The Total House During & After Coronavirus: a Virtual Place & More

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Abstract

We are aware that the phenomenon we are currently experiencing as a result of the Coronavirus pandemic is producing radical implications in terms of environmental transformations, changes in the relationship between man and nature and social relationships. These major questions are leading us once again to think "big" and to formulate new theories, which inevitably involve all our spheres of knowledge. One of the topics that will continue to be linked to this long, exhausting struggle against Covid-19 is that of social distancing. This is the expression around which the phase or phases revolve, which have confined all, or nearly all of us within our own four walls.

Social distancing is an expression, which has been discussed in depth, and various sociological, anthropological and psychological theories have been compared since the nineteen thirties. According to Vincenzo Cesareo the concept of social distancing before Covid-19 was understood as "the relational closure of an individual towards others, who are perceived and recognized as different depending on the social categories to which they can be traced. It is the result of the dynamic interlacing of factors from different dimensions in space: physical, symbolic and geometric." A pandemic wipes out social and cultural categories and extends the principle of Physical geometric distancing to all of humanity without distinction. We are speaking of a space which expands in terms of linear meters and which, on the contrary, shrinks to within a telematic, virtual dimension. With Covid-19 we now know what it means to work, read. Communicate, take part in events, conferences, exhibitions, travel and carry out research within a single, infinite, fluid space. In terms of architecture and town planning, the virtual space corresponds to an annulment of the traditional, physical distances between living, work and recreation, which for Le Corbusier represented the functional and spatial categories established in the Athens Charter and which were part of the principles and rules to construct the future city. Similarly, virtual communication has seen the continual decrease in distance between public and private space, and the most appropriate place to contain different functions and spatial requirements is actually the home. First and foremost, we have been able to ascertain that the house has the potential to transform into a multi-functional space, a place where we live, work, carry out research, communicate with the world, into a place of recreation and entertainment, in a public, yet at the same time private area and, therefore, a total space, in which everything can be automated and where everything can be perfect: our bodies, objects and furnishings. Perhaps after the pandemic, our cities will consist of a group of total houses where cars will transform into perfect chauffeurs, in which materials, such as metamaterials or 3D graphene will be able to make us invisible or make us live in transparent structures made of very fine but, at the same time, extremely resistant membranes. Perhaps we will not need to design and construct public places, merely because they will be of no use, and perhaps cities of the future will only have underground department stores with long travellators and service lifts. The goods purchased will be sent directly to our homes via the lifts.

Introduction

We are aware that the phenomenon we are currently experiencing as a result of the Coronavirus pandemic is producing radical implications in terms of environmental transformations, changes in the relationship between man and nature and social relationships. These major questions are leading us once again to think "big" and to formulate new theories, which inevitably involve all our spheres of knowledge. One of the topics that will continue to be linked to this long, exhausting struggle against Covid-19 is that of *social distancing*. This is the expression around which the phase or phases[1] revolve, which have confined all, or nearly all of us within our own four walls.

Social distancing[2] is an expression, which has been discussed in depth, and various sociological, anthropological and psychological theories have been compared since the nineteen thirties. According to Vincenzo Cesareo[3] the concept of social distancing before Covid-19 was understood as "the relational closure of an individual towards others, who are perceived and recognised as different depending on the social categories to which they can be traced. It is the result of the dynamic interlacing of factors from different dimensions in space: physical, symbolic and geometric." A pandemic wipes out social and cultural categories and extends the principle of *Physical geometric distancing* to all of humanity without distinction. We are speaking of a space which expands in terms of linear metres and which, on the contrary, shrinks to within a telematic, virtual dimension.

As we learn from Fabio Introini[4] in one of his articles entitled *La distanza sociale. Dimensioni teoriche e attualità di un concetto classico:* "It has been highlighted several times that contemporary society is defined by the semantics of space. Globalisation: this is actually a term which magnifies the geometric aspects at the expense of time. This space, in turn, appears to lose every connotation and true strength by amalgamating with the smooth, zero gravity surface of telematic or cyber space, or with the space of the flows within which, whatever we want to call it, territorial feelings of belonging appear to lose all importance, while social processes are being remodeled." New information and communication technologies not only actually abolish the time and need to move physically, but also enable social spatiality to even out and thus conform to emergency health prerogatives[5]. An increasingly interconnected world is, in fact, a world in which relationships between individuals appear capable of dipping into total purity as new, virtual communications methods appear to balance out the old, currently obsolete, social differences as they remodel. To speak of social distancing in the current, historic and cultural context means supporting and encouraging the passage from a physical, spatial dimension to the fluid, infinite dimension of virtual space. Physical and social spaces are not disintegrating. However, they are losing their traditional level footing while supplementing each other in other types of relations. In view of the current situation, an analysis of the types and processes of social distancing in contemporary society involves a journey through the most complex, chaotic dynamics running through them.

It is worth reflecting on this viewpoint simply because the new meaning of social distancing, understood as the physical distance between individuals corresponding to a virtual closeness, becomes the salient aspect of the problem. The catastrophe generated by Covid-19 has actually *accelerated the globalisation of virtual intelligence*, by increasing the awareness of a profound transition and of a cultural revolution, which humanity has been experiencing for some time now, equal only to the rise of the Industrial Era. In other words, we are re-locating from one century to another, from one ideological period of time to a post-ideological time, where ancient certainties find it hard to resist and where unexpected events following one after the other leave the individual facing a reality « of unrest and leaving the 20th century to enter the 21st century with certain categories of ideas»[6]. Regardless of the pandemic, the historic cycle linked to modernity and postmodernity has finally come to a close, to open up new paths towards virtual communication and technological innovations. However, until the arrival of Covid-19, this process was unnoticeable, as it still belonged to a symbolic, order and to a purely immaterial, veiled setting which was, therefore, hard to decode.

The trauma currently felt across the globe has violently flung mankind into a near future, and transformed what had been a topic for a few experts in the field into a mass phenomenon.

Traumatic events and momentous shifts

Natural or criminal disasters have always been driving force behind changing and transitional moments in ways of thinking and living, often accompanied by effects the individual finds that disorientating and destabilising. Periods, as Serge Latouche claims, which: "could also be opportunities of reawakening. Catastrophes and crises are sources of suffering, but also moments to raise awareness, to rekindle debate, to refuse and revolt"[7].

From this point of view, the response by architecture has often to be sought within the concept of *utopia*, understood not as visionary imagination,[8] but rather as a search to identify an ideal society, which corresponds to the design of an ideal place. Utopia also, and above all, understood as a *prediction* of an immediate future,[9] with the intention of offering concrete answers. All Buckminster Fuller's research[10] was for the benefit of humanity. His works, considered utopian, actually aimed to offer concrete solutions for the cultural and political transformations following on from the Second World War throughout the world. In 1967, Tetrahedral City[11] was a prefabricated, floating city, designed down to the last detail for a million inhabitants. The only reason it was never built was because the customer, a wealthy Japanese entrepreneur, died a few years before construction began. Fuller imagined a society seen as an aggregation of individuals, educated individually on ecology and the self-management of natural resources. A complex structure, far from the traditional concept of society, seen as a completed entity.

It is an unusual way of responding to the unstoppable phenomenon of consumerism. Once we become aware of the fact that the relationship between man and nature can be remodelled in a «convivial dimension», in compliance with the laws of entropy, we can work to produce "*less material consumption and more inner riches, less «well being» and more «good living*[12]»".

The utopian cities, designed from the first half of the 19th century, represent the society of production and aim above all at economic and technological progress. The second revolution[13] with its innumerable reforms and discoveries produced original social models, which corresponded to new urban systems. Robert Owen's 1817 Town Planning Report[14], Fourier's Falansterio, Étienne Cabet's Icaria of 1848, James Buckingham's Victoria of 1849[15], Godin's Familisterio in 1859, W. H. Lever's Industrial Colony in Port Sunlight in 1887, the Linear City of Soria y Mata of 1882 and Ebenezer Howard's Garden City 1889, all aimed to provide a radical alternative to the traditional, compact development model of the city around an original nucleus. Importance was given to mechanised transport infrastructures (first and foremost the railway), which became the matrices for the urban settlement. Godin's Familistère, one of the few utopian projects to be constructed, stands close to a factory and was an alternative solution to the difficult conditions of the urban working class, employed in the new manufacturing activities[16]. In 1914, Tony Garnier designed the Industrial City from the first to the last building, concentrating mainly on the technical aspects. There were major innovations, such as the use of starkly adorned, reinforced concrete for all the buildings: «with absolutely no extravagance unless dictated by precise, generally acknowledged requirements»[17].

In search of the ideal society between past and future

Throughout history, research on the ideal cities and societies has always been supported by political action. Politics has always been the main ingredient of utopia, commencing with Plato's ideal Republic, the essence of which is imbued with the ethics and justice forming the constitution and structure of the city[18]. Thomas More, who coined the term in his Utopia in 1516, criticised the monarchy in favour of democracy based on equality without the social hierarchy found in reality. Thus, the search for the ideal city represented democratic politics to face the future and open up to new things. With Plato as its precursor, the Renaissance represented a fundamental moment for the concept of utopia at an epochal passage of time, which opened up the path for modern society based around man at its centre.

In fact, from the 15th century onwards, theoretical experience and the debate on the ideal city were so intense, as to make utopia, although lacking true, practical constructions, one of the great, inspirational, pivotal points on which art, architecture and Renaissance town planning focused.

Their attempt to combine functional needs and aesthetic sensitivity aspired to achieve the characteristic features of that period. The art of good government in the ideal Renaissance cities could be implemented only by means of a close association between a linear, balanced, political effort and the application of town planning criteria, designed according to precise, rigorous calculations, capable of giving life to perfect forms. They aspired to an inspired co-existence with a state, governed wisely along town planning lines and organised according to the principles of pure geometry, which actually led to ideal cities. Studies on this topic in the 20th century and above all in the 70s found numerous references to Renaissance utopias. What fascinated scholars in particular were the interventions to reorganise urban space in terms of the proportions between man and the universe, where the individual represented the unit of other aspects of creation[19].

It was perhaps the prerogatives mentioned in the 12 ideal cities that moved Superstudio's sophisticated and strongly conceptual, utopian vision. "The city stretches in equal, perfect measure across green meadows, sundrenched hills, wooded mountains with very tall, slim blades of continual buildings, intersecting one another in a rigorous square mesh, measuring 3,999 metres"[20]. Each city was scrupulously organised and structured via pure geometry, constructed by using precise measurements to reach infinitesimal values. Superstudio's research proposed an alternative model of life on earth, via what Cristiano Toraldo di Francia refers to as "another restrictive view: a new reality, a sort of situationism which triggers a radical criticism of society". Architecture as an interpretational tool blends nature, politics and society into a single project, and triggers a path of hybridisation, which reunites with man in a state of harmony and equilibrium with the surrounding environment.

After traumatic events, the utopian architects also created works as a warning, as an exhortation to raise awareness of a reality, which was developing into a catastrophe and required new project hypotheses, using the tools of science, technology, art and philosophy.   Examples such as the feverish solutions of Archigram on the one hand,[21] and Richard Buckminster Fuller's Dome over Manhattan on the other, were concrete answers to consumerism and air pollution, in the same way as Superstudio's Spaceship City and Archizoom's No-Stop City responded to the problem of unconditional urbanization and the depersonalisation of the individual. In the 50s, the Smithsons or the Independent Group[22] also saw their work as a response to the Second World War by creating a plain, simple, true, and essential style of architecture based on new ethics of project design.

Nowadays, social uniformity and the mindful awareness of reality, highlighted by the phrase "we'll manage together" or " united in the fight against coronavirus" which the coronavirus has produced, together with the social homogeneity typical of the virtual space, appear to coincide with the democratic idea of equality, which are the foundation of past utopian visions. We have been violently catapulted into an immediate future and into a new utopian dimension which, this time, requires urgent answers of designs and new theories in all fields of knowledge.

 " It is above all in periods of crisis like these that man goes in search of new utopias, places without place, a different, space less and timeless (atemporal and aspatial) elsewhere to what we are experiencing,[23]" in which to be able to imagine life in a better world.

Politics, a good ingredient In Italy and elsewhere, for years: «Political action is no longer able to govern the economy, the market and the country. » claims Massimo Ilardi in his book *Nei territori del consumo totale. Il disobbediente e l'architetto*: « An essential tool for political action to exercise hegemony is to raise the political awareness of the social community, by offering the utopia of another possible world. This no longer occurs, if it ever did occur and, on the contrary, the existing world is transformed via conflict».[24] According to Serge Latouche, economic globalization, the corruption of the political elite, the general weakening of civic sense and the end of solidarity organized by the social state have had devastating effects on society. Politicians and senior officials are under

enormous, increasing pressures and stress generated by the world of money. Business deontology and market ethics are mere expedients to hide this hypocrisy-filled cosmos[25].

The Covid-19 pandemic has momentarily placed this process, which is unlikely to be reversible, on standby. The pandemic clearly shows the errors made by governments in their spasmodic search for power and money. The democratically elected Italian politicians have chosen to reduce the budgets for health (often to the advantage of anything but laudable, private interests), suppress any initiative whatsoever linked to public or collective housing construction, debase the role of education and research and boast of their own ignorance in order to win over the population[26].

Those politicians who, full of their own authority and competency, wisely began reconstruction after the Second World War according to the INA CASA plan, also known as Fanfani's Plan,[27] which proposed an unusual transformation of the town compared to the past. Or the politics which, after the cultural revolution of the sixties, used social housing or subsidized construction plans to transform the country. However, this global emergency is putting not only Italian politics, but also all governments in the four corners of the planet to the test. It is measuring their ability to face the spread of the disease and is producing a direct, forceful effect on politics, which has somehow been exposed to its foundations[28]. One thing is indisputable: during the pandemic, all governments have established binding directives,[29] which even restrict individual freedom, masked as requirements for the common good. In fact, the risk is spreading[30] that our system of values and freedom is being turned upside-down in the same way as our lives and the way we live together. We do not intend to look at the pandemic from a legal viewpoint here. However, it is worth while mentioning that the needs to immediately face the emergency, the new parameters for health safety should be compared with the values at the basis of a modern, democratic society: "bending the former to the latter and not vice versa",[31] in the new regime of normal living together, which will inevitably take shape after the pandemic.

Certainly more closely linked to town planning and architecture is the so-called *Restructuring Law Decree*, issued by the Italian government to support the construction sector. It specifically establishes the increase in tax deductions of works regarding: the repair of façades[32] or heating systems; seismic compliance and a series of minor interventions. The aim is to increase building energy efficiency (eco-bonus)[33] and reduce the seismic risk (seismic bonus). Although this law has not yet beem implemented, it already appears to show promise, as applications are coming in daily from private individuals who intend to modernize and adapt their properties using the aforementioned concessions[34].

Compared to a wider programme to organise and plan major, public, urban interventions, the Restructuring Law Decree risks becoming something of *little consequence*. For years, our towns have been waiting for effective, innovative answers to resolve problems, such as mobility, the management and organisation of public parks and urban waste and the complete lack of new housing and public services, e.g. schools, health structures, sports facilities and all types of cultural buildings.

Politics remain unresponsive when faced with the uncontrolled development of large or small urban portions, managed almost exclusively by private enterprises, whose only purpose appears to be property speculation. From this point of view we are not in a condition to know.

To imagine the future, an unprecedented opportunity

So if we launch into the immediate future, as architects we may wonder: what will our new, everyday, written or spoken words be and what will things be like in the near future? Should we imagine life without the support of politics and follow in the footsteps of the guidelines and typical features of utopia[35]?

According to Pasquale Ferrara, the state of emergency generated by the struggle to survive the pandemic, gives us an unprecedented opportunity and suggests a possible path to follow: "to

create a Cosmo political economy based on the interest of all the states in collaborating to fight an enemy that no longer lines their borders, but is already encapsulated within each one of them. It is up to us to capture it or to allow it to escape. Now is truly the time to "rally round the flag" as the flag is not just ours, but that of all humanity." Victory could then become a precedent: once the virus has been vanquished, why shouldn't we launch a second campaign to save the planet from an ecological disaster?[36] Perhaps politics will really have to cross national borders as problems, such as

environmental and health emergencies, pollution, and economic problems, now involve the entire planet.

A possible answer from virtual communication

It is worth beginning the paragraph once again with a question which is closer to our hearts: What will the physical or virtual space in which we live be like?

Recent claims by Stefano Boeri and Massimiliano Fuksas, which envisage the rediscovery of villages and very tiny towns as a response to the pandemic, should be considered pleonastic and hardly suitable, as they are not in line with the reality we are currently experiencing. Furthermore, the ideal of the little town risks being an illusion, since it was actually the small towns in Lombardy that were the initial hotbeds of the virus, since social interaction there is historically greater than in the cities, where physical proximity is not always social interaction.

A possible answer in our sector could be found in *virtual communication*. We are unequivocally aware that, in the era of the Internet, the meaning of our world increasingly requires the use of tools, platforms and infrastructures linked to the Internet. This phenomenon does actually lead to a transformation of social relationships into virtual entities, but does not drag the individual towards *isolation*.

Above all, when there is a pandemic, the term *social distancing* implies, as mentioned previously, a physical distance which, not by chance, is expressed in meters. However, it also implies a desire to remain united, to be part of a group, of a "community" and to work on social solidarity especially as part of a network.

According to Patricia Wallace[37], it is easier to see phenomena of group polarization via the network to form *echo chambers*, virtual places in which people can interact. It is worth highlighting once again that the network is not wiping out relationships between people. On the contrary, it is merely modifying considerably the ways in which emotional relations between individuals begin and change with the Internet. Chat lines and social networks enable people to get to know one another from a distance according to their interests and passions: all this revolutionizes how we socialize. This tends to become less concrete in the form of virtual bonds.[38]

Virtual relationships differ greatly from real relationships, because they can be based on anonymity or on the partial revelation of one's identity, and also because they lack the gestures and visual and body descriptions of a two-person relationship. Perhaps we are increasingly moving towards a society based on abstract components of relationships. However, the Internet is unquestionably proving to be a powerful means of bringing people together. The characteristics of socialisation are changing. Nevertheless, as we have already mentioned, the advantages in terms of overcoming socio-cultural barriers and of localising the protagonists of the socialisation process are on the increase[39].

The space between face-to-face and virtual

As we also have the chance to choose between the two options of *face-to-face* and *virtual*, virtual communication could undoubtedly be a valid alternative to physical communication. The virtual place is not, therefore, a non-place. Instead, it is the new place, within which we can potentially be everywhere with everyone and where time is reduced enormously. With Covid-19 we now know what it means to work, read. communicate, take part in events, conferences, exhibitions, travel and carry out research within a single, infinite, fluid space. In terms of architecture and town planning,

the virtual space corresponds to an annulment of the traditional, physical distances between *living, work and recreation*, which for Le Corbusier represented the functional and spatial categories established in the Athens Charter and which were part of the principles and rules to construct the future city. Similarly, virtual communication has seen the continual decrease in distance between public and private space, and the most appropriate place to contain different functions and spatial requirements is actually the *home*.

It is worth remembering that the home is, and has been from the very start conceived as man's best refuge. When man crossed over from being hunter to farmer, he felt the need to find a refuge: in caves, in temporary shelters and by creating structures of straw and hay. In recent years, momentous phenomena have always seen the topic of the single family residence as a subject for research and experiments by numerous maestri of architecture. Ville Savoye, Villa Mairea, the Glass House, Falling Water, Casa Schröder, Casa Moller, Sudgen House, all bear witness to this and have become true theoretical manifestos of avant-garde architecture.

In praise of slowness, to combat the constant race against the clock

We know that the individual can move freely via the Internet, without the need to physically cross a territory. This could determine a consistent decrease in the pollution levels in our towns and a reduction in the problems linked to mobility. But that's not all. Just think of the economic advantages of smart working[40]. Moving work dynamics to a virtual plane means increasing the time dedicated to recreation and hobbies. The frenetic rhythm of real life slows down in the virtual space and recovers words, such as slowness and reflection, to fall in line with our biorhythms. "Yet the brain, which regulates our behaviour, has been given to us as a slow machine, which requires its own time and sequence of actions."[41] Professor Lamberto Maffei, president of the Accademia dei Lince and former director of the CNR Institute of Neuroscience, describes the advantage of thinking slowly, of thinking which supports the natural time of the machine, i.e. of the brain. «The desire to emulate the fast machines we ourselves have created, unlike the brain, which is a slow machine, becomes a source of anguish and frustration. »[42]

To use our time differently, and make use of the virtual world becomes essential for us to achieve our goals and recuperate our mental wellbeing.

From smart working to organising on-line events and more

As regards cultural and educational initiatives, virtual communication is proving to be an excellent alternative compared to face-to-face communication. We have recently seen a considerable increase in participation in all types of events.

Luca Vanin,[43] author of the first Italian manual for on-line events "Professional Webinars", lists a series of advantages in organising an on-line conference, for example, which includes: cost cuts, lean organisation, no material to be moved (except for gadgets or similar objects), extended access without borders, wider user experience, greater visibility, inclusion of a different public, a far more structured follow-up. The losses could depend on the change in paradigm, on the ability or inability to organise an event that breaks with the past and to invent new systems of organisation and communication.

An additional advantage of the use of the Internet comes from recent, economic data from Confcommercio, which highlights the collapse of retail purchases, replaced by an exponential increase in on-line purchases[44]. This data should not be underestimated, as online sales provide a series of advantages, such as the elasticity and flexibility of opening hours and places of purchase (24/7 throughout the world), greater supplier reliability, thanks also to the request for reviews, and above lower prices compared to retail.

The total house, a complex organism

If all the above is true, as it is true to say that the virtual place is discovered within the home, and the latter is, in turn, considered to be the best place for experimenting, we wonder: how will our home space change in the near future?

First and foremost, we have been able to ascertain that the house has the potential to transform into a multi-functional space, a place where we live, work, carry out research, communicate with the world, into a place of recreation and entertainment, in a public, yet at the same time private area and, therefore, a *total space* , in which everything can be automated and where everything can be perfect: our bodies, objects and furnishings.

Unlike a traditional house, the total house constitutes a complex *organism*, in which spaces for cognitive experiments are added to private spaces, where individual experiences and those linked to communication can be acquired. We are speaking of an intimate, welcoming environment for every member of the family, equipped with large screens and sophisticated, technological equipment.

The total house appears as a self-sufficient body: in addition to the technical rooms containing the control panels for the automated systems, it also contains a space for differentiated waste recycling. This room[45] is equipped with machinery and containers to compost organic waste, to collect and compress paper and cardboard[46] and where a new, domestic appliance can transform plastic into petrol and diesel[47]. A system of photovoltaic and geothermal plants will be able to optimize the plant engineering of home comforts.

The total house will also consist of communal areas, which will have all the facilities for group perceptive-sensorial experiences and where it will be possible to see places, images, films, works of art and design objects. They will, therefore, be equipped with large screens and automation systems.

A disadvantage of these living conditions could be the reduction in the individual's physical activities. Crossing a particular territory, which used to follow a temporal process as the individual moved from one place to another, would now take place standing immobile within one's own four domestic walls. What would be lacking, would be the perceptive aspects and synesthetic experiences acquired by physically exploring the different places in the world. To solve the former problem, we should specify that the total house may be equipped with a spa area with a gym, sauna and pools or mini swimming pools with hydromassage, whereas the answer to the latter comes from so-called *augmented reality*[48]. This mode enriches sensorial perception by electronically manipulated information, which would otherwise not be perceived by the five senses. Whereas the surrounding environment in virtual reality is simulated, augmented reality adds graphic elements and information to the real environment. If this is true, we can be anywhere extremely quickly.

In augmented reality, the individual continues to experience normal physical reality, but uses additional information, which can enable interaction and digital manipulation[49]. How? The user wears glasses and by simply using his voice or an integrated touchpad, he can search on Google or Google maps and roam across the Internet, take a look at social media networks or read the news on-line.[50] At the same time, the user can also telephone, read and send SMS, take photos or record videos to share. Technology, which is gradually beginning to change our way of seeing the world.

Another interesting discovery is the *HoloLens*[51]. This is a real, wearable, holographic computer, equipped with movement sensors, microphones and audio surround - or should we say, spatial surround, which enables you to understand where the sound is coming from and has a special, specific video-camera. What's new about it? Put it on and you are catapulted into a reality consisting of holograms, in which to sample unprecedented spatial experiences. You could enter a classroom and find yourself strolling through the universe, or dive into a past as vivid and as colourful as the present. Even the most familiar objects could surprise you and appear in a completely new light.

These experiences are not just possible with iPhones and iPads: they are already available for you right here and now. Augmented reality uses technology to transform the way you work, learn, play and communicate with what surrounds you. And this is just the beginning. An entirely new world awaits you." [52]

The *total house* can transform a place into a true container of perceptive, sensorial experiences, in which ever-changing spaces and furnishings can be built according to your requirements.

The house as a tool of perception

The architecture of the total house can be a tool for perceptive-sensorial experiments. Thanks to the use of automation systems, space becomes extremely flexible and transformable.

By moving architectural parts or elements in the space (following a movement such as sliding, rotation, slipping, overturning), it is possible to achieve infinite spatial conditions in a relatively short length of time. Thus, architecture acquires subjectivity and can transform into a body capable of representing continually diverse images, which correspond to continually diverse gestures. In the same way, disparate noises will be produced within it, thanks to *movement*.

The walls move slowly, following the instructions designed by architecture which becomes communication. Changing the space means transforming communication and culture. In the total house, moving house brings new prospects and behaviour. Each place remains unfixed; it need not be identified by its irremovable nature. On the contrary, it can be referred to with the prefix "Trans", to identify its transit. Moving house can confirm the desire not to repeat and not to feel repeated. Thanks to its movement, the total house produces a symmetric assembly of unfamiliar thoughts, of untamed concepts, of a multi identity move. It encourages a multiple use of a body reaching out once and for all towards new communication systems.

All this triggers a scenic, illusionary aspect, which the architectural body produces by means of its everyday gestures. Sliding, screen-printed windows, rotating drawn walls, continually moving lights which change the perception of space to create special, optical effects, capable of establishing a bond between the perceiver and the perceived space. "Your body is in the world like the heart of an organism: it continues to keep alive, animate and internally feed the visible performance, to form a system with it. When I walk around my apartment, the different aspects which are revealed could not appear as profiles of one and the same thing, if I did not know that each one represents the apartment seen from this or that angle, if I was unaware of my own movement and body as being identical throughout the phases of this movement," Merleau-Ponty[53] stated in his book *Phenomenology of Perception* of 1945. According to the author, the body ensures the sight remains visible, in the sense that a person understands the meaning of things in reality via the body's ample process of perception. In the total house, what can be seen are the parts, the elements and the objects, of which it consists. They give a meaning to perceptive reality. Above all, time slows down in the total house. Time takes the upper hand in your mind. It is concerned with the way each one of us gives a value to the flow of events, situations, years according to our personality and life experiences. The total house implies the person reflects before making any movement within the space, just as thought lies behind each movement of the house, moved by the person himself.

The total house and new types of homes

The total house can be seen in new types of homes, such as the semi-duplex, the semihypogeum or the double-sided space.

These are types with functional and morphological characteristics that originate from antonyms, such as: open-closed, inside-outside, visible-invisible, order-chaos, above-below. These contrasting terms (time-honoured subject of philosophical studies) never reach the typical equilibrium of tradition, an aspect which gave the individual emotional security (classicism searched for equilibrium between proportions, between empty and full spaces, etc.). On the contrary, they actually find a reason to exist in the most extreme conflict and contrast, creating new, different tensions, capable of arousing multiple sensations in the individual.

Perhaps after the pandemic, our cities will consist of a group of total houses where cars will transform into perfect chauffeurs, in which materials, such as metamaterials[54] or 3D graphene[55] will be able to make us invisible or make us live in transparent structures made of very fine but, at the same time, extremely resistant membranes. Perhaps we will not need to design and construct public

places, merely because they will be of no use, and perhaps cities of the future will only have underground department stores with long travelators and service lifts. The goods purchased will be sent directly to our homes via the lifts.

End Notes

[1] The second phase envisages a slow return to normality, although still a suitable distance away. It should be said, however, that the more pessimistic epidemiologists believe a complete return to some of our pre-Covid-19 life styles will actually no longer be possible.

[2] The expression "social distancing" was used mainly in North American sociology during the 30s, especially by theSchool of Chicago and above all by Emory S. Bogardus. Georg Simmel gave the concept its most complete definition(1898). The sociologist's idea was that society is actually the result of distancing processes, in which social and spatial factors combine to give a community of individuals a specific shape, with a particular order in the relationships between groups of individuals and the individual himself.

[3] See V. Cesareo La distanza sociale Una ricerca nelle aree urbane italiane Franco Angeli, Rome 2007 pag 11

[4] See F. Introini, La distanza sociale. dimensioni teoriche e attualità di un concetto «classico» In Studi di Sociologia Anno 45, 2007, pp 9-29

[5] Clearly a health emergency does not involve social class. Like it or not, the protagonist is the individual.

[6] See M. Nanni, Tra inquietudini e incertezze: cosa cercano i giovani d'oggi? cit. See also A.R. Emili, altro studio.From the temporary house to the living unit, plug_in, Genova 2015).

[7] S. Latouche, Breve trattato sulla decrescita serena, Bollati Boringhieri, Turin 2008.

[8] See A.R. Emili, Boullee visionario Fuller utopico, in "Anfione e Zeto, rivista di architettura e arti", no.28,   Ed. Il Poligrafo, Padua, pp. 217-221, ISBN 978-88-9387-046-7

[9] See A.R. Emili, Ludovico Romagni,, Utopia e teoria, dalle Neoavanguardie alla contemporaneità, Ed. Quodlibet, Macerata, 2016

[10] See A. R. Emili, Richard Buckminster Fuller e le Neoavanguardie, Ed. Kappa Rome, 2003.

[11] See A. R. Emili, Richard ….Cit.pag 70

[12] See S. Latouche, Come si esce dalla società dei consumi, Corsi e percorsi della decrescita, Bollati Boringhieri Turin 2011

[13] See S. Battilossi, Le rivoluzioni industriali, Carocci, Rome, 2002.

[14] (R. Owen, Report to the Committee for the Relief of the Manufacturing Poor, 1817) See L. Benevolo, Le origini dell' urbanistica moderna, Laterza, Bari, 1991 p. 66

[15] : L. Benevolo, Le origini….., cit. p. 242

[16] See: Benevolo, Le origini ….cit, p. 104

[17] See Hanno-Walter Kruft, Le città utopiche, Laterza Bari 1990

[18] F. Fronterotta, Politica e utopia: la Repubblica di Platone nel XX secolo, «Micromega», 10 May 2013. See also D. Morrison, The Utopian Character of Plato's Ideal City, in G.R.F. Ferrari, The Utopian Character of Plato's Ideal City, Cambridge University Press, Cambridge 2007, pp. 232-255.

[19] See A,R, Emili, Richard Buckminster Fuller….cit

[20] Complete text regarding the first ideal city of the 2000 Superstudio City. See C. Toraldo di Francia, Superstudio and radicals, Moryama Editors, Tokyo 1982.

[21] See P. Cook M. Webb Archigram, Princeton Architectural Press.1999

[22] See A.R. Emili Pure and Simple the architecture of New Brutalism. Kappa, Rome 2008

[23] C. Mazzucchelli, Philosopher, technologist and consultant in communication science, marketing and management of organisations. He is the founder of the editorial project, SoloTablet, dedicated to the new technologies and to their effects on people's individual, social and professional lives. See C. Mazzucchelli, Internet e new Media: un forte bisogno di Utopia per immaginare il futuro, Solotablet.it, 25 September 2013.

[24] M. Ilardi, Nei territori del consumo totale. Il disobbediente e l'architetto, DeriveApprodi, Rome 2004.

[25] The world we possess is a world in which men are reduced to the status of objects which can be bought and if we can only govern a restriction, the government of men will soon be replaced by the government of objects. Political authorities are now in the position of those provincial deputy prefects of the past, powerful over their subordinates and in the execution of all the oppressive, hierarchical regulations, but weak towards central power and anonymous on the financial markets. Seen from below, the end of the politician translates into a social crash, of society itself. See S. Latouche, The City and Decreasing Growth, taken from the text of Serge Latouche's paper at the international meeting held on 19 and 20 May in Rome, entitled The architecture of well-tempered environment. A harmony of integrated instruments, sponsored by the International Union of Architects and L'Union Internationale des Architectes. See S. Latouche, Breve trattato sulla decrescita Cit.

[26] See F. Armao, La politica e il virus: due lezioni che potremmo apprendere dal dramma della pandemia in "Micromega" 02/2020

[27] Also known as "Piano Fanfani" [Fanfani's Plan]. By INA CASA plan, we understand the plan of intervention by the Italian State to build social housing throughout the country.

[28] See P. Ferrara, Il potere e la cura. La politica ai tempi della pandemia in https://www.sophiauniversity.org

[29] One current point of view sees dictatorship as being able to handle the pandemic more efficiently. According to Ferrari: The main point here, in my opinion, does not concern the amount, but rather the quality of power in governments' hands. In other words, it is not necessarily true that only authoritarian systems are really capable of handling crises, as democracies can also do so, provided they hold power that is ready not only to respond to their decisions (accountability), but also to explain them.

[30] Corrado Caruso, Associate Professor of Constitutional Law at the University of Bologna. See F. De Stefano. Is the pandemic also attacking this right? Interview of Corrado Caruso, Giorgio Lattanzi, Gabriella Luccioli and Massimo Luciani in Giustiziainsieme.it

[31] Phrase by Di Stefano given during the interview

[32] These are a series of prefabricated parts, applied directly to the façades of the buildings, basically a sort of sandwich consisting of adhesive, insulating material, fastenings, base covering, reinforcement (glass fibre mesh) and final covering with primer and/or protective paint. Once the application phase is terminated, the building appears from the outside to be a normal, plastered construction equipped, however, with a protective, insulating "shell", capable of considerably decreasing fuel consumption required for heating and reducing heat loss via the exterior walls. See https://www.guidaedilizia.it

[33] Article 128 of the text states: "we expect to increase the deduction rate to 110% for specific interventions for energy efficiency, to reduce the seismic risk, install photovoltaic systems and electric vehicle charging columns and for expenses sustained between 1 July 2020 and 31 December 2021. We also expect the deduction to be used in 5 instalments of equal amount."

[34] It should be noted that the legislation will presumably enter into force in July 2020.

[35] Should we be thinking of an ideal society, where justice for the people and respect for the surrounding environment reigns supreme, or will politics be able to handle the current historic moment and establish directives to align us with the changes in culture, thought and economics we'll come across along the way? Also taking into account that the choices we have to make will no longer involve peripheral, procedural or tactical questions, but rather central,strategic dilemmas.

[36] Pasquale Ferrara, Secretary General of the European University Institute in Florence. See P. Ferrara, Il potere e la cura. ….cit

[37] Patricia Wallace, lecturer at the Graduate School of Maryland University College. Her work focuses on the psychology of relationships and learning and provides a clear picture of our on-line psychology. See P. Wallace "The psychology of the Internet Cortina Raffaello, Milan

2017 See also   A.L. Bonfranceschi   La psicologia dei social, ecco perché sul web cambiamo personalità in "La repubblica.it" 24 March 2017

[38]. See P. Wallace "The psychology….cit.

[39] See La socializzazione nella società del web, Usanze, Supereva (guide. supereva.it), 2015. See also M. Massarotto Social network. Costruire e comunicare identità in rete. Apogeo.Milan 2011

[40] See Smart working come risposta all'emergenza coronavirus in Stimulus-Psya http://www.psya.it

[41] See L. Maffei Elogio della lentezza, Il Mulino Bologna 2014

[42] L. Maffei Elogio ……cit

[43] Luca Vanin, a graduate in Philosophy and Psychology, consultant for businesses and professionals involved in on- line technology, co-author with Fabio Ballor of the first Italian manual on the topic of on-line events "Professional Webinars " (Hoepli, 2013) and the first book in the world on "Public Speaking Online" (Dario Flaccovio Editore,2015). Co-founder with Fabio Ballor, Paola Breseghello and Marco Canali of WebinarPro. See L-Vanin, Organizzare fiere online e convention digitali nel 2020, in   https://www.webinarpro.it/2020/05/organizzare-fiere- online-convention-digitali

[44] According to a study by the B2C E-Commerce Observatory of the Politecnico in Milan, on-line purchases of professional tools are on the increase, in "Economia e Finanza" 01/2020

[45] See https://www.irrigazioneagricoltura.it. See also E. Accotto, Il compostaggio collettivo tra discussione normativa ed esperienze già avviate, Seminario Energethica, Turin 9/04/2011

[46] for the purpose of reducing large packaging into tiny pieces. See Carta & cartone, 10 regole per una raccolta di qualità in https://www.adnkronos.com

[47] 1 kg of plastic will give almost 1 litre of diesel and enough power to run the machine. The inventors of the process and the machine called Chrysalis, which will enable 10 tons of plastic to be transformed each month. "The idea is to encourage people to collect waste before it ends up in the oceans via a closed reactor capable of producing fuel." Thus, the waste-eating machine will transform plastic into petrol and diesel, see S. Galeone, in https://www.inabottle.it/ , 16 January 2019

[48] Communication Strategies Lab, Realtà aumentate. Esperienze, strategie e contenuti per l'Augmented Reality, Apogeo, Milan 2012

[49] Augmented reality is a fairly recent technology and is continually evolving. If we were to attempt to give it a very general definition, we could say it represents an altered reality, in which artificial and virtual information is superimposed on the normal reality perceived by our senses.

[50] See https://tecnologia.libero.it/cose-la-realta-aumentata-1054. See also I. Lagazio La realtà aumentata è alla portata di tutti: ecco perché in https://www.teknoring.com

[51]'The Holo project, as yet in the prototype phase, was developed together with NASA. It functions independently and needs no connection with a Smartphone or other device and was revealed at the launch of Windows 10. We still do not know when this marvel will reach the market, or how much it will cost. However, it is actually further proof of the potential of augmented reality which, in some ways, blends with virtual reality. See https://tecnologia.libero.it/cose-la- realta-aumentata-1054. See also https://www.microsoft.com

[52] See Apple website https://www.apple.com/it/ios/augmented-reality/

[53] M. Merleau-Ponty, Fenomenologia della percezione, Bompiani Milan, edition 2003 See also M. Merleau-Ponty Il primato della percezione e le sue conseguenze filosofiche, Edizioni Medusa, Milan, 2004.

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[55]See also E.L. Wolf, Application of Graphene, Springer, Berlin 2014.

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