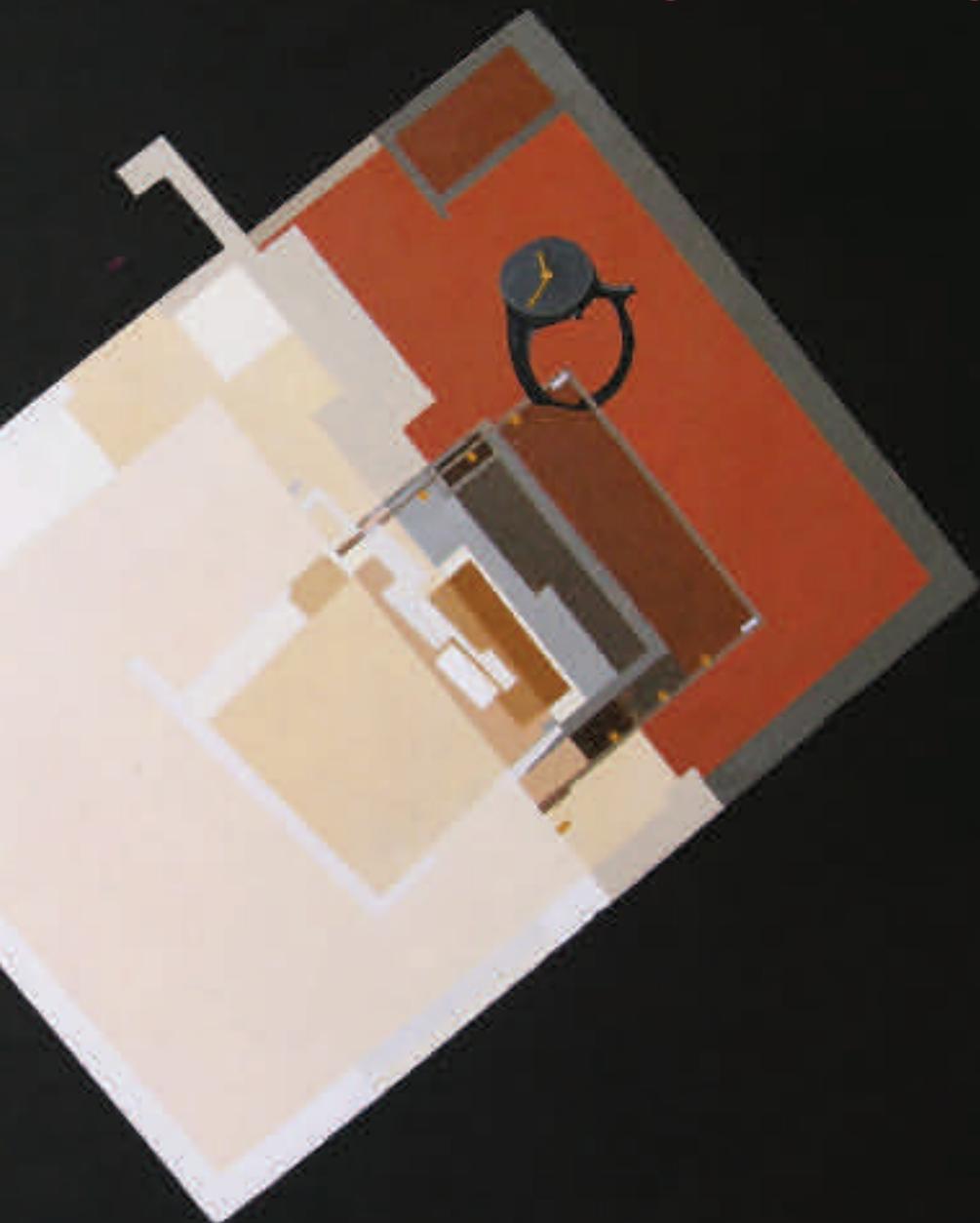


URBAN CORPORIS UNEXPECTED



Edited by
MICKEAL MILOCCO BORLINI
ANDREA CALIFANO

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URBAN CORPORIS X - UNEXPECTED

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**A BOOK OF
ARCHITECTURE, ART,
PHILOSOPHY AND
URBAN STUDIES
TO NOURISH THE
URBAN BODY**

URBAN CORPORIS X - UNEXPECTED

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X

INCIPIT

Starting from the emergency provoked by the Sars-Cov2 that affected the whole world, the book brings the contributions of researchers and artists from all over the world discussing the theme of the “unexpected”, its implication and interaction with the everyday life.

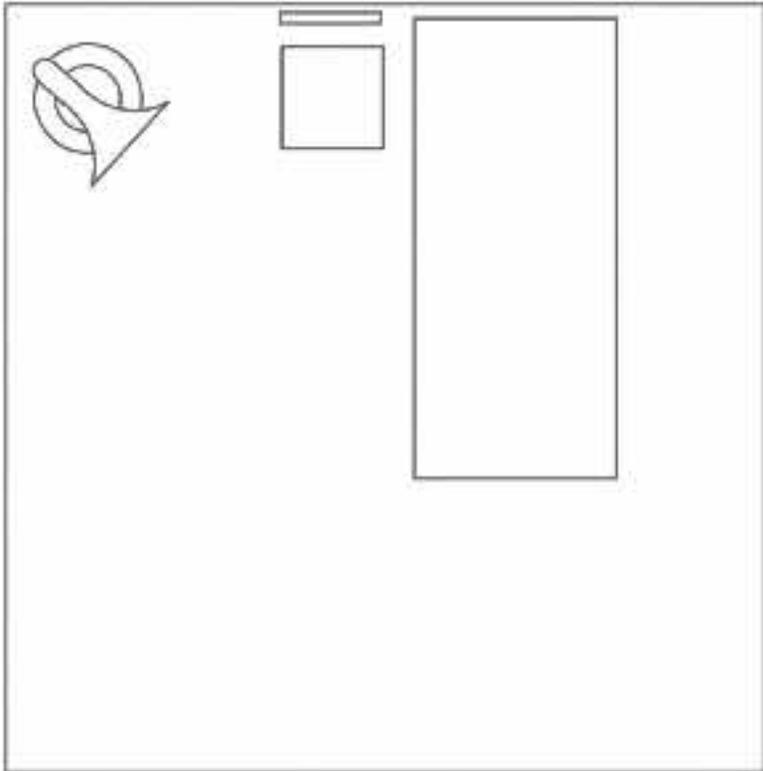
The book presents a series of essays divided into three parts: Living unexpectedly, Missing interactions and Different sociality.

These three categories bring together authors who have had a reading of the unexpected emergency that occurred, pointing out different perspective upon dynamics and relation caused by this situation, underlining how the isolation period has affected both the domestic and the urban sphere.

Moreover, through drawings, photo-montages and photographs, several authors gave a visual interpretation of the changed lives, spaces and routines.

All these contributions don't want to answer to the enormous problems brought by the pandemic. Rather they synthesize an interpretation of the shifting condition that occurred, showing both the great reactive capacity and the fragility of the no longer present reality.

**LIVING
UNEXPECTEDLY**



01. Plan of Hannes Meyer's Coop-Interieur, from "Die Neue Welt", 1926. Authors'drawing.

Caged Spaces of Interiority

Less Space and Cabanon

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Keywords: Minimal re-existence, Caged imaginarium, Intimate squared meters

Abstract

*During the Covid-19 pandemic, our surroundings, rather than the landscape became the closest things. In past debates, confined spaces have been linked with mind expansion. This dualism has been presented by Pier Vittorio Aureli's book *Less is Enough: On Architecture and Asceticism* (2014) related to the monk's space: the cell obliges him to be apart from others, living in a condition of essentiality but, also, it leads to a connection with interiority, contemplation, and asceticism. These opposite aspects also define the minimum cell, as Aureli underlines in his *The Architectural Review* article (1453, 2018): it could be seen as the emblem of "an atomized and precarious existence" and alienation, as well as a "representation of interiority."*

The cell is the condensed unitary construction in which we feel protected in primitive hut terms (Bachelard defined it as a "nest" or "shell" in 1957), and it could promote meditative activities. The physical properties of the concentrated space culminate in mind concentration itself. Since the notorious Le Corbusier has decided to seek refuge in a small fisher hut in the South of France, the notion of rational design has changed. The rustic house exterior turns into an interior designed as a shell. It follows the golden ratio rules, closing in as its uses are more intimate (Sola-Morales, 2000).

Meanwhile, we are locked down, and small spaces interrogate us for their ambiguity. Since the minimum spaces had not been chosen, "less is not more" seems a challenge: in our silent and intimate "cage", can we (re)invent the inner space and nourish our Imaginarium? How do we do "more with less" (Aureli, 2014)? Could less space lead to more Imaginarium? Revisiting critical thought and the ideas in Cabanon's design allows us to rethink our current situation.

Introduction

During the Covid-19 pandemic, our surroundings, rather than the landscape, became the closest things. To be confined in our homes changes our perception of space in sensible means and dialectically. It also opens up a critical perception. It is interesting to notice how in past debates confined spaces have been linked with mind expansion. This dualism has been presented by Pier Vittorio Aureli's book *Less is Enough: On Architecture and Asceticism* (2014). The Italian architect Aureli (1973-) evokes the idea of "asceticism" linked to capitalism as well as monasticism, as Max Weber (1864-1920) did before him. To live apart in this situation of crisis suggests to do "More with less", a new slogan proposed by Aureli changing the famous Mies van der Rohe's aphorism "Less is more". According to the author, to live apart could have two different meanings: in one way, it means being in connection with ourselves, with interiority, contemplation, creativity, and essential values; but, also, it could represent a form of resistance to the external life factors and powers (i.e., capitalism). Therefore, from his standpoint, it could be "one of the most radical experiments in living [...] completely antithetical to the principle that has regulated modern forms of powers, namely the concept of private property" (Aureli, 2014, p. 25). Extreme situations require radical positions. That is what Aureli emphasizes in his article reviewing the Minimum Cell on *The Architectural Review* (2018). The necessity to create a new world from the Coop-Interieur was the impulse to Hannes Meyer's work in 1926 (fig. 01). He used extreme simplicity in his photography Coop-Interieur to illustrate an article entitled "The New World" as a means to engage people in less consumerism, rethinking the way design used to be made. This image resumed his efforts during the years between 1923 and 1926 in a series of artworks, exhibitions, and projects as educational propaganda for the co-operative movement, in an explicit Marxist position. "Meyer proposed the Coop-Interieur as a universal space for a generic worker" (Aureli, Tattara, 2018, p. 107). By illustrating the new world changes with the private room, he addressed the entire socio-economic issue to dwelling problems. Converging to specific minimum space issues, in turn, he classifies dwelling as a place of the worker. Instead of the workplace, at home one should be comfortably accommodated to live better. The global pandemic situation we found ourselves in 2020 reminds us of the dimensions of our living spaces. Using Aureli's terms on Meyer's works, we should not "romanticize" our reality and look carefully at our design choices and the market impositions. Powerful images come when we think about minimal spaces and simplicity: the iconic Le Corbusier's *Cabanon*² and monk's cells, among others. From our inner places, we can imagine how Le Corbusier's particular experience is different from his production, as an architect in modern dwelling proposes. Can it be the corporeal experience and the natural environment the causes of such different projects, or are they very close in abstract and imaginative terms? How can the restrictions contribute to expanding our ideas, considering we are well at home?

State of the Art: Small Spaces and Critical Architecture

Recently, the debate on small spaces is still seen in publications, conferences, and exhibitions, because of market pressure. Some articles on *The Architectural Review* draw attention to the relationship between small spaces and the market in the form of a critique. We can mention articles such as "The price of everything, the value of nothing" (August 2019), "Form follows Finance" (September 2019) or "Enough is Enough" (October 2019). Nowadays, we know that the market defines the sizes and relations among spaces. For example, in the last decade, Manhattan's apartments were increasingly smaller³, and designers were very proud of arranging space-saving furniture in extremely tiny spaces. These micro-apartments are usually sold

showing images, masking the reality of the tiny spaces. We know that their real dimensions are more visible in drawing analyses than in pictures!

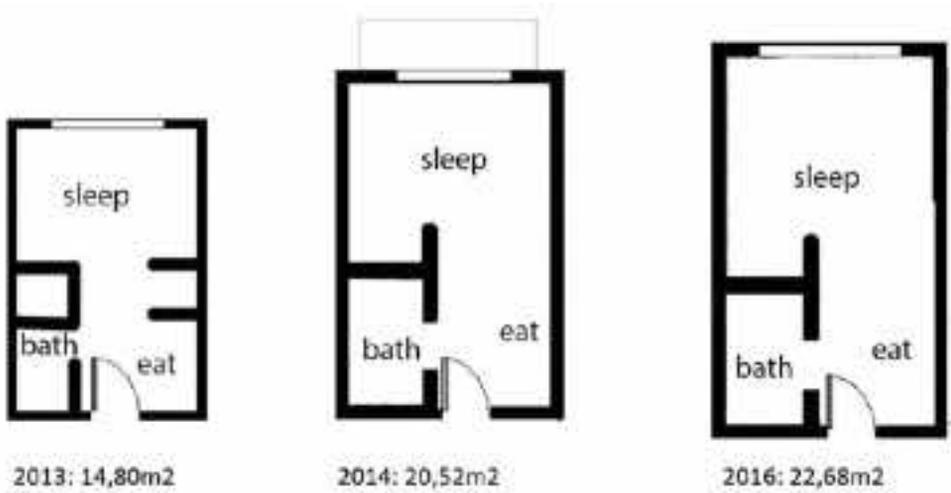
The efficiency and flexibility of space have been presented radically since the MoMA exhibition “*Italy: the new Domestic Landscape*” of 1972⁴. But, during the Covid-19 pandemic, some reactions at the lack of space and the increase of flexible design increase. For example, in France, in the *Le Monde* and during an online debate, François Leclerc, Jacques Lucan, and Odile Seyler mentioned the mass population dwelling problems with which their generation has been dealing since the 1960s and the 1970s. Somehow, they assume that the radical solutions made by his contemporaries to modify small spaces for different functions have been unsuccessful. Concerning the present situation, they agree that having a few more meters to live in, without *a priori* defining a specific use for this extra space, represents an improvement in the quality of life⁵. It seems that Seattle’s government policies have adopted this way of proceeding, turning the micro-units into more comfortable spaces as a form of resistance (fig. 02).

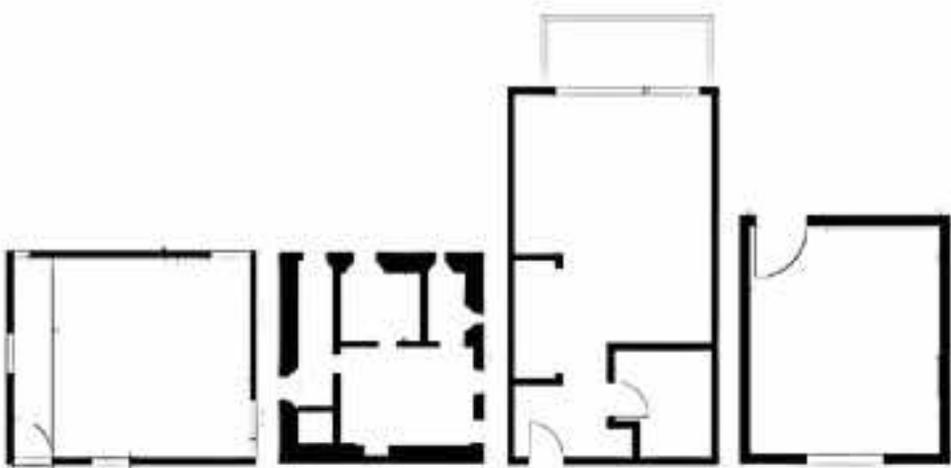
Going back to architectural history and critique we must understand the meaning of our sensory experience of the lockdown we endure in small spaces. Reading the references while living in lockdown gives them more importance. Most of the politically engaged critics of architecture put themselves against formalism but discussing new methods and new forms could bring better solutions. In this case, pointing out minimalist alienation means to face the design problems directly. However, some architecture critics use sociological thinking in the field discussions, leaving behind the design and forme issues.

Thinking of small space design Pier Vittorio Aureli (1973) plays dialectically with forms and ideas. Through Aureli’s texts, it is possible to put together some types of spaces such as the monk’s cell and the minimum dwelling, as spaces presenting a strong dualism. For the author, the monk’s cell is the emblem of this opposition: it is a space of desire and restraint, a space of oppression and resistance, as “the quintessential representation of interiority” (Aureli, 2014, p. 20). He uses Roland Barthes’s idea of “idiorrhhythmic cluster”: the cell allows the monks to live with their own rules and rhythms, according to a “slow life” opposite to the dynamics of work, industries, and powers. Yet, this double aspect is also true for other types of space. For instance, Aureli evokes the domestic space as a “temple”: the inhabitants “ritualize” lives with a personal routine, based on self-care and individual rhythms against the “*unpredictability of existence*” (Aureli, 2016, p. 105). About the effects of the cell space on interiority, British architect Simon Unwin (1952-) explains how “*the cell [...] is one of the fundamental and most powerful elements of architecture. Its power derives from its phenomenological effects. [...] Going into a small cell has a psychological effect*” (Unwin, 2015, p. 88).

However, for Aureli, the domestic space of the monk’s cell could have a different meaning. It could be considered as the representation of inside power relationships (despotic, conjugal, and parental) and the relationship with the land. Aureli follows Meyer’s footsteps, arguing that the room depends on the structure of the house, which causes places of inequality, as well as social inequalities. Thus, to emancipate the minimum cell as a generic device could bring freedom and equality. Aureli also underlines in this article the idea of the house as a space of resistance:

When we talk about domestic space, we are not simply talking about a space of intimacy and affective refuge but also about a sphere driven by economic conditions that radically compromise the possibility of individual and collective autonomy, of an escape from the rules that structure society (Aureli, Giudici, 2016, p. 115).





The room integrated into the system of the house is not a space of freedom and self-development but an instrument of control, considering systems of power in the relationship between the bourgeois domestic interior and the capitalistic society. The property is seen as a fundamental right with the promise of a better life; the opposite of an emblematic “atomized and precarious existence” (Aureli, Tattara, 2018, p. 107) and domestic life. During the Covid-19 pandemic, the words of Theodor W. Adorno in *Minima Moralia* resonate and thoroughly describe the precariousness and nomadism of our condition:

Things are worst of all, as always, for those who have no choice at all. They live, if not exactly in slums, then in bungalows which tomorrow may already be thatched huts, trailers [in English in original], autos or camps, resting-places under the open sky. The house is gone. (Adorno, 1944, note 18).

This idea makes us return to Aureli et Tattara’s article (2018): the minimum dwelling unit could be seen as an emblem of the “uprootedness” and nomadic way of life, so it should be independent of the house. It was pushed away in a strong utopic sense. Maybe, from now on, in a pandemic situation, instead of a utopia, we have to rethink how to be at the same time apart and inside a net, whose structure makes our lives possible.

Crossing readings: drawings, images, and texts

As an architect and an architectural historian, our reflections on the spatial changes we are living in and on the confined situation we are stuck in, under the capitalist system, convert to drawing analyses and possibilities. It is what we mean when we mentioned the link between sensible perception of space to a critical one in the current situation. In Aureli’s “Soft Cell” article, the schemes⁶ assume an essential value. He shows many space schemes in different periods and places: houses, bedrooms, monasteries, monumental and modest spaces put side by side and compared on drawings methods of abstraction and symbolisation. These schemes show only walls, entrances, openings, and some structural elements. No dimensions and no details.

It could be significant to merge Aureli’s critical vision of the cell with the antonomastic small space of Le Corbusier’s *Cabanon* drawings (fig. 03). It is also frequently evoked as Le Corbusier’s variation of the classical theme of the cell, which interested several architects from different cultures (Unwin, 2015, p. 90). Constructed on the golden ratio rule, the Cabanon measures 3.66 meters by 3.66 meters (16 m²), 2.26 meters high and it is composed by the assemblage of geometrical spatial-functional entities (four rectangles organized in a spiral around a square) that determines a fluid hierarchy.

In September 1929, during an intervention called “Analysis of the fundamental elements of the problem of “the minimum house” at the CIAM-2, Le Corbusier had already explained: “as far the “minimum house” is concerned, architecture can centre its attention on equipping the inside of the house” (Le Corbusier, CIAM, 1929). The standardisation of the structure contrasts with the flexibility of the interior. *Cabanon* seems to condense qualitatively the synthetic organisation like a scheme. Yet, schematisation could be rich in metaphors and symbols. Certainly, for the Cabanon the metaphor of refuge is evident: it is the architect’s space of intimacy, a “cabin to be alone, voyaging across an ocean of reflective creativity” (Unwin, 2015, p. 94). At first glance, we might think that it is a space completely closed in itself, an ephemeral space structured from the interior, structure which is

cut out from the exterior (material also changed: wood for the interior and metal for the exterior). This aspect is also mentioned by the French architect and historian Rémi Papillault:

Snail shell with modular, regressive system, the shed is a belly thought of from the inside breaking with the outside, while it works with its natural extension that is the garden where one finds shower, corner office of the day, corner office of the evening, the workshop in the background of plot in the form of a small construction shack (Papillault, 2000 – author’s translation from French).

The *Cabanon* is “the primitive hut,” and it represents the architect’s interest for primitive and vernacular structures of the countryside, Mediterranean Sea villages, or those discovered during his *Voyage d’Orient*. Besides what Bruno Chiambretto underlines, *Cabanon* could allow Le Corbusier the asceticism of the monastic life, that attracted him after his discovery of the Carthusian monastery of Ema at Galuzzo in 1907, of the Mont Athos in 1911, and Indian traditions as Sannyasa, a life of hermitage, in 1951 (Chiambretto, 1988, p. 57). Le Corbusier said:

I would like to live all my life in what they call their cells (Zaknik, 1990, p. 30).

Modern architects put strong efforts into designing dwellings they believe would improve living conditions for the people. Nowadays, we know modern urban design has brought segregation and gentrification took place in this context. The housing units have not guaranteed the qualities of buildings and the city as well. However, it does not mean we could not learn from the past experiences studying their design tools in order to anticipate our own new problems, imagining spaces and relations. This description leads us to put together sketches of the pre-existent form of the *Cabanon*, monk’s cells, and a generic room, subjects of the Aureli’s article on *The Architectural Review*. Making this comparison, we would like to stretch the tensions and possibilities of imagination involved in the design process (fig. 04). As the architectural historian Michael Hays (1952-) explains with the concept of “Architectural Imagination”, one of the most important competencies of architecture is “*the power to create images [...] a disclosure of truths about the world by giving the appearance to them*” (Hays, 2015, p. 205).

Discussion: the minimum and the feeling of enough, inside the room outside the mind

From the monk’s cell to the *Cabanon* of Le Corbusier, small spaces are not considered as oppressive and caged but, on the contrary, spaces of access to a different way of life, linked to interiority and imagination. As underlined, it is interesting to notice how modern architects have linked life of the soul and the physical life in a straight relationship concerning space matters. Le Corbusier uses the term of “room” for internal or external spaces to connect them with the experience of interiority (François, 2017, p. 304). For Aureli the situation is more complicated for the minimum dwelling. If the monk’s cell is a space free from private property and a manifest of an interior choice in communion with a collective structure, the minimum dwelling could be seen as a space of oppression and alienation. Once again, the *Cabanon* and the monk’s cell give the surroundings a fundamental role to make these units able to live in: the landscape nature for the first one and the monastery outbuildings for the second. Nowadays, we find ourselves confined in spaces disconnected to the city because they were not designed as independent parts of a network.

The point is that most of the people are obliged to live in a small space: it is not a choice but a consequence of the “structural” system. However, a sacralization of the house space is still

present. It resembles the standpoint of the philosopher Gaston Bachelard in *La poétique de l'espace* (1957), which describes the domestic space with some powerful metaphors: a primitive hut, a nest, a shell. The domestic space is rich in symbols and significances, profoundly linked to the interiority of the inhabitants – “*the intimacy of the cell is our intimacy*” (Bachelard, 2019, p. 203). It also relates to a “non-caged” imagination – “*The lived home is not an inert box: the inhabited space transcends geometric space*” (p. 73).

Geometry and schematization are strictly linked to the “Architectural Imagination”, as defined by Michael Hays. Kant’s productive imagination is the basis of the Hays’ concept. Generic abstract solutions can solve specific problems. Imagination operates at an abstract level where “a *schema* is something like a script for producing images in accordance with the symbolic order – a synthetic operator between the sensible and the understanding” (Hays, 2016, p. 205). Meyer’s creation is a scheme in Kant’s terms that brings an abstract lecture of reality, putting the design role in a critical distance. Imagining different social relations is to imagine flexible spaces in which the multiple human activities can operate instead of different social layers being juxtaposed. Making use of pre-existent spaces forms and social relations to criticize them is perhaps to resort to history and observe the cultural grounds of the forms.

The decision to revisit modern forms and concepts and evaluate if they are present and how it happens in the *Cabanon* is a way of learning from history. Recent past is always being revisited to examine how the design and history collusion occurred in the last century. Anthony Vidler (1941-) in *History of Immediate Present*, declares:

I hope to demonstrate not the pernicious effect of history on design nor the need radically to separate the two, but rather their inevitable collusion, one that pervades all modern architectural discourse (Vidler, 2008, p.15).

In contrast to modern ideas of *tabula rasa* and rejection of the past, for some architect history becomes a critical tool for examining present situation and for design. We could “*conceive history like a project*”, suggests Vittorio Gregotti in *The territory of the architecture* (1966). This idea of active and “prophetic” history is expressed in the notion of “operative criticism”, as developed by Manfredo Tafuri in *Theories and History of Architecture* (1968). Considering a juxtaposition of criticism and history, Tafuri defined the “operative criticism” like “*the point of collusion between history and design*”, and as a criticism that “*project history from the past to the future*” (Tafuri, 1968, author’s translation from Italian).

The problem of intellectual work within capitalist development was a target point in Tafuri’s efforts to show “*architects as intellectual workers*” (Tafuri, 1968). In this context, the processes and forms which link intellectual work and political economies should be “*seriously (re)historicized*” (Aureli, 2011). We believe works like Meyer’s diagrams in their critical and engaged discourse should be put in this (re)historicized reading of the past.

One could say that Aureli resorts to monasteries to make a similar critical strategy focusing on Modernist Statement - “*Less is Enough*” - as we have mentioned before. Once again, the critical distance lies in the historical time distance. Meanwhile, Michael Hays’ tools to evaluate our surroundings do not lie in history but inside our minds: the imagination. The “Architectural Imagination” consists of a specific kind of thinking in which design is a potent tool, therefore visual thinking is a way to imagine new possibilities and a model of space production as well:

We schematize, we mentally organize, we design the type form. And then and there, we enter the architectural imagination. We proceed from the initial appearance, through the imagination, to the symbolic order - that is, to the category and concept of architecture. [...] an understanding built from prior encounters, memories, and reflected conceptualizations. [...] Only when the imagination mediates between the sensible and the understanding, with the symbolic order of the understanding presiding, is That architecture (Hays, 2016, p.205).

The way Meyer perceived architects as labourers was fundamental to create his images. And “for him, co-operation was both a collective mode of production and the link between the product itself—architecture – and its producer – mass society” (Borra, 2013), which means he had internally accessed economic and architectural categories and codes to transform them imaginatively.

Conclusions

All of Aureli’s arguments in *Less is Enough* converge to the issue of private property as the fundamental concept to think of the historical evolution of the modern city: “not simply a means of power, but a sort of transcendental instigation for people to become more focused” (i.e., dedicated to work) and thus dependent on their economic condition (Aureli, 2014, p. 28). House rentals were a turning point from the shelter to a productive role, and it is no coincidence that it has happened in the early modern period (Aureli, 2014, p. 30). We believe that revisiting this debate based on Aureli’s persistence and adding some elements to bring it closer to the public is to shed light on the architects’ social responsibility and participation in present culture as an intellectual agent. Considering that private property prices have been increasing and the process of reducing spaces has always been part of the architecture realm, it is very important to assume a position to face this issue and perhaps offer alternative solutions.

In the last decade, especially in Michael Hays’ thought, it seems that imagination has gone beyond ideas and has included design problems to articulate the architect as an intellectual agent in contemporary cultural complexities. It is exactly in design tasks that we can change the problem of less space, which was not chosen but it is a form of submission in society’s unequal division. One of the most important legacies of Meyer’s work is not making a model to follow but showing how schematization can be a fruitful process for broad solutions.

Commenting Meyer’s work on the Co-op Interieur schematic role, Aureli shows the industrial nature of its design as the most radical aspect: the anonymity seems “to kill off the property value”. Its objects and architecture itself are “not right nor wrong, neither public nor private, but simply instruments” (Aureli, Tattara, 2018, p. 111). Aureli suggests that possibly Meyer’s contemporary version of a monk’s room in which the possibility of happiness is the lack of property, because “his room shows what could be the architecture of use against the architecture of property”. The radically generic and anonymous room frees us from the obligation of ownership, and that is the crucial point of the pandemic situation: the social differences that are rising. In this sense, “we can imagine Co-op Interieur dialectically”, so as our isolated rooms are revealing “our increasing precarious domestic life and as the harbinger of space for anyone like a universal basic right” (Aureli, Tattara, 2018, p. 111).

This process of abstraction quoted by Aureli is in confluence with Kant’s concepts within which “Architectural Imagination” is impregnated: the importance of schematization to create new realities. More than creating new models to follow, the scheme serves to synthesize thoughts and feelings at abstract levels before applying them, or not, in real specific situations. Therefore, we need a way of relating and connecting these two separate faculties.

There must be a third thing, [...] which must stand in homogeneity with the category on the one hand and the appearance on the other, and make possible the application of the former to the latter. This mediating representation must be pure (without anything empirical) and yet intellectual on the one hand and sensible on the other (Kant in Hays, 2016, p. 205).

The operation between feelings and thinking could be read as the architecture's intellectual properties. It could be a revision of what Aureli identifies in Tafuri's goal of seeing "architects as intellectual workers" to deal with crisis considering "the pressure points in intellectual culture within capitalist development":

To historicize intellectual mentalities meant that the political site of struggle was the intellectual work itself in the terms of its qualifications, its way of being specialized and the way, at every cycle of production, capitalism always defined a new mandate for the social role of intellectuals (Aureli, 2011).

Paradoxically, Tafuri's reflections provide an open way of understanding the possibilities of action, which makes it mistakenly similar to slogans such as "creative work" and "creative class" (Aureli, 2011). These slogans have included and accepted the productive status of knowledge, not taking into account the fundamental "pressure points" of Tafuri's ideas. Returning to our discussion on less space, we could argue on the difference between the monk's choice of alienation based on asceticism and the contemporary political alienation that feeds economic segregation.

Asking ourselves if imagination is the only solution in caged small spaces, we found it is impossible to have a conclusive answer. However, the more we have entered this debate through Aureli's and Hays' ideas and looking at Cabanon's drawings, the more we have found it is important to reveal our problems.

The potential of collective immaterial production⁷ and the self-valorisation of mass society have been organized in diagrams by Hannes Meyer, and Borra (2013) believes it's "The crucial aspect of the architecture of the collective subject". Meyer had already "used material diagrams to "organize" these potential forces, "something that was largely underestimated at the time". By the pioneer vision of Meyer's co-operation, there were not only material problems and "architecture was not produced by a diagram mapping" in a play with "material and immaterial factors in the development of diagrams". Consequently, it is "the opposite of today's tendency to create a "diagram of everything"⁸ not considering the political realm.

Among diagrams, schemes and images there are infinite possible combinations of design and thinking that could reveal the importance of imagination. Yet, we have decided to take the critical path and to emphasize the intellectual role of architects because it (less) is really enough. We need more a critical position and fewer market solutions, more space and less form.

Notes

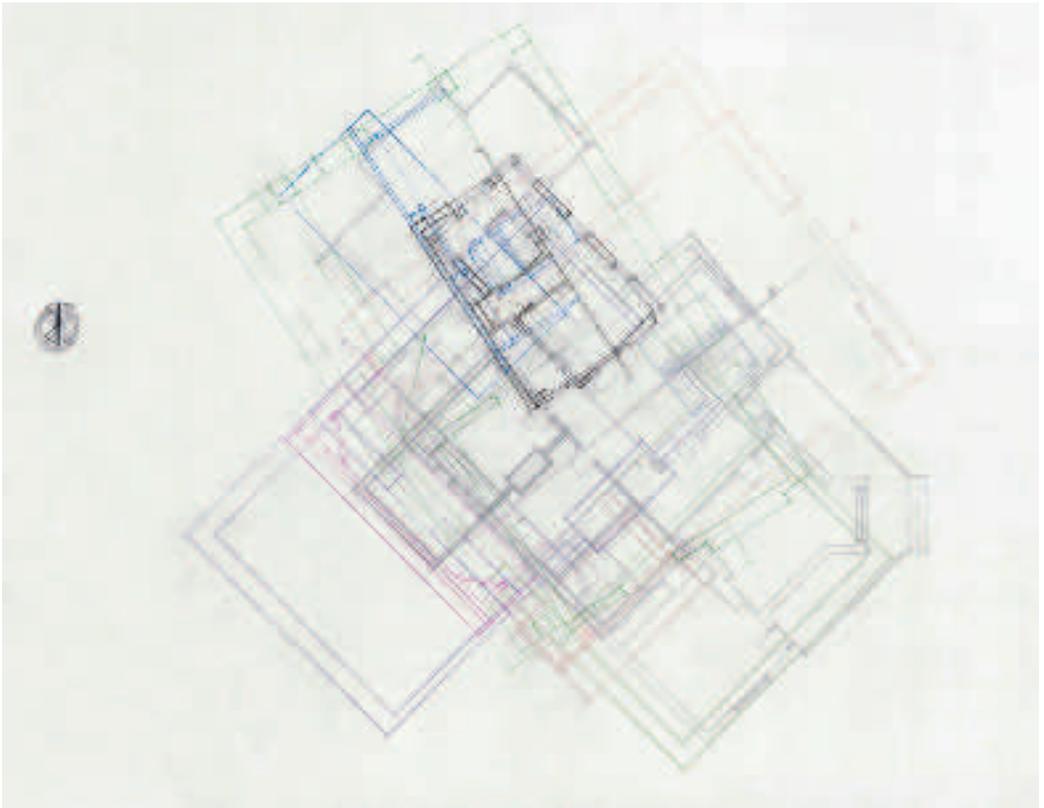
1. Pier Vittorio Aureli is not the only one that plays with Mies's slogan. Italian architect Stefano Boeri published a book entitled Fare di più con meno - "To do more with less" (Boeri Stefano, Fare di più con meno, Milan, Il Saggiatore, 2012), evoking the idea of "degrowth" with a critical (and political) connotation.
2. From the 1950s, the Cabanon is a small fisherman hut in Roquebrune-Cap-Martin, in the South of France. It could be considered a manifest of the rational minimum cell theorized by the Modern Movement and Le Corbusier's concept of "machine for living" (machine à habiter) and Modulor.

3. Since the last decade, the micro dimensions are getting more drastic, a two-bedroom apartment could measure 490 square feet instead of a traditional 900 square feet, and a three-bedroom apartment is about 735 instead of 1,200 square feet. For example, at nycurbed.com website the market predominant discourse is evidently based on efficiency.
4. MoMA exhibition's catalogue shows efficient design in tiny spaces furniture defining the future of micro apartments.
5. Leclerc François, Lucan Jacques, Seyler Odile, "La taille et la qualité des logements doivent être un chantier auquel nous devons nous atteler", *Le Monde*, 24th April 2020; Darrieus Margaux, "Coronavirus: quelles leçons pour le logement?", *AMC*, 13th May 2020. An online debate between François Leclercq, Jacques Lucan and Odile Seyler called "Logements plus grands, mode d'emploi" took place on the 10th of June, 2020.
6. The scheme is part of Kant's thought we will develop further in the discussion.
7. Author's note: See Branden W. Joseph and Alessia Ricciardi, "Interview with Paolo Virno", *Grey Room*, no. 21 (Fall, 2005) and Maurizio Lazzarato "Immaterial Labour".
8. Borra quotes Rem Koolhaas, ed., *Content* (Cologne: Taschen, 2004) to explain how the architect believe diagrams could make architecture out of construction not a stupid thing, a way of thinking by diagramming everything.

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01. Neurotic House. Rachel Hurst, 2020, propriety of author.

Neurotic House: elastic spaces of the Pandemic

Rachel Hurst is a Senior Lecturer in Architecture at the University of South Australia, with extensive practice-based research into the everyday.

Keywords: The everyday, Architectural scale, Urban analogies, Speculative drawing, Analogue representation

Abstract

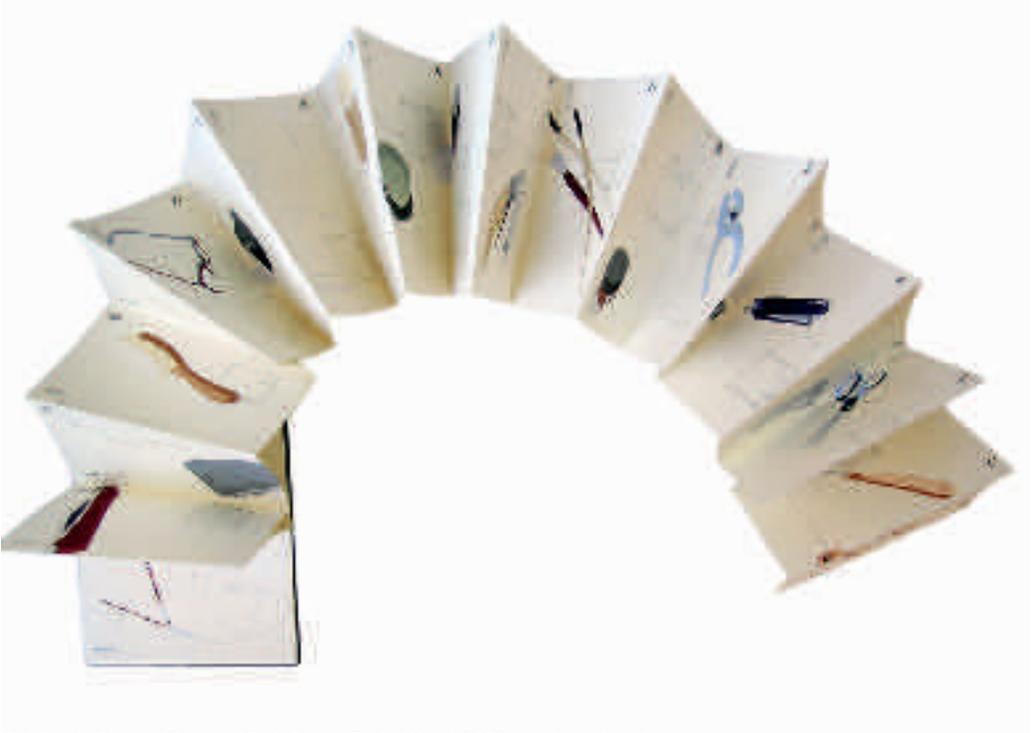
In the pandemic shutdown, our world shrinks from city and neighborhood to house and room. Simultaneously, everyday spaces become expanded neurotic realms, occupied day and night. Kevin Lynch's elements of city, districts, nodes and landmarks become house, room, place and object respectively (1960). This project recalibrates the way we read space in the time of Covid_19, superimposing plans and sections at increasing scales: first home, then room, place and thing are layered to represent what draws our attention as we work from home. The suite has three components able to be read separately or together. Each uses a different analogue medium – graphite, gouache and oils – as resistance to the enforced digital milieu of social isolation, and as a broader critique on the future of analogue representation. Neurotic House is the core data of five drawings compiled into one, subversively using the conventions of architectural drafting in a linear, colour-coded trace of a renovated 1913 Australian house and four key rooms. 40 days of Small Mercies journalises designed things that help transcend the 'new normal', whilst showing the repetitive paths and places of daily existence. Four paintings titled Intimate Squared Rooms combine both, as richly coloured multi-scaled studies of discrete rooms, places and things. Jointly the collection depicts the cumulative spatial perceptions of everyday settings, especially at times of prolonged occupation, where the familiar acquires fresh intensity and what is 'at-hand' assumes new significance. Scale is interpreted as malleable, not just graphically with multiple scales operating within the one composition, but in the reconfiguring of the house with urban gravitas and complexity. In this compressed environment, living rooms become conceptual public spaces, ancillary rooms become productive work precincts and inanimate objects become the obelisks and monuments of our unexpected microcosmic cities.

Pliant space

Neurotic House (fig. 01, 02, 03) is an exercise in pliability, bending ostensibly stable structures in the pervasive uncertainty wrought by the Covid 19 pandemic. The trio of projects examines the rapid recentering of civic and workplace life into the domestic sphere: redeploing the codified practices of orthodox representation to depict the febrile occupation of lockdown. If the prevailing urban tendency of the last two decades was of expanding cities and accelerated time, 2020 has seen a radical reversal for many into compressed space and slowed time. Daily life has become a contradictory spatial inhabitation between the immediate intimate space of home and a virtual workplace, city and globe. Does this intense reacquainting with home, versus our thwarted desire for civic life, alter our reading of familiar places and things? How might we use a correspondingly destabilised attitude to conventional drawing to investigate these “plastic perceptions”, where houses become cities and rooms become realms (Spoerri *et al.*, 1995)? The work here explores these ideas in a case study (of my own renovated Arts and Crafts Australian house), building on a prior practice of expanded drawing and analogies between intimate and urban space.

An Elastic State of the Art

Neurotic House presents three accounts of one house in diverse drawing modes, but critically using blended scales. Fundamentally, the works build on existing arguments that scale is malleable in the way we use and comprehend spaces – from urban through to architectural; and even to the table and object. Aldo Rossi, for example, extrapolating from his seminal *The Architecture of the City* (1982), demonstrates fluidity of scale and symbol in morphology, through projects of Modena Cemetery, Teatro del Mondo and his coffee service designs for Alessi, while David Leatherbarrow focuses on the fluidity of functional habits from the table to generic space (2004). This synecdoche generally works in both directions: where the small can stand in for the large, so too the large can be compressed without loss of critical characteristics. The familiar term ‘the outdoor room’ in both urban design and landscape architecture discourse is testament to this commutative characteristic of occupied space. Allied with canonic discourses that typologically analyse the city (notably Lynch [1960]; Cullen [1971]), Neurotic House considers how a private residential setting conceptually transforms during the pandemic to substitute the amenity and psychological significance of civic life (fig. 03). Contemporary directions in expanded and hybrid drawing motivate and underpin the Neurotic House suite. Catalysed by the dramatic shift from analogue to digital modes, organisations like Drawing Matter and DrawingOn journal exemplify a resurgence of interest in representation as both artefact and practice-based research. Boundaries between art, architectural drawing and documentation are being stretched across disciplines. The lineage of Eisenmann’s “superpositioning” (1986) for instance, resonates in the artworks of Julie Mehretu (2020), Riet Eeckhout (2020) and the eclectic collages of Perry Kulper (2013), while the “non-compositional architecture” studies of Pier Vittorio Aurelio (2016) recall the reductionism of mid 20th century Minimalist Abstraction. Evident in the first and third components of Neurotic House (fig. 01, 02), these influences belong in the rarefied practices of architecture and art. In contrast, the central component 40 Days of Small Mercies (fig. 03) draws on theories of the Everyday. Its focus on daily routine and adapted work-processes extends Michel de Certeau’s (1988) and Georges Perec’s (1997) analyses of the quotidian as a site of complexity and resistance to authority, while its taxonomy of commonplace objects reframes Daniel Spoerri’s assemblages of everyday settings. Allied with the 1960s Fluxus movement, Spoerri’s Anecdote-



02. Intimate Squared Rooms_Alice's Room. Rachel Hurst, 2020, propriety of author.



03. 40 Days of Small Mercies. Rachel Hurst, 2020, propriety of author.

ed Topography of Chance resonates, not least for its book format, but for its allusions to expanding scales: though his collections are determined in an aleatory way, they are gathered as prompts for experiential associations where “an apparently infinite process is unleashed, like a stroll taken in every direction at once”(Spoerri, 1995).

Stretched Methods

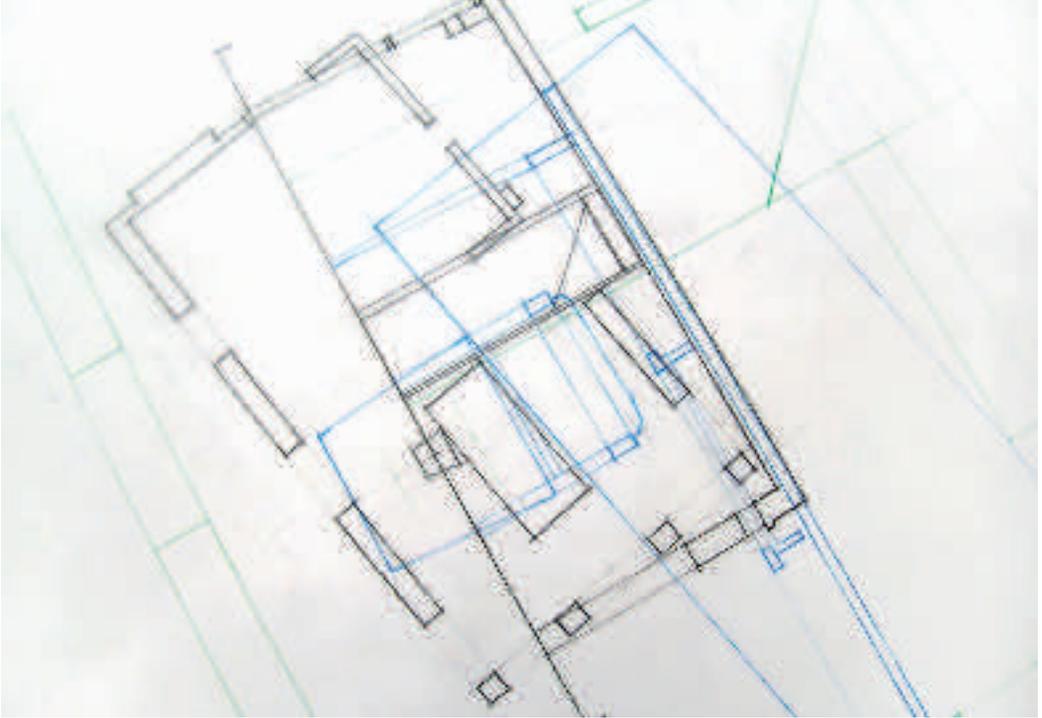
The works are in a deliberate, overlapping sequence: from assembling raw data, to pictorial studies, to final synthesis. Each component relies on stretching the methods and habits of traditional drafting techniques (linearity, transparency, singular scale, discrete orthographic projections and color codes).

Part 1_Neurotic House. Tactics of superimposition and nested scales are used in this linear collation of plans and sections. The base is a 1:50 ink drawing of the entire house (sited with North upwards). Four layers of trace isolate studies of the major work rooms during the lockdown. Each sheet duplicates the 1:50 plan, locates the observer ‘in place’, and from that datum projects a 1:50 section, then 1:20 plan and section, and finally 1:10 plan and section of the immediate place. Different coloured leads are used for each scale, coded to the actual referents. Fig. 04, for example, shows in blue a chair and table of an improvised workspace in a dining room. The observer’s position becomes the locus of a simultaneously expanding-shrinking projection: encompassing the memory of spaces beyond, but privileging those things closest to us. The five drawings are scanned into one compilation, retaining the opacity of the layers, so that the result is a complex fabric of lines. While superficially reminiscent of Libeskind’s seminal *Micromegas* drawings (Libeskind, 1991), the depiction is not imaginary space, but mapping actual physical data, and its oblique collisions derived from shifting occupational positions within otherwise orthodox projections. In this way it mimics how dynamic inhabitation affects the way we perceive the generally gridded geometry of the city.

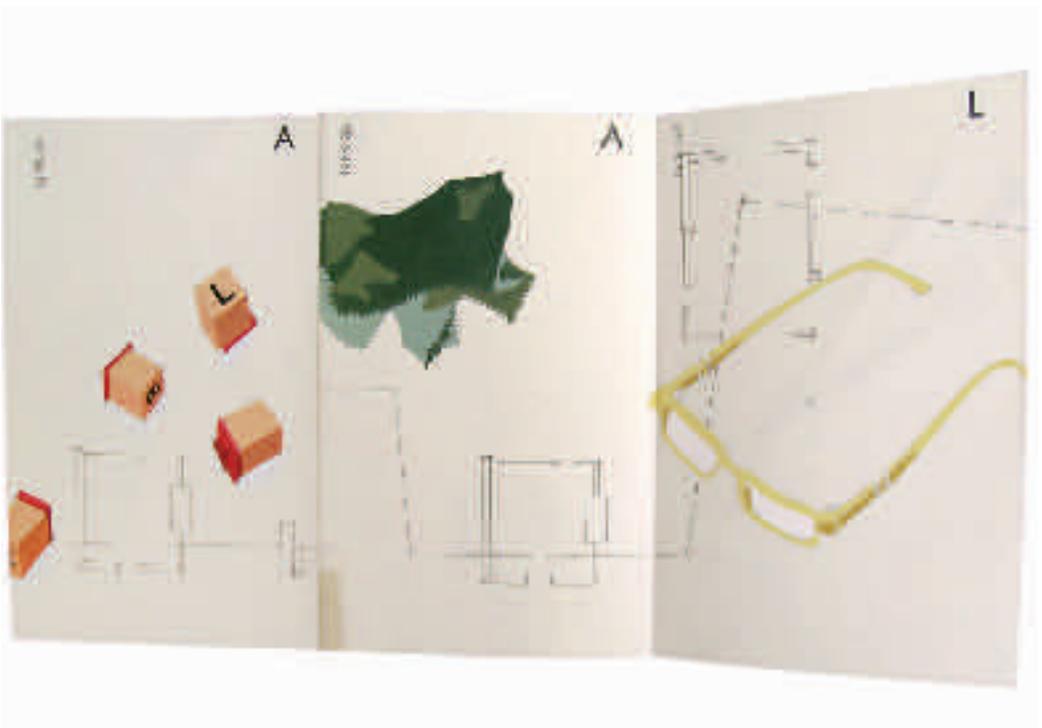
Part 2_40 Days of Small Mercies. More accurately 46 days of paintings, this component uses a folding sketchbook, or codex, to journalise the objects and spaces of working in isolation. Unlike Spoerri’s aleatory collection of objects (1995), this daily ritual was deliberate: the criteria was to select a designed object which predominated in the day’s activities, and to render it near life-size against a 1:100 plan of the room where it was used. Simple tools and objects of production predominate, like the stamps, cleaning cloth and spectacles of fig. 05. Dotted pathways connect each page/room in a stretched circulation diagram, notionally recording the degree of movement or stasis that day. Painted in gouache, the objects are intentionally stylised: flat, floating and emphasising any zoomorphic characteristics, as if in a children’s book or primer. Reinforcing this didactic impression, readymade rubber stamps record the date and room legend for each page.

Part 3_Intimate Squared Rooms (fig. 06).

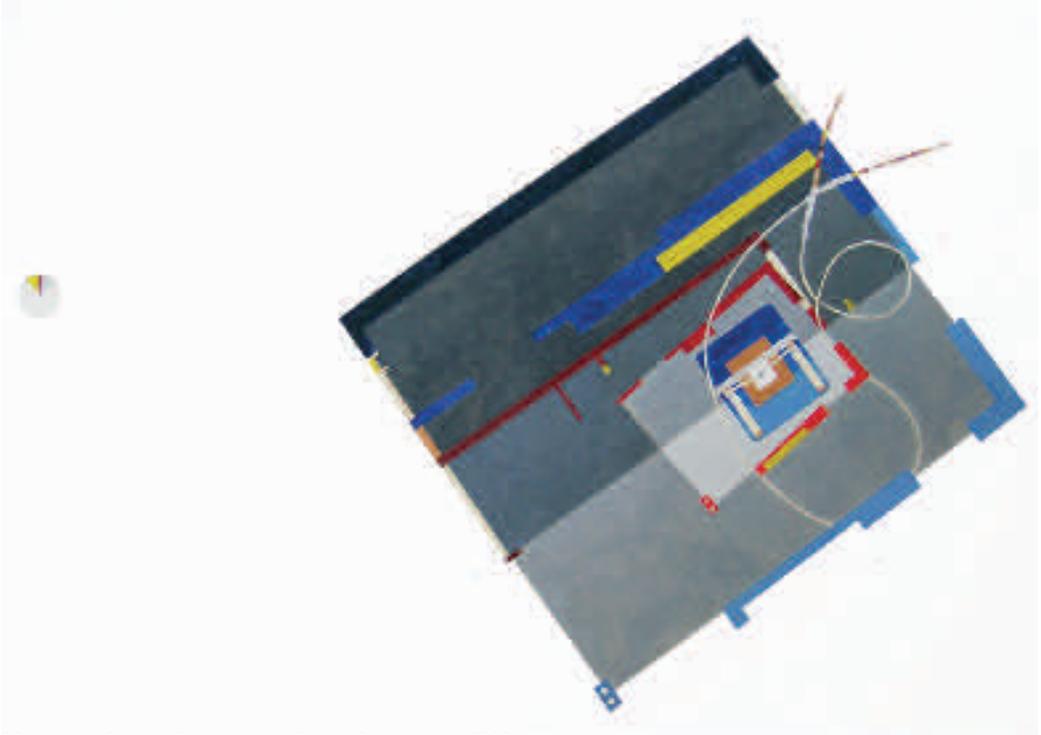
These four oil paintings unite the layers of the Part 1 drawings with the object studies of Part 2. Reworked at the same scale and orientation as the originals, they incorporate precise colour and tonal systems to heighten the various scales and projections of the compositions, and challenge the often monochromatic, muted and textureless renderings of orthodox spatial representations. Colours relate to actual material palettes



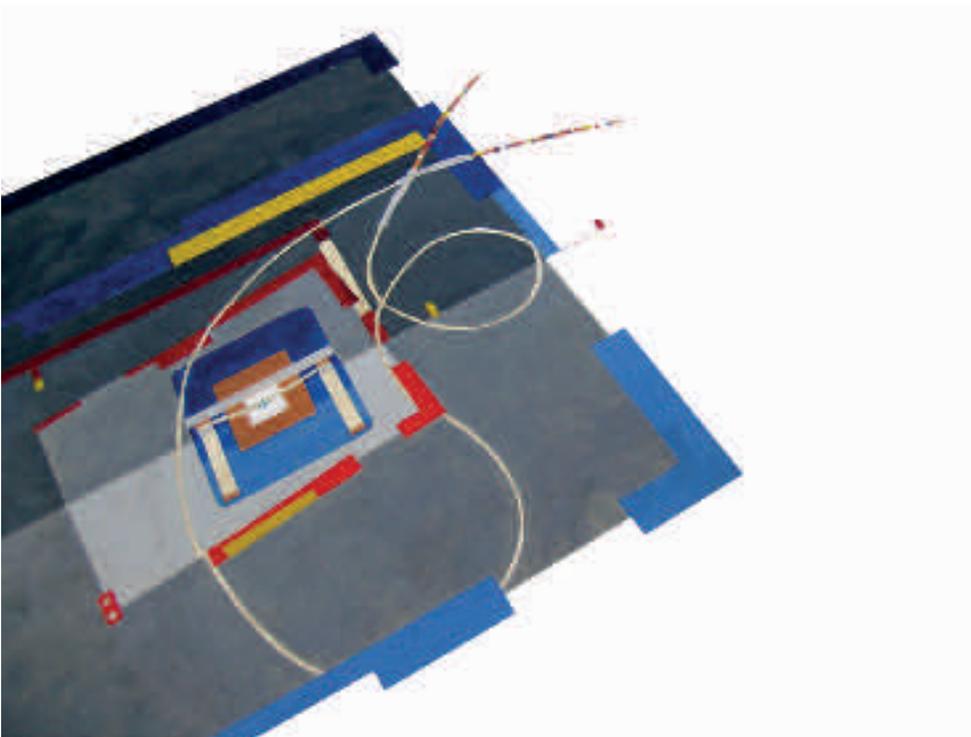
04. Neurotic House_detail, 2020, Rachel Hurst, propriety of author.



05. Neurotic House_detail, 2020, Rachel Hurst, propriety of author.



06. Intimate Squared Rooms: Living Room. Rachel Hurst, 2020, property of author.



07. Intimate Squared Rooms: Living Room_detail. Rachel Hurst, 2020, property of author.

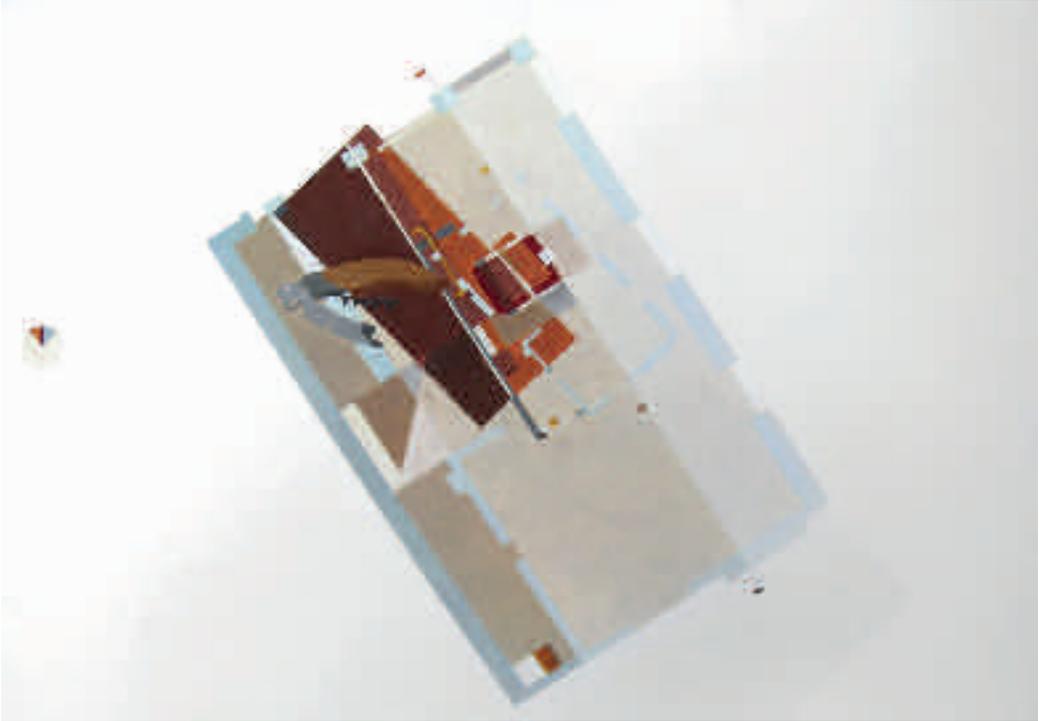
of the spaces, and intensify methodically with scale and sectional cut. Fig. 06 demonstrates this deepening and layering of colour, borrowing techniques of phenomenal transparency from the Cubists to evoke spatial depth. The culminating synthesis is in selecting the appropriate object from the codex for each study: of the multiple options attached to each room, which thing most potently fulfils 'landmark' status in a cognitive map of time and place?

Over + Over the same ground. As the works develop, three insights emerge. The first is the complexity of otherwise unremarkable spaces when representation attempts to 'see all things at once'. This is not a startling revelation, given the century old heritage of the Cubists. It does, however, underscore the inherently reductionist nature of orthographic projection and the way we habitually compare scale, projection and materiality in architectural documentation. Secondly, the complexity of everyday spaces lies not merely in the envelope and fabric of the place, but in its occupation, furniture and accoutrements. With heightened attention to the logistics of daily inhabitation, the house is revealed to be in a repetitive state of flux, of people, objects and purpose. Three rooms (two bedrooms and laundry) become workspaces, tailored for specific processes, like a veritable industry district. The qualms that working-from-home would sap productivity are not borne out by the marked repetition of these spaces in the mappings: not only are they the most prominent, but objects in recreational spaces occasionally relate to peripherally productive tasks (like the knitting needles foregrounded in fig. 07). In general, central shared spaces are dedicated to recreation, sustenance and cultural pursuits. The house gently assumes some of the zoned characteristics of the Modernist city (although a slightly blurry version). Abstracted and at intimate scale, the paths, edges, districts and landmarks of Lynch's city image (1960) are nevertheless discernible with varying emphases in each suite: Parts 1 and 2 favour edge and path while Part 3 presents district and landmark as new saturated versions of figure-ground maps. Lastly, the three parts each foreground distinct (yet coexistent) temporal aspects of occupation (fig. 08). Each aspect is amplified by the undercurrent of anxiety, repetition and limbo in the pandemic. The superimposition in *Neurotic House* yields a drawing of labyrinthine complexity, where the shifts of spectator point and slight imprecision of registration convey a sense of instability, as though the house is twitching. *40 Days of Small Mercies* beats a regular rhythm of well-worn paths and contemplative focus, while the considered thick compositions of *Intimate Squared Rooms* ground spaces as fixed moments of equilibrium, or sedimentary layers of inhabitation.

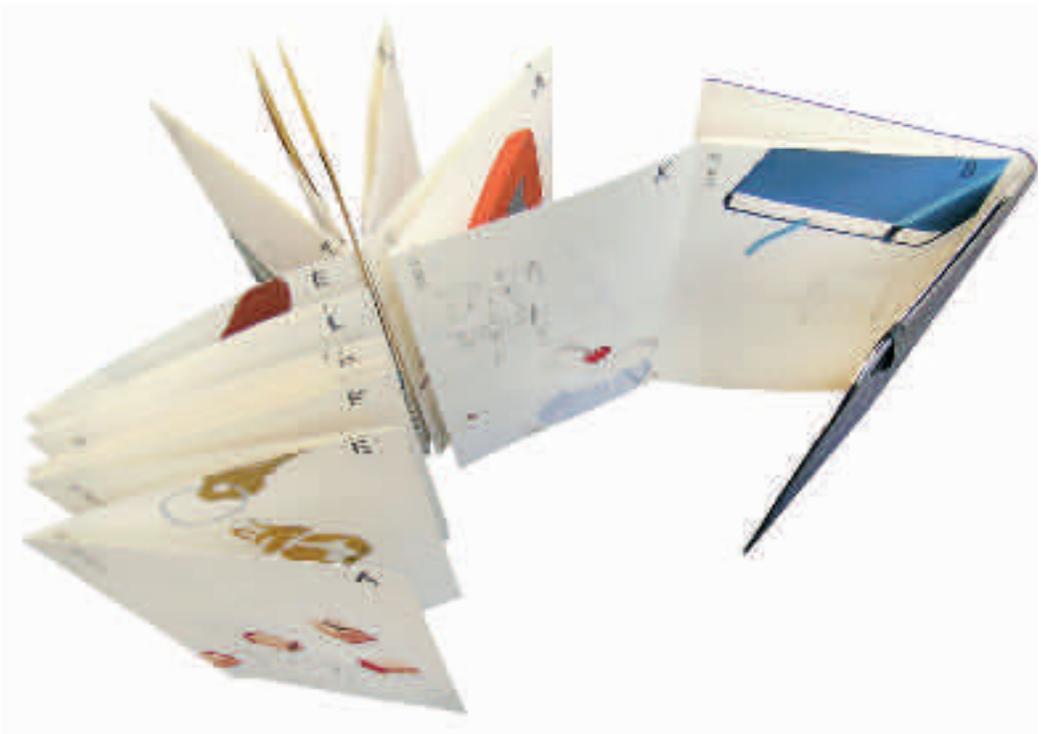
Expansions

These effects also suggest parallels with the way we read a new city. Initially, there is an overload of information at many scales. The information is thin, a mere outline of what we know is beyond the surface, just as we know there are many surfaces coalescing in our view, and that reordering those surfaces will alter the view. Acclimatisation comes with incremental, repeated focus on immediacy and utility (fig. 09): what is at hand in the neighbourhood that is necessary or memorable, and how is it connected to other places? Finally, we reach the stage where the multiple scales and sensory richness of urbanity are assimilated into our own personal images of the city), which though still complex, have legible structure, hierarchies and landmarks (fig. 10).

If the layout and functions of the house were established well before lockdown, and hence



08. Intimate Squared Rooms: Dining Room. Rachel Hurst, 2020, property of author.



09. 40 Days of Small Mercies_detail. Rachel Hurst, 2020, property of author.



10. Intimate Squared Rooms: Beatrice's Room. Rachel Hurst, 2020, property of author.



11. Intimate Squared Rooms: Dining Room_detail. Rachel Hurst, 2020, property of author.

urban correlations (of zones, public-private interfaces, circulation etc.) substantially pre-existing, the same cannot be said for the landmarks of a Covid-adapted life. Lynch defines landmarks as “points of reference”, including buildings, signs, stores, mountains and public art (1960, p. 48). His discussion concentrates on their ocular centric qualities as singular, contrasting elements. Cullen too describes them formally, as foils and focal points. Even his note on “significant objects”, which may be commonplace urban infrastructure, emphasises their sculptural or vivid visual qualities (1971, p. 73-77). In a house exhaustingly familiar from months of confinement, few, if any objects, are likely to provoke “urban drama”, or as Percey writes, “I’m too accustomed to the monuments to want to look at them” (1997, p. 63). The things of import are those that facilitate, that give pleasure in their haptic, helpful obedience (often in the face of recalcitrant higher technologies). The catalogue of things in *40 Days*, chosen with minimal parameters, reveals recurrent associations and capacities. Some are practical and frequently used (spectacles); some are discretionary but potent in their enhancement of the everyday (perfume). They fall approximately into the following categories (with specific examples from *Intimate Squared Rooms* in italics):

- Items of repetition, ritual or temporality (pencil sharpener, perfume, watch);
- Items of enquiry, measure or knowledge consolidation (tape measure, hard drive, book);
- Items and tools of production (knitting needle, paintbrush, pencil);
- Items of sustenance (bottle opener, drinking glass).

These associations not only elevate these ordinary items into diminutive personal monuments, but potentially expand the conceptual definition of landmarks beyond the ocular. Post-lockdown, can we look anew at the landmarks of our towns and cities and find similar qualities underwrite their significance: that apart from their visibility they are in-service to our existential needs – of physical and psychological locatedness?

compliant places

The pandemic has demanded adaptation of global systems, and exceptional compliance from its citizens, as the sociable cities of the world are reconfigured as quarantine zones. Some communities have adjusted to this enforced shift better than others, with the benefit of economic and political largesse: they have even been able to embrace isolation with curiosity, for in Spoerri’s words “isolating... you see things you never saw before” (1995, p. 81). Perhaps they have had the luxury of spatial settings that are themselves pliable, that by Cullen’s definition enable them to “manipulate within the tolerances” (1971, p. 8)? The *Neurotic House* project expresses the general disturbance of the pandemic, with its compulsive, constrained iterations of an inescapable situation, but also manifests as an exercise in manipulating scalar and representational tolerances. It is an optimistic bid to advance potential evolutions of analogue crafts, and recognise the resilience and elasticity of everyday space (fig. 11).

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Bricolage City



Playful Narratives



Baguette and Chocolate



Nail Salon



Sunday Market



Puzzling Fragments



Ritual Moments



Magic City



Monumental City

Kitchen Table Mapping

Rennie Tang is a designer and educator based in Los Angeles. As Associate Professor of Landscape Architecture at California Polytechnic State University Pomona she spent the 2019-20 academic year on sabbatical leave in Paris, France, where she was living during the period of confinement. Her practice-based research interests include the investigation of choreographic tools as methods for architectural/landscape design, health and well-being in urban landscapes and intergenerational play; this research is fueled by collaborations with choreographers, artists, movement analysts and occupational therapists. Her teaching methods emphasize topographic manipulation, material exploration and one-to-one scale spatial construction. She is recipient of the 2017 Excellence in Design Studio Teaching Award from the Council of Educators in Landscape Architecture (CELA).

Keywords: Confinement, Mapping, Movement, Play, Sennett

Abstract

The unexpected turn of events brought about by the pandemic have forced people around the world into a new reality. When urban life as we know it comes to a grinding halt the urban actions that define our daily lives are suddenly collapsed into a realm of domestic space where new nodes of spatial intensity are formed. For example an urban scale action like walking to a restaurant and enjoying a meal is reduced to plates of food sitting on a table perhaps only centimeters away from a laptop and a hairbrush. Eating, working and grooming find themselves as unexpected neighbors. In a series of photographic mappings I capture moments during the confinement period defined by relations between objects and actions that take place within my 1 meter diameter round kitchen table in Paris. In small living quarters the primary 'public space' is often the kitchen where the table becomes an active surface upon which daily life unfolds, shifting from classroom to play space to dining area over the course of a few hours. These photographic mappings tell the story of my family's everyday life during the months of confinement when government orders severely limited our displacements around the city, revealing unexpected relationships between domestic and urban space.

Introduction

The following artworks are a set of mappings composed using aerial view photographs of my kitchen table in Paris during the confinement period that took place between 17th March and 11th May 2020. These mappings mirror the urban life that had suddenly collapsed into the interior space of my home within which the kitchen table became a dynamic continually changing surface. While table and city operate at completely different temporal scales, the former based on daily rhythms and the latter following the much slower pace of urban development, there are some potent aspects of both that find relevance within the framework of urban theory. Both the kitchen table and the city surface are urban landscapes, *“dynamic and responsive; like a catalytic emulsion, the surface literally unfolds events in time. In this sense, the urban surface is similar to a dynamic agricultural field, assuming different functions, geometries, distributions, arrangements, and appearances as changing circumstance demands”* (Wall, 2003). Specifically I will examine Richard Sennett’s concept of the Open City in relation to these works. The first artwork is a set of nine selected mappings with titles and the second is a collage of the 1 km radius around my home in Paris merged with 1 m diameter kitchen table mappings. The other artworks are single kitchen table mappings accompanied by a narrative that links to various facets of contemporary urban and landscape theory (fig. 01, 02).

Horizontal Awakening

The beauty of the kitchen table lies in its horizontality (fig. 03); like a landscape it is a shared surface upon which many separate actions may unfold yet are not contained, thus a sense of togetherness arises through horizontal awakening. Schools are places for learning. Kitchens are places for cooking. This is the case when ‘form follows function’ a mantra learned in architecture school that assumes that our built environment is shaped by those with the power to decide what should happen there. However, when functions like learning and cooking are unexpectedly forced together, questions arise and assumptions begin to loosen. What can we learn from cooking? When oil is heated up and sears the surface of the raw chicken, the meat takes on a completely new form; its texture, color and smell are transformed within minutes as if some kind of chemical reaction had occurred. Honey, caffeine, and salt are substances that transform with heat. There is no doubt that the kitchen is a science lab. School meets home in the form of homework. If school can be brought home, why not let lessons from home become part of school? Cities divide functions into boxes, whether buildings or rooms, designed by architects based on given functions. The problem with these divisions is that the interweaving of these functions is thus rendered impossible because of the vertical surfaces that divide them, depriving us of discovery, possibility and invention. This is what happens when form follows function too closely, a condition that prevents us from creating what Richard Sennett calls the Open City (Sennett, 2006). What is brought to light here in thinking about vertical surfaces or walls is that contemporary urban habitation is largely structured around being contained. As noted by Tim Ingold *“We live in a world turned outside in- what I shall call an inverted world – in which all that moves and grows, shines or burns, or makes a noise has been reconstructed within as a simulacrum or image of the exterior”* (Ingold, 2015). When rules are placed around how far and how often we displace ourselves in the city, and one is confined to a single location, we become immediately aware of the freedoms normally granted to us as city dwellers. However, as Ingold points out, our daily lives happen largely in a world of containment anyways, but it took the pandemic to make us appreciate the exterior world that we are always shielding ourselves from. The chirping, buzzing, whistling sounds of nature have always been there, but go unnoticed as we shut ourselves into our closed system of living, as modernity dictates. With this new awareness, we might then rid ourselves of the container and its vertical dividers, so that one action may bleed into another, one material might mix with or repel the other.

Some might call such interweavings disruptive, while those who champion the Open City would call this productive disruption, a means to jolt us out of the comfort zone of convention in search for something that might enrich or enliven space in unexpected ways. Locking oneself behind closed doors is a natural way to focus on tasks that we do alone, such as reading or writing, but as a relief to this state of isolation, we might move to the kitchen table where stories and food are shared, as illustrated by the Horizontal Awakenings mapping. It is notable that the mapping shows one dominant vertical surface, which is the laptop screen. Fortunately this surface can fold down and join in with the horizontal awakening of the table. The simple gesture of closing a laptop screen can open up the space between two people on either side, which can indeed be as powerful as taking down the vertical walls that bring us closer to the Open City.

Playful Narratives

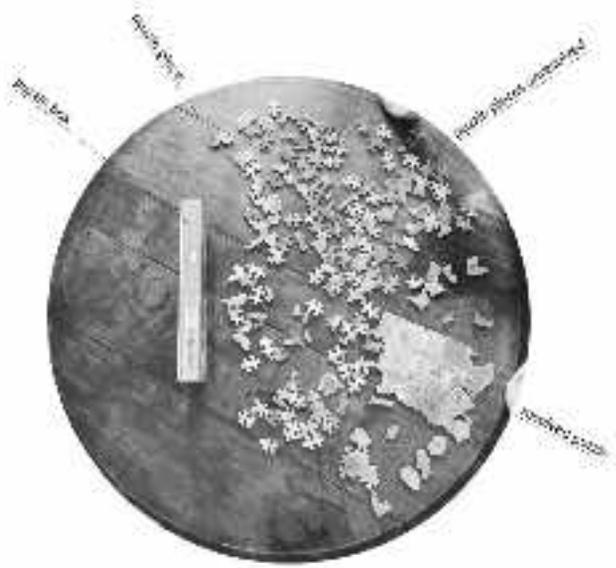
When a young girl plays with a doll, she comfortably lives in between the space of the imaginary and that of the real (fig. 04). She makes up a scenario where the doll is getting ready for bed, but really it is the girl's real hands that put on the doll's pyjamas because she controls what happens, not the doll. Narratives unfold during the course of play; they are not pre-determined by someone else. Designers use narratives to tell stories about places, perhaps moments in history to be remembered, perhaps ecological phenomena to be revealed. It may be irrelevant for the child that there are green onions being chopped right next to where her doll is sleeping. The green onions are part of preparing dinner for the family, and when the doll wakes up she will join us at the dinner table. Unexpected adjacencies are often viewed by designers as undesirable, such as an existing factory next to new housing development, but to deny such conditions is to erase the richness of urban life. The necessity of relational thinking in design allows for new narratives to interweave with those of the past, treating sites as continual dialogues. The kitchen table is not a blank slate upon which to perform the act of chopping, like a cooking show, but rather it is a real space around which the family sits to tell stories while chopping, chatting or chewing.

Narratives intersect with sites, accumulate as layers of history, organise sequences and inhere in the very materials and processes of the landscape. In various ways, stories "take place." The term "landscape narrative" designates the interplay and mutual relationship between story and place. More than just a backdrop, places become eventful changing sites that engender stories. And we come to know places because we know their stories (Potteiger and Purinton, 2002, p. 136).

The mapping of Playful Narratives reminds us that the city is a space that should invite imagination, not a place that is scripted and controlled by the designer. Children are unhindered by the invisible codifications that tell us what to do and how to behave in cities. A more playful attitude towards the design of cities treats citizens as agents of space-making and creates meaningful relationships between them and their city.

Puzzling Fragments

The goal of doing a jigsaw puzzle is the desire to arrive at a complete picture (fig. 05). We are driven by the knowledge that the pieces are all supposed to fit together to create a finished whole. The picture on the cover of the box makes our goal visible, like a masterplan, so that we know where we are headed. The challenge of doing a puzzle reflects the modernist vision of completeness and control



of the urban realm. Construction sites and spaces in disrepair are viewed negatively because they are in a state of transition and messiness; they are incomplete. While the desire for completeness is ingrained in human nature, we must not let this undervalue what incompleteness might have to offer, particularly with respect to the design of cities. For designers the goal of completeness runs the risk of creating over-determined spaces as well as skip valuable steps in the process of becoming complete. Sennett asserts that over-determination, both of a city's visual forms and social function, are responsible for a lost vitality of the urban imagination that favors control over creativity (Sennett, 2006). Sites are complex places and therefore may need time to reach a state of completeness. In the world of urban development where time is money, dwelling in this transition zone is not seen as favorable.

The bonds of community cannot be conjured up in an instant, with a stroke of the planner's pen; they too require time to develop. Today's ways of building cities – segregating functions, homogenising population, pre-empting through zoning and regulation of the meaning of place – fail to provide communities the time and space needed for growth (Sennett, 2006, p. 1).

From the standpoint of a community that would like to be engaged in the transformation of a public space that will eventually become theirs, for example a neighbourhood park, incompleteness can be a virtue. The resolved part of the puzzle may serve as an invitation or a means of setting a future process in motion. We allow time for dissonance and debate rather than eliminating that which does not seem to fit a prescribed agenda. The unresolved parts of the puzzle can be left for others to complete. Rather than following a masterplan like the picture on the puzzle box, the design of cities must allow for the unexpected and therefore be open to visions other than the one dictated from the top down. Dwelling in a world of incomplete fragments gives weight and meaning to the process of becoming, just as the incomplete puzzle spread across the kitchen table is what motivates us to keep going.

Conclusions

The diminished urban radius that I present in the table mappings alludes to the heightened sense of bodily distance experienced when going outside during the confinement. Measures such as the 1 meter social distance and the 1 km permissible travel radius from home become embodied and embedded within our consciousness. I am fascinated by the diversity of activities possible within our modified locality of 1 meter diameter that reflects the rich range of urban experiences in Paris as a whole that have become temporarily inaccessible. The unexpected is a condition that jolts us out of our comfort zone and demands us to redefine that zone. Accepting this altered spatial reality our modes of attention shift from the scale of the city to that of our bodies. While the kitchen table cannot replace the city, what it can reveal is an unexpected set of physical, social and sensorial exchanges that hold potential for reconfigurations of urban life yet to come.

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Nesting in Pandemic Times

Unexpected Memories and Lost Desires

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Keywords: Anthropology, Home, Identity, Rituals, Symbols

Abstract

The home is an active moment in both time and space in the creation of individual identity, socio-economic relations, collective and symbolic meanings. Dwelling is at the core of how people situate themselves in the world. The home is first and foremost a localized activity of ordering and control in the present, produced through accumulating meaningful objects and through enacting individual and familiar routines in a certain space. During the pandemic, the houses as material shelters as well as meaningful ritual centers helped the individuals keep them safe from distress. They have been perceived more than ever as a nest, providing a sense of refuge and protection. The home has become a reassuring and densely symbolic microcosm, that has safely reproduced and replicated the full array of social and individual life and what has unexpectedly been lost during the pandemic.

The home as a localizable idea

If the understandings of home remain grounded in the notion of a physical house, a further set of perspectives engages with representations and practices of home more widely. An architectural structure, a domestic space, or an ideal home is a complex, often conflicting, discursive category that is always inflected with particular notions of gender, race, class, citizenship, and lifestyle. The home is an active moment in both time and space in the creation of individual identity, social relations, symbolic meanings.

Indeed, the home is at the core of how people situate themselves in the world. The boundary of the home is still the most culturally significant spatial demarcation and the way in which homemaking is elaborated. The border of the home constitutes a boundary between someone or a family and “the world”, “the others”. The home acts as a physical and symbolic point in which individual and social identity is anchored. Therefore, the home might be understood as including feelings of rootedness, safety, and value (irrespective of how modest or tiny it may be). During the pandemic, the houses as material shelters as well as meaningful ritual centers helped the individuals keep them safe from distress. It has been perceived more than ever as a nest, providing a sense of refuge and protection.

In her minimal definition Mary Douglas (1991) argues that the home is the act of bringing a particular space under control. Based on “*a pattern of regular doings*” (Douglas, 1991, p.287), the home is a highly multifaceted system of ordered relations with space and society. The very regularity of home’s processes is both inexorable and comforting. Home is located in space; yet it is not necessarily a fixed space or it need not be a large space. It does not need bricks and mortar, but it “*is always a localizable idea*” (*ibidem*, p. 289).

In Pierre Bourdieu’s classic account of the Berber house, the physical organization of the house not only reflects this structured worldview, but it is also responsible for reproducing it. This argument would find full expression in his later theory of ‘habitus’, which he came to characterize as a system of predispositions inculcated by the material circumstances of life and by family upbringing. Bourdieu argues that the Berber house works “*as a microcosm organized according to the same oppositions that governs the universe*” (Bourdieu, 2000, p.498). In his approach, “*the world of the house taken as a whole is in a relation with the rest of the world*” (*ibidem*), replicating the same set of oppositions and relations of the external world such as: male (day, fire, etc.)/female (night, water, etc.) As a microcosm organized according to the same oppositions which govern all the universe, the house maintains a relation with the rest of the universe, but at the same time the world of the house, taken as a whole, is in opposition with the rest of the world.

Spatial identification and imaginative value

Focusing on links among architectural, social and symbolic significance, Janet Carsten and Stephen Hugh-Jones take a more processual and dynamic approach to the anthropology of the house. According to them, the home is a space where relations are not only reproduced, but actively mediated. The domestic spaces play a crucial role in social reproduction and transformation. Carsten and Hugh-Jones argue that the house is also “*an extension of the person; like an extra skin, carapace or second layer of clothes, it serves as much to reveal and display as it does to hide and protect*” (Carsten, Hugh-Jones, 1991, p. 2). Being an extension of the person, the house is an extension of the self, frequently thought of as a body, sharing a common anatomy and a common life history. As Carsten and Hugh-Jones state, “*the body and the house are the loci for dense webs of signification and affect and serve as basic cognitive models used to structure, think and experience the world*” (*ibidem*, p. 3). The house has a direct relationship with mind and body, a connection which embodies aspects

of consumption, kinship, division of labor and identity. One's sense of home is bound up in a sequence of relationships usually termed "familial": parents, brothers, partners, children, but includes also significant others, friends, neighbors and associates.

The notion that a house has a "personality" can be expressed by through many features. Things, according to Daniel Miller, are constitutive of identity. Miller offers a theory of materiality based in ethnography-generated understandings of material culture and subject/object hybridity. In his book *The Comfort of things* (2008) the anthropologist documents how residents decorate and renovate their council flats in South London in ways which reflect their class position and inflect this position with a personal sense of identity and belonging. He analyzes the connection between relationships and things, and endeavors to show the parts these material objects play in constituting and organizing subjects' lives. Focusing not on homes themselves, but on the possessions and consumption practices that concentrate within their walls, Miller has been examining the importance of material objects for developing a sense of home. As a result, the objects in one's home are simultaneously involved in placing oneself in broader society, creating relationships of care, and developing a personal sense of biography, whereas the home both facilitates and reflects these interwoven processes. Miller argues that consumption is a process by which human beings materialize or objectify values and meanings, and moreover resolve conflicts and paradoxes in everyday life. The house is a whole ensemble of possessions that define a person's lifestyle and values.

Obviously, things are not enough to make a house a home. Jane Davison, a social historian and editor, wrote in what was then hailed as a classic history of the love-hate relationship between the American housewife and her place of residence:

home is not a house, nor a place, nor furnishings, but it is the hopes and the memories which cling about the place of habitual abode. We make a home in a certain place, among material things, but not of materials (qtd in Garber, 2000, p. 55).

While houses are surely commodities, and individuals may spend time and money furnishing and personalizing them, the phenomenon of home itself cannot be commoditized. Aside from its physical reality, the home is also a mythic image, a symbol that carries with it a strong affective and cultural charge.

Edward Said argues that a space is created and endowed with certain qualities offering an imaginative value. A house may be haunted or homelike, or prisonlike or magical. It provides a sense of intimacy, security, and secrecy because of the experiences that come to seem appropriate for it. Imaginative engagement with the home and spatial identification provide a particularized aura of certain spaces. According to Said, the domestic "*space acquires emotional and even rational sense by a kind of poetic process, whereby the vacant or anonymous reaches of distance are converted into meaning for us here*" (Said, 1978, p. 55). The house is a humanized space created through certain imagery, specific historical contexts and social circumstances.

French phenomenologist Gaston Bachelard was the first to pay close attention to how individuals self-identify with the house, its particular spaces and objects, and how these attachments have been represented in poetry and literature. In his seminal book, *The Poetic of Space* (1994), Bachelard affirms that the house is the topography of our intimate being, both the repository of memory and the lodging of the soul – in many ways simply the space in someone's own heads. The work of Bachelard is foundational in contemporary discussions of the relationship between the physical and existential structure of home and dwelling, focusing on the ways

conceptions of home offer a place of refuge, material or spiritual, from the pressures and anxieties of the outside world. However, while useful in helping understand psychological and emotional investments in places, this work also tends to universalize the experience of home while neglecting the political, social and cultural dimensions of domestic space. Bachelard emphasized precisely the individualized, imagined identities of space. He argues that the objective space of a house – its corners, corridors, cellar, rooms – is far less important than what poetically it is endowed with, which is usually a quality with an imaginative or figurative value. Bachelard states:

the house shelters day-dreaming, the house protects the dreamer, the house allows one to dream in peace (Bachelard, 1994, p. 6).

The house is one of the greatest powers of integration for the thoughts, memories and dreams. The home may thus be seen as always in-between the real and the ideal and imaginative. Carl Gustav Jung argues that the dream-representation of the self as a house is a repeating phenomenon with profound roots in the human psyche. In *Memories, Dreams, Reflections* Jung reports a dream he had many years before, in which he was exploring a house on various different levels, where each floor belonged to a different historical era, and in the lowest level he found prehistoric remains (Jung, 1989, pp. 159-161). Jung understood the dream as the moment when the existence of the collective unconscious was revealed to him. He states that the house dream represents the relationship between the conscious and the unconscious mind. The house is an allegory, a story: a story with “stories”, upper and lower. Indeed, the dream can also be taken as a figure of speech and translated into a statement about archetypes and architecture, in which houses reflect or refract the full panoply of human desires. Dreams and memories merge and diverge continually, but the home provides fertile ground for both. According to Marjorie Garber:

as a space of and for fantasy, a space both inside and outside the psyche, a house can function as if it were capable of being the original lost object capable of giving us what we want – the space of wholeness and completeness, of perfectability, of fulfilled desire (Garber, 2000, p. 69).

The house is the repository of unmet needs, unfulfilled dreams, or nostalgic longings.

Symbolic shelters in pandemic times

Amid the coronavirus pandemic, individuals have been mostly confined to their home. A full spectrum of quarantine-era emotion emerged. There was an element of fear as individuals venture out for necessities, yet on the other hand, a heightened feeling of compassion with neighbors and with strangers, as everyone jointly faced this challenge.

The home has been perceived as the only space recognized and rewarded for bringing things under control. During lockdown, everyday life has been characterized by a lack of predictability, a sense of immobility, of being stuck, a loss of connection, a loss of sense of time and sequence, but the home, as the locus for dense webs of signification, has been protected individuals from the loss of meaning, and purpose. Indeed, the houses as material and immaterial shelters as well as meaningful ritual centers helped people manage, cope and reduce the unexpected stresses associated with Covid-19.

This human-made, ultimately symbolic nest indicates a subtle entry into desires and fears. In





a time of pandemic, indoor life has conveyed worry and a longing to feel a sense of security and normalcy again. The pandemic couldn't really be under anyone's control but the way people behave in response to it is. Routine has reminded the individual of stability and permanence, even if it may also be oppressive and imprisoning. Anthony Giddens argues that "*The maintaining of habits and routines is a crucial bulwark against threatening anxieties, yet by that token it is a tensionful phenomenon in and of itself*" (Giddens, 1991, p.39). During quarantine, staying at home has allowed people to maintain the relation with the world outdoor without succumbing to paralysis. At the same time the house, taken as a whole, has been a shielding microcosm in opposition with the rest of the world. The border of the home has constituted a boundary between "safe" and "dangerous" spaces (fig. 01).

Before the government loosened the rules, the home has been more than ever a pattern of regular doings and the world in general. The house has been incorporating multiple facets of human life and organization, and familiar routines helped relieve the tension from the challenges that pandemic has brought (fig. 02). Individuals have been quarantined for many weeks, and regular activities that were their former "normal" have been mixed up with the ones that have been their "new normal" during lockdown, from yoga to listen to the silence or mapping the different geography of the sounds outdoor. People adapted to interacting with friends and loved ones solely through screens. The home as "*a group of organic habits*" (Bachelard, 1994, p. 14) has been the only comforting retreat and a shelter of imagination, providing a "*protected intimacy*" (*ibidem*, p. 3) (fig. 03).

As a space of and for fantasy, a space both inside and outside the psyche, the home has been capable of giving people what they needed during the pandemic, reflecting and refracting the space of wholeness and completeness. The house and its miscellaneous objects have been telling the story of individuals' life before coronavirus. Objects and their associated narratives have been a means of self-expression and have been assisting in the maintenance of a cohesive identity (fig. 04-05). The close connection between mental space and architectural space allows the home to be represented as "*a personal memory theatre*" (Brundin, Howard, Laven, 2018, p. 39) (fig. 06-07). Things also provide a socializing function whereby individuals differentiate or integrate themselves with others. Even odds and ends that used to be pretty insignificant, during the quarantine have been experienced like an intimate bridge to the life that everyone was leading before coronavirus. Considering that things embody relations and that memory is selective, it follows almost logically that the sorting out of things becomes a metaphor for the sorting out of relations and memories (fig. 08-09).

According to Rachel Hurdley the practice of arranging photographs, knickknacks, everyday objects is deeply embedded within identity and domestic space. The deployment of memories is a way of accounting for oneself and an important strategy in the complex and shifting construction of individual subjectivity and social relations (Hurdley, 2013, pp. 79-97). The home is first and foremost a localized activity of ordering and control in the present, produced through accumulating meaningful objects and through enacting individual and familiar routines in a certain space. Indeed, particular constructions of memories and belongings, as a force that is both intellectual and affective, are materialized in various cultural products and in some ways has been intensified during times of rapid and unexpected social transition and tension. During the lockdown, people have changed, feeling more conscious of the ways lives connect and of what home means to them. The home has become a reassuring and densely symbolic microcosm, that has safely reproduced and replicated the full array of social and individual life and what has been lost during the pandemic.



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05 Untitled. Roberto Piloni, Rome, 2020, Roberto Piloni copyright.



06. Untitled. Roberto Piloni, Rome, 2020, Roberto Piloni copyright.



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Stenáchoro [tight-space=distress]

Social and physical boundaries in the pandemic era

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Keywords: Distress, Covid-19, Architecture, Anthropology, Boundaries

Abstract

“Stenáchoro” began as a lyrical text about the obligatory confinement that followed the lockdown of the Covid-19 pandemic during the spring of 2020. Stemming from the dual meaning that “stenáchoro” has in the Greek language - meaning “confined space” but also “saddened” (steno-choriménos) which literally translates as “being distressed” - the paper examines the relationship between natural and anthropological space. It also explores how social boundaries are expressed in physical boundaries, as well as how physical boundaries define social relations.

Architectural elements like walls, partitions, floors, elevators etc. enhance relationships, hierarchies, connections - or even disconnections - while social structures in turn often determine the positions, layouts and sizes of such building boundaries. This paper examines those gaps and breaks the aforementioned boundaries that appear as openings, holes, passages, corridors, escapes, and generally all sorts of “escapes”. The breaks and discontinuities in the walls together with the “planned” time intervals shape a spatial experience some aspects of which are analyzed in this text.

Introduction

The liminal-extreme condition of confinement, due to the Covid-19 pandemic, revealed different aspects and implementations of the actual experience of inhabiting its architectural, anthropological and social dimension. This article discusses how physical boundaries of homes, especially apartments in large cities, and the life that takes place in them are closely related to certain anthropological and social boundaries. It also questions, how, in the often extreme and universal conditions of confinement, these boundaries became harsher, making their observation of the boundaries possible.

Stenáchoro began as a lyrical text about the obligatory confinement that followed the lockdown of the Covid-19 pandemic during the spring of 2020. Stemming from the dual meaning that *stenáchoro*¹ (Liddell, H. G., Scott, R., 1897) has in the Greek language - meaning “confined space” but also, “saddened” (*steno-choriménos*) which literally translates as “being distressed” - the paper examines the relationship between natural and anthropological space. It explores how social boundaries are expressed in physical boundaries, but also how physical boundaries define social relations.

State of the Art

It is [tight-space] distressed/distressing. The room is [tight-spaced] distressed, but I, as well, am distressed [tight -spaced] steno-choriméni (fig. 01).

The room is tight-spaced [distressed] distressing, but even more, distressing [tight-spaced] is what happens. What happens in the next “room”. The space is tight and it is getting tighter, limited.

Restrictions are imposed, but also self-restrictions: of responsibility, reduction of responsibility, irresponsibility, but no matter what we say, the basic restriction is the fatal one.

Many people wonder if space was always tight or if it was free before. Space may not have been free, but it was probably defined by negligence, ignorance, something without an end or even better, something that seemed as being endless.

In fact, we had already escaped from some of our prisons in the past. (It is even sadder that walls have become visible again). It is not the brick walls that have become visible, nor the drywall panels or other dividers (the saddest thing is that those dividers which I thought I had already passed by or overpassed, became visible again).

And those were these limits. Financial and familiar limits, gender restrictions, the city, the country and other pseudo-hopes like: “oh, there is THIS new application you should submit”, “THAT party”, “THAT blond”, “THE ONE with the shaved hair”, “THAT job”, “THAT trip”. All these THESE and THAT looked like those window cleaner sprays. Those that make glass invisible.

The tight-space is here and at the next door, in the next room, in the next country [Chora²] which becomes every day even more confined as a country [tight-chora], with confined villages [tight-xoriá], distressed [tight-space] and unfortunately segregated [apo-spaced] people.

In this tight space [stenó-chóro] of “paper,” at the limits of this screen, these graphic characters, these signs of language are traces that would like to stay here and delineate the distress [tight-spaces] of the times (Kosma, 2020).

The fragment above inspired this article and all the reflections around the limits of physical and social space.

Methods - A narrative beyond binaries

As the text deploys itself, one can observe that by using the term “stenáchoro” we refer to all these spaces which by their material-physical boundaries formed any possible house-shelters, but also the prisons of any confined person during the Covid-19 pandemic. In order to present and explore the “stenáchoro” boundaries in this paper, both bibliographic references and a case study have been used: the course of “Special Issues of Representations” (Kosma, 2020) conducted by architect Anthi Kosma at the Department of Architecture of the University of Thessaly in the spring of 2020. Fragments of texts, drawings, images and verbal statements produced by the students during the pandemic period here examined are used as reference material. The aforementioned texts arose spontaneously during the course and as part of a graphic-visual diary that the students had to carry out through the academic semester. The excerpts presented here, related to covid and “stenáchoro”, are spontaneous expressions that describe impromptu and “natural” aspects of “excluded” everyday life.

No matter how fragmentary those impressions are, they carry vital features that depict the pressure of the narrow space while revealing how the physical boundaries that constitute the “house” are irrevocable, immovable, protective, safe, fixed, insulated. On the other hand, the social aspect is identified in “the Others”, neighbors, strangers, friends, relatives, while triggering relations, connections, the socio-economic conditions, but also, racial, anthropological and gender limits. However, there are moments and encounters - social interactions - that make the smallest apartments look like endless squares and, on the other hand, there are restrictions, prohibitions and violence that make the largest apartment a “suffocating prison”. Just like there are huge squares full of loneliness exactly like their lonely passers by.

The lyrical style, which is preserved in a large part of the text, tends to highlight aspects, nuances and to approach unuttered situations that are difficult to describe. It also reveals that a more “open” and poetic discourse may facilitate investigations and phenomenological approaches that attempt to connect the visual and the visible with the senses, the sensible, aesthetics and its politics. The impromptu writings that are presented in this paper, enhance the representation of the imaginary and its ability to give hints of this unuttered inhabitation. At the same time, those writings allow us to explore this hidden ability of the imaginary to construct, transcend, destroy, accept or not the physical boundaries of built space during periods of confinement restriction and fear.

Results - Stenáchoro through testimonies: Daydreaming in the Covid-19 house

During the confinement in the stenáchoro house or the house of Covid-19, the daily and automated movements and journeys in these conditions became obligatory, and even more conscious:

Constituting an emotional and a moral commitment to a culturally specific way of being and moving in a house inhabited by other human be-ings (parents and visitors) who deserve respect (Duranti, 1997, p. 352).

In an indefinite period of time, without clear knowledge of the outcome of the lockdown and its confinement, the narratives of space and its experience were undoubtedly disturbed just as much as time was also disturbed. The “closure”, the “restrictions”, the “prohibited circulation”, all these compulsory pauses caused a different perception of time, often freezing to a halt. Feeling strange and unfamiliar was often confused with familiar reminiscences. Our house

we used to know so well, was no longer so familiar to us. We had no idea it could have been either so suffocating or uncomfortable. We had no idea we have been always scorning our balcony or our neighbor's habits, things that now we tend to observe and enjoy. The feeling of estrangement was there. That feeling of "belonging and not belonging here anymore".

Our body was locked in the house. Our bodily movement and the art of walking were locked with it. Our routes changed scale and place. The map of our city became the map of our house. The boundaries of our house set the limits of our bodies. And this is where the stenachoro lies. This is where imagination comes to transform, alter and comfort us. It comes marked by the formulary ability of daydreaming, while defeating time, processing materials, paths and maps.

We decided to go on a trip which you like me never had no time to take. Damn it! It was a great opportunity. | Now we named our bathroom Paris. Our bathtub was named Eiffel. Our toilet was the Louvre. Our sink was the Versailles and our window was Gioconda. | The soap used to be called Marseilles from before. | Our kitchen is now Naples and the refrigerator is now called Oslo (Girvalakis, 2020) (fig. 02).

Michel de Certeau marks that for the New York apartment dwellers, their homes are more like routes than maps and places. Therefore, our distressed residents of the Covid-19 house reshape the maps of their apartments too. They attempt to map and update their land-maps, to admit the given boundaries and of course to seek for new worlds and routes for escape. De Certeau in his "Routes and Maps" speaking of the oral descriptions of spaces and stories about homes and their narratives, significantly marks:

Oral descriptions of places, narrations concerning the home, stories about the streets, represent a first and enormous corpus. In a very precise analysis of descriptions New York residents gave of their apartments, C. Linde and W. Labov recognize two distinct types, which they call the "map" and the "tour". The first is of the type: "The girls' room is next to the kitchen". The second: "You turn right and come into the living room". Now, in the New York corpus, only three percent of the descriptions are of the "map" type. All the rest, that is, virtually the whole corpus, are of the "tour" type: "You come in through a low door", etc. [...] In other words, description oscillates between the terms of an alternative: either seeing (the knowledge of an order of places) or going (spatializing actions). Either it presents a tableau ("there are ..."), or it organizes movements ("you enter, you go across, you turn ..."). Of these two hypotheses, the choices made by the New York narrators overwhelmingly favored the second. (Michel de Certeau, 1998, p. 118-119).

In the narratives of Covid-19's distressed homes, maps and routes change. The forced stop facilitates or even obliges the observation. The descriptions and maps within their constraints change, the dominant paths are no longer hurried, unconscious or boring. The "threshing" of the house, brought to the surface artefacts of the space but also forms of the imposed order. How capable is it in the end to limit, define and even crush the boundaries?

Stories about space exhibit on the contrary the operations that allow it, within a constraining and non-"proper" place, to mingle its elements anyway, as one apartment-dweller put it concerning the rooms in his flat: "One can mix them up" ("On peut les triturer"). From the folktale to descriptions of residences, an exacerbation of "practice" ("faire") (and thus of enunciation), actuates the stories

narrating tours in places that, from the ancient cosmos to contemporary public housing developments, are all forms of an imposed order (Michel de Certeau, 1998, p. 122).

In the restrictive paths for the sake of safety, social boundaries, inequalities and differences become more apparent. So do bodies, fragility and our needs. From the location of the apartment, the area, the lack of public spaces and parks, the existence or even the absence of the concept of neighborhood and, of course, the conditions in the house itself and family relationships, some social characteristics became even more distinct and, in many cases, intolerable. The physical boundaries reveal social relations, hierarchies, beliefs, but also describe how their order and their juxtaposition are related to the social classes, factions and rearrangements. As the exit from the main entrance is almost forbidden and the routes to the houses are restricted, people look for other escapes, transports and connections with other places. So one notices that balconies and windows were turned into “piers” - “gates” of escape, places of disapproval, applause and connection with those around, those around and opposite. “It’s been like 2 months since I put the desk on the balcony to look outside” writes George Girvalakis while Chryssa adds in a shocking way that the balcony (vital and at the same time neglected space for the expansion of apartments, especially in Mediterranean countries) regained its use, acquired new ones and gained great importance while in many cases it attained a more symbolic meaning (space of protest-expression-applause).

I always saw the balconies | as a tradition of bad taste | and the occasional sign of patriotism | When the city no longer fits us and we are trapped the house | but our house does not fit either, the balcony it becomes a telephone, it becomes an elevator becomes a clothesline, sunbed, | becomes park, becomes wind, | sun, moon, stars, smell, rain | These days I see balloons with a different eye, | but I’m not going out again Who would have expected it, | that all humanity would rely on one cantilever? (Chryssoula, 2020) (fig. 03, 04, 05).

How does Covid-19 determine the dreaming of Bachelard’s house? In this, the borders of the house and its shelters and its “basements” are contagious, invisible, unknown, invading with what was once loving, touch and contact. What are now the accommodations and shelters for the imagination, the daydreaming of materials, the home of protection?

Dreams of sterilization, gloves, the rubbing touch to clean the contaminated objects, the windows and the keyholes that became screens. Different resistances and prohibitions came to disturb the world of positivism, the world of “likes” and the continuous growth often without ethics. The “society of fatigue” and competition in the distressing home, even loneliness and individuality cannot be detached from it. Individual boundaries are so unwavering and strong that distressed compartments, these individual capsules, do nothing more than signify individuality, exclusion, disconnection, and lack of relationships.

Everyone is in their world” writes Ioanna Rovina (2020): “*What does it mean that everyone is in their world? | And how is everyone’s world? | What are the differences between each world? | And in the end, if everyone lives in their world, how can we all live together in the same world? | That is, what world we live in is the combination of infinite worlds ? | I decided! If it is to live in a world of my own then every day I will live in a different world of my own!*”

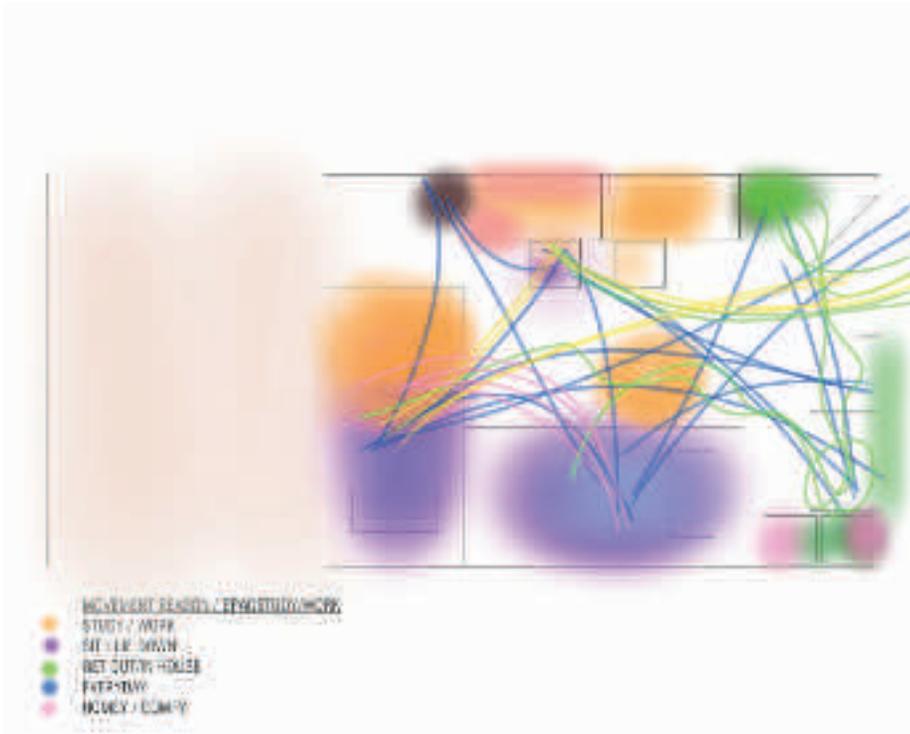
In the holes of the windows of our screens, there lies the daydreaming of the pixels of this crystal surface of millions of lights, of this alternating window with the theoretically infinite



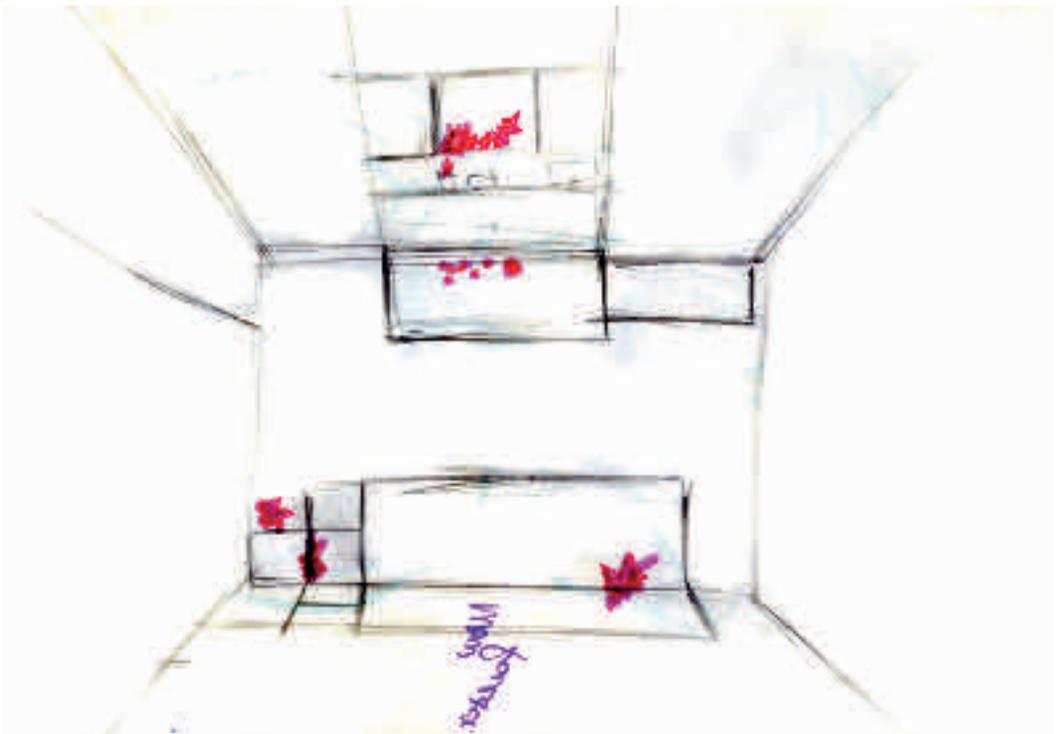
02. The strangeness. Girvalakis George, Volos (Greece), 2020, CC0 Public Domain, Free for personal and commercial use.



03. Cartographies. Karali Ioulia, Volos (Greece), 2020, CC0 Public Domain, Free for personal and commercial use.



04. Cartographies. Karali Ioulia, Volos (Greece), 2020, CC0 Public Domain, Free for personal and commercial use.



05. Cartographies. Karali Ioulia, Volos (Greece), 2020, CC0 Public Domain, Free for personal and commercial use.

escapes (Brea, 2010). Those who far away seem to be here. You feel them here, but they are so far away. I am here and I am not, I am and I am not. Working from a distance, educating from a distance, affection and empathy from a distance. And when the “magic” crystal closes and cuts off its connection to the current and the eternal world, this is when the distressing room is even more narrow, empty, uninhabited, silent and relentless. Asimina speaks with disarming honesty:

How meaningfully are they locked up in here? Until when? And if all this is reduced and we go out again, will it spread again? And do we have to go out in the end? All day on the computer though I can't bear it much. My head, eyes, everything hurts and I have no appetite. I miss my life and daily life from before. I probably stop now because I write irrelevant things (Talahoupi, 2020) (fig. 06).

In the sad conditions of confinement and screens, there is another paradox: the monitoring. Between the narrow walls and the distressing moods of fear, loneliness and restraint, there is another kind of invasion through screens, data, algorithms and laws. Some observe and control. The distressing house is more related to the control house, Kafka's castle, the playboy house and less to Bachelard's “attic”. Christos Kalietzidis (2020) writes:

Listen, they see us. Our eyes became their eyes. Doubt. Void. Repetition. Void. Knowledge. Void. Freedom. I am free, another free prisoner. Now, there is peace on the screen of my life I AM FREE! (Fig.07).

Prohibitions and necessities, the obligatory and the emotionally-physically incomprehensible, our inefficiencies: all these are also registered in our bodies. Stenáchoro reveals the embodied space, opens the dialogue for the body as a space of limitation, but also as the space for opening, writing and production of another space. In these excerpts from the students' notebooks, feeling distressed - “Stenáchoros”, “Stenáchorimenes” - the feeling of being trapped and the effects of the pandemic related to dwelling are transformed and presented through feelings, expression, writings, both through the signified - the letters - and the non-signified - the plans.

The house “our corner in the world” through the double meaning of distress [“Stenáchoro”] is presented in phenomenological terms as a psychological phenomenon while the body appears as a topos of production. Here, the embodied experience is refined, it reaches our consciousness through the space of our bodies. The body - exactly like this place of production - starts to open or gets opened.

I once read that to disappear from reality, i have to look out of the window | - Do you have a tendency to run away or even break the chains? Or even salvation? - How do you think we will survive? (the big divas). Everything a little more, more, more, more, more, | In fact you are already addicted | | Someone does not need to break glass doors, they will find a solution made to withstand. | Choose yours. | So find space. | Find time. | And finally find your keys! (Konstantinidou, 2020).

Discussion - Space as expression of relations and structures

The paper manages to foreground and explore the architectural-physical and the socio-anthropological space as inseparable and integrated with each other. It attempts to showcase that these two aspects of discussion are an expression of a pluralistic and complex version of



06. Words. Talahoupi Asimina, Volos (Greece), 2020, CC0 Public Domain, Free for personal and commercial use.



07. Ελεύθεροι κρατούμενοι. Kalietzidis Christos, Volos (Greece), 2020, CC0 Public Domain, Free for personal and commercial use.



08. The virus. Kosma Anthi, Athens, 2020, property of the author.



09. Distress. Kosma Anthi, Athens, 2020, property of the author.



10. Anxiety. Martella Federica, Rome, 2020, property of the author.



11. Anxiety. Martella Federica, Rome, 2020, property of the author.

space rather than a binary relation. The physical-material space and the anthropological one are presented here interdependently. The boundaries of one are linked to the boundaries of the other and vice versa. Specific conditions that flourished on the occasion of the pandemic made the borders of these binaries and their interactions more noticeable while, at the same time, that had already revealed new affordances.

Furthermore, they present their understanding of body/space/culture in new and creative ways that allow us to theorize and imagine the body as a moving, speaking, cultural space in and of itself. This evocative and theoretically powerful concept of body/space/culture marks a radical shift in anthropological thinking that previously separated these domains and resolves many of the dilemmas that plague those of us who cross the micro/macro boundaries from individual body and embodied space to macro analysis of social and political forces. This integrated notion of embodied space addresses the metaphorical and material aspects of the body in space as well as body/space to communicate, transform, and contest existing social structures (Low, 2003, p. 16) (fig. 08, 09).

Conclusions

We could say that we inhabit spaces while already having an image of the houses and the bodies that dwell in them. The “stenáchoro” house of the pandemic showcased an alternative image of its own which came to be confronted with the old one. This new image appeared as more real, haptic, restrictive, and many times suffocating. “*Have I allowed my mind time to be deceived by this or that deceptive interpretation, a consequence of my desire and, therefore, an image of reality that I would like and not of reality itself?*” wonders Clément Rosset (2012, p. 142) in his “*Real and its double*”. (fig. 10, 11). Stenáchoro has come even for a while to reveal the images of the house and the relationships it covered. These images are more related to a representation, they seem rather like models, like copies or illustrations of animals following a lifestyle than depict the imperfections of everyday dwelling.

“*Losing the double element of reflection, losing the shadow*” (Rossett, 2012, p. 142) may insinuate a hint loss, but we will focus more on that possibility of accepting and emerging new narratives and descriptions, new ways of everyday life, the present and relationships with Others.

Acknowledgements

To Katerina Boulougoura for referring to “stenáchoro”.

Notes

1. “Stenáchoro” στενοχωρ-έω ,

A. to be straightened, confined, Macho ap.Ath.13.582b: metaph., to be anxious, in difficulty, “ἐπί τινι” Hp.Praec.8; “εἰς τὴν ἀκριβείαν τῆς ἐρμηνείας στενοχωρεῖ ὁ λόγος” IPE12.39.18 (Olbia, not before ii A.D.).

II. trans., crowd, straiten, “τοὺς ἀπαντώντας” Luc.Nigr.13; τὰς πύλας, τὰς ὁδοὺς, Charito 5.3, 4.7; “ταλάντοις τοὺς θησαυρούς” Lib.Or.59.15.—Pass., with fut. Med. (Them.Or.25.310d), to be crowded together, D.S.20.29, Charito 3.2; ἐν ταύτῳ ζ. Luc. Tox.29; “χῶραι -οὔνται ποσι μαιφόνων” J.BJ4.3.10; “ἀγορὰ -οὐμένη ὄχλω” D.H.6.67; of stricture, Heliod. ap. Orib.50.9.1; to be cramped or confined, “ὁ Εὐφράτης -οὔμενος” Isid.Char.1, cf. Sch.II.Oxy.221 xi 8, Porph.Sent.27; of a picture, Them. l.c.

metaph., press closely, tina LXX Jd.16.16.—Pass., to be straightened, cramped, ib.Is.28.19(20), Procl.Inst.98; ἐν “τοῖς σπλάγχνοις” 2 Ep.Cor.6.12; ὑπὸ τῶν κακῶν Sch.E.Med.57.

στενοχώρ-ησις , εως , ἦ , = στενοχωρία ,

A. oppression of breathing, Gal.8.120.

στενοχωρ-ία , Ion. -ίη , ἦ ,

A. narrowness of space, a confined space, Hp.Art.14 (codd., but v. στενυροχωρή× ζ. τῆ φάρυγγι παρέχειν ib.

41; want of room, by sea or land, Th.2.89, 4.26,30, Pl.Lg.708b; “ὑπὸ στενοχωρίας” Id.Tht.195a; opp. εὐρυχωρία and ἄνεσις, Plu.2.679f, cf. 182b; ζ. βίου the short space of life remaining, Ael.VH2.41; “τὸν λόγον ἀπὸ τῆς ἐκεῖ στενοχωρίας εἰς πεδῖον ἐξαγάγη” Lib.Or.64.10.

- II. metaph., straits, difficulty, ἡ ζ. τοῦ ποταμοῦ difficulty of passing the river, X.HG1.3.7, cf. LXX De.28.53, al.; distress, OGI339.103 (Sestos, ii B.C.); “ἡ τῆς πόλεως” Plb.1.67.1, etc.; “ἡ τοῦ καιροῦ” D.C. 39.34: pl. in 2 Ep. Cor.6.4, PLond.5.1677.11 (vi A.D.); also, narrow limits, prob. in Phld.Rh.2.220 S.
2. Chora - Χώρα: country; the part of the Greek city (polis) outside the city itself; in the Timaeus, the Greek philosopher Plato speaks of Χώρα (Chôra) as an “invisible and formless receptacle [...] of the whole becoming” laying the foundations for the concept of spatiality, place, collocation.

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Udine
Oostende
Turin
Antwerp
Porto
Stockholm
Bruxelles

studio
office
bedroom
livingroom

domestic space and architectural production:
Investigation on differences, similarities and
contingencies of rooms across Europe

About homes, About journeys

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Keywords: Domestic interiors, Productivity, Typologies, Private rooms, Reconstruction

Abstract

The pandemic crisis forced us all to work and learn from the home environment, and in doing so, to rethink the setting of our domestic spaces. As recent graduates we hereby document how architectural production has taken place in our homes over the course of five years. Although we spent our days working and attending classes at school, large part of the production took place in our rooms, late at night. This set of spaces became the background to our academic careers, to every act of production. Sometimes in the same room, sometimes two rooms in the same city, sometimes in opposite parts of Europe. Sometimes bedrooms, sometimes living rooms, studios, Airbnbs or an empty pharmacy. The very idea of the home is therefore investigated and represented through the lenses of (architectural) production. Although the rooms were different in nature, the activity was always the same, leading to divergent approaches to our productive domestic space. Therefore, the reimagination of our rooms from memory aims to confront our perception of them, enhancing their differences and similarities, their contingencies and affordances.

Drawings and Thoughts

To display the rooms we lived in, means to narrate our memories and perceptions of the interiors. In order to visualize this narrative, we developed a drawing methodology that aims to create a system of relationships among the rooms. It is based on a very precise language in which a strict grammar, intended as a set of self-imposed rules, generates a level of abstraction to uncover the underlying hierarchy of the interior settings. Visible are the few elements that define the naked room and the use we made of them, highlighting the different qualities of every space. Consequently, the process of abstraction introduces into the drawing an own hierarchy, as if the spaces are composed by a multitude of layers: the perceived volume of the room, the as-found furniture, and our personal objects for living and producing. The private interior is thus conceived by us as a constellation of objects, including as-found elements and surfaces such as a window to the city or an existing closet, and the series of own personal objects for both domestic and productive activities.

Our set of drawings thus represent a chronological sequence of our inhabited spaces, framed as a dialogue between every-day objects and architectural elements. Stressing on this condition, the rooms are represented only in part, cropping their crucial portions. Focusing on, and trying to capture the recurring window-bed-table relation and sequence, the drawings illustrate the connection to the outside world, the space for rest and the area of production. In the homes and rooms we lived in, these conditions were each time compressed into the most private of rooms: the own bedroom.

The success of the process does not come from a precise tracing based on measurements and photographs, but results from a careful reconstruction through our experiences and memories. As a consequence, the drawings become a tool for exploration and re-creation, allowing us to re-discover the multitude of rooms that accompanied us through the past years.

Therefore, it is even possible to argue that the methodology implied in retrospective drawings repeat, and at the same time inverts the process of setting a domestic interior.

Our personal reflections on the broad topic of domestic interiors are, in this occasion, translated and explored through drawings. The consequent chronological panorama of rooms aims to illustrate the re-discovery of a five years long experience, trying to form an own progressive vision of domestic space aside of aesthetics, taste and colours.

Objects, Domestic Interiors and Typologies

The abstracting effect of our drawing methodology makes it possible to visualize the relationships between the different spaces. Since the drawings are based on memories instead of measurements, the conclusions always relate to our own experience, and thus were relevant compared to the banality of everyday life. The essence of our experience lies in the setting of the highlighted elements in the drawings. About how we approached the spaces, how the productive areas were organized. It is this link to the reality within our contemporary society that allows us to develop our own attitude towards (productive) domestic space. As young architects, this self-reflection feels almost necessary and one of few certainties as existing theories and regulations have become obsolete for both housing and domestic interiors.

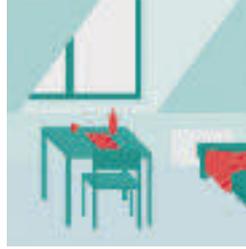
In a personal reflection on our series of rooms we guide the reader through our thoughts within three themes: discussing the constellation of objects that shaped the domestic interior, the typology and building culture in which the rooms originated or became transformed, and at last specific situations which dictate the use of the domestic interior for us.



Small studio room in own family home near Udine



Bedroom in own family home near Oostende



Mansard in historical neighbourhood in Turin



Attic in rowhouse in Antwerp



Student dormitory tower in historical centre of Antwerp



Small studio in Brussels' central neighbourhood



Bedroom in the Turkish neighbourhood of Brussels



Small studio within a garden in Porto



Small bedroom in student house in Antwerp



Guestroom in a Stockholm 'Miljonprogrammet' towerblock



Bedroom in a Stockholm 'Miljonprogrammet' house within a satellite settlement



Guestroom in Stockholm, a family's living room split in half



Double bedroom in family apartment in Stockholm's suburbs



Livingroom in large family apartment in Stockholm's periphery



Studio in a former pharmacy on the edge of Brussels' pentagon



Small bedroom in flatshare in Brussels

In relation to the first aspect, in which we understand the interior as a constellation of objects, it is important to consider that we as students or young workers are reduced to temporary residents of rooms in the cities. Our inhabitation and productive activities are therefore required to be ephemeral and reversible, preferably without leaving traces.

Reflecting on such a way of reading the domestic interior, and especially its coming into history as we know it nowadays, Charles Rice states that it is “*the choice of an arrangement of objects, rather than the physical nature of the space that demarked a private and individualized interior*”(Charles, 2007). Therefore, sharing this theory means to acknowledge that the personalization of a private room, starts by organizing the objects we own, without necessarily altering the nature of the domestic space.

Pragmatic considerations were crucially defining the setting of objects into our interiors, such as weight and dimension restrictions of public transport, or the possibility to recycle or reuse the objects by others. In the specific situations of the rooms we found ourselves, this led to the returning importance of three objects or surfaces within the domestic interior for both productive and domestic activities: the window, the floor and the table.

The window has its importance in both the drawing and appropriation of a room as a reference point. Both in a pragmatic and philosophical sense, as the window brings in daylight necessary for domestic and productive activities, but also anchors us mentally and physically within society and the city. While the bourgeois interior was a representation of the world through the display of personal objects and souvenirs, this became replaced by the internet in the digital era. The window has thus become the only physical connection to the place we live in. The second as-found element, the floor, becomes a working surface in the productive interior. The finishing of the floor defines therefore its affordances, such as sitting or resting on a wooden floor, or being able to do more intense productive tasks on a more robust floor. Big piles of books were most of the time lying on the floor next to the bed, and worked at the same time as shelves to even smaller objects like headphones or pencils. The third and last element is the table, which in many cases was not present. The idea of the traditional table became in our experience systematically replaced by a wooden board from a local DIY shop. Sometimes on trestles, sometimes placed on the bed, the hard surface was the minimum necessary for cooking, working and writing.

In a second reading, we investigate the setting of the productive interior in relation to the local room and building typologies. Due to the variety of cities and cultures we found ourselves, the definition of a home or a room widely differed based on historical, cultural, and recent socio-economic factors. This realization made us aware that every room we lived in, with the exception of the parental homes, was a result of a neoliberal tendency to (partially) transform former family homes into rental rooms. We can subdivide this further in three recurring room typologies: the attic room, the Swedish Million Homes Program room, and the online sublet room.

The attic room is a returning phenomenon in the historical urban centres of Antwerp, Brussels and Turin, often used to rent out to lower income families or individuals through history. This was possible as the rooms were often stacked and used the same staircase directly linked to the front door. As cities densify and gable rowhouses become replaced with apartment buildings, the attic room might however go extinct.

The second recurrent typology is to be found in Sweden, built in the seventies and eighties as part of the “Miljonprogrammet”. One million homes were built on the base of repetitive three-room floorplans for the traditional middle-class nuclear family. Today, these dwellings in the satellite suburbs of Stockholm are half a century old and inhabited by a diversity of family

configurations from lower socio-economic classes. Both of us lived in several of these homes, and we observed each time the same tendency: one of the rooms became unnecessary, almost obsolete, and was rented out online to provide extra finance. As the floorplans did not allow for easy separation of the home, this subletting often disrupted the normal family life and required major transformations of the home.

This leads to the third recurring typology: the online sublet room. Throughout Europe, we inhabited new types of room typologies, due to the success of recent digital rental platforms: a garden pavilion behind a vegetable garden was made into a room, a former living room was split in half with just a curtain, or a small flat was transformed to have a guest bathroom.

The last topic of investigation concerns the life situation in which we found ourselves. Throughout our nomadic existence, the parental home formed a permanence, both physically and mentally, as it provided storage space for our personal belongings. On the other hand, we also became confronted with the intrusive experience of renting such a family home, where all personal objects are still in place. In what was thought to be a more freeing space to live than renting a room, our activities had to be even more ephemeral and fleeting to not disturb the family's own constellation of objects.

Old Bedrooms, New Offices

At last, the lockdown situation in which we still find ourselves, made our once personal domestic interiors not only into a space for productive activities, but transformed their private character into a more public one. Suddenly, since everyone was expected to work from home, most of the times from the bedroom, the main private space of the home became exposed.

The last two rooms in the sequence of drawings suddenly became 'public', meaning that classroom activities literally took place from those rooms. They have been revealed to the class, to the teacher and the juries. A consequence of that, is the twofold character the rooms acquired: still private bedrooms, they became more similar to office space, not only for the productive character we have always conferred to our rooms, but especially for the public nature they acquired.

A contradiction this period brought in, perhaps relies on the exhibition of our private interiors. They replaced the most public spaces in terms of work and productivity, but they still remain (spatially, and especially chronologically) the space in which the least people are allowed to spend time inside.

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Inhabiting the frontier

Representing space

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Keywords: Drawing codes, Topological representation in architecture, Graphic analysis, The space of the house

Abstract

The term frontier topologically means a set, which is neither internal nor external to the set itself. Inhabiting also means to dwell, and consequently to both guard and protect. Living on a frontier context has the aim of foreseeing and presupposing the fulfilment of mental and interior journeys through thought and memory. With this, we consider a dimension that refers to the representation of space and immanence. The frontier is not only a synonym, among other things not always equivalent, of limit, margin, border, edge or threshold. This corresponds to the topological geometric notion for which, intuitively, for example, it can be said that a point X is called a border for a set A, if its neighbourhood contains both the points that belong to A and the points that do not they belong to it. This paper will be aimed at representing the concept of the frontier through the cognitive processes and procedures of architecture. Therefore, the frontier thinking on which we intend to investigate concerns different aspects and registers; the macro one which is decreed by its flexibility due to historical territorial consequences fixed on obviously geographical, social and cultural aspects; the micro one which is observed on an architectural question as a result of different experiences of a settlement, typological nature; all of this allows us to investigate the relationship between facts, between presence and absence. In this way, space also marks the inner frontier whose representation is described within a territory of experience, becoming indefinable. The domestic space is modelled on the interior space, just as the interior space intends to affirm its representation by extending towards the outside. "Laudabunt alii claram Rhodon aut Mytilenen" [...]. Namely 'here are those who go around the world, and those who go around the garden. But won't it be the same thing after all?'

Introduction

Observing and representing the space both in the context of research, and deductively in the project in its configuration of relationships, it constitutes an opportunity also within the limits of resilience to understand the inherent adequacy of the living space. This relevance intends to consider the perceptual aspects and, where they can be found, also the metric values in confirmation of particular configurations inherent in the home. This experimental study experience concerns a type of investigation which is related to the control of space in architecture. It is constituted through a process of graphic analysis whose description takes place considering and describing the space in spatial regions and borders, inherent both to the internal environment and to the external environment, in which the latter relates to the historical permanence and, additionally, to different connotations and ascendants related to modernity. Inhabiting the frontier constitutes a reading referred to the topological space in which the conditions attributable to semantic and semiological aspects are described, which, in turn, interact on dimensional and non-dimensional facts. These aspects have an impact on the quality of perception and sense of the living space itself. The acquisitions and returns inherent in space are meant to focus on issues that pertain to geometric graphics. These events are verified and controlled through the spatial categories that belong to the order of the investigation of the representation in which the relations are expressed through a graphic representation code where the problems are outlined. For instance, in the home, space generates relationships between different areas and paths. Non-measurable conditions, the values of which are further referred to the space fall within the considerations of perceptual aspects, which can influence different relationships, for example, between internal and external areas. Thus, the paths, psychomotricity, the sensation of the measures that can be altered refer to movement and orientation. Through the organisation and an acknowledgement of the phenomenon observed around the topic of the spatial region related to the frontier or frontiers, a set of issues relating to the definition of a variety of morphologies is assumed as the main theme. The different morphologies lend themselves to establishing relationships now of a conceptual and abstraction nature, now of a reflective nature inherent in the processes of representation decreed by the form of architectural space. In that case, spatial organisations are determined that constitute a single whole with the interaction processes of architecture, responding to the different registers made such by the demonstration of 'spatial models', which are derived from both the constructive organisation, formalising links, history, and from tradition. In summary, the representation of the 'architectural model' is nothing more than what architecture is: a corpus of facts, of form. By inhabiting the frontier there is the intention of investigating and reformulating the study based on the understanding of space to understand the dimensional categories by identifying topological relationships which are capable of being able to understand the links and outcomes of the most determining cases.

State of the Art

The study relating to space and its perception, the methodology and procedure inherent in the configuration that makes it possible to graphically delineate spatial regions, frontiers, and the experience of describing architecture in primordial terms from levels of analytical topology. These levels correspond to mental structures, which run through the stages of mathematics. Topology concerns the study of the more general properties of space, such as the algebra of relations - formal logic. The transposition of experiences related to topological mathematics which are reordered according to the criteria of investigation in architecture has been introduced in

the studies carried out in the 1960s by Christopher Alexander and made known through the publications: 'A pattern language', 'The Oregon Experiment' and 'Space of relationship and private space'. These researches have formed the basis from which to start a thought that has led to affirm the studies within a privileged field for theory and experimentation, considering them a conceptual path aimed at the understanding and knowledge necessary for the reading of space in architecture. In Italy, parallel to the US experience, the investigation, that derived from the topological experience, was formed through the thought of Giuseppe Samonà which took place with the analysis of the aesthetic lexie of the urban organism of the city of Venice. Furthermore, these reflections gave the possibility of forming the design thinking to Carlo Scarpa and, at the same time, to Franco Albini. In fact, the latter proved to be a ruling class of IUAV teachers who at the beginning of the sixties of the twentieth century, in turn, allowed their direct assistants of that time Valeriano Pastor, Umberto Tubini, Domenico Sandri and Franca Semi to undertake with intuition and intelligence the development and articulation as well as the sharing of research on architectural space, becoming, subsequently, a form referred to a knowledge that characterises a school of thought. Currently, this scientific and methodological approach is not so markedly part of the culture of the moment. The capacity of a phase of architecture that is capable of restoring a suitable location by recognising a sense of relevance to recent history relating to the thought that once belonged to a school has been lacking.

Methods

As part of the specific and advanced teachings at the IUAV from the late seventies to the early eighties of the twentieth century within the Department of Restoration Science and Technique in the corresponding teachings relating to architectural and urban composition, as well as in design and relief, it was thought to articulate a training course that could refer to a precise survey methodology. This cultural action envisaged, in practice, initially having the student perform simple, not simplistic, short intermediate level exercises to subsequently have a final paper carried out through adequate preparation. This formative orientation was referred to precise learning, which consisted of the achievement by the student through a wise and conscious demonstration, of a thought elaborated with the mature knowledge of producing research in research. The method consisted of a *condicio sine qua non* of pedagogical inspiration in which the teacher related to the learner for a time that was considered indispensable to realise levels of interest, breadth, and intensity of the reasoning referred to the study programme. The method, therefore, refers to the theme of describability of the architectural space aimed at the problems of links and the representation of relationships in architecture. This implies two thetic positions; the first one highlights that there are ways of describing space that can be differentiated concerning the bundle of intentionality, while the second one highlights that the ways of describing in some cases cannot be exhausted only on the experiences conducted, but in this case, they become the product of the ways of the descriptive invention (of finding). The reference for describing and representing is given by the order of geometry which assumes a key role for the representation of space and the recognisability attributed to the sign understood in the canonical principle, through the codes of representation of architecture. Consequently, in the in-depth analysis referred to the description of the space which is considered in spatial regions and borders, the value of the stroke and the sign is communicated by sources that refer to semiotics and semiology. In the same way, the definition that concurs in the way of representing space, that is, on the impact of studies on the perceptual organisation of space, can be considered very singular. In this way, hypotheses are

formulated that are intertwined as results of the intersection between space and memory, space and history, and a sequence of technological reverberations that also arise as an image revealed by space. From these experiences, as a consequence, conjectures are elaborated for which inhabiting the frontier can lead to the concurrence of further considerations that affect inherent degrees and levels of living such as the relations between inside and outside, the design of the territory understood both as a contiguous part of the physical space and as a part inner. The outcome, that is inherent in the unity of the problems and conformations formed through the relationships derived from the value of the signs and therefore from the architectural form, determines a morphological whole. This set of facts and forms, if observed separately, constitutes a point on which to recall functional connections to determine the principle of inseparable unity of architecture in the integrity of the experience.

Results

In the scientific field, especially in the field of experimentation, the first results, whose discoveries are still transitory, can be achieved in a figuratively indeterminate time as the thought lasts longer than expected. The results obtained, to be considered not conclusive yet, have, however, allowed us to overcome the first well-established phases and to be able to deduce the following simple conclusions. The clarity of the architectural representation codes and the immediate descriptive reading of the space which are obtained thanks to the graphic symbology, made it possible through the hierarchy, and both the material and constructive knowledge of the architectural object to be able to fully describe and interpret the space. The symbolic and abstract drawing in which spatial regions and borders are described has defined a basis on which to determine the cognitive processes as well as the procedures of representation in architecture. And as a matter of fact, Tubini stated that “The set of signs with which we speak of architecture, with which the knowledge data about the phenomenon are expressed, highlights the articulation of the mental process and the operational cycle that presides over the definition of the architectural object” (Tubini, 1979). The analysis of space refers to the scientific content of architecture both for the geometric graphic process of the representation and for the understanding of the relationships that space promotes. The set of tests is capable of making sense according to pre-established rules governed by the formulation of the process of construction of the research work. Inhabiting the frontier means understanding and governing space. The first outcomes obtained in this way are intended to demonstrate how the architecture, understood and known at the different levels of analysis, is linked to the cultural and social experiences that have stratified on it, and on which history has also influenced, as well as how it originated also based on some particular and significant awareness borrowed from a concentration of knowledge of heterogeneous origins. From this fact, it emerges an evident conclusion, albeit a predictable one, for which the historic house, in this particular case, the instance found in the study referring to the experience that belonged to either vernacular or anonymous architecture, has the power to embody admirable experiences relating to the relationship of space. This has made it clear that research, through the attestation of giving meaning to the complexity of phenomena, has constituted the field of sedimented existence within the relations of relationships linked to the space of living in the historic house.

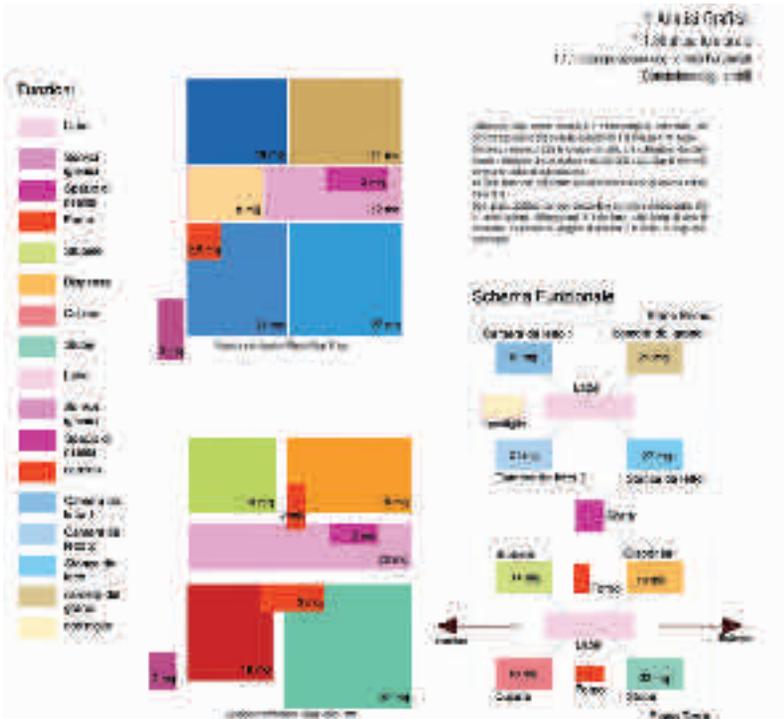
Discussion

The presence of a vertical surface that limits the horizontal plane of a defined area is topologically called a border. The degree and hierarchy with which the aspects belonging to the

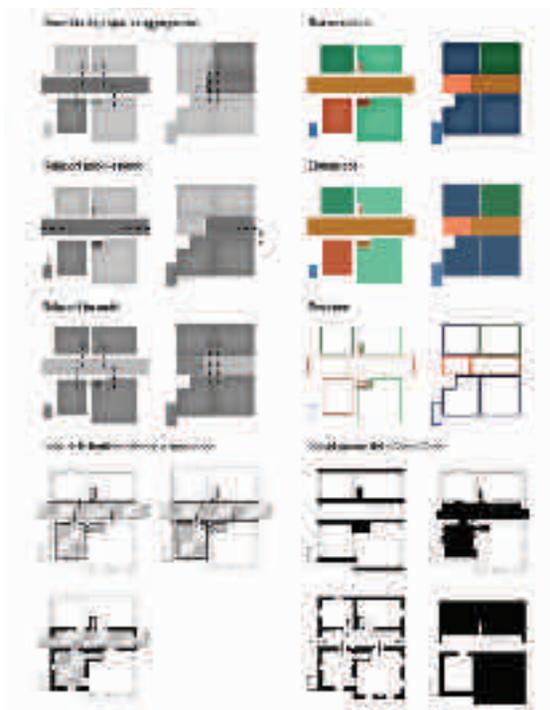
spatial regions and borders are considered to belong to a particular control assigned to the design and to the methods of rendering the space graphically. In more detail, they are specific to those processes that are part of the knowledge and procedures of the representation of architecture. Drawing and survey are, therefore, the essential tools that allow us to acquire in useful and necessary terms the process relating to the representation of spatial facts that first identify the phenomenon inherent in understanding, and subsequently, they can describe their knowledge. Images, actions, verbal and non-verbal formulations, codes of representation, also perceptual values, are themes that make explicit through thought and representability what is derived from certain phenomena that are part of architecture; the ways as the materiality, technology and location of the architecture itself are integral parts (fig. 01).

The phenomenon of the spatial region which is related to either frontier or frontiers takes as a theme a set of issues relating to the definition in terms of the plural of morphologies. The categories that refer to morphologies determine different relationships, both conceptual and abstraction ones, as well as of a reflexive type referring to the processes of representation inherent in the form of architectural space. In that case, spatial organisations are determined that constitute a single whole with the interaction processes of architecture, responding to the different registers made such by the demonstration of 'spatial models', which are derived from both the constructive organisation, formalising links, history, and from tradition. In summary, the representation of the 'architectural model' is nothing more than what architecture is: a corpus of facts, of form. Dynamic space has a direct impact on psychomotor skills. These elements can be traced back to the concept of 'space-time' of the Bauhaus school, referring to Gropius' study of the 'continuous and mobile' concerning the concatenation of experiences related to dynamic trends "introduced by the dimension of time in art" (Molon, Tresca, and Pastor, 1985). The implementation of the processes of representation leads first to understand and then to know the plots and problems at the different levels of reading connected to the formation and composition of the space in which systems and meanings are stratified (fig. 02-03). As a consequence, it is possible to trace the various issues relating to construction to a succession of actions, choices, attitudes, and finally cultures. The term construction refers to a broader thought that goes from the construction of the territory to the construction that is also pragmatic, and thus, to the ideal scale understood here as a non-metric gradient transition value. By proceeding this way, it is also possible to consider all those aspects through which the migration and diffusion of architectural languages become evident and similar.

The research activities carried out in this perspective highlights how the survey, the design, the architectural representation act according to a double level of investigation: the first one considers and evaluates the relationships that have taken root in theoretical thought and which refer to the organisation of space based on also to historically settled and codified models; the second one deals with the question of the description relating to an order based on purely theoretical concepts of a geometric - topological type, with the intent of grasping the compatible and incompatible transformation processes of the system, by controlling and examining the aspects and issues according to a rule and a graphic code which are corresponded to this task. Spatial devices, fundamental configurations, and formalised expressions give place to constitutive units of the architecture of different origins that allow reading of spatial regions and borders, representations of the sense and significance of a culture of experiencing and producing techniques, patterns or figurative models that only an elective and sapiential affinity could associate. The question of the representation of the border can also be considered and objectively described in the different registers. Inhabiting the frontier means re-discovering a



02. Maria Chiara Giangregorio, 2015. Graphic analysis of the functional areas of the Antholz Alpine House in Süd Tirol; source archive author. Licensed under the Creative Commons Attribution: by M.C. Giangregorio and author paper.

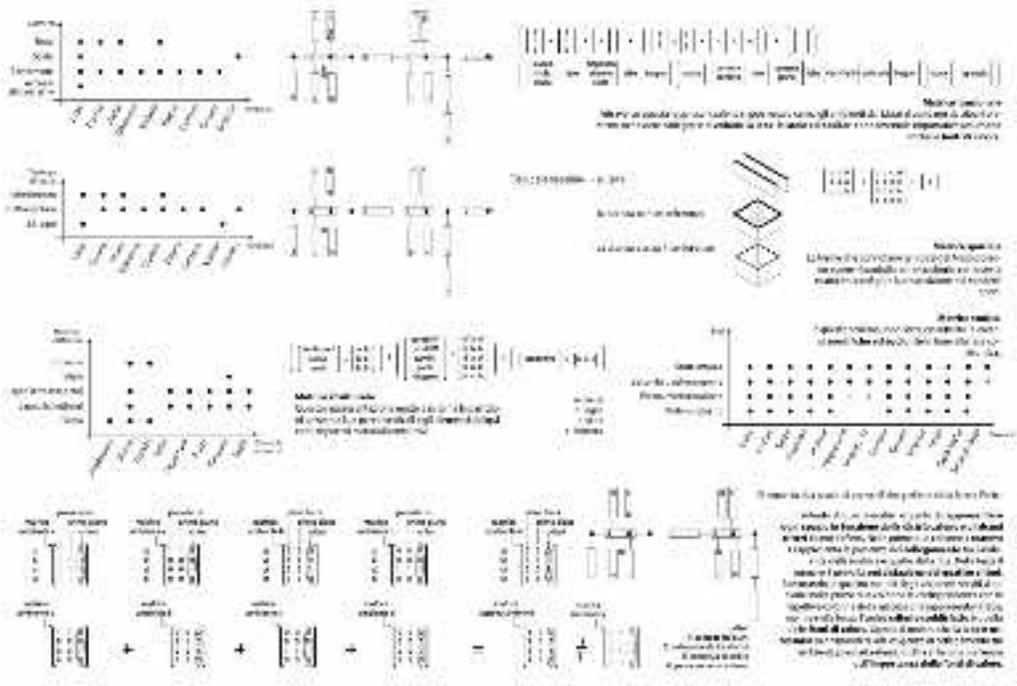


03. Nicola Bruno, Laura Scalvenzi, 2015. Graphic analysis and definition of the relationships forming the functional areas of the Antholz Alpine House in Süd Tirol; source archive author. Licensed under the Creative Commons Attribution: by N. Bruno, and L. Scalvenzi.

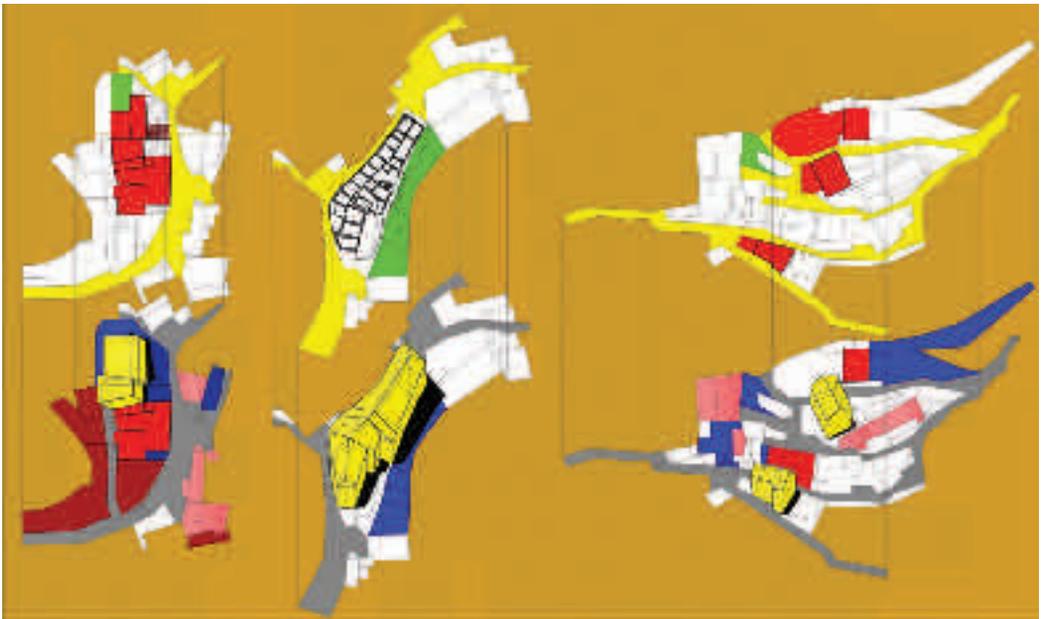
knowledge that is the result of values and experiences that intertwine and constantly iterate. The perceptual values of space, defined by rational relations, correspondingly constitute the sum and superimposition of the categories that govern the space itself, the extension and both physical and material reality. In fact, as Tubini wanted to emphasise “the psychology of perception highlights, among the founding aspects of the cognitive process, the active condition that presides over perception” (Tubini, 1979, p. 29). Therefore, from a form of complexity due to the experience of perception, the elements that have functionally settled and have given rise to the formation of a certain knowledge are selected, placing all the additional elements considered to be boundary conditions at a second level. In this way, it is possible to isolate and confirm all those elements that contribute to determining a given figure, a principle on which to base and recognise relations, relationships, and configurations. Additionally, it is also possible to summarise the space according to macro and main categories which are: the convention of position, shape and dimension, number, arrangement, size and accesses. For example, the image referred to (fig. 04) describes, through a matrix system, the arrangement of activities and areas in which relations are established due to different degrees, that is, of direct functions and indirect secondary functions. This method inherent in the matrix clarifies the connections determined by the character of the space which generates, recognises and, in turn, subdivides the functions considered primary from those of the second order.

The position convention can be found by aiming to investigate the categories of the interior space, enclosed by the design of the architectural form or by the sign produced by the relations that guarantee geometric recognition, such as modules, grids, meshes, whether they are traceable as geometric generators spaces that limit and internally enclose the connective tissue and also measure the design of the soil (fig. 05). Form and dimension are aspects that fully summarise space, that is its logic, ratio. They both are the bearers of iterativity as a sign of completion. The form and dimension take on other boundary areas within themselves, that is the space that completes and makes organic the connections of the space related to the architectural organism. Number, arrangement, size and accesses recognise the areas that form the boundary conditions referring to the form and its dimension. In fact, the number of accesses, of the combination constitute the near and adjacent areas. The arrangement of the areas concerning the accesses, as well as their form derived from the configuration of the space and the influence of the dimension and the entire connective system, generates the different morphologies. Morphologies, as mentioned above, are the relationships that are determined by the spatial organisations that constitute a unit referred to the interaction processes of which the architecture is composed.

Inhabiting the frontier is, therefore, a condition of investigation that allows to reveal and make understandable a series of facts that intervene in the psychomotor aspects. And hence, in the consideration of the space which is related to its dimension and the areas of incidence, both external and in particular internal, it is possible to describe metric and non-metric values, as the latter are intuitive and perceptible. The set of these events is, in turn, demonstrated through a reasoned process of representation that is relating to systems which are referred to spatial regions and borders. The determination of space, of its reading and representation, intends to remain an experimental research work that tests itself with conjectures, representation techniques and textual elements. This concerns above all the investigation with the means and tools of knowledge and the need to organise space; operations which are themselves, as already reported, constitutively experimental (fig. 06). Specifically, in the dwelling-house taken under observation, that is the mountain one of which much of the research carried out in the



04. Simona Bravaglieri, and Silvia Furioni, 2015. Table of matrix systems of space and functions referring to the Antholz Alpine House in Süd Tiro; source archive author. Licensed under the Creative Commons Attribution: by S. Bravaglieri, and S. Furioni.

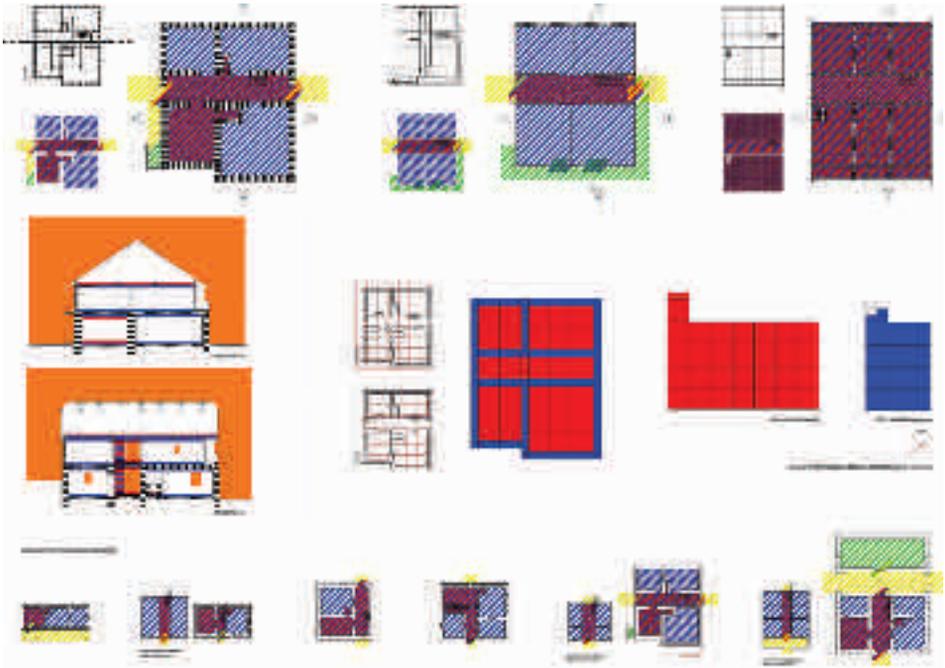


05. Graphic work by the author, 2010. Morphologies of the areas concerning the house-soil form in the alpine context; source archive author. Licensed under the Creative Commons Attribution by author paper.

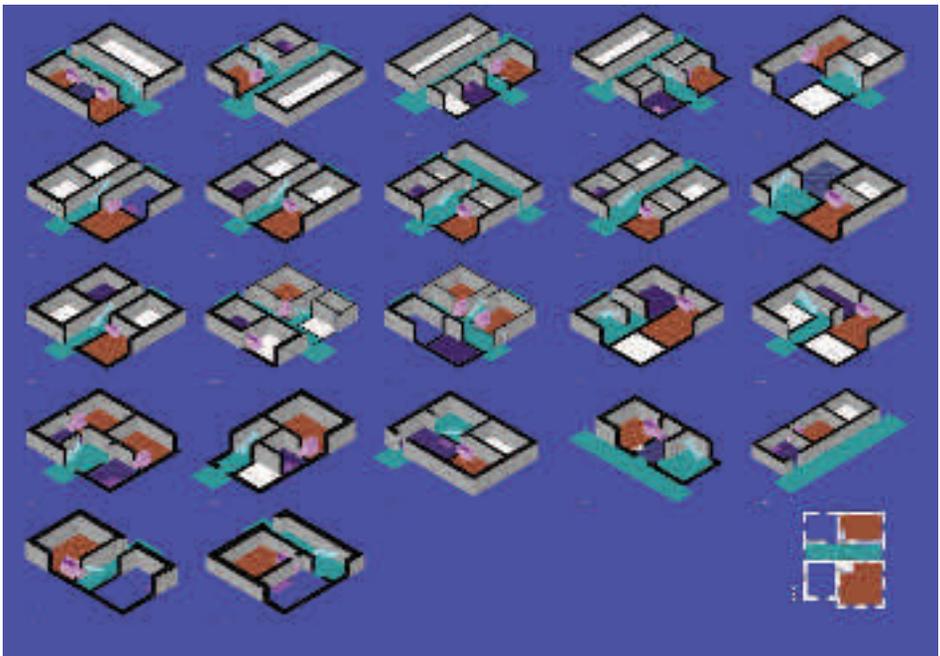
last twenty years has often analysed the form of living and space is realised in the farmstead, a characteristic house of Alto Adige, in this case in the Valle di Anterselva, which presented continuous and different borders. These are both vertical ones which mean real constructive elements such as the walls that defined the corridor of the labe, and horizontal ones such as the barrel vault in the masonry of the kitchen and ovens. In the farmstead in general, at different scales, degrees of study and relationship that elapse between the external and internal space, the constitutive elements that specify the patterns as well as the connection areas that define this condition are as follow: the labe (passageway), the flight of stairs, the kitchen, the ovens. The latter are arranged within the kitchen space, and generally also near the labe (figure7). All these reported elements are formal organisational entities of a family type, but at the same time, they are useful and necessary for the recognition of the structure, which is understood in the double and dual meaning, that is, of construction and space that is also perceptive, in the recognisable character. Practical, but also theoretical recognition is revealed by the synthesis of the models whose representation is of a topological geometric matrix.

Conclusions

By inhabiting the frontier, we intend to investigate, know and represent the space that generates relationships in architecture. They take place through the implementation of parameters such as categories - dimension, position, accesses, etc. - and patterns that constitute the union of fixed data such as the shape of the architecture and its components. Clearly, the meaning of the terms border and spatial regions is understood by the topology. As a matter of fact, the architectural space of living is described according to topological intentions in regions and borders. It is represented through codes consisting of hierarchical signs that are thought chromatically as a dependence on the sign itself. It is a technical modality conceived to give shape and represent the space. External space and internal space interact and in turn, constitute constant relationships and positions; whether they be either primary or secondary, and minor relative to categories. The exercise is accomplished by being an exemplification of a process that intends to record a method of research and thought implemented in terms with the objective of, albeit experimental, representing the organisation of the living space. This fact is not necessarily characterisable, what is established is the attempt to be precise in the parameters useful for distinguishing regions of space in order to interact in the recognisability of the border system. Dwelling is going through a profound crisis also because models and techniques of modernity have frequently translated into other practices of different procedures, often devoid of meaning and quality, which have produced spatial and even social separation and fragmentation. Thus, this phenomenon gives life to forms of segregation and division, ergo of non-recognisability. The fact found and experienced apodictically was the limit imposed by the lockdown, for which the home, the house, should have been the privileged place for both family and intimate relationships, in which space was essentially constituted through the perception of how to enjoy and live domestic activities, and consequently lead to perceive it as a sense of custody, of shelter as it should be. But on the contrary, often, the house has been experienced and described more as a place of detention than of protection. As a consequence, this means that this does not work properly, that is why a serious and responsible answer would be required to provide all the individuals who have thought or will think about the future way of living.



06. Giulia Rossetti, and Laura Sartori, 2015. System of spatial regions and borders according to a symbolic code of representation, referring to the Antholz Alpine House in Südtirol; source archive author; licensed under the Creative Commons Attribution: by G. Rossetti, and L. Sartori with author paper.



07. Isabella Passeri, and Anna I. Piazza, 2015. Patterns of the areas referred to the study of the Antholz Alpine House in Südtirol; Giulia Rossetti, and Laura Sartori, 2015. System of spatial regions and borders according to a symbolic code of representation, referring to the Antholz Alpine House in Südtirol; source archive author. Licensed under the Creative Commons Attribution: by G. Rossetti, and L. Sartori with author paper.

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01. Victorian Era Queenslander. Jbrew Brewbooks, 2005, CC BY-SA 2.0 licensed under the Creative Commons Attribution-Share Alike 2.0 Generic.

The Unexpected Life of Balconies

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Keywords: Balconies, Asia Pacific Architecture, Tropical and Subtropical Architecture

Abstract

This paper is a reflection by two practitioners on the street facing balconies they designed for their own homes. While the balconies were designed in response to the climatic conditions of their respective sites, lockdowns during the 2020 pandemic have proffered an opportunity to evaluate the social and cultural values of these indoor/outdoor spaces. The two practitioners met while working in Brisbane, Australia. One remains in Brisbane, while the other practitioner relocated to her home in Taiwan, where she now resides and practices. On reflecting on these balcony spaces, the work describes the influence of verandas typical to a vernacular type of housing in Brisbane, called Queenslanders. By discussing these balcony spaces, the paper also explores the role of balconies in cities with different density and cultural considerations. The writing is also informed by the two geo-political locations of the practitioners, whose responses to Covid19 have been different. Central to this paper is how the unexpected utility of these indoor/outdoor spaces has shaped experiences of home during the pandemic.

Introduction

Balconies have often been likened to stages with the pronounced presence they make from private homes onto public streets. From Mussolini's speeches made from his balcony over the Piazza Venezia, to Romeo and Juliet's expressions of love from a Venetian balcony, and Evita (a character based on Eva Peron) singing "Don't Cry for Me Argentina" from the Casa Rosada balcony in Buenos Aires. The stage-like qualities of balcony spaces have been celebrated in unexpected ways throughout the 2020 global pandemic of Coronavirus (Covid19). In Toronto, Canada, an opera singer stood on her apartment balcony serenading her neighbours with well known classics. Her audience, also contained by their balcony balustrades, cheered and applauded her singing. Across Italy, from Palermo to Turin, neighbours found solidarity in a time of isolation by singing and playing musical instruments in unison from their separate balconies. The pandemic has provided new ways of evaluating the physical and social benefits of balconies to both individual private dwellings and to the street, communities and public life.

The unexpected life of balconies is explored in this paper through the discussion of two homes that the authors both designed and currently dwell in. Both homes are located in the Asia Pacific region, one in Taiwan and one in Australia. Both were designed with balcony spaces as a response to climatic conditions, especially the heat and humidity that come with Tropical and Subtropical climates. They were designed as a way of avoiding excessively air-conditioned indoor spaces and to create comfortable, sustainable family homes. However, during periods of lockdown during the pandemic, these plant-filled, semi-enclosed outdoor spaces have provided both physical and mental respite during these times of restricted movement.

The Ambiguous Nature of Balconies

While there is technical literature that discusses how balconies are advantageous to the quality of indoor air quality for apartments, recent, dedicated literature on the social benefits of balconies is limited. Town planning laws in the cities of many developed countries still require passive surveillance over the street through devices such as balconies, a referential nod to Jane Jacobs concept of "eyes on the street" from the seminal text *The Death and Life of Great American cities* (Jacobs, 2016 p. 54). In a similar vein Henri Lefebvre acknowledged in *Rhythmanalysis: Space, time and everyday life* the social value of the "marvelous invention of the balcony" as the place where one can experience the "fleeting rhythms of urban life" (Lefebvre, 2004, pp. 27-28). These two texts have had an enduring influence on urban planning principles even in the 21st Century.

Perhaps the lack of critical observance paid to balconies in spatial geographies and theory lies in the ambiguity, as Christopher Alexander described, of front porches and verandas in *A Pattern Language: Towns, Buildings, Construction*. Alexander discusses the front porch of a house in his theory for the "intimacy gradient", where he describes the need for domestic spaces to be organised from most public spaces facing the street retreating back to the most private spaces (Alexander, 1977, pp. 341-343). In Carolin Aronis' study of the social and cultural life of balconies in Tel Aviv, she discovered this same ambiguity. She wrote that the "private and public are intertwined in the balcony and constitute a baffling combination of what is supposed to be open to the public, and what is a private, personal matter" (Aronis, 2009 p. 158). In the early 1960s Dutch Architect Aldo Van Eyck coined the term "thresholds" to describe the spatial condition created by the intermediary and liminal nature of balcony spaces (Van Eyck, 2008, pp. 291-292). In Elspeth Probyn's text *Outside Belongings* she celebrates the ambiguity of

the balcony, describing the space as an “ongoing inbetweenness” writing that it “highlights the necessity of getting at the minuteness of movement that occurs in the everyday processes of articulation” (Probyn, 1996, p. 158). It is this opportunity for a close study proffered by the ambiguity of balcony spaces that is central to the analysis of the two balconies, in Taiwan and Australia, presented in this study.

It is also the ambiguity of balcony spaces that has allowed for a reimagining of their functions and program during these extraordinary times. These liminal domestic spaces that are both semi public and private - spaces that are neither outside nor inside - have played an unexpected role in a time of pandemic, quarantine and social isolation. It has created renewed international interest in balcony spaces, which is much needed, considering most of the aforementioned literature comes from the mid to late 20th century. This renewed interest has been presented in varied forms including events such as the international Porch Placemaking day. It has also seen some much needed new critical discussions on the balcony in the 21st century city. Including Zacka Bernardo's essay *An Ode to the Humble Balcony* in the *New York Times*, which again highlighted the liminality of the balcony, describing it as “a strip of private property suspended over public space. On a balcony, one is outside, yet at home; exposed, yet secluded” (Bernardo, 2020, p. 12). In reflecting on the balconies designed by ourselves for our own homes, the purpose of this study is to contribute to this emerging field of literature by discussing balconies in the context of urban density and the 21st Century and living in the time of Global Pandemic.

The View from our Balconies

The two authors met while working together in an architectural practice in Brisbane, Australia in 2004. We both trained in architecture at schools in Queensland. As part of our studies, we were taught about the late 19th Century and early 20th Century vernacular style houses, called Queenslanders. While working together in practice, we worked on the renovation of a number of these houses in the northern inner-city suburbs of Brisbane. Queenslanders are a colonial style of architecture, adapted from other colonised countries in the Asia Pacific region to suit a tropical and subtropical climate. Designed in the pre-modern era, these houses employ a number of strategies to provide cool and comfortable indoor environments without air-conditioning. The most significant of these strategies being the wrap-around balconies that shade internal rooms while also providing an outdoor room to occupy, and even sleep within, during very hot and humid nights (Brisbin, 2014, p. 96). Working and learning about these houses had an influencing factor on our work, as we have established our own practices in Hsinchu in Taiwan and in Brisbane, Australia. While we designed our own homes with balconies in response to local climatic conditions, we both found that these liminal spaces have functioned in important ways throughout the Covid19 Pandemic (fig. 01).

The View from Taiwan

Like Brisbane, Hsinchu in Taiwan, is classified as a humid, subtropical climate. However, Hsinchu tends to have higher levels of humidity than Brisbane and with a higher density, the Urban Heat Island Effect has a greater impact. Buildings in Hsinchu typically have deep, rectangular plans with the narrowest edge of the row house facing the street and the long edges running adjacent to neighbouring properties. On average, the plot size is about 80 square metres, maybe not small by international standards but small in comparison to housing in Australia, where the average house size is 250 square metres. The street facing side of the row



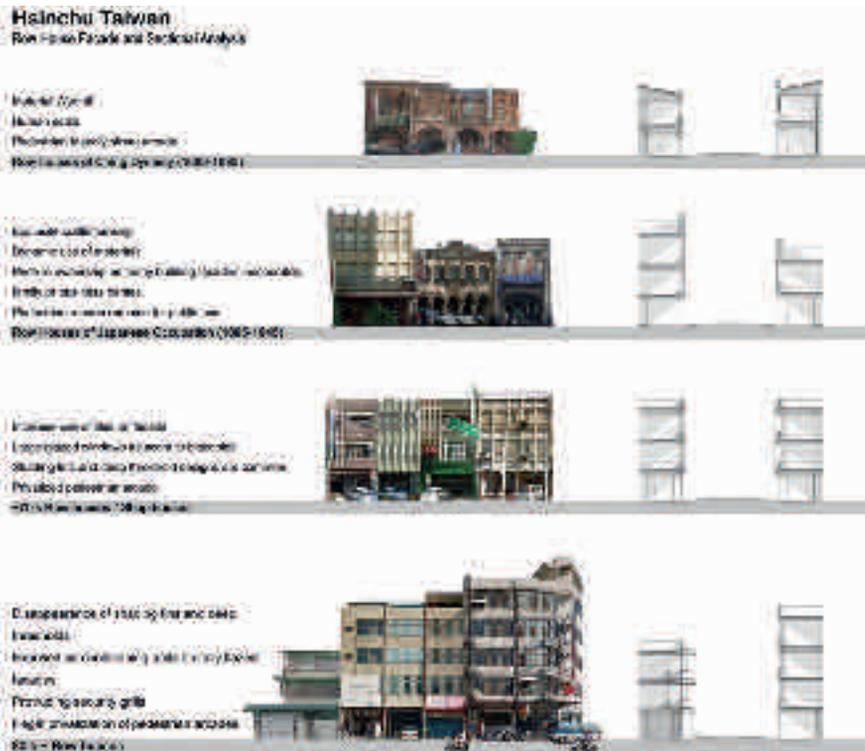
02. Row House. Studio Millspace, Hsinchu, 2018. Copyright: Studio Millspace (reproduced with permission).



03. Row House. Studio Millspace, Hsinchu, 2018. Copyright: Studio Millspace (reproduced with permission).



04. Row House. Studio Millspace, Hsinchu, 2018. Copyright: Studio Millspace (reproduced with permission).



05. Row house and Façade and Sectional Analysis. Jenny C-T Peng, Hsinchu Taiwan 2018. Copyright: Jenny Chu-Tzu Peng.

house is usually the only side with openings such as balconies, however, as residents rely on air conditioning for cooling, balconies are increasingly enclosed to maximise the availability of enclosed, air conditioned space. This approach to design makes the attainment of natural light and ventilation deep into living areas of the row houses nearly impossible (fig. 02, 03, 04).

In response to this, the refurbishment of the Hsinchu row house involved cutting a void in the centre of the floor plan to open access to both natural daylight and ventilation into the living areas of the house. The void opens out on one side to the widest part of the garden. Additionally, the street facing elevation of the apartment is open through a new balcony. In Figure 3, this balcony can be seen in the context of the street, where neighbouring row houses have enclosed this space and fixed air-conditioning units along this façade. The façade is western facing, meaning that it absorbs heat gain throughout the day. As well as assisting with the climatic response, plants along the balcony provide privacy on this street facing edge of the home in the densely populated city. While initially the balcony was designed as a climatic response, it also provides sensory experiences of variations of light and temperature as well as access to nature. Plants are rarely part of modern domestic life in Taiwan, which is what makes the Hsinchu Row House so special. On a grand scale, as much of the inner city is made up of these narrow, row house facades, besides being climatically beneficial, the combination of vegetation and balconies of the Hsinchu row house hopes to rejuvenate societal discussion about the very public role of each private facade. Analysis of past row houses in the local area show a change in value and increase privatization of the 'front edge'. Climatic responsive design may provide a much needed solution to this alarming urban issue (fig. 05).

In Taiwan, preventive measures never went full blown to the level of a full lockdown. For those who experienced the SARS outbreak 17 years ago, people knew that business was not as per usual and staying home became the new normal. For a nation that prides itself on convenience and mobility, as people can easily travel from north to south in just under two hours on the high speed rail covering 350 kilometres, a voluntary stay at home recommendation forced more people to look inwardly at the comfort levels of their homes - something that a lot of people may have overlooked in Taiwan. Throughout the voluntary lockdown, the green balcony of the Hsinchu Row House demonstrated its full potential - beyond a climatic response - it also provided physical and mental respite, as well as access to natural daylight and ventilation, throughout the stay at home orders (fig. 06).

The View from Brisbane

The Two Pavilion House is a detached dwelling built on an infill suburban site. It is a tall narrow home in the inner city of Brisbane, designed as a response to growing needs for housing density in Australian cities (fig. 07, 08). Although much larger than the Hsinchu Row House at 140 square metres, 110 square metres enclosed, it is still small in comparison to the average Australian home. Houses in Queensland no longer use the vernacular wrap around cooling device of the verandah, instead they are increasingly enclosed and reliant on air conditioning for cooling. In a similar approach to the Hsinchu Apartment's void in the middle of the floor plate, the Two Pavilion house is split into sections, leaving an open courtyard in the centre of the house. Another similarity between the two homes is that the street facing façade of the Two Pavilion House is West facing. In response to this, the defining circular patterned screens on the street facing facade shade the house from the daily heat load to the West (fig. 09). The balcony space that both joins and separates the two pavilions of this house was designed



06. Row House. Studio Millspace, Hsinchu, 2018. Copyright: Studio Millspace (reproduced with permission).



07. Two Pavilion House. Scott Burrows, Brisbane, 2017. Copyright: Studio Millspace (reproduced with permission).



08. Two Pavilion House. Scott Burrows, Brisbane, 2017. Copyright: Scott Burrows (reproduced with permission).



09. Two Pavilion House. Neil Burton, Brisbane, 2018. Copyright: Neil Burton (reproduced with permission).

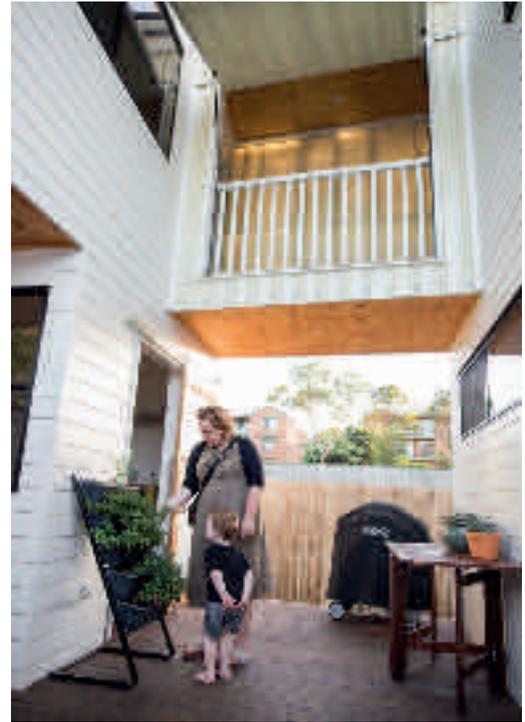
as, again, a response to climate. The balcony provides access to natural day light and ventilation. It is also part of a cooling strategy called night flushing, where the wall of second storey corridor opens over the courtyard to draw out hot air from that day through the processes of natural convection. The space is also used to introduce plants and greenery, including an edible garden with herbs and chilies. Additionally, we felt that we could provide a better microclimate to our neighbour in terms of access to natural daylight, air movement, and ventilation. Rather than looking at a long continuous wall, our neighbour could look through the opening between the two pavilions of our house to the view beyond. Most importantly, it provided us with the opportunity to be actively private or social with our neighbours. It meant that we could intentionally engage and socialise with our neighbours through the balcony; rather than the anonymous passive surveillance over the street prescribed for in local planning laws (fig. 10).

Importantly, the function of this internal balcony is to separate the spaces in the front pavilion from spaces in the rear pavilion. The separation between these two spaces was beneficial to living in lockdown. Unlike Taiwan, the first wave of the Covid-19 outbreak required compulsory lockdown measures in Australia, which required people to stay at home and only leave for essential reasons. This required all household members to work from home and undertake home schooling. Having these two separate sections of the house meant that activities related to work and school could be kept separate in the front pavilion of the house, leaving the rear pavilion for family and relaxation time. These balconies also acted as breakout spaces to provide household members with space for respite from inside (and at times from each other) (fig. 11).

Into the Outside

Both the Two Pavilion House and the Hsinchu Row House were designed to create a quality of space, in terms of access to light and fresh air; a quality over quantity approach to indoor space. They both used balconies as a response to their respective hot and humid climates in Taiwan and Brisbane. Balconies that provide insulation to indoor spaces as well as creating shaded outdoor spaces in which to enjoy prevailing breezes. However, increasingly air conditioning has become the enemy of the balcony. What we have found from living in our own homes throughout the pandemic, is that they have provided our lives with much more than just a climatic response. They have given our families space for respite and access to natural elements of the environment.

Importantly, these balconies have been a social device that promotes interaction with our neighbours, our streets and urban settings. They are liminal spaces that exist between the interior and exterior and public and private space. Balconies are a device that allows for the return gaze; moving beyond passive surveillance over the street, the balcony allows people to safely view each other and by doing so, actively engage in urban social life. The advantage of the socialisation promoted by balconies has been greatly appreciated by cities placed in lockdowns. They provide a method of engaging with public life during times of restricted movement. As more stories emerge, internationally, of the unexpected social and cultural benefits of balconies during these extraordinary times, there should be a renewed interest and discussion about how balconies contribute to good quality urban life.



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01. "Subdivided Flats" photographic series image. Benny Lam, place, 2015, Benny Lam / Society for Community Organization.

Unpredicted, Productive

About Transformations and Polyvalence of Private Spaces

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Keywords: Habitat, Lockdown, Polyvalence, Transformation, Permanence

Abstract

The exceptional days of ever experiencing different phases of a lockdown, and in which way a pandemic is able to develop and spread amongst our familiar environment in the same time as all over the world, implies big impacts on our daily habits and personal freedoms. Within this scenario, we began questioning how spaces in our usual routines were being used. And what changes were happening during the pandemic to these settings. In a brief design task handed to urban planning and architecture students of an international university in the Sultanate of Oman, we intended to elaborate and collect impressions about the temporary use and transformation that have happened to our familiar spaces. We experienced that transformations were necessary, due to the fact that leaving home was possible only for the most essential activities.

Within a photographic documentation, a brief design task announced at an urban planning and architectural design department of an international university located in the Arabic World, we intended to elaborate and collect thoughts and impressions about the temporary use and transformation that happens to the spaces of our familiar surroundings, due to the fact that leaving home is merely possible for the most necessary activities. The documentation of said changes was done through photographs capturing a space within or around participant's house; firstly, in its initial condition, then secondly, during its moment of temporary adaptations due to the current circumstances. The chosen situations were documented through a bird's-eye perspective, composed by different pictures being taken from the ceiling.

The results give insights to the private "intimate square meters" of each participant. The manner of changes might be varying and more or less visible, eventually hidden in detail but described in words. Still they can make us aware and conscious about our ability of adaption and strength of endurance, and the hope that the possibility to follow our beloved habits will come back soon.

Introduction

To curb the spread of the Novel Coronavirus, many activities have been shifted to the inside of our private spaces. This required a change of the usual environments and adjustments to our habits. Forced to work and attend classes from home, residents of Oman were obliged to develop new practices to stay active and healthy during this period. Furthermore, time dedicated to hobbies or passions that did not receive enough attention previously was regained. Common spaces in many houses underwent radical transformations since families and flatmates had to get closer together and rearrange their living spaces (Committee, 2020a).

The moment of recognition that there is something oncoming that we don't know about, and never experienced before, was followed by a state where our minds witnessed and developed different phases of adaption (Ministry of Health, 2020).

Initially, the public awaited further information related to the newly spreading virus. Like in many other countries, Omani newspapers had constant updates on the where, whats and hows of the virus. The first effect of the disease to the local "habits" was in relation to activities happening in foreign countries. As the world health organization officially declared a pandemic (WHO, 2020), restrictions in international movements began to happen.

While waiting for government's reactions and continuously adapting to the new rules and restrictions, the impotence in regards to the situation heightened as the crisis evolved. Moreover, growing passive acceptance threatened individual hopes, exceeding the capability of complying with the situation and obeying the restrictions.

This paper follows the sudden changes that intimately occurred during a pandemic. The upcoming section details the emergence of our research question, and the inspirations behind the methods used in this documentation. This is followed by a description of the task handed out to our students, and the feedback from their private dwellings. Finally, we discuss the openness, or counteractively, the closed off nature of spaces to sudden change.

Adjusted Environments

Working as academics in the field of architecture and urban planning at a university, we had to shift all teaching and consulting contents to online modes, as restrictions were placed on face-to-face meetings with students after the arrival of the virus (Committee, 2020b). Throughout this semester we held numerous online sessions, enabling virtual meetings with students through the use of webcams from their homes in different cities or villages. These were little glimpses into the private environments where they adjusted their workspace within. Some of them had found a calm and quiet corner to occupy for their work and calls, others had to adjust further to create a suitable space within dense family situations.

As we recognized these temporarily adapted spaces constructed by the students, curiosity peaked on transformations happening in familiar surroundings. During this period of an ongoing pandemic, the situations demands reorganizations of environments and habits within one's occupied square meters.

This paper intends to acknowledge and consciously perceive the occurring reorganisation of spaces, as well as capture the transformations. In the attempt to study this transformative phenomenon, the brief design task carried out was inspired by the works of China-based photographer Benny Lam.

In his photographic series "Subdivided Flats" (Lam, 2017a), shot between 2012 and 2015, Lam documented the polyvalence and multipurpose usages of spaces in subdivided flat units with suffocating living conditions in Hong Kong (fig. 01). These close premises are a result from

the problems of the housing market in the country. In the living spaces occupied by people beyond the shiny society of the city, all daily routines like having meals, paperwork, body hygiene and leisure pursuit and more have to happen in the same limited square meters. “From cooking to sleeping, all activities take place in these tiny spaces” (Lam, 2017b), says Lam.

Methods

Within a brief design task entitled “Homerecording: Unpredicted, Productive” announced in April 2020, when first lockdown measures started worldwide, we intended to elaborate and collect thoughts and images about the temporary use and changes that happened around us, in our private surroundings, within a photographic documentation

How were we using certain spaces in our usual routines? How are we using them in these days of staying and organizing everything from home, and which changes happened in the setting? Which adjustments do we imagine making the space ideal for this temporary dedication?

Participation in the assignment was voluntary. The registered students were given six days to observe space in their habitual environments (house, flat or plot) that experienced temporary changes due to the needs that arose in their lockdowns. This was then documented in a “scan” of their area. The submission required two different image productions, projecting the observed spaces and situations from above through a “bird’s eye perspective”.

One image should show the room in the spatial moment generated by the current circumstance the participants found themselves within. This task was carried out two weeks into a local lockdown, and the beginning of a shift to e-learning for the students. The students were instructed to display the adaptive nature of their new living conditions, as traces of their activities would be visibly left behind by its users. The manner of changes might be varying and more or less visible, eventually hidden in detail but described in words.

The second image requested was expected to show similar boundaries in its familiar and original setting, and this would portray the “old normal”. Therefore, this required the rearrangements of some spaces by the students. The two images side by side would then act as a “before” and “after” a pandemic lockdown for the university students in Oman (fig. 02).

Accompanied with by two images, the students had the opportunity to further describe details about the situation. This was done in a short text submission of 200 words, that provided additional information on personal circumstances which may have influenced the monitored changes.

In order to generate the required images of the room or space, students took several pictures from different positions across their ceilings. The students used ladders and other instruments to position themselves high enough, and ultimately collaged together with the multiple shots they acquired. The final pictures are a composure of several single shots presenting the whole described situation, including all its corners and walls with their openings to communicate its spatial configurations and connections.

Through this method, projections in the images may include the photographers themselves, the standing tools, as well as the possibility of distorted elements. In these scenarios, the students edited the raw shots and merged them with one another through their preferred graphic editing programs. Therefore, our team took the chance to further explain certain basic program skills that would help this process through a self-made video tutorial. This was distributed to all the students that registered to partake in the task.

Submissions were accepted if they met the basic requirements. “Patchwork” styles were accepted, as long as the information about the space was clearly represented. It was mandatory



02. Bedroom. Marianne Sigl, place, 2020, property of the Gutech.



03. Majlis. Noor al Hinaï, place, 2020, property of the Gutech.

to follow the carefully described instructions. Ultimately, 16 students participated in the task. From these, 12 submissions were admitted and 4 didn't fulfil the requirements. After all, this paper will focus on seven relevant and completed submissions.

Results

Among the 12 spaces documented, 5 bedrooms, 3 living rooms, 2 studios, 1 party and game room and 1 underused basement were explored. Long-stay compartments (like living, gathering and bedrooms) normally used to address multipurpose programs, were, perhaps predictably, the chosen areas to be registered. These are spaces of inherent versatility, normally available to be occupied in many ways according to the needs of the inhabitants of a house.

Living rooms, or "Majalis"¹, still stand as the place of worship and gatherings, especially at homes where a large family lives². Except for the lack of usual guests, they seem to still be the place for occasional communal activities (fig. 03). Homes where siblings share rooms seem to witness more sensitive changes in the use of the "Majalis". Occasional activities, such as playing games, praying or light meals, originally held in these spaces, now are "living" side by side with online meetings, remote classes, homeschooling and even exercising, which are now unable to be performed in the bedrooms. Notably, one of the submitted "Majalis", due to the arrival of a family member from abroad, who had to be quarantined for 14 days in a room with an attached bathroom, had to be radically transformed into another exclusive bedroom, with a bed and a desk occupying the central free space, originally intended for being empty, or hosting activities to be performed on the carpet (fig. 04).

Uncommon big halls normally dedicated to larger family gatherings and parties can also play the role of harbouring unpredicted activities. These rooms are considered more private, as they are usually more closed off from the rest of one's house. In a large hall documented (fig. 05), some furniture wall the room on each side, originally producing a large empty central area. This space was able to host a small gym without changing its former configuration, and without losing the previous condition of being a place to watch television and play video or table and board or card games. In another space shown, as a studio attached to a bedroom (fig. 06), a never used empty desk and a big armchair are activated, as their uses are finally necessary for the inhabitants of the house. These elements work as spatial support for online classes and meetings, with the addition of mobile devices such as their phones and laptops. A further inclusion of a sewing machine, gym equipment and a bookcase join the scene, making the area collective and polyvalent in essence. The documented bedrooms tell similar stories in different ways. Some of them confess they were not being intensively used before the pandemic, except for bedtime. The images of one of these rooms (fig. 07) show that the only difference between before and after the pandemic are the desks and piano keyboards being used and played, supported by the portable electronic devices now trapped inside.

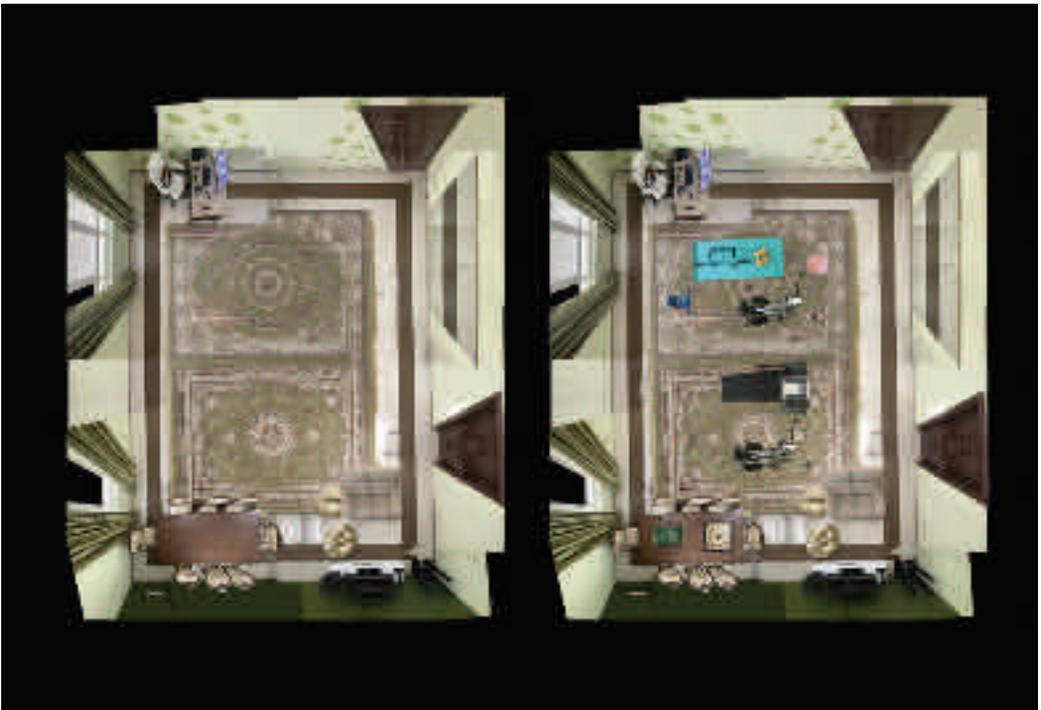
However, some people need more desk space than ground. In this case, we see new tables getting into some of the rooms. As urban planning and architectural design students, the need for drawing boards and painting easels are leading this change (fig. 08). While academically the analogical designing tools used by the students are being replaced by the digital counterparts, some students place importance on reinforcing physical and manual activities as a way to escape online reality so present in these times (fig. 09).

Discussion

A kitchen, for many reasons, did not appear among the areas exposed. Maybe for its intense use during quarantine, or for its inability to change during this time as its need and essence



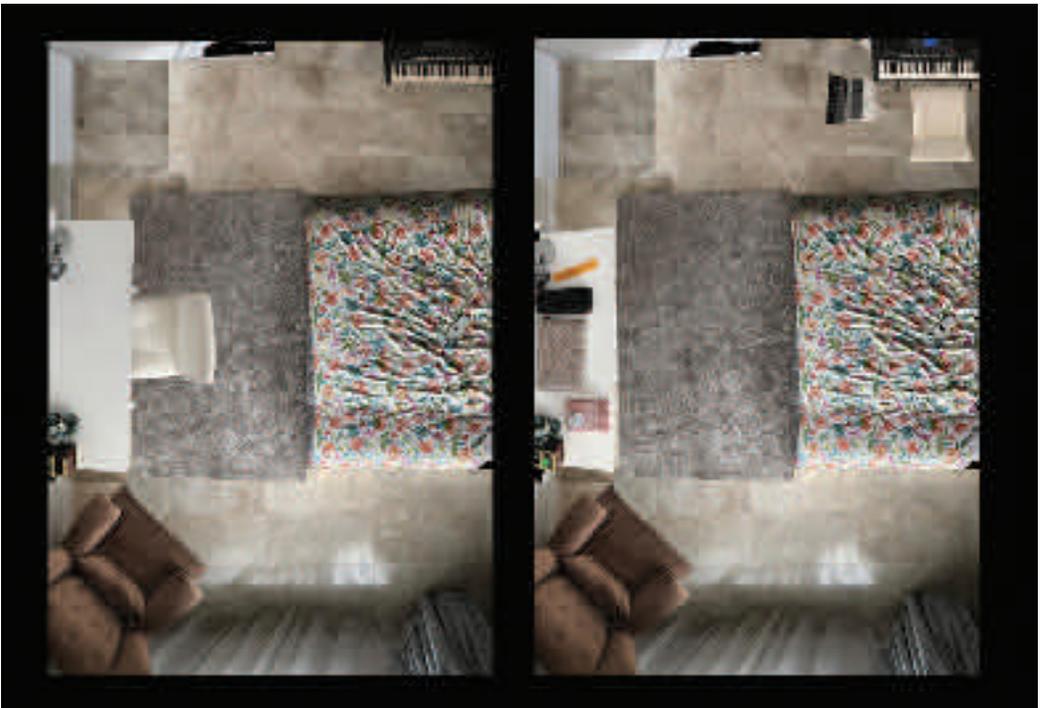
04. Majlis. Shatha Alhanshi, place, 2020, property of the Gutech.



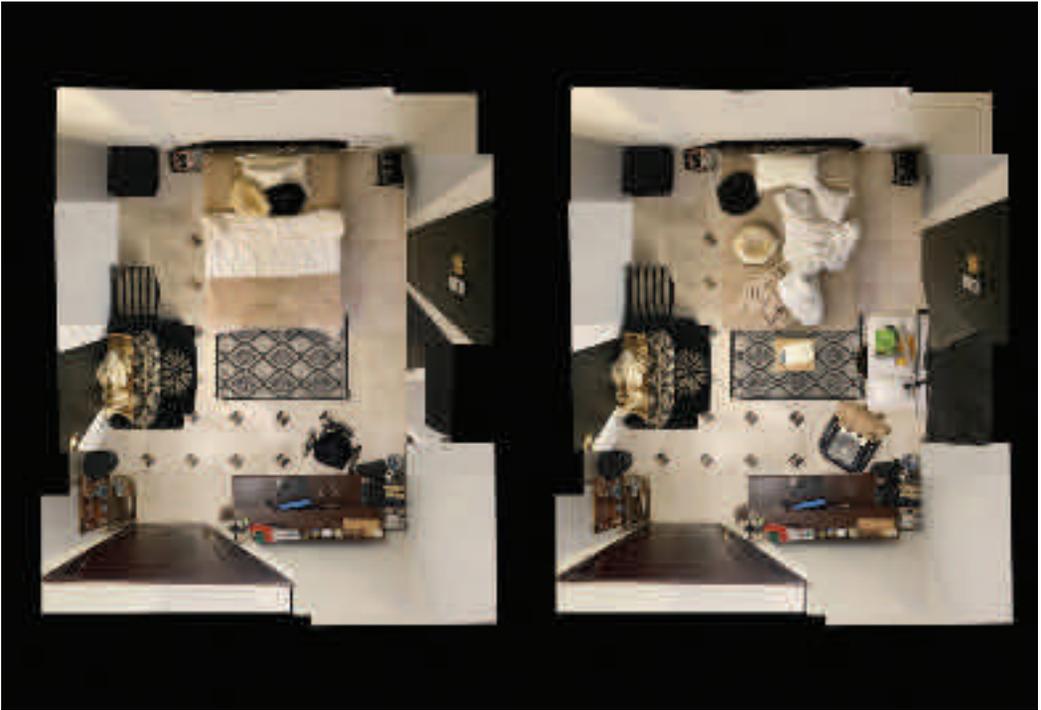
05. Hall. Noor al Yaarubi, place, 2020, property of the Gutech.



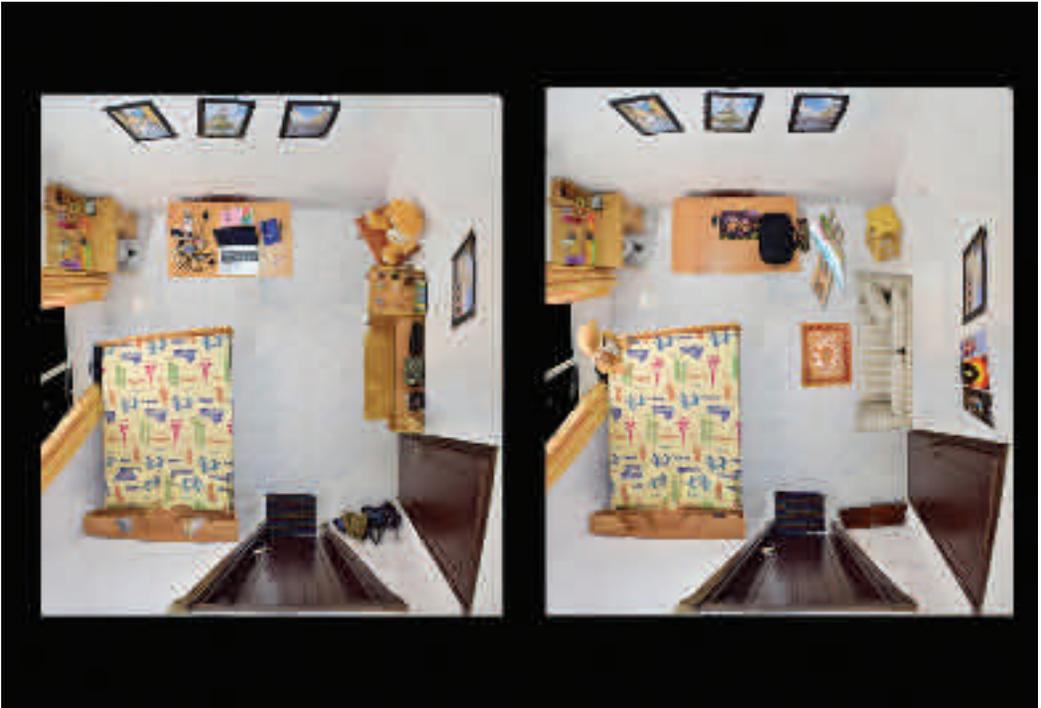
06. Adjoining Room. Rahaf Alwadhahi, place, 2020, property of the Gutech.



07. Bedroom. Ithar al Harthi, place, 2020, property of the Gutech.



08. Bedroom. Rayyan al Rawas, place, 2020, property of the Gutech.



09. Bedroom. Sanmaya Sudhakaran, place, year, property of the Gutech.

don't change. The same could be said for bathrooms. It can be argued that such places whose forms follows function so much do not require or even admit change, or perhaps have not had time enough to be open to imaginations.

Conversely, bedrooms and living rooms seem to be more accessible to open interpretations. Therefore, they were the most documented spaces. The house being a metaphor of the city (Rossi, 1966) is something that the circumstances to a certain degree enforce. Because people are spending all their time inside home instead of going out in the streets. Then, the difference between exceptional and ordinary buildings (Barata, 1999) could be represented by domestic compartments that are not so alike, but still coexist side by side.

Keeping on moving from words to things (Foucault, 1966), or things to words if we prefer, the etymological analysis made by Gottfried Semper here makes sense. Looking for the textile origins of architecture and construction, he could find an ancient relationship between some Germanic terms for wall (Wand) and fabric (Gewand), and the node and the junction as basic primitive structural artefacts in construction (Frampton, 1990). That leads us to reflect on the mobility of the tents of nomadic people, like the Bedouin, and its ability to travel and change. Despite its inability to last, as the stones of Venice do (Ruskin, 1851), heritage, as what we inherit, can just be in many ways. As material inheritances available to be used, but reused. While great exceptional buildings last on their fixity, weight and oneness, regular houses of common people also do last, but due to its polyvalence and numerousness (Hertzberger, 1991). It takes a lot to transform a big monument dedicated to a special program, and radical interventions to shift its use. On the other hand, a group of ordinary houses are capable to host a group of other daily activities without so drastic and visible changes to the ensemble.

Ordinary houses, continuously organized in space, give shape to what is not by chance called the urban fabric or tissue that defines large part of the city. A tissue capable to absorb more silently the passage of time and change. As we see performing the moveable furniture and textile objects from the documented domestic spaces. Unlike what fixed equipment from kitchens and restrooms can do.

Evoking the dialectic that may still rest between the concepts of historical and intentional monuments (Choay, 1992), respectively made originally to be used, and to last. Reinforcing the opposition between putting things in a condition that has never existed before (Viollet-le-Duc, 1854), and the most total destruction which a building can suffer (Ruskin, 1849), both in face of an imminent "restoration". And it is from these paradoxical juxtapositions that still can emerge synthesis like Camillo Boito (1884) or Cesare Brandi (1963) could do, paving the current theories of restoration and interventions on heritage. Increasingly more and more towards a matrimonial sense of mix and transform rather than a patrimonial or patriarchal sense of maintenance and preservation.

The movement of the messy bedspreads seen in the last images, or the teddy bear that moves from one corner to the other, among not so moveable objects and furniture around, may symbolize a relevant circumstance inherent to the photographs displayed. They show that we are made of different needs, and sometimes these needs are made of different materials. Sometimes we are still nomads, sometimes sedentary. Sometimes we need to be inside, sometimes outside. Sometimes we need to be transformed, sometimes not. Sometimes we want to move, sometimes to stand still. Sometimes inside closed rooms, sometimes garden yards. Sometimes in public spaces, sometimes in private ones. Sometimes in wide spaces and open free horizon, but with our backs always protected. We need sometimes to prospect, sometimes we need to refuge (Harari, 2014).

The same happens when we consider the variety of objects and furniture people have inside home, which we could see in the images. Movable and immovable goods put side by side. Heavy types of equipment standing still, while light tools move around, even though stuck inside. Despite some of them being really made to be carried outside and to be used anywhere. A history of the telephone could tell some tales in this way. As good as a history of the computer or piano could do. As if they are now what cards and board games once have been. Moving today from side to side inside the room, the house or, why not, the city. All of them now made of silicon that in its turn is made of sand that in its turn can move and change the landscape in which some nomads live. Whose shelters, made of fabric, really needed to be made like that. As well as some soft and mobile parts of the interior spaces documented are still textile made. Like the carpets and rugs, bean bag seats, sheets and blankets, or even the teddy bear that we can take with us, and by now can be more than a metaphor for this affective materiality. What the images of the documented areas someday maybe can tell, between the lines or under the cloths, is the competence inherent in things that can change without moving, and at the same time the virtue of those who can move without change (Deleuze, 1968).

Conclusions

While being trapped at home trying to stay safe, we had to adjust in interior spaces that are getting denser and more intensively shared with other family members or flatmates. Our aim was to capture the moments of an emerging flexibility and how our environment is able to react to disruptive situations. It may have brought some unexpected possibilities and abilities of adjusting to a changed routine. Perhaps these sudden experiences expose the fragile architectural dichotomies between form and function and content and container.

The hard and concrete parts that shape the spaces documented can also tell some stories about the polyvalence of private areas and through them, about polyvalence at all. The results of this paper talk about the inability of built matter to change as fast as necessary, or as fast as its use moves, and about the performance some types of places or buildings can play this way. On the other hand, the performances held within them, instead, are played to the user's needs.

While this project worked with the personal, self-made and emergent spaces within the student's homes, these changes in spaces are also happening in the private and public sectors. For those around the world attending work or some form of public life, the new care for distances and exchanges with one another has quickly changed our space interactions. An expansion of such a project can therefore branch out in other spheres of our day to day activities.

The work focused on seven examples received through the brief design task held in April 2020. However, working from home has affected all students at the university. They have never received online courses previously and were used to be present for full day courses 5 days a week before the circumstances changed. Within this drastic educational change, the work presented in this paper is a glimpse into our average student's experience during a pandemic and a lockdown.

Acknowledgements

We are grateful for the efforts of our students who engaged in this short and intensive exercise. Special gratitude to Noor al Hinai, Shatha Alhanshi, Noor al Yaarubi, Rahaf Alwadhahi, Ithar al Harthi, Rayyan al Rawas and Sanmya Sudhakaran.

Notes

1. “Majlis” is the Arabic word for a sitting space for talking, and “Majalis” is the plural form. It is considered by UNESCO as “a cultural and social space”: <https://ich.unesco.org/en/RL/majlis-a-cultural-and-social-space-01076> (Accessed 26 Sep. 2020)
2. The average household size in Oman is 6 persons.

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Year	Description
1918-1920	Spanish Flu (H1N1), which infected around 500 million people worldwide and resulted in approximately 50 million deaths
1957-1958	Asian Flu (H2N2), which resulted in approximately 1.1 million deaths
1968	Hong Kong Flu (H3N2), which resulted in approximately 1 million deaths
2002-2003	SARS epidemic confirmed 8096 cases and 774 deaths
2009-2010	Swine Flu (H1N1), which infected between 700 million and 1.4 billion and resulted in around 201,200 deaths
2012	MERS-CoV epidemic, confirmed 3379 cases
2013	Ebola epidemic, confirmed cases 28736 cases
2019	COVID-19 death tolls are increasing day by day, right now confirmed cases have crossed seven million six hundred and thirty-six thousand

Nest to Next

Long-term Containment and Its Impact on Residential Spaces

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Keywords: Long-term containment, Pandemic, Residential spaces, Human behavior, Preferences

Abstract

Global events of pandemic have struck the world to a standstill even before Covid-19. Its adverse effects affect normal life, particularly in the way societies used to function, relate to one another; spatial order, and normal business. Long-term containment and its impact on human behavior are none less than the dwindling world economy. These ill-effects are reflected more in terms of spatial order, spatial standards, housing, and rehabilitation later, to reach new normalcy. It calls for social and responsible individual behavior challenges to assimilate the essential requirements of pandemic and move toward a new normalcy of life and business. 'Freedom of movement' is considered these days as more of a curse than bliss! However, a sudden change is unwelcome and causes tumult in human behavior, preferences, and societies, even in relationships, nationally and internationally. The safest place in pandemic times is home; the nest where one finds rest and restoration. However, this notion is being undermined as days pass by with longer imposed containment. The intolerable issues of confinement affect human beings at all levels of body, mind, and spirit. Fragile human nature is at stake during long-term indoors, within walls and hot roof, or in the chilling cold outside! Walls and roof pose induced ill-effects of confinement and irritation, not just protection and shelter per se. Even so-called normal humans display oddities in behavior, intolerance, or lowered tolerance levels, leading families to wreck. This study analyses the effects of long-term containment on human behavior, preferences, emotions, and changes required in residential spaces. The methodology used is a literature survey, observation of community behavior through a digital medium, and a questionnaire survey of 280 people from various walks of life. This study will help designers all over the globe in the inevitable effort to reach new normalcy.

Introduction

Global events of the pandemic have struck the world to a standstill even before Covid-19. Its adverse effects are affecting normal life; particularly the way societies used to function and relate to one another; spatial order, and normal business. Long-term containment, with its adverse effects on human behavior, is no less than the dwindling world economy. These ill-effects are reflected more in terms of spatial order, spatial standards, housing, and rehabilitation later; to reach new normalcy. It calls for challenges and changes in social and individual behavior in order to assimilate the essential requirements of pandemic and move towards a new normal. Freedom of movement allowed as a fundamental right is more of a curse than bliss now! However, a sudden change is unwelcome and causes tumult in human behavior, preferences, and in societies, even in relationships; nationally and internationally. The safest place considered in pandemic times is home; the nest where one finds rest and restoration. However, this notion is being undermined as days pass by with longer imposed periods of containment. The intolerable issues of confinement affect human beings at all levels of body, mind, and spirit. Fragile human nature is at stake indoors; within walls and hot roof, or in the chilling cold outside! Enclosed spaces pose induced ill-effects of confinement and irritation; not just protection and shelter per se. Long-term containment has detrimental effects on people with chronic diseases and ailments. More to say, the elderly with restricted abilities tend to depend on others which causes increased problems and friction within the household. Change which is the essence of a happy life is at stake, paving the way for instability for all; especially children and teenagers. Care and concern in normal human life get misty and complicated turning social, family, and individual lives to doldrums. Containment is 'the act of restricting free movement of citizens for limiting the spread of something harmful elements like pathogens and carriers.' Due to the outbreak of Covid-19, it has become quite normal to have restrictions imposed through 'containment area' or 'containment zone' as prescribed by appropriate governmental bodies or by the respective governments themselves; restricting the free movement normally allowed to its citizens. This has led to an 'emergency-like' situation in which all normal activities, movements, and businesses are suspended for a period of time as deemed fit. Further, legal actions are taken against anyone who breaks the restrictions. In such abnormal circumstances, one has to spend 90%; if not full time, confined to indoors. The idea of buildings to act as containment spaces have to spring up to use such spaces as prime means to combat infectious diseases from reaching 'social spread level'. Many a time reasons for containment are humanitarian emergencies and to prevent the societal level spread of pathogens. Such emergencies that societies suffer are natural and environmental emergencies, human-induced emergencies, climate crises, medical and health emergencies which include epidemic or pandemic.

Disease outbreak has always prompted innovations in architecture and urban planning throughout history. Major epidemics and pandemics that occurred in the last hundred years are given below (fig. 01). These testify to the magnitude of death, requirement for relocation, and suffering including monetary loss and Gross National Production (GNP).

An epidemic is defined as "the occurrence in a community or region of cases of an illness clearly above normal expectancy". However, the pandemic is defined as "an epidemic occurring over a vast area, crossing international boundaries, and usually affecting a large number of people" (Porta, 2014). World Health Organisation (WHO) announced the outbreak of Novel Corona virus Disease (Covid-19) a pandemic on March 11, 2020. WHO reiterated its call for countries to take urgent action and accelerate response to 'trace, diagnose, treat'; thus, reduce its spread

to save the lives of people everywhere (WHO, 2020). Many states have vigorously stepped-up intervention in terms of 'identifying, isolating, testing, treating, and tracking' potential carriers. The pandemic is relentlessly preying on social cities where freedom of movement is not curbed. The urgent call for physical isolation and distancing is not paid any serious heed by the citizens, which arises further concern. Moreover, it runs counter to human fundamental desire for connection, and socialization for which the cities and plazas, subways, and skyscrapers are designed. Increased urban density is the target of many urban environments to work properly and economically sustainable (Kimmelman, 2020). However, Covid-19 is highly contagious which requires 'physical distancing and long-term containment' to flatten the toll-graph until an appropriate vaccine is developed. Many countries have imposed lockdown to prevent the spread of this disease. India is not different and the state of Kerala has strictly imposed such measures using law enforcement agencies and the medical department.

Although the safest place considered for anyone is their home during the pandemic, the big question is 'Are homes designed for long-term containment?' Earlier the notion is that architects and planners have no major role to play in health crises such as pandemics since; they are a matter of medical concern. Even so, now architects, designers, and planners are compelled to rethink, the strategies and tactics to be developed so as to pave the way for new normalcy. As the very notion of democracy and free movement are at stake in the wake of long-term containment and physical distancing, it is of vital importance to take cognizance of the human requirements in terms of spaces, treatments, technology, and other psychological requirements that keep people comfortably contained. A critical study and development of long-term solutions are of the highest importance, particularly when the possibility for reoccurrence of such a pandemic is not insignificant. The world is threatened, so too the existence of human species, in peace and wellbeing; which is the primary concern addressed through this research.

The Problem

Presently, societies and humans are deprived of community and personal connections that enable them to hope, heal, recover, and proceed in life with renewed vigour. However, in the time of pandemic, separation, and isolation have become a norm especially in the wake of prolonged durations. What humans do normally is the opposite of what they are forced to do in terms of response to major emergencies. 'Physical distancing' has quickly become 'a way of life' for the majority of the inhabitants of the green planet. Although naming physical distancing 'social', it has only contributed to being unsocial in reality. Lack of tolerance, irritability, boredom, and increased stress levels make people under long-term containment more unsocial! Seeing, feeling, listening to one another, and interacting has no place in a pandemic situation. During this challenging time, designers, architects, and planners shall do everything possible to preserve and foster social lives and wellbeing and comfort of those humans under containment. More so, physical distancing is a spatial condition and shall be fought back with appropriate spatial standards, designs, technologies, and techniques. This is possible by way of taking stock of the situation and getting to know through surveys what people go through their preferences, frustrations, and other concerns. One has to bear in mind that in this time of the pandemic, economy dwindles globally, income reduces, prices for commodities skyrocket, lowered affordability, and non-availability of laborers or operators and service providers. Further, one has to keep in mind that the standard designs, dimensions of spaces allowed, and sanctioned by the local governmental agencies are adopted in the study at this point in time. Considering all these limitations alongside, the remedial measures shall be thought of, if it is to be practical. Hence, a de-

tailed survey is undertaken to take stock of the true situation, even keeping the limits of physical distancing and other norms.

Research Questions

1. What are the effects of long-term containment on human behavior?
2. Changing human preferences; physical and psychological, emotional, and changes required in residential spaces?
3. How do residents respond to long-term social isolation in times of concern, anxiety, and stress?
4. Are the residential spaces available, foster comfort and wellbeing in long-term containment?
5. How to modify existing spaces to foster human comfort and wellbeing?
6. How shall architects respond to the pandemic situation of a global nature and develop new standards and appropriate design solutions?

Methodology

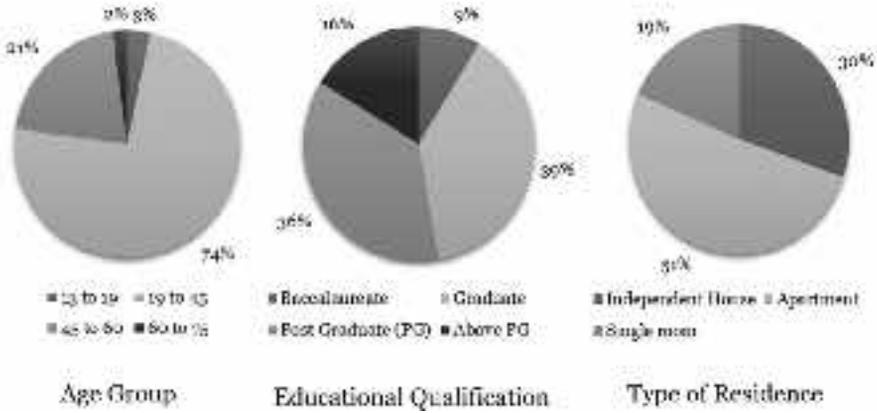
The methodology adopted takes the process through published data and articles that have appeared in recent months in various sources; both digital and in print. Standard designs, dimensions of spaces allowed and sanctioned by the local governmental agencies including the National Building Code (NBC) of India are adopted in the study at this point in time. Further, it involves a large online survey conducted to find out the effects of long-term containment on human behavior, preferences, emotions, and changes required in residential spaces to foster comfort and wellbeing. Observing the community behavior and response through various digital means, explore and propose appropriate architectural ideas that would lead to mitigation of ill-effects of long-term containment. The people; (n=280) identified for the research are drawn at random, consisting of a representative mix of 145 male and 135 females from all walks of life; professionals, health workers, employees, and students.

Age Group, Education qualification, and Type of residence of the people who participated in the online survey are given in the chart shown below.

Respondents are from a mixed group of people staying in urban and semi-urban areas from different states of India. The age group of the respondents is divided into four categories namely 13 years to 19 years (3%), 19 years to 45 years (74%), 45 years to 60 years (21%), and 60 years to 75 years (2%) (fig. 02). Educational qualification of the surveyed varies from Baccalaureate (9%), Graduates (39%), Postgraduates (36%), and above Postgraduates (16%) (fig. 02). Out of 280 respondents, 19 % of respondents stay in single rooms, 51 % of respondents stay in Apartments, 30% of respondents stay in Independent houses (fig. 02).

Family System

Most people surveyed live as a nuclear family either in an apartment or Independent house; (83%); from Apartment, and 66% from Independent house (fig. 03), which is the natural response to the growing urbanized world. It is interesting to note that most of all those stays in apartments and single rooms are without extended or joint family. This is due to the compulsion of urbanization and its consequences on the family structure to shrink from joint-family to nuclear families; whereas in independent houses joint-family structure predominates; (34%) people from Independent house stay in the joint family as against 17% people from apartments stay in a joint family (fig. 03). One reason for the predominance of extended family in independent houses is to bring down the 'cost of living' to affordable levels by sharing spaces.



02. Age-Group, Educational Qualification, and Type of Residence. P.V. Ghom & A. George, India, 2020, Intellectual property of the authors.



03. Family System of Apartment and Independent house. P.V. Ghom & A. George, India, 2020, Intellectual property of the authors.

In a way, this sharing of spaces also contributes to the increased density of urban spaces which may facilitate the community spread in times of a pandemic. On the contrary, if it is separate rooms with shared accommodation for different people, to an extent spread of pandemic may be slowed down through shifting of rooms. However, in such a case, all bedrooms shall have attached toilets and pre-entry spaces that are mandatory in times of pandemic. However, this is not the reality.

Residential Space:

Residential spaces in this research are broadly classified into Apartments, Single room institutional housing like hostels, a single room or double room row houses, and independent villas. In Apartments, 52% are 2 Bedroom, Hall, & Kitchen (BHK), 32% are 3 Bedroom, Hall, & Kitchen (BHK), 13% are Single Bedroom, Hall & Kitchen (BHK), and 3% are 4 Bedroom, Hall, & Kitchen (BHK) (fig 04). In Independent Houses, 33% are 3 Bedroom, Hall, & Kitchen (BHK), 28% are 4 Bedroom, Hall, & Kitchen (BHK), 24% are 2 Bedroom, Hall, & Kitchen (BHK), 12% are 5 Bedroom, Hall, & Kitchen and more), 3 % are in Single Bed-room, Hall, & Kitchen (fig. 05).

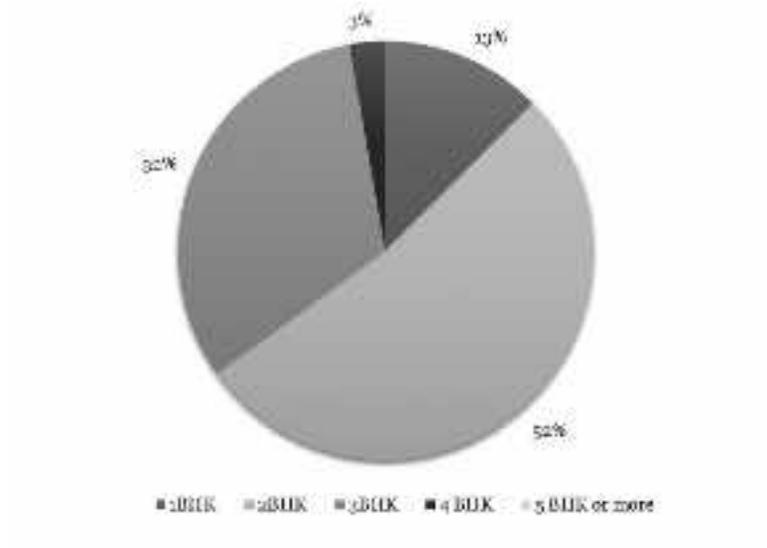
It is evident from the studies that most of the housing stock surveyed consists of 1, 2, and 3 BHK units were the respondents surveyed live under space restrictions. In such a case, the number of the toilet-attached bedroom is only two, except in the single room category. Therefore, these housing stocks cannot accommodate social distancing or isolation as required in a pandemic like Covid-19. Further, these housing stocks cannot be modified to suit the pandemic requirements even with difficulty, except for most essential interior modifications as per the preference of the residents.

It is most important to take care of the additional space requirements by way of creative designs that allow regrouping of internal spaces with flexibility. One such thinking for new constructions is to 'choose long-span free spaces' with dismountable internal structures which are mostly of prefabricated and manufactured boards and framework. Such flexible spaces with prefabricated internal partitions facilitate the regrouping and redesign of changing pandemic spatial requirements; provided the built forms are built on structural concrete frames and beams. Since the large-span, framed structures facilitate flexibility, and the resulting housing will be much more acceptable and remain sustainable in the long run (George, 2020). If the built forms are on load-bearing walls, the possibility for re-modelling of internal spaces is bleak and the adaptability of such structures is low. It is, therefore, important to have a detailed survey and mapping of the built forms of every state and union territories to be done and data kept available to planners and rescue workers, local authorities, and police force.

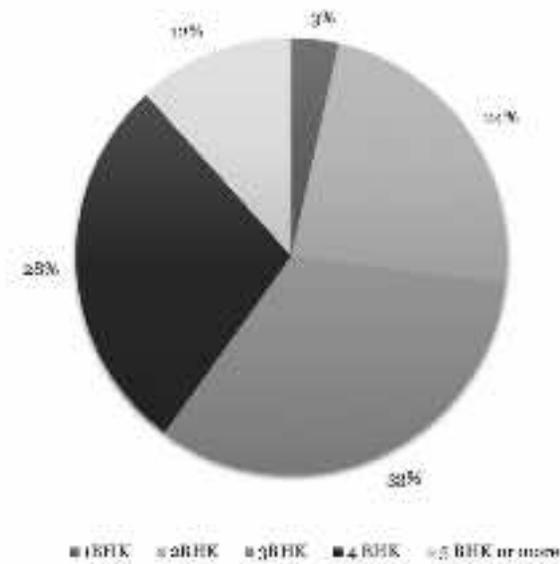
Effects of Pandemic on emotional wellbeing

Developmentalists often categorize the human lifespan into Prenatal Development + Infancy and Toddlerhood (0 to 2 years), Early Childhood (2 to 6 years), Middle Childhood (6 to 11 years), Adolescence (12 to 18 years), Early Adulthood (20 to 40 years), Middle Adulthood (40 to 65 years), Late Adulthood (65 to 74 years) (Lumen, n.d.).

The problems associated with each category also are different, since needs, abilities, and preferences vary. While elderly people are facing the challenges of lowered physical and mental abilities which require special standards and assistance, adolescents have extra energy, need for peer companies and group activities, living outdoors and games, etc. whereas, 'Early Adulthood' and 'Middle Adulthood' people are the 'bread-winners' in any typical family. They are, therefore, required to work from home which requires 'long sitting' and 'acceptable workspaces' at their homes. Middle Adulthood has extra problems relating to growing age like medical, physical, and



04. Number of Rooms (in terms of percentage) in Apartment. P.V. Ghom & A. George, India, 2020, Intellectual property of the authors.



05. Number of Rooms (in terms of percentage) Independent house. P.V. Ghom & A. George, India, 2020, Intellectual property of the authors.

psychological. On the contrary, Children when confined to closed spaces for prolonged periods, tend to be physically less active, develop irregular sleep patterns, have less favorable diets, leading to unhealthy weight gain and even a loss of cardiorespiratory fitness (Brazendale K, 2017) (fig. 06). The presence of outdoor elements such as plants, water, bird sounds, sunlight, and wind gives the feel of outdoors inside, which enables the residents in all age-groups to remain happy and comfortable. Architects are compelled to explore these possibilities in achieving the presence of outdoor elements in new as well as existing indoors for enabling the residents of housing to stay happy and comfortable in long-term containment spaces. Pandemic also leads to less outdoor activity, and interaction with peer groups gets restricted (Sprang, 2013). Studies show that the 'mean traumatic stress scores' of children quarantined are four times compared to those who are not quarantined. Lack of social support due to isolation may lead to poor compliance, depression, ill-being, and increased stress (Boden-Albala, 2005). The problem of increased stress and lowered tolerance level applies to all groups of people; particularly to 'Early Adulthood' and 'Middle Adulthood' people. These two reasons when combined with the lowered income during a pandemic lock-down period catalyzes the incidence and probability of domestic violence. It is of no wonder that United Nations have reported a 'horrifying global surge in domestic violence' during the Covid-19 (United Nations, 2020), and the aging population may experience increased physical limitations or psychological challenges. One important cause of such an unhealthy state is increased stress, irritability, and growing impatience in the contained. Architects have a great role to play in identifying the reasons for such behavior; particularly from environmental and spatial points of view and create remedial solutions to lower or negate such problems. Each of the stress-inducing factors and its potential remedy needs to be thought of and the authors have tried to identify and give options to choose from so as to bring out a design aid for the designers. Therefore, lots of options of distraction or choices are sought so as to incorporate such in future and existing built forms.

In India, the 'joint family' system has prevailed from the Vedic times and joint families still prevail in a better state of health with high values and morale, as compared to the nuclear families that have lost brakes and cushions. The survey reveals that people who are staying in a joint family have many advantages over a nuclear family, especially with mutual support concerning growing children, the bread-winners; working people from home, and the elderly. This benefit is from mutual care, concern, affection, and increased family support. The study reveals that the respondents from joint families are more, personally, interpersonally, and socially satisfied, in the current state of the pandemic in comparison to those from the nuclear family. In the case of nuclear families opting for 'work from home'; daily chores and taking care of children are burdensome; particularly to women, as compared to joint families where children are mostly engaged with their grandparents. The positive support from elders facilitates the bread-winners to concentrate on their office work and home chores although it depends much on the interpersonal-relations of family members. Moreover, the mixing of children with the elderly benefits both; to stay indoors happily and emotionally connected, reducing stress levels, although it must be done with care so as to prevent mixing since the elderly are more vulnerable.

Effects of long-term containment on human behavior

The surveyed are asked to mark their opinion regarding important problems faced by them pandemic period. The responses are marked on a 5-point Likert Scale. Furthermore, this survey has been performed on three basic levels, namely 'Single Room', 'Apartment', and 'Independent house'. The results are shown in the following Tables (fig. 07).

It is quite understandable that the problems reported by those staying in a Single Room are Discomfort from prolonged sitting, Desire for friendship, and Meeting other people, Lack of entertainment/engagement, which finally lead to Boredom. Lack of extra space due to economic considerations has to be creatively dealt with within this category of residential spaces. One strong possibility for combating this is to provide 'smaller isolated community spaces' within single room housing like Institutional residences, hostels, etc. Architects have to conceive designs that are 'isolatable blocks with distributed supporting and community spaces' which, in times of pandemic, can be isolated. This basic change in approach will facilitate the availability of 'isolatable spaces' with supporting social spaces instead of central facilities; giving distributed facilities will make effective isolation possible. Such designs will also lower the operational cost of buildings since they are appropriately conceived and designed to respond sustainably. Larger span structures will be of good use in such cases since blocks could be effectively designed and constructed considering lighter partitions used for internal separations (fig. 07).

It is observed from the survey conducted that apartment dwellers are predominantly nuclear families. Their desire for socialization and friendships are essentially satisfied by visiting friends and families; most often weekly. These are essential facts which also enable them to live stress-free and supported mutually in urban life. Discomfort from prolonged sitting, lack of outdoor elements, and boredom are the major problems faced by apartment dwellers. This too could be creatively resolved with large-span structures, long ventilated and lit corridors separating internal spaces, and the introduction of outdoor elements inside. Careful and creative minds of architects could think of introducing even life on walls like aquariums, green micro landscapes, etc. to prevent boredom indoors and facilitate happy long-term containment (fig. 07).

Problems observed in the Independent house category are much similar to that of apartment dwellers, although they have the advantage of more internal space and outdoor spaces in specific cases. Considering the situation, the suggestions given in the case of apartments are applicable to this category too. One design prescription seems good which is to 'follow simple and isolatable spatial longer span grids, with open to sky courtyard' in design. It is important to note that complexity in space design is opposed to flexibility and resulting sustainability (fig. 07).

Long-term containment and residential spaces

In the current situation of the pandemic, architects and planners are compelled to reconsider their roles and responsibilities, since the outbreak of Covid-19 that has taken a heavy toll on human lives over the globe. The situation is quite alarming with the doubling of 'infected cases' in every 12-14 days. Architecture is an essential product of the society that manifests the concerns and considerations of people and their group wisdom. However, the concept of society itself is founded in 'interactions and togetherness'. This very foundation is shaken when the requirement to deal effectively with the pandemic is 'physical distancing' and 'isolation'. During the Second World War, when the human toll of war was horrific, leaving many cities and economies in shambles, architects were able to direct the new rebuilding of destroyed cities 'towards more just, fair, and prosperous societies'. This was facilitated by standardization and mass production which required 'less is more' and the resulting simplicity. In this pandemic time, architects shall have to learn a lesson from 'less is more and straightforward planning', especially in the design of residential spaces. Their first concern shall be, to 'help the world battle the raging deadly pandemic, and then to help communities recover and rebuild, implementing lessons that can hopefully avoid future health and environmental disasters' (Vonier, 2020; Archdaily, 2020).



06. State of children confined to closed spaces. P.V. Ghom & A. George, Pune, India, 2020, Intellectual property of the authors.

Sr. No.	Problem	Mean (Single room)	Mean (Apartments)	Mean (Independent house)
1	Stress / psychological problems	2.5	2.06	2.98
2	Discomfort from long sitting	3.1	2.52	2.98
3	Desire for friendship	3.3	2.87	2.98
4	Meeting people	3.4	3.07	3.01
5	Confinement and lack of interest	2.8	2.36	3.00
6	Lack of entertainment/engagement	3.0	2.27	2.95
7	Lack of landscape interiors	2.6	2.69	2.94
8	Boredom	3.2	2.48	3.01

Notes: Each item is measured on a 5-point Likert scale, Mean scores 3, and above 3 implies problems exist.

07. Effects of long-term containment on human behavior residing in a single room. P.V. Ghom & A. George, India, 2020, Intellectual property of the author of the author.

In a way, 'restoration and retrofit of the existing' stock of housing shall be of immediate priority as revealed through the survey findings. Although architecture has multi-perspective parameters or design concerns; Aesthetic (timelessness), Socio-cultural (appropriateness), Environmental (resource management), Economic (affordability), Structural (strength and stability); none of these is primary to saving lives and achieving wellbeing in the pandemic situation. It is, therefore, a creative challenge to transform the calamity into a 'prospective project' that facilitates the healthy coexistence of societies and the world at large. How will a new normal be? Shall it 'shrink further the already shrunk humans' in the world and confine them to virtual reality? Is it not an architect's responsibility to foster a healthy and civilized human existence in the green globe? Staying indoors at home, although it is the safest place right now, does this foster a healthy society in the future? Staying at home and working from home will reduce travel time and has environmental benefits like reduced greenhouse gas emissions, decreased consumption of fossil fuels, lessened impact on infrastructure. Are these all not going against the basic free travel and resulting human interactions? Already people are getting polarised, generating further unrest and tension all over the globe. Healthy and creative intervention and designs are unavoidable these days. To analyze how pandemic will impact residential spaces in terms of physical spatial elements; 'floor, column, wall, fenestrations, stair, ceiling/roof' and natural elements; 'sun, wind, water, vegetation, landform, people and activity' the survey addressed these concerns.

Qn. 1: The first question addressed the need for additional spaces like open area/ balcony/ terrace, in various categories. The responses are given below in (fig. 08).

Single Room

Respondents staying in the single room are the residents of institutional housing like hostels. 54% of respondents stay in rooms having a carpet area of 80 sq. ft. to 100 sq. ft. 46% of respondents stay in the room having an area of 100 sq. ft. to 150 sq. ft. 77 % of respondents have single occupancy, 16% have double occupancy, 7% have four persons/room occupancy in hostels. 100% of respondents have open outdoor areas attached to their rooms but spatial elements and activities their responses are as follows (fig. 08). Due to lockdown imposed, respondents are unable to go to gyms or take part in sports or social gatherings. Therefore, respondents would like to add on a priority basis 'Gardening, Place for exercise, Courtyard, and Indoor landscaping' (fig. 09). However, on an individual basis, these suggestions are not economically viable. The alternatives are to give feasible and 'isolatable blocks' with common amenities, 'rooftop gardens', or even 'vertical farming' which will add to better livability and architectural image and productivity. Potential gardening systems with integrated drip irrigation are already available in the market. Once such creative and healthy solutions are integrated with institutional housing it is possible to ameliorate the boredom and stress build-up in the occupants. Further, they also may be provided with 'art and craft spaces' where they could engage their minds creatively (fig. 09). Although these suggestions are better feasible in new constructions, existing built forms can also be attempted to integrate the same. Further, offering incentives will be beneficial to those who take part in terrace farming, which has multiple benefits.

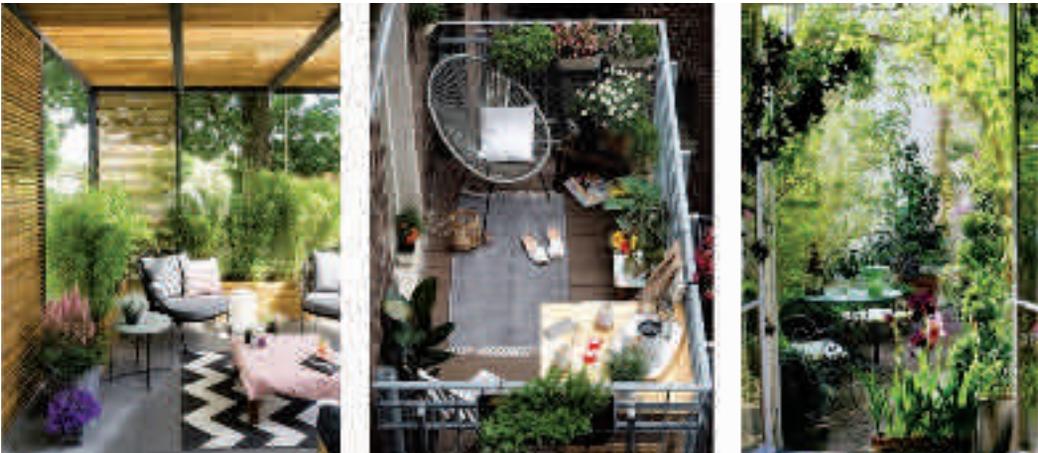
Apartments

Respondents are either from urban or semi-urban areas spread across India and selected at

Profession	Add Space for Gardening	Add Space for Exercise	Mean		
			Add space for coffee-table	Need for Courtyard	Add Space for Indoor Landscaping
Single Room	5.08	5.15	4.00	5.23	5.31
Apartments	4.61	4.64	3.86	3.73	4.14
Independent house	4.76	4.33	3.36	4.11	3.76

Note: Each item is measured on a 7-point Likert scale, mean above 4 implies spaces participants would like to add, on a priority basis in open area/ balcony/ terrace.

08. Effects of long-term containment on a residential area in a single room. P.V. Ghom & A. George, India, 2020, Intellectual property of the authors.



09. Creation of environment to create outdoors inside to remain happy and comfortable. Kindledcor, U.S.A, 2020, copyright: www. kindledcor.com (Public realm).

random. These respondents have begun working from their homes as permitted during the lockdown period. Of these, 83% belong to a nuclear family, and 17% belong to a joint family. Although 84% of respondents have access to an open area in terms of a balcony, terrace and 16% of respondents do not have access to open areas attached to their apartment; all of them are working from home amounting to long-term containment effects. The spatial elements and activities they would like to add in their open areas are given in fig. 08. Spatial elements and activities these respondents would like to add on a priority basis are Gardening, Place for exercise, and Indoor landscaping. The majority of such preferences are emanating from the human need to be in the outdoors with rich landscapes, consisting of flora and fauna. Vertical landscaping, vertical farming, crafts, and creative spaces; if carefully added in a well-integrated manner, will provide a panacea for such a situation. Further, governments shall prescribe 'incentives and necessary bylaws' in achieving these targets. Every rooftop in such a case shall turn out to be an agricultural production area at the location of consumption itself. Every household can actively participate in such positive initiatives and lessen the burden of heat load on buildings, CO₂ emissions from transportation. It could be seen that 'E', 'F', 'H', 'L', 'X', 'Y' and 'Z' shaped residential blocks with large-spans will be conducive to make isolatable blocks with flexible internal spaces built up from dismountable, manufactured panels for effective partition. If architects could think in terms of such blocks rather than doubly loaded corridors, it would be the genesis for adaptive architecture that could perform multiple tasks at times of normalcy and pandemic.

Independent house

Most of the Independent houses open up to a separate lobby, courtyard, or living room. It is a healthy practice in traditional houses to provide a separate area for washing hands, face, and feet before entering the house. Freshwater is kept in appropriate utensils for such use. It may be due to space constraints and low affordability that these essential 'pre-entry, transition areas' have vanished from so-called modern residential designs. However, the fact is that 99% of respondents would prefer to have these healthy transition spaces; especially in pandemic times. Making it a norm would help in creating necessary cleanliness indoors. These transition areas can be used for keeping shoes and other articles that one uses outdoors effectively separated from indoors; using air-curtains, proper lighting, and ventilation. Although 94% of respondents have open areas attached to their house, these are not used creatively and in an economically viable manner. However, 6% do not have an open area attached to the house. Regarding community with common gathering and recreational space, 79% responded "yes" and 21% responded "no". However, such community spaces are not advisable unless they are isolatable and kept sanitized. 58% responded "no" and 42% responded "yes" to office spaces to be provided in residential places. Additional office spaces will be an advantage, especially when it comes to necessary 'work from home' situation if allowed. However, the additional space would cost more, and only if affordability permits, such a space can be added. However, 65% of respondents preferred 'work from home' even in the post-pandemic period, if the new normal dictates it, they would prefer to have 'separate office space' in residential spaces. If not, being a family with small children, it is hard to concentrate and be productive in 'work from home', since effective working requires segregation and privacy. Moreover, 35% of respondents prefer not to 'work from office' since it provides direct social interactions that are healthy for the mind and body. Spatial elements and activities that respondents would like to add on a priority basis are 'Gardening, Place for exercise, and courtyard' (fig. 08). Especially in a pan-

demographic situation, respondents prefer to add Working space / Office Space (44%), Indoor courtyard with the landscape (45%), Outdoor Seating (50%), Outdoor Seating with vertical farming (28%), Balcony with vertical farming (22%), Balcony without vertical farming (10%), Green Roof without vertical farming (20%), Green Roof with vertical farming (30%), and Place for exercise (62%). It would be better if the sanctioning authorities and the Bureau of Indian Standards (BIS) take a fresh look at the spatial requirements of humans in the current scenario.

Covid-19 and such pandemic raises questions of designing a residential space for infectious diseases where isolation and Physical distancing are the primary criteria to be considered. Residential areas are quite varied in density and character; they range from leafy suburbs to apartment buildings in the core of cities. Apartments, homes need to provide support, challenge, and delight to maintain physical and mental health. Not all homes are healthy; many add threat to public health and productivity, particularly in dense urban environments: door handles, crowded lifts with buttons to press; residential spaces without sufficient light, poor indoor air quality caused by fungus or poor ventilation, fresh air and greenery, no space for Physical activity which are design issues to be sorted out creatively.

Qn. 2: The first question addressed behavioral changes suggested by respondents that need spatial alterations like lighting on the floor, music as you walk, digital walls, life on walls e.g. aquarium, the landscape on walls, special color scheme, and larger glazed window area. The responses are given below in (fig. 10).

Single Room

It could be deduced from the survey results that what people desire most is 'openness and freedom' which could be compared at best to a large glazed window area. Such a feeling of openness is derived from the 'transparency of glass' and 'fresh air' availability if the windows are open or designed with Vanishing blinds appropriately. Thus, it extends the view from the contained spaces to the outdoors ameliorating, to an extent, the ill-effects of containment. Further, people always prefer nature and natural materials over artificial products to be used for surface treatments. This is often due to programmed rhythm, which when repeated results in boredom. However, living materials; whether plants or fish, require constant maintenance which is bliss in the containment period as well as botheration in normalcy (fig.11). If careful choices can be made, such a preference will lead to engagement and diversion appropriately. It could also be seen that people prefer colors as they are influenced by their mental make-up, associations, and culture. This is, however, an easy change that could be achieved appropriately (fig. 10).

Apartments

The explanations and deductions given in the case of single rooms are valid in the case of Apartments too. The choice of the landscape is a matter of constant maintenance and if this could be integrated and automated, it is a better option in both normalcy and containment period (fig. 10).

Independent house

The explanations and deductions given in the case of single rooms are valid in the case of Independent houses too. The choice of the landscape is a matter of constant maintenance and if this could be integrated and automated, it is a beneficial option. However, since the availabil-

Sr. No	Spatial Alteration	Mean (Single Room)	Mean (Apartments)	Mean (Independent house)
1	Lighting on floor	3.54	3.00	2.62
2	Music as you walk	3.38	3.26	2.81
3	Digital walls	3.23	2.76	2.61
4	Life on the walls e.g. aquarium	4.31	3.07	2.88
5	Landscape on walls	4.54	4.25	3.05
6	Special color schemes	4.77	4.55	4.34
7	Larger glazed window area	5.38	5.24	4.67

Notes: Each item is measured on a 7-point scale, M scores 4 and above 4 implies spaces participants need spatial alteration

10. Suggested spatial alteration in Single Room. P.V. Ghom & A. George, India, 2020, Intellectual property of the authors.



11. Life on the wall, Aquarium most preferred by single room respondents. Oceans Aquarium Design, California, 2018, Drawn from public domain.

ity of open spaces is there with an Independent house, the choice of the additional landscape seems to be bleak (fig. 10).

Qn. 3: The third question addressed the incorporation of pleasant sounds such as the Chirping of the birds, Sound of the flowing water, Sounds of raindrops from the window, making one feel cozy and comfortable within the confines of home, Musical Instrument, cuckoo bird's melody, Raindrops falling gently on leaves, Sound of cool and calm breeze rustling by a tree, Sound of bells ringing together in a religious gathering, Sound of pets playing, or Children playing in residential spaces. The responses are given below in fig. 12.

Incorporating such natural and soothing sounds are preferred by all; particularly by the single room occupants, followed by apartment dwellers. Whereas, independent house dwellers already have better exposure to alternatives, seem to prefer only 1-4 and 7 options. Architects need to include controlled use of the above options as the case deserves.

Qn. 4: The fourth question addressed the integration of pleasant aromas such as the smell of freshly made coffee, aroma candles, incense sticks, dried potpourri, and fragrant houseplants in residential spaces. The responses are given below in fig. 13.

Although the respondent's choices may be appreciated, it must be kept in mind that boredom from repeated odor puffers could lead to irritation which depends on the mood of individuals. Further, the mix of different remnants of odors might lead to something of dislike, since different chemicals may react with one another. Further, aerosols generally cause problems for lungs and human health. Therefore, it is advisable to go for such incorporations carefully, giving maximum priority to least disturbing and least troublesome, if not harmless choices, that too in a mild dose. Moreover, adopt individual choices appropriately with regulating devices.

Discussions

Life after the Covid-19 Pandemic outbreak never will be the same as before. To 'break the chain' of transmission of Coronavirus, (Makhno, 2020; Lichfield, 2020) implies that it will need a radical change in almost everything people are accustomed to; work, exercise, socializing, shopping, physical, and mental health management, education, and family care. So too, the spaces in which people perform such activities require changes an adaptation to the new normal. It is also an appropriate time for architects and planners to take a detour and also explore creative and novel ways and create a new world of 'Resistive Architecture'; where the physical designs themselves would begin the first step in detecting, warning, and preventing pathogens! Way back to nature and adopting healthy ways of lifestyles are also ways by which people may remain healthy and happy in this life on the green planet.

It is observed from the survey that people generally prefer extended spaces such as a balcony, open terrace, courtyard, and indoor landscape (fig. 14). All these preferences mean extra space that cost additional project cost. However, the paradox is that under the dwindling economic situation and lowered affordability, additional expenses are not a viable solution. Learning from the Japanese, architects could think of multiple-use, flexible spaces that facilitate the comfort and well-being cherished in long-term containment spaces (fig. 15). In order to increase group and individual activities, 'vertical farming, terrace farming, and balcony landscapes' offer good choices (fig. 16). In spite of being contained such activities motivate people

Sr. No.	Pleasant Sounds	Single rooms	Apartment	Independent house
1	The chirping of the birds	92%	68%	56%
2	Sound of the flowing water	85%	62%	62%
3	Sounds of raindrops from the window, making you feel cozy and comfortable within the confines of your home.	69%	54%	62%
4	Musical instrument	62%	59%	52%
5	A cuckoo bird's melody	51%	51%	38%
6	Raindrops falling gently on leaves	62%	47%	49%
7	Sound of cool and calm breeze rustling by a tree	85%	62%	53%
8	Sound of bells ringing together in a religious gathering	46%	36%	27%
9	Sound of music playing	46%	56%	33%
10	Children playing joyfully	23%	23%	27%

12. Suggested pleasant sound in a single room, apartment, and independent house. P.V. Ghom & A. George, India, 2020, Intellectual property of the authors.

Sr. No	Olfactory Suggestions	Single rooms	Apartments	Independent houses
1	The smell of freshly made coffee	62%	50%	72%
2	Aroma Candles	62%	52%	38%
3	Incense sticks	69%	45%	39%
4	Dried potpourri	31%	30%	29%
5	Fragrant Houseplants	69%	77%	69%

13. Suggested pleasant aroma in a single room, apartment, and independent house. P.V. Ghom & A. George, India, 2020, Intellectual property of the authors.



14. Preference for nature and natural materials (Image source: Vertical Gardens India, 2018; Terrace Tiles, n.d.).Public domain.



15. Healing garden/ multipurpose place for long-term containmen. P.V. Ghom & A. George, India, 2020, Intellectual property of the authors.

to be involved and active. Further, they, to an extent, can generate food at the place of consumption itself. It is a valuable option especially in the light of the growing population of the elderly since they can get involvement, nurture plants, and stay healthy indoors.

Interior modifications shall consider the preferences of users; artificial vs. natural, in terms of sight, auditory, olfactory, tactile, and kinesthetic, although, artificial choices have the latent potential to be repetitive and boring in the long-term. Natural choices, on the contrary, are pleasing and invigorating. However, the cost of installation, maintenance, and the time required by such in upkeep would be considerable; although such items would involve the residents in a creative manner and ameliorate boredom. It is also a possibility that, in the post-pandemic situation, these might turn out to be additional botheration, if not automated. However, even in post-pandemic, elderly people would definitely find these engaging and interesting. In a way, if the elderly stay with other age groups, both will be mutually benefited. Moreover, in this falling modern world, architects can bring back a good model for human life and boost the good moral of the younger generations. Hence, with all these benefits, careful choices and installations integrated needs to be exercised.

In new constructions, architects shall think of accommodating long-term containment requirements of residential spaces. They shall learn from 'less is more' and conceive simple, isolatable, and large-span blocks with distributed facilities and support spaces and suitable technology well-integrated with built-forms, especially in institutional and apartment housing. It is appropriate to think in terms of 'H', 'X', and 'Y' shaped residential blocks; that promote lighting and ventilation, with large-spans that facilitate flexibility and required modification in times of pandemic.

Governments shall think of promoting sustainable 'E', 'F', 'H', 'L', 'X', 'Y' and 'Z' shaped residential blocks with large-spans and integrate vertical landscaping and vertical farming and rooftop farms. Such built-forms may be given 'Green incentive' and promoted. On the contrary, in the case of built-forms without sustainable and pandemic constructions 'Green tax' may be imposed. Further, no relaxation in terms of 'setback' and 'inter-block spacing' shall be permitted since such decisions will adversely affect lighting, ventilation, and increase the potential to spread pathogens.

In the context of the pandemic, with strict Physical-distancing measures in place, balconies and terraces can have a crucial role in our social lives. These spaces are often neglected, will have to evolve into an essential extended space to communicate with the outside world and to create a 'sense of community' while maintaining physical distance, since they exist mostly in a zone between the private and the social zones. Across the world, examples have appeared where citizens are singing and playing music from their balconies, often creating a shared social experience where balconies are used as venues for groups of people to gather to usher and applaud the healthcare workers, first responders, and other essential workers who continue to keep a society running through the difficult times.

The windows of closed shops and businesses could be turned into temporary galleries and exhibition spaces so that people can admire the works of art while traveling to visit the grocery store or complete other essential activities permitted under isolation. It is of value to add more of public art especially, of humane scale, in pathways or by walkable routes in order to involve peoples' attention and appreciation of art.

Accessible green roofs should be an option in each building to provide a distributed natural space for social life that is primarily protected from outside. This could help expand the area available to families sharing cramped urban living conditions and could help improve the psy-

chological life of the people and also give more free space for children to meet and play. A new Green Law came into force in New York City in November 2019 requiring all new roofs, constructed for new or even existing buildings, to receive photovoltaic solar panels or a planted green roof (University of Venice, 2020). But as part of the needs of our social life, one can take it one step further and make every new roof accessible and legal to the safe occupation. In an emergency, it might be our mutual social green space, offering access to the air and water and 'nature' that we need and want to preserve our physical and mental well-being. For larger buildings, green roof occupancy could be spread over time in a way that would keep contact down. Such spaces could become a vital resource in the event of an emergency like a pandemic. Suitable spaces on the rooftop and the vertical faces of built forms shall be identified for photovoltaic panel installation, whereby, energy needs of users can be met. If integrated with the electric grid, one might think of earning some money by selling extra energy!

The doubly loaded corridor was an invention in terms of floor efficiency and building economics (fig.17). However, it has the disadvantage of being dark and under illuminate and multiple reflections in terms of acoustics. These problems become aggravated if there are atriums or vertical continuity shafts introduced for improving lighting. These vertical openings and horizontal central passages will act as continuum spaces that carry pathogens to every user; thereby, increasing the spread of the pandemic.

Virus-free Transit will be a very important criterion for designing common spaces in the residential area. The architectural design will help to lower crowds where viruses can spread easily, for example, wider, ventilated corridors and doorways, antibacterial brass doorknobs, or other appropriate technological options made available. Hand washing everywhere especially at the main gate, security counters in a residential society. Surfaces can be of anti-pathogen in nature reducing the risk of transmission of pathogens from one to another. Bringing fresh air into buildings is extremely important, since improving ventilation outside; between building blocks, in dense neighborhoods is an important strategy that can be appropriated through the design of built forms and planning of urban masses using aerodynamic principles. It has to be made mandatory to test and certify the aerodynamic performance of new buildings so that the new urban masses shall serve to ventilate the polluted urban spaces. Future technology will be able to do more sensing that can detect more than viruses and pathogens on surfaces in real-time and can warn building occupants or trigger air cleaning. Newer technology is enabling it more cost-effective to make air and surfaces much cleaner. The Portable Ultraviolet Light Surface-Disinfecting Devices eliminates viruses in air and surfaces while simultaneously making equipment last longer (Health Quality Ontario, 2018).

The effectiveness of a good operation manual will depend much on the honesty and commitment of operators! Human willingness and concern are the final but the most important aspect in times of pandemic and in normal times. It is highly important to stick to the Standard Operating Procedure (SOP), issued by authorities and medical institutions from time to time. In a vast country like India, this is the most important and difficult to impose. However, even developed countries shall present a good model by adherence to SOP. In the name of freedom, no one shall put another's life at stake!

Conclusion

Residential spaces should be calm and comfortable which helps one to reduce stress, en-





17. Doubly loaded corridor. P.V. Ghom & A. George, India, 2020, Intellectual property of the authors.

hance creativity and clarity of thought, and improve the overall mental health and physical wellbeing; as pandemic requires maintaining physical distancing, self-isolation, it is important that architects need to understand the relation between cognition and space with its elements; which is indispensable to keep the occupants comfortable and healthy. As a first step, rethink of residential spaces equipped for long-term containment; architects shall recognize the very different needs for long-term containment spaces, to keep human life comfortable and healthy. Understanding what is available and what can be easily redesigned could be incredibly useful.

Minimalism in spatial and visual design needs to be appreciated since one operates in deficiency during pandemic times. The minimalist architecture looks clean and spacious and offers wellness benefits with much-lowered maintenance and energy requirements. In post-Covid-19 times, people may prefer houses over apartments, flexible open planning, sunroom, spaces for urban farming, outdoor space, self-sufficient power and water, Air filtration system, home as an office, open kitchen, and open living room. One big space makes it easier to stay at home and enjoy a big volume of air, open planning which is flexible can be converted into small spaces for mental health and privacy, light, air, and social isolation. It is important that governments set up the Council for Adaptive Architecture and facilitate research in this direction. Promoting open and sustainable designs and livable cities in a new and visionary manner with built forms that can sense, detect, deter, and prevent the spread of pathogens is important. Further, citizen awareness and strict adherence to SOP and good habits are to be encouraged. It is most important to accommodate the elderly who have struggled in their good ages for the betterment of humanity with the younger generation. They shall be enabled to stay indoors with respect, self-esteem, and partnership which vertical/roof-top planning can achieve in a big way. Planners and architects shall be aware of the fact that the way one treats elders is the brighter future of nations itself!

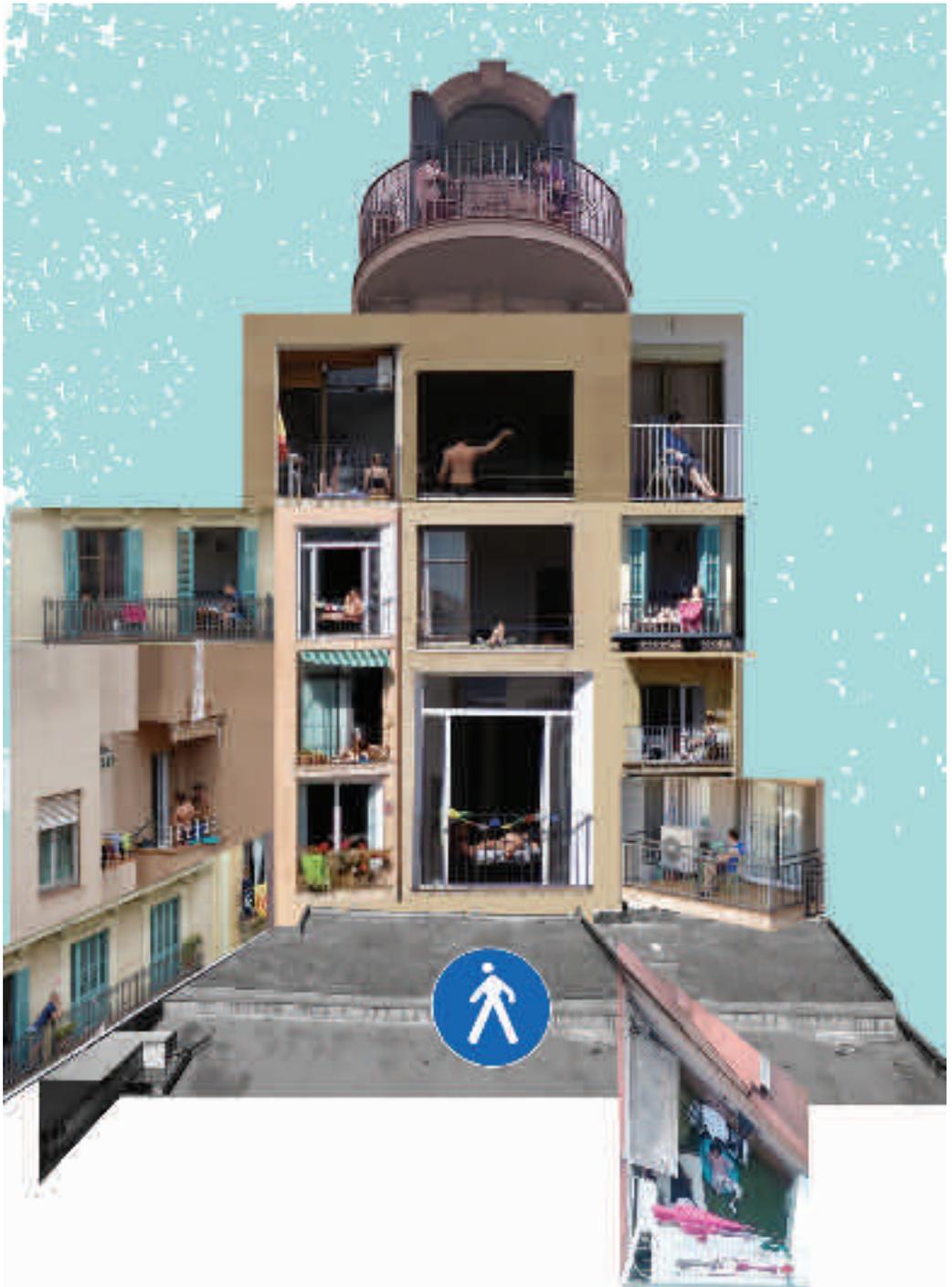
Residential spaces need to have to flexibly adapt to functions appropriately as more than just a gathering or living space. It has become imperative that future homes shall function simultaneously as offices, classrooms, conference rooms, and gyms with multiple users at the same time and dealing with the nature of open planning. Interior spaces need to be flexible to accommodate changing activities from time to time appropriately. People delight in natural daylight; quality materials, healthy indoor air quality, and access to livable outdoor spaces. They see their living spaces as their refuge sanctuaries where they are safe, healthy, and comfortable. People have developed a great desire for different quality materials, textures, and objects within homes that encourages them to use such. They are much more interested to bring outdoor feeling within indoors; possibly re-imagining their living spaces as indoor gardens and landscapes as revealed in the survey findings. Minimalism, simplicity, flexibility, and back to nature are the dictums of the times. Architects, therefore, shall be at the forefront to dream new, dream big, dream sustainable, to facilitate a new normal in the world.

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MISSING INTERACTIONS



01. Project Collage. Caterina Anastasia, 2020, property of the author.

It is not a matter of sexual orientation

Cohabitation in a time of emergency

Caterina Anastasia PhD Architect / postdoctoral researcher, URBinLAB, CIAUD; School of Architecture; Universidade de Lisboa; Lisbon (Portugal).

Keywords: Interior vs. exterior, Caged imaginarium, Taking action

Abstract

If 'before' only short-term rented accommodations gave life to city centre's urban balconies, 'during' the confinement, due to the spread of the virus, we are the ones occupying the spaces that extend towards the exterior of our houses, especially those spaces well exposed to sunlight. 'During' the confinement, it is our half-naked bodies that seek the sun, it is our clothes we lay out in the sun even in the main facades. We lose shame, we equip and make liveable the micro external spaces of our homes, but also the internal areas next to windows well oriented towards sunlight. During the day, the orientation of our flats marks our presence (or absence) in the balconies or windows. Our closest neighbours are those who live across the street (the vis-à-vis ones), we watch them rejoice in the morning sun, we offer ourselves to their sight while we benefit from the afternoon light. That is how we discover ourselves using our balconies in a way similar to that of our cities' visitors. Therefore, we question: is there a 'before' and an 'after' in how to use residential spaces that receive direct sunlight? Will what happened 'during' the lockdown also be a practice for 'after'? If 'during' we lived our albeit minimal balconies looking for light, explored our buildings in search of community terraces or underused practicable roofs that gave us sunlight as well as open and fresh air; will 'after' give these spaces another (a new) value?

Introduction

For anything that will be necessary to create an exception, or a moment of genuine inspiration, human intercourse is necessary (Rem Koolhaas in Luscombe, 2020).

This article was born during the three months of confinement spent by the author in an apartment located in a European capital city's urban block. Being conscious that the radical change in daily habits, the limitation of social life and the stress resulting from the public-health emergency could have a strong impact on the well-being of individuals (Motta *et al.*, 2020), the place where we spend most of our day takes on new importance. The following notes show the change in the relationship between the author and her own home. Without claiming to extend the conclusions to the whole city population, the author wishes to underline that the adaptation to the imposed situation could lead people to a new bond with their home.

The confinement restrictions and the time spent observing from the windows the behaviour of the neighbours – perhaps for the first time with such attention –, have encouraged a desire: the lesser used parts of the properties (community roofs/terraces, flat roofs of internal courtyards) could, for example in times of infectious disease emergency, be used and, at the same time, maintained by the inhabitants of the surrounding blocks.

As recently argued by Rem Koolhaas (Luscombe, 2020), during the health crisis people have shown incredible flexibility in terms of changing their behaviour in the most radical way. If the population all around the world, and in particular that of an urban environment, has shown flexibility in adapting to the imposed restrictions, why cannot underused urban spaces (not necessarily public) be flexible too?

The first sections of the article report the author's notes on 'life' during the confinement. Here, one's own feelings and personal interpretations of recurring attitudes of the neighbours at their windows probe the human ability of adaptation to a given situation, by constructing a sequence of dominant sensations. Therefore, the text is a sort of brief register of the different moods that accompanied the observation of a city from an interior space.

The reflection finds its first synthesis in the *collage* that closes the article. The collage seems to be the appropriate mean to collect and describe human behaviours observed during the confinement. The collage puts together images captured from the author's windows (main facade and interior courtyard), and give them new life in a future scenario of new spaces that could be occupied by the neighbours.

From 'reverse geography' to hyper-proximity

During the first period of the confinement, we experienced a sort of negation of what was close to us. Forced into our homes, we lived a sort of 'anti geographical location' or a 'reverse geography': our communications were marked by the little attention given to those physically close to us. Throughout the first confinement times, new or recent means of communication (through internet or phones) facilitated the elimination of physical distances.

We talked to people far away from us in space and time – even with people we have not heard in years. The ease of communication and the vanishing of distances have opened up the possibility of listening and seeing – if we own means and internet connection – conferences and debates held in places far away from us and in which, who knows, we could never have participated in normal times. Hence, talking to who is distant (relatives, family members, people unrelated to us, or famous people participating in online events) helps to

step away from those who are very close to us (our next-door neighbours) (fig. 09). However, the confinement in Europe is widening more than expected, and our relationship with the immediate environment slowly changes. Like the nuance that attenuates the transition from one colour to another, from one colour to its inverse, perhaps even our mind needs a given time to accept another (new) reality. And so, if our loved ones are relatively well, even if physically distant from us, if we do not see and listen to the pandemic progression data – or the data itself falls within an accepted routine – we enter our microworld.

If we are not workers needed by the community in a health emergency state, we are asked to limit our outings and stay home. Our accommodation becomes our microworld, the workplace and, at the same time, the place where we manage family activities. In our microworld, displacements are minimal, we cannot move, we are forbidden to move from home (it is true!); however, in any case and except rare situations, we do not have much desire to move. 'Before', we thought of excuses we could take to get out of the house where we spend the confinement: bringing out the garbage, purchasing food and medicines, etc., could have been valid reasons. But then, 'during' the confinement, we do not go out... We go out a little... We go out much less than we would have imagined.

'Leash'

The slow adaptation to the imposed situation leads us to a new bond with our home. Regardless of the way in which we perceive and face risk, whether or not it is due to fear of contagion, or just an attitude of our mind, a sort of 'leash' binds us to the place where we spend the most of our day. As if we were tied to extensible leashes (used to walk pets), we tend to return early to the place where we started, at home, where the leash can be stored (fig. 02).

The new routine of social distancing (interpersonal distance) changes the relationship with the place where we live day after day. The immediate interior and exterior of our homes receive our special and long attention. We clean, do bricolage, make order, recognise and renew the space where we have, perhaps, always lived. Special attention is given to windows, balconies, terraces, and the views they can offer us, all of them take on a central role in our everyday life. They become our outside, our main contact with the exterior and the city around us.

In the nearby balconies, the occupants of the houses use the same uncomfortable (IKEA) seats, which 'before' cued us that tourists (or short-term inhabitants) were staying inside the apartment. No habitual resident would have used those chairs, in the same way that no one would have hung clothes on the balcony of the main facade, especially if the facade faces a driveway (fig. 03).

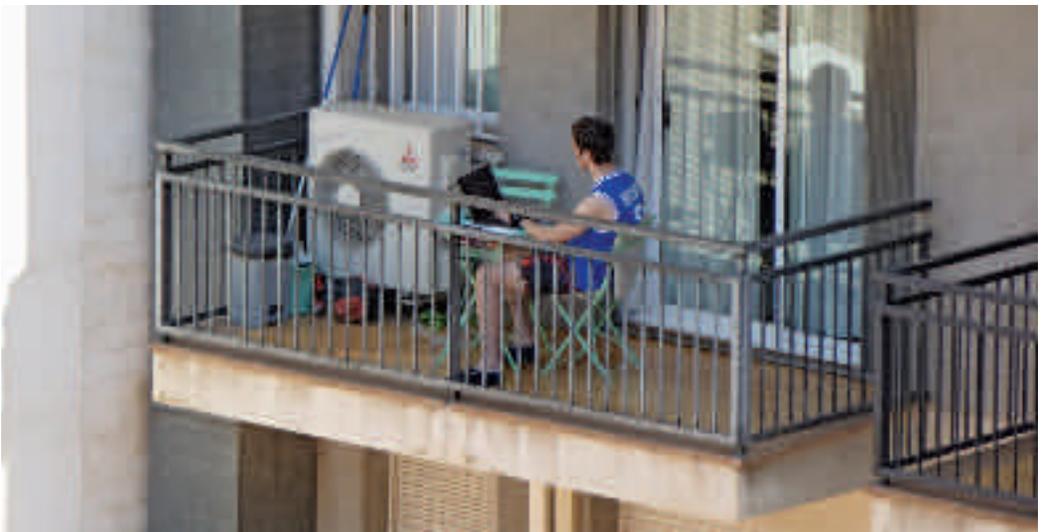
The behaviours of the foreigner and the local inhabitant are confused, perhaps a 'confinement population' is configured: formed by those who have chosen to spend – voluntarily or forcefully, by the conditions and the rapid and unexpected aggravation and protraction of the emergency situation – the quarantine in the city. Otherwise, maybe we are simply observing what a common European capital city population is today (fig. 04).

Cheap and chic / chic and quick / quick and cheap

Bypassing the usual long times of urban planning, the major European capitals amaze us by realising, in a very short time and taking advantage of lockdown restrictions, fast interventions with a huge impact on urban mobility. Cities are waking up with altered public spaces and road transport networks towards the benefit of pedestrians and bicycles. The urban interventions are often temporary but could remain in the future.



02. From the main facade 2. Caterina Anastasia, 2020, property of the author.



03. From the rear facade towards the internal courtyard of the block: working remotely. Caterina Anastasia, 2020, property of the author.



04. From the main facade: interpersonal distance / new acquaintances. Caterina Anastasia, 2020, property of the author.



05. Carrer del Consell de Cent (Barcelona; Spain): new pedestrian and cycling area. Caterina Anastasia, 2020, property of the author.

Parklets – sidewalk extensions installed on parking lanes – (in Rotterdam, the Netherlands, and Paris, France), *Strade Aperte* (in Milan, Italy), *Slow/AQ* (in Aquileia; Italy), *Itineraris segurs* (in Barcelona, Spain) are just a few examples of new or existing projects undertaken by cities, more or less dense, that take action to alter public open spaces, by taking advantage of the confinement (fig. 05 and fig. 06).

The most disparate organizations discuss the post-Covid-19 in urbanised environment. Although the core of the matter mainly targets the open public space, there are also examples of reflections and proposals on housing and on those spaces that lie between the public and private domain.

About this, the Iuav University of Venice proposes a protocol for renting to students the houses that, before the health crisis, were intended for tourists and short-term rentals. In addition, in the process of drafting of the new Metropolitan Urban Master Plan and at municipal level, the Barcelona Metropolitan Area and the municipality of Barcelona suggest guidelines for the design and use of future ‘intermediate spaces’ – private balconies, terraces, outdoor spaces located in urban blocks – (Àrea de Desenvolupament de Polítiques Urbanístiques de l'AMB, 2020).

Final considerations

It seems that the city is again (and still) the synthesis of crucial human problems, and, at the same time, a testing ground for solutions.

Again, the city is at the core of the matter. It is the place where socio-economic inequalities intensify, where the health crisis has its hardest manifestations – cities concentrate the greatest infection rate, even if the mortality rate is not higher than elsewhere (Hamidi, Sabouri and Ewing, 2020). The city is where we physically fight against the infectious disease, and, at the same time, it is the terrain where firstly the adaptation to a public threat has to take place.

For those who live in the city, these inequalities translate into the absence of a ‘right to space’, which means fewer square metres in which to live, fewer resources in terms of public and green space to draw on, less chance to stay healthy, less availability of private means (Ricci, 2020).

As argued before, the health crisis has influenced the transformation of urban public spaces by enhancing the value of ‘attempt’, ‘provisionality’, flexibility, and experimentation. This is to say (in some cases): we do it now, quickly, with reduced costs, by bypassing the bureaucracy, and then we will see how it goes.

Starting from the idea that density is the basis of the city, its founding element – and that this is not the time for a resurrection of the debate about dens and compact city vs. dispersed and low-density urbanisation –, we question: what if we intervene in population density without depriving cities of it? What if we use (even for short periods) a greater number of underused open spaces (even if not necessarily public) by organizing temporary access to them? What if, in anticipation of other periods of emergency, we open (gave free access) to spaces at the top or inside the urban blocks? Those ‘intermediate spaces’ between the street and the buildings, between the public and private realms, are the ‘buffer rooms’ that could make more liveable our city (fig. 07 and fig. 08).

Three months spent in an apartment located in an urban block of a European capital city gave way to the desire that the lesser used areas of the buildings (community roofs, flat roofs of internal courtyards) could, for example during times of sanitary emergency, be used and, at



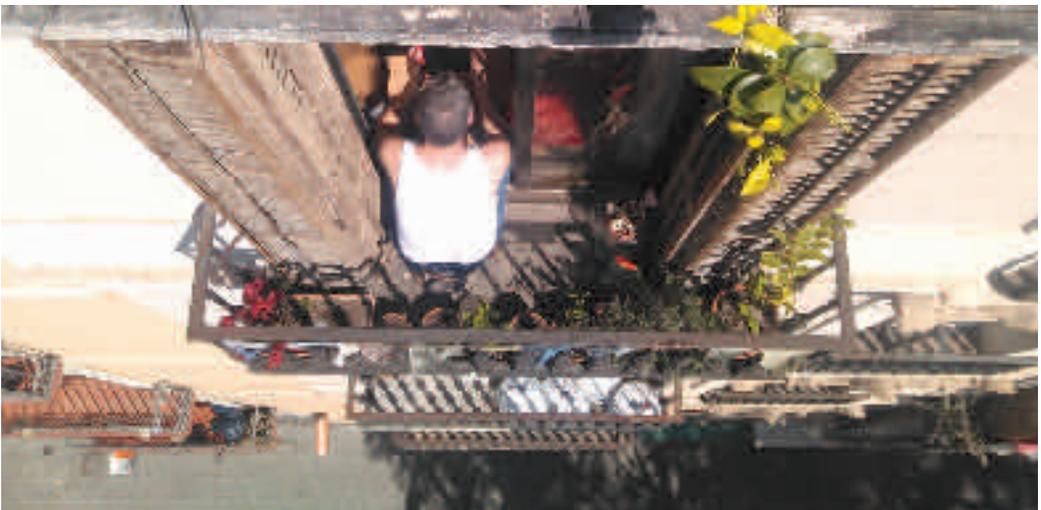
06. Carrer del Consell de Cent (Barcelona; Spain): new pedestrian and cycling area. Caterina Anastasia, 2020, property of the author.



07. From the rear facade towards the internal courtyard of the block: sequence of progressive occupation of an underused space well exposed to sunlight. Caterina Anastasia, 2020, property of the author.



08. From the rear facade towards the internal courtyard of the block: sequence of progressive occupation of an underused space well exposed to sunlight. Caterina Anastasia, 2020, propriety of the author.



09. From the main facade 1. Caterina Anastasia, 2020, propriety of the author.

the same time, maintained by the inhabitants of the blocks. In line with Tactical Urbanism and Open Urbanism (towards an *Open City*, as argued by Richard Sennet), ambiguity, flexibility, and porosity in highly urbanised contexts seem to be key elements of inhabiting the city. This could give way to the search for spaces in which the inhabitants distribute themselves by socialising (fig. 01).

A socialisation caused by the need for distance... A paradox?

A more distributed population density, which reinforces the idea of a compact city... A paradox?

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Works which could give a greater imaginative strength to the 'vision' proposed by this article:

The Covid-19 Visual Project. A time of distance (An ongoing permanent archive on the coronavirus pandemic: effects, struggles, and glimmers of hope), conceived and produced by Cortona On The Move in partnership with Intesa Sanpaolo – with special attention to the work of Luis Cobelo (2020), Afuera. Available at: <https://covid19visualproject.org/en> (Accessed 10 August 2020).

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01. Protecting from the Unpredictable. Giulia Setti, 2019, property of the author.

(Architectural) Adaptation to the Unexpected

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Keywords: Adaptation, Architecture, Emergency

Abstract

What was unexpected and unpredictable struck us, without any warning, several months ago, questioning our lives but, above all, our cities and the forms with which we have always lived in public spaces, buildings and workplaces. In the unpredictability of these events, many forms of resilience, resistance and adaptation have arisen, even spontaneously, both in the compulsory redefinition of domestic spaces, and in the awareness of a change that, we know with certainty, will be neither short-lived nor temporary. The risk, with which we have been confronted daily, is a latent and hidden variable, which obliges radical forms of protection: by separating, dividing and reducing contact, and sociability. Adaptation is a possible strategy to resist, in the face of what appears unpredictable; to adapt underlines the need to compromise, to renounce and to achieve new states of stability. During the pandemic, the transformed existence shows a life organized by phases, by different emergency procedures, and by the need to find minimal, but safer, spaces within which to move. Architecture has always been able to facilitate radical forms of adaptation, but also it has been the custodian of memories and traces of time; in these unexpected times, how much will we be able to adapt? And to what extent will we be willing to take risks to return to, and regain, our collective spaces and architectures? This text aims to define a critical reflection on the adaptation to unexpected circumstances in architectural design. In the current conditions, following the ongoing emergency, the relationship between architecture, space and time seems to be decisive in defining different phases, in the relationship between spatial and architectural events and projects. Through which design strategies will we transform spaces, our homes, collective places or infrastructures? How could the unexpected interact, in different ways, with architecture, and what changes does it imply?

Introduction

What was unexpected and unpredictable struck us, without any warning, several months ago, putting into question our lives but, above all, our cities and the forms with which we have always lived in public spaces, buildings and workplaces¹. In the unpredictability of these events, many forms of resilience, resistance and adaptation have arisen, even spontaneously, both in the compulsory redefinition of domestic spaces, and in the awareness of a change that, we know with certainty, will be neither short-lived nor temporary².

The concept of risk, with which we have been confronted daily, is a latent and hidden variable, which obliges radical forms of protection: by separating, dividing and reducing contacts, and sociability (Beck, 1992). The risk is a variable, and this could produce stronger and more destructive effects where a place, a building or a territory that has been hit appears more fragile. Architecture has, among its primordial tasks, the task of protecting, defending and providing shelter, starting from the archetype of dwelling: the hut. The concept of shelter and protection is linked to basic forms of adaptation; the hut is, after all, the simplest form of protection built by man who, prior to this, found shelter by adapting to natural conditions.

Thus, adaptation is a possible strategy to resist, in the face of what appears unpredictable; to adapt underlines the need to compromise, to renounce, to achieve a new state of stability. During the pandemic, the transformed existence shows a life organized by phases, by different emergency procedures and by the need to find minimal, but safe, spaces within which to move. Architecture has always been able to facilitate radical forms of adaptation, but also it has been the custodian of memories and traces of time; in this unexpected condition, how much will we be able to adapt? And to what extent will we be willing to 'take risks' to return to regain our collective spaces and architectures?

This essay aims to define a critical reflection on the adaptation to unexpected circumstances in architectural design processes and events, describing different approaches: from punctual and precise interventions in sensitive territories (such as Central Italy hit by earthquakes) to a renewed focus on the design of private houses and collective spaces.

The cases and situations described in the essay enable us to understand some reasons of contemporary complexity in architectural design, called to act in uncertain and precarious contexts. At the same time, the text underlines some design strategies necessary in contemporary projects: flexibility, the use of local resources, recovery and reuse of existing buildings. The main focus would be on the effects on the design of the current health emergency, together with a broader reflection on the relationship between shocks and recovery or reconstruction projects, especially considering the 2016 earthquake in central Italy, as a natural disaster, and on the other hand, the extensive disposal of buildings, a stock that claim for a possible new lifecycle.

Adaptation forms: a premise

Architectural design bears witness to continuous and repeated adaptation processes that, over the centuries, have affected buildings but also significant parts of the urban fabric. Recycling and recovery strategies have highlighted how architecture could change, to respond to unexpected needs or new conditions, questioning the long duration of the project. The recent literature describes a scenario open to reflections, design and theoretical experiments around the topic of recovery and, it could be said with a different term, of adaptation (Ciorra, Marini, 2011; Robiglio, 2017). Design frameworks that are questioning the transformability of design materials and their flexibility: we no longer design, perhaps, to last forever, but the

project is, more and more, a backbone, a skeleton that could generate different shapes and spaces according to requirements, which are often unexpected (fig. 01). Adapting is, however, a widespread and frequent practice that has its roots in the history of architecture: in Arles, during the Middle Ages, the amphitheatre became a sort of fortress, useful for protecting the community from Saracen invasions. Today, we are witnessing different forms of recovery and reuse, which are no less significant, where abandoned or underutilized buildings have been the focus of an intense debate, in the design disciplines, on how to imagine new life cycles, recovering what already exists. Industrial spaces and architectures have opened up the field to a critical thought on the reuse of places, including iconic ones, but which are in decay due to new and different needs in the production and work system. Adaptation that affected space of production describes a transformative attitude of architecture, capable of changing – even radically – following shocks and new needs; using industrial heritage as an essential design resource. The season of industrial disposal, which began already in the 1980s³, highlighted how fundamental it is to reconstruct scenarios and places by imagining different activities, often still productive, but which could transform abandonments – extensive and complex – into opportunities (Robiglio, 2017). Thus, different forms of adaptation have started, large industrial sheds incorporate small and medium-sized enterprises, spaces for community work have been provided and architecture becomes the tool for redesigning the large cathedrals of production, the legacy of an industrial past, now lost. The modification processes require longer times and the change in productive spaces is undoubtedly a slower process than the more recent shocks (related to climatic or health events) that are affecting our countries. And which make it necessary to update, partially, design tools and ways in which it is possible to cope with extreme events.

Architectural design in the midst of risk and adaptation

The contemporary era shows, with strong evidence, the ongoing changes, not only climatic, but related to the way in which we will be able (and will have to) use the planet's resources differently. In the current situation, it is important to note that architectural design is by necessity resilient and must be able to act in uncertain times but, above all, to adapt quickly in the face of unexpected conditions (Gunderson, Allen, Holling, 2009). In a recent exhibition at MAST in Bologna, entitled "*Anthropocene*", the effects of man's footprint on the Earth were clearly described, as well as how this led to the construction of a world that is increasingly subject to unexpected, unpredictable and violent climatic and health changes; where scraps and residues, deriving both from industrial production, and from the continuous and exasperated abuse of the planet's resources, will represent the design materials of a near future. Therefore, architectural design acts in an unstable terrain, where the ability to foresee risks and to react to transformations, through adaptation processes, appears increasingly fundamental. It also raises new research questions and design issues to be considered, that concern both the design of the domestic space and a reflection on the role of collective spaces and infrastructures. Through which design strategies will we transform spaces, our homes, collective places or infrastructures? How could the unexpected interact, in different ways, with architecture, and what changes does it imply? Over the past few decades, many calamitous events – often of a climatic nature – have hit Italy, causing serious injuries and destruction; the historical memory of these events is recent, and it has prompted various possible design responses, not always capable of being effective. The earthquake of LAquila in 2009, that of Emilia-Romagna in 2012, and in Central Italy in 2016, are some of the shocks that have recently hit Italy; in the face of

sudden and unexpected events, architecture has attempted to define responses or methodologies of action. In the reconstruction processes, which began soon after the emergency phase, efforts were made to recover and to consolidate the necessary elements of those contexts: industrial and productive supply chains, historical-cultural heritage and the living spaces (fig. 02). The reconstructions showed the difficult work conditions in contexts affected by sudden and violent events. Above all they recounted the difficulty of creating a “*shared knowledge*” with respect to processes and projects of reconstruction that affected, in different forms, our countries (Ferlenga, Bassoli, Galli, 2018). Every shock generates new reconstructions that often start from zero, without being able to consolidate previous strategies, focused on safety measures, forecast and emergency response; in this unstable scenario, which does not build knowledge and tools, but continually re-proposes the stereotypes that are generated as a result of an environmental disaster, architectural design acts. The project works with different interventions, like small temporary projects or more extensive and impressive reconstructions, to try to reflect on the need to act when confronted with unexpected phenomena and on the answers that architecture could give to the need to re-inhabit, to resume production or reactivate tourism. If, before, the forms of adaptation to unexpected events were mainly related to natural disasters, therefore devoted to development in extended times, today, following the health emergency that hit the planet, the answer to the unexpected is given by precise projects and immediate actions that concern not only the public sphere but, more often, domestic and private spaces, or semi-collective areas, such as courtyards and gardens. In particular, the health emergency, linked to the rapid spread of the Covid-19 virus, has generated a change in the ways and forms of using spaces (public and private), as well as an increasing, and unexpected, focus on the contemporary design of domestic spaces. The forms of confinement, imposed by the epidemic growth, have highlighted how in contemporary architecture, the design of the “house”, intended as a refuge, a welcoming space and a shelter, has often been underestimated; for many months, in fact, the home has represented the only possible environment, in which to live, work and share. A hidden architecture, the “home”, placed at the center of a series of new questions, linked to the need to design more flexible spaces, capable of adapting to the overlapping of work and family activities. In addition, many domestic spaces, of a small size, have shown problems in guaranteeing good living conditions and highlighted how it is necessary to reflect on the design of contemporary houses. Over the decades, the house has gradually been reduced to a few rooms, and it has extended into their semi-collective spaces, like courtyards, which have become – in the uncertain time of the quarantine – necessary spaces, places that return to the center of architectural debate. The possibilities to adapt that emerge, in formal or informal ways, describe how the response to unexpected risks produces radical changes in architectural design. Adaptation means satisfying sudden needs, often not rooted or consolidated; sometimes it means “taking risks” to return to use urban spaces and public architecture, which are still desolately empty. It is necessary to build a different design methodology that could, in its own way, adapt to changes that appear ever more rapid and incisive: how could the project act in conditions of unexpected crisis? What relationship could be established between “risk” and “project”? In the unexpected crisis of the past few months, a lot has been done to imagine different spaces and projects, starting from a critical reading of contemporary houses to the design of new productive and working spaces. How could the design of these places change? The prefiguration of the unpredictable is, in itself, impossible; architecture needs to devise prevention strategies, working on the design quality, on its materials and spaces. This does not mean giving up,

or reducing the design complexity; on the contrary, it means building and working on responses to future emergencies.

Design (in) emergency

The current emergency describes, perhaps, the end of an era, marked by control, predictability and freedom to move and to act. It is a radical change, which is producing different effects on territories and architectures, it is a change in the uses, and it forces us to redefine design strategies, thinking about the necessity of space. Emergency projects are often a frugal, temporary and fragile exercise, made to respond to immediate needs, involving different contexts, marked by environmental but also humanitarian crises. In most of the cases, it is a project made with limited resources, thanks to the help and cooperation of local communities (fig. 03). However, the recent health emergency marks other forms of design actions; indeed, it requires a change and a transformation on the existing buildings, with partial adaptation processes necessary to re-use architectures and spaces. The consolidated use of spaces, both public and private, made up by aggregations and shared activities, are destined to change, considering the actual needs of social distancing. The unpredictability of the emergency also indicates a lack of flexibility, visible in many collective spaces such as schools, universities and public spaces of various typologies, which remain static spaces, consolidated by repeated uses over time, which have never changed or have never been subject to a recovery. Architectural design must respond to renewed needs for flexibility and adaptability, as it was for the Arles amphitheatre and its subsequent reuse; in the emergency, however, it is also necessary to identify new typologies of need for a greater care and attention. Spaces dedicated to education (schools, universities) and, as already underlined, the residential complex and its close spaces (courtyards) return to the center of a new season of design. In many cases, these are not new projects, but accurate actions and transformations, that are necessary to guarantee the safety of places and to return to normal activities. In other cases, mainly related to housing projects, some useful indications emerge to define a better relationship between the private spaces of the home and, in particular, the need to enhance sharing collective spaces, mostly semi-public. The home becomes a central topic of the project, because it opens up to different questions and leads to looking at well-known spaces with different eyes (de Maistre, 1987). The house is a room, or a set of rooms, which are revealed in forced confinement; it has been rediscovered and, within it, the difficulties and critical issues of living in one place have emerged. If, in natural and climatic catastrophes, what emerges is the destructive power of nature, which removes, destroys and erases architectures or landscapes and, therefore, raises questions related to reconstruction issues, or recovery of the past identity and how to return to a lost normality, through new projects of infill, at different scales, that are more necessary than ever. Earthquakes and floods destroy infrastructures, houses and landscapes, they have damaged historic centers, small villages, but also collective and public infrastructures; meanwhile, the recent pandemic has not destroyed or canceled, but rather has drastically modified the ways and uses of traditional urban spaces (squares, streets, markets), confining and isolating them. The design in emergency conditions is destined to change, precisely as a result of the various forms of calamity and shock that occur. With the natural disasters that have hit Italy in recent decades, reconstruction projects have been consolidated at different scales; projects often developed in extended times and sometimes unable to respond immediately to the emergencies raised by affected contexts. If adaptation represents a possible strategy of action (and care), then architectural design must be based on new, and radical, scenarios, on



02. Norcia: the heart of the city, after the earthquake. Giulia Setti, 2019, property of the author.



visions that work on protective actions through design interventions, recovering and consolidating the existing building stocks, or with new projects to replace what has been destroyed. Also, the actions shouldn't be related only to the emergency and post-emergency phases but devoted to devising preventive measures. Safety actions, in various forms of emergencies, are related to contexts marked by different forms of fragilities; the role of design is to consolidate, to secure and, at the same time, to reconstruct spaces, buildings and infrastructures. In recent, and unexpected, immaterial emergencies, time has stopped and, within it, the project. It is in the fragility of the waiting time that architecture moves, trying to regain public and collective spaces thanks to specific projects, working on scenarios that consider unpredictability as a new design tool.

Design strategies in unpredictable times: defining possible conclusions

If the unexpected becomes a design matter, the relationship between space and time changes radically: architecture and design have undergone a slowdown, entering into suspended time. Adaptation is the only type of project, perhaps possible, which emerged in the days of the spread of Covid-19; the ability to adapt, and the necessary design actions (infill, inclusions, additions), involve the definition of changing, flexible and temporary scenarios, capable of preparing territories and architectures for permanent changes. Adaptation implies the possibility to create open scenarios, where architecture could accommodate different activities and change its lifecycle. Thus, architecture is facing an important transition in design paradigms: from long-lasting buildings (Valente, 2016), fixed, stable and in some ways immutable, to flexible ones, prepared for continuous adaptation actions. It is possible to witness a continuous transformation in what exists, in civil and public architectures; when faced with unpredictable conditions, the tools of design change, while the traditional uses of these places do not. Resilient projects create different hierarchies and time phases of action, they grow up by parts and do not draw a finished shape but leave open visions and possible scenarios that could change and be modified according to ongoing or future needs and emergencies. The design time-frame changes, at the same time immediate choices are imposed, which concern the emergency phases; very often the first responses and projects mark the entire course of an emergency. In the recent cases of the earthquake in L'Aquila and Central Italy, adapting to new conditions, or to new projects, has been a complex and long process that has irreparably compromised the recovery of commercial activities or the reconstruction of houses. It is important to acknowledge, in the event of disasters, that architectural design must proceed according to different time strategies, defining a hierarchy of priorities in the reconstruction process to keep buildings, inhabitants and territories safe. Recovering and designing in the unexpected requires dealing with scenarios in continuous evolution and more stringent upgrades of architectural design tools, as well as reconsidering the relationship between architecture, environment and economic systems. Finally, adapting and being resilient represent an initial but crucial design phase, a transformative and strategic step of acting to contrast vulnerable conditions for architectures, territories, and spaces facing unpredictable and calamitous events. Different design strategies could be identified: the need for flexibility implies working with infill and grafting, with the addition of new volumes and spaces next to existing buildings, adding, for example, new functions. The addition of volumes is an initial strategy for dealing with emergencies, it works on the relationship between new and what exists but is damaged. The current health emergency has led to the redesign of public open spaces, courtyards, gardens, allowing collective activities to be carried out in larger spaces. What the emer-

gencies, material or immaterial, often highlight is the lack of spaces and buildings, which are flexible, open to accommodate different activities and functions; although the abandoned or underutilized building stock is large and extensive, every emergency brings to light what is missing or what is inadequate.

Notes

1. Article realized with the support of DASTU “Fragilità Territoriali” Research Project financed by the Italian Ministry of Education, Universities and Research (MIUR), Departments of Excellence Initiative 2018-2022.
2. With reference to the crisis that hit in February 2020, in Italy and first in China, following the spread of the Covid-19 virus and the pandemic, which continued through the following months and is still ongoing.
3. The industrial disposal has marked an important season in Europe since the 1980s, due to the abandonment of many productive architectures, many spaces become free and are protagonists of significant urban transformations, for example the neighborhood of Bicocca in Milan or the recovery of the seafront in Barcelona.
4. “*Anthropocene*” is the title of an exhibition, held at MAST in Bologna, from 16th May 2019 to 5th January 2020, which explores, through photographs of Edward Burtynsky, Jennifer Baichwal and Nicholas de Pencier, the indelible footprint of man on Earth.

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01. Market fence and outdoor movie screenings placements signals. Dorotea Ottaviani, Piazza San Cosimato, Rome (Italy), 2020, property of the author.

New Urban Choreographies

Cohabiting public space in the time of a pandemic

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Keywords: Public space, Social distance, Physical distance, Choreography

Abstract

This research sits within the emerging debate - inside and outside academia - over the paradigm shift in public space and cities consequent to the current pandemic outbreak. A shared understanding of the nature of public space defines its core values in density, plurality, diversity, proximity, concentration, multiplicity, and sharing. Those values have now been questioned opening to a new interpretation and evaluation of them. The paper explores this shift in order to trigger reflections and insights that might help in formalising the correct questions and generating possible answers. The exploration sets off from the question: How has the everyday praxis of inhabiting public space changed under the pandemic predicaments? People's movements in public space evoke a dance made of a combination of improvisation and choreography. This paper tries to interpret the new movements and behaviours in public space through the codes and patterns inherent in dance. Observing movements and behaviours in public space through the lens of dance can help in making sense of the new norms, practices, and rules. The undertaken observation shows how new practices, written and unwritten rules, and patterns have been developed as a result of emerging emotions and reactions to the presence of others in public space. In this unprecedented situation, we have to reconsider the interpretative tools we have used so far to read and decipher public space and its practices.

Introduction

Where people stand in relation to each other signals their relationship, or how they feel toward each other, or both (Hall, 1966, p. 120).

This research sits within the emerging debate - inside and outside academia - over the paradigm shift in public space and cities consequent to the current pandemic outbreak.

The paper will present some insights on the impact that Covid-19 has had on public space and life, intending to offer an interpretation of the changes already detectable in public space.

According to Hall (1966, p. 4), “the relationship between man and the cultural dimension is one in which both man and his environment participate in molding each other”. Drawing on this consideration, the paper will explore the physical transformation that public space is currently undergoing as well as how the relationship among bodies in space and the one between bodies and space is changing in the public environment.

Such relationships - investigated by proxemics - are part of a larger subset of categories in the study of non-verbal communication (Moore, 2010).

The aspects of non-verbal communication explored in this paper span on two different levels: on the one hand, the authoritative signage apparatus prescribing new uses and practices in space and, on the other, how bodies perform differently in this new dimension and how they communicate with each other fear, care, and compliance with the norms and the authority, as a reaction to the new circumstances.

Pandemic: a rediscovered dread

2020 is looking quite unsettling for humankind: limitations of personal movements, challenges in everyday life, and various threats at the foundation of one's understanding of normality. This is particularly true for people in Western countries, who are not familiar with an epidemic of such intensity and proportions and perceive the situation as unprecedented although this does not correspond to reality. The history of humankind has always been linked to outbreaks, and the closer the proximity between people, the higher the odds for viruses to spread, this being the everlasting paradox of urban life.

The idea of an extraordinary situation is just a matter of perception: not so long ago, in 1918-1919, the Spanish flu infected more than 500 million people and killed over 50 million (CDC, 2019).

Just closer to our time, humankind has also experienced AIDS, a disease that greatly impacted human life on a private and personal level. The consequences of the Coronavirus outbreak seem to have large repercussions both in our private life and our public behaviours.

2020 has also brought under the limelight a set of words: coronavirus, pandemic, epidemic, Covid-19, infodemic, community spread, contact tracing, quarantine, isolation, physical distancing, and social distancing (OED, 2020), among others. The latter is particularly interesting when discussing public space since it deconstructs many of our beliefs and realities revolving around proxemics and the role and values of public space in our cities.

Most of the governments of the countries affected by the Coronavirus outbreak and, above all, the World Health Organization, recommend maintaining social distance. Recommendations vary from 1 meter (3 feet) to 2 meters (6 feet). Social distancing is defined as a non-pharmaceutical set of rules to prevent the spread of a virus during an outbreak (Merriam-Webster.com Dictionary, n.d.). The WHO encourages the use of physical distancing as a term, rather than social distancing (WHO, 2020), to stress the need for bodies not to be in proximity rather than preventing social

interactions as a whole. Although the intent is clear, this language diatribe doesn't mitigate the fact that the introduction of this kind of norm greatly affects public life and the use of public space. In addition to social distancing, another device greatly recommended for preventing the spread of the virus has been the face mask. In light of what we will discuss below, it is particularly interesting that the mask seems to be effective not as much as a barrier to the virus per se, but rather as a visual signal reminding people to keep the physical distance (Marchiori, 2020). These new rules are producing a new reality and a transformed everyday life in which space between people is no longer a 'hidden dimension' (Hall, 1966) - as a culturally developed set of behaviours - but rather a very explicit and visible dimension, the one given by the norms for physical distancing.

This new dimension emerged during the pandemic, is the result of a mixture of both formal policies, informal reactions and practices, and a set of rules inscribed in public space. Government bodies are inscribing moves and distances directly onto space: signs on the floors, walls, benches, buses and so on, show which distance needs to be kept, where one is allowed to sit, stand, and walk, the directions one can keep in a street and so forth.

The overall goal of the regulations is to keep people physically distant and eventually rarefying the concentration of humans in a given space. In this continuous swinging between desire and dread of social contacts, density and proximity are considered conditions to be avoided and forbidden. The ideas and values based on which public space has been designed so far, are currently under scrutiny.

The pre-pandemic role and values of public space

This paragraph presents an overview of the meanings and values of public spaces, as they have been intended and understood in urban studies, so far. This is a first step towards understanding how and to which extent those meanings and values have been questioned by the effect of the pandemic, opening to a new interpretation and evaluation of them.

Public spaces play an important role in the urban experience: they are 'our urban living room' (Cobe, 2016), the place where public life unfolds, a shared resource for cities and their inhabitants, a 'gymnasium of democracy' (Charter of Public Space, 2013). All those definitions underline an idea of sharing and compromising among people. According to Sorkin (2011, p. 98), "cities are public reservoirs for the production of private experiences" and public space is the ground for everyday negotiation, sharing, cohabitation, exchange, and the unfolding of a *modus convivendi* (Bauman, 2003).

Even though the digital public space is expanding its dominance, the physical one is still of great importance as a tool for interpreting and understanding the city and a key factor for the definition of the city itself (Mela, 2006).

A key-value associated with public space is one of proximity, which relates to concepts such as concentration, density, and closeness. As a primary human need - to different extents in different cultures (Hall, 1966) - proximity is one of the most effective attractions for people in public space (Whyte, 1980).

Human concentration in the urban environment is, therefore, to be considered as a positive and desirable fact - in the belief that it is a source of vitality and generates a great and vibrant richness of differences and possibilities, many of which unique and unpredictable, therefore so valuable (Jacobs, 1961). Unpredictability is a value not of less significance since the active and passive engagement of people with the environment is prompted by the fortuitous encounter of strangers meeting in public space (Whyte, 1980).

Public space is, therefore, an indeterminate space where actors from many diverse worlds come together (Sassen, 1994), a place of encounter-confrontation, whose ambivalence determines its capacity of repulsion-attraction (Bauman, 2005).

The constant exposure to strangers - we might share language, norms, and regulations with but not personally know - has been part of our evolution as humans for a comparatively short period of time (Appiah, 2007). Our ancestors would live in a small community based on familiarity with each other and it seems that - evolutionarily speaking - humans have not completely adjusted to the new situation and still perceive the stranger as a possible threat. In pre-modern towns or villages, strangers wouldn't stay strangers for long but in the modern city, strangers meet, remain in proximity, and possibly interact while still being strangers (Bauman, 2016).

Connected with unpredictability, is the value of diversity in public space, including visual, social, and experiential diversity. Variety, richness, and chance are the elements that induce people to spend time in public space beyond the immediate need to use it for primary and necessary activities (Gehl, 1971).

Public space has, thus, an ambivalent nature, living at the edge of predictable and unpredictable, at the loose borderline between the safe and the possible. In this ambivalence - swinging between the necessity of proximity and the innate tendency to avoid contact with strangers - public space has evolved and transformed, representing a valid litmus paper for the health of urban aggregations.

A shared understanding of the nature of public space defines those above-mentioned factors as core values. As such, they have currently been questioned by the pandemic, which is rapidly changing the way we use, perceive, and make sense of public space, what we consider values and what risks instead.

Drawing on those reflections, the paper presents a snapshot of the shift happening in public space, interpreting new dynamics and practices.

The exploration sets off with the question: How has the everyday praxis of inhabiting public space changed under the current pandemic conditions?

Research Methods

Dance: insights for the research. To respond to the above question, the paper interprets the new movements and behaviours in public space through the *modus operandi*, codes, and language inherent in dance.

The paper kicked off from an intuition that the authors had, experiencing public space during the current pandemic, sharing observations and impressions. The insight being that people's movements in public space evoke a dance made of a combination of improvisation and choreography. Due to its inherent kinaesthetic non-verbal communication component, dance has been taken as an evocative inspiration for the research to interpret and speculate on the new practices in public space.

Observing movements and behaviours in public space through the lens of dance can help make sense of the new norms, practices, and rules - due to the response to the pandemic - and how they are affecting the everyday practices in public space. Proxemics recognises the movements of bodies in space as a form of non-verbal communication, identifying a hidden dimension to measure distances and identify a lived spatiality - not geometric but acted and perceived (Olivetti, Lambertini, Metta, 2013).

Dance is, therefore, a form of non-verbal communication: it could be read as a silent

language, whose 'grammar' is found in its positions, moves, steps, patterns, figures, and variations.

Individual dance is a dialogue between body and space while collective dance is a more complex conversation among bodies and between bodies and space.

Dance can be described by its repertoire of movements. It can be rhythmic, following choreographies or improvising, it can be an expression of emotions or aesthetic qualities or an investigation into the physics of moving bodies, it can be a social or an individual activity, a ritual or a spiritual practice.

What unites all types of dance is that it is an essentially embodied activity: a human act of presence and movement of the body in space. What differentiates dancing from other human activities is, therefore, its embodied nature. It is not just movement: it is a movement that relates the body to the world. The ability to acknowledge the body as a reality and ourselves as a body is something that, while dancing, it is not possible to avoid (Pastorino, 2019).

The dance position is the starting point: the position is how the body takes a posture in space, a posture in relation to the world. It is an attitude, a declaration of intents, revealing the state of mind that is present (Pastorino, 2019).

Dancing, similar to walking, is also a way of knowing the world. It is a form of perception - not a passive observation but rather a way of perceiving things through movement. As a form of active bodily engagement, it opens up the world in a new way. The world becomes present to the individual in a particular way through dancing. In this process of thinking and knowing through the body, the mind is essentially extended, enacted and embodied. The body is not only a means to translate ideas from the mind to the physical world but also an entity capable of imagination (Pallasmaa, 2009; Bachelard, 1957). The body is a thinking entity, in a direct interplay with the mental space and the physical action, both allowing and prompting the thinking flow.

Therefore, dance is one of the possible ways through which the body thinks and knows. Those aspects above led the observation and interpretation of new practices in public space, using dance as an inspiration.

Fieldwork observations. Since solutions or final resolutions to the pandemic are still under discussions and - as we write - we are still very much in the midst of this crisis, the best way to contribute to the discourse about public space is to give a snapshot about the current situation drawing on information, data, and reflections from a different array of resources. On the one hand, a literature review is conducted collecting data from all over the world through articles in newspapers, journals, and social media. On the other, research on the authors' everyday experiences has been led through a collection of impressions about formal restrictions and signage used by authorities to constrain the use of space and spatial relations between people in public space.

Moreover, a reflection on visual representation has been undertaken drawing both on internet common sources (i.e. Wikimedia Commons) and a call to contribution through social media pages.

The authors acted as curators in selecting among the multiple inputs coming from different areas of the world to create a possible visual narrative of the new relation between body, space, and norms. The selection provides a visual account of the new conditions in public space, tracing a collective narrative through images.

'A new concerted dance': storytelling about body, space, and norms. The pandemic has transformed our customs in public space and generated new practices, rules, and hidden codes. Results of this research are evident in the interpretation of new movements in space as a dance, responding to the norms and regulations applied in public. The authors envisioned this new situation as a 'new concerted dance', wherein the individual is subordinated to the wider and variegated rhythm of the group (Copeland & Cohen, 1983). The following sections present several aspects identified as the main changes in behaviour ongoing in public space.

Awareness of bodies in space. Dance involves an ability to acknowledge ourselves as a body, and the presence of our body and the body of others in space. Increased awareness of our body in public space is one of the consequences of the pandemic. One cannot be indifferent anymore nor can look beyond others and pretend to be alone in space. There is a new need to be aware of the position of our body in space in relation to other bodies, to decide how to move to keep a safe distance. We now have to look at others and carefully observe where they stand or move. Numerous non-verbal conversations among strangers are happening to agree on the next step to take, we now acknowledge the presence of strangers more than before, but with more fear.

Fear and/or care. In the pre-pandemic condition, fear in public space was identified with concepts such as diversity, unknown, not-belonging. The fear of strangers was considered one of the challenges of public space, being the stranger an unknown variable to consider in deciding how to behave. The presence of strangers inside the field of action is discomfiting and "sharing space with strangers, living in the uninvited yet obtrusive proximity of strangers, is the condition that the city residents find difficult, perhaps impossible to escape" (Bauman, 2003, p. 28).

In this new reality, fear overcomes the idea of the 'stranger' spreading into the idea of the 'other' as a possible vector for the virus. Everyone becomes a potential threat, bringing the dread of the other beyond bias and cultural specifications in an ironically equalitarian way. At the same time, looking at others to make sure a safe distance is maintained is not only driven by fear but also by care for others and the community of belonging: physical distancing has become an act of care, compassion, and responsibility. Fear and care are now associated and intertwined

Predictability: more choreography, less improvisation. As discussed in section three, unpredictability has been so far considered as a positive value for public space. The ambivalent nature of public space is what made it attractive in the pre-pandemic, leaving space for improvisation, spontaneous and unplanned events, behaviours, and activities.

This seems to have shifted completely: control is taking over; spontaneity is now dangerous for it is a challenge to health and safety. People have to follow specific rules and space needs to be predictable to be safe and controllable (fig. 01). People in public space are playing a 'choreography' dictated by the application of rules, regulations and hidden agreements. Space needs to be planned and designed to communicate how to behave and to use it and there is no space left for ambiguity, which would bring anxiety rather than excitement and curiosity. In such circumstances, there are, therefore, fewer opportunities for creative acts of appropriation of space.

Prescribed policies remove randomness and unpredictability inducing movements and times controlled to make sure everyone is aware of the presence of the other and can physically avoid them.

Choreography: induced actions and codes. A 'choreography' of movements and practices have been designed by the regulations and policies applied to public space. Signs on the floor and walls dictate how to behave, move, and stand in public space (fig. 02) and signs on public transport, benches, and stairs dictate how to position one to the other. The distance rule is applied anywhere people might stand and gather; signs on the floor dictate people where to stand in the street to enter shops (fig. 03, 04).

Public space now communicates its rules through a display of symbols: straight lines, circles, grids are visible anywhere (fig. 05).

An interesting example of induced choreography design by codes and rules is the new layout design for public parks in different parts of the world: perimeters have been drawn on the grass to suggest people where they might stay to keep safe (fig. 06, 07). Information and policies are translated into different forms, colours, and signs. As shown in the picture, white circles are smaller (3 m diameter) and allow the gathering of maximum 2 people, whereas the blue circles are larger (5 m diameter) and allow for more people to fit in, offering different possibilities of social interactions. Within the confined and constrained safety of the perimeters, people can behave freely, performing a variety of unplanned and spontaneous activities.

Other rules applied in some countries relate to the maximum number of people allowed to gather in public space: for instance, at the time of writing this paper, in the state of Victoria in Australian the limit is defined at five people in one group, waiting to move to the next step of ten people in one group when the number of active Coronavirus cases will decrease, while in the UK the limit is currently six people in one group. Normed gatherings generate interesting variable dynamics and patterns of movement in public space depending on the temporary state of rules and changing in time.

Improvisation: action-reaction. Inhabiting public space requires now a newly discovered level of improvisation, in reaction to the presence of other bodies in space. Movements are performed in reaction to what is happening in our surroundings. Stepping back, deviating, stopping, rushing forward, turning away, are improvised actions in reaction to the presence of others.

An improvised and erratic dance is generated by multiple bodies in space: a non-verbal collective conversation, made of an action/reaction dynamic.

The use of face mask, compulsory at different levels in numerous countries, influences the dynamic of such a dance: people perceive the mask as a sign of potential danger and the reaction of distancing is faster and more effective

The presence of the mask seems to be a positive device in responding to the pandemic, not only because of the object properties but also because of the perception of it.

Conclusions

Similar to a stage, public space has become the place for new configurations dictated by health regulations and policies which 'choreograph' public space by applying new forced distances among people. An interplay of orchestrated choreography and improvisation is shaping peo-



02. Signage for social distancing and regulated behaviours. Sigrid Ehrmann, Cubelles Beach, Cubelles (Spain), 2020, limited use licence copyright (2020) by Sigrid Ehrmann. Printed with permission.



03. Signs on the floor for social distancing. Cecilia De Marinis, Melbourne (Australia), 2020, property of the author.



04. The Long line to enter Trader Joe's while social distancing during the Covid-19 pandemic. Rhododendrites, New York, 2020, Licensed under the Creative Commons Attribution-Share Alike 4.0 International.



05. Panorama of the facade of a kindergarten in Paris, with street markings used to guide social distancing during Covid-19. DiversionForARainyDay, Paris, 2020, licensed under Creative Commons Attribution-Share Alike 4.0 International.





ple dynamics in public space like a 'new concerted dance'.

Observation of bodies in space during the outbreak evidences a new required awareness of one's own and others' bodies in space. A shift is also visible in the increase of personal space required by the human body to perform its public life.

Furthermore, proximity has now become codified: distance among bodies is no longer a 'hidden dimension', culturally developed, but rather a regulated and worldly-shared dimension. What emerges from the investigation is a new dimension for personal space: more conscious, regulated, and wider.

It is extremely hard to predict how the future of cities will unfold since we happen to live in an era of constant revolutions (Bauman, 2003) and the Covid-19 outbreak, although a very scary one, could be just another deep transformation that will impact cities and their public space. Nevertheless, an inquiry and subsequently an understanding of how the perception of bodies in space is changing will be a tool to navigate predictions and expectations. Insights coming from this research can inform further investigation on how cities and public space will continue to creatively adapt and transform in the service of individual and collective health.

Reflections and questions emerge on what role public space will play in the future, what its values will be, how people will adjust to the situation, and how they will mould their spaces accordingly.

The growing collision between the two opposite forces acting in public space - the urge of connection and the fear of proximity - will drive the research on public spaces towards a new direction that is yet to be completely understood.

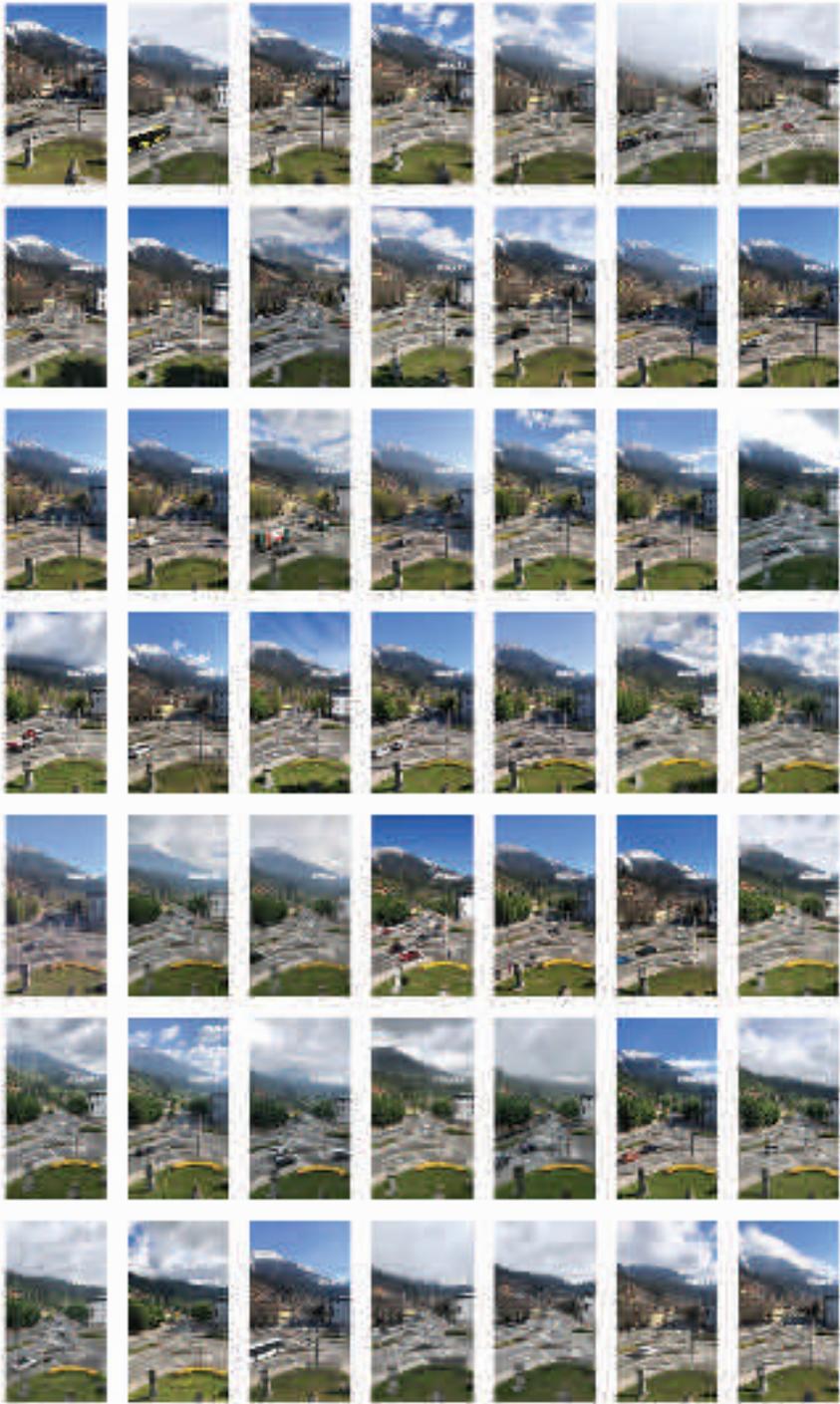
Some questions arise from these reflections on public space and the relationship with the physical body: is the very role of public space changing or will it continue to be intended as a place for connection, encounter, and interaction with others? And if its role is changing, will the values at its core convert and shift?

Conversely, if the role of public space is not questioned or challenged, what values will need to be maintained and which will be discharged to keep public space well alive in its role of connector between people in the urban settlements? Namely, to keep the same role, will we need to change the rules of the game? All these questions derive from the most compelling and appalling of all these inquiries: what will the role of public space be if the current situation will become the new normality?

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01. 49 days of lockdown shown in 49 daily photos from the author's balcony. Andreas Körner, Innsbruck, 16/3/2020 – 4/5/2020, Instagram, screenshots, posts, and photos by the author

Elevations

49 Days of Looking onto Nature

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Keywords: Painting, Landscape, Instagram, Climate, Humboldt

Abstract

On Monday, the 4th of May 2020, 49 days of lockdown due to the Coronavirus ended in Austria. This meant seven weeks of staying indoors at home. Since the city of Innsbruck is surrounded by mountains, it also meant 49 days of looking at their elevations. This allowed the daily observation of the different weather conditions in such a landscape. The text presents a series of thoughts on quarantines, natures, journeys, and landscapes. They are initiated by 49 photographs of a crossroads in the foreground and a mountainside in the background. The author took them routinely during the lockdown every day. Venturing from this, the text discusses the relationships between place, time, and their corresponding artistic depictions as well as the impact of technology. While the history of Innsbruck's 'Rieserndumgemälde' – a large 19th-century panorama – acts as a local case study, Alexander von Humboldt functions as a historic and global travel companion and guide. This meandering journey discusses the bipolar relationships between indoor/outdoor and immersion/objectivity when depicting landscapes. The alpine scenery – documented through drawings – performs as a climatic recording device and a place of longing. It displays climatic and seasonal progress in a time of social standstill. As a metaphor for this juxtaposition the author's reading of Humboldt – while being stuck indoors – gives various opportunities to contextualise thoughts within theory and to reflect upon our current time of crisis: both climatic and pandemic. During his years-long journeys, the 19th-century explorer took sketches and notes of distant lands. The 21st-century author instantaneously shares his 'elevations' on social media as daily 'stories'. Humboldt was among the first to emphasise the role of climate and global interconnectedness. His thoughts are increasingly relevant, in a time where we need to re-evaluate the relationships between the built and the natural environments.

Corona and the Panorama

On March 16th, 2020 the Austrian government declared a nationwide lockdown because of what is now commonly known as Covid-19. Covid-19, which stands for *Coronavirus disease 2019*, is an illness caused by the infamous *coronavirus 2*, also known as SARS-CoV-2¹. The lockdown was regulated by an unprecedented law in the history of the second Republic of Austria. It was supposed to end on the 22nd of March 2020 according to the official legal document issued by the federal government. (Verordnung gemäß § 2 Z 1 des Covid-19-Maßnahmegesetzes. Republik Österreich, 2020) The law temporarily forbade to enter any public space except for essential errands such as grocery shopping. What followed was roughly fifty days – “seven weeks and one day” (Hofer *et al.*, 2020) – of lockdown with reduced social contacts and a life indoors. The exact length of the lockdown is hard to demarcate and ambiguous due to the intricate legal situation and constantly changing conditions. Therefore, this paper assumes the end of the lockdown with the 4th of May and a return to normality in Austria on the 15th of June². During that time the regulations on activities like jogging or going for a walk were always ambiguous: it was neither explicitly forbidden, nor certainly legal³. Consequently, the population experienced seven weeks of solitude, often alone, either indoors or by strolling through the landscape in small groups.

Innsbruck is a city in the western part of Austria. Because of its geographic proximity to northern Italy, it has been near one of Europe’s Corona hotspots during spring 2020 and was hit harder by the pandemic than the rest of Austria then. The city is surrounded by mountains to the north and south. It snuggles between them and the river Inn which flows eastward. Because of its location, Innsbruck is often referred to as the capital of the Alps. It offers a marvellous alpine panorama and feels embedded in this environment. Spending the 49 days in such a place provided ample time to awe the views and witness the transition of seasons: from winter to spring. As the recent French philosopher, Michel Serres observed: “*there is no direct path from one spring to another*” (Serres, 1994, p. 20 translated from German by the author). In our immobility, we also experience both resignation and awe for the environment. The Chinese artist Ai Weiwei wrote recently on Coronavirus inflicted lockdowns: “*Spring does not slow its arrival just because no one can go out and look at it*” (Weiwei, 2020, p. 82).

A sequence of 49 Instagram stories taken repeatedly from a specific spot in the city of Innsbruck accompany this text (fig. 01). They act both as a documentation of the lockdown and as departure points for speculations on climate, landscape, and environment. Reflections on those, the looking at nature, and the drawing of ‘elevations’ during a time of closed borders and quarantine measures create jagged geographies. In architecture, *elevations* are drawings that allow to take measurements and to assess the relationship between a building or structure and its surrounding environment; urban or natural. In the following text poetic narrative and scientific observation enter a series of meandering dialogues. They stretch across scales and fields, similar to the one between “*qualitative and heterogeneous*” landscape “*quantitative and homogeneous*” land (Ingold, op. 2011, p. 190).

Humboldt’s Kosmos

In his notes and publications, the early 19th-century German natural scientist Alexander von Humboldt often merged Romantik *poetry* with scientific *observations*. When describing his journeys through the Americas (1799-1804) he regularly described the landscape and climate by objective accounts and vivid, romanticized, descriptions. Humboldt and his companions often witnessed multiple climates when crossing the Andes. They experienced blizzards al-

ternating with extreme heat (Wulf, 2018, p. 111). Such emphasis on dramatic climatic changes – ascending or descending through alpine terrain – makes his accounts so relevant in our contemporary time of unexpected extremes. For example, he stated that by descending “*to the plains, all climatic gradations of the forms of plants are offered to the eye*” (Humboldt, 1845-61, p. 761). He makes a case for the dynamism between mobile fauna and immobile flora (fig. 02). Similarly, Michel Serres notes about 150 years later that “*the plant remains where it is*” (Serres, 1994, p. 36). Of course, Humboldt was a botanist and geologist with a particular interest in the planet’s morphologies and the relationships between vegetation, altitude, and climate. His journeys shaped his understanding of the planet as an interconnected system full of dynamic relationships and global networks. He understood that very *local* – and compared to a human lifetime static – things, such as geology and landscape, are shaped by *dynamic* and *global* processes. Throughout his life, Alexander von Humboldt published extensively, explored the world, and established the foundation of our contemporary scientific concept of an *interconnected nature*. Andrea Wulf’s biography of Alexander von Humboldt offers an accessible account of his life and work. Together with a collection of *Selected Writings* edited by Wulf and first-person accounts of Humboldt himself they act as the main secondary sources for this text, besides Humboldt’s original writings in German (Bromme, 1851-1854; Humboldt, 1845-1861). Special attention is given to his accounts on landscape painting, climate, and the *panorama*.

Landscapes

Towards the end of the second volume of *Kosmos* – his main publication – Humboldt explains his views on the role of art in the communication of both the beauty of, and the urgency to protect, nature. He states that “*heroic landscape painting must be a result at once of a deep and comprehensive reception of the visible spectacle of external nature, and of this inward process of the mind*” (Humboldt, 1845-61, p. 761). He reached out to great artists to “*lend his voyage visibility*” during his journey to Italy in 1805 (Humboldt and Ette, 2018, p. 9). On the processes of landscape painting as a tool of science-communication Humboldt notes: “*It is only by colored sketches taken on the spot, that the artist, inspired by the contemplation of these distant scenes, can hope to reproduce their character in paintings executed after his return*” (Humboldt, 1845-61, p. 760). He highlights the role of time between observation and production. Photography was not invented before the third decade of the 19th century; too late for Humboldt to document his findings in the Americas. He relied on sketches and notes as well as specimens which he brought back to Europe or disseminated in-situ when resting in-between the voyages. Consequently, the delay between observation and recreation was anything between a few hours and several years. Not counting the many samples that were lost because of bureaucracy and accidents (Wulf, 2018). This is the opposite of today’s social media. All photos taken during the Corona lockdown were *instant* and *colorful*. Further, they contained metadata on the exact time and GPS coordinates. Other than Humboldt’s timeless work, each daily image was only visible for exactly 24 hours. Nonetheless, the notion of time persists in the form of consistency in observation. Since 49 photos were taken, the resulting sequence allows making various observations. One can see the gradual change from winter to summer by tracing the rhythmically receding snow line as well as spontaneous happenings such as the blossoming of the daffodils in the foreground on ‘#day28’. Sometimes, deep clouds disguised the true face of the mountain (fig. 03). The formation processes that create our environment work across larger timescales and are rarely observable as wholes. Speeding up such processes in the form of *time-lapse* or *hyper-lapse* videos we see that “*solid rock bends, buckles and flows like molten metal*” (Ingold, op. 2011, p. 201). Tim



02. Sketch by Alexander von Humboldt (drawn by Paris von Schönberger and Pierre Jean François Turpin, etched by Louis Bouquet, writing by Louis-Marie Aubert du Petit-Thouars), Ideen zu einer Geographie der Pflanzen nebst einem Naturgemälde der Tropenländer, 1807, Public Domain, Zentralbibliothek Zürich



03. Day #7. Andreas Körner, Innsbruck, 22/3/2020, screenshot, post, photo, and drawings by the author.

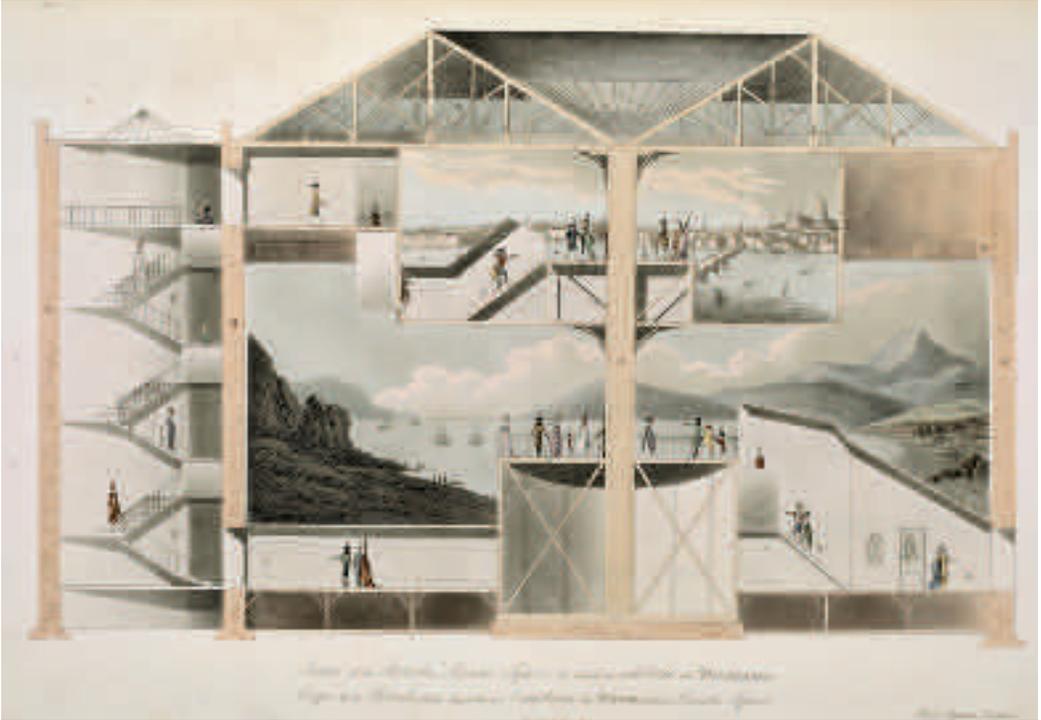
Flannery describes this in his book *Here on Earth* as *fluid* and by this emphasises the interconnected relationship between different states of matter (Flannery, 2012). Because of this geological folding, “*the seabed is found in the mountain, the forests are deep under the ground*” (Gooding, 2020, p. 3). In nature we can only observe the strata of those events when encountering *ruptures* in its textures; such can be earthquakes or tsunamis where “*matter and matters intertwine*” (Klingan *et al.*, 2015, p. 23) Humboldt’s graphic work has been instrumental in developing his idea of images that “*move*” – not in the sense of *motion*, but *emotion* – which inspired a new understanding of landscape painting (Humboldt and Ette, 2018, p. 22). For him painting a landscape was already more than painting a backdrop. Other than for the ancient Greeks, he wrote, it has to be more than a “*mere background*” with human figures in the “*foreground*” (Humboldt, 1845–61, p. 700). Humboldt questions depictions of landscapes that are “*complete in themselves*” and that “*hide*” the processes and geomorphological changes landscapes continuously undergo. The anthropologist Timothy Ingold describes this as an act of “*subordination*” of processes based on “*Western bias*.” Consequently, the final product (painting) becomes itself the sole “*object of contemplation*” (Ingold, op. 2011, p. 198).

Landscape painting can be here considered only as it brings before us the characteristic physiognomy of different positions of the earth’s surface, as it increases the longing desire for distant voyages, and as, in a manner equally instructive and agreeable, it incites to fuller intercourse with nature in her freedom (Humboldt, 1845–61, p. 752).

Scale and Place

Besides writing about large scale landscape paintings Humboldt also takes note of the back then-fashionable *panoramas as immersive devices* (Humboldt, 1845–61) (fig. 04). He states that “*in a panorama, the spectator, enclosed as in a magic circle and withdrawn from all disturbing realities, may the more readily imagine himself surrounded on all sides by nature in another clime*” (Humboldt, 1845–61, p. 765). He admires the large and complex apparatuses but he criticizes that they “*have been applied chiefly to views of cities and of inhabited districts, rather than to scenes in which nature appears decked with her own wild luxuriance and beauty.*” (Humboldt, 1845–61, p. 765) In *Kosmos* Humboldt refers to Robert Barker’s panoramas⁴; the first created in London in 1788 (Humboldt, 1845–61, p. 764). In its inwards orientation, a panoramic painting creates an immersive space. This is the opposite effect of, for example, that of a façade ornament like the one of the *Palais de la Porte Dorée* (1931) in Paris. The 1130 m² Art Deco *Bas-relief* by Alfred Janniot (1889–1969) depicts various scenes from France’s many colonies at that time (fig. 05). Architectural theorist Ines Weizman highlights a comparable process, of swapping interior and exterior, in the cases of *Pergamon Altar* before 1908 in Berlin and the *Elgin Marbles* in London. In both cases, an external façade is everted and projected onto the interior walls of museum spaces (Weizman, 2018, p. 9).

In Innsbruck, one such panorama exists to this day. Originally revealed in 1896 it travelled to London for the *Imperial Austrian Exhibition* in 1906. In its absence, the original building burned down and a new rotunda was built in another place (fig. 06). The panorama painting depicts the 1809 *Battle of Bergisel*. Bergisel is a hill on the opposite side of the city on top of which now towers Zaha Hadid’s famous *Ski Jump* (2002). In 2011 the panorama painting was relocated to a newly built museum next to the ramp. The old rotunda is located roughly thirty meters from the point where the 49 photos were taken. When overlaid on a map the virtual spheres of influence between the hill, the view, the balcony and the rotunda show an interconnected



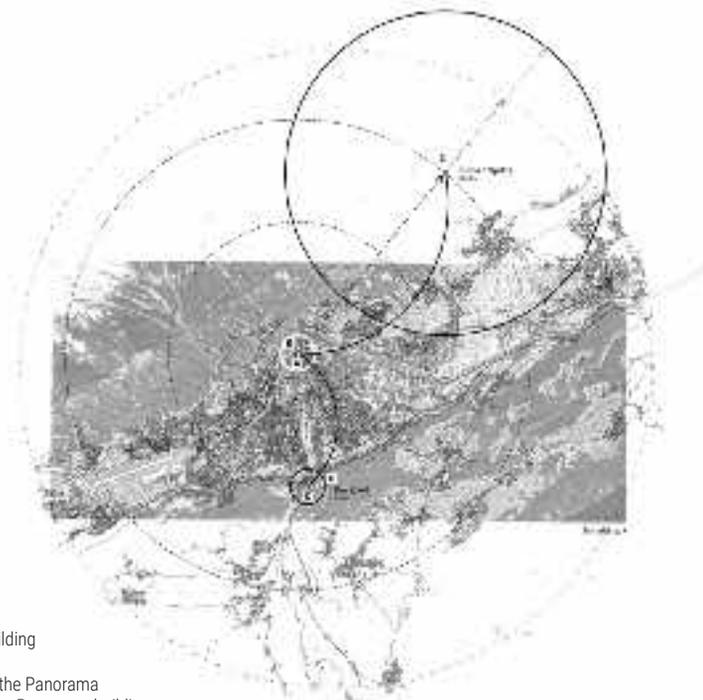
04. Section of the Rotunda at Leicester Square. Robert Mitchell, 1801, Public Domain, British Library.



05. The façade of the Palais de la Porte Dorée (1931). Andreas Körner, Paris, 7/2015, photo by the author.



06. Riesen-Rundgemälde bei der Kettenbrücke (postcard). Unknown, 1938-1945, Tiroler Kunstverlag, scanned by the author.



- A: The balcony
- B: The old panorama building
- C: Rumer Spitze
- D: The peak depicted in the Panorama
- E: The location of the new Panorama building

07. A schematic map of Innsbruck including radii of vision. Andreas Körner, 2020, map data from OpenStreetMap, open licence, drawing by the author.

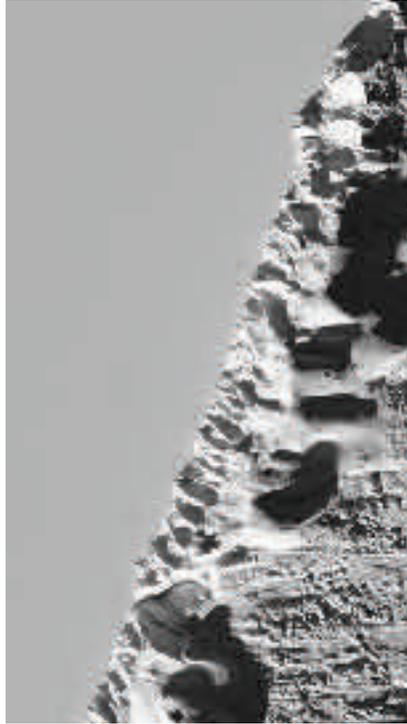
web of relationships across scales (fig. 07). While Humboldt had to carefully note down all aspects of his observations to be recreated later by affiliated artists, the modern *digital native* simply *touches a screen* which instantly captures an objective totality; given no filter is applied. It allows us to take snapshots on a human scale with unprecedented detail. On a landscape scale, for example, the Danish government publicly provides high-resolution (40cm) 3d-scans of the entire Danish coast online. One can pick from several versions which include 3d-models without any vegetation and with all built structures omitted using artificial intelligence. (fig. 8) This way, the topography of any location on earth can be recreated virtually, without the human *clutter* that would otherwise obstruct the *pre-Anthropocenic* condition of nature. On a global scale, satellites constantly observe the conditions of our atmosphere, such as when NASA documented the clearing of pollution over China during the local Corona lockdown this February (BBC News, 2020).

It is a long way from the first true aerial drawings by Thomas Baldwin using hot air balloons in the late 18th-century. (Baldwin, 1786) We can now use augmented reality to overlay meta-data onto images like when using one of the various apps that tell the wanderer what she is looking at (fig. 9). Humboldt probably could not have established his thoughts without the forced rhythm of collecting, reflecting, and recreating which always allowed for moments of pause – and moments of awe – to create bonds of seeing and knowing. Looking onto nature for 49 days left a strong mark; plenty of time to reflect, document, and now review in the form of this text.

It is seeing which establishes our place in the surrounding world; we explain that world with words, but words can never undo the fact that we are surrounded by it. The relation between what we see and what we know is never settled (Berger, 1972, p. 7).

Interconnection

Humboldt often described the *interrelated* nature of our planet. As mentioned before, he emphasized the relationship between landscape – and geology – and climate. One is the result of the other and vice versa. This notion of *reading* climates or landscapes invokes again the notion of time. When looking at the mountains – when reading their elevations – any observer can witness the movement of such atmospheric phenomena like clouds, fog, and mist across their faces. This experience can be imminent and immersive as well as frightening, as in the vivid account given by Richard Coyne in his *Network Nature*. Coyne describes his ascendance of Ben Cruachan (1,126 m) in Scotland in 2003. Along the way he almost gets lost in the cloudy terrain, vividly describing landscape features he sees when the clouds retreat. His account of this adventure is the introduction to a series of thoughts on what is known as “*geosemiotics*”; a term coined by Victor R. Baker in 1998 (Coyne, 2018, p. 79). It is a concept that advances a concept of nature where all is “made up of a web of intercommunicating sign systems independently of human control, but in which human beings participate from time to time.” (Coyne, 2018, p. 80) This *participation* can also be a simple *observation*. While we often – especially during 49 days of lockdown – witness the weather moving over a landscape, we hardly ever get the chance to watch *geology* happen due to its beyond-human scale. Humboldt almost experienced such an instant event when he visited the volcano *Jorullo* in 1803. Tobias Kraft recounts this in his article *Die Geburt der Gebirge*. Humboldt arrived about 44 years after the start of a 15-year long geologic event at which end a new mountain range was formed. Upon arrival, he still witnessed a smoky and hot landscape resembling a “*burst*” terrain (Kraft, 2015, p. 33). Witnessing the



08. Rudjerg Fyr. Mathias Bank, 2020, scan data by the Danish Agency for Data Supply and Efficiency, open licence, rendered by Mathias Bank.



09. Augmented Reality overlay of the same perspective using the iOS app PeakVisor. Andreas Körner, 3/7/2020 at 13:00, Routes Software SRL, screenshot by the author.

formation of a mountain range – drawing as well as measuring the aftermaths – were crucial to Humboldt's move from *Neptunism* to *Plutonism*. Later, by comparing landscape profiles, he concluded that the shapes and elevations of landmasses above sea level are related to weather (Humboldt and Ette, 2018, p. 419).

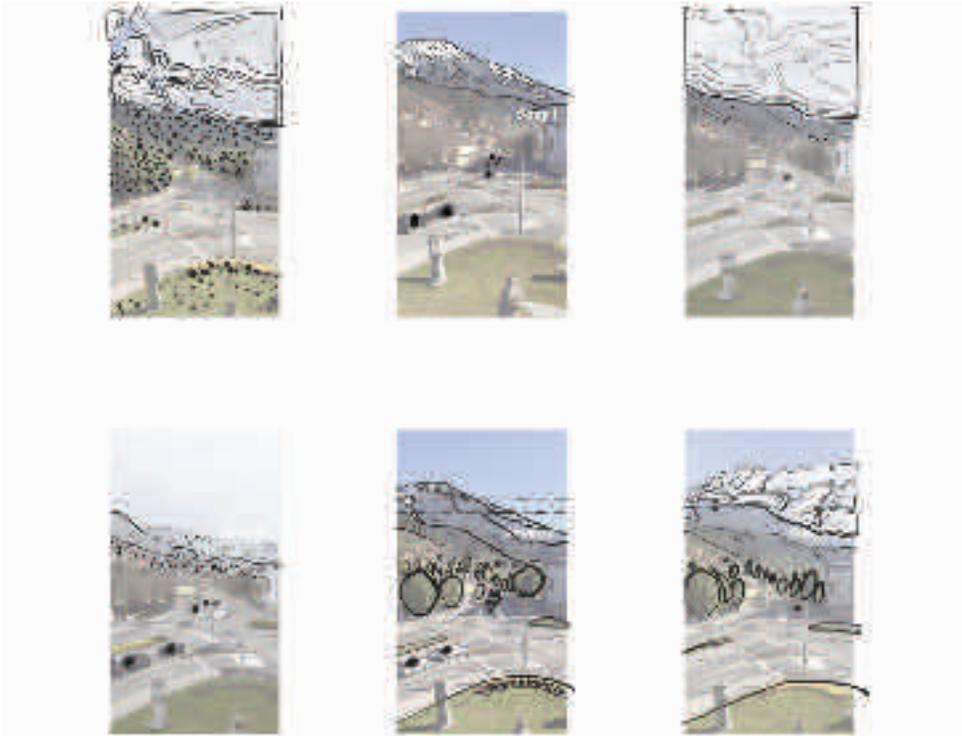
"We have now to consider the impression which the image received by the external senses produces on the feelings, and on the poetic and imaginative faculties of mankind." (Humboldt, 1845-61, p. 696).

Depth

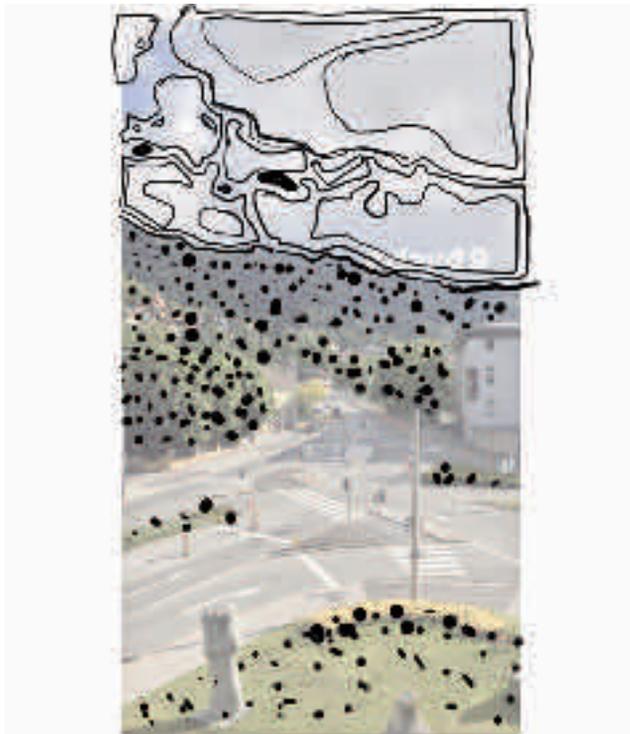
The 49 photos are flat images from a specific point of view. Neither are they immersive panoramas, nor augmented reality overlays. They lack the surreal depth of landscape paintings alike William Turner's. Nonetheless, they have a global reach and document different micro-climates in a small perimeter. Humboldt noted about the alpine environment: *"The observer who leaves the center of the earth by an infinitely small amount compared to the radius can reach a new world [far more than] if he were to pass from one latitude to another"* (Chaplin, 2019, p. 19). The distance between the location where the photos are taken and the objects of observation is not a simple distance from A to B. The depicted landscape breaks the *"sterile opposition between the naturalistic view of the landscape as a neutral, external backdrop to human activities, and the culturalist view that every landscape is a particular cognitive or symbolic ordering of space"* (Ingold, op. 2011, p. 189).

"In the landscape, the distance between two places, A and B, is experienced as a journey made, a bodily movement from one place to the other, and the gradually changing vistas along the route." (Ingold, op. 2011, p. 191).

Travelling from A to B isn't easy during a lockdown, hence the horizon is fixed. According to the German-American phenomenologist Erwin W. Straus, the horizon is what differentiates between landscape and geographic space. (Straus, 1935, p. 50 translated from German by the author) During a lockdown, our familiar borders shift and behind *"shut doors and windows"* we realize that those are our new *"borderlines"* Ai Weiwei wrote about Corona (Weiwei, 2020). The process of drawing on top of the photos adds subjective information retrospectively. (fig. 10) The author traces and highlights what moved him, and in this process, both accentuates features and fills gaps. Those gaps – in some cases the overcast sky or the empty road – are initially *reserved* spaces. (fig. 11) The landscape architect Gilles Clément defined this *reserve* as *"unused spaces"*; highlighting the French term *"la réserve"* as the area of a painting that is omitted or left blank (Clément, 2004, p. 7). Where a lockdown restricts our mobility, digital technology steps in. Michel Serres noted that the virtual world of communication accompanies and sometimes substitutes physical *journeys* (Serres, 1994, p. 8). He also wrote that travelers like Humboldt always went beyond what were their places. In all their cases, the *journey* was pre-eminent to the place. (Serres, 1994, p. 33) As mentioned in the introduction of this text, 'elevations' allow us to track, trace, and compare relationships. Such drawings do not only depict a static condition but allow to draw dynamic conclusions. In the context of architecture, they allow investigating the relationship between the natural and the artificial. In the case of the 49 images, every 'follower' has his or her own reading. Additionally, such a play with plan (horizontal) and elevation (vertical) can yield surprising insights. *"Does the performance of a surface change when oriented horizontally versus vertically?"* (Berrizbeitia et al., 2012, p. 262) Of course, since hot air moves upwards, not sideways. Elevations depict external conditions; through them we truly look *onto* something. A *section* would yield more information but is abstract and in this context kind of



10. Reflections of mountain elevations. Each drawing represents the varying interplay between weather and landscape on selected days during the lockdown. Andreas Körner, 05/2020, screenshots, posts, photos, and drawings by the author.



11. Day #49. Andreas Körner, 3/5/2020, screenshot, post, photo, and drawings by the author.

‘unnatural.’ When observing landscapes *in-situ*, as previously expressed, one cannot slice and dissect them but only look *at* them. Especially from behind a window glass and if the observed specimen has the size of a mountain.

Conclusion

The relationship between *elevation* and *depiction* is interesting when compared to the 49 photos. Where the panorama is *immersive* but *static*, the social media image sequence is *dynamic* but *flat*. The provided relationship between Corona and geology is similar to the one between being stuck in a place looking into the landscape and the global reach of a pandemic. The position of any observer defines what he or she sees. Technology allows us to accelerate the movement between different positions and/or to shift between micro, macro, and global scales of observation. While Alexander von Humboldt reached a global audience through the novelty of his observations, in social media *global* reach is the standard regardless of the content. The 2020 Coronavirus pandemic is forcing us to reflect upon our *place* in the world in terms of motion, geographic location, and as a species among others. Images from all across the interconnected world now reach any place instantaneously. A virus spreads quickly across the vast and spherical terrain of the planet but is still only transmitted within a few meters between humans: one by one. While the author observes the clouds’ movement along a specific mountainside through his window in the Alps, satellites monitor the vanishing of smog over vast stretches of land in East Asia: both because of the same reason. While the significance of the two is by no means comparable, they highlight the same thing: Maybe we should spend more time looking at the environment. While experiencing this exceptional state, we have to ask ourselves: How would Humboldt have dealt with a lockdown such as, for example, during the second cholera pandemic (1826-1837)? He was well known for his restlessness and “*he always seemed to be setting out, going somewhere*” (Humboldt and Ette, 2018, p. 10). Presumably, he would have, at one point, sat down to sketched what he saw.

Acknowledgements

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Notes

1. Information related to Covid-19 and SARS-CoV-2 was collected from the website of the World Health Organisation (WHO) on 23/06/2020.
2. Since the 1st of May 2020 access to public spaces was granted when wearing appropriate personal protective equipment (PPE). On 15th of May restaurants were allowed to reopen while maintaining social distancing rules. Since the 15th of June 2020 masks have only to be worn in public transport and other sensitive areas like pharmacies. As by October 16th 2020, a new lockdown is again being discussed.
3. On July 22nd 2020 it has been ruled by the Constitutional Court of Austria, that some of the lockdown measures imposed by the government were partially unconstitutional.
4. Robert Barker was an English painter (1739-1806) who coined the word “panorama,” from the Greek words *pan* (for “all”) and *horama* (for “view”).

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Unexpected made natural

Turning the project into a tactical tool

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Keywords: Architectural design, Risk management, Potential, Strategy and tactics, Adaptation

Abstract

All crises produce shocks, changing people's perception of life, habits, and rights. In systems theory terms, we could state that, during a crisis such as the Covid-19 pandemic, people start marking a distinction between the past and the future, noticing transformations that before stayed ignored. Two attitudes emerge: a nostalgic one, pretending to go back to normal as soon as possible, rejecting any changes; and a revolutionary one, claiming that nothing will be the same as before and asking for even stronger transformations. But things do not stay unvaried, nor do they overturn: the future happens together with the evolution of people. There is a continuous shifting we are not even aware of, and which becomes noticeable only at a distance: this is especially true about space and its perception. However, not all transformations are good: while some of them seem to be a natural evolution of the present, others appear to be forced. This (apparent) randomness may have a clear relation with the tendency of traditional design to use projects as prescriptive models for the future. Indeed, using systems theory again, we could say that projects, by marking a distinction between what is designed and everything else, also originate the possibilities of unexpected, which then becomes an (unavoidable) flaw of design. In a crisis, the attitudes mentioned above push the predictive approach to its limits and, by proposing either old or new models, they prophetically raise expectations toward an ontologically false future. Quite the opposite, also with the aid of case-studies showing how unexpected normality can be, the paper investigates architectural design as the artfulness of evolving spaces by exploiting the so-called potential, changing the unexpected into the founding element of design. Then, the project can become a tactical tool for implementing subtle, yet effective actions, able to influence spaces toward an ontologically unexpected, yet natural future.

Introduction

Everything had been admirably thought out as is usual in dispositions, and as is always the case not a single column reached its place at the appointed time (Tolstoy, 2010, p. 1069).

The most important thing to do in order to make the world a peaceful place is to create a situation in which we don't make waves (Oki, n. d.).

All crises produce shocks, changing people's perception of life, habits, and rights. In systems theory terms, we could state that, during a crisis such as the Covid-19 pandemic, people start "marking a distinction" (Luhmann, 1996, p. 47) between the past and the future: a before/after distinction which makes it possible to notice previously ignored transformations. Reactions to this new awareness seem to go toward two main directions: a nostalgic attitude, pretending to go back to normal as soon as possible, as nothing happened or changed; and a revolutionary one, claiming that nothing will be the same as before and willing to exploit the crisis for forcing even more radical transformations. We will not discuss if/whether these attitudes are inspired/aroused by the media, nor their relationship with economic interests, nor even the psychological dangers or those concerning welfare and employment rate. Instead, we would like to highlight that, in the case of the pandemic, public debates mainly have aroused around the topic of the *space*, and the way of living it (Deregibus, 2020b). On the one hand, people want "their" space back, recognising the absolute importance of public spaces as sociality places, of homeplaces as individual nests, of workplaces as places of commitment and confrontation: a new sense of possession emerges, as well as an updated sense of belonging. On the other, people claim to have the right to revolutionise "their" spaces, which are being proven inadequate precisely by the pandemic: public spaces, as well as homeplaces and workplaces, must change, and they have to do it *now*.

But rarely things stay unvaried, nor do they completely overturn: usually, the future happens *together* with the evolution of people, with a continuous shifting we are not even aware of, and which becomes noticeable only at a distance. Whether the crisis will last or not, people and spaces more likely will adapt, maybe in such a radical way that what how seems to be a critical limitation of freedom, tomorrow will be a usual way of living (ibid.). Just like it happened for sharing personal data on social networks, or for controls in airports and terminals, it may happen that limitations in using the space will be no more seen as threats to freedom, but as a normal necessity. Such adaptation continuously happens, continually shaping our spaces and our perception of spaces: it is a "silent transformation" (Jullien, 2011).

Then, whether these transformations are good or bad is all but obvious. While Some of them seem to happen in a natural way, others appear to be forced and artificial, and end up being rejected by people (Chia, 2014). There is a strong tendency of promoting participation for reducing this apparent inconstancy (Kempenaar and Van den Brink, 2018): still, our hypothesis is that even a participative process may generate forced changes due to the tendency of design to produce *prescriptive models* for the future. In other words – and this is true especially in participative processes – design works on what Okashah and Goldwater (1994) called *known knowns* (things we already know to know, as it happens in products design) or at most *known unknowns* (something that we know we don't know, as it is for city planning), but usually ignore, or conceal, *unknown unknowns*: that is, precisely the unexpected.

Therefore, after some examples of silent transformations, our aim is to conjecture a different way of designing changes, so to make unexpected natural.

1. Unexpectedness of normal, normality of unexpected

Marking the before/after distinction means formalising a fixed point in the perception of time, just like deadlines and recurrences do. However, we are so accustomed to making this distinction that we struggle to perceive, more than the change itself, the *possibility of change without a clear transition*. We look for revolutions, but transformations stay hidden in the mists of normality so that, when we notice them, they may surprise us. Therefore, on the one hand, normality comes unexpectedly because we are not able (or used) to see its evolution; on the other, unexpected is ubiquitous to the point that getting a critical distance will reveal it everywhere. Moreover, normalities, as well as unexpected things, cannot be compared among different times or places (Deregibus, 2020b): we could compare different situations, but not the way there are/were perceived, due to different intentionalities and biases involved – in a Husserlian sense – as well as to the role of the environment – in a Luhmannian sense. The ontological consequence is that, in any case, all normalities are somehow unexpected.

1.1. Urban space

Urban development shows, maybe better than any other example, how unexpected the change can be, and how natural. In the seventies, all European cities were choked by traffic. After the economic boom following the end of the Second World War, the car became a symbol of freedom and social standing, soaring to be a state of personality. From 1950 to 1970, cars increased 250% in the USA, 500% in the UK, 850% in France, 2000% in Germany and a whopping 2600% in Italy (Boscarelli, 2003). Clearly, cities could not change as quickly. What we are now used to call “historical centres” were very different, with lanes running in stately squares and medieval districts, as it was the most normal thing in the world: indeed, *it was* the most normal thing in the world. No pedestrian areas and no more bikes, which were so common before the War (Belloni, 2019): other things were far more critical. Only after the eighties, a sustainable vision raised, leading to the promulgation of the Agenda21 in 1993. More subways were developed, more soft mobility routes and plans were implemented. As a (partial) result, nowadays most cities in Europe have a pedestrian area, usually corresponding to the historical centre or relevant areas: a definite change in the perception of the city, which allowed a rehabilitation of heritage that before was literally inconceivable (Bigio, 2015). We are now used to take a walk in the city centre, to socialise in public spaces, to enjoy pedestrian and green areas: again, just as it was the most normal thing in the world. That’s because the adaptation of the city went together with the adaptation of people. Similarly, things can change again: and will change. The pandemic showed us a different way of living and, consequently, models for future cities that were so diffusely discussed (Saaty and Sagir, 2015) proved to be wrong. That’s because they relied on known knowns, while actual changes are as unexpected when they happen as normal after the adjustment period needed for tuning shapes and habits. Thus, it is entirely plausible that cities will change together with our way of living it, with maybe green areas more similar to woods than parks – more natural, even savage, because no one will go there, or with pre-set footpaths to be used for going around respecting reciprocal distances. In other words, what today seems to be an intolerable limitation of the way of living public spaces, tomorrow could unexpectedly become the most normal thing in the world (fig. 01).

1.2. Homeplace

The evolution of the homeplace is just as dramatic as that of the cities. The intense urban growth allowed/caused/required by the economic boom (Capello, 2001) also gave birth to a



02. All normalities are unexpected/2. Carlo Deregibus, 2020, propriety of the author.



03. All normalities are unexpected/3. Carlo Deregibus, 2020, propriety of the author.

new type of blocks of flats and houses. Building techniques and typologies were different across the countries, depending on the development of the family and the society (Barbagli and Kertzer, 2005; Lane, 2015). In Italy, for example, quite all blocks were built with a concrete frame, plastered or tiled cavity walls, and very peculiar flats' plan based of the also typical family structure: a working husband, a housewife, two or more children. It was the most normal thing in the world for the housewife to choose furniture, tapestry and tents: the house was her reign, especially the kitchen – a four meters square cubicle. The family ate and passed their time in a cramped dinette. A long, narrow corridor led to an even narrower bathroom, to the enormous bedrooms, and to a nice living room, too precious to be lived and whose couches would be new forever (Baldini, 2010). People and houses adapted reciprocally: flats were built with the typical family as a target, and the family aspired to become typical (Cosseta, 2000). Nowadays, both are changed. The traditional family is less common, both parents now usually work, there are fewer kids per family, and rarely grandparents live with their sons. The whole social dimension is different, and spaces are changed accordingly, with new standards to aspire to. Modern flats expose open spaces, with the kitchen as a socialisation place; bedrooms are smaller, bathrooms larger; terraces are very welcome; cars are necessary, but not as much as in the past. Obviously, these trends are all but unquestionable: housing standards are so different among different cultures (Liu *et al.*, 1999) that it's clear that normality is a very relative concept. The pandemic inspires a possible next evolution, toward a different way of organising the houses, especially with reference to the ever-growing extended families, the need for spatial adaptability and the smart-working requirements. Thus, it is not impossible to think to a new homeplace, in which the open space can be separated into isolated, sound-proof cells useful for working or studying; or to the “revenge” of bedrooms, now essential for enjoying smart-working and distance learning (Semi, 2020); or the evolution of dining space and livings, in a world in which invitations to dinner are forbidden. Things that were absurd just until 2019, and that, unexpectedly, may become the most normal thing in the world (fig. 02).

1.3. Workplace

The evolution of the workplace – especially the manufacturing workplace – is so evident that there exist museums showing the working conditions of just a century ago. At that time, the industry was like a systemised artisanal work (the so-called Industry 1.0). Then, there was the evolution to mass-productions, where assembly lines commuted workers in machines – as Charlie Chaplin's *Modern Times* lovely represented (Industry 2.0). The next step was robotic process automation (Industry 3.0), and now Industry 4.0, i.e. exploiting the Internet of Things for building smart factories, is the new trend. The shape of the workplace changed according to this evolution. Workers were once inside the factory, manually operating on the machines for even more than 12 hours per day (Gasca, 2009). That normality is now unthinkable, and new standards have emerged. Many workers currently operate on the controls of machines – standing near them more than manipulating them – and office work increased exponentially (Rainhorn and Bluma, 2013). Obviously, this change had a price: those now abnormal standards were adopted in delocalised factories in the Far East, again creating a new, relative as questionable, normality (Klein, 1999). But, if workplaces don't need people's presence anymore, why should they exist? We could develop remote factories, with at most a few workers supplying physical maintenance. Then, while thinkers were discussing (Fadini, 2018), the unexpected happened. The pandemic irrupted, imposing remote-working. Beside its opportu-

nities and risks, what is truly relevant for our thesis is seeing that people actually managed it. In other words, they adapted themselves to the new situation. Obviously, it was not that easy, especially for some categories of workers or depending on different conditions – for example, the management of children, as schools were closed. But the debate on remote-working could start only thanks to a before/after distinction, because it became possible to compare the “after” with the “before”, on the base of the (mostly unexpected) experiences of people. All theoretical expectations that were possibly proposed before relied on the known, conjecturing a series of known unknowns. But the unexpected made it clear that the revolution of the manufacturing may lead to an ultimate separation between workers and workplace, so that it’s possible now to think to spaces before typical of just dystopic movies. And our habits will change consequently: while it was normal to have a strict time-table in the day, the future may allow free disposal of time, possibly leading to a result-based work, instead of the present, time-based work. So again, normality will be different, and we’ll maybe discover that it will better fit our new habits (fig. 03).

2. Fascination and danger of modelling

The three examples above show that evolution is, more or less, always unexpected. We could think that experts and specialists could manage these changes: an urban planner will adjust city models, reacting to the variations of the conditions; an interior designer will promptly feel the latest style trends, updating its projects; managers and designers will reshape workplaces following the ongoing utilitarian nature. There should be a constant evolution of the projects: and this evolution would indeed be enough, if the project was a problem-solving tool, i. e. a way of answering a question. But at the base of problem-solving there is the necessity to model the present situation, so to make its complexity more manageable and define the problem itself: consequently, the model tends to replace the actual contingency, losing its relations with the environment (Husserl, 1970). This separation could work for many human activities, but, in the case of architecture, it inevitably leads to failure. In fact, models (possibly) work just *within* the modelled system: or rather, the model defines a new system precisely by excluding the rest of the environment (Moeller, 2006, p.16). The problem is that unexpected is “an irritation between systems [which makes them] resonate with each other” (*ibid.*, p. 38): therefore, it comes from *outside* the system defined by the model. Thus, as using the project as a problem-solving tool requires to define models of the present and/or the future, the condition of the existence of the project would also be the leading cause of its failure. In other words, the distinction between what is inside the model and everything else automatically produces the possibilities of unexpected, which will ontologically be *out* of the model.

Considering the three systems (which are three among many others) of the examples mentioned above, they are quite obviously connected: the work organisation strongly influences houses, both determine the city, public transport affects housing and workplaces, and so on. Each system has its own evolution, but this evolution is strongly influenced by what is outside the system itself: or rather, by the reciprocal irritation of the systems. Even if we can somehow manage these systems (indeed, they are *known knowns*), these irritations are by some degree unexpected (they are *known unknowns*) because they overcome the safe boundaries of the systems themselves, so that “the system produces information that does not exist in the environment but only has correlates out there” (Luhmann, 2002, p. 122). So, even “normal” irritations go beyond the specialists’ field of knowledge and, consequently, from existing models of reality. Then, the most unexpected thing is the one that we cannot even imagine to foresee (Hill,

2012, p. 28): therefore, irritations such as the pandemic will be much more intense (indeed, they are *unknown unknowns*), and will provoke even more unpredictable cascade irritations between the systems – as exemplified by the clashes between remote-working and the housing system in the pandemic. Furthermore, in an undefined future, from the medical research system (which is part of the *environment* of the *three-systems' system*), a vaccine could come out, invalidating all those projects so carefully arranged: because they were, indeed, nothing more than models.

Now, both the nostalgic and the revolutionary attitudes aroused by the pandemic persist in proposing models – either educated views of the present or brand-new ones – pushing the modelling approach to its limit on the base of the panic. By this way, they prophetically raise expectations toward *ontologically false futures*, relying on a pseudo-scientific approach which cannot fit the continuous happening of unexpected. Consequently, the expectations will only be disappointed, because the future (or better say *the present of the future*, i. e. the actual state of things in the future) will be inevitably different from its model – which is *a future of a present* (Luhmann, 1996; p. 51). Even when considering all the known systems, unexpected will continue to be there, outside all the distinctions. And from there, it will influence the contingency, invalidating plans and project just like it happened to the admirable, but useless, Kutuzov's dispositions for the Russian army in War and Peace (Tolstoy, 2010, p. 1069). If projects continue to propose prescriptive models, unexpected will continue to be nothing but a problem and a flaw of the project, instead of its natural premise.

3. From modelling to orienting

It could seem that unexpected, being a “natural premise to all projects”, could just be suffered: for exploiting it, we definitely need to change our way of design, *outgoing* the boundaries of model-making (Turkle, 2009, p. 90). Indeed, the main consequence of the iteration of irritations is that the whole process has a radically contingent nature (Deregibus, 2020a). This state is inconsistent with the (predominant) idea of modelling the future, as the failed future-city models show: but at the same time, it can become a critical resource for the project. In fact, unexpected is the most evident symptom of what François Jullien (2004, p. VII) called the “*potential*” intrinsic to the situation. Among all the possibilities (all the possible *futures of the present*), the potential is the evolution that seems to be the most favourable, as the contingency seemingly shows a *propensity* toward it (*ibid.*, p. 16). Interestingly, in prescriptive models, the futures of the present can be evaluated as positive or negative on the base of their adherence to the model itself. This is obvious, as the traditional way of design *opposes* the project to the events, trying to force them to become consistent with it: for example, by trying to convince the others (i. e. the client or public opinion) of the goodness and beauty of the project, or to find the normative way for making it real. Quite the opposite, the propensity is free from any moral or qualitative character: it is the best *future of the present* just because it has the highest possibility to become a *present of the future*, and *that* is its positive quality. This (plausible) propensity may change at any moment, so the project, too, must evolve, reducing the irritations of the system as much as possible. Thus, exploiting the potential emerging at any moment requires to *continuously* adapt the project (De Rossi and Deregibus, 2020), using the unexpected changes *for* and *with* it (Hill, 2012; p. 25), instead of suffering them. Therefore, for exploiting the potential, we need to overcome the limitation of modelling, or rather, to use models exclusively for their *contingent* usefulness (Deregibus, 2020a), avoiding any prescriptive lust.

Moreover, as unexpected involves both the designer and the other actors, it is possible to imagine that adapting the project may *reinforce* the project (for the designer) precisely by embedding the unexpected as soon as possible, thus being always ahead of others. A continuous move up which would minimise what Oki Enkichi called “waves”, or the consequences of the frictions between the plan and the real. Then, the project may be continuously calibrated also for influencing the others, thus orienting the process toward a preferred result (Deregibus and Giustiniano, 2019). Hence, the *efficacy* of the project tends to a very peculiar idea of operational *efficiency* (Jullien, 2004, p. 120). The project then becomes a tactical tool for implementing subtle, yet effective actions (Chia, 2014) toward a result which should be *conjectured*, but not fixedly *decided* – and this requires to abstain from the compulsive fascination that all architects have for their own proposals. This is especially true for complex transformations of urban space or similar, where many actors are stakeholders, and the architectural proposals risk to be reduced to their aesthetic character (De Rossi & Deregibus, 2020) – which is essential, but unable to orient the whole process, as too many examples clearly show. Quite the opposite, an adaptive project permits to sense the evolution of the contingency by a continuous orientation of the actors and factors influencing it, so that the future it will produce will be *ontologically unexpected, yet natural*.

Conclusions

Going beyond predictive illusions asks for a considerable change in architectural design, requiring to turn the step-driven traditional project into a continuous tactical practice. It's quite a new approach that enhances the strategic potentiality of architectural design: or rather, its (potential) ability to orient processes by working on space. The possible reward of such change is the capability of greatly influencing transformations, finally stopping the typical lamenting of architects – «they modified my wonderful project!» – and turning the strongest (and invincible) enemy of the project – the unexpected – into its strongest ally.

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01. Living on the periphery of time. Claudio Zanirato, Novoli District (Florence), 2019, property of the author.

Communications and global peripherals

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Keywords: City, Transformations, Suburbs, Communications, Atopy,

Abstract

The current pandemic situation has led many to the widespread condition of the peripheries and also to the marginalization and lack of communication that distinguishes them, exasperated by new technologies. All this in the era already characterized by the progressive loss of definition of things, by perceptual contamination, by mechanical concreteness replaced by electronic intangibility and, finally, now also by social distancing. And “the inability to access telematic space is the condition for the establishment of new forms of marginalization, of a periphery that is no longer located along the urban limits but is located everywhere” (Virilio, 1988, p. 19).

The acceleration caused by the telematic-tertiary revolution already underway, promoting home teleworking and decentralization, at the same time leads to indiscriminate consumption of the territory and a growing impulse to the “urban hermitage”. Electronic technology is altering the concept of limit and now no one can consider themselves isolated from a physical obstacle or from too long distances of time, thanks to the interface of monitors and networks.

In this perspective, the symbolic order of the city is embodied by the neo-Enlightenment model of the wired city, a reflection of the apparently hierarchical world of information technology, represented as a network that reaches everyone, in the form of collective intelligence, where the prevailing bargaining chips it is knowledge. The meeting, the living, are not the very essence of the city, but the exclusive human accessibility to things, people, information, to which the form of transport / communication available is at the service. The latter tend to progressively free people from the need to concentrate in limited spaces, thus favoring the “physical distancing” and the affirmation of the peripheries.

Communicating versus meeting

Urban areas are increasingly inhabited by people who tend to dialogue with the outside world, even remote, rather than with neighboring citizens, producing widespread segregation. This is a form of home atopy, where the neighbor is discredited to the advantage of the distant, which leads to a crisis in the neighborhood, replaced by a presence-absence.

With the establishment of a virtual culture, our reference context tends to be time, the way to transmit and disseminate information, rather than the place where we live. In practice, *“the depth of time supplants the ancient depth of field of topology”* (Virilio, 1988, p. 31).

Thus it happens that the traditional networks of physical communication, inherent in the existence of centers of radiation of political and cultural power, of clots of economic and social relations (essentially points capable of establishing hierarchies of relational values, capable of conditioning the location choices based on the spatial and temporal distances of connection), immaterial networks have overlapped, with virtual paths and fictitious nodes, and some cities are already beginning to lose power, because they are cut off from these new logical dispositions. The progressive space-time condensation, induced by the latest communication systems, increasingly in real time, cancels the distances of the past and with this the weight of many cities.

The communication systems are aimed at expanding space and contracting time, tending to zero out space as a function of (real) time. Global communication, allowed by pervasive telematics, inevitably leads to the loss of reference to the places and forms of architecture that distinguish them, since the physical place becomes independent of the possibility of communicating, which instead originated cities (Indovina, 2017).

Since transmission supplants the population of space, inertia tends to replace the old sedentary lifestyle, the persistence of urban sites, in citizens for whom the freedom to come and go is replaced by the home reception of everything. The contemporary city thus tends to simply reduce itself to an information and communication system, ceasing to be a place of protection, becoming a communication, dislocation and transmission apparatus. The freedom conquered by the constraints of distance makes the model centered on material translations useless, undermined by a universe of information.

The city in which we find ourselves suddenly is no longer crossed by its citizens, but enters their homes directly through the media, which provide a virtual knowledge of it: it is the city that invades the home while it invades the territory, it is the city seen as a place of representation of itself. With the use of instant means of communication and drones, *“arrival supplants departure, everything arrives without having to leave”* (Virilio, 1988, p. 12) and therefore no longer the traditional spatial oppositions between citizens and non-citizens. It is the city that invades the home with new technologies, while the city as an exterior is running out, as a public space of life and urban activities are relocating according to invisible rules (Pisano, 2018).

What the city gave exclusively as a potential for meeting, social exchange, learning and comparison, the “square” in short, today is surrogately given by an antenna, a telephone terminal. The physical contiguity of city settlements, the *“massive proximity of the history of the population of space and the occupation of territories”* (Virilio, 1988, p. 59) is today in open conflict with the new telecommunications properties and is seriously risking to succumb.

In practice, *“the (bad) futurism of speed, of travel, of mass-in-motion, gives way to the”* contemplation *“of a space where expansion and contraction coincide, where the maximum temporal expansion can be made to coincide with the complete immobility”* (Gacciari, 1986, p. 15) (fig. 01).

An enzymatic action

The methods activated to deal with the latest epidemic have accentuated the concept of settlement / housing isotropy, demonstrating all the potential of this model already in place, contributing to its implicit strengthening as an unexpected enzyme.

Ultimately, the territorial settlement relationship and the known habitual urban values, the methods of transporting things and people according to individual and collective needs, the value assigned to space and with this the dynamics that govern cities, are radically changing, it is increasingly useful to imagine new transformative scenarios to be proposed and controlled as they become, especially for existing and historicized cities, which are more difficult to adapt.

The consolidation of transport and communication systems increasingly over the air and less overland, in fact, allow us to glimpse a revision (a desirable liberation) of the use of soils, together with a spatial rarefaction of the settlement compactness, as we have seen, not more in need of centralization. Therefore, networked or dedicated interconnections and 'on demand' public and private transport modes tend to prevail over local interdependencies, as traditional founding factors for urban development, no longer as communities with a limited territorial base (Benevolo, 2011).

Transmission / expedition supplants the populating of space, with a new sedentary lifestyle that limits direct physical relationships, especially of people, but increases in an inversely proportional way that of things and goods (Oberti, Préteceille, 2017). Basically, the type of vehicles that move around the city and the reasons for these movements are changing, and not the number of flows themselves: fewer people but more goods, fewer direct contacts and more remote communications.

The freedom acquired by the constraints of distance makes the model centered on material translations (based on urbanism) useless, undermined by an increasingly widespread universe of information and accessibility (Indovina, 2017). There is less and less need to 'go' to the city, since more and more often it is the city itself that 'reaches' anyone and everywhere, thus canceling the concept of suburbs because it has conquered the center, first with the shopping centers and then with the internet.

The unpredictable successes of individual mobility, instant telecommunication systems, teleworking, the decrease in production and the internationalization of distribution, have therefore favored the dissolution of the strategic role of cities, traditionally formed on the concepts of accessibility, proximity and variety of goods and services concentrated therein.

Conclusions

Instant and global forms of communication, drastically reducing the friction of distance, also attenuate the principle of centrality on which the urban order is mainly based (Benevolo, 2011). It follows that the means of communication that we are employing even forcibly manage, rather than transporting their users, to out-of-phase them with their immediate environment.

We have discovered in these months of forced confinement that much of the frenetic movement, which has suffocated the cities and extended territories in recent times, is perhaps superfluous, not entirely necessary and it can be done in large part at least, that the technologies we already they can help us live better, if they are oriented to assist us closely. Therefore, a hypothesis of a more "static" and egalitarian city is emerging, where people will move less and goods and things will have to find their own alternative ways to reach us.



Much of the man-made scenario, for more than a century, has been aimed at making people move faster and faster, above all independently, with roads, parking lots, service stations distributed in a capillary manner and large land consumption: now, this model of development will have to be re-oriented to serve people who have discovered that they can move much less and in other ways. The city can be reborn by reversing the suffocation factor and the frenzy of the recent era, gaining spaces already present but used for other reasons, for the new modes of exchange and corridors dedicated to new intelligent vehicles. The movement in the city, in practice, will necessarily have to be less than people and more than things, and this will lead to greater uniformity of citizenship with a widespread “peripherization” (fig. 02).

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Adapting to crises: windows of opportunity and paths of transformation for cities in Covid-19 times

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Keywords: Covid-19, Urban Form, Urban Design, Adaptation, Cities

Abstract

The attempt of cities to adapt in response to Covid-19 impacts on health, economy and society is quickly changing the way we use public spaces all over the world. Facing the necessity to maintain social distancing and providing safer public space in dense urban agglomerations, current models of development and urban form have been questioned. New models are increasingly being investigated and proposed as alternatives to live in dense cities, while phenomena of migration toward inner areas and minor urban settlements are happening worldwide. The Covid-19 pandemic will hardly affect the form of the urban environment; rather, in reshaping and rebalancing the social, economic and spatial relations in response to the pandemic, it will change the social and economic interdependencies and relationships both among and within cities. This paper investigates the role of density and connectivity in the spread of the pandemic across the globe and looks at the current strategies to define challenges and explore possible future trajectories for cities in the light of the impacts of Covid-19 on cities and the transformation of our daily routine and the emergence of new needs within urban environments.

Introduction

On the 8th December 2019, a resident of Wuhan City, in the province of Hubei, China, is found to have symptoms of an unknown pneumonia. One month after, the first death was reported in China. That was the beginning of a global pandemic that would have changed the whole planet as we know it.

Briskly, the Coronavirus disease 2019 (better known as Covid-19) travelled around the world, resulting in more than 18 million confirmed cases across 188 countries, and almost 700,000 deaths to the third of August 2020¹.

Since then, local, regional and national authorities have been deploying a wide range of measures and strategies to minimize the pressure on healthcare infrastructure and mitigate impacts on society and economy. Regional and national lockdown measures have been implemented all over the world as an initial response. Workplaces, schools, universities were closed; public events cancelled; restriction measures on gathering size were adopted; public transport was closed and internal and international movement of people was limited; in some cases, like in Wuhan and Italy, requirements to stay at home were implemented.

Impacts on urban economies were heavy. Tourism, culture and local activities are still suffering substantial losses. Sectors such as education and the creative industry shifted online, paving the way for novel work- and lifestyles supported by the digital infrastructure.

In a subsequent phase, cities started to rethink their public spaces to accommodate the restrictions imposed by the virus, mainly intervening on the redesign of public transport and streetscapes.

Such measures and solutions are heavily impacting the geography of cities, on different scales. On a global level, urban megaregions appear to be losing their appeal, suddenly becoming “places of terror” (Rossolatos, 2020). Urban dwellers tried to escape big and dense cities to seek shelter in more remote and perceived as safer areas, which in turn suddenly regained appeal.

At the urban scale, temporary adaptive solutions aiming at providing safer spaces to cope with the new constraints posed by the virus are deployed and experimented all over the planet.

On the scale of the individual, the restriction on public space access and the consolidation of digital infrastructure and platforms are shaping new relationships between cities and dwellers, opening up to a ‘new normality’ made of remote working, studying, and leisure activities. Even though it is still hard to predict what are the long-term spatial implications of the pandemic on the urban environment, both spontaneous and more regulated patterns are emerging, shedding light on novel ways of living in and experiencing cities, providing interesting clues on how the latter will likely transform in the future.

This poses questions on the role that urban design can play in looking for synergies between short-term solutions needed to cope with the socio-economic impacts of the pandemic and those aiming for a long-term sustainable urban development; at the same time, this opens to multiple challenges that must be tackled in the light of this unexpected transformation.

This contribution presents a brief overview on urban form factors that have been discussed in relation to the Covid-19 pandemic and design solutions deployed to cope with it, looking at the on-going processes to trace a possible future development of urban environments in the post-Covid era.

A geography of the global pandemic

Since the beginning of the pandemic, cities have been at the center of the debate in the attempt of understanding what is the role they play in the spread of the Coronavirus.

Worldwide, major urban agglomerations have been hotspots of Covid-19 infections, due to the

concentration of population and economic activities, and the high level of connectedness at both the regional and global scale.

Main studies are focusing on the investigation of the mutual interplay between environmental factors and the spread of the virus (Zambrano-Monserrate, *et al.*, 2020; Liu *et al.*, 2020; Bashir *et al.*, 2020), the impact of the pandemic on economy and society (Wells *et al.*, 2020; Wade, 2020), and on management and governance of the pandemic (Duggal, 2020).

A smaller branch of research has focused on urban design and the interdependencies of urban form and pandemic, (Sharifi & Khavarian-Garmsir, 2020), investigating the role of factors such as density and connectivity (Hamidi *et al.*, 2020) at different scales. Other studies focusing on urban design highlight the opportunities in deploying green strategies to achieve additional co-benefits and enhance urban resilience (Sharifi, 2019).

At the beginning of the pandemic, many scholars addressed urban density as one of the main factors of vulnerability. The advent of the pandemic raised questions on such a development model, but until today reported evidence on the relationship between density and Covid-19 is contrasting.

The compactness of cities has several advantages: it helps preserve green areas from being urbanized, offers opportunities for social interaction, innovation and greater economic productivity, and reducing human pressure on the environment.

Density constitutes the prerequisite for more frequent and closer contacts and interactions among residents, thus increasing the occasions for the rapid spreading of viruses. On the other hand, denser urban areas provide better services and governance structures to mitigate and respond to pandemics.

Density is directly related to the connectivity of urban systems. Urbanisation itself is the tangible outcome of agglomeration, spatial concentration and densification processes of these flows, which materialize through fast changes of density of urban population and land use (Harvey, 1996).

The world has never been connected as today is. Over time, man has built a thicker and thicker infrastructural web to facilitate the flow and exchange of people, goods and information all over the planet, supported by economic structures that encouraged such a growth model (Bélanger, 2009). In this perspective, cities are the key physical nodes of a planetary web, and their success or failure in attracting dwellers, economies and innovation depends on their connectedness (Khanna, 2016), whether it be physical or digital.

The rate of expansion of cities goes hand in hand with their advancement in technology and investment in infrastructure. The fast development of roads, railroads and airports led over time to the “explosion of the city”, resulting in several side-effects at different spatial scales. On the global scale, urban regions have become highly interconnected economic and transportation hubs, and this process of infrastructural development gave birth to a planetary urbanisation (Lefebvre & Bononno; 2003 Brenner, 2013) that rendered the concept of spatial proximity obsolete.

Such premises represented the reason why the virus spread at a breakneck velocity all over the world. Wuhan is the seventh-largest city in China², with 8.5 million people and one of China's most important transportation hubs, where the country's east-west and north-south transport corridors converge.

From Wuhan, the virus travelled westward reaching central Europe, landing in large and well connected metropolitan areas and quickly spreading all over the countries, such as it happened in France, Spain, and the Northern part of Italy, specifically the Lombardia Region.

Somehow, globally interconnected cities served for the virus as hubs for the spreading at the regional and national level, supported by social, economic, and commuting relationships. On the other hand, digital connectivity provided the tools for continuing with business-as-usual activities, limiting the economic impact of Covid-19 and acting as a surrogate for social interactions. In this forced condition of isolation, the digital world served as a 'new space' for human relationships, redefining the role of public space and ultimately the concept of quality of life in urban environments.

Pandemic as a trigger for a different urbanisation

According to the economic historian Walter Scheidel (2017), a pandemic is one of the only four events capable of bringing about greater equality, alongside war, state collapse, and revolution. Even though it is arguable whether this is true or not, it is undeniable that the attempt of urban systems to cope with and adapt to the coronavirus are modifying their own essence. Such a response can be interpreted as a degree of resilience of cities as complex socio-ecological systems. In this sense, cities are dynamic systems characterized by structures and processes that happen at multiple levels of organisation and different spatio-temporal scales (Nijhuis & Jauslin, 2015), the very nature of which can change over time due to an external disturbance (Scheffer, 2009, Davoudi *et al.*, 2012), and will hardly return to a state perceived as "normal" (Carpenter, Westley, & Turner, 2005).

In this perspective, a pandemic acts as a trigger that activates a trickle-down effect that can alter both urban processes and structures at different scales. Covid-19 had a huge impact on how we perceive and deal with our basic needs, and to which extent cities and public spaces can meet them.

In the light of the Coronavirus pandemic, responses began as spontaneous reactions, up to the adoption of temporal measures, policies and design of temporary solutions to cope with the emerging new conditions. This transformation process is dramatically altering the physical structure and the social interactions taking place in urban environments, resulting in a structural change that can become something radically new and far different from the original state (Kinzig *et al.*, 2006).

In the short term, alongside the impact that the coronavirus emergency is generating worldwide in terms of massive health crisis and economic issues, two major trends involving cities are consistently emerging: one is related to the attempt of cities to reinvent themselves, adapting their public spaces to the new conditions; the second is the migration (or the counter-migration, in the case of Italy, for instance) of urban dwellers toward places perceived as safer from the pandemic.

Regarding the first trend, metropolitan areas worldwide are increasingly shifting toward a greener and more sustainable mobility. This is the case of Paris, in which 50 kilometres of *coronapistes* have been added to accommodate the increasing demand in response to the pandemic³, or Bogota, Colombia, where more than 75 kilometres of temporary cycle lanes popped up to reduce traffic congestion and improve air quality⁴. Proposing and implementing bike transportation systems seems to be a valid alternative that can be effective in the long-term to reduce crowding on public transport and simultaneously have positive impacts on air pollution. At the same time, strategies hinged on getting pushing outwards cars far from cities create opportunities for providing more open streets to overcome issues related to density. New York experimented the opening of 160 kilometres of "open streets" to mitigate crowding in urban parks, for pedestrians and cyclists to use streets while maintaining social distances⁵,

expanding outdoor seating options for restaurants and food establishments and providing more playground areas. Such initiatives aiming at the pedestrianization of streets are happening in European cities too, such as Rotterdam, Milan, and Vilnius. The latter has been transformed into an open-air café⁶ making use of plazas, squares and streets, as well as abandoned and underused places, that have been transformed into drive-in movie theatres. Interestingly to note, such initiatives in the Lithuanian capital were already planned for 2021, but somehow the Covid-19 pandemic acted as an accelerator of this process of greening the city. If this seems to be an effective measure to reshape spatial interactions in dense cities, it doesn't represent a viable alternative in minor urban settlements, due to the lack of infrastructure and their being more car-dependent.

Migration from most affected metropolitan areas to smaller cities and suburban areas is happening all over the western world. In Italy, the leak of information on the decree that closed the border of the Lombardia Region resulted in a panicked exodus that was actually the tip of the iceberg of a getaway process started weeks before. Suddenly, people flee back to the South of Italy (in particular to Campania, Sicily and Apulia⁷ regions) which has historically a poor economy and lacks adequate public services compared to the northern counterpart of the country. In the United States, similar migration trends are happening, with people moving to places like Pittsburgh. Such places are still able to provide a sense of urban life, and are characterized by a cheaper cost of living than metropolitan areas like Milan or New York.

This has been possible because of digital infrastructure. As the pandemic forced people to avoid workplaces, smart working measures such as remote working and other flexible forms of work organisation have been adopted in those productive sectors that allowed it, thanks to the presence of online platforms for co-working and video communications. This sudden shift to digital seems to be becoming the new normal, as working life has entered a new era. In Italy, this resulted in the rise of a new movement called South Working⁸. Formed by young professionals, managers and academics, this movement sees in smart working an opportunity to reduce the economic, social and territorial disparities in the Italian country. However, to which extent smaller and less equipped municipalities will be able to retain these novel dwellers stands up to scrutiny: this represents a full-fledged challenge to transform an unprecedented global tragedy into an opportunity for developing more equitable and sustainable cities, especially in those contexts that are less impacted by uncontrolled urbanisation and pollution issues and present relatively virgin natural assets.

Green recovery is one of the major trends in addressing the Covid-19 pandemic consequences. However, the effective deployment of such strategies can be slowed down due to the substantial economic losses that local administrations will likely experience in the coming years. In the attempt of local administrations to recover from the consequences of the pandemic, investments aiming at enhancing social, environmental and public space qualities will likely be postponed (Kunzmann, 2020), as well as initiatives to enhance both physical and digital infrastructure. This calls for strategic long-term planning that looks at both natural and urban features of cities at different scales, and green and smart renewal actions.

Conclusions

Throughout history, pandemics have proved to be one of the extraordinary events that can spawn a cascade effect, altering urban settlements profoundly and bringing about different – and sometimes better – ways of living, moving and working in our cities. The Covid-19 pandemic will likely have the same impact on cities, acting as an accelerator of those transforma-

tion processes aiming for greener and more sustainable urban environments, and creating new opportunities for less economically developed areas. Even though it is still hard to predict to which extent this pandemic will transform urban settlements in the long run, some already on-going processes of adaptation in response to it are likely to become permanent and can serve as hints for investigating possible future developments.

Despite the social and economic crisis that cities are – or will – experience, a potential for a more balanced distribution of economies and people between denser and more populated regions and more remote areas is rising. Such reshaping of socio-economic interdependencies on a global scale can provide a new impetus for minor urban areas and regions for a systemic recovering phase strategy, leveraging on the population that found shelter in them.

The perception of risk associated with density has led to a progressive abandonment of dense urban areas. However, the latter doesn't have a direct correlation with the vulnerability to Covid-19, and shouldn't be questioned as a tool for aiming at sustainable urban development. Densification strategies shouldn't be discharged in the light of Covid-19 impacts. It still remains the most valuable strategy to mitigate urban footprint on the environment and pursue sustainable development aiming at energy efficiency and reducing further soil consumption. In this sense, urban greening strategies, alongside the transition toward integrated and 'softer' forms of mobility can support the provision of safer spaces meeting the requirements for social distancing. At the same time, they will keep supporting the reduction of emissions in urban areas, mitigating pollution and providing a better quality of life.

On the other hand, connectivity plays a more prominent role in the spreading of the pandemic, both at the global and local scales, and investments should be addressed toward the enhancement of both physical and digital accessibility to key services to tackle social and economic disparities.

The way the economic crisis consequent to the pandemic will be handled will be crucial for the future of cities. This is particularly true for minor and more remote settlements, that are confronting with an opportunity to be more competitive and attractive. They have a hard road to go, but can leverage on fresh demand for services coming by the new dwellers to compete against more developed areas. In this sense, addressing accessibility and quality of public space and deploying smart strategies will be pivotal to enter the post-Covid era.

Notes

1. Data retrieved from <https://coronavirus.jhu.edu/map.html> (Accessed on 03rd August 2020).
2. Information retrieved from <https://www.visualcapitalist.com/chinas-113-cities-one-million-people-population/>, (Accessed on 03rd August 2020).
3. https://www.france24.com/en/20200616-coronavirus-fears-spark-bicycle-frenzy-in-post-lockdown-paris;http://carte.velo-iledefrance.fr/#map=11/48.8195/2.3497/OSM_Piano-Pistes_cyclables-Principaux_axes_cyclables-Pistes_cyclables_temporaires_en_projet-Pistes_cyclables_temporaires (Accessed on 03rd August 2020).
4. <https://www.uci.org/news/2020/pop-up-bike-lanes-a-rapidly-growing-transport-solution-prompted-by-coronavirus-pandemic> (Accessed on 03rd August 2020).
5. <https://www1.nyc.gov/html/dot/html/pedestrians/openstreets.shtml> (Accessed on 03rd August 2020).
6. <https://www.theatlantic.com/international/archive/2020/06/coronavirus-pandemic-urban-suburbs-cities/612760/> (Accessed on 03rd August 2020).
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01. The Desert, Fabrizio Ferraro, 2020, Roma, courtesy of the author.

Desert City - Shelter City

Possible scenarios in the unidentified space of cities suspended by unexpected events

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Keywords: City desert, City shelter, Refuge, Unexpected scenarios

Abstract

The contemporary city is a reality full of contradictions. It is a multiple and changeable artificial space that shows opposite conditions, Unexpected occasions. Starting from the idea of the city as a place of life, this essay intends to reflect on the condition of crisis that our urban organisms are going through, highlighting its limits and potential. The recent Covid-19 pandemic has helped to re-emerge latent problems and re-consider new ones: with greater awareness, it is perhaps possible to transform our historical moment into an opportunity to identify the limits of planning and incorrect habits and, finally, find new ideas for the city of the future.

Introduction

“As a remedy to life in society I would suggest the big city. Nowadays, it is the only desert within our means” (Camus, 1978, p. 176); today the city appears as the only desert in which contemporary people may – according to Camus – live or survive (fig. 01). The ambivalent feeling that assails the French writer refers to the centripetal and centrifugal aspects of the contemporary metropolis studied by urban planners, geographers, historians, philosophers, and anthropologists. It is the contradiction that the contemporary city lives; a place of encounter and at the same time of escape, a *detritorializing territory*⁴ guilty of the incompleteness of sociality itself. From the *home of humankind*, the twentieth-century city quickly transforms itself into a metropolis, “it dismembers, struck by the excesses that urbanization and industrialization impose and takes on the forms suggested by the disturbing figures of the forest and the labyrinth” (Giordano, 2013, p. 55).

Rosario Assunto identifies the era that the city is experiencing in the syndrome of “*dry pustules*” (1983, p. 16); thus, it is as if the fight against inequality in the modern world has led to a leveling and annihilation of the differences that make the skyscrapers of *Gallipoli* equal to those of *Hong Kong* or, even more, that makes the two cities an expression of the same homogeneous culture. In addition, we may consider that “*the reduction of places to pure and simple space has been reached, which in turn corresponds to the reduction of language to pure and simple sign*” (Assunto, 1983, p. 16).

Nowadays the contemporary city appears – in an emergency context – deprived, or dispossessed, of everything that should make it welcoming such as a dilated space of the house and place of social interactions; these lacks are the artificial deserts that we have unconsciously created.

In this context and historical period, digitization has represented the *final act* of a path that has led physical space to experience a moment of profound crisis, in which the *presence* has lost *its substance* and where we are at the same time in the same space leading to experience intimacy and social relations in *separate rooms* (Tondelli, 1989).

Despite the ongoing crisis, the city continues to be a *refuge*, a symbol of civilization, an emblem of progress and technical-technological innovation, a creative forge ready to solve even the problems created by the society itself. Precisely the recent global pandemic, which reduced to *anonymous spaces* the interaction and living *locis* as the squares, and streets, has shown at the same time the limits of a generalized desire to return to live the urban space.

During the Covid-19 epidemic, technology represented the *element of contact* with the outside world, and along with the denied urban space, it recalled and pointed out the inadequacy of urban areas in a time of crisis and emergency. Therefore, we find ourselves in a controversial dynamic of opposites that represents a basis for thinking on the possible ways of experiencing the city of the future.

Identified Cities

In this essay, we investigate how the city is represented in time, considering it as a set of objects and people, and then focusing on the *Covid Era*.

The subject has illustrious precedents as in the *Universal Encyclopedia of Art* (Astengo, 1966) in which the main definitions about the city are collected, highlighting as well as the evolution of role and meaning that has been attributed to it over time and it finally reaches the impossibility of giving a final definition of an organism – as result of social, historical, anthropological and economic dynamics – in continuous transformation. The city, a complex organism, is, as expressed above, in constant contradiction with itself, and contains *multitudes* (Whitman, 1892, part 51), therefore it is a *living machine* which is in continuous transformation, in symbi-



osis with its inhabitants, in a perpetual motion; depending on the services and evolutions it offers it can locate, relocate, displace, and desertify itself.

This complexity can be found in the etymology of the word “city”: according to Massimo Cacciari (2004) the city is not identifiable in a univocally defined urban or social construct, a city in fact refers to words such as the Greek *pólis* or the Latin *civitas*. While the first indicates the place where a lineage lives and therefore a place of strong roots of a family, the Roman *civitas* is made up of the *cives*, a group of citizens who have gathered to give life to the city. The Roman civilization places as a prerequisite for its cities the association of people under common laws beyond an ethnic or religious determination. The Greek world was characterized by eternal conflicts between *polis* aimed at preserving the individual identities, and the perfect dimension that surrounds the agora. The Roman civilization – on the contrary – lived through its entire reign trying to unify the known world by crossing the borders to acquire a global dimension: it could be the first form of globalization.

Unidentified cities

The contemporary city contains aspects derived from both the urban and cultural models described above; although the connection to the Roman *civitas* in terms of size, conformation, and structure is clear, it is equally true that the idea of the city of each inhabitant refers to the safe and defined dimension sought by the Greek *polis*. The same *dreamlike* dimension that L. Mumford (1961, p. 15) identifies in the city-village relationship: according to the urban planner the city borrows its values from the village, aspiring to a form capable of welcoming and forming relationships, seeking her maternal and community meaning. The lost dimension of the contemporary city is precisely this: the urbanized territory now shapeless and devoid of *de-lirious* margins² has lost the ability to create places full of that comfort, as G. Ponti recalls³, and is no longer able to make its inhabitants feel at home.

The abandonment of historic centers, the phenomena of gentrification, depopulation, and the proliferation (sprawl) of marginal areas - such as urban suburbs - are the manifestation of the *disease* of the contemporary city: an organism increasingly dedicated to the laws of the market (La Cecla, 2008) and characterized by the absence of social exchanges, transformed into a space of individualism and isolation (fig. 02) rather than a place for inclusion and sharing.

Some brief notes for a better understanding of this last subject - vast and of national interest - can be found, for example, both in the vision of the Community of A. Olivetti and in the recent verses of the landscape scientist and poet F. Arminio (2020): “*If Italy regenerates its countries, it will also benefit the cities, which are too congested*”. In this regard, it would be appropriate to recover that vision of new territory as a whole system made of man and earth, the *habitat* of human life, a larger and more naturalized space than the metropolis, capable of re-establishing a network between major and minor abandoned centers.

Therefore, the limits, accumulated, forgotten, and omitted of the metropolis driven by the excess of technology, are today *out of control*. As Baumann (2014, p. 89) recalls, from the sociological point of view we are witnessing, once again, a visceral ambivalence; on the one hand the desire to repopulate the deserted places, on the other, as the author states, the total closure of the individual from the unexpected, the uncertainty of the *real*.

Unexpected deserts

The gathering space in the contemporary city, which transcends the idea of the “square” and

often finds its *soul* in shopping centers, deserts itself in an ambivalent, ambiguous, and sometimes alienating way.

During the evolution of the Covid-19 pandemic, the collective place has unexpectedly become a space of isolation and at the same time, a space to escape from; unexpected is the fact that the city itself, from a place where one moves in for a *better living*, as an emblem of modernity and possibility, has become a place to escape from, due to the virus.

It is also unexpected that the public space, a place created to be fully lived, is now empty in assonance with its loss (temporary and/or permanent) of sense, meaning, and identity; an urban place without people is an empty box, an unused object; La Cecla (2008) states that cities have in common a “collective unconscious” and the open public space is the place where the senses of *belonging* are acting, and where identities conflict; we may consider it (the public space) as a *tool* to intervene in the city and reverse the trend of urban desertification. Therefore it is important to value the street as a space, a meeting place, and a passage, to enhance connections, and interactions holding the right to meet and be present in the community. The street and the square are exterior areas to *live in*, to be *taken care of*, a place that the contemporary designer must think and rethink as a *comfortable* space, a resource for the community, and a *home* for citizens. Art often manages to anticipate the needs of the city and in this regard, we can mention the experiments of U. La Pietra (1970) who thought of the street as an extension of the internal space:

I remember that in my country, as in many southern countries, many individuals and collective daily domestic practices were carried out on the street. The street was a space conceived as a natural expansion of the private space, as a space favorable to meeting and dialogue between citizens. [...] The house in the street or the street in the house: here is a design practice to be developed (La Pietra, 1970, p. 174).

The spontaneous actions of the inhabitants often unconsciously hold this need and desire for re-appropriation of urban space, showing the discomfort created by careless planning, and often creating temporary solutions rich in imagination and meaning. Simple gestures are almost always enough: a flower, a seat, an old sofa left outside, a few cans of paint, restore life to the open spaces of the city; those are the same attention given to an old room in a house that has no longer been *taken care of*.

Spontaneous or combined actions such as the *Imaginary square* in Prato, *Restart* in L'Aquila, or the numerous examples of *street art* created on the shutters of Mazara del Vallo which, combined with the majolicas designed by the municipal administration, have managed to tell the *two souls* of the city. Hanging curtains, unexpected vases, hand-painted ceramics remind the city anecdotes and epithets, thus showing the *casbah* and the entirety of the town of Mazara; these *tactical* interventions transform a simple walk in a *deserted historic center* unique: the great value of these interventions lies not in the use of precious materials, famous artists or architects, but in the response to the needs of citizens and users (fig. 03). This is the keystone that planning tools and projects must recover by thinking about the post-traumatic urban space.

Nowadays the idea of stopping, of aggregation has been lost and has been transformed into a concept linked only to the laws of the market (La Cecla, 2008); on the other hand, recalling Baumann's words, technology, which had a negative pre-covid role, was able to re-act as a bridge and *filter* during a health emergency, for a virtual and real return to the urban space that will remain contingent for some time. Therefore, we are witnessing the *vendetta of the pub-*



lic space that aims to create, through the planning of the city of the future, new unexpected spaces and, accordingly, it was also shown by the technology that this space had denied. However technology, combined with the lack of a physical place, has generated the desire/obsession to experience urban spaces more; during the pandemic and the various changes of freedom of movement (yellow, orange, and red zones), some spaces have evolved and adapted with the needs of the population, others did not; on the latter, it is necessary to work in concert with professionals, administrations, and stakeholders.

Conclusion - Suspended shelters

Even in these conditions - due not only to the emergency state of the pandemic - spaces have become inadequate for the needs of a *caged* population; public space is missing; habits, *routines*, repetitions of our social and community lives have been faulted, identities have temporarily deserted, all united by a single denominator: *Time*.

Human time does not rotate in a circle but moves fast in a straight line. This is why man cannot be happy because happiness is a desire for repetition (Kundera, 1989).

The timeless landscape, therefore, becomes suspended; suspended between the potentialities that can be carried out in it by citizens and, at the same time, suspended by the negation of the same. The unexpected situation brought upon us by the pandemic has certainly decreed an introspection not only of the citizen but also of all the architectural theory and practice that has found itself having to face new possible urbanities, new questions, and possible solutions to which only the time may bring the necessary wisdom for a choice suitable for this or future situations; starting from natural disasters to those created by man that destabilize the delicate but complex human and urban system, we are looking - hopefully - to prefer a shelter city to a deserted town.

Notes

1. One of the nerve centers of the contemporary metropolis seems to be precisely that of not being able to produce more *territories*, or *places*, spaces that, even if created by a transformation or a trauma-transformation event, can contain that spirit of the place proper to the city. With regard to these issues, see Deleuze and Guattari's *Thousand Plans*, M. Augé's theory of *non-place* and the concept of the *Spirit of the place* expressed by N. Schulz.
2. *Delirium* derives from the Latin and is the composition of *lyre*, limit or border, with the particle *de*, which indicates distancing.
3. In the first issue of the editorial of *Domus* Giò Ponti replaces the term *comfort*, an essential requirement of the modern home, with the term *comfort*, an intimate and welcoming requirement to be sought and created in the Italian home, that sense of connection with nature surrounding that benefits the spirit. It was therefore intended to extend this relationship between inhabitant and inhabited to the city, a place of shared life that relates to nature and territory and which should equally be the seat of the body and spirit of the community.

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01. La strada entra nella casa. Umberto Boccioni, Sprengel Museum (Hannover) 1911. CC0 Public Domain.

Hanging spaces

A dialogue between domestic and urban space

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Keywords: High density, Inward-outward, Hanging spaces, Social interaction

Abstract

The contemporary urban model, globally spread and characterized by a high housing density, from different perspectives is considered more “sustainable”, and therefore to be pursued, compared to an extensive development connected to low-density urban development ideologies. Indeed, phenomena such as urban sprawl become degenerations of an urban model that cannot be controlled and defined as a whole. High density avoids excessive soil consumption, minimizing the use of the car for travelling, and, consequently, the reduction in the emission of polluting substances. However, the health emergency caused by the Covid-19 pandemic highlighted the shortcomings of a high density settlement morphology. Since social distancing has become part of everyday life, following the health emergency, the most detectable effects are social. On the one hand, if the traditional urban convivial spaces are deserted (going towards an almost total cancellation of physical social relationships) on the other hand we are witnessing a multiplication and explosion of types of urban sociality, developed through new forms of expression and use of spaces. Therefore, this contingent situation offers the possibility to reflect on the role and importance of all those often forgotten spaces. Indeed, they have returned taking a key role within our quarantined lives: balconies, terraces, roofs, landings. Hanging spaces have become elements of sociality, bringing into dialogue a living microcosm with an external macrocosm, currently extraneous and detached. The paper intends to survey projects of the international architectural panorama that have been able to interpret these spaces with a new social vision. This vision does not lead to the oblivium of these relationships’ physical and spatial dimension, but compares them with the new instances, and even emergencies, of the city of the future.

Introduction and Methods

The issue of sustainability has become one of the most important 21st century problems. It has been estimated that within a decade (2030) World's population will be around 8,5 billion and almost 70% of Earth's population will live in cities.

High-density living into urban contexts is considered as the best response to some of the most pressing ecological challenges of the 21st century: a compact city could have effects on reductions in travel distances and vehicle emissions, could be served by a more efficient public transport system and would reduce an alarming sprawl of urbanization on the natural landscape, with a result reduction in the usage of soil. As stated by Sorkin *"the consumption of the world's resources simply cannot continue as its present rate. The answer is density, delineability and difference"* (Sorkin, 2003).

However, despite the undoubted advantages of a high-density model, there are also some critical issues to be considered. Densification could indeed have effects on public health, it is true that *"putting so many people together increases health risks"* (Roaf, 2009), vulnerability and security. It has also effects on living conditions and individuals' perceived comfort and healthcare. Moreover, most of the world's population still dream of their own home in the countryside despite high-density housing models: in this way people search for green settings and country-life.

The global health emergency related to the Coronavirus pandemic has further highlighted the importance of the open space into people's daily life: those who had a private garden have probably lived the experience of lockdown in a way better than those who lived in an apartment, without any private open space. According to these premises, an important question we have to face in both theoretically and practical ways is: how to reconcile a sustainable high-density model and the need of people to have contact with the "outside space", even in an emergency situation like the present one?

The belief behind this work is that a good architectural design could guarantee comfort conditions and a good relation between inward and outward, even in a high-density urbanization model. Particularly, the Covid emergency has underlined the importance of those spaces which work as a sort of "filter" between inside and outside. We have called them "hanging spaces", since we are considering the ones which are not at the ground level of the public street, but they are located at the floor levels of residential buildings: balconies, shared spaces, roofs.

This article aims to give an overview of some projects in which these "hanging spaces" have good quality and could serve as references for future design of high-density cities. Starting from this desire, the research will present some projects, identified because they outline the social spaces as one of the main characteristics of the project, and sometimes they become the identifying element itself.

Starting from the study of these spaces it is in fact possible to outline some best practices in the design development of hanging spaces.

The projects presented, therefore, are not proposed as examples for comparison, but rather as successful experiments, within which it is possible to observe particular attention to the spaces of relationship. The critical analysis of the elements deduced, therefore, aims to trace a possible design trajectory that knows how to combine urban density with social density.

It has to be pointed that the described spaces of the next sections have different levels of privacy: balconies are mostly totally private, shared spaces normally belong to more inhabitants, while roofs are usually common spaces for the whole building. For this reason, "time of usage"

is an important variable to be considered for those spaces which are not private, as shared spaces and roofs (section 3 and section 4). The health emergency has been contained with the method of lockdown, and lockdown is based on social isolation: this means that people have to avoid any form of interaction. So, if we think about these spaces in the perspective of health security, “time of usage” is an important variable to be considered, in order to control any kind of possible social interaction.

Balconies

The following section deals with the first type of hanging spaces, focusing on allowing people to live in relation to the open space. Balconies and terraces can have a high level of private open space, but, in case of isolation, they demonstrated one more important feature: providing each dwelling, or the rooms that compose it, its own suspended space in safety, allowing social interaction between buildings. As it has been experienced during the pandemic, balconies lead greater benefits to users in the relationship with the outside, becoming elements of sociality, though physical distance, through a dialogue of a living comfortable microcosm and the external urban macrocosm.

The selected case studies are an extreme opposite examples of how suspended devices of space can intersect people’s needs and the architectural composition, preventing and safeguarding the primary needs of safety and social distance also during unexpected further lockdowns. In one case, the project is itself a composition of repeated balconies, bonding the function of one dwelling roof with the function of a terrace for the dwelling above. In the second case, the architecture shows an intricate and yet distinguished relationship between the building and its suspended spaces.

The former example is *The Mountain* by Bjarke Ingels Group (BIG), a Copenhagen building completed in 2011. In this case, the project is itself a composition of housing with large, repeated balconies, concatenating the function of one’s dwelling roof with the function of a terrace for the dwelling above. This is the direct consequence of the concept, that uses the required parking area as a heavy base to hang up the dwellings, positioned as a cascade covering the parking. This particular use of balconies for each housing unit has contributed to creating a preferential direction of the project, facing both the needs of sunlight/fresh air and the need for privacy differentiated areas.

The plan perfectly shows how the balcony is shaped into two main spaces, one more private, as an outside extension of each home, and a second one more extroverted, allowing social interaction between inhabitants. It’s possible to notice from the plan, but also from a street-level view, how each of this suspended space is delimited by planters. The presence of a private garden has been a greater benefit for those who had one, for this reason, bringing nature as an architecture component can provide the idea of a proper balcony garden, contributing to emissions reduction also in high-density living areas.

The latter project is *Romainville Marcel Cachin*, by Brenac & Gonzalez & Associés, 2017. In this example a balcony typology variety (bow-window, porches, terraces, and loggias) twirls and plays with the volumes of the architecture. As stated by the architects, these devices’ ideas provide a “fragmentation of built mass [...] also alleviates the perception of density, resulting in quality apartments, with multiple orientations and limited direct views of the opposite neighbours. A feeling of being closed off has been eliminated in favour of the enhancements of framing and views into the distance, now enjoyed by the inhabitants, passersby, and even neighbouring city blocks”. Here, the use of vernacular forms parasitizing the volumes is not



02. The mountain, by BIG. Guillaume Clément, Copenhagen (Denmark), 2007, propret of Guillaume Clément.



03. Evasion, by Brenac&Gonzalez&Associés. Sergio Grazia, Romainville (France), 2017, property of Sergio Grazia.

only a connotation for the elevations; as the architects call them, the “wooden footbridges can be imagined as treehouses”, generating new social dynamics, though providing physical distances, and a closer perception of gardens and common spaces. Furthermore, in this project, through the fragmentation of built mass, new visual connections are provided both for who lives in the apartments, and who passes near the complex, as these devices limit the perception of architecture as a barrier, enhancing, instead, different levels of privacy for users.

Focusing on the particular use of “wooden footbridges”, they can be described as wooden floating parallelepipeds, open-air rooms above the garden area. An iron structure, resembling proper trees, suspends each open-air room, denoting a volumetric animation of the garden. In conclusion, though the former examples show different forms of the same architectural device, both provide not only an interaction between homes and the city thanks to quality outside spaces, they also show the possibility of having a various set of architectural solutions for progressive stages, from high privacy to high socialization, yet distant, spaces.

Shared spaces

The second spatial category analyzed includes landings and servant spaces among houses as possible places for social and relational cohesion in the definition of a new paradigm of living, both in an emergency and normal condition.

This contribution identifies which spatial strategies and typologies were proposed, redefining the role of collective spaces among the houses in which the inhabitants are involved and, in some way, brought to interact; spaces that are defined as social integrators. This great typological variety emerges in the galleries, in the walkways, on the landings, in the loggias so that each element projects its specific articulation on the collective space.

The Celosia residential project by MVRDV and Blanca Lleò built in 2009 and located in Madrid is part of a larger redevelopment program in the metropolitan area. This project refers to the traditional building typology of the courtyard, proposing however a greater opening towards the local context through the insertion of collective spaces on the different levels that are configured as passing elements, cutting the volume and allowing a visual permeability in different directions (fig. 04).

Every house has an additional room, the exterior room as a transition between the house and the patio, conceived as spaces for neighbours enjoyment and social aggregation.

This attention to collective spaces within the housing dimension, which as defined by the designers are elements of “escape”, becomes a leitmotiv in some interventions of the MVRDV studio such as the Mirador. It is also in Madrid, finished in 2005, and it is also part of the redevelopment intervention, re-proposing the same logic of aggregated residential blocks, conceived as micro-neighbourhoods, assembled around “voids” that become the fulcrum for the creation of a vertical community, configuring itself as suspended squares.

The second analyzed project concerns the Shinonome Canal Court residential and office complex (2003) involved several designers including Kengo Kuma, Toyo Ito, Riken Yamamoto among others. Although each of them focused on a single building, the common framework is the centrality of the collective spaces placed among the houses (fig. 05), breaking the limits of individualism, and proposing a paradigm of living different from the metabolist one suggested by Kurokawa based on the capsule.

Here the construction of a multilevel urban space is proposed through the insertion of connections and public paths among the different buildings, these connect the collective spaces, which animate the interior of the building, with the residences and workplaces. On these so-



04. Celosia Residential Project, by MVRDV & Blanca Lleò. Ricardo Espinosa, Madrid (Spain), 2009, property of Ricardo Espinosa.



05. Shinonome Canal Court, Block 1, by Riken Yamamoto. Shunsuke Sasaki, Tokyo (Japan), 2003, property of Shunsuke Sasaki.

cial spaces that characterize the façade, becoming explicit as cuts in the volume on several levels, there are “foyer-rooms” which can be used as small common kindergartens, hobby rooms or coworking.

Servant spaces that through spatial dilatations become elements of social cohesion, densification of neighbourhood relationships, establishing new connections towards the city through the construction of a new paradigm of living according to the paradigm of urbanité.

The purpose of the analysis of these case studies was to identify new possible trajectories of social and spatial relationships within the residential dimension in what could be considered an emergency condition.

These spaces, acting as the first element of a physical and social interface between different homes, located on the same floor or inside the same building, are configured as places necessary for the transposition and construction of a new “urbanité” within the building, proposing a renewed vision and values of living. This notion of Urbanité can be defined as “The reciprocal adjustment of a form of urban fabric and a form of conviviality” (Choay, 1994, pp. 26-35). It is the leitmotiv of social mix, whose urban form is proximity, promoting integration, and public space, in all its forms. The place itself builds relations with the urbanity through reciprocity.

This reflection opens up future scenarios for managing emergencies, as these spaces between homes can be modulated and managed to guarantee the possibility of meeting and socializing in smaller dimensions and becoming the first moment of relationship following a more acute phase of the crisis.

Roofing

The theme of roofing, and thus the management of this space, takes on a series of declination in which the composition and the design could produce a project of sharing spaces, relating the interior spaces with the open/urban space of the city.

The case studies analyzed will present a design perspective of the roofs, observed in their potential to be an elevated ground level of the city, shared by a group of users and synthesis of social and urban dynamics. In this sense, roofs, designed as social spaces, can be defined as fully common spaces, establishing the closest relationship between small communities (referring to individual buildings) and city.

Through the best practices selected it will be possible to notice how the project of shared spaces on the roof can take on further directions and variations, in which the outdoor domestic space can develop further reflections concerning issues such as urban agriculture and the increase of greenery in dense metropolitan areas; answering at the same time to sustainable and social issues, giving a new vision to design building also in a dense context.

The case studies presented show an approach which on one hand develops the theme of the reinterpretation of an existing covering, converting it into a space of relationship; on the other hand, typological research will be presented in various new realizations, where the domestic space is hybridized with a living roof.

The “Garden Among the courtyards” project, developed by the Milanese studio Piuarch in collaboration with Cornelius Gavrill, concerns the redesign of the roof of the building containing the architects’ studio, located inside a typical courtyard of the Milanese block.

Analyzing this work, it is possible to define the roof as a new urban ground, shared by the inhabitants of the neighbouring buildings with the coworkers of the studio, and inserting the theme of urban agriculture within the courtyard¹.

The project, developed for the Fuorisalone, in 2015, initially conceived as an ephemeral inter-

vention, then consolidated as a permanent space, contributed to the social life of the court and improved the performance of the existing building itself.

The developed project, in addition to rethinking the roof as a space for socializing, includes a series of plants and flowers which, depending on the season, provide users with medicinal plants, food, natural fertilizers, or simple ornamental flowers.

The realization shows how the rethinking of the roof of an existing building can define new trajectories of the spaces of relationship but, at the same time, contribute to the improvement of the building itself, also opening up to various degrees of use.

Moving the focus to new construction projects, instead, we can take the work of Vo Trong Nghia Architects as representative for the reinterpretation and hybridization of the roof spaces. These were taken by the Vietnamese studio Vo Trong Nghia Architects as a leitmotiv within the various typological variations and experiments entitled “House for trees”.

In this, architectural forms and nature come together to define new spatial systems and characterizing, in different projects, the covering: intended as an element of socialization, and domestic greenery production.

The first project of this experimentation, as well as its prototype, was carried out in 2014 in Ho Chi Minh City, a city with a high urban density and poor green spaces. The various rooms of the residence are divided and freely placed in the lot, then, on the roof, hosting the hanging gardens that characterize the project itself.

Starting from this project we have a series of variations, including the House in Nha Trang, which transforms the roof of the residence into an ideal extension of the living room. Here what comes about is not only a simple hanging garden but an inhabited social space that is an integral part of the residence’s domestic environments. At the same time, the project shows its ability to relate to the open space of the city, building a hybrid space between domestic and urban space.

Through the case studies analyzed, therefore, we can trace a possible definition of design practices in which the domestic space can find a minimum dimension of relationship and contact with the external space, maintaining a clear relationship with the individual housing system. Consequently, from this, we could extrapolate a perspective in which private living can present new forms for cohabitation of common spaces, co-production, and collectivization of some portions of space.

With this in mind, the design of the roofs analyzed as habitable and sharing spaces can describe social practices in which the relationship between domestic and urban space is brought to life.

Rethinking the roofs, both in new construction projects and in the rethinking of existing buildings, therefore offers a possible answer in periods of domestic confinement, offering open spaces and sharing, containing the number of relationships and, at the same time, opening up to uses even during non-crisis scenarios.

Conclusion

The analysis of the previous case studies shows that these “hanging spaces”, or spaces in-between outward and inward, can be designed to have an extreme quality. Indeed, they are able to define the character and the aesthetics of a building.

According to Lefebvre, space is intrinsically social and as such contains within it a weave of social relationships, producing them in turn. In this sense, the projects analyzed show a new way of interpreting the internal-external, private-semi-public / public relationship of the urban struc-





ture, opening up to the possible development of new types of space within the urban project. Before the lockdown, this social space was mainly outside, in the streets and squares; what was supposed to be a physical distancing between people changed into a social distancing, losing that density of relationships that has always characterized the city.

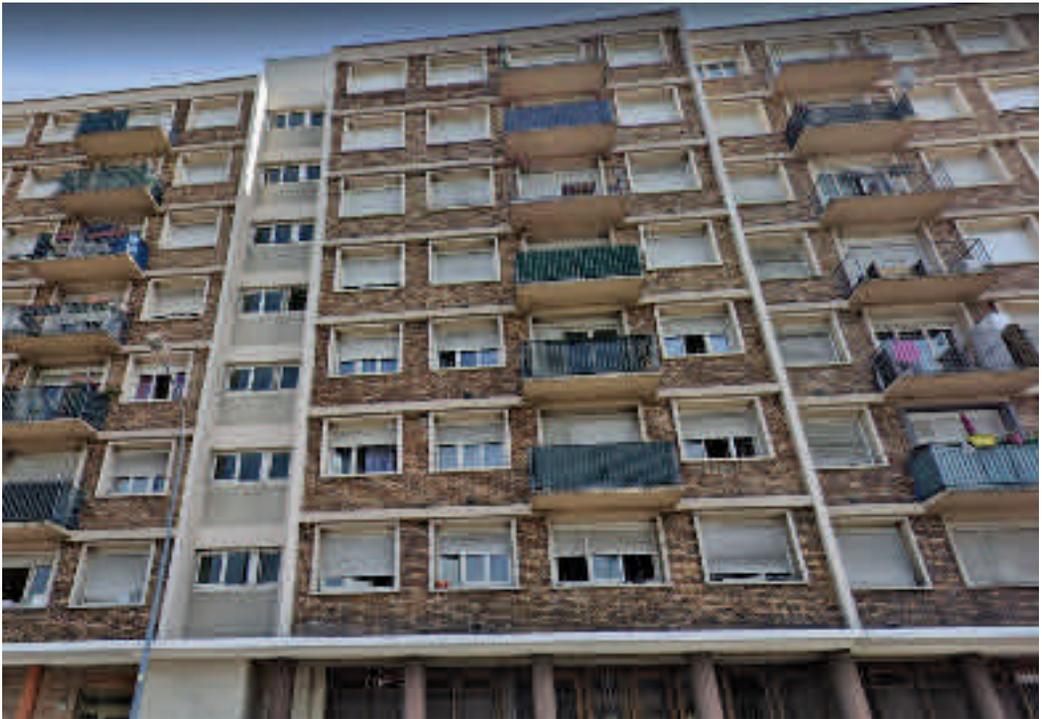
The global health emergency has highlighted that it is not possible to think of a high-density housing model without providing areas of physical relation with the outside world. People need them, since these spaces are necessary to reduce the so defined *perceived density* (Cheng, 2009). Perceived density is the individual perception and it is conditioned by spatial characteristics and architectural features such as colour, brightness, room shape, window size, ceiling light, amount of daylight, use of screen and partition and arrangement of furniture (Desor, 1972; Baum and Davis, 1976, Schiftenbauer *et al.*, 1977; Bell *et al.*, 2001), but also, of course, relation with the city. In conclusion, the project of hanging spaces becomes a field of investigation in which social and design issues can be founded and in which the theme of the relationship between internal and external spaces can be redefined.

Notes

1. Within the article, for urban agriculture, it is meant the cultivation of plants used for the production of food inside buildings in metropolitan areas. This shows a small-scale production, affecting individual building and small communities.

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01. Example of social housing in the community of Saint-Ouen in the Seine-Saint-Denis department. Varvara Toura, 2019, propriety of the author.

Emerging socio-economic inequities during the Covid-19 pandemic

The landscapes of the Parisian suburbs

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Keywords: Suburbs, Inequities, Working conditions, Social housing, France

Abstract

The unexpected pandemic of Covid-19 in France by the end of January 2020 and the imposed confinement on March 17 led to a series of publications regarding the preparedness of the French government to respond to an unexpected crisis. At the same time, despite the serious socio-economic difficulties faced by the inhabitants of the large cities' suburbs, the national government and the local authorities didn't show a particular interest for these rather sensitive urban areas. The main question of the paper is to open the debate regarding the different pandemic landscapes in France by focusing on the confinement conditions of the Parisian suburbs. Since March 17, suburbs like Seine-Saint-Denis at the north of Paris were among the urban areas where more than 80% of the inhabitants couldn't benefit from teleworking, as most of them work in grocery shops or in the municipal cleaning service. Even though the RATP, Paris public transport operator, had reduced its services by 50% during the confinement period, the metro line 13 was overcrowded as it serves the north Parisian suburbs.

Another factor showing the inequities observed in the confinement conditions is related to the type of place where the confinement took place. The Parisian suburbs are characterized by their high residential densities and the presence of social housing. The apartments in these residential buildings have limited spaces (10-20 square meters) with no access to balconies, while at the same time they lack basic hygiene spaces (the residents of certain apartments have to share a common bathroom with their neighbours).

The differences observed in the confinement conditions show the necessity to deal with socio-economic inequities at the city level. National strategic plans for the revitalization of poor urban areas could act as a means in order to improve the living and working conditions of those in need.

Introduction

Since the beginning of the lockdown in France on March 17 several media focused on social inequities regarding the health crisis that we are going through and the greater daily difficulties faced by the inhabitants of working-class neighbourhoods. In his speech on April 13, the French President Emmanuel Macron mentioned the need to limit the duration of confinement measures as there are important educational and housing inequities across the different French territories. In early April, in the wake of the publication of updated figures for deaths from Covid-19 by Public Health France and INSEE (National Institute of Statistics and Economic Studies), a number of articles reported *worrying* levels of excess mortality in Seine-Saint-Denis department unlike the other departments of Île-de-France. However, social, spatial and health inequities remained absent from the presidential speech. We can say that they remained poorly understood in this crisis, including the interviews or forums that researchers in the social sciences devoted to the connection between the deaths from Covid-19 and the questions of socio-economic inequities.

Socio-economic inequities were at the heart of our 2017 to 2020 survey on professional practices (including the use of public transport for professional activities) and living conditions in working-class neighbourhoods in Seine-Saint-Denis department, a suburb in the north of Paris. The chosen neighbourhoods are characterized by the economic precariousness of their population, their high residential densities and the presence of social housing. We used this survey as a base, while at the same time we continued the investigation during the confinement by documentary work (press, social networks) in order to analyze the increase in socio-economic inequities regarding the working and living conditions imposed by the health crisis.

State of the Art

Identifying and understanding of the inner and outer risks that face the cities at national or international level help us develop policies and tools that lead to urban and territorial transformations. Environmental degradation, social inequities and economic recession are among the risks that threaten working-class suburbs at an international level, resulting in the transformation of their spatial and social identity. The close interaction of these factors affects the organization of cities and for many researchers a way to manage their possible impact is through a systemic approach (De Falco, 2018).

The economic inequities in working-class suburbs in France are partially explained by their former character as industrial districts. In France, the industrial sector is in decline with a reduction of 22,6% in the number of manufacturing jobs between 1990 and 2011, which particularly affected the poor urban areas (INSEE, 2019). The latter, which had already been badly hit by the crisis of the 1970s and 1980s, has experienced a new wave of deindustrialization over the past 30 years (Girard, 2014). Jobs in the construction and public works, transport, logistics, maintenance-repair and agriculture sectors are also over-represented in these urban areas, while the distribution and services sectors are less dynamic. Thus, working-class neighbourhoods are characterized by their face-to-face economy which groups together activities such as domestic services or retail trade intended to meet local demand (Davezies, 2009; Talandier, 2013). One of the consequences of the industrial past of these areas is that their working population is mainly industrial workers usually less qualified for jobs as senior managers or businessmen. This socio-economic structure of the working-class neighbourhoods is a result not only of a lack of attractiveness by highly qualified people but also of

selective residential mobility of the inhabitants of these neighbourhoods, since young skilled workers have a greater propensity to emigrate than manual workers (Rudolph, 2015). Another factor showing the inequities observed in the working-class suburbs is related to the phenomenon of poor housing. France is no exception to this situation. In the major cities, the housing crisis has intensified since the 1990s, despite the relative maintenance of social housing construction (131,509 housing units were financed in 2010, of which 32% in Île-de-France) (Houard, 2012). The scarcity of land, speculative strategies, the recomposition of housing policies, the explosion of construction costs, socio-demographic developments as well as the low supply of housing compared to demand have resulted in take-off prices on urban real estate markets (Balchin, 1996). These evolutions have concrete manifestations: re-appearance of shantytowns on the outskirts of cities, development of insanitary conditions, homelessness, saturation of emergency accommodation systems, longer waiting periods for obtaining social housing, increased financial efforts of the poorest households. Faced with the resurgence of problems, the public authorities have renewed the categories of public action and the means of intervention, giving rise, for example, to the development of intermediation in rental relationships, to the legalization of private actions, or through the intervention of associations and NGOs (Navez-Bouchanine, 2013).

Methods

The method adopted for the research was descriptive-analytic. The descriptive method is used in order to link the current research with previous studies (Mariette and Pitti, 2020; Cauchi-Duval, Cornuau and Rudolph, 2017; Bouillon *et al.*, 2015) and related literature focusing on the socio-economic characteristics and the housing typology in working-class urban suburbs, in order to make the correlation between the socio-economic structure of a certain area and the effectiveness of implemented policies during the Covid-19 pandemic. The target group is quite large, as it involves researchers and practitioners in social sciences (urban planners, sociologists, economists, anthropologists, geographers of health), who are specialized in the subject, but it can also interest local authorities and national governments working on public health policies and the revitalization of poor urban areas.

The analysis of our case study, the department of Seine-Saint-Denis at the north of Paris, was conducted by using a combination of quantitative and qualitative techniques. The quantitative included the analysis of demographic and economic data taken from the local authorities and the French national institute for statistics and economic studies (INSEE). These data were analyzed in the current research through 3 types of diagrams: (1) those illustrating the percentage of full-time employees by professional category in Seine-Saint-Denis, in order to estimate the percentage of people that benefited from teleworking during the national lockdown in France from March to May 2020, (2) those illustrating the percentage of use of public transport at rush hour before and during the lockdown, by doing a comparison between the metro lines serving the Seine-Saint-Denis department and the ones serving the districts of Paris and (3) those illustrating the percentage of existing residential buildings by housing typology in Seine-Saint-Denis, in order to study the confinement conditions which are related to the type of house where the confinement took place. The qualitative included the analysis of interviews with local authorities, inhabitants, researchers in social sciences working on the socio-economic inequities observed in Seine-Saint-Denis and those with several teams of architects and urban planners that participate in projects of urban renewal in this area. The basic purpose of these interviews was to study the role of each local actor (politicians,

professionals, inhabitants) in the implementation of new territorial policies regarding public health and the reduction of socio-economic inequities.

Results

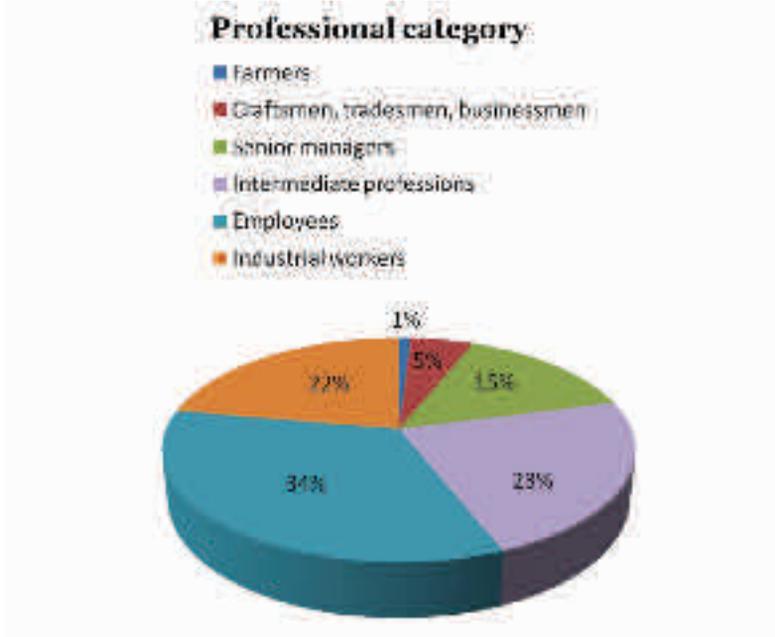
The department of Seine-Saint-Denis, symbol of the Parisian suburbs and their contradictions, regularly covers the news with police or race riots and its socio-economic inequities. From our research in the historical archives of the department we identified the beginning of the 19th century as the period of its creation. The dream of Paris local authorities to create the *City of Light*, an international metropolis, led to the decision to move industries out of the city limits to the East, so that the fumes of the factories do not reach the wealthy districts of the West. Thousands of heavy and polluting industries were concentrated on the northeast fringes of the capital. In the aftermath of the Second World War, the general housing crisis resulted in the multiplication of slums: “200.000 in the Paris region”, specified former Minister Pierre Sudreau during our interview. The workforce has been pouring in from the colonies, as the industry needed more and more people. When the State decided to build large complexes, out of the 36 built in Paris region, 28 were built in Seine-Saint-Denis. The policy of industrial deconcentration led to the departure of many factories and the loss of the jobs which depended on them, while the allocation of social housing continued to bring together the poorest populations. Then begins the era of unemployment, illnesses, drugs. The houses were ageing badly, due to lack of maintenance: “They put people in ghettos. We can stay six months without a lift. We live on the 18th floor and we have to go out”, denounced an inhabitant during our interview.

The swift from the industrial activity to office buildings and businesses seems not to concern the inhabitants of the department. As we can see in the diagram illustrating the percentage of full-time employees by professional category in Seine-Saint-Denis (fig. 02) the majority continues to work as industrial workers, in domestic services or in retail trade intended to meet local demand, like grocery shops, hair salons and car repair shops as we observed during our research in several communities of the department (fig. 03).

Even though the construction of the Stade de France and the establishment of offices and nearby businesses revitalized certain areas of the department, the lack of high skills within the inhabitants had as a consequence the recruitment of senior managers and businessmen from Paris or from other departments of Île-de-France. As Georges Guilbert, former president of the chamber of commerce and industry, deplored during our interview, «when Air France hired 1.500 people in Tremblay-en-France, only five of them came from Seine-Saint-Denis».

The analysis of the local economic structure helped us to estimate the percentage of full-time employees that could have been benefited by teleworking during the confinement period. We assumed that businessmen and senior managers could have been benefited by this measure as part of those exercising an intermediate profession («those holding a Master’s degree», according to the local authorities). Less than 30% of the full-time employees potentially benefited from this measure while “they were employees (retail, municipal cleaning service) that had to work at least 4-5 times per week”, according to the local authorities, whereas the average percentage of full-time employees who benefited from teleworking in Ile-de-France was 56% (APUR, 2020).

The active circulation of the Covid-19 in the Seine-Saint-Denis department (during the national lockdown in France the daily percentage of positive tests for Covid-19 was 2% for Paris,



02. Full-time employees by professional category (%) in Seine-Saint-Denis. Varvara Toura, 2020, ©V. Toura, INSEE.

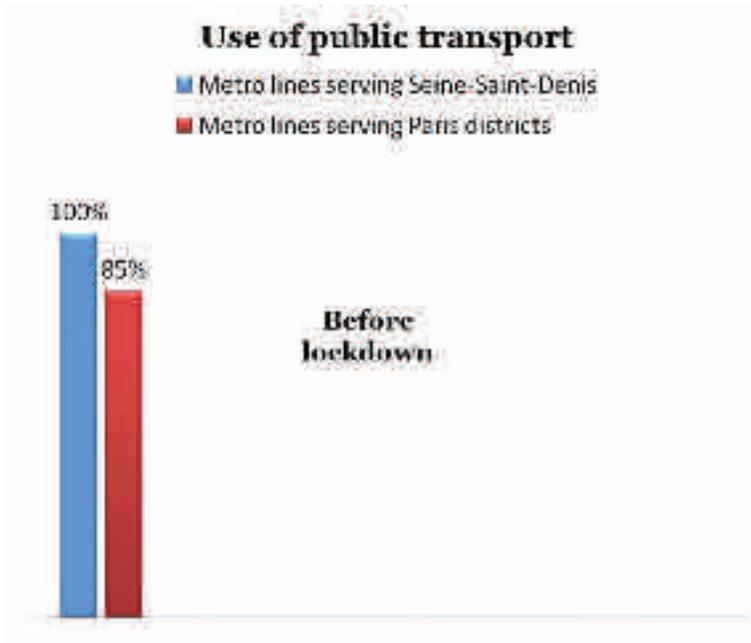


03. Examples of small retail shops in the community of Saint-Ouen. Varvara Toura, 2019, ©V. Toura, propriety of the author.

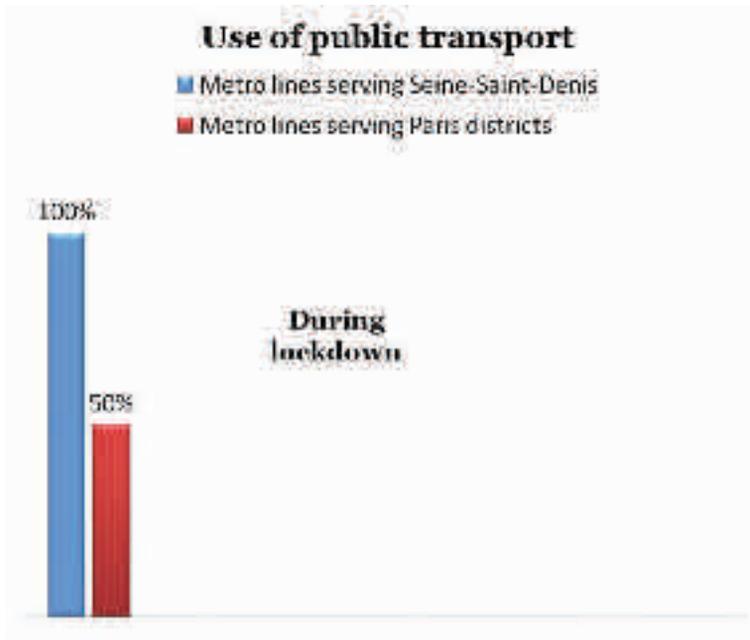
4% for Seine-Saint-Denis whereas at the national level it was 1%), the high number of patients in the local hospitals combined with the high mortality rate compared to other departments of Île-de-France, can also be justified by the percentage of use of public transport at rush hour during the confinement period. The department is served by 7 metro lines (18 stations), 5 RER lines (Paris suburban railway) and 6 lines of tramway. «The vast majority of users (80%) chose before the lockdown for their travels metro line 13 and RER B», specified RATP, Paris public transport operator, during our interview. We need to emphasize that before the lockdown the use of public transport at rush hour (6-9 am and 4-7 pm) in Seine-Saint-Denis was higher than in Paris districts, mainly explained by the fact that only two lines, metro line 13 and RER B, connect the department with Paris. During our interviews with the users of public transport in Seine-Saint-Denis we noticed that the average waiting time for the metro before the lockdown was 5-8 minutes (3-5 minutes for the lines serving Paris) and for the RER 10-15 minutes (8-12 minutes for the lines serving Paris). It is evident that the department is badly served by public transport compared to Paris, causing congestion many times in the metro and RER especially in the morning hours.

The national lockdown in France tended to reduce the use of public transport (as a measure against the diffusion of Covid-19), by proposing to full-time employees who couldn't be benefited by teleworking alternative solutions for their daily travels from home to work such as the use of bicycle. For this reason, RATP reduced its services by 50% during the confinement period. As we previously explained, most of the inhabitants of the department couldn't have been benefited by teleworking as most of them work in the retail or in municipal cleaning service. We also need to underline that many of these employees use public transport for their daily travels from home to work as they don't own a car. The numbers are impressive as we can see in the diagrams illustrating the percentage of use of public transport at rush hour before (fig. 04) and during the lockdown (fig. 05) in Seine-Saint-Denis and Paris. Before and during the lockdown the use of public transport at rush hour in Seine-Saint-Denis was 100%, even though RATP had reduced its services during the confinement period. On the contrary, the use of public transport at rush hour in Paris was reduced by 35% (85% before the lockdown and 50% during the lockdown) as many of the city's inhabitants could have been benefited by teleworking or by alternative solutions for their daily travels from home to work such as the use of bicycle or car.

In France Covid-19 tends to circulate more in poor urban territories as we could see in the daily figures published by Public Health France and INSEE. Thus, it is no surprise that most of the patients are recorded in working-class neighbourhoods where there are higher residential densities and many social housing ageing badly due to lack of maintenance. The department of Seine-Saint-Denis since the 1960s brought together the poorest populations usually immigrants from Europe or from French colonies who came to France in order to work in factories. The lack of means urged many of them to live in social housing. Seine-Saint-Denis has the highest percentage of social housing in Île-de-France (32%, whereas in Paris it is 20%). Most of the houses of the department, including social housing, «63% are built between 1946-1990», according to the local authorities. It is evident that the housing crisis has intensified since the 1990s, despite the increase of the department's population and the need for new housing units (+0,98% in the 2016 census, department's population: 160.660). During the confinement, «95% of the department's inhabitants» according to local authorities, stayed in their primary residence in Seine-Saint-Denis as they don't own a secondary residence outside the city. On the contrary, according to statistics gathered by French



04. Use of public transport at rush hour (%) before the lockdown in Seine-Saint-Denis and Paris. Varvara Toura, 2020, ©V. Toura, RATP.



05. Use of public transport at rush hour (%) during the lockdown in Seine-Saint-Denis and Paris. Varvara Toura, 2020, ©V. Toura, RATP.

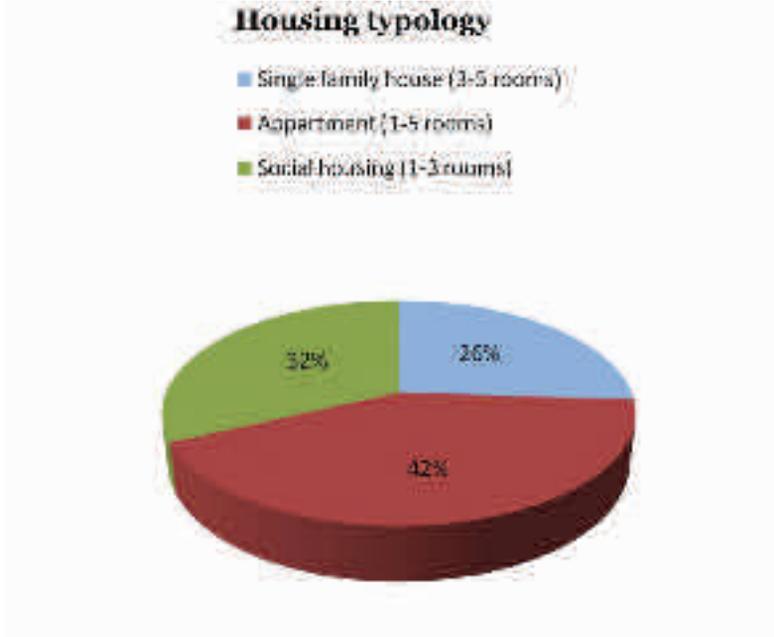
phone company Orange, more than a million people fled Paris at the end of March in order to spend the Covid-19 lockdown in the countryside (Paris population: 2.148.271). For this reason, we found essential for our research to study the existing housing typology in Seine-Saint-Denis in order to be able to evaluate the confinement conditions which are related to the type of house where the confinement took place. We can see in the diagram illustrating the percentage of existing residential buildings by housing typology in Seine-Saint-Denis (fig. 06) that only 26% of the residential buildings are single-family houses usually with small gardens, which means that most of the department's inhabitants had to stay during the confinement period either in an apartment or in a social house.

«The apartments, even the small ones (French studios, approximately 15 square meters), have a private bathroom», explained a sociologist working on the social inequities in Seine-Saint-Denis during our interview. On the contrary, as most of the social housing of the department are built before 1990 we can see a lack of interest in maintaining basic sanitary conditions inside these residential buildings. According to sociologists and urban planners that we met during our study «most of the existing studios inside social housing have limited spaces (10-20 square meters), no access to balconies, while at the same time they lack basic hygiene spaces». Thus, the residents of certain apartments have to share a common bathroom with their neighbours increasing the possibilities of diffusion of Covid-19. Another point to mention, is that during our research in several communities of the department we observed that most of the social housing were compact urban blocks, typical examples of the *trente glorieuses* (1946-1975) a period of economic prosperity that increased the need for new building units (fig. 07). Their floor area ratio (5-6) (fig. 01) is the same as in central Paris districts, where even the population density is high (Paris population density: 6.800 inhabitants/km²).

Conclusions

The research showed that socio-economic inequities in poor urban areas tend to be increased during unexpected crisis as is the case of the Covid-19 pandemic. The department of Seine-Saint-Denis has been affected more than any other department of Île-de-France (the daily percentage of positive tests for Covid-19 during the national lockdown was 2% for Paris, whereas for Seine-Saint-Denis it was 4%). The health crisis and its political management had also more significant consequences than elsewhere on the deterioration of the *physical, mental and social* health of its inhabitants and the increase in the accumulation of socio-economic inequities. In order to understand the amplified effects of the Covid-19 pandemic in Seine-Saint-Denis, it is imperative to reify the inequities of means, in this case the under-provision in equipment and health resources of the department compared to the rest of the French territories (Amdaoud *et al.*, 2020), faced with a population for which access to equipment and health care is more limited than elsewhere (the number of general doctors for 100.000 inhabitants in 2018 was 257,60 in Seine-Saint-Denis, whereas in Paris it was 858,30).

The different confinement conditions (insanitary social housing) in Seine-Saint-Denis compared to the ones in the rich Parisian districts (big apartments or single-family homes) help us understand the transformations of French cities and the different aspects of their interface, as it is evident that there is a huge socio-economic gap between the working-class suburbs and the city districts. The interviews with the local actors tried to answer the question of how these rather sensitive urban areas could be adapted to different needs and crisis, by proposing a different vision of the French national strategic plans used for the revitalization of poor urban areas. Citizen engagement could be added as a new dimension of these plans,



06. Existing residential buildings by housing typology (%) in Seine-Saint-Denis. Varvara Toura, 2020, ©V. Toura, INSEE.

Technical characteristics of the social housing in the community of Saint-Ouen

Year of construction	Type	Floor area ratio
1965	Compact urban block	5

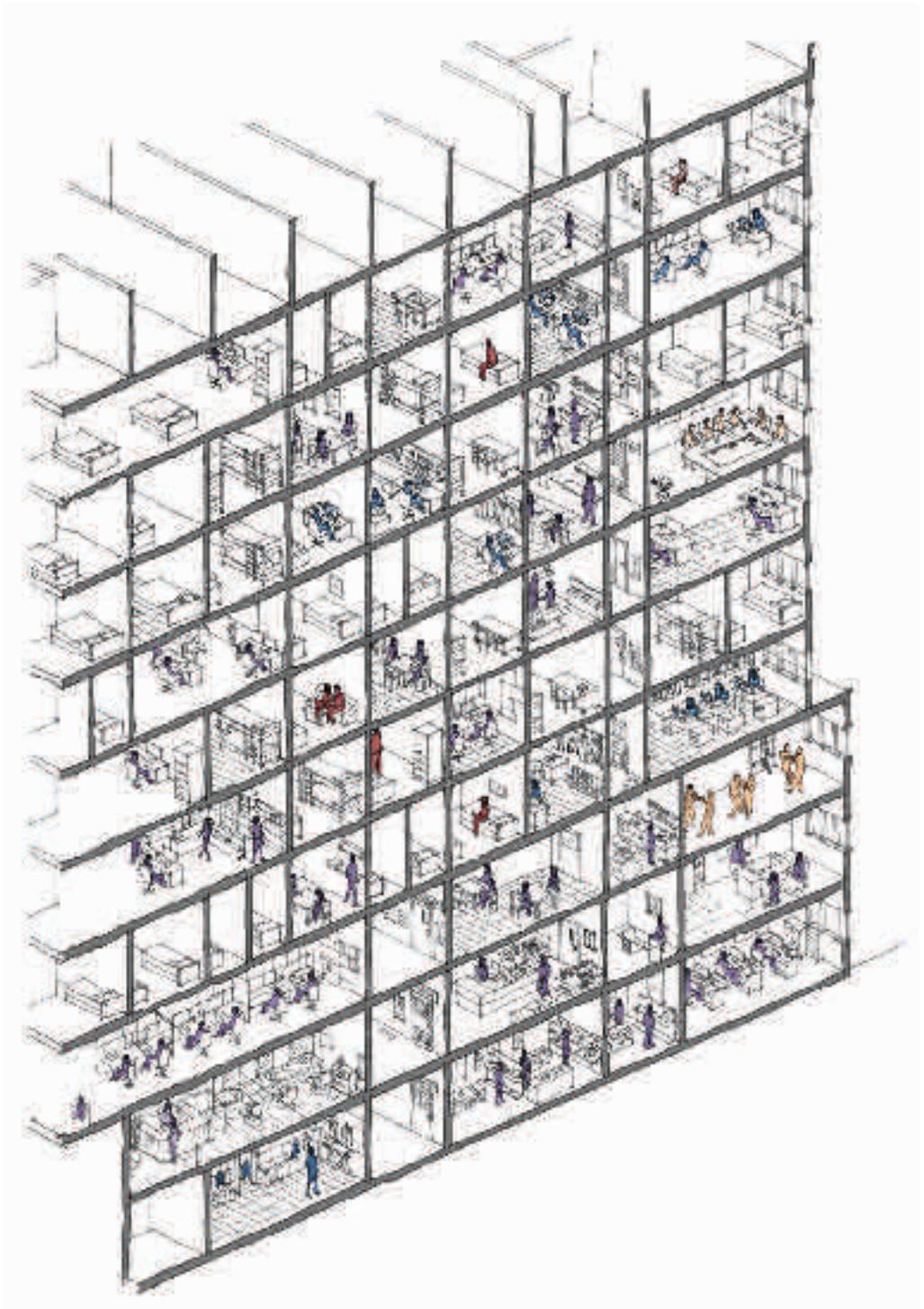
07. Technical characteristics of the social housing in the community of Saint-Ouen in the Seine-Saint-Denis department. Varvara Toura, 2020, ©V. Toura 2020, City of Saint-Ouen.

as the citizens become true social actors who decide about their living and working conditions and don't depend on political decisions usually taken at national level and not at the level of the city.

As a final conclusion of the study, we should mention that the transformation of working-class suburbs in France and the reduction of the socio-economic inequities faced by their inhabitants are, on the one hand, the result of urban planning policies designed at the local level by the local authorities and on the other hand, of programs of urban revitalization planned at national or international level (for example the French *loi relative à la solidarité et au renouvellement urbains*). For these reasons future research will have to investigate the interactions between the policies adopted against socio-economic inequities at national and international level and how to transfer good urban policies, especially in times of unexpected crisis, from one country to another.

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01. Conceptual sectional illustration of composite building in Hong Kong. Adrian Lo, 2020, property of author.

Unexpected Juxtapositions

Hong Kong's Informal Urban Ecologies

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Keywords: Composite buildings, Urban ecologies, Informal architecture and urbanism

Abstract

With more than half the world's population living in urban areas which accounts for just under 3% of the world's land mass, today's cities face an ever evolving urban crisis. Hong Kong, renowned for its high density urbanism, was culminated by its now demolished Kowloon Walled City. With living conditions similar to the notorious Walled City, today's subdivided apartments, locally called 'butchered flats', are homes to some 200,000 people, accommodating families in crowded environments, which in some instances, are barely 10 square metres.

The culture of congestion with its spatial and programmatic juxtapositions of the Walled City have continued to manifest today in the city's composite building typology such as Chungking Mansions and Mirador Mansion situated in Kowloon. With kungfu schools alongside travellers guesthouses, garment factories next to restaurants, private dwellings near social clubs, all occurring along a common corridor above ground, these buildings exhibit certain unexpected orders within apparent disorder. Here, seemingly opposing activities co-exist with legal, illegal, or even extralegal operations, with intricate business networks of various suppliers or retailers in the podium serving the 'shop-houses' within the tower above. This produces a sense of a dense 'city within a building', whereby the outside pervades the inside, the city enters into domesticity, public blurs with the private, collective contest with the individual, and informalities become formalized.

This paper seeks to re-examine Hong Kong's composite building typology and its underlying informally-formal urban orders by mapping such unexpected ecologies to reveal the messy vitality of their invisible socio-economic networks within interiorized urban conglomerations. By interrogating these buildings in this manner we can further understand their potential to impact the way we perceive the city, as well as how they can productively foster these unexpected yet everyday practices.

Introduction: High Density Urbanism in Hong Kong

In 2018, 55% of the world's population resided in urban areas. This is projected to increase to 68% by 2050 (United Nations, 2019). However, only a mere 2.7% of the world's land mass, with the exclusion of Antarctica, is estimated to be occupied by urban development (Cox, 2010). This consequently means more than two-thirds of the global population will be living in around 3% of the world's land in 30 years time. As raised at UN-Habitat's World Urban Forum of 2020, today's cities face a plethora of challenges as more people migrate to ever densifying urban regions.

Hong Kong, being a socio-political economic and transit hub, as well as the gateway to China and Asia, has been known for its soaring property prices and subsequent high density urbanism. Locally referred to as 'butchered flats' or 'sliced rooms', subdivided apartments in Hong Kong are homes to some 200,000 people, accommodating, in some cases, families of up to five people in small crowded environments of barely 10 square metres (Cheng, 2018; DOMAT, 2016). These subdivided apartments result from homeowners who want to multiply their investment properties by literally slicing a typical two-bedroom apartment into a series of smaller units, each individually metered for water and electricity. Around two-thirds of these units ranged between 7-13 square meters, where a single room could contain a bed, mostly a double bunk, a fridge, a desk, and other furniture (Cheng, 2018). Benny Lam's photographs for the Hong Kong based Society for Community Organization (SoCO) dramatically illustrate these squalid living environments where a single toilet cubicle could also facilitate washing, drying, and even cooking!

Further to this plight of the underprivileged in Hong Kong, there are those that live in what is known as caged-homes. These are essentially stacked modules of wire meshed cubicles, like those for caging livestock animals, but for the private dwelling of one person. Stacked within a room similar in appearance to an animal ward in a veterinary clinic, these modular caged-homes contain various personal belongings ranging from clothes to televisions (Yoon, 2009). For some, this is all they can afford in this competitive and highly priced residential market.

Such dense living environments, mostly invisible to outsiders, are similar to the now demolished Kowloon Walled City, the harbinger of high density urbanism and a symbol of Hong Kong's built heritage (Cheng, 2016). The Walled City was a composite high density urban block comprising 300 high rises with some up to 13-14 stories tall (akin to a tall high-density shanty town) with only a single void left for a temple¹. Historically an enclave of China within Hong Kong, the 'city' was initially a military fort, but grew into a densely populated compact city with more than 33,000 people within a 6.4 acre block (Jacobs, 2018) (fig. 02). The Walled City was also reputed for its lawlessness and being controlled by the Chinese mafia or triads for a period of time, it was home to organized crime, gambling, and drugs. As a haven between China and the then British Hong Kong, laws were not enforced in the Walled City, such that doctors and dentists, as well as meat processors and even a noodle factory were able to operate outside of the legality of Hong Kong (Jacobs, 2018).

Streets in the Walled City were narrow and dark with services dangling from above, as well as little to no sunlight reaching the ground, such that the enclave was dubbed the *City of Darkness* after a book by two photographers, Greg Girard and Ian Lambot, who documented the city before it was demolished in 1994. The residential units inside typify Hong Kong's highly dense living standards with personal belongings stacked above one another, and tables which can fold-up to save space when not in use. Some units, however, were also used as shops, constituting a 'shophouse', for selling everyday items and even hair salons. Girard and Lambot's striking photos of children playing on the rooftop with its arrays of antennae made sense as rooftops became the most open space for outdoor activities, even sunbathing, as a way to re-

claim ground space, but on the roof. A detailed cross-sectional study produced by Japanese researchers fantasize the everyday private, informal, and illegal happenings of the Walled City, showing every inch of wall space being utilized by the occupant's and their 'stuff' to the hanging of clothes (Kani, 1997).

Although converted into a public park, the intense density and programmatic mix formerly found in Kowloon Walled City are alive today in Hong Kong's composite building typology found in various districts on both sides of Victoria Harbour. These composite buildings, such as Chungking Mansions and Mirador Mansion situated in Kowloon, accommodate a high density and diversity of subdivided flats (Cheng, 2016). Like the Walled City, and unseen to the outsider, these buildings produce unique informal urban ecologies of seemingly chaotic networks which give the appearance of disassociated or unexpected activities juxtaposed next to each other. This paper aims to conceptually map and understand these composite buildings for their interior urban ecologies and informal economies. A series of sectional diagrams of a typical composite building will reveal and highlight the various invisible networks and their unexpected juxtapositions. A discussion of these socio-spatial phenomena will elucidate these disorderly yet ordinary encounters to shed light on the complexities within these composite highrises.

Informal Urban Ecologies

For the purposes of planning (built volume controls of height, plot ratio, and site coverage), in Hong Kong buildings are categorized into domestic or non-domestic. Composite buildings blur these boundaries as spaces for dwelling can double up with other kinds of activities². Unlike conventional modern mixed-used buildings which show clear vertical separation between commercial podium and residential tower, composite buildings and their messy or unrelated mixing of activities escape simple categorizations or interpretations, thus making them truly composite and heterotopic.

The composite building type rose out of the city's history of expanding industrialization and massive population growth, particularly post-1949 (Seng, 2017). Occupying an entire urban block, some composite buildings can contain populations equivalent to the size of a town (some 10,000 inhabitants). In the 1960s-70s thousands of composite buildings were approved and many of them were built, including Mirador Mansion (16 stories, 1959) and Chungking Mansions (18 stories, 1961) which are both situated, a block apart, on the busy Nathan Road in Tsim Sha Tsui (Seng, 2017). In what can be described as an urban labyrinth, composite buildings such as Chungking Mansions typically contain a mix of retail and services in the ground and lower floors (podium) such as currency exchanges, electronic stores, restaurants, supermarkets, and other businesses. Whereas the upper floors (tower) contains various guesthouses and residential apartments, where toys can be found along the corridors showing signs of children (Hou and Chalana, 2016) (fig. 03).

Like the Walled City, Chungking Mansions is considered by locals as a place to avoid, though many tourists will find its highly affordable guesthouses a convenient yet intrepid way to experience Hong Kong. Known as the *Ghetto at the Center of the World* after the anthropological work of Gordon Mathews, and labelled by *Time Magazine* as the *Best Example of Globalization in Action*, the urban jungle of Chungking Mansions, notorious for its crime and illegal activities, popularized by Wong Kar-Wai's film *Chungking Express* (1994) displays the urban vitality of the composite building type. Seeming to lack any spatial or programmatic order, the composite typology can easily be dismissed as apparently chaotic or messy (Hou and Chalana, 2016). However, on closer in-



02. Photograph of Kowloon Walled City model. Adrian Lo, Hong Kong, 2015, property of author.

spection one can find an intricate network of businesses in and around the building. Highly pragmatist, owners reconfigure their three-bedroom units into ‘shop-houses’ or home-businesses with the front room acting as a shopfront and the two in the rear for dwelling (Lee and DiStefano, 2010; Seng, 2017). Here, residential units are coupled with commercial or even industrial operations (Lee and DiStefano, 2010). Private dwellings double up with restaurants or guesthouses which cater to various ethnicities and hire illegal migrant workers at meagre wages. Blurring inside and outside, private and public, day and night, these composite buildings are where people, culture, and activities converge for information, transactions, and business (Hou and Chalana, 2016). Eunice Seng, who has written extensively on density and domesticity in Hong Kong, describes composite buildings as a “*paradox of collective sociability within an individual privatized space... with many containing spaces of continual confrontation between public urban life and domestic life*” (Seng, 2017, p. 82).

Within the crowded hustle and bustle of these dense urban interiors, unexpected commercial and industrial relationships form within their confines, negotiating between the formal and informal, as well as the legal and illegal. Their activities come as inelegant, incomprehensible, or even unacceptable (Hou and Chalana, 2016). However, in order to appreciate their underlying order and invisible hierarchy, we must look into the specific relationships formed by the various urban actors. Take Mirador Mansion for example. Here, a Chinese martial arts class (particularly Wing Chun, the style Bruce Lee was taught in) cooperates with the guesthouses to sell kungfu and accommodation packages to travellers (fig. 04).

Similarly, fabric, garment, and tailors’ accessories traders in the tower cooperate with the tailor storefronts in the podium forming a supply chain, constituting a vertical urban ecology (Cheng, 2016). As Hong Kong was and still is a popular layover location for major international routes, a typical 48 hour stopover is enough for one customer to do a fitting and have his suit delivered to his hotel before going to the airport to catch a connecting flight (fig. 05).

With Mirador and Chungking Mansions offering some of the cheapest backpackers accommodation in town, the guesthouses in the towers are likewise served by the chains of traveller’s oriented shops down in the podiums such as cyber cafes, restaurants, currency exchanges, travel agents, and various retail outlets (fig. 06).

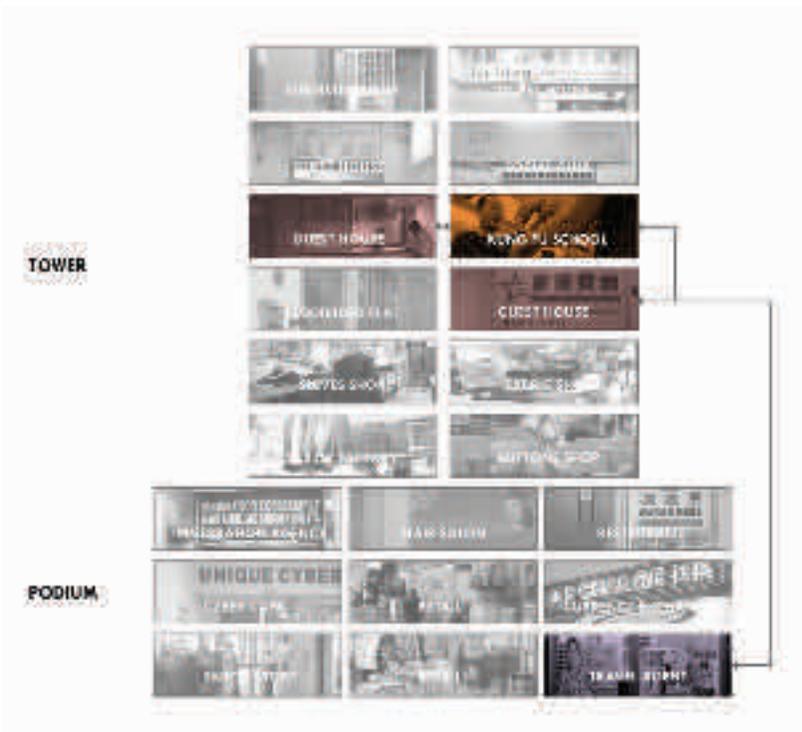
These intricate informal economies and invisible business networks of various suppliers or retailers in the podium serving the ‘shop-houses’ within the tower above are key to providing social and economic resources as well as forming support structure for each other (Cheng, 2016). Moreover, these business ties go beyond the limits of the buildings’ confines as they are nodes of multi-national trading networks connecting Asia and Africa. Despite the superficially chaotic logic and disarrayed occurrences inside these buildings, given their deep socio-economic infrastructural circumstances, it is possible to interpret this inelegance as another kind of order, challenging predominant or institutionalized notions of order, one where informality becomes formalized (Chalana and Hou, 2016).

Smooth Congestion

Composite buildings, as a microcosm of the city itself, with its dynamic mix of residential units juxtaposed with contrasting activities like guesthouses, social clubs, commercial, and industrial practices, truly become a dense ‘city in a building’ (Seng, 2017). This spatial-programmatic phenomenon of juxtaposition of opposites is well theorized by Rem Koolhaas in his study of definitive instability in New York’s Downtown Athletic Club which illustrates the stratified coexistence of different activities connected by an indifferent circulation core. Com-



03. Conceptual sectional diagram of composite building in Hong Kong. Adrian Lo, 2020, property of author.



04. Composite building diagram highlighting kungfu travellers. Adrian Lo, 2020, property of author.

posite buildings, like Manhattan skyscrapers, become instrumental of what Koolhaas calls a 'Culture of Congestion' (Koolhaas, 1994).

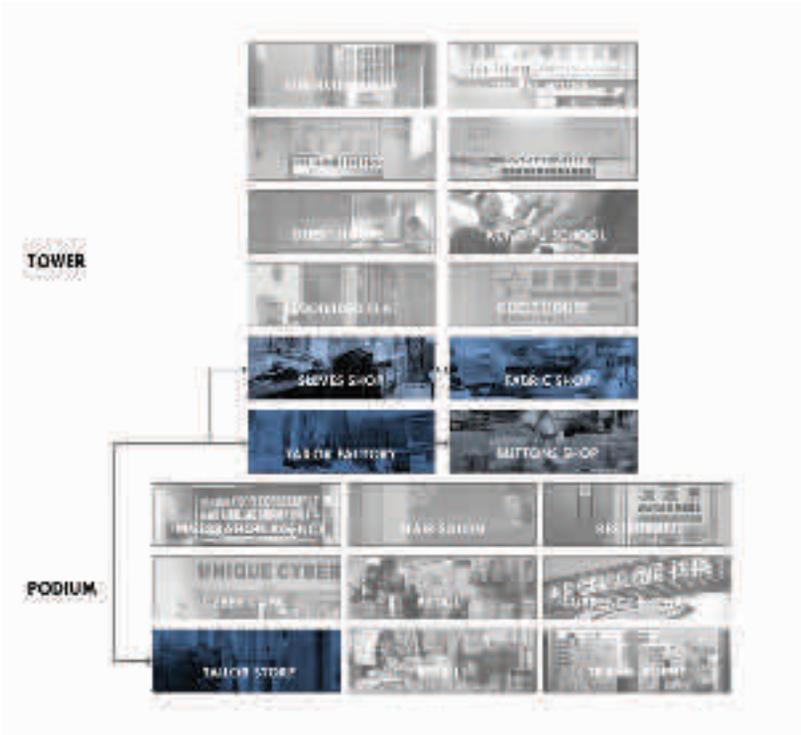
Architecturally, Kowloon Walled City, consisted of some 300 highrises comprising a compact city, whereas its more modern counterparts of Chungking and Mirador Mansions as with other composite buildings take up an entire block following a podium and tower morphology served by lifts and stairs, with a more monolithic appearance. Although morphologically different, composite buildings are instilled with a chaotic programmatic diversity similar to the Walled City. The composite type, with urban ecologies contained within and around them, literally brings the city into the building, where aspects of urban public life contest with domestic private spaces, overlapping city with domesticity, such that the urban exterior continues into the collective and familial interiors, as containers of socio-economic heterogeneity and heterotopia (Seng, 2017). The typology articulately integrates the city and dwelling into a 'domesti-city' and reiterates the social complexities yet down-to-earth logic which defines Hong Kong and its high density urban experiences (Seng, 2017). With multiple ownerships, buildings like Chungking Mansions and its complex intermingling of business affiliations juxtaposed with its various legal, illegal, or even extralegal activities, intensify the notion of 'composite' even further by providing collective dwelling in continual contestation and adaptation within interiorized urban networks (Seng, 2017) (fig. 07).

What remains to be asked is what are the opportunities and limitations of this mode of operation? It can readily be seen that in composite buildings, activities traditionally taking place on the ground level and possibly spanning over larger distances, are now tightly knit into compact, adaptable, three-dimensional overlapping networks. Amongst the difficulties and challenges of this 'city in a building' is the issue of maintenance, just as ground level streets require regular cleaning, composite building owners unfortunately found little incentive to maintain the public circulation or common areas which were frequently encroached upon (Seng, 2017). Hong Kong's development-oriented urbanism and strict regulatory frameworks lack critical consideration of the complexities of everyday life and the practices and aspirations of ordinary citizens (Siu and Zhu, 2016). The chaotic vitality of composite buildings demonstrates how various stakeholders, through informal practices and operational mechanisms, socially adapt, negotiate, and interact with each other within dense three-dimensional urban interiors producing highly effective business networks (Gomez, 2016; Siu and Zhu, 2016).

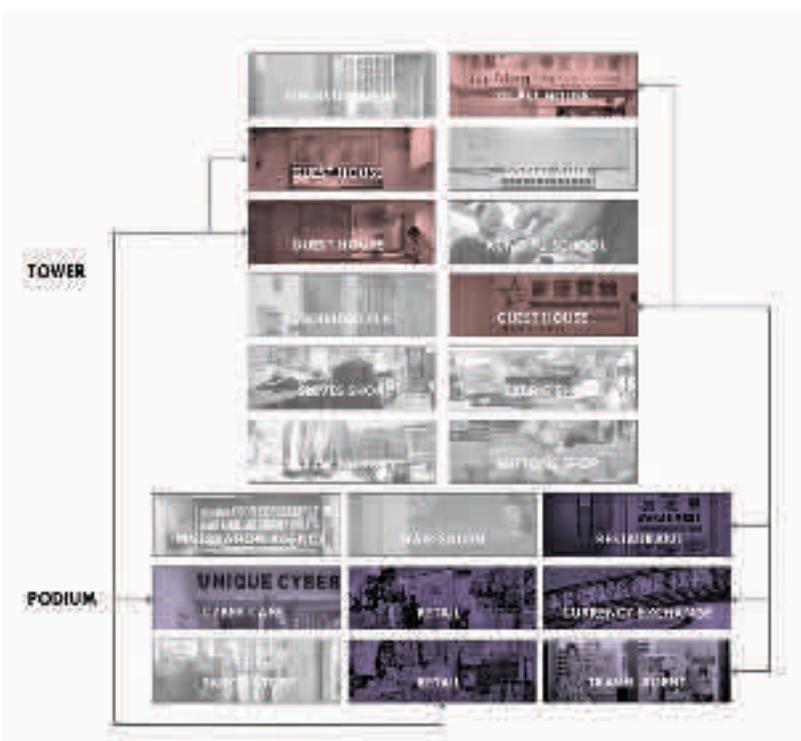
Urban informality, which emerged from discussions of the informal economy, is first and foremost a process (Dovey and King, 2011; Roy and Alsayyad, 2004). What is evident in these composite buildings, as with other forms of urban informality, is a dual condition or process of relative informality, in which the formal and informal are working together simultaneously and redefining each other (Dovey, 2013). In the inelegant art of compromise, self-organization, and the fluid network of interdependent relationships between people and space, the smooth functioning of particular economic activities and exchanges is allowed to take place inside these urban conglomerations, transcending them beyond the stereotypical binary interpretations of formal/informal and order/disorder (Chalana and Hou, 2016; Siu and Zhu, 2016; Tam, 2016). Instead these informally formal urban processes and their unexpected or messy networks constitute an alternative kind of urban order, one more restless and uncertain (Hou and Chalana, 2016; Kusno, 2016), a kind of 'smooth congestion' in Koolhaas' terms (Koolhaas, 1994) (fig. 01).

Conclusion: Speed/distance and encounters of the unexpected kind

Hong Kong's composite buildings not only illustrate a city within a building, but they are also buildings about the city. Such is the case of the film *Chungking Express*, which according to



05. Composite building diagram highlighting tailor industries. Adrian Lo, 2020, property of author.



06. Composite building diagram highlighting tourist services. Adrian Lo, 2020, property of author.

its director Wong Kar-Wai, was a means to explore the concepts of speed and space/distance through cinematography. Wong was particularly interested in the distance between people, whereby the movie is very much about the spontaneous encounters between the characters as well as between the characters and their environments. Disorder, messiness, or chaos can be a form of misunderstood organization such that within apparent informality there exists fluid and flexible spatial orders within dynamic social-spatial organizations (Kim, 2016). Proximal relations between juxtaposed contrasting activities makes for productive chance encounters and unknowing social interactions within a high speed and high density city. Thus, speed and distance or proximal interdependent relationships can be understood not only at the level of experiencing the rapid city of Hong Kong, but also of understanding the complexity, smoothness, fluidity, and dynamism of everyday urban ecologies found within composite buildings as manifestations of Hong Kong's culture of congestion. This suggests a possible condition of 'Hong Kongism', here defined as a complex system where high density urban informal processes intersect and resonate with formal orders, and interdependent parts are in dynamic tension between everyday practices and hierarchical systems, produced by a smooth congestion of speed and close proximities (Dovey, 2012).

This paper sought to comprehend the apparently incomprehensible and incompatible relationships evident inside Hong Kong's composite buildings to provide a deeper understanding of the invisible socio-economic interactions of people going about their everyday activities. In these buildings, we can see the unexpected juxtaposition of activities occurring at different scales: from the international scale of the building and its relation to global supply chains, to the scale of the building where different businesses work with each other side by side and between floors, and down to the scale of the unit which combines multiple and possibly unrelated functions within the same space.

The interiorized urban messy vitality exhibited in the vertical ecologies and unseen informal networks of these composite highrises pushes the boundaries of how we perceive mixed-use typologies as well as how a city can enter or even extend into a building. The pluralistic and contradictory coexistence of private dwellings with commercial and industrial activities show how unexpected orders operate within apparent disorder, colliding urban with domestic, public with private, legal with illegal, and formal with informal. Unable to elucidate complexity, multiplicity, and fluidity, these dichotomies become destabilized in the underappreciated forms of order contained within these urban heterotopias, constituting alternative interpretations of socio-spatial processes (Hou and Chalana, 2016). Informal urban ecologies break down conventional binary conceptions giving rise to something in-between and even innovative, forming smooth congestion to be harnessed in producing urban environments which consider and fulfil the aspirations of ordinary citizens and their unexpected everyday practices.

Notes

1. The height restriction was the only regulation enforced due to the nearby former Kai Tak Airport.
2. The *Buildings Ordinance* of Hong Kong defines a composite building as both domestic and partly non-domestic.

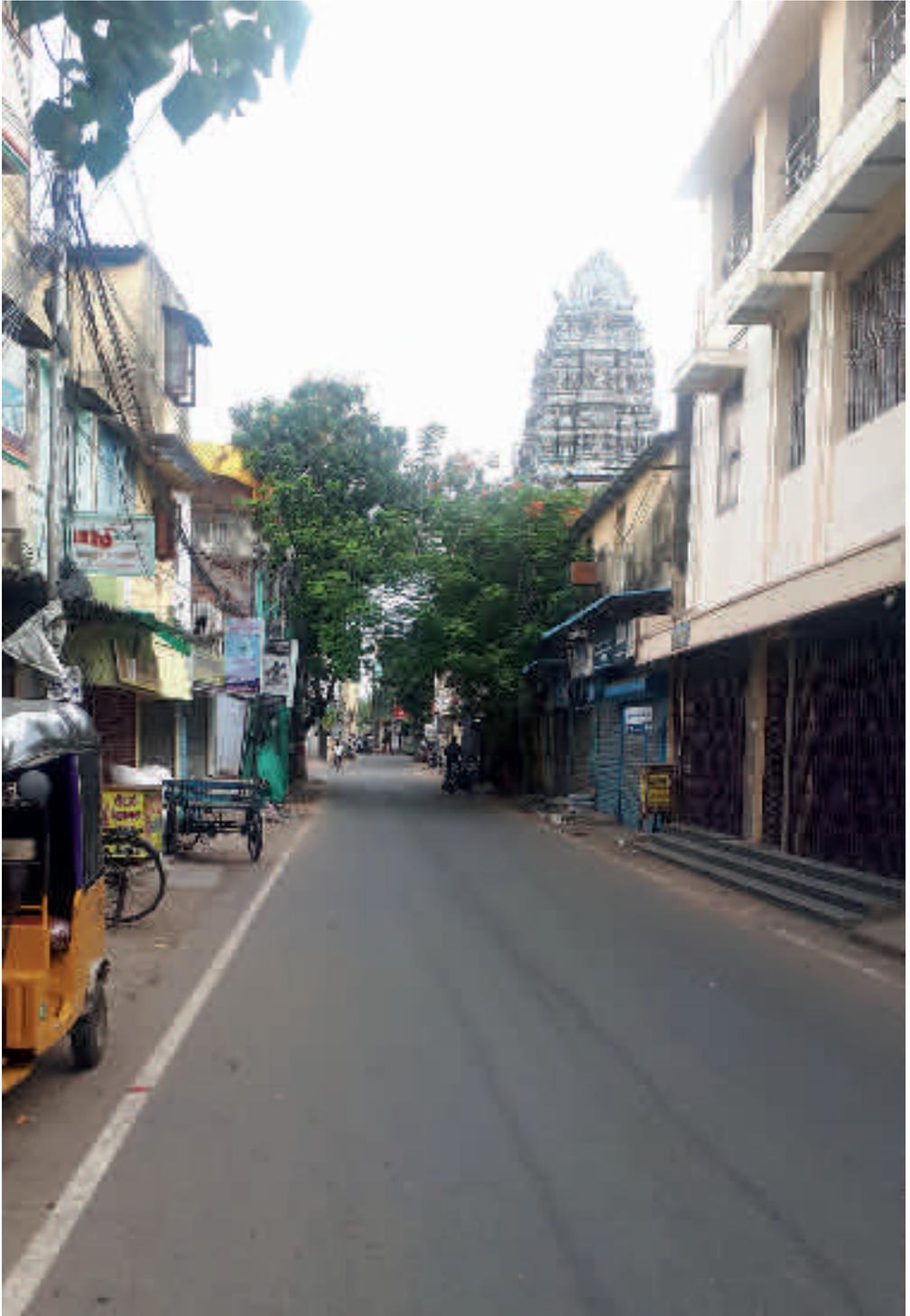
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07. photograph of internal atrium of Mirador Mansion. Adrian Lo, Hong Kong, 2013, property of author.

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01. Empty Streets during Quarantine at Chennai City. Priya Sasidharan, Chennai City, 2020, property of author.

TEMPORALITY and TENACITY

Potency of the Indian Panorama

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Keywords: Temporality, Tenacity, Rootedness, Reminiscences

Abstract

The urban canvas of India in its response to uncertainty of the global pandemic has unfolded a multitude of ethnic shades. While the plazas and squares in its pristine architecture shrunk to the geometries of space remaining a picturesque montage, a void that truly defined the public realm, the Indian context revelled in its new donned garb of utilitarian adornment. Transformation of public spaces as markets, civic awareness camps and as an assemblage of quarantine centres showcases the temporality of the space and tenacity to the context. In the new normal cityscapes of social distancing, the digital world has unleashed virtual convergence as the syntax against the expanding boundaries of the urban scenario. The booming issue of dens(c)ity becoming the contention and the flow of migrants defining the networks, the innate connect of sheltering the distanced and societal integration in the times of plunging economies exhibit the underlying chord of universality. The quarantine paving the way for rootedness of nature and uprooting of exploitive economy has led to introspection of the existential being and primal exploration of the inner realms of the self. The deeper meaning of people in space, creating a home from a house, reflecting the potency of the social domain of the house in applauding, entertaining and bonding in the privatised public realms of balconies, sit-outs, terraces paint the shade of awakening of the inner realm. The emerging typology of inner-scapes or inscapes redefines the residential quarter in it inclusive and exclusive spaces. The Indian landscape in its revival of folk arts and live performing traditions of the street has morphed to become an instrument of educating and creating awareness, reminiscences the deeply ingrained cultural legacy resonating camaraderie of oneness.

Introduction

Urban Landscapes in the time of a pandemic outbreak represents an ambit of triadic constructs (fig.02) of space, people and function that combine in unique permutations to respond, adapt and reconfigure representing a sense of tenacity rooted in the Indian panorama. The dictum of timelessness has transgressed to shades of ephemeral reality and the temporal nature of spaces is resurfacing as a means of resilient retaliation. The temporality of space in its inner realms of the house and the outer sphere of publicness have evolved in its innate potential to absorb, resonate and react to mutant changes in the pandemic environment. The public realm and infrastructure revealed in its strengthened quotient of adaptive use manifest a new theory of latent potential in harnessing plug and play inventory. The underlying quotient of tenacious urban rigour has seen avenues of permeance amidst a state of emerging urban flux. The most visible, manifested and tangible dimensions reflected in the generic understanding of public spaces have been complimented in the Indian context through its display of tenacity, temporal resurgence and transcendence from its primordial function of a gathering space for exchange.

The ingrained cultural essence of the Indian panorama rechristens streets as arteries of communication beyond social distancing norms to avenues for spreading social awareness. Revival of traditional wisdom, engaging folk arts and local artisans in creating the base for awareness campaign has brought the indigenous knowledge into the public urban forum. The connect in the time of distancing, established through conscious integration of dual modes of communication through digital platforms and analogous methods of reaching out have bridged the gap across the nation in its geographical rural urban divide. The pandemic landscape presents scenarios of coming together in spirit, the reconfiguration of networked and physical spaces amidst dualities of the real and virtual worlds.

The constructs of people on space in terms of defining densities have presented a different scenario with the slums and high dense core areas facing the brunt of the pandemic which needs redefining the boundaries of people on land. The connecting link of Geddesian triad stands to be questioned in the pandemic context as the concept of work from home rendered stillness in the mobility of the information technology corridors of the city. The duality in contrast was the exodus of migrant works creating unprecedented flows countered and encountered in its vagaries need introspection on urban employment based functions.

The case of Chennai city in the state of Tamil Nadu in India has been delved to understand public space resonance, social cultural reminiscences and the state of flux in redefining density and the urban form configurations of planning core facilities and economics. The experiential learning from the city reflects the understanding of the tangible and intangible manifestations as a resultant of pandemic induced urban changes to space – people dynamics. The planning strategies reflecting shifting boundaries of vital urban functions in its spatial connect, reworking densities of essential lifelines and surging through communal connect leaves footprints and reminiscences on the sands of pandemic times.

Revelation Process

The process adopted to understand the pandemic landscape in Chennai city had its primordial focus on transformation of the public realm in its dimensions of location, function and adaptability from information/ data revealed in the news media. The concept of publicness was interpreted in parameters that transcend the dimension of time to reveal temporality of spaces in its function, flows and constructs. The axiom of digitally shrinking phenome-

non in terms of advanced integration of technology was profiled through the launch of Govt. schemes and private technology vendors/research groups. The thread of tenacity gathered in the fabric of the community and societal patterning that celebrated its vibrance in ritual spaces and convergence to observing the regimen of the quarantine through empty streets (fig. 01, 03) showcase adaptive nature in times of unpredictability.

The network of flows as in the major arteries and the edge of the city (fig. 04, 05) revered in its coastline and the longest promenade of the city donned the garb of space against place, bringing strength and the emphasis on the construct of people. The crux of public spaces being dynamics of people has brought to the fore of discussion the need to revisit the tenets of place-making as an integrated process in the planning and urban design of the city. The content and contained components of public space need redefinition as a container with multitude of possibilities of function and flows.

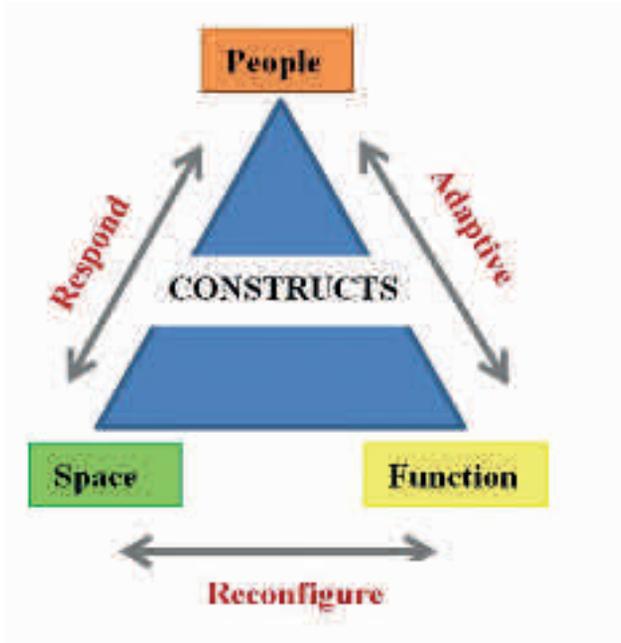
The largest public realm of Chennai city, the Marina Beach, the pivot of expression, demonstrative freedom and public voice (fig. 06, 07) that championed the cause of people in the administrative capital of Tamil Nadu adopted a grinding halt of functions to curb the spread. The evocative question that arises pertains to the concept of publicness in its axioms of naturalness, universal access and inclusivity, all of which hold potential in times of an unprecedented pandemic.

While within the premise of expanding social distance, the concentration of density and centralisation of essential functions of the city as in the wholesale market at Koyambedu in Chennai city has been discussed on the basis of planning strategies of the masterplan and the strategies in the context of the emergent pandemic situation. The sociocultural facets and essence of the community was focussed through the indigenous adoption of traditional techniques of awareness campaigns, integration of ethnic ways of transmission and engagement of the local folk artisans for dissemination of information. The city as a “category of practice” (Wachsmuth, 2014) representing traditional ideologies that could be revisited has been a thread of analysing the integration of timeless legacies of the society even during the contemporary context of a pandemic.

State of the Art – Digital Flows

The digital flows that networked people has become the new normal connect in virtual space, wherein the axiom of physical connectivity stands to be questioned and deliberated in the contemporary world under the pandemic. The spaces of flow (Castells, 2001) highlighting the information age in cities has come to a fruition in real terms by digital flow. The Arogya Setu mobile application launched by the Indian Government, a mandatory installation helped trace and track the spread, keeping citizens informed and responsive as a nationally accessible and connected network. The opening up of digital corridors, envisioned in the digital India scheme, a flagship program to empower the nation, wire and network the citizens to information, saw its culmination point in the use of information technology to profile the pandemic, in its spread, growth and access to awareness and support schemes.

The mobile applications launched by the urban civic authorities, access to dashboards and periodic information dissemination, has realised the larger vision of digital India mission. The Covid – 19 Quarantine Monitor – TamilNadu (by Tamil Nadu Police Department, Pixxon AI Solutions Private Limited), GCC- Corona Monitoring (Greater Chennai Corporation) and Cobuddy – Covid-19 Tool (FaceTagR, Notion Tag Technologies, Tamil Nadu) mobile applications using GPS (Global Positioning System) tracker and proprietary based face recognition



02. Triad. Priya Sasidharan, 2020, property of author.



03. Ritual Spaces near the Temple before the New Normal, Chennai City 2020, property of author.



04. Desolate Urban Edge - Public Realm at Marina Beach. Priya Sasidharan, Chennai City, 2020, property of the author.



05. Deserted Network – Kamarajar Salai, Main road adjoining Marina Beach. Priya Sasidharan, Chennai City, 2020, property of the author.



06. Parade at the public arena before the New Normal, Marina Beach 2020, property of the author.



07. Republic Day Celebration at the public arena before the New Normal, Marina Beach. Priya. Sasidharan, Chennai City, 2020, property of the author.

systems launched in early March 2020 started with its supervision of more than 15,000 people quarantined at home in Chennai city (Lakshanae, 2020). The GCC application had enabled the citizens to record symptoms and also submitting photos of crowded spots in the city bringing to the fore public participation, responsive civic action and collective community involvement. State of the art public realm stands to be redefined in the revolutionary surge of digital networks bringing people together in a new typology termed virtual space.

Temporal Public Realm: Tenacious Blue Print

The decongestion strategy of the central business district of Chennai city in the master plan saw the creation of a centralised wholesale market facility for the Chennai city at Koyambedu integrated with access and transport networks. The onus on strategic siting of public infrastructure along major corridors, self-sustaining open spaces, active and passive in its functional nature in the neighbourhood and the database on the potential of new interventions can be read from the second master plan of Chennai city. The strategic decision to shift the wholesale market from the pandemic stricken Koyambedu to the satellite town of Thirumazhisai, at a distance of 20kms further away from the main city was due to the availability of access, plug and play facilities wherein a prompt rearrangement could be facilitated. One of the major transport terminals at Madhavaram on the periphery of the northern corridor of the city was the temporary holding post of the fruit market shifted from Koyambedu profiling the spatial connect in its transformative role play.

The temporal changes that the pandemic registered has rendered an additional urban property to the functioning of public infrastructure as in play areas and transport terminals. Nearly fifty smaller neighbourhood markets were shifted to playgrounds, while 90 shops of the strategically and centrally located Chintadripet market were shifted temporarily to the nearby May Day Park in the south of Chennai city. The decentralised approach resurfaced at the time of the pandemic to contain the temporary markets within neighbourhoods thus isolating and diversifying the concentration of people at the core. Strategic location of corporation owned play areas in major neighbourhoods and bus terminus played a crucial role in transforming to centres of essential lifeline services. The tenacity in reassembling the essential services, reinvesting the facilities at varying hierarchical scales, making a contingency blueprint is a pointer to governance and advocacy planning measures.

The pandemic proved that the centralisation of Koyambedu wholesale market had to make way to the shift of functions to neighbourhood, urban nodes and satellite /new town settlements in the developing suburbs envisioning essential urban landscapes in extended outgrowths. The larger spectrum of urban planning goals has a new paradigm as in resurgence at times of uncertainty as a premeditated axiom in the 3rd master plan for the city which is in its nascent stage. The siting of major infrastructure, return to decentralisation and decongestion mode, density norms to be addressed in the residential neighbourhoods and new developments in contradiction to the subaltern spaces are the emergent planning codes to be decoded.

Discussion-Urban Metamorphosis: Social Resurgence

The age of new normal saw the closure of public spaces across the globe but the opening or unfolding of varied dimensions and opportunity in the Indian context underlining the integral quality of constructs for people. The Indian public realm, celebrated in its everyday urbanism (fig. 08, 09) rose to utmost adaptive power donning the role of quarantine areas, makeshift markets and gathering spaces for essential supplies, the true public lifeline. The traditional

street art and graphic culture in its new-found expression became conduits in creating awareness, spreading social messages and fostering visual convergence.

The case of Chennai city saw the emergence of typological variations of the public realm as temporary markets; hold areas for migrants and quarantine spaces each with a varied construct of function. The metamorphosis and redefinition of the public realm as adaptive and resurgent spaces, universally accessible and conundrum of self-sustained containers have established a new dictum in the design of public spaces.

The coming together of the community in organising temporary shelters, pit stops for the migrants on the move and the private groups volunteering to open educational houses/institutions to house the stranded people displayed the resilience and responsive measures to ensure equity to secure shelter and access to basic services. The Indian Government took stock of the looming movement of workers by introducing the Shramik Train Services for the stranded people. The Indian Railways as stated in the news reported that as on 27th of May 2020, 3604 Shramik Special Trains had transported nearly 48 lakh migrants (Nag, 2020). The special services had addressed the needs of transporting students, pilgrims, tourists and others beyond the focus group of migrant workers. Though the emphasis on flows of economy and power has integrated the networks of communication investments and capital is yet to reinstate emphatically and bring to the fore the physical existence of the migrant workforce.

The private realms unfolded in a unique way in the coming together of people in applauding the health workers from the inner - scapes of homes has brought a new wave of community networking . The new found potential of opening out corridors, eyes on the streets, bonding from the balcony and linking across the arteries has outlined new challenges to be integrated in the architecture and design of spaces of the city. The psychologic inner realms have been revisited with small neighbourhood communities collating essential stocks to be shared and distributed to the stranded, migrants and the outsiders to the city celebrating the ancient Indian scriptural saying in Sanskrit, "Athithi Devo Bhava" (treating guests like God, *Athithi* is "guests", *Devo* is "God", *Bhava* is "like").

Conclusions

Urban landscapes have the inherent potential to redeem, regenerate and renew itself in its myriad forms of adaptive resilience. Design of the public realm has to be an extension of everyday urbanism and transcend beyond expression to existential essentialities. The avenues that revolutionise densities should begin resurrecting land economics through an understanding of the shifting boundaries between place of work and residence. Question of density needs a paradigm shift from only blaming the subaltern spaces to granting of high densities in neighbourhoods of minimally equipped infrastructure which tends to lay pressure on land and services. The work flows need to be inclusive in addressing the migrant population, their temporal access to land and services and vulnerabilities in transforming landscapes of permanence. The zoning and land use parameters prompt at revamping in terms of the emerging culture of work from home, reducing travel, mobility patterns, flows of people and mix of typologies at the urban context. Pandemic landscapes have created a plethora of changes in the accepted doctrines of zoning, concentration of activities and a rethinking on public and private realms. The future of the existential world is not in its temporalities of change and tenacious resilience during an unprecedented pandemic outbreak, but a proactive continuum that fosters people and their constructs in the hearth of responsiveness to nature and its veracities.



08. Street as extended sacred space. Daily ritual - Procession of the deity through the street, Chennai City 2020, property of the author.

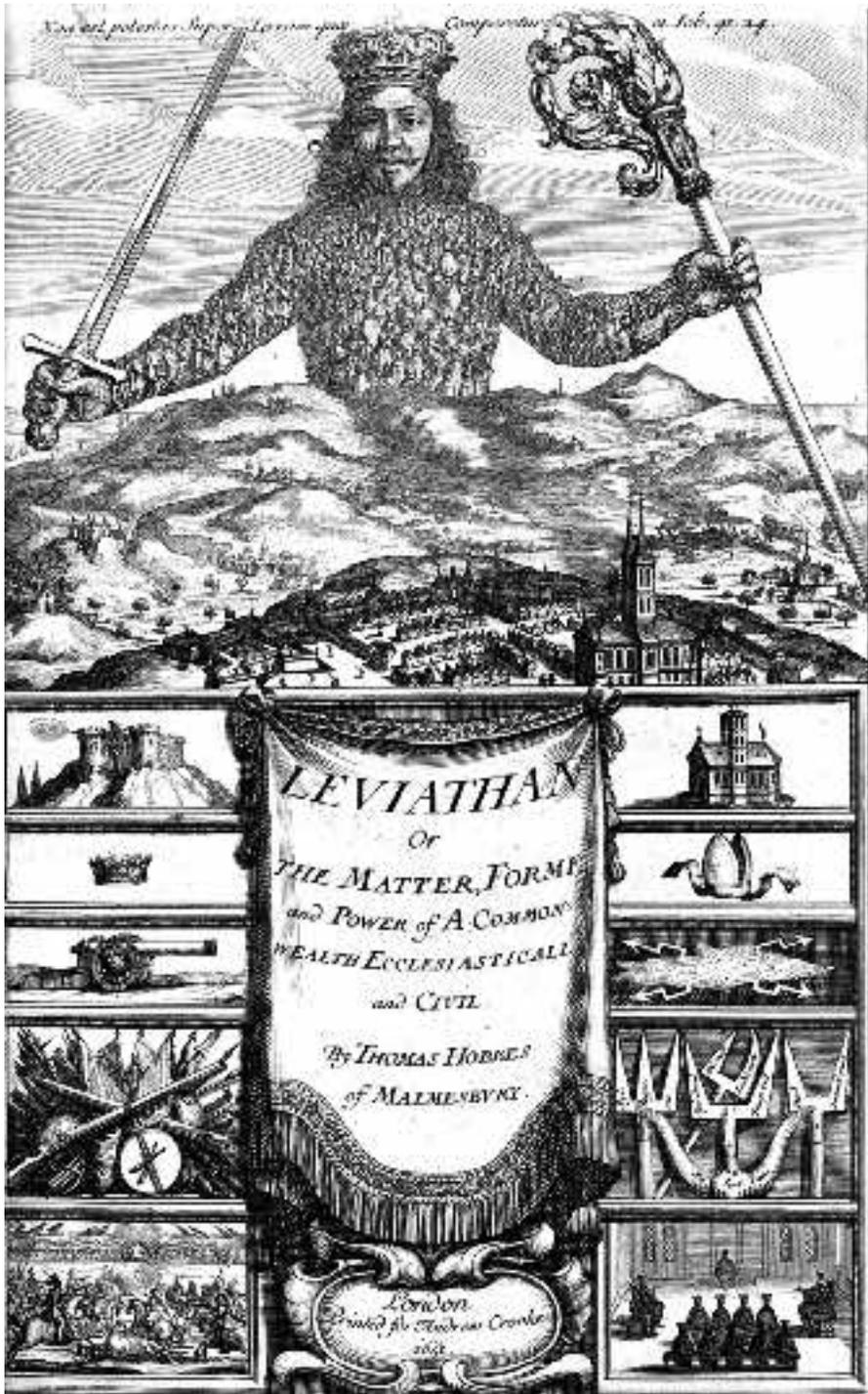


09. Celebration of Tradition and Art. Street as an extension of the house and its everyday urbanism, Mylapore, Chennai City 2020, property of the author.

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**DIFFERENT
SOCIALITY**



01. Engraved Leviathan's frontispiece. Abraham Bosse, 1651, public domain.

The social Act

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Keywords: Social act¹, Control, Community, Individual

Abstract

Restrictive measures adopted during the emergency inevitably left individual and collective psychological after-effects.

If these wakes are easily identifiable, it's more complex to search for human behavioural traits that, together with real contingencies, led to such measures.

The attempt to identify the origins of social operation mechanisms in relation to an emergency situation, both from an anthropological and urban point of view, could constitute a first condition of self-criticism and strengthening of collective reaction.

“Some of them pitifully whine, others obscenely swear, but none or a few ask themselves: if I had done my duty too, (...) would have happened what happened?” (Gramsci, 1917).

Introduction

Isolation caused by health emergency, transposed into daily living dimension, took the perceptual form of confinement, leading us to experience the unusual situation of unintentional incarceration, even if at any time avoidable and free of jailers.

This is not a choice, but an imposition of collectivity (embodied by the State) on itself to protect the balance of its system; therefore, it acquires at the same time the role of operating subject and object of a mockingly self-destructive action, however aimed at preservation.

Hostile to restrictions, prisoners crowd paws, standing as a champion² of monastic self-discipline and claiming heads of its jailers.

The frantic attempt to defend fleeting boundaries of individual rights, originally sanctioned by that community itself, should however get started with a question: how did we come to the imposition of personal restrictive measures rather than just impose behavioural guidelines?

Without venture into choices and structural differences of different nations, or into practical aspects of the reaction to emergency, the reflection moves from the signifier to the meaning, decisively converging towards the principles of human sociality and its foundational agreement.

Because issue's cornerstone lies in the relationship between community and the elementary cell that composes it, the individual, who changes his own self-control parameters when he detaches himself from the multitude he belongs to and from which he's mutually influenced. Through this act of separation, the individual starts to lose his ability of responsible self-management and, rather than regressing from an ethical point of view, allows human nature to emerge from the filters of an internalized sociality.

Justice's establishment

“Even those who practice justice do it reluctantly, merely because they're unable to commit injustice” Platon (IV century b.C.). *Politéia*, book II, ch. III.

Glaukon, Platon's elder brother, in dialogue with Sokrates in *Politéia* argued the thesis according to which most people intimately believe that «committing injustice is by nature a good and suffering it's bad», thus underlining a deep rift between human essence and social convention. The suggested theory was that humans originally lived in a state of nature in which, spontaneously and without inhibitions, everyone pursued his own aim by overpowering the others. It was just when they realized that this way of acting was damaging, since everyone suffered from the multitude more abuses than he could inflict, that decided to move from an “unfair” system to a “fair” one, ratified and guaranteed by the creation of laws.

However, from this perspective the concept of “justice” was not a moral ideal, and the social agreement obtained was a compromise between the most advantageous individual behaviour, the one of committing abuses sure of impunity, and the most adverse, suffer it without revenge possibility. To substantiate his thesis, Glaukon later exposed a personal version of the death of Gyges, king of Lydia, in which it was evident that even honests would embrace injustice if they were sure not to be discovered.

Through this tale, the natural persuasion that corrupt acts generate in humans and the fragility of the “good” were highlighted, easily denied when faced with the guarantee of being

able to act deliberately; facing this possibility, a fair and an unfair man would both behave against justice, aware of its unprofitable.

According to this perspective, the public apology towards justice originates from the awareness of not being able to be unfair in the range of social contract, as proved by universal praises to honests who haven't taken advantage of their power, balanced by an intimate pity. A contrast that reflects the basic dualism between a public sphere of rules and fear and a personal one of disorder and oppression, subject to constant surveillance by the former.

The conclusion reached by the Athenian was that respect for justice is based on the awareness of personal advantages deriving from the maintenance of the common pact, superior to those deriving from its violation, a condition that constitutes the cornerstone of education.

The legacy of Glaukon's theories will be embraced almost two millennia later by Thomas Hobbes, within a society that was projecting itself towards the modernity.

The English philosopher will move from the origins of social life and from that *state of nature* representative of the condition in which men are not yet associated with each other, nor governed by a structure of government and by the body of laws of the rule of law³.

“Natural right, commonly named by writers jus naturale, is everyone's freedom to use his own power at his own will for the preservation of his disposition, that is of his life and consequently to do anything that, according to his judgment and his reason, he conceives as the most suitable means to this purpose” (Hobbes, 1651).

Endorsing the natural origin of law, Hobbes imagines the state of nature as a moment in which all human beings benefit from the same rights on everything, winding up themselves living a permanent state of oppression known as *bellum omnium contra omnes*⁴, triggered by individual self-preservation instinct. When men realize that in order to pursue their desires and enjoy assets, a condition of security and not of conflict is functional, the State is engendered, revealed through the metaphor of Leviathan⁵; by giving up a share of their natural freedoms, they enter into a social pact and accept the body of law and civic supervision in return for peace. The transition to the rule of law therefore takes place through a redefinition of aspirations, once again led by egoism and self-preservation.

“I authorise and give up my right of governing myself to this man, or to this assembly of men, on this condition; that thou give up, thy right to him, and authorise all his actions in like manner. This done, the multitude so united in one person is called a Commonwealth; in Latin, Civitas. This is the generation of that great Leviathan (fig. 1), or rather, to speak more reverently, of that mortal god to which we owe, under the immortal God, our peace and defence” (Hobbes, 1651).

As for Glaukon, all men own the ability to do harm, as well as the fear of suffering it, and it's only thanks to this fear that they decide to leave the state of nature (Bacin, 2010); Hobbes, therefore, set natural law as the foundation of the civil one, that must be as broad and unitary as possible to be efficient.

Crisis' development

In the wake of Hobbesian theories, we could read the development of health crisis as the moment in which the Leviathan demands a greater share of personal freedom, limiting at the same time the granted satisfaction of desires.

It's the unilaterality of this action, necessary to safeguard the security sought through social contract, that leads to its violation and to the imbalance of the whole system.

The rule of law, embodied by the State, is aware of deriving from the pact and knows the circumstances that generated itself; it's for this reason that, in order to preserve peace by limiting the pursuit of individual aims, it is even forced to reduce personal freedom.

If men were naturally moved by the ambition of peace and justice, it would be possible to fully rely on self-regulation; if they made their policy the responsibility towards other signatories of the pact, it would be enough to adopt guidelines, sure of the autonomous reduction of their freedom by those who were aware of constituting a danger.

But since the individual is etymologically individualistic and dictates of reason not always and necessarily prevail over personal advantage, in crisis time the determination to obtain one's own advantage becomes even more pressing and the motto "*homo homini lupus*"⁶ (Hobbes, 1647) associated with it get truthful.

Necessity downsizes the rationality that led to the pact, generating the crushing of the irrational and of the courage combined with it, up to accept to jeopardize self-preservation.

It's with the pursuit of one's own advantage that *bellum omnium contra omnes*, that remained hidden under state of nature's ashes, is triggered again; the conflictual relationship between the individual and community is not therefore generated in an emergency situation, but is steadily present.

Michel Foucault theorized (1977) that power is not just a central entity from which individual and collective orders and behavioural rules originate, but is widespread within society and suggested in individuals.

It nourishes from censorship's and self-censorship's mechanisms induced in the subjects, rather than direct repression, thus safeguarding order's stability.

Thanks to society's development, these control systems refined, moving from explicit corporal constriction to influence behaviour, just as natural selfishness was progressively overtaken by the sense of justice of rule of law.

Mechanisms that govern the balance between individual and community, including the control one, however go into crisis in front of emergency and of the requirement to choose again the priorities to be fulfilled.

The layer of conventions and induced behaviour formed over the centuries thus begins to crack together with the social pact, leaving surface the original individual nature aimed at self-preservation, to the detriment of one's fellowmen.

This is not a unique case in modern history, but an imbalance typical of extraordinary situations and proportional to their extent.

In support of this claim, it's useful to dwell on the improper equivalence between covid19 and war, an acceptable hyperbole if confined within the limits of a contextualized comparison.

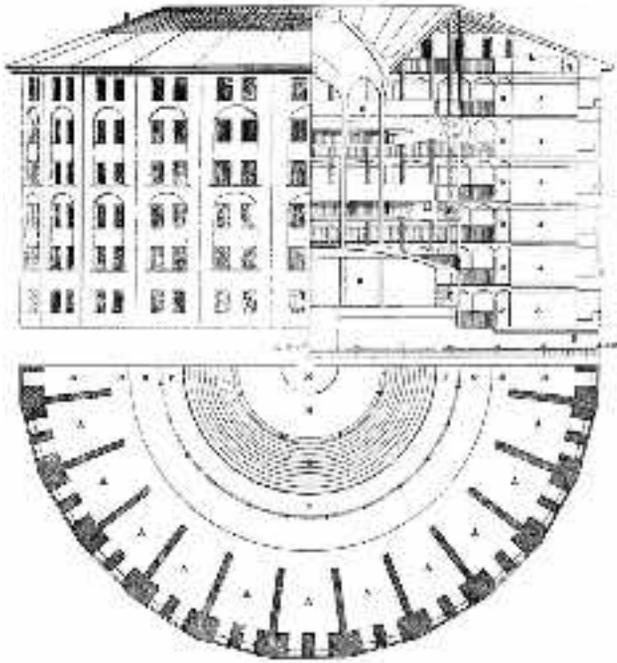
Basing on past experience, it can be claimed that those who didn't elude, even slightly, sanitary instructions⁷, however thought about the way to do it, aware of the damage that could be provoked just as of instant benefits achievable.

However, no one thought about the extreme act of oppression, to kill or not to be killed, as his ancestors had done during the war emergency.

Circumstances, therefore, scatter self-control, before social control; an extreme situation such as war, in which one prepares to give and receive death even if it doesn't actually happen, clearly reveals the basic centrality of self-management.

Once again writings of ancient Greek come to support this thesis, showing the case in which health and war emergency blend, in the witness of commander Thoukydides (fig. 02).





During Athens' siege by the Spartans in 430 b.C. indeed, a plague wiped out the population of the Attic city, triggering the domination of natural instinct on sociality.

“More easily one dared to do the things he previously concealed to do for his own pleasure (...) And no one was willing to toil for what had always been considered noble, because he clearly didn't know if he would die before achieving it; instead what was already liked at the time and, anywhere, useful for it, was considered both honest and advantageous. No fear of the Gods or men's law held them back, (...) since no one expected to live up to account for his crimes (...)” (Thoukydides, V century b.C.).

Psychological results of disease, although through a scientific perspective, will be evoked by roman Lucretius, that making a list of its symptoms will end showing the contrast between mental clarity and inability of expression.

“(...) et ulceribus vocis via saepta coibat atque animi interpretes manabat lingua cruore debilitata malis, motu gravis, aspera tactu. / (...) and, obstructed by sores, voice's passage closed and tongue, soul's messenger, dripped drops of blood sapped by illness, clumsy in movement, rough to the touch” (Lucretius, I century b.C.).

A common thread between the two authors is the role of nature as an essential power within human life.

A constant that Thoukydides reads as the interpretation key of *Polis'* developments, through delineation of laws that deterministically govern the behaviour of socially aggregated men, led by an inexhaustible desire for growth.

From the summary of these considerations, we can therefore claim that self-containment that engenders the rule of law it's shaped by it to increase power, but at the same time it's extremely frail and able to modify itself, dragging the whole collective structure that supports.

The social reaction

During emergency, a cracking of self-censorship mechanism induced in individuals takes place and with it a rift of the whole social system, that produced and steers the place assigned to common life: the city.

However, it boasts the particular condition of being the product par excellence of human sociality and being able to influence it at the same time.

At the beginning, the perception of living in a vulnerable environment increases the deterioration's speed of social contract, decreasing the primary purpose of its constitution, namely security.

Loss of self-control and resurfacing of overwhelming instinct are certainly faster in inhabitants of a place perceived as unsafe and exposed to prolonged stress.

The city therefore not only becomes the afterwards intervention site through decrees' realization, characterized by an implementation of the supervisory authority, however it can be an active means of prevention by acting more efficiently on self-control mechanisms.

Self-management, that plays the role of primary form of “immune defense” of the whole system, is however not innate but caused, slowly assimilated through continuous exposure to control.

Reinforcement precept⁸ was applied to architecture in the middle of Enlightenment by Jeremy Bentham, who made it the backbone of the conception of a new jail system.

This system, called *Panopticon*⁹ by its creator himself, focused on the re-educational principles of detention, inspiring a sophisticated form of terror far from the one of cruel corporal punishment. Fervent and optimistic supporter of utilitarianism, he conceived a cylindrical prison structure in which, thanks to specific technological and architectural devices, a single guardian could control all the prisoners, without them being able to see him (fig. 03).

Aware of being supervised, however not knowing when it happens, they would have progressively assumed disciplined behavior and introjected the necessity to maintain order; furthermore, in order to make detention productive, would be assigned to convicts a rewarding and useful job.

Sure of the effectiveness of this mechanism, Bentham also attempted its application to other civil institutions such as factories, schools and hospitals, ending up unwittingly suggesting to Foucault contemporary society's power model (Foucault, 1975).

From this perspective, *Panopticon*'s architecture would be the exemplification of power that no longer falls upon society from above, but pervades it from within, constituting a series of multiple and not clearly perceptible dominance relations.

In the wake of similar theories and experiments, it becomes legitimate to express the idea that the city can represent a tool through which to implement a positive reinforcement on the whole society, producing beneficial effects through the perception of control.

Generating the idea of being controlled, without this actually happening, can be considered a form of education, differently from controlling individuals without their perception, an extremely authoritarian *modus operandi*.

Just as architecture is able to influence the psyche of those who live it, it could help to create a sense of security and basic education that is more efficient than the corpus of law in maintaining the rule of law.

Aware that behaviour changing is a mental prerogative, the space where we live is called to make its contribution to social order's maintenance, accepting the attribution of huge responsibilities and risks.

In the face of a widespread power, penal law can just constitute the founding core of education, but State's security depends on the ability to delay the surface of the state of nature.

The pursuit of social peace, the aim that set humans themselves in a community, therefore becomes possible only through mutual collaboration between self-control and control.

"Agreements without sword are just words that cannot defend anyone" (Hobbes, 1651).

Notes

1. With the capital letter it specifies the set of laws. In relation to the sacredness of the Acts of the Apostles, it evokes the greek term *praxeis*, equivalent to latin *res gestae*; it was used in Hellenistic historiography to describe war deeds (Bianchi, 2003).
2. From medieval latin *campio-onis*, derived from *campus* in the meaning of "battelfield".
3. Condition successfully explained in Rousseau J.J. (1755).
4. Literally "each one's war against everyone".
5. Leviathan is an horrific and fearsome creature part of various cultural and biblical contexts, a sea monster with legendary strength introduced in the Old Testamen. Allegorically, it represents primordial chaos, uncontrolled power, although biblically it's more often an expression of divine's will. From Hobbes' point of view, in order to theorize the modern absolute State, Leviathan symbolically embodies the State as a huge body whose limbs are individual citizens.

6. Literally “man is a wolf for man”.
7. There are no data about it, but experience suggests that those who have firmly respected rules are a minority.
8. Shifted from Skinner’s operant conditioning theories (Skinner B.F., 1969).
9. From greek words *pan* = “whole” and *opticon* = “visual”, literally “integral vision”.

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01. "È come se fossi intrappolato in un'orbita". Elisa Mozzelin, Venezia, 2019, propriety of the author.

Quarantine Symptomatology: is a naked running body a heterotopy?

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Keywords: Quarantine, Performative body, Right to the city, Vulnerability, Public space

Abstract

This article attempts to critically focus on a news event happened during the quarantine in Italy. Indeed, in the middle of the global pandemic, while the Italian government forbid citizens from leaving their homes, a young woman ignored the restrictions and after stepping out of her house, started running through the empty city. The fellow-citizens of the small-town who were around, both shocked and confounded by the singular event, took their smartphones out of their pockets and began recording what was happening in front of their eyes. The news and the critics have mainly focused on the absence of empathy shown by the fellow-citizens, but the aim of this paper is to interpret this act from a philosophical point of view, looking at its phenomenology as the deepest symptom of the quarantine. Is the woman lacking lucidity or can we also interpret her performance as a metaphor for something else? Can we say she is simply a victim of delirium or is she claiming her right of appearance in space someone took away from her? The work interprets the body as the greatest heterotopy of the quarantine, by showing the gesture as a claim to appear in the deprived public space, it will underline the performative relevance of the woman's behaviour.

Introduction

On the fifteenth of April 2020, in the midst of the global pandemic, a completely naked woman leaves her house and starts running along the city streets (Feltrin Jefwa; Chiariello 2020). The fellow citizens who are passing by, surprised by what is happening, suddenly take their smartphones out of their pockets and record the scene. They laugh, incredulous: they cannot believe what is occurring in their small provincial town, there, in front of their eyes. After a while, a couple of Civil Protection officers help the dazed woman to recover. After covering her with a wool blanket to stop the ravenous cameras from recording, they accompanied the lady back home.

Criticism of the event, some of which even came from the mayor of the town, mostly centred the absence of empathy demonstrated by the town's citizen. Indeed, they just seemed desperate to report the scene without even thinking about aiding the helpless woman (Feltrin Jefwa; Chiariello, 2020).

Some who have read the news have been shocked, whilst others, after viewing the video on social media, have been amused by the weird behaviour of a naked woman who escapes from her house to run through an empty town.

Against this backdrop, we will attempt to critically think about the meaning of what happened. Our purpose, indeed, is to philosophically question the woman's behaviour during a pandemic in order to underline its performative relevance. Is the woman unable to understand the extent of her gesture, or can we consider her behaviour as a symptom of the quarantine forced isolation?

In this paper then, we will provocatively invert the perspective by considering the woman not just as a victim of delirium, but as a conscient subject. Once seen from this perspective, the gesture can be interpreted as a claim for the right to freely appear in the public space, where the government was prohibiting its occupancy.

We will see how the pandemic has reinforced the fragmented condition of the public sphere, already vexed by the contemporary post-democratic (Crouch, 2018), globalized set-up (Castelli, 2019). The woman's performance will gain a particular meaning when interpreted as the need for a vulnerable subject (Butler & Athanasiou, 2019), to reappropriate the publicity sphere negated by this ultimate form of forced isolation (fig. 01).

What can a body do...now? Toward a politics of the heterotopy¹

During a radio conference held on the 7th of December 1966, Michel Foucault introduced his listeners to the concept of *heterotopies*. As the ancient Greek etymology suggests, as places these are meant to be the main feature of which is to contest reality.

These *hetero-topoi* arise specifically as counter places: they can be said to be other-spaces in relation to the context they spring from. Their main characteristic, indeed, is the ability to create an original space-time order inside everyday life, simply arising from the experience we all live.

In any case, the author writes that to every heterotopy corresponds, in parallel, to a heterochrony, an exclusive temporal structure which removes time from its loyalty to clocks by inventing a new way of scanning the rhythm of moments (Foucault, 2006).

Heterotopy and its heterochrony then, own the great power to delete the normal experience of space-time perception by creating extraordinary moments made of different and autonomous rules and structures.

At the end of the same conference, Foucault stated that the heterotopy par excellence is the boat. To him, the big XIXth century typical vessel:

[...] is a floating piece of space, a place without a place, that exists by itself, that is closed in on itself and at the same time is given over to the infinity of the sea (Foucault, 2006, p. 28).

If on the one hand, the boat represented the greatest economic instrument of the last centuries, the philosopher shows that on the other hand, it has simultaneously been the most important reserve for our imagination. The ship, indeed, let us imagine ourselves as adventurers and discoverers... as corsairs freed from the typical civil society duties.

Incidentally, quarantine has represented a heterochrony where time was suspended in an awkward waiting. The central question then becomes: if to every *etero-chronia* corresponds a heterotopy, where might this be situated?

Considering the event, can we not say that the heterotopy is precisely that running body? His refusal to stand immobile, sealed up and constrained witnesses the need of the organism to run away from an overwhelming and anomalous environment. The gesture does not only have to do with the subject of the act, but allow us to consider the body of action as a self-constituted *topos*, the place where protest is effectively performed.

Moreover, the space where the run happens cannot be distinguished by the surrounding architectures and infrastructures. Not only are these the primary conditions of the movement, but they also take part in the creation of the heterotopic space. As Butler (2017) writes, the freedom of a body can be exercised only if there is a support to sustain it.

Not only is the interdicted space used to empower the alterity, but every leap the body makes, the trial to inhabit a different and divergent reality is constantly renovated. Paradoxically, the heterotopy becomes present when the feet touch the soil and use it to hold and nourish the claimed freedom (Butler, 2017).

Not by chance, to be trampled is not a private space where everything is allowed, but on the contrary, the public one. In a way here the body appearance resembles an ancestral being and his vitality suggests a sort of vernacular practice of land occupation (Boni, 2019).

What happens during the run is that the organism tries to re-appropriate in a spontaneous manner what has been taken away from it (Butler & Athanasiou, 2019). The aggravating normed circumstance, which in fact prohibits the attendance of the public space, reduce the street, the public space par excellence, to a private place, a space-of-deprivation (Lefebvre, 2018). Its peculiarity, that of possibly being enjoyed collectively, is in fact denied to those who cannot demonstrate a valid justification to occupy that piece of concrete.

In particular, when to lead the action is a feminine body the scene colours up of extremely political meaning. Indeed, the space of the city responds historically and architecturally to the patriarchal logic (Decandia, 2019). Given this condition, the behaviour of women's bodies responds to a particular geography of fear, shaping and conditioning their everyday life experiences (Kern, 2020). This is the reason why a feminine body running over a city's paths shifts the expectations connected to the genealogy of that same space and ends up representing an unconscious reclaim for a brand-new and inclusive form of urbanity.

The "*phallic-visual-geometric*" space (Lefebvre, 2018, p. 281) maps and manage the city's routes, but this time, for a while, it is de-formed by the heterotopic resistance. By deciding to be exposed and to autonomously perform, the body establishes a totally dynamic lived space which disarms the power of the abstract space representations (Lefebvre, 2018).

Now, the body making its way states his right to appear in the public space (Butler, 2017; Butler & Athanasiou, 2019). This time, the gesture witnesses a precariousness which is not only social and economic, but, during the pandemic crisis, especially biological. His display, in fact,





can be effective only if performed in the public soil because this is the only place where this behaviour becomes explicitly political (Arendt, 2017). The feminine body statement is a call for a street politics action.

The subject of the run recalls of Foucault's corsair because it witnesses a different and engaging modality of existence (Foucault, 2006). Finally, the space of de-privation and his typical oppression can be forgotten, and overcome, at least for a moment (Lefebvre, 1969) (fig. 02).

Vulnerability and public space

The peculiar nudity of the running figure is what lends this event its exceptionality. The woman, by undermining the wraps and undressing from civil clothes, becomes the main actress of that counter space which now appears to be appropriated by her moves. The gesture of undressing, abandoning her clothes and leaving behind the social meaning incorporated in these objects (Bourdieu, 2001), gives this act the opportunity to be critically read.

This raw bust is innocent and at the same time harsh. It is not intimidated, neither it does appear as an educated and subjected body. There, it belongs to an invisible space-of-presence, situated, but hetero-topical (Lefebvre, 1977; Foucault, 2006). It is exactly for this reason that this exceptional performance is able to pierce the surrounding scenery. The body represents an oxymoron: its vitality clashes with the crudeness of the concrete, with the pruned trees and the saturated colours of the commercial signs.

In the raw and innocent bareness, norms, symbols and social practices incorporated by clothes are not visible anymore, neither recognizable: the body, here, simply embodies itself, showing off its vulnerability. Yet, this is not intended as an exposure to brutal violence: on the contrary, when the body appears in the public space is calling for a relation with others, but at the same it is conscious of the dispossession the exposure involved in this process of affection-connexion (Butler, 2017; Butler & Athanasiou, 2019; Deleuze, 2013). Indeed, an action cannot be performed alone: to be effective, it requires a plurality of subjects (Arendt, 2017).

Therefore, the nakedness is not just a symptom of delirium, because if we go beyond the appearance, we find that this is a call for attention, a way to make sure that whoever is looking is really affected by what is happening. This event forces passers-by to find a valid explanation for the disturbing running body. In fact, this atypical figure overwhelms the spectator's familiarity with his everyday life landscape, the same he used to cross repeatedly. The awkwardness, then, is meant to awaken the observer: the run is thus to be interpreted as a call to take the responsibility of this affection. But as Arendt (2017) writes, it is never possible to perform alone: instead of welcoming the body's openness, the public sphere dispossesses her by refusing to recognize the displayed vulnerability, the need to breathe.

As we saw, the woman literally pierces the scene, but on the other hand her action is immediately classified as an irrational behaviour: she is seen as a victim of delirium. The victimhood rhetoric is not here by chance here: this has indeed the function of forgetting both the subject and the inflicted injustice (Butler & Athanasiou, 2019). The rhetorical obsession for compassion reduces the political claim of the vulnerable subject by simply labelling her as a poor victim of a delirium. The subject's behaviour is then pathologized and the paternalistic foundational logic is just reinforced (*ibidem*).

By recording the scene, the fellow citizens place a layer between them and the performer, underling the difference between the normal (and normed) and the atypical or the monstrous (Foucault, 2005).

The public sphere, then, displays its strained condition. Beyond the Social Media society



mask, a progressive closure of the identities happens by showing their increasingly closing and self-referentiality (Pariser, 2012; Castelli, 2019).

At this point, the only way to render this event is to jeer at it, to transfigure the indecorous into an object, into an entertaining spectacle (Debord, 2012). Not only is the nature-landscape becoming a commodity, but the running body too, which is in turn condensed into a technological device, prepared to be widespread and dismembered through the insubstantial network (fig. 03).

Conclusion. Disclosing metaphor?

When in the second radio conference Foucault (2006) described the body as utopic, he reminded his audience that it is because of both the mirror and the corpse that its transformative and resilient character is forgotten. In fact, with these two elements we perceive our body as situated, we see something that is outside of us. It has thickness, contours, and weight... but still "it" is something other than us. This representation of the body, a pitiless *topia* (Foucault, 2006), fences the organism into a shape, assigning a specific place to every move it makes.

In reality, this is what happens when the performative body is recorded or photographed in order to be jeered at: by reducing its image to a fools' joke the body becomes a corpse. An optical layer, the one of the camera, separates and divides the performer's action from its potential plurality (Arendt, 2007).

The heterotopic body told that the article discusses about is a metaphor for a mutilated public space, where the Biopolitical power is not only surveilling and norming the streets (Foucault, 2015), but it is incorporated in the individuals' Panopticon-like behaviours (*ibidem*). Now, the typical plurality of the public space is only considered a hygienically unsafe crowd.

If the pandemic heterochronia suggested new approaches to everyday life, its heterotopic counterpart has been completely ignored. We do not mean that the spatial issue has been ignored, on the contrary this has been the occasion to accelerate the crumbling of the public sphere. Spaces have been rethought by governments in relation to the infection rate and the urban environments have been recalibrated according to the norms of social distancing norms. The consequence for all those places notable for their aggregative peculiarity has been their unavoidable penalisation and denaturalisation, and with this the annihilation of the individual's agency.

From a spatial point of view, Covid-19 has not been democratic at all. As a matter of fact, it has profoundly stressed the geography of social inequality and exacerbated mobility injustice. More explicit has been the case of the Southern regions where the class divide has only intensified.

The challenge, now, is to understand how the public sphere will evolve through these conditions. In part, the answer has been suggested by the "I can't breathe" extremely performative riots, but in regards to the virus' progress, the future is still uncertain. What is certain is that new hermeneutics of the Covid-19 affected public space are extremely necessary and urgent (fig. 04).

Notes

1. «What can a body do?» is the unceasing question Deleuze pronounce during its lectures on Spinoza. In order to understand what a body is capable of it is necessary to acknowledge the complex relationships established with other things and bodies. A body, here, is defined by this ensemble of organic and inorganic relations, or in other words, by its power of being affected (Deleuze, 2013).

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01. Indistinct Humans. Thomas Pepino, Market of Porta Palazzo (Turin), 2020, property of the author.

Virus, Man and Architecture

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Keywords: Virus, Lockdown, Fear, Pandemic, Human geographies

Abstract

The Virus is a machine in constant expansion that tries to regain its presence in the anthropic space. Can this micro existences¹ represent a physiological response to anthropocentric problems? Is the destructive action of the virus a human point of view or is it an autonomous work capable of safeguarding an objective whose dimension is not visible? The virus and the man, unfaithful longtime travel companions, inhabit and share the forms of architecture, striving for space in the struggle for survival on the planet.

Introduction

At first everything seemed normal. Early observations associated the effects of this new virus with a simple flu whose symptoms were similar to the common cold (Dipartimento Malattie infettive, ISS *et al.*, 2020). In fact, we have witnessed from the beginning a series of statements that underestimated its importance, until the moment when the health care system showed the first signs of collapse. When it all began, the spotlight was on the eastern area: China. What was happening there (SkyTG24, 2020; Wikipedia, 2020b)? We followed with interest the Chinese events and the speed with which they were building the field hospital. The need to build a hospital in such a short time already implied the speed with which the virus would spread. The priority was to fight against the problem. Not all governments operated immediately with common lines but, with the extension of the problem on a global scale, the comparison between nations determined an almost collective adaptation of rules and positions quite similar to each other. Perhaps we should have responded quickly to what was happening from the beginning. The virus, SARS-CoV-2 (Wikipedia, 2020c; 2020d), commonly called Covid-19 (Wikipedia, 2020a), is a respiratory disease that has transformed the way we live and interact with the space around us. It will no longer be possible to return to the original condition, but it will be possible to live together and face new threats with greater awareness.

Infected geography

The term *Virus* is derived from the Latin word for poison (Quammen, 2014, pp. 271-272). The virus dwells in a dimension undetectable by the human eye and, given its parasitic nature, needs an autonomous environment in which it can live. We imagine the virus as a constantly expanding machine that, within the hosting space, in our case mankind, sets the rules for destruction (Benjamin, 2018, pp. 41-43).

We can interpret these *micro existences* (Alliegro, 2020, pp. 11-46) as a physiological response of the biosphere to problems of anthropocentric nature. What is hidden behind the innate destructive propensity that characterizes the virus? Is destruction a point of view or the salvation of a target whose gradualism is not visible to the humankind?

In these months we have experienced a profound change, which has led us to reflect on how to live our daily lives. Society found itself facing an emergency for which it was not prepared. Although the pandemic does not represent a novelty in human history, most of the generations that populate the earth, entrust the evolution of Western culture (Rossi, 1997, pp. 24-29) with the scientific cure capable of saving them.

The emergency has changed us psychologically, doubled us and altered our way of thinking and acting depending on the context in which we are: alone, in groups, outdoors or indoors. This experience has made it necessary to act in a tight time frame, first of all implementing contrast measures to reduce the presence of the virus on the territory (Governo Italiano, 2020) and, at the same time, it has opened a reflection to understand how architecture can play a fundamental role in this scenario.

Terms such as quarantine, social distancing, patient zero, asymptomatic, epidemiological curve, herd immunity, mortality and many others could still be added to this list, quickly took over our glossary from a clinical to a domestic environment. These words not only regulate our lives, but also affect the perception of the space around us and parts of the city cease to be remembered because of the effects related to them. The final solution is the lockdown, a measure deemed necessary to defeat an apparently harmless enemy whose destructive capacity destabilizes the realities in which we live, putting the use of domestic and workspaces in crisis.

The global health emergency has highlighted the physical and psychological vulnerability of humanity at different levels (Kanter and Manbeck, 2020; Vindegaard and Eriksen Benros, 2020).

Cities have become contaminated areas that change color based on the trend of the transmission index of contagion (R_t)². The streets and sidewalks we walk along are the points of passage of viruses and vectors. We can imagine these infrastructures as the transit arteries for the contagion, the sorting places authorized to permeate from public to private space. Because of the fear of being infected and, consequently, of being the cause of potential virus transmission to our loved ones, these places of transit lie in a long, deep oblivion (fig. 01).

So it happens that the shape of the city, by its nature a place of memory sediment, a product of *homo faber*, surrenders the imagination to the theme of ruin before its new inhabitants.

The man travels through the urban spaces emptied of life, the shutters of commercial businesses are closed, the *porticus*, no longer offers a safe shelter but becomes an enclosed area controlled by the police. The parks, squares and places of social life are adorned with barriers and red and white tape, where individuals dodge each other as if they were bullets. The *urbe*, so desired by man, becomes a threat, the prison where the danger of viral proliferation is determined by the population density.

The architecture of shopping centers, designed to enclose in a single space different services for the citizen, have become potential places with high viral concentration, whose access is reserved to one person per household. When the Government exercises its functions and decrees the lockdown (Abburà, 2020), the tension reaches its maximum, consequently these places organized around consumption are prey to the masses who, terrified by the idea of not being able to leave their homes, stock up on food and get ready for the apocalypse (Forti, 2020).

From the news we understand that the health facilities have now come to collapse. Hospitals and nursing homes are the places where the virus engine is recruited (De Lorenzo and Pavesi, 2020). The corridors, rooms and resuscitation areas are the outposts of the virus colonies where every object you come into contact with, from stretchers to elevator push-buttons, can hide the threat. The difficult work of monitoring the pandemic by the World Health Organization, has made it possible to provide periodic updates on the world's health conditions and how the disease is transmitted and controlled (World Health Organization, 2020; Arcgis.com, 2020).

Individuals, having understood the ways in which danger is transmitted, tend to isolate themselves, dissolve social relationships and in some cases return to rural life.

In this scenario, urban planning needs rethinking, revisions and adjustments according to the anthropized space (Secchi, 2004, pp. 78-80).

Observing the latest reports, the poison now seems to be widespread all over the world and the sunset of a species could be hidden behind the first sign of failure. Fighting the virus requires cohesion and the ability to imagine actions that last beyond the temporality of man. Overcoming this crisis means to concretely visualize the permanence of man on the planet.

In what way can anthropic space be transformed into an immuno-architectural system? Which geographies should be reconfigured to counteract the infection?

Drawing a line along time, men have always transformed the earth's crust (Caniggia, 1976, pp. 189-191), working on it in two ways: by addition and by subtraction. The ability to manage these forms of settlement has transformed the nature of places. Men, unchallenged for centuries, have changed the territory irreversibly projecting on it an anthropocentric reality that dominates the laws of nature. The interventions we carry out are oriented towards a monocentric vision, directly and indirectly influencing the destiny of other living beings.



Therefore ecumene is the earth's surface conquered and transformed by man, and corresponds to the same surface that the virus is able to reach to destroy it. The virus, which by nature transfers its information into the host architecture, acts in the same way as humans: it conquers anthropic space and, by addition and subtraction, modifies the original structure.

The relationship between man and the virus is defined by geography. The man in becoming an architectural machine of the virus, unintentionally allows being crossed. The virus, as a simple organism, transmits its code to architecture. When man inhabits space, he creates architectural elements whose structures derive from archetypal models that, over the centuries, represent the idea of the type (Rossi, 1995, pp. 31-35). The virus in the same way acts in the host cell, imitating the type by altering its characters.

We can see these two models as pathogens capable of contributing to the same cause and, for short periods of their existence, are able to coexist peacefully. The death of man, means the death of the virus (Burioni, 2020, pp. 42-43). When this happens, the primary objective has been perfectly met.

Invisible enemy

The virus operates in our dimension in a sort of supreme biological intelligence that through its imperfect replication establishes a Darwinian theory. We can interpret this geographical framework as a sort of ancestral will, a sustainable model for a futuristic space, a process of self-regulation delivered by the biosphere into the hands of the invisible enemy.

Approaching and distancing, distancing and approaching, these are movements repeated over time with the sole purpose of avoiding fatality. Loved ones become distant and the contemporary city is unsteadily searching for the right distance. This alternation, if made definitive, can start a process of dehumanization. Men, in the act of moving away, turn their gaze to new horizons, abandon the city in search of peace and comfort, finding in rurality a protected place. The virus that escapes time, in its diabolical nature, represents an opportunity to give human beings time to reflect on their work.

Around this problem, urban geography has always been interested in the manifestation of the forms of the city, in the formal expression with which humanity has expressed the way society has lived over time. Today this presence is absent, the most visible urban event is the emptying of the city. The human shape dissolves, giving way to the shadows of the city. (fig. 02)

Now I realize that the power of the invisible enemy is perceptible in the weight of the bodies carrying the mortuary chambers. The deceased destined for the other side of the city, access the transit spaces for the afterlife in total abandonment, buried in the shadows of cypress trees, without bells and without relatives.

Like the tolling of the bells, with the same punctuality, every day at 18:00 starts the contagion bingo. Given the manner in which the virus is spread, among the security measures required, distancing is an essential requirement for survival.

The distancing in a multi-storey society, it seems like a paradox. People live stored, protected and isolated in their niches. In between one room and another, away from danger only when the front door closes. The maximum concentration of people in tall, multi-functional structures following a tree-like pattern, forces the inhabitants to enter the places with the highest risk of contamination: the elevator and the stairs.

Pieces of the city correspond to needs conceived by designers who have read and interpreted the facts of reality before the emergency. The clinical picture of the planet renews the symbolic role of the virus in the context in which it operates.

The world, the subject of mutations, tries to understand the idea of living apart, far away and without physical contact. The Ville Radieuse, Broadacre City and the Soviet experiments had imagined the role of humans in a society that had to respond architecturally to spatial needs. Today we must think about what new urban materials must be put in place for the city of the living and the dead. Can technology help us rethink anthropic space?

In the book *Surveiller et punir. Naissance de la prison*, Foucault reports a series of actions that towards the end of the 17th century would be taken to fight the plague (Foucault, 1975, pp. 197-206). This logic of fragmentation, identifies in the structural behavior a drastic response to the perception of reality. Urban space is transformed into a controlled space and the population, if it wants to survive, must unconditionally obey the rules. These preventive measures conceived three centuries ago are disciplinary mechanisms similar to those adopted during the lockdown. The infected protagonist, sentenced to domestic imprisonment, is happy to participate in the world project in order to ensure his salvation from the invisible enemy, conscious and unconscious of the latent potential of the virus. Technology takes over through a system of machines connected to each other, as the result of global transformation and homologation, where technological acceleration (Rosa, 2015, pp. 26-28) is the form of our being in the world. The change of connections with the objective world, allows us to reflect on a common agenda capable of changing both positively and negatively the quality of life and the surrounding environment.

To reflect on the role of public spaces at the time of Coronavirus, one can perhaps start from the symbolic and central value of the squares. Rethinking the city today, starting from the *agora*, does not mean inventing new squares, but imagine how the places of social life, can change by equally representing those symbolic values that originated the *polis*. To begin from the center of things, as architectural compositional operation, is necessary to reason on the literary sense of the parts of the architecture, so that the ability to reach other places, even distant and on different levels, will perhaps confer autonomy with respect to the rest of the body, making it viable and composing a room in the sky, as a symbolic window of hope in the world.

The redemption of Humankind within this unfortunate misfortune, is to dream - through memory - of the return of a recent past whose architectural dimension follows a reflection on the content as a code of rules (Eco, 2015, pp. 331-335) used to generate a correlation between man and nature.

Architecture can regenerate the space starting from nature as a necessary condition for man's health, declining the responsibility to produce environments capable of improving mental and physical well-being.

The geography of the mutation is still in progress, the poison will be arrested, but it will reappear in time in other forms and, as in all wars, the brutal formula is destined to alternate with peace. Human architecture promises a somewhat rhetorical timelessness within its walls.

The challenge is: to free ourselves from the illusory condition of determination, to embrace the architectural act in its ephemeral gesture, ascribable to the primordial intention, the inflexible social condition of time.

Conclusion

This text describes, through words, the spaces and the geographies experienced during the lockdown. The modest and brief narration of some portions of the urban space here reported, can be used to consider and reflect on some aspects of humanity. The analogies between the actions we perform on the Earth's crust and the reiteration of models within a geo-viral sphere, try to ask, without answering, whether there is a project of a higher order.

Given the uncertainty of the moment in which we live, the intent is to leave the reader with the possibility of imagining a follow-up to the multiple declinations that these two time travelers could assume in the practice of their functions. The Man and the virus, friends and enemies, travel at two different speeds of living in the anthropic fabric, unraveling analogies between inside and outside, real and unreal.

In the contingent temporal situation, the pandemic provokes a series of reflections for our intellect by building a picture composed of signs and memories. This heritage, made up of memories, fears and suffering, belongs to the present, it constitutes the skin, the footprint of the Sapiens, the garment he wears in social structures, a heritage to be leafed layer after layer independently of our presence on the planet.

Seeing beyond the destructive threat could be an opportunity to re-read our work on the territory to improve our objective and quality of life, questioning whether the virus and human activities will ever come to the end of the struggle for survival and whether the architecture will be the last testimony of our present.

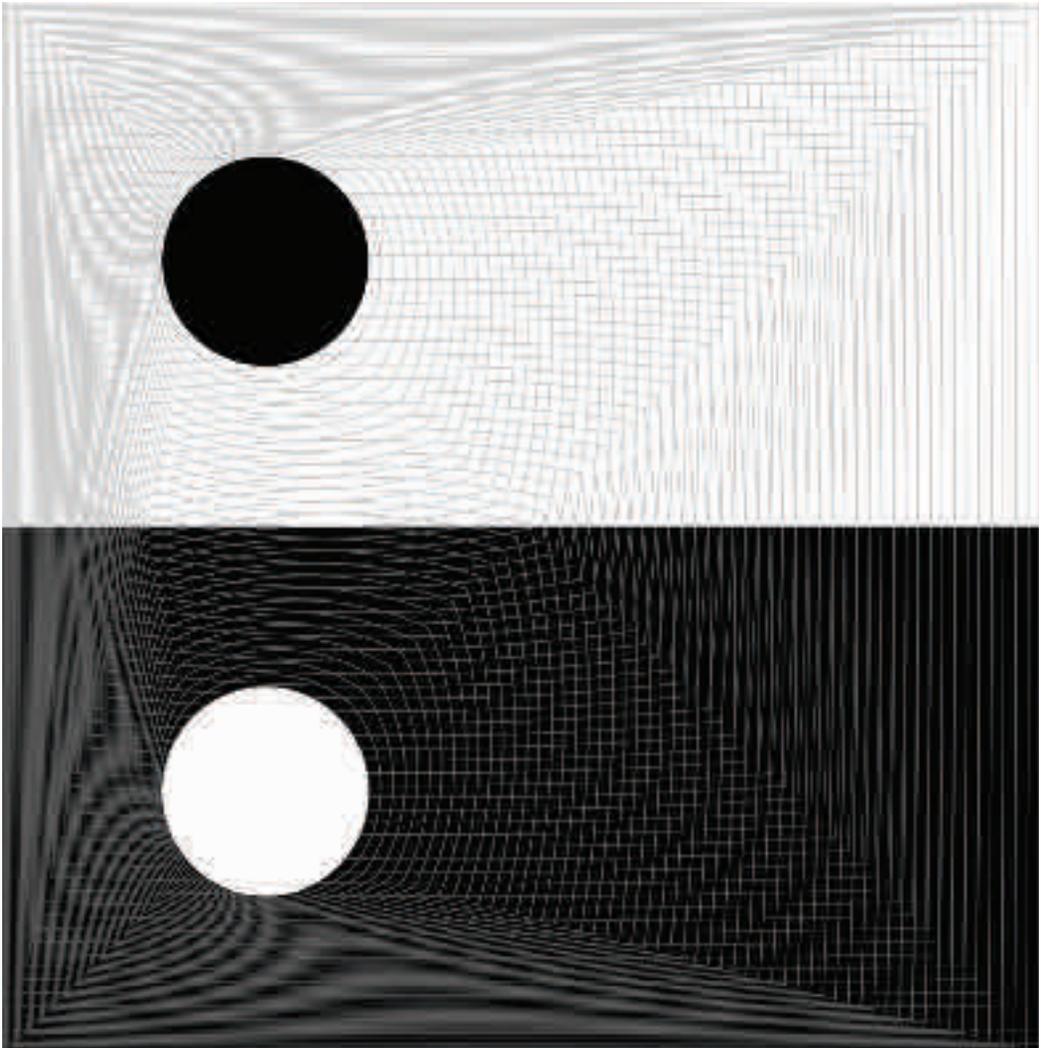
Notes

1. The path that leads to uncertainty about the existential nature of the virus is the result of conflicting opinions with which it is understood. Given its architecture capable of protecting the content, given the intention of replication of the content towards another architecture, the host one, the idea of existence resides in the autonomous mechanisms that regulate the transfer of genetic knowledge or its alteration in what is the semiotic process of intentional resignification of data and content towards another significant object. To inhabit other spaces repeating each time various archetypal characteristics is a human intent.
2. R_t is the transmission parameter of the contagion. The parameter is calculated based on the average number of people who are potentially infected by only one person in a given period of time. The R_t index varies according to the effectiveness of the containment measures and allows regions to switch from one color to another. If the value is lower than 1 the epidemic curve is flattening.

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01. Phase one: the quarantine begins. Giuseppe Gallo, 2020, property of the author.

Digital and quarantine

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Keywords: Digital, Quarantine, Social media, Digital life, Architecture

Abstract

The epidemic we are facing denies our contemporary liquid world, freezing and expanding its physical distances again. The global city, distributed beyond its geographical borders, interconnected and shared, is now being questioned, as the role of our houses, previous part of a city-ecosystem, now isolated refuges. It is not the first time we face an epidemic, but it is the first time a pandemic hits a global digital world. Digital has offered us a novel way to face the epidemic, transforming IT possibilities in an obligation. This aspect showed us the limits of the digital paradigm, and we are all hit regardless our level of computer literacy: not just some parents who must now deal with e-learning for the first time, even digital champions as Facebook, which, given less human control over machine learning activities, because of remote work, classified reliable information as fake news. I tried to describe the influence of the digital paradigm during this collective quarantine in a series of images ideally starting from the Yin-Yang Symbol, which indicates a dynamic balance, overcoming dualism in polarity between opposites. A circular icon, now limited within the four sides of a square, in an apparent balance that forces us to find a difficult adaptation to the enclosure. In a second phase, the apparent balance breaks, and even if the digital paradigm guarantees us its possibilities of communication, its non-neutrality distorts our vision of the world, flattening it to the medium and limiting our perspectives. With the third moment, the digital artifice dominates our daily lives, homologating it to seemingly logical, but not natural rules and structures, which escape our control and confuse our identities in ones and zeros.

Introduction

Humanity will remember the Twenty-twenty, in the coming decades and probably for centuries, as the year in which the world stopped. The pandemic hit the global system and revealed its limitations and inability, the technical and economic apparatus suffered a backlash when the virus suddenly became the undisputed protagonist of worldwide communication: televisions, websites and social media, chased each other, divulging even conflicting news on the genesis and spread of the virus. In the beginning, we all experienced the uncertainty, doubt and fear caused by an invisible, elusive and unknown enemy, impossible to fully understand, even for highly experienced specialists. Each individual built his opinion starting from the often fragmented and incomplete information that saturated the infosphere (Floridi, 2014): our reaction, fomented by uncertainty, fear, inability to understand, ranged from disbelief to rejection, and found vent on digital dimensions, feeding the media noise that dominates the web. National and international government bodies had to face unexpected scenarios, so difficult to understand that the institutions initially reacted even in diametrically diverse ways. The political bodies had to rely on specialists, and the response to the emergency, despite the initial inconsistencies, converged into the only strategy capable of narrowing the spread of the virus: isolation. From China to Italy, from Germany to New Zealand, world governments have decided to limit the contagion by inhibiting the movement and interaction of people, applying restrictive measures and forcing entire populations to stay at home.

The influence of digital on our quarantines

It is not the first time that an epidemic has threatened humanity; it is the first time, however, that a pandemic has struck a liquid society (Bauman, 2013) and a globalized planet, shrunk in space and time necessary to travel through it. It is the first time that an event of this magnitude affects a digitally and economically interconnected world. The result is there for all to see, the capitals of the global economy have stalled: cities, emblems of the speed that characterizes surmodernity (Augè, 1992), have suddenly frozen, public spaces have emptied, internal and external connections which normally animate global metropolises have stopped. The advent of quarantine has challenged the model of the contemporary city, every common space from offices to stations has suddenly become deserted, useless or unusable, matching the limits of our daily lives to those of our homes: elements of a shared urban ecosystem, starting points for the exploration of contemporary society, which have suddenly become not only our refuges but also and above all our prisons.

Wanting to synthesize our pre-quarantine existence, it is possible to recall an image characteristic of Taoist culture, the yin and yang symbol, which for more than a thousand years has represented a polarity between light and shadow, overcoming the dualism typical of western culture and expressing, on the contrary, a dynamic balance that constantly regenerates itself (Watts, 1975). Although the symbol has deeper meanings, which have stratified over the centuries, it is possible to use it to describe the constant evolution of our existences within the contemporary city: immersed in a flow that we contribute to define with the evolution of our daily lives. A dynamism that undergoes a setback with the beginning of the quarantine, represented by the first graphic proposed (fig.1), the moment in which our existence narrows at home, as well as the circular forms of the Tao, which find themselves boxed in a square. The result is an apparent balance, that forces our energies and desires to clash with the new proximity of home horizons, generating conflicts that result from the new limits imposed on our possibilities.

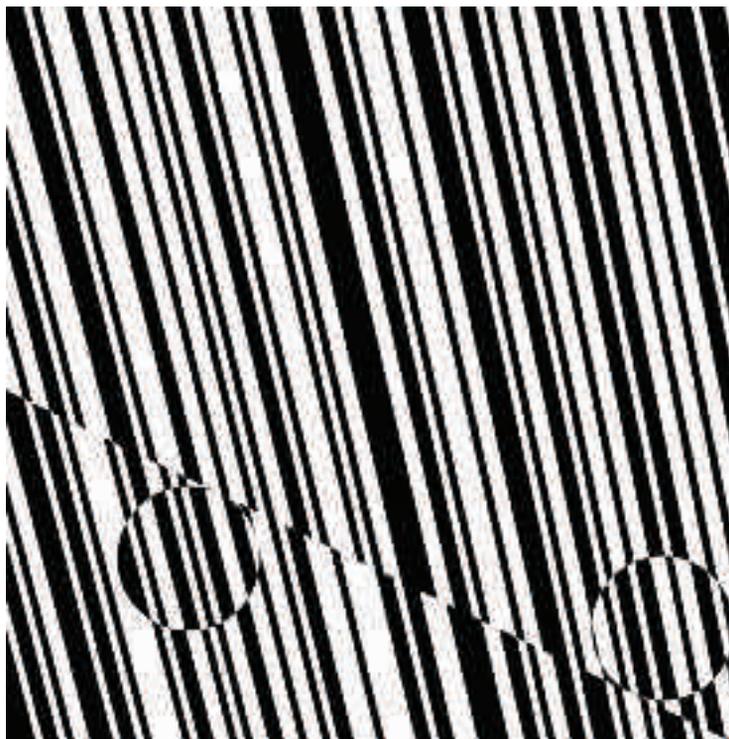
The digital paradigm that has already embraced our lives, causes an apparently invisible influence on our perception of time, which today risks getting lost in cyberspace. Einstein's theory of relativity first, and quantum mechanics later, led us to abandon the presumed truth of space and time as containers of entities, separate from each other (Rovelli, 2014). On the contrary, digital prostheses through which we experience the world flatten this relationship, reducing time to a category of space, measuring it and recording it in a database. Databases form an interpretation of reality according to a discontinuous and non-linear logic, forcing us to see, think, and experience the world as a spatial system of data rather than a temporal system of events (Barker, 2012). As evident online, where information is immediately available regardless of when it was produced, and from which it is always possible to construct altered narratives, by upsetting the temporal relationships that characterize it and therefore meanings.

A condition that gets even worse when even physical space at our disposal contracts, distances that separate us expand, the lock-down alters our habits and rhythms, and we find ourselves lost in our homes (Molinari, 2016), where we are forced to confront ourselves with our identities, with what we are, regardless of our profession and the relationships that defined our daily life before the quarantine. Possibilities of analogical communication and interaction outside our home diminish, and the desire for contact only finds an outlet in digital dimensions, on media that have already impregnated our pre-quarantine existences, and during forced isolation become the only channels for us to relate to the outside world.

The contractions of time and space trigger the next phase, summarized in the second graphic (fig.2), where the first apparent balance is broken, resulting in a reconfiguration of our desires, and an imbalance of intentions and energies: conditions that favor the imposition of structures coming from the digital dimensions of the media. The information, already liquefied and crowded with discordant voices, gets more and more confused in opinion, and while we experience the meaning of tough words such as lock-down and social distancing we also have to deal with a concept such as the trend of the contagious curve, a topic that is thoroughly incomprehensible by those who do not have any knowledge in statistics and virology. Incorrect information bombards our existence, news that reaches us in the form of posts on social media, vocal notes, images: media noise that we are not always able to judge based on our previous knowledge, but which we interpret starting from our feelings. This causes further distortion in our comprehension of the world and compromises our understanding, which we come to structure based on erroneous information.

An increasingly frequent condition because of web 2.0, a phenomenon that revolutionized our way of communication, democratizing media, but has also allowed disinformation to reach an even wider audience. Over the years from the first appearance of social media, these communication platforms experimented systems structured through algorithms aimed to show us only that information that most closely approximates our profiles of media consumers. Features already present in our lives regardless of quarantine, but which had more weight on our perception when digital became the primary means of relationship. This happened globally. It is easy to see how governments around the world have been pushing for decades to encourage the digitalization of processes and interactions: digital promises easiness, immediacy, economy, and an unprecedented ability to understand and control phenomena. The quarantine was then an opportunity to speed up in this direction, resolving the inability to move if not to supply food and necessities by translating all activities usually performed outside our homes to digital dimensions. Governments and private groups have then immediately found a chance to solve the immobility crisis exploiting information technology: turning working in remote





working and learning in distance learning, “smart” practices, which have transformed digital possibilities in an obligation. In this sense, quarantine has become the largest mass digital experimentation in history: the effective shift to digital of every human activity translatable from physical reality to virtual dimensions, not just office work and learning, but even fitness lessons and Telehealth services (Xiao, 2020).

This sudden and unexpected total transition to digital as the only means of communication has created many problems at every level: problems easy to understand by those parents with children, who had to face for the first time with dozens of different e-learning platforms, often starting with insufficient digital skills. Problems that have occurred regardless of the users’ computer literacy, because even digital champions had to face new issues for the first time: Facebook, as an example, forced to send home its moderators who can carry out their duties exclusively inside their offices for privacy and security reasons, has widely relied on machine learning algorithms to perform automated moderation of posts published by the platform users. This, according to many, has caused problems in the classification of reliable news about coronavirus, information that Facebook machine learning algorithms have erroneously reported as fake news and immediately removed from the popular social network during the second half of March (Price, 2020).

Similar issues happened to several online streaming services offered by multinational of technology and entertainment as Google and Netflix, companies that own some of the most powerful information technology infrastructures in the world, and despite this, had to measure themselves against anomalous phenomena caused by the quarantine, recording unprecedented amounts of data traffic, which forced them to lower the quality of streaming videos to avoid a collapse of their information technology infrastructure (Gold, 2020). Problems experienced with no doubt because of the suddenness of changes, but which should make us reflect constructively on the meanings that digital instills in our lives, and on the level of reliability of those systems. Furthermore, it is important to remember the heterotopic dimension of digital media, a condition meaning that what we communicate is never reality, but a representation of reality (Foucault, 2001) and, as Marshall McLuhan (1964) already said over fifty years ago, “*the medium is the message*”. Tools are never neutral to the actions we carry out through them, and in the case of digital means, their influence extends beyond our immediate understanding of the phenomena. We have seen it inside our homes, scenes of an adaptation to digital activities that has elevated them to the univocal centre of our existences, but at the same time has undetermined their internal spaces, transforming them during the different hours of the quarantine days, from private spaces to classrooms and offices: public places, the exact opposite of what the house traditionally means.

These upheavals of meanings, together with the evident problems caused by the difficulty of communication and understanding, lead us to the third graphic (fig. 3), which represents an advanced phase of our quarantine, the moment in which logics and orders conveyed through digital infrastructures take precedence over the remaining of our balance, now dispersed within configurations that seem rational to us but are not natural nor neutral, oblique and incidental to our human needs and experiences.

Conclusions

The quarantine shared by a large part of humanity in 2020 has found an outlet in the digital dimensions, accelerating the translation of physical functions and objects into heterotopias. We were witnesses and protagonists of the largest digital experiment ever made, and we did

not pass it unscathed: the model of the contemporary city experienced a backlash, we had to confront with the enclosure that contracted our spaces and with the obligation to use digital means that flatten reality according to discontinuous and non-linear logics. A condition that highlighted, not only how unprepared we were for the arrival of a black swan (Taleb, 2007), but also and above all, the impact that the transposition to digital impresses on our understanding of the world and therefore on our culture. Imagining this series of graphics during quarantine helped me to consider the loss of balance that each of us faced as an individual, as well as member of a community. Today, months after that period, we wonder if the pre-quarantine models are still sustainable. We are not able to fully understand the consequences of this epochal experimentation, yet digital has crept further into our lives: those who, during the quarantine, experienced the efficiency of home delivery of products that they previously bought in a store, can now continue to take advantage of it. Those who vented their loneliness in online practices such as gambling or porn may have developed an addiction. Similarly, remote work and education could become the new normal, a prospect full of advantages and risks, which, given the scale of application, requires a different awareness on our part. In the meantime, we rely more and more on digital technologies that evolve towards invisibility, hiding their mediating presence (Catalano, 2016), and generating an increasingly evident influence on human beings.

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Un-covid Urban Corporis

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Keywords: Pandemic, City life, Change, Behavior, Point of view

Abstract

COVID pandemic has upset the lives of billions of people, infected and otherwise. Until yesterday the social structure didn't foresee vulnerability as a mental category applicable indiscriminately to all human beings. There were privileged, wealthy, productive, cultured, in perfect health and aesthetically good people and "inadequate" people from an economic, physical, cultural and social point of view. The pandemic has made all of us potentially "incorrect" and "undesirable", breaking down (not necessarily in a positive way) the social barriers built over centuries, as indeed had already happened in the past in more or less recent times. The human soul has not changed in the face of the threat of an invisible danger which reaps death, deprives entire families of sustenance and economic security, makes individual and collective social growth efforts in vain, extinguishes enthusiasm and cancels legitimate dreams of many individuals. For this reason, COVID becomes a symbol of NOT, NOT ENOUGH and in many cases NO MORE. These reflections arise from the comparison of two women, an architect and a doctor, mother and daughter, different looks, same reality. Many rightly maintain that the pandemic has brought out the best and the worst of the human being, but often this consideration is limited to the most striking positive and negative manifestations and not always more subtle and underground attitudes and mental patterns are taken into account. COVID from a virus has become THE Virus, as if all other diseases had suddenly been eradicated. COVID is: UNknown, UNpredictable, UNmanageable, UNbearable, UNforgettable. We cannot accept that a microorganism upsets our existences of the present and future time. It is up to us to transform the COVID problem into an awareness of the limits, fear and suffering shared by all mankind, to transform the curse of a positive COVID test into an UN-COVID soul.

Introduction

In the last 60 years politicians, scientists, writers, philosophers have stimulated people to positive attitude and thoughts, to overcome stress, psychosomatic diseases, cancer, obesity and anorexia, amatory and work failures, economic crisis, loneliness and depression; neuroscience has discovered brain circuits that through emotions condition organic responses.

Technology has allowed overcoming our cognitive and aptitude limits, to perform pleasant activities, to reduce fatigue, to increase the precision and speed of our gestures: all positive outcomes.

The new economy requires flexibility, resourcefulness, initiative, ability to renew itself in different and unconventional jobs: all positive attitudes.

Modern society requires politically correct language and behaviour towards nature, ethnic minorities, different sexual orientations, disabled: all positive behaviors.

In common life "positive" has a good meaning, "negative" means unfavourable. Not in medicine: a positive test means disease, cancer, infection...Covid-19 too. People are always happy to know that their CT, biopsy or biomarker are negative, and this epidemic is no exception.

Prefix Un- corresponds to a concept of negation, deprivation. Humanity experienced the COVID pandemic as an immense heap of limitations, and lockdown is the emblem.

However, millions of people have been looking forward to the negative test result to feel safe, to continue living in their homes, with their family.

And so our daily living swung between frustration of common restrictions, relief for the good news that looks at us closely and fear of infection. But not everyone has experienced these dark months in the same way. Here are some UN- experiences in Covid-19 time.

The way we were and we are

UN-EXPECTED: pandemic in 2020, not terrorist, but banal influence: a pretty microorganism, very photogenic under the microscope/ nevertheless without care, not only for older people, you die at all ages, black, yellow or white.

UN-TOUCHABLE: common things and people, sick and suspected of contagion/ millionaires, political leaders and celebrities from illness and death.

UN-WASHED: fashionable hairstyle, jeans and shoes for teenagers/ lonely people closed at home, not able and without interest to personal care/ people like Robinson Crusoe: if nobody sees it is not worth taking care of themselves.

UN-RESPONSIBLE: spread fake news on social media, news, newspapers/expose themselves and others to risk of contagion for futile reasons or for economic interest.

UN-FASHION: dull men and women, devoid of charm/everybody live indoors at home without makeup and trendy accessories and each one looks in the mirror and sees himself beautiful or ugly/faces marked with masks, with bruises and scratch.

UN-COVERED FACE: in compliance with the law, not banished or jihadists/ irresponsible spreaders of infections, punishable by heavy economic sanctions, beatings or jail.

UN-THINKABLE: don't return to own country, from work or holidays/ organize rooftop barbecue and COVID party with friends.

UN-BEARABLE: don't kiss parents, sons and lovers, don't go to the church, don't get married and not having funerals/ having hair without styling and dye, no manicure, not gym, cinema, restaurant/move relentlessly for 12 hours covered in overalls, gloves, shoes, masks and visors.

UN-FORGETTABLE: coffins lined up in front of hospitals/ ventilators breathing system noise for patients in resuscitation/joy of knowing that you and your family were not infected.

UN-WANTED: news and images of died from war and hunger in the world, even in times of pandemic/share the fear of those who don't want to die alone in the house next to yours, in your town.

UN-NOISY: squares, streets, shops and markets, courtyards of the schools and the play areas of the gardens/ hallway, ward and emergency in hospitals during lockdown.

UN-VISIBLE: eyes, smile or tears of doctors and nurses in Covid hospital wards/the mouth of the speaker for deaf-mutes/ death of homeless people on the street, violence against women and children at homes.

UN-RESTED: insomnia of those who are closed at home all day and only carry out sedentary activities/

who should continue to cure and care even when he can't take it anymore.

UN-RENDERING: hundreds of men and women looking out of windows and terraces/ low-ered shutters, dark windows, lights that illuminate empty spaces.

UN-OPEN SPACE: needing to redesign rooms, common spaces and social gathering with plexiglas separators, partitions, distancing of workstations, changing the face of schools, of-fices, factories, museums and theatres.

UN-FUNCTIONAL: if I have to sit on a chair or armchair all day for 3 months, if I have to cook all the meals, if I have to make quota spaces in the house, I find that design without function-ality is not needed to improve the quality of life.

UN-PLANNING: locked building sites, closed offices, interrupted competitions and contracts, men and women home from work; you can finish the drawings, complete the calculations and models, but do not start working and carrying out a project.

UN-MOVEMENT: not to see men, cars, trains and planes moving in space/not being able to move because you feel fatigue for every least activity.

UN-SURGICAL MASK: hospitals and hospices without sufficient safety devices for patients and operators/masks sewn by men and women with fabric cutouts, made from scarves and handkerchiefs, paper rags used for shelter, famous brands that have created evening masks, coordinated with clothes and accessories.

UN-CORRECT: official numbers of Covid infected, hospitalized, dead, discovery of effective drugs and vaccines/ political statements to minimize risks, to exploit a worldwide disaster for economic and power purposes/ discrimination of some categories in restrictive or economic and social support measures.

UN-FOUNDED: surgical or washable masks, FP2, FP3, disposable gloves/all types of flour, yeast (all have become bakers or pastry chef).

UN-CHILD FRIENDLY: children who can't go to school with their classmates, who can't go out to play in the park, who can't play sports/mothers who must resign to look after the children/ grandparents who cannot be approached or who die in hospital without seeing their grand-children again.

UN-ECOLOGICAL: lockdown has caused an increase in energy consumption for continuous use of communication devices and PC/ plexiglass dividers, disinfectants, latex gloves are the new top products on the market

UN-IMAGINABLE: see elephants, ducks, goats, crocodiles and bears on the streets of our cit-ies- what a beauty!/ explain to a policeman that we have chased with our car a fox that was not to be in front of our garage- what a pity!

UN-COMPLIANT: ultra-modern hospital buildings designed to be inclusive but not suitable for an epidemic/signs, routes, entrance to public structures to regulate access flows.

UN-USED: industrial buildings, abandoned areas, which have been transformed into tempo-

rary hospitals, often with very high costs; why not permanently convert abandoned areas into polyvalent structures able of supporting emergencies of various kinds?

UN-DIET: open the fridge or food storage every hour to snack to deceive the boredom of being at home all day and being at the end of the lockdown gaining weight of 5 kg/ losing 15 kg after 3 weeks in intensive care.

UN-MEASURABLE: places that until yesterday were suitable for work and commercial activities have become insufficient to prevent contagion, comfortable homes are not suitable for mandatory quarantine/ days last more than 24 hours and weeks overlap always the same / memory mistakes recent events and the “normal” past seems so far.

UN-CERTAIN: economic future for thousands of families, return to stable work/ immunity after infection / safety in public places.

UN- KNOWN: COVID 1-18/ when pandemic began/when pandemic will end/ what will be our daily life in the coming years (fig. 01).

Conclusions

Each of these observations is real, there is no absolute truth but everyone knows a part of it. There are no same needs for everyone, but ethical priorities that should unite us all.

Our lifestyle has changed, we have adopted never experienced behaviours, except during catastrophic, nuclear, war or chemical events, but well defined in time and space.

In past months we have discovered realities that we believed relegated in past centuries, unknown features and emotions, unusual joy and pain.

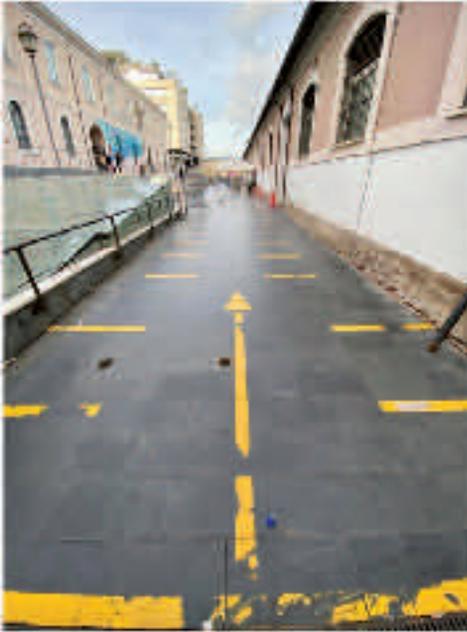
Many shouted that we would never again be victims of the futility, called for a return to the essential values and respect of nature. On social networks, famous men and women (or not) said that life would never be the same as before, that we would look at the world with different eyes and pursue different values: but will it be true? And how long will it last?

Will we be able to keep those intentions? have we really learned anything from COVID19?

What positive or negative we were, we are or will be? If COVID-20 came, will we be ready for?

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01. Covid-19 measures: placing markings on the ground and restricting the direction of walking in Esquilino Market. M. Edeisy, Rome, 2020, property of the author.

Healthy housing and regeneration

Covid-19 and post-pandemic

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Keywords: Healthy city, Resilient urban setting, Inclusive regeneration, Covid-19 pandemic, International policies

Abstract

The topic of healthy built environments is now more actual than any other time. In the light of the pandemic situation and the concept of the 'New Normal', the scientific community and international bodies are focused on optimizing solutions for crisis management and the post-pandemic future. The World Health Organization (WHO) identified a list of guidelines to reduce the spread of Covid-19 and protect communities. Parallely the United Nations (UN) and the European Healthy Cities Network (EHCN) provided recommendations and measures to reduce the risk and mitigate some of the longer-term impacts in urban contexts. In a phase where cities act as centres of community transmission, EHCN and the United Nations (UN) provided examples of good practice and reports to share experiences and lessons learned, promote inclusivity, and underline key action areas for national, regional, and local bodies to rebuild urban settings against pandemics, climate change, and socio-economic hazards. This article provides an overview of the WHO, EHCN, and UN response – through critical literature of the official published documents and reports- and evaluates their implications on the housing sector and the built environment. It provides guidance to mitigate pandemic impacts and strengthen preparedness, and recovery in urban settings. The results support policymakers and actors of the built environment to regenerate healthy inclusive communities and resilient cities.

Introduction | Focus on urban areas

Since the rapid increase in the number of cases outside China in March 2020, cities and urban areas have become the epicenter of the pandemic crisis. More than 90% of reported Covid-19 cases have come from urban areas and preparedness in cities is more urgent than ever for reducing disaster risk (UN-Habitat, 2020). The World Health Organisation (WHO) worked to support countries to prepare and respond to the Covid-19 pandemic through a list of strategies and tools; providing information about the virus, publications for technical guidance; Health System Response Monitor (HSRM); surveillance reports; training courses; and multimedia statements and campaigns. Parallely, the European Healthy Cities Network (EHCN) moved to provide support on the city-level implementation of guidance from WHO and national authorities, in order to assist the response plans. Cities are composed of complicated systems that work together in what appear to be interconnected networks, their populations and their high level of interconnectivity make them particularly vulnerable to the spread of the virus. Proper methodologies to fully assess the impact and outcome of actions for healthy and resilient cities has been a central topic since the establishment of EHCN. The principle of interdependence between the various policies -that can no longer be neglected- and the 'construction' of the Health City represents a long-term urban and territorial planning process (Giofrè and Djukanović, 2017). The Network provided resources and reports – from the Covid-19 dedicated meetings of the WHO European Healthy Cities Network – of good practice to support the strategic preparedness and guide response plans for cities and urban areas (WHO European Healthy Cities Network, 2020).

Short term vs long term

It is necessary to distinguish between the phases of the emergency management cycle – from preparedness and readiness to respond to an eventual recovery from the crisis. The first layer of protection against the pandemic spread is recommended by WHO is physical distancing, hand hygiene, and respiratory etiquette. Cities and urban settlements, where possible, should introduce measures to enforce physical distancing in public spaces, markets, and streets without closing them entirely (World Health Organization, 2020). This implies an immediate modification of the space distribution users' flows, densities, and general use/functions of public spaces, which might be simpler in the case of planning new cities or designing new zones and buildings, but adapting the existing built environment might require additional effort.

WHO's documents recommend intervention measures such as placing markings on the ground and restricting the direction of walking (World Health Organization, 2020) (fig.1). In order to reach a high level of physical distancing in open spaces, these measures can be integrated with urban design elements (landscape and greenery, urban furniture, lighting and material selection, etc.). For example, street and urban furniture can influence the people's movement and social behavior in public places, taking into consideration that the equipment placement impact on the interaction between public spaces and users' behavior is contextual and can be influenced by local factors (Mourthé and Bezerra de Menezes, 2000).

During recovery or between epidemic peaks, cities and other urban settlements should refer to the interim guidance on urban and environmental measures to support public health and well-being. In the long term, policy choices by national, regional, and local governments are needed to build resilient cities against pandemics, climate change, and the crisis of the new normal, while strengthening the ability to achieve good health and wellbeing –the third sustainable development goal¹.

Strengthening preparedness in cities and urban settings

In urban settings - areas with a large and dense population that may be within certain administrative or political boundaries-, there are large populations and spread may be faster in congested places. The Department of the WHO Health Emergencies Programme recommended the development and testing of possible innovative and applicable solutions for distancing in public places and physical distancing in domestic settings and social settings (World Health Organization, 2020).

This includes measures such as limiting mass gatherings and the selective closure of enclosed public venues. Consider ways to promote physical distancing in public spaces that remain open (e.g. green and natural spaces, temporary closure of narrow vehicular roads; The application of all measures should be appropriate to the local context (Lohan, Kauppinen and Debnath, 2016) and it requires the inclusion of practitioners of urbanism, architecture, and engineering, who play a strategic role in stimulating urban transformation for healthy built environments and activating actions in key development sectors (Giofrè and Edeisy, 2020). For this reason, the European Commission is investing to support the preparation of practitioners that design healthy environments from city to neighborhood to building scale (Healthy URBan Environment Developing Higher Education in Architecture and Construction in Bosnia and Herzegovina, 2019). The Internet of Things (IoT) and Big Data can play an important role in understanding the people's movement patterns, assist -vehicle and pedestrian -mobility solutions that enhance physical distancing and limit mass gatherings (Yoshiki *et al*, 2020). Cities should take necessary measures to limit movement out of homes while reducing overcrowding within homes. Where this is not feasible, the use of public assets and facilities should be explored. In social settings, measures may include closures of schools, religious centres, entertainment venues, and limiting visits to elderly and chronic care centres and prisons. This might require a reevaluation of the temporary change of function of those structures that might be out of use. It might be necessary to reconfigure the spaces according to the new norms in order to re-use them safely. Alternatively, those facilities can be thought of as potential public assets, where new -temporary- uses. For example, develop the tools to provide temporary and emergency housing to people who are homeless or inadequately housed can have a positive impact on social cohesion and solidarity, while reducing transmission; also the allocation of vacant housing to people in need including using public assets and cooperating with the private sector to make use of underutilised spaces and repurposed buildings. These are some of the various actions provided by the Department of the WHO Health Emergencies Programme to enhance health, social cohesion, and solidarity while reducing transmission and enhancing physical distancing in the response phase (World Health Organization, 2020).

Digital technologies embedded in architecture can allow the optimization of the use of these facilities, by coordinating space-time. This means the spaces are adapted, considering the notion of porosity, accessibility, or movements, to optimize the use of spaces throughout time (Cassar, 2019), while implementing strict protective measures and contextually appropriate approaches. Smart building technologies can provide a valuable contribution and help mitigate against contagion in the long run (Lam, 2020).

Key areas of action

Realizing these potential gains will require intensified commitments and action. The United Nations (UN) urges national, regional, and local bodies to adopt long-term policy choices commitment in three key areas to rebuild resilient cities against future pandemics, climate and economic hazards and shocks, (fig.2) (United Nations, 2020)²:

1. Tackling inequalities and development deficits

It is necessary to make large-scale public investments in affordable and adequate housing, infrastructure, and slum upgrading to be able to provide safe shelter and adequate sanitation for all residents, especially marginalized groups³. Vulnerable groups in slums and informal settlements should be at the center of attention. In a scenario of a global urban housing crisis, where it is estimated that 24 percent of the world's urban population to reside in slums and informal settlements (United Nations Economic and Social Council, 2020), overcrowding in low-quality housing increases the risk of rapid transmission. Nearly 1.8 billion people live in overcrowded or inadequate housing, slums and slum-like conditions, or a state of homelessness, with acute risks of exposure (United Nations, 2020). Everyone needs access to adequate housing in order to safely adhere to coronavirus physical distancing and hygiene guidelines (Office of the High Commissioner for Human Rights, 2020) (World Health Organization, 2020).

Coping with the crisis requires the presence of uninterrupted services, such as water, sanitation, waste collection, and electricity; it is important to ensure necessary infrastructures for areas that lack access to these services in order to facilitate telecommuting, home education, etc. On a wider scale, health institutions must coordinate the distribution of resources and collaboration that ensures equitable access to facilities in deprived areas.

2. Strengthening the capacities of local actors, particularly local governments

Inclusive, multi-level governance is at the heart of local responses, and collaboration between all levels of government needs to be institutionalised, providing consistent engagement with all residents, particularly marginalised and vulnerable groups. This emphasizes the importance of participatory processes to engage communities, which is increasingly recognized within area-based regeneration programmes. Studies show that integrated participative urban regeneration models allow local people to play a successful role in the research process while delivering a range of data that assist in the planning and design of services to meet local needs while fostering inclusivity (Dobbs and Moore, 2002).

3. Pursuing a resilient, inclusive, and green recovery

Covid-19 economic recovery measures in cities could harness green and sustainable solutions that provide longer-term benefits, such as the introduction of new models of urban development and a transition from a linear to a circular economy that regenerates, reduces waste, and reuses materials resulting in cost savings as well as environmental benefits.

Priority actions could include:

Build future-ready cities

Stimulus packages could enhance resilience and future-proof cities by focusing on important sectors that have a high environmental potential for transformation and job creation (e.g. retrofitting, sustainable buildings and construction, waste collection and management, decentralised renewable urban energy, local food systems, and climate-resilient urban infrastructure).

Urban compactness could be a goal while de-densification could be resisted

The pandemic situation boosted trends such as digitalization, working from home, and service delivery⁴ (International Energy Agency, 2020). This transition influences homes, buildings,

and cities' infrastructures. One of the many possible scenarios is the decrement of demand for office spaces/buildings and the rise of a gradual urban sprawl, as higher income groups escape to live and work outside the epicentres of the pandemic – the cities. Policy measures and incentives could be pursued that discourage urban sprawl (e.g. implement carbon pricing, eliminate fossil fuel subsidies that reward suburbanisation, and promote well-designed urban density to generate economies of agglomeration). It is important to recognize that compact cities are healthier for the planet and people, particularly when they are designed to ensure adequate housing and public green space for all (Kaw, Lee and Wahba, 2020). The macro and micro urban characteristics – morphology, density, environmental conditions, etc. – impact the response, and it is necessary to adopt regenerative programs for long-term recovery plans, that enhance resilience – of the physical and built environment – against future pandemics, including climatic and economic hazards and shocks, while safeguarding human rights and wellbeing.

Sustainable mobility and air pollution

In cities, where citizens had access to public transportation, efforts were made to encourage biking and walking as safe alternatives to public transport during the outbreak (fig. 03). The success of these initiatives may encourage city governments to intensify the efforts for a transition towards improving sustainable mobility models, contributing to the combat against the growing burden of non-communicable diseases, not to mention the positives impact on greenhouse gas emissions and air pollution reduction. Especially that new studies suggest that poor air quality is directly correlated with higher Covid-19 mortality rates - For example, a small increase in the fine particulate matter has been associated with up to 21.4 percent increase in death rates in Netherlands and U.S.A (Wu *et al.*, 2020; United Nations, 2020).

Results

The article has provided an overview of the World Health Organization's and European Healthy Cities Network's recommendations in the Covid-19 emergency management – from preparedness and readiness to respond to an eventual recovery from the crisis- with a special focus on their influence on the housing and urban regeneration sectors. It highlighted the importance of adopting both short-term measures - during the pandemic risk phases-, and long-term strategies to mitigate some of the longer-term impacts, increase preparedness, and enhance city resilience.

The results provide guidelines for cities by focusing on indications for policymakers and actors of the physical and built environment (i.e. urbanists, architects, and engineers) (fig. 04). It is necessary to invest in the development and testing for innovative, but pragmatic, solutions for distancing in public places and physical distancing in domestic settings and social settings. Urban designers and architects can guide the user flows through the integration of adequate choices of urban design elements (landscape and greenery, urban furniture, lighting and material selection, etc.) that encourage the distribution of movement patterns and applying favorable behavioral shifts.

Local decision-makers can collaborate with architects and engineers to reevaluate the function of facilities and buildings that might be out of use – during the pandemic emergency phase and in post-pandemic phases. A methodological regenerative process in combination with adaptive reuse can fill the gap between underutilised spaces and repurposed buildings. It is important, however, to respect the necessary measures to protect from contagion and allow safe use of the repurposed spaces.

Applying digital and smart technology-based solutions with analytics can improve decision-making and provide a valuable contribution at a building to city-scale (e.g. regeneration processes, housing, and mobility). Smart buildings can continuously monitor air quality, as well as the comfort levels of occupants. Additionally, coordinating space-time can optimize circulation flows, hygiene, and distancing. On a city scale, big data can be used to recognize the patterns and needs and support planners in collaboration with policymakers for strategic preparedness and readiness to respond to an eventual recovery from the crisis⁵.

Public authorities should take concrete long-term actions to regenerate more resilient cities that resist pandemics and climate change while strengthening good health and wellbeing. Intense commitment is necessary to reduce inequalities, provide safe shelter for vulnerable and marginalized groups, and guarantee access to facilities in informal areas. To realize these aspirations, cities have to intensify the efforts in the three key areas – recommended by the United Nations: Tackling inequalities and development deficits; Strengthening the capacities of local actors, particularly local governments; Pursuing a resilient, inclusive, and green recovery.

This should be supported by large-scale public investments in affordable and adequate housing, infrastructure, and slum upgrading for all residents, and integrated urban regeneration participatory processes to engage all society members. National, regional and local authorities have to consider long-term benefits for environmental transformation, urban compactness enhancement, sustainable mobility encouragement, air quality, and even job creation in urban key sectors.

Discussion

This work puts together significant data – from the WHO, EHCN, and UN – to face the pandemic challenge and their relation to the housing and regeneration sector (fig. 05). It discusses the implications of their guidelines on the sectors of the built environment on various scales. The article reveals approaches and key actions that have to be adopted by public authorities that operate in urban settings and provides guidance for healthy and resilient cities. Circumstances of urban life – especially segregation and poverty – contribute to and reinforce discrepancies by imposing disproportionate exposure to unhealthy and socially undesirable patterns of response to economic and social deprivation (The Regional Office for Europe of the World Health Organization, 2019). Studies have shown how the pandemic has magnified the deficiencies of cities but has provided a new chance for replanning and rethinking how we manage our urban environments (Acuto, 2020). The results of this work indicate that national, regional, and local bodies need to adopt long-term policy choices and commit major efforts to enhance the preparedness of urban settlements, especially within informal and low-income areas with increasing inequities in health, security, and socio-economic challenges. The adoption of innovative and smart technologies can assist inclusive, multi-level governance and engage all residents through participatory policymaking (Castelnovo, Misuraca and Savoldelli, 2015; EU Smart Cities Information Systems, 2017).

There is an emphasis on the role policymakers and local governments play as front-line responders in crisis response, recovery, and rebuilding. The role of urban planners, architects, and engineers is crucial in this scenario, but it can be enhanced and further developed. Previous work has highlighted the importance of the profession of architects, urbanists, and engineers in stimulating urban transformation for healthier built environments, capable of adapting to the continuously updating environmental and social changes (Giofré and Edeisy, 2020).

Architects and engineers design homes, schools, workplaces, care services, and older people's



04. Covid-19 and post-pandemic strategies: a multiscale approach for inclusive healthy housing and regeneration. M.Edeisy, 2020, property of author.



05. International response and guidance for crisis management and post-pandemic future in cities. M. Edeisy, 2020, property of the author.

homes, and open and collective spaces, which can be effective to improve living conditions and support health challenges (e.g. pandemics). Healthy urban planning can create health-promoting environments that tackle risk factors and support physical, mental, and social well-being. Planning laws that support air quality, housing quality, active transport, more green spaces, and urban ecosystems, should be enhanced. The right design and planning strategies as a part of a paradigm that improves new tools and a long-term reform can help position the built environment in the post-pandemic era (Megahed and Ghoneim, 2020). Finally, the pandemic has shown that it is possible to transform and adapt rapidly. It is necessary to avoid a return to the pre-pandemic status quo and instead, policymakers should harness the effort to activate city health development plans, position the health wellbeing of all residents in the centre of municipal development strategies and adopt a multi- and intersectoral participatory approach⁶. Active collaboration between decision-makers, actors of the built environment, and local community members is key to transform cities for a resilient, inclusive, and healthy future.

Conclusion

The pandemic situation modified – and continues to modify – the paradigm of our urban settings, social environments, and state of wellbeing. It is reconfiguring the global perception of concepts like “healthy city”, “inclusive city” and “resilient city”; and it has direct impacts on national public plans, the private sector and businesses, and on the life of individuals. The rapid evolution of knowledge and even the basic concepts – for example, health⁷ – is accompanied by direct implications on the regenerative processes and operational approaches in the built environment. Keeping up and coping with this development represents a challenge for complex urban agglomerations.

On one hand, scientists, policymakers, and actors of urban transformation are seeking adequate knowledge and tools to mitigate city living's effect on health and wellbeing – through a focus on the physical and built environment. On the other hand, the disproportional impact of Covid-19 has shed the light on the deep-rooted inequalities in cities (e.g. where in a city someone lives - quality of housing, neighbourhood design, density of development, mix of land uses, access to green space and facilities-, socio-economic status, education level, sex, age, disability).

The guidelines provided represent a limited fraction of a vast list of indications and guidelines that aspire to achieve a holistic – and almost utopic – approach for healthy, resilient, and equitable sustainable development in cities. They should be adopted as a part of a wider framework that takes into account all aspects of urban transformation and employs adequate solutions according to the specific contexts and phases (i.e. pre-vaccine, post-virus, long term, short term, etc.).

Although it is hard to predict the post-pandemic future with a high degree of certainty, data monitoring can play a crucial role in understanding and managing the pandemic's impact. Scholars are attempting to assess this impact in the different disciplines of science and life, which represents a critical space for future research lines.

Research and evaluation – based on reliable information – influence the understanding of a situation and provide suitable approaches and insights into contextual policy options. Disaggregated data gathering and utilisation can support conscious values-driven decision-making – and evidence-based policymaking- for systematic action to address health inequalities and tackle the interlinked challenges caused by different urban conditions. It is necessary to continuously improve the effectiveness and efficiency of policy decisions through constant monitoring and evaluation, considering all constituents of information and all social groups of the

community. Future studies can assess the role of data monitoring and evaluation in guiding successful decision-making processes and applied policies in different urban contexts. They can investigate the application of – some or all - of the highlighted guidelines to provide insight into the implications of international policies on urban transformation, health, and risk mitigation in specific urban settings.

Notes

1. “Ensure healthy lives and promote well-being for all at all ages” is the third goal in the 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015.
2. The WHO European Healthy Cities Network refers to the United Nations Policy Brief as a document of reference and good practice. It explains how cities can handle the pandemic and emerge as the hubs of resilience and innovation. It calls for a change of approach and urban policies with respect to local capacities and a green, recovery; hence highlighting the importance of inclusiveness, especially for the most vulnerable groups.
3. Marginalised and vulnerable groups include slum dwellers, internally displaced persons, people suffering from homelessness, people with disabilities, women and girls, migrants and refugees.
4. As the Covid-19 pandemic continues to challenge public health worldwide, it has also abruptly affected economies, society and people's lives. With many people confined to their homes, working remotely and home-schooling, interest in appliances and consumer electronics has risen. It is vital that new appliances bought during and after the pandemic are as efficient as possible to outpace higher ownership patterns and avoid increased energy consumption levels after the crisis.
5. The shift towards smart technologies (e.g. smart city) requires a complicated framework and governance tools that are a part of a holistic approach, it is limited to urban contexts that possess necessary of resources and its adoption in low-income contexts still represents a challenge.
6. At the time of writing this contribution, with the vaccine on the horizon, it is hard to speculate the post-pandemic future. It is possible that Covid-19 measures and guidelines could be completely irrelevant. It is important, however, to learn from the Covid-19 crisis lessons and adopt policies and processes that enhance preparedness to potential future pandemics or other health challenges.
7. “Health”, according to the evolution of the concept, is defined as “a state of complete physical, mental, and social well-being”, “and not merely the absence of disease or infirmity”. The definition is from the Constitution of World Health Organization, which was adopted by the International Health Conference held in New York from 19 June to 22 July 1946, signed on 22 July 1946 by the representatives of 61 States (Off. Rec. Wld Hlth Org., 2, 100), and entered into force on 7 April 1948. Amendments adopted by the Twenty-sixth, Twenty-ninth, Thirty-ninth and Fifty-first World Health Assemblies (resolutions WHA26.37, WHA29.38, WHA39.6 and WHA51.23) came into force on 3 February 1977, 20 January 1984, 11 July 1994 and 15 September 2005 respectively and are incorporated in the Constitution's text.

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01. Monumento Continuo. Superstudio, 1969-1970.

Fallen dogmas Vs solid eventualities

From architecture to sets and vice-versa

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Keywords: Covid-19, Religion, Society, Sacral architecture

Abstract

Even though optimistic aphorisms and platitudes are quoted when dealing with the notorious virtuous changes that should ensue from any dramatic upheaval, all too often one forgets that every crisis provides fertile ground for intellectuals of cultural marketing and stakeholders to trespass into lateral areas and introduce new economic opportunities disguised as the unavoidable paradigms of the transformation. That is why, in this pandemic juncture, hypothetical projects of a new post-pandemic residential spatiality, researches about the shape of tomorrow's health-preserving cities, layouts of contagion-free shorelines have already met with undue empowerment. We are, however, unaware of any morphological change occurring in Greek poleis after the 430 BC plague, or of alterations in city-building practices after the black death that killed off almost 50% of European population between 1347 and 1352. Whether one may like it or not, in fact, the principles underlying the genesis of form (and architecture, that is to say architectural composition) have nothing to do with epidemiological issues. This is not meant as providing support to do-nothing policies, or underwriting end-of-the-day interpretations. Changes can – or rather should – occur within a metaphysical speculation framework, in order to result in the forms best befitting a community: law and spirituality. It is not by chance, in fact, Thucydides avoided any issue related to how to design a post-pandemic agora; instead, he felt the urge to describe two basic issues triggered by the plague: the fear of the Law and the misgivings about Olympus. The present brief essay is meant to focus on some crucial paradoxes, contradictions and short-circuits that have arisen during the Covid-19 pandemic within the confusing practices in the places of worship. Time-hallowed sanctuaries emptied by temporary decrees have afforded the chance to become occasions and marks (forms) of semantic and nomothetic (normative) approaches; thus places and architectures have been – merely visually – transformed, disrobed and clothed with new meanings, which entails far from negligible practical fallouts.

Introduction

In 1522 a plague pandemic spread in various European countries, cyclically striking again, more or less up to 1530. The 1522 plague is not one of the most notorious; however, some of its features make it extremely interesting, since they tally with the overall framework of our modern Covid-19 pandemic, such as cyclical occurrence, setting up of panels of experts, issuing regulations to fight and curb the epidemic, sending both medical and spiritual teams to work in the infected areas, devising official charges against the institutions and the experts handling the crisis. What makes the two events strikingly different is the amount of beliefs and acts stemming from religion (metaphysical in their nature) as related to the physical nature of the pandemic. The difference is so glaringly noticeable that paradoxically it risks being overlooked, shrugged off as obvious, since in the centuries when scientific truth was not yet developed and tested, it is assumed that the secular and scientific nature of thought could by no means overpower a dogmatic and religious approach that thousands of years had structured and codified.

From crowds to the desert, from pilgrimage to streaming

During the 1522 plague, Rome resorted to religious processions: from the convent where it was preserved, a cross was brought out; Saint Marcello cross (this is its name) was believed to be miraculous, since it was left unscathed by the 1519 fire that burnt to the ground the entire church complex it was lodged in. Throughout 16 days, that August processions were held, at the end of which the plague stopped. The procession of the Cross was therefore kept up during the following centuries, until that same cross appeared in an utterly empty St. Peter`s square on March 27th 2020, with the same aim of withstanding the epidemic. St. Peter`s square, however, is not the only architectural space that has been emptied by the measures taken to combat and contain the spread of the virus (fig. 02): the place of worship in front of the Grotto in Lourdes has appeared empty during the daily TV broadcast of the Rosary (fig. 03); no longer do pilgrims crowd well-established pilgrim routes; churches and places of worship have been more or less closed down throughout the world. Even now, in a post-lockdown phase of re-opening, decimated congregations attend services. Such tale-telling images suggest considerations this brief research does not presume to solve; they may, however, prove useful to further insights as regards structural and operational approaches.

In short, if celestial phenomena – accepting they exist – are believed to belong to a plane different from human ways and proofs, we should have witnessed squares overcrowded with believers praying for the end of the pandemic, processions and pilgrimages propitiating the recovery of the sick in those very places where health has been restored, with the blessing of the church.

State decrees, however – approved by men of science –, have largely overpowered spiritual practices; they have been endorsed by the Church that has accepted any decision. It is therefore to be presumed that miracles occur more frequently in some pathological contexts, such as non-infectious diseases, or that there is a clear hierarchy as regards protection from infection; so that going on a pilgrimage to beg for celestial help is felt to be less effective than keeping one`s distance from other fellows, or that some practices – such as pilgrimages and crowding together in a holy place – relying therefore on getting to and being physically present in a place of worship, have been ditched in favour of webinar mode (the TV broadcast Lourdes rosary), or the streaming plenary indulgence from the Vatican².

Re-semanticisation of the form, the updating of the codes

In the light of the above-quoted events, and what matters more, of these official reactions, it



02. St. Peter's Square in the Vatican, March 27th 2020 (vidcap from a TV program).



03. Grotto of Massabielle, Our Lady of Lourdes sanctuary, April 14th 2020 (vidcap from a TV program).

is suitable to suggest some considerations, with the view to boosting the evolution of thought, of techniques and of regulations; a far cry from the already under way sham digital evolution of smart work, webcam and digital socialising, which has been analysed, admired or criticised for some years. Such far more structural considerations regard necessarily the meaning of some places where men have lived and some norms underlying the way they have been conceived. What is St. Peter's square? Is Bernini's colonnade the stone visualization of the church embracing the believers? Is it the boundary of a different, sacred, protected place? Is it the place welcoming numberless crowds waiting for the pope's blessing? Perhaps this unfortunate occurrence helps the re-semanticisation of the forms we see, stripping them of some meanings and beliefs, in order to clothe them with new ones. This has already been happening to other time-hallowed notable forms. How many people are aware today that the Acropolis is a sacred place? How many people look upon the areas where the pyramids stand as cemeteries? Or upon the Colosseum as an appalling place where men and beasts were slaughtered? Nay, the very ability of some works to keep catalysing new and up-to-date meanings endows architecture with the gift of doing away with the obsolescence (Stendardo, 2014) that belongs to other man-made creations (first of all technological devices). Many such places could enjoy a sort of new life, shedding their role as the sets for rituals for which they were conceived to be seen as authentic forms in themselves, independently from their initial purpose.

Similarly, owing to legacies proving the supposed supernatural power of some places (which obviously stem from political agreements and compromises), it would be suitable to reconsider the system of rules to be followed in their building plans. Only few people, except those directly involved in the works – and sometimes not even they, unless a chance occurs –, are aware that, for instance, planning a large civic hall, either for public shows or educational purposes, requires complex and long fire-fighting tests and equipment³, as well as (depending on its functions) a strict compliance with hygienic-sanitary requirements⁴; on the other hand, declaring that very same hall as “place of worship”, provides a derogation from all that. In plain terms, this happens because a crowd gathered in a movie theatre is somehow deemed much more likely at risk than a congregation crowded together in a theoretically identical place of worship. This approach, anyway, starts cracking during a sanitary crisis like the present one, in which churches and places of entertainment have been subject to the very same regulations as regards safety: both believers and non-believers, worshippers and non-worshippers have been equalized; nay, paradoxically, gatherings have been favoured first in discotheques and only later in churches, thus triggering a sensational and paradoxical dogmatic u-turn, as if contagion were more likely to occur in a place shielded by God than on a dance floor (inevitably – though unintentionally – this led to the catch phrase God is a DJ). In the face of these contradictions and approaches, science, devotion, secularism and sacredness seem to overlap and blur their boundaries, furthering new, first of all ontologic and later on, legislative stances.

Conclusions

A relevant change has already taken place in the way events impact on how people react; even architecture has been involved: nowadays the focus is no longer on analysing an occurrence, but rather on discovering what can be got out of it, first of all as far as technology, and later on as far as market production are concerned. The arguments regarding the hypothetical, unavoidable alterations cities are to undergo have aroused a keen interest not only in archistars, but even in fledgeling architects, in a kermesse made up of common places, megalomania, and the pathetic scramble to ensure a position in an area where chances of employment are

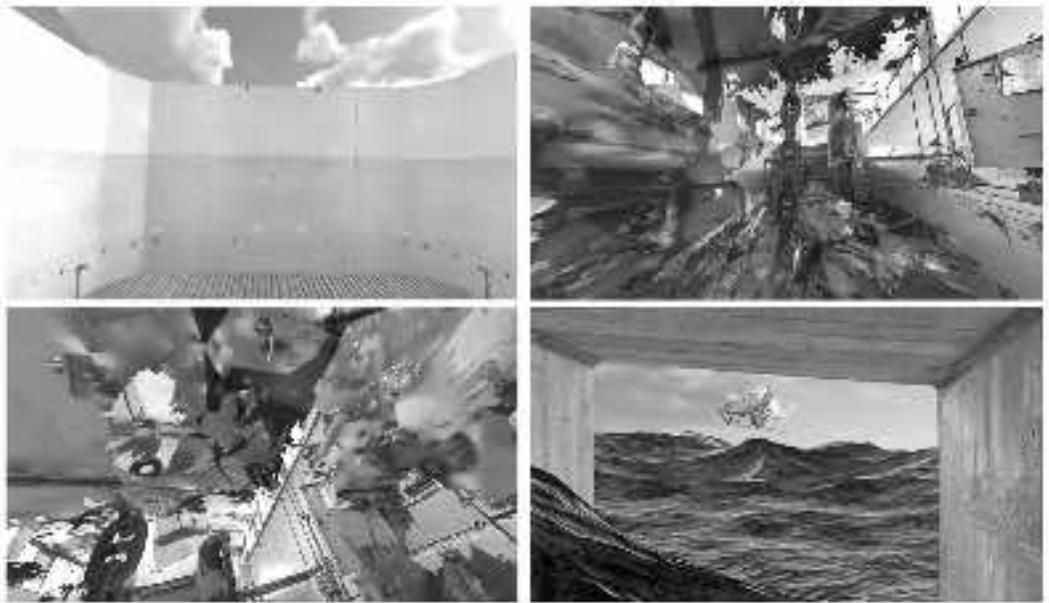
scanty indeed. Reference has been made to stockpiling oxygen, to reverting to bucolic life, to keeping a safe distance even between trees, as well as between humans. In a society like ours, ruled by market laws, any such procedure entails either investing money, or appealing to a brand (whether high-tech, degrowth, green sustainability). The real opportunity to reconsider our lives that these peculiar times have afforded remains rather muted: I mean, modifying things though not being able to impact on them, resemanticising our heritage, adjusting the ley lines between the realm of physics and metaphysics, enacting structural regulatory reforms in the architectural code. In other words, what matters is triggering a cultural revolution that may at first sight seem to beget neither a market nor a sensation (and for this reason it is not sponsored). This pandemic crisis is an event as traumatic as the 1966 Florence flood has been, which implies a sort of loss of innocence as regards the relations with our territorial, artistic and architectural heritage, which has led to envisage the definition of the Monumento Continuo by Superstudio (fig. 01) which fits extraordinarily well the images of the empty sanctuaries and church squares during the Covid-19 pandemic, pending being given a new meaning.

Notes

1. As regular it often happens, the Orthodox Church is an exception: showing untimely consistency, it has taken the decision to administer communion as usual on the same liturgical spoon, as if nothing were the matter, since diseases cannot be conveyed out of the “Cup of Life”. See: Press Release of the Permanent Holy Synod of the Greek Church regarding coronavirus, paragraph 3.
2. Pope Francis granted a “live streaming” plenary indulgence at 6 p.m. on 27th March 2020.
3. See the D.P.R. 151/2011 and the Decree August 7th, 2011.
4. The building regulations are somewhat diversified: in case of functional transformation only Lombardia region asks some adjustment according to the regional health and hygiene regulations (L.R. Lombardia March 11th 2005, n. 12).

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01. Out-takes from a Virtual tour of Matiu/Somes Island Quarantine stations. Malcolm Doidge, Matius/Somes Island, 2020. Images courtesy of the artist.

New Faith in Fakes

Out-takes from a false scenography

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Malcolm Doidge is a PhD researcher within Wellington's College of Creative Arts, Massey University, Aotearoa – New Zealand. Malcolm's virtual reality scenographies are a hybrid practice – located between Fine Arts and Spatial design – experienced as an immersive tour of three existing Matiu/Somes Island sites.

Keywords: Aotearoa/New Zealand, Palimpsest, Pandemic, Scenography, Virtual-reality

Abstract

The global Covid-19 pandemic and visual representations of both its passage and impact have spread ubiquitously across global news and social media platforms; it has been impossible to keep up. The example in this paper is a Virtual Reality. It stems from Matiu/Somes Island, a scientific and historic reserve in Aotearoa - New Zealand. With past colonial links to the British Crown, it was a site of both human and animal quarantine at "The uttermost ends of the earth" (Parkinson, 1975). Now returned to Māori tribes Taranaki Whanui after earlier confiscation, the Island's quarantine interiors have been reinterpreted as a virtual mise-en-scène of digital photogrammetry models providing layers of a site-specific palimpsest. This 'False scenography' calls upon the antecedent writing of the Italian semiotician Umberto Eco. His novels popularised intertextuality as a permeable boundary between an historical account and its fiction and Eco's essays for the press - collected as Faith in Fakes - considered successful faking to be "a perfect likeness, a 'real' copy of the reality being represented" and something 'iconic' (Eco, 2016). This paper addresses our pandemic times as epochal, where the fake and the false find willing hosts amongst those who exhort us to resuscitate a waning global economy in a diminished neo liberal 'normal'. We propose this involution as an unexpected visual entanglement. Allegorical like – an immersive and scrambled false scenography – haemorrhaging from old quarantine interiors on a small Island in the Global South. This virtual tour of digital scenography feels uncanny and sometimes appears spectral, a hauntology that gestures toward recycling the past as a slow cancellation of the future but with a twist (Fisher, 2014). While Aotearoa/New Zealand's borders are closed to non-citizens, a future of pandemic isolation has opened. Punctuating this unexpected interlude, amidst the turmoil of global heating, is a palimpsest metaphor for this archaeology of Matiu/Somes Island sites that introduces a virtual tour – exploring this uncertain moment – through woven layers of past quarantine and incarceration.

Introduction: An eerie pandemic

Without doubt, a pandemic of this magnitude with a novel coronavirus, Covid-19, was expected to occur someday but, its arrival was almost unforeseen. Now it's epochal. Given earlier related coronavirus outbreaks, what was once anticipated is now unexpectedly an eerie part of our every day. This Pandemic emerged to precipitate a global economic crisis, bracketed by social outrages and continuing ecological calamity. What follows examines the implications of this on the border security of Aotearoa/New Zealand; a remote country initially successful in eliminating community transmission of Covid-19. Here, Matiu/Somes island was once part of our national human and animal quarantine network. It has a layered past that informs an uncertain pandemic future.

These quarantine facilities have been digitally mapped, using photogrammetry, for an immersive, virtual tour that provides the images accompanying this text. Reproduced below, they represent 3D models compiled from many photographs of interiors within Matiu/Somes Island's quarantine sites (fig. 01). These are reimagined/reimaged within an immersive virtual tour of almost grotesque hyper-scenes, a 'false scenography' with reference to Umberto Eco's essays in 'Travels in Hyper reality'.

However, as part of a shared national heritage referencing an indigenous Māori interpretation of the palimpsest metaphor (Pānoho, 2015, p. 24), these digital scans illuminate the layered histories of this place: the haemorrhaging sterilising room for animal effluent or, a ghostly digital layer inside the human quarantine barracks. Given close human proximity to wildlife populations through overcrowding. The palimpsest metaphor incidentally becomes a weird metaphor for Covid-19's zoonotic vector. Animal viral pathogens can make a parasitic jump to our species, a viral hijack overwriting human cellular processes to replicate the virus's genetic material inside us, re-inscribing our cellular DNA then spreading, sometimes overwhelming us (Programme, 2020). This is a gratuitous pandemic, strangely taking hold at a time when humanity – witnessing incipient global heating – is stuck within a malaise of inaction regarding climate change. Despite clear and early warnings (Ribeiro, 2020) about perilously destroying wild habitats then industrially farming much of what's left (Institute, 2020). Not unexpectedly, but knowingly, we have increased our risk of zoonotic pandemics while effectively ignoring global heating. One day all this could lead to our extinction

Quarantine Island palimpsest

Quarantine and isolation were once familiar remedies, for humans and livestock, in previous pandemic times. They were regularly practiced long before vaccination offered some safety through herd immunity without great loss of life (Sample, 2020). Despite millennia of global pandemics, their perennial reoccurrence also germinates wild hopes of a return, amidst desperation, to normalcy. This leads to uncertain remedies – following false hopes – against microbes that rupture our everyday with death (Bristow, 2020).

Matiu/Somes Island was once called Matiu after the daughter of the great Polynesian navigator in Māori mythology, Kupe. Some 800 years ago his wife, Hine te Aparāngi, first sighted these islands that became Aotearoa (Howe, 2020). Later, in the 19th century, Matiu island was taken from Māori and renamed Somes Island after a director of the company that also founded the capital city, Wellington. Contagious infection decimated many Māori populations in the 19th and 20th century and 'Somes Island' became part of a national quarantine bulwark isolating shipborne disease and local outbreaks (Weekes & reporters, 2020). Matiu/Somes was returned to Taranaki Whanui Māori in 2009 and the history of this island's sites are analogous

to an archaeological palimpsest where historic Māori sites were erased by colonisers, then built over again. The surface of the whenua or land was later scraped away, reused in wartime and for quarantine. Digitally mapping these sites brings them together within a virtual space (fig. 02). This is where a palimpsest poetic of ‘ambiguities and disturbances’, referred to by Gerard Genette in ‘Palimpsests’ can be experienced (Genette, 1997; Allen, 2000, p. 114).

While measles, smallpox and leprosy are now vaccinated for; hope flourishes – sometimes falsely – under quarantine. Hope for a return to ‘normalcy’ also clamours around the world (Ferguson, 2020) though the pre-Covid-19 era that was hardly neutral, nor normal, or without inequality. As Rosi Braidotti notes in ‘Crisis, Capital and Austerity’ (Braidotti, 2015) there is no recourse to normal language when confronting crises in capitalism. Significant injustices act against mitigating climate change. The catastrophic spread of this pandemic became existential as livelihoods disappeared. Remarkably, given our remoteness, Aotearoa/New Zealand finds itself setting a unique precedent. Through timely Government leadership, at midnight on June 8, 2020 Covid-19 was officially eliminated from the population of 5 million people. This is quite remarkable as just some 76 days earlier, on March 25th, a total lockdown of the border had swiftly been imposed. Working under pressure, and swiftly, meant calculated risks were taken (Hall, Harris, Marsters, Nash, & Rata, 2020).

Borders as barriers or permeable membranes

Forewarned, “*The team of 5 million*” (Ardern, 2020, p. 1) initially eliminated Covid 19 by *strictly* following quarantine. A University study modelled potential Covid-19 mortality figures for New Zealand at 30,600 deaths. The political choice was either elimination or containment (Blakely, Baker, & Wilson, 2020). By comparison, Australia’s policy of virus containment sought to flatten the Covid-19 curve. There, Melbourne city with a population of 5 million has, after a recent spike in community transmission, now been 6 weeks into lockdown.

This pandemic disrupted global free trade and its reliance on open borders. The neo-liberal ideal of freedom of movement and commerce fragmented supply chains reliant on airlines (Avishai, 2020, p. 5). This initial recalibration affected Aotearoa/New Zealand (Gerrard & Chiaroni-Clarke, 2020) surrounded by the Pacific Ocean, 99% of exports go by ship (Transport, 2019) our nearest continental neighbour is Australia, 2,161 km away (similar in distance between London and Moscow).

In hope of preserving the economy till a vaccine could be found. Our Government could not accept high mortality rates, especially affecting Māori, overwhelming the Health system. As Prime Minister Jacinda Ardern said “*there is no playbook for what the world is going through*” (Ardern, 2020). 24 days after our Covid free status without a case was declared, two citizens arrived on a flight from London to Auckland, unwittingly carrying the virus. An exemption from quarantine was granted to attend a funeral hundreds of kilometres away in the capital city, Wellington. Through human error, they were not tested for Covid-19 before leaving quarantine. The fear of community transmission returning infected social media with anxiety and racism. Another 50 people also had been released earlier without testing. Luckily, none of these cases had then led to community transmission but Prime Minister Ardern brought in the Military to control the borders. Despite a recent resumption of small scale Covid community transmission, recovering the ‘coveted status’ of being Covid-19 free still rests on tracking individual cases. The *UK Guardian* notes countries like New Zealand ‘face months, perhaps years, sealed off from the world in a way unprecedented in modern times’ (Graham-Harrison, 2020) (fig. 03).



02. Out-takes from a Virtual tour of Matiu/Somes Island Quarantine stations. Malcolm Doidge, Matius/Somes Island, 2020. Images courtesy of the artist.



03. Human Quarantine barrack; out-take from a ruin in reverse. Malcolm Doidge, Matius/Somes Island, 2020. Image courtesy of the artist.

A gilded cage: Luck and false hope

Haere Whakamua, Hoki Whakamuri – Going forward, Thinking back (Keenan, 1994, p. 69).

Luck is an antipodean thing. “We don’t know how lucky we are” was a line from a popular local comedian who lampooned our rural and farming culture (McConnell, 2017, p. 1). Our nearest neighbour Australia is called the ‘lucky country’ (Bongiorno, 2017) a vast continent rich with mineral resources ready to exploit - as the Mining Conglomerate Rio Tinto recently did – blowing up (legally) the Jukken Gorge cave, a 46,000 year old indigenous site (Wahlquist, 2020). For the indigenous peoples of Australia and in Aotearoa/New Zealand, guardianship of the natural world and all cultural connections to it are cultural bedrock (Bargh, 2019). For Māori, the past could inform the present, ‘going forward, thinking back’ in order to preserve ancient attachments to the land through acting independently in the future (Keenan, 1994, p. 69).

Luck and swift action had originally proved decisive in eliminating Covid-19. But what next? Aotearoa/New Zealand’s Economic Development Minister has controversially made notable exceptions for non-citizen immigration. Creative film industry Director, James Cameron and 55 overseas film crew of the Hollywood ‘Avatar’ film series landed in the capital, followed by quarantine. This exception initially ran counter to the Labour-led Government’s Covid-19 regulations (i. N. Zealand, 2020).

Avatar’s fictional tribes fight against an invading mining conglomerate that attempts to exploit their planet’s resources. If this sci-fi script seems uncanny in its resemblance to the Jukken Cave disaster, it lapses into a parody on other levels also. In 2018, Lightstorm Entertainment (the production company behind Avatar) threatened to sue over the Government attempts to end a 25% film industry subsidy for the film (Nippert, 2018). The government fearing rising post Covid unemployment (Bridgman, 2020) now supports other international immigrant exemptions like the commodified sport of billionaires, the America’s Cup sailing regatta.

Although it might seem a churlish question voiced amidst nations still wracked by Covid-19; is this sacrifice only gilding a cage for cashed up events with no-where else to go?

New Zealand nationals abroad are on waiting lists to return home as quarantine facilities risk being overwhelmed. The exo-planet eco-fantasy peddled by Avatar might provide CGI work locally but represents a distraction as false as its scenography. Without a vaccine, in the years of isolation following this pandemic, what we really need is post Covid-19 investment in a new normal, a vision also confronting global heating on this finite Earth (Aldred, 2020).

Ruins: Simple past Tense

The brief we’ve been given is, what do we need to stop the world being blindsided again by a crisis like this?’ (Roy, 2020, p. 1).

According to the International Energy Agency 2020 flagship report, its questionable global communities will get back to normal i.e. fully recover a pre Covid-19 global economy (Agency, 2020). The report reflects, at best, an outcome where a vaccine offers persistent immunity and is developed quickly, cheaply, then equitably distributed. Nothing is guaranteed (Molyneux, 2020). In Aotearoa/New Zealand, social ‘wellbeing’ is an official metric quantifying how we conduct our lives, work more from home, ‘be kinder’ (S. N. Zealand, 2020). Politicians brandishing ‘the new normal’ will preserve wild habitats, clean up rivers that diary agricultural business

pollutes etc, etc (Gregory, Espiner, Eastham-Farrelly, Watkin & Schmidt., 2020). But pressure to recognise – let alone resolve – older, structural colonial inequity is manifested through Twitter hashtags, #*Metoo* and #*black lives matter* accompanying civic marches. Aotearoa/New Zealand's founding document was the Treaty of Waitangi, signed in 1840 between the Crown as coloniser and most Māori tribes which gave to these rights, then, of British citizens. What followed was decades of Land wars wresting territory from tribes for a pastoral farming system, still the economic foundation of Aotearoa/New Zealand's modern economy (Belich, 1988). Māori tribes hope for a post Covid-19 new normal that is about greater independence or *mana motuhake* i.e. development through self-reliance and the Crown observing the Treaty (Oram, 2020). Māori also remember the great loss of life in tribal areas during the 1918-20 Spanish flu pandemic. In some parts of the country – Northland and the East coast – tribal checkpoints were established to keep Covid-19 carried by anyone not local, out of traditional tribal areas (Graham-McLay, 2020).

Unlike the frontier trope of the 'Avatar' movie franchise. Umberto Eco wrote complex inter-textual avatars with porous boundaries between fiction and pseudo-historical narratives (Rodríguez-Ferrándiz, 2019, p. 11). While constructing books out of other books (Eco, 2011), Eco's other interest was holograms. In 'Travels in Hyper reality', Eco saw these as particularly American simulacra. What he called 'realism' was more a grotesque of "*the art museum contaminated with the freak show*" (Eco, 1983, p. 8). Eco identified the aim of digital faking was "*a perfect likeness, a 'real' copy of the reality being represented*" (Eco, 1983, p. 4). He knew the results were more a parody of the Carnivale; feasting on the ersatz while fasting in the absence of the real. If the film Avatar reads like a kitsch sci-fi version of New Zealand's colonial history. The intervening 180 years, between the British Crown and Māori signing the Treaty of Waitangi, sees white privilege economically intact amidst a dominant, post settler agricultural economy.

Returning to Matiu/Somes Island digital scenographies – of defunct quarantine interiors – these uncanny simulacra disturb layers in a virtual tour. Following Māori Art historian, Dr Rangihīroa Pānoho, the printer's palimpsest metaphor provides a reading of these site-specific scans as woven, permeable layers. This means acknowledging colonisation's imprint on landscape and architecture but also respecting a Māori world view of that. This methodology is called by Pānoho 'Te Hana' or 'the radiance' (Pānoho, 2015, p. 24). Emphasising intertextuality in this palimpsest approach, Pānoho identifies also what Laurent Jenny's essay and palimpsest analysis '*The strategy of forms*' notes as the problem of how "*to bind together several texts in one without their destroying each other*" (Allen, 2000, p. 114).

Regarding shared pasts and places, Simon O'Sullivan quotes Robert Smithson, in 'Fictioning the Landscape: Robert Smithson and Ruins in reverse', that industrial monuments – such as this animal quarantine station – are "*memory-traces of an abandoned set of futures*" (O'Sullivan, 2017, p. 63). In short, a prolonged pastoralist land grab enforced Matiu/Somes Island's isolation and alienation from Māori, the Crown taking it for a settler economic and military monopoly. The Island's quarantine history represents, in microcosm, a wider inter-generational lost opportunity cost for indigenous identity and Aotearoa/New Zealand. In these new pandemic times of isolation, understanding this quarantine heritage looks to these past layers by way of looking forward, hopefully, to a more equitable future (fig. 04).

Conclusion: All that is solid

The lens-based photogrammetry technology, which generates virtual models of Matiu/Somes Island's quarantine interiors, is like that which generates 'deepfakes' or animated digital forgeries (Zakharov, Shysheya, Burkov, & Lempitsky, 2019). The lexicon of 'expanded scenography'





05. Bunker; out-take from a ruin in reverse. Malcolm Doidge, Matius/Somes Island, 2020. Image courtesy of the artist.

is potentially everywhere but this ubiquitousness is doubly troubled by the inauthentic (Hann, 2019, p. 4). Contrast deepfakes with a traditional stage device like Pepper's ghost, a transparent glass sheet on stage providing a spectral illusion, then a gulf opens between contemporary digital simulacra and traditional scenography devices. In *Travels in Hyper reality*, Umberto Eco included the hologram as part of the metaphysics of fakes (Eco, 1983, p. 57) but like Pepper's ghost in a haunted house, neither convinces us ontologically of their verisimilitude. For Eco, the invitation to suspend faith in fakes indulged our entertainment. Today, live digital holograms are staged as immersive false scenographies or 'ghost slavery' (Myres, 2019). These dead pop icons are zombie encounters, intertextual exploitations resurrected on stage then animated by algorithms in the presence of the living. What would have Karl Marx the materialist made of deepfakes?

All that is solid melts into air, all that is holy is profaned, and man is at last compelled to face with sober senses his real conditions of life, and his relations with his kind (Marx & Engels, 1848).

While an immersive virtual experience of Matiu/Somes Island also invokes hauntology and the spectral (Fisher, 2014). Looking back at a quarantine past is hopefully a way of thinking forward about a sustainable future, especially post Covid-19. Our anticipation of a new normal should not reflect a 'slow cancellation' of human hope (Fisher, 2018) but instead, understanding that our future will likely have CO₂ concentrations in the atmosphere – clearly never experienced by humans – at levels identical to 15 million years ago (de la Vega, 2020). Coconuts may grow again in New Zealand, as they did in the Miocene (Ariki, 2020). The world then was four degrees warmer and sea levels 20 metres higher than present (Watts, 2020). For a remote trading nation beached by a retreating global economy – when Aotearoa/New Zealand opens again to the world stage – we will need to see some hope beyond the spectre of that ancient past returning to plague us (fig. 05).

Notes

1. Helen Clark, 2020, Former New Zealand Prime Minister and co-leader of a review into the WHO response to Covid-19.

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01. Sketch at Palazzo della ragione di Padova, The eternal triumph installation. Diego Zangirolami, 2018, Berlin (DE), china ink on paper and felt. Author's copyright.

L'eterno trionfo / The eternal triumph

Designing an art installation

Diego Zangirolami is a painter, professor and architect, graduated at Politecnico di Torino. His artistic research is strongly linked to history, philosophy and anthropology.

Keywords: Eternity, Triumph, Nietzsche, Circularity, Danse macabre

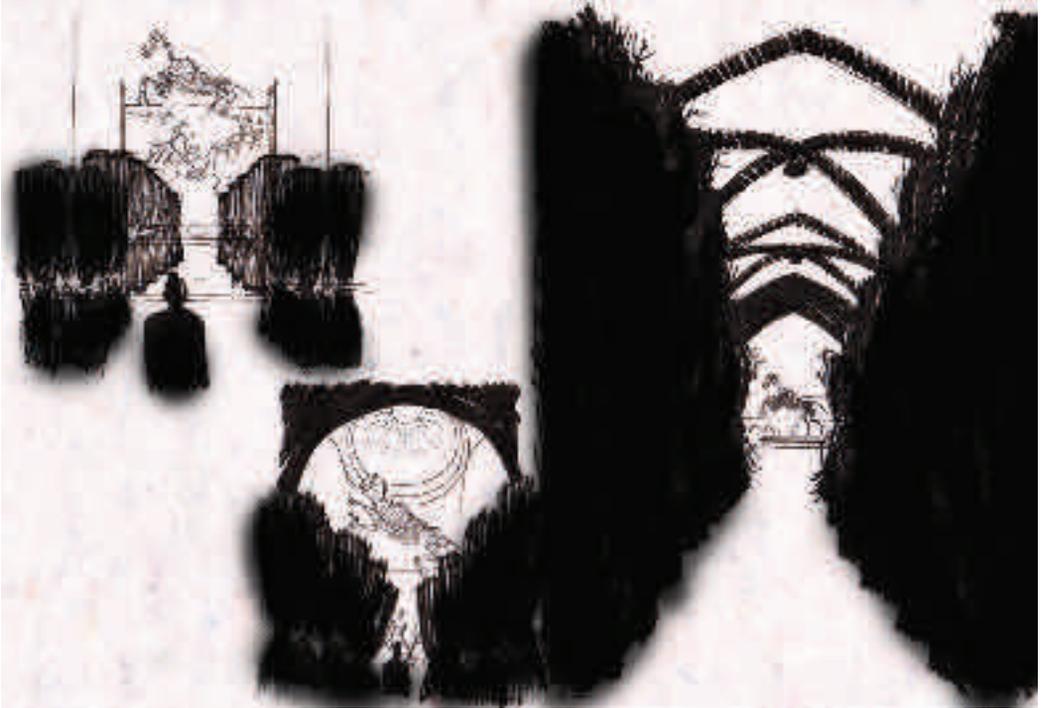
Abstract

Thinking on the concept of the Nietzschean eternal recurrence¹, historical facts move themselves circularly in whorl, in a continuous game between opposite signs, for instance: life and death or decay and vitality. This is a point of view not a fact, by the way. The inborn resilience makes Mankind and, between them artists, to feel the optimism of life energies involved in a match against the death pessimism giving to them a highly symbolic value. Personally I think that this dualism is a non-sense because it belongs to the wrong starting concept. However, when this feeling comes into the art debate as in literature the involved resilience sense often creates an enigmatic scent of mystery that shows the most poetical shape of this topic.

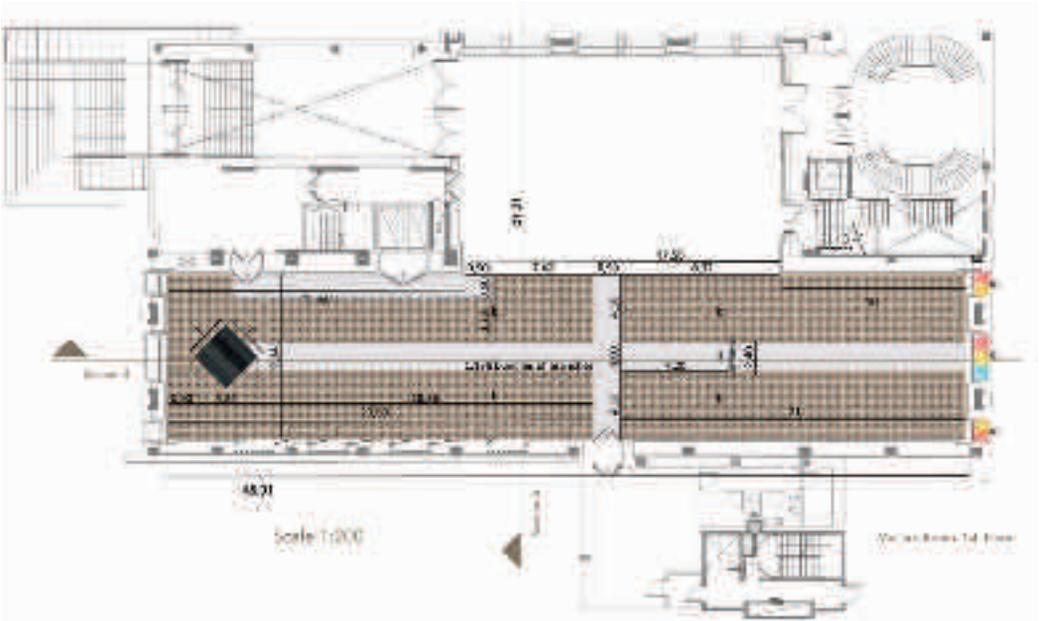
Introduction

The design of an installation can be considered the true artistic core of an art work. How the philosopher Giambattista Vico claimed with his *Verum ipsum factum / the truth in itself is in making*, allows us to say: the design of an art work in itself has same dignity of a built art work². The eternal triumph (fig.01) is a project, at the state of the Art, looking for a patron or an institution who wants to set it up in their own spaces. The idea is to rebuild an environment by known objects, which are derived from nature in order to recreate the feeling looks a familiar place. The used method is to reconstruct the shape of a corn field by deriving the shapes with the use of symbolic materials. Bundles of dry tree branches instead of corn plants and a wrapped structure made by black fabric in place of the shape of big container like a Canadian Silo. Our industriousness is represented by the symbol of an obscure Silo: life is a tireless worker. But still, in the fear of death is present the feeling of anxiety could make us crazy if we wouldn't ask help to the rationality. The bundles are placed regularly in lines to form fields areas and they divided from paths. A true horse's skeleton hanging on the central path close to a crossroad simulates a jump (fig. 02). Its crystallized ride and the jump is connected to the famous historical topic of the danse macabre. A project to be effective needs a sample area for being placed. I chose a hangar in Buenos Aires³, but it could be any other similar place like an abandoned industrial settlement. The installation plan (fig.03) and the elevation cut show two principal axes that cross the wheat field. As a final result of correct planning is although necessary calculate also the cost voices placing all of them in time schedule (fig.04). High ceilings could be preferable because the inner spaces simulate open air in this case. The alienating effect may be increased by the presence of industrial machines. The path within the installation must be initiatory. The scenic composition mystery produces the desired poetic effect. In the distance, outside of a high window, blinking light beams of police cars are seen, as if something sinister is looming. Beams lights represent late helps in this process of rationalization. So, in order to prepare a program, it was important to measure and give quantities to all structures and materials which take part in the installation. Therefore, a specification was drawn up to quantify all the presumed costs for the construction of the work at the end of the preliminary design phase. Certainly, depending on the place where it is set up the installation may vary in cost, but it is useful to give an idea of what its construction costs may be.

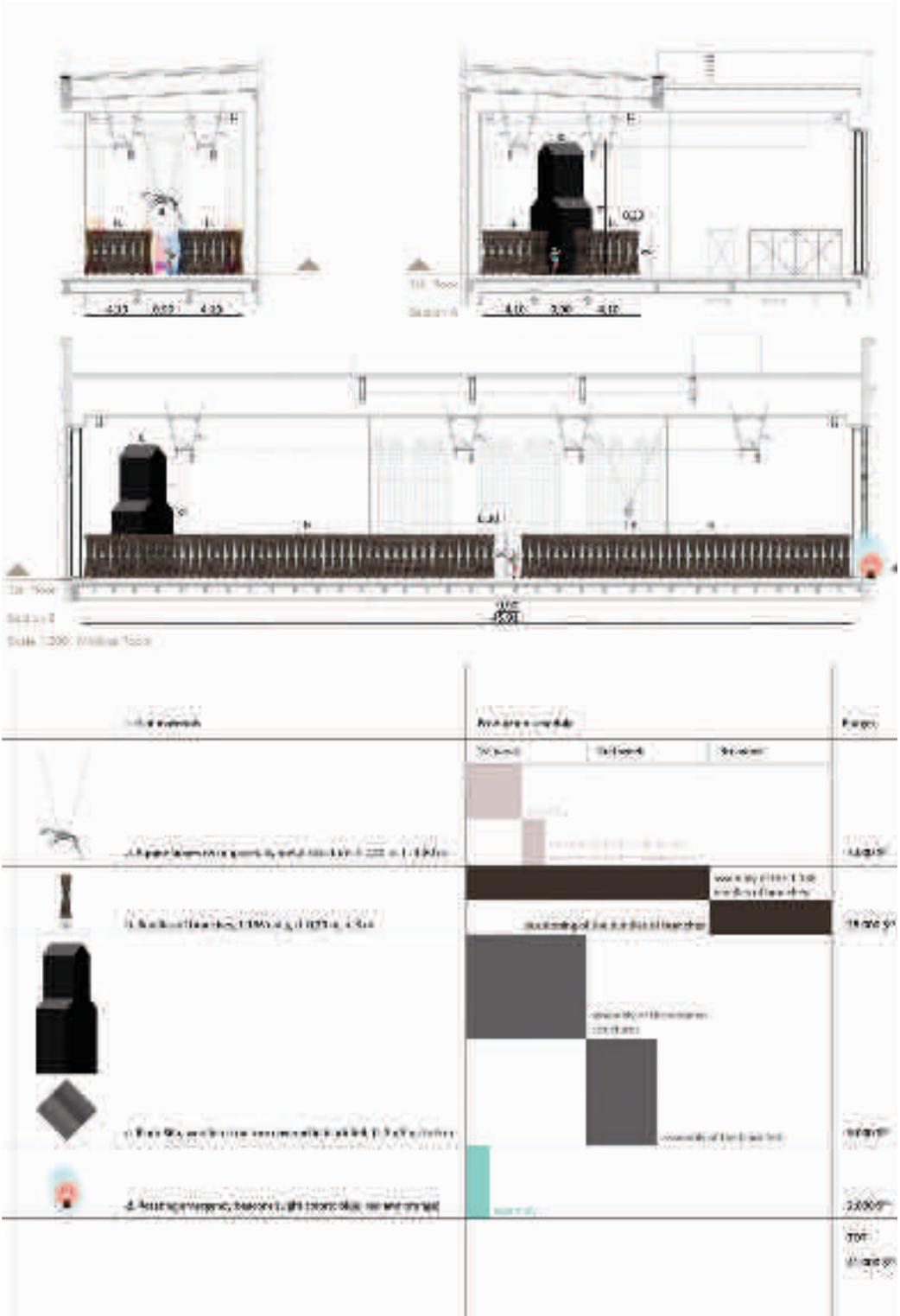
Paragraph 1 Talking about the working protocol adopted, it is the same procedure for drafting an architectural project. Being trained as architect plays a fundamental role for an artist. In every work I elaborate on the architectural presence is massive. Project requires order and control of each artistic will to achieve the final poetic effect. Architectural method treats rationally the initial vision of an art work in order to design concept with clarity and this leaves little room for randomness. The composing method of the scenes displayed in my works of art is recursive. Symbols from other works or other paintings taken from reality, are often found. Often these iconic shapes I selected returned and populate the scenes I composed. For instance, I chose years ago to open a series of art works talking on the hidden life of people and things with a riding Death on her horse in the Canadian countryside. Her shape was derived by a famous fresco from Palermo. The anonymous panorama of Saskatchewan province, was something that I remembered by a picture that I saw in an Italian photo magazine of the '80s owns by my father. All of these memories of images were mixed in my mind and the result was The triumph of love first work of Der Prozess series (fig.05). The correlation paths that take thoughts to condense into new images are mysterious. Another related work to the installa-



02. Sketches at Palazzo Abatellis, The eternal triumph installation. Diego Zangirolami, Berlin (DE), 2018, china ink on paper and felt. Author's copyright.



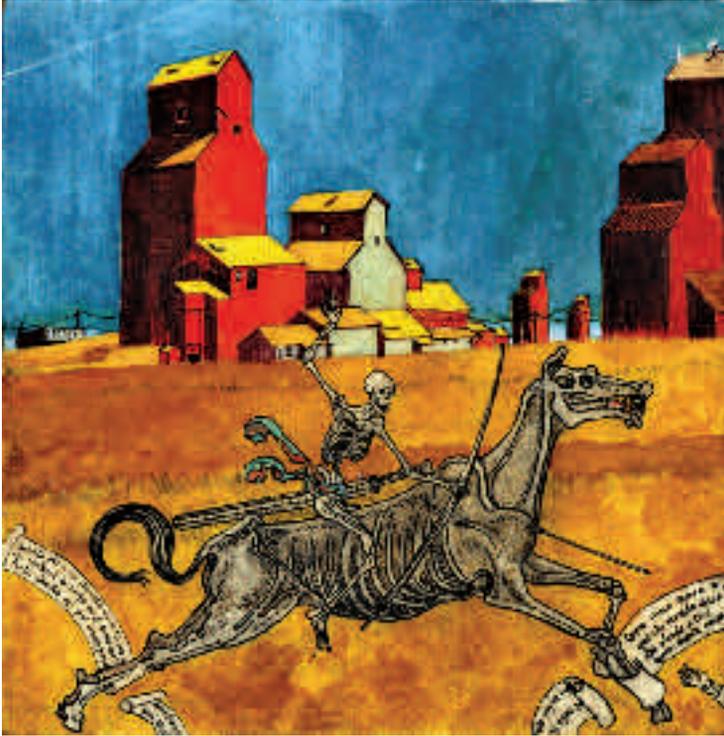
03. Plans. The eternal triumph installation. Diego Zangirolami, Berlin (DE), 2018. Author's copyright.



04. Elevations cut and time schedule, The eternal triumph installation. Diego Zangirolami, Berlin (DE), 2018. Author's copyright.

tion presented tempera work : Dio salvi la regina / God save the queen. The work displays the interior of a cemetery architecture where a sumptuously dressed woman poses for her official portrait. The interior refers to the chapel of the Brion's tombs in San Vito di Altivole (Maser, north-east Italy) (Zanchettin, 2005) and was designed by the architect Carlo Scarpa (fig. 06). The Queen straddles a large stone which seems to have a vaguely animal shape. In this painting, architecture is not only the scenic environment, but a conceptual setting as well. Burial place is also topography of memory where the physiognomy of departed is mentally located. According to the painting, however, a portrait is a monument, a memento mori that makes eternally alive the portrayed person and represents her transcendent power. More references from art history come from Piranesi, Canaletto, Bellotto, Guardi with their capricci and views. Their compositions which were called "folly", whimsical aggregates of monumental architecture and ruin have interested me very much. These paintings influenced Romanticism and Surrealism. All of these view makers, more than revealed the beauty of the plain air, they were looking for a modern perspective that today could be called a Kafkaesque distortion, seemingly erecting fantastic structures, epic in volumes and dimensions, but finally representing through scenes, similarly in a still life painting, the symbolic view of the author upon Nature and the *Zeitgeist*⁴. Another no less important aspect is that concerning the intellectual responsibility that each artist exercises in the creation of his works. Piranesi's capricci, for instance, were reflecting on the transitory nature of cultural heritage as well. Ruin of ancient civilizations is the result of buildings deterioration that once were functional. The eternal triumph alludes to how this transience is an unavoidable leap into the void (Vattimo, 2007). The quotation is never literal, almost an echo that emanates from the objects represented, from the narrated stories, from the appearance of the portrayed people. Similarly, to this procedure, even in the project *L'eterno trionfo* quotes without naming and shows without giving interpretations, leaving mere visuals, spatial, tactile references, shortly : aesthetics.

Paragraph 2 When space and time circularity once again shows the finality of life and its annihilation, then after death life retakes vitality in different new shapes. This concept is well visualized in *The Death of Palazzo Abatellis* (Polano, 1989) (fig. 07) or at the fresco of *Disciplini's oratory of Clusone* (Rosa, 1846, pp.381-391) (fig. 08), and for sure in all the danse macabre cycles of the International gothic age and last Renaissance. Popes, Kings, poor and riches destiny is the same because they will pass by. Slaughters and plagues of the 14th century such as recurring famines, the Black Death, were culturally assimilated throughout Europe. During the past like today, the omnipresent possibility of sudden and painful death increased the religious desire for redemption and salvation, but it also evoked a hysterical hedonistic desire for amusement while still possible ; a last dance as cold comfort. The danse macabre combines both desires : in many ways similar to the poetical mystery plays, allegory reasons were originally didactical, like in a poetical dialogue to remind people of the inevitability of death and to advise them strongly to be prepared at all times for unavoidable. A monumental tribute to life talking about death. After last two World wars, the cold war, Vietnam's conflict, the Desert storm operation, the war against al Qaeda and Daesh and after this pandemic, the recurrent theme is still back like a persistent leitmotif. The French term danse macabre may derive from the ancient latin chorea machabæorum, literally dance of the Maccabees. Many French art works from Middle Age plays were commemorating the Biblic subject of the martyrdom of a mother and her seven sons. Another allegoristic way to describe the sorrow of loss of beloved ones. But an alternative explanation is that the term



05. The triumph of Love. Diego Zangirolami, courtesy of private collection (IT), 2012, tempera and china ink on cardboard on wood, 14x14cm. Author's copyright.



06. God save the Queen. Diego Zangirolami, courtesy of Galeria Espora, Santiago de Chile (RCH), 2016, tempera on cardboard on wood, 30x30cm. Author's copyright.



07. The Death. Unknown master, Palazzo Abatellis, Palermo (IT), c. 1446, fresco, photo by Diego Zangirolami (2020). Author's copyright.
08. Triumph of Death and danse macabre. Giacomo Borlone de Buschis, Oratorio dei Disciplini, Clusone (IT), c. 1485, fresco, photo by Diego Zangirolami (2012). Author's copyright.



09. Rendering, The eternal triumph installation. Diego Zangirolami, Berlin (DE), 2018. Author's copyright.

was arrived in France via Moresque Spain, transliterated from the Arabic « *maqabir* »⁵/ cemeteries that could be the root of the word. Both in the Disciplini's fresco (Frugoni, Facchinetti, 2005) that in the riding Death of Palermo the dialectic of images showed a concept that even the illiterate people, who were the vast majority, could understand. In other words, the circle of life can't be broken.

Conclusions

The inborn resilience makes Mankind and, between them artists, to feel the optimism of life energies involved in a match against the death pessimism giving to them a highly symbolic value. Personally I think that this dualism is a non-sense because it's taken by the wrong starting concept. However, when this feeling comes into the art debate as in literature the involved resilience sense often creates an enigmatic scent of mystery that shows the most poetical shape of this topic. Whole art production of mine has influenced by anthropology and history. Since from the beginning of my artistic research I felt the needing that my mission has to be engaged in showing that intimate spaces of our mind in which poetical mystery is situated and its manifestation is obtained by the representation by the original symbols of Human being taken from his collective inner memory. The eternal triumph project meaning is that signs of life and death are equal and both are positive from Nature point of view. All these signs are represented outside of a moral frame. Of course the recurring symbols of art history may be got part of the composition of a contemporary version of a danse macabre plays. We may find or lose, this is not for the good and not for the bad, the meaning of our existences, walking in a cornfield; someone like Vincent Van Gogh may say this (fig. 09).

Notes

1. "Fellow man! Your whole life, like a sandglass, will always be reversed and will ever run out again, a long minute of time will elapse until all those conditions out of which you were evolved return in the wheel of the cosmic process. And then you will find every pain and every pleasure, every friend and every enemy, every hope and every error, every blade of grass and every ray of sunshine once more, and the whole fabric of things which make up your life. This ring in which you are but a grain will glitter afresh forever. And in every one of these cycles of human life there will be one hour where, for the first time one man, and then many, will perceive the mighty thought of the eternal recurrence of all things: and for mankind this is always the hour of Noon" (Nietzsche, 1909-1913).
2. Vico's coincidence doctrine: *verum* and *factum*, which is the basical concept of the "new Science". From Latin, *verum* and *factum*, which are used interchangeably or, more commonly said at schools, they convert themselves one into other. It is supposable hence the ancient Italian sages agreed, concerning the truth in these terms: the truth is the fact itself. Therefore, in God there is the first truth, because God is the first factor: infinite, because he is the factor of all things, most perfect, because he represents, to himself, as he contains them, both the external and internal elements of things. In order to clarify all of this with a comparison: the divine truth is the material image of things like a sculpture. A real human being is like a monogram more like a flat image, like a painting and as the divine truth is what God disposes, orders and generates while he's knowing, so the human truth is what man designs and makes during the process of collecting knowledge. For this reason, Science is the genesis knowledge, that is the way in which the object is made and in force of this, while mind's knowing the way of make (composed by all own elements), "object is already made". God, who understands everything, makes solid images. Mankind, who understands the external elements, designs the flat image of it (Vico, 1976, pp. 194-195).
3. Faena art center, Aimé Painé 1169, C1107 CABA, Buenos Aires (AR).
4. The origins were merely scientific. *Zeitgeist's* concept, became well known starting from the content of a polemical pamphlet which was published by the philologist J.G. Herder in 1769, against the philosopher A. Klotz, who substantiated that the meaning of word was derived the Latin expression *genius saeculi*. Almost unaltered, the term was inserted in W. Goethe's *Faust*: "*Was ihr den Geist der Zeiten heißt*" / "*This is what you call the Time soul*" but is main-

- ly known in the philosophy of World history written by Hegel and his lectures on the subject (Hegel, 1840/1975).
5. The solution was given to the problem by Van Praet more than a hundred years ago lay in an entirely new direction. He derived the word from an Arabic “*maqabir*”, meaning tombs or graves, a suggestion which was taken up almost immediately by A. Ellissen and repeated by V. Dufour. How controversial this theory was already in the second half of the last century is shown by simultaneous entries in dictionaries (which reflect, of course, the results of scholarship down to date of their publication). Thus, shortly after Littré’s entry: “*Devant chorea Machabeorum, on ne peut faire compte de l’arabe makbara*”, we find in Barcia (*Diccionario de la lengua española*, 1881) the Arabic derivation was still considered the best explanation. To Eisler, Van Praet’s opinion would have appeared to be supported by the studies of Paul Kahle, if the Egyptian rites in question had been celebrated in the cemetery and not, as was the fact, in the house of the *turbā* and *fahbar* (metathetic for *haffār*) respectively, never *maqbara* or *maqabir* (Eisler *et al.*, 1958, pp. 539-540).

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01. Frame 1. Eleonora Alviti, 2020, property of the author.

A day at the airport

Eleonora Alviti after a Bachelor's degree in Architecture at the University "La Sapienza", obtains a Master's degree in Architecture at the Polytechnic of Turin with a thesis on the relationship between architecture and Mega Events. After graduating he attended, winning a scholarship, the Advanced Training Course "Architecture for Heritage" at the YACademy in Bologna.

Keywords: Airports, Transfer, Flows, Pause, Change, Scenario

Abstract

The musician Brian Eno published, in 1978, an album entitled "Ambient 1: Music for Airports", to be played in airports with the aim of putting people at ease ready to embark on a flight. The loss of orientation, passenger flows, transfers, anxiety, waiting, luggage, ramps and shiny corridors; the airport is a place characterized by a strange form of reality and an even stranger perception of time; it's the space where things are like that but not for long. The first airport was built in 1909 in Collage Park and since then man, an increasingly restless animal, has made travel his constant and these places his 'home', a macrocosm of interconnections and interrelationships in which people pass. From the 'passing station' airport of Neutra, to the 'naked' one of Le Corbusier, to the organic one of Saarinen; these architectures are the symbol of the contemporaneity as well as the one of the greatest and most prestigious challenges an architect is called to face. Airports are business cards for cities, often taking up their geography, harmonious shapes and colours. In the world there are 17,678 commercial airports and an airport with international airports sees about 7 million people moving around the city every year. But to date, flights have decreased by 85%. These giants in their suits of steel, concrete and glass are left to rest their ears after years of talking. No hug goodbye, no psychosomatic take-off, no conversation born of a chance encounter; in airports there are only a few people without voices, wearing gloves and masks, lined up in a row, at an appropriate distance from each other. The pandemic has transformed these places into Marc Augè's non-places, cancelling our flights, for now, at a date to be set.

Departure

*The airplane takes possession of the sky the various skies
of Earth.*

The airplane, symbol of the New Age.

*It is high enough, up there in the sky. You must lift your head
to suit.*

Lift head and look above.

*The airplane, advance guard of the conquering armies of the New
Age, the airplane arouses our energies and our faith*

(Le Corbusier, 1935, p. 6).

If it is true that most architects love to photograph the places and architectures that inhabit them in the absence of people and means of transport with their ungainly forms, the months just passed have been paradoxical gold mines for the expression of their creative flair. Especially if the architecture on which you are focusing your attention is an airport: a space impossible to see without 'humans'; considering that airports with international stopovers see about 7 million people moving inside them every year. The Swiss writer Alain de Botton defines the airport as the place of feelings. De Botton is so in love with these architectures that in 2009 he wrote a diary book: *A week at the airport* (the title of the article is a reference to this book) in which he tells in original and amusing tones the week spent at the Terminal 5 of London Heathrow airport. A real praise to this particular architecture and to the world that moves within it. "Heartbreaking farewells, passionate kisses at check-in, furious anger over cancelled flights, take-off psychosomatics" (Scorranese Roberta, 2012), airports, for him "are full of lives and emotions. In fact, I can define three prevailing feelings: anxiety, waiting, desire. In few other places are felt so strongly" (Scorranese Roberta, 2012). The restlessness and frenzy of departure and arrival that follow one another endlessly and never stop, all day long throughout the year, make the airport a lively and dynamic place. Listening to *Ambient 1: Music for Airports*, the album that Brian Eno released in 1978 in order to be played in airports with the aim of putting people at ease ready for a trip, we are faced with the loss of orientation, with passenger flows, transfers, countless coloured suitcases, ramps, shiny corridors and calm lights of check-in, with the natural ones of the gates and the artificial and strong ones of baggage claim. The airport is a place characterized by a strange form of reality and an even stranger perception of time; it is the space in which things are like that but not for long.

Travel

To date, there are about 18,000 airports in the world (only commercial airports are taken as reference)¹. These architectures, symbol of the contemporary era and globalization so guilty that it has become a subject too much treated, do not have a very long history but certainly full of experiments and inventions ranging from urban planning to design through new and sustainable technologies.

Over the last twenty years, CO₂ emissions from air flights have increased by about 130% and passenger transport in 2018 accounted for 747 MMT. Talking about sustainability when talking about aviation is a nonsense². The first airport in history was College Park in Maryland, built in 1909. From that moment on, man, a restless animal, excited and intrigued by the increasingly easy exchange of cultures, has made travel his constant and the airport a new form of

covered square, a parallel macrocosm of interconnections and interrelationships. Exchange, displacement, movement have always been considered symptoms of technological and therefore evolutionary and social progress and architects have always been the interpreters. In 1933, at the 5th Milan Triennale during which architecture debuted as an autonomous discipline, the main project of the Transport Exhibition was the Civil Airport Station of the futurist Enrico Prampolini. The theme of aviation introduced ten years earlier by Antonio Sant'Elia came out of the paper, transforming itself into a central cylindrical hall and two lower parallelepipeds as two arms, precursors of the current gate.

In this plastic work I wanted to give simultaneously the sense of the measure of time and space. The earth and the conquest of it in its parallels and meridians
(Marinetti, Prampolini, Celasia, 1933, p. 10).

Across the ocean, more or less in the same years, the American Richard Neutra, in *Rush City Reformed* his ultra-modern and utopian city, perceived the airport as a transit station. So important was the concept of flight that needed infinite space, without limitations both mental and physical, to avoid creating distractions in the passage from earth to sky. Le Corbusier also dwelt on the crowd, the transfer and the idea of sliding. For him the airport had to be a 'naked' place, a space without impediments to its perfection where he could contemplate the continuous movement of the harmonious and perfect forms of the aeroplanes. He wrote "now the planet has 24 hours at its disposal" (Le Corbusier, 1933, p. 10) focused on how amazing it is to be able to be on the other side of the globe in a very short time, making sure that there is no longer just one center of the world as it was until the Industrial Revolution, but many centers where things happen. Every city, every nation and every island needs an airport to be part of this intertwined cultural and air route and they are the first thing that a traveler, if he has decided to travel by air, sees when he arrives and when he departs from a certain place. Designing an airport is one of the biggest challenges that an architect can undertake and very often we are faced with gigantic and majestic works of architecture.

The function of the airport like that of the Universal Exhibitions: to demonstrate the state of the art of technology, architecture and foreshadow the innovations
(Esposito, 2012, p. 22).

These architectures are the business card for all those cities that have the desire to show themselves new, modern, progressive and active in technological development. For their conception and realization we try to create a dialogue with the context as it happened for Kansai International Airport for which an artificial island was built in Osaka Bay, or we use tradition as a link as it happened for Marrakech-Menara Airport for which a texture characterized by arabesques typical of the Islamic tradition was used for the glass parts. Surely, however, the preferred subject to be inspired by is the flight, as it happened for Bilbao airport and Zurich airport where the roof, which rests on glass walls, resumes the dynamic movements of the flight or, in a more striking way, for Ashgabat Airport in Turkmenistan whose roof resumes the shape of a hawk in flight. In the last twenty years, the huge increase in the number of travelers, has meant that attention has been drawn not only outside but also inside the airport, trying to create new and comfortable environments. Vancouver Airport in Canada, for example, houses the largest collection of Native American art. The Brisbane International Airport



02. Frame 2. Eleonora Alviti, 2020, property of the author.



03. Frame 3. Eleonora Alviti, 2020, property of the author.

in Brisbane, Australia, contains inside a natural oasis with native vegetation that manages to move a feeling of nostalgia to those who leave the city and instead creating curiosity to the traveler just landed, or the Keflavik International Airport in Iceland that was designed and built with huge windows to frame the beautiful views of the island.

Stopover

Inside the airports we find restaurants, pharmacies, bookstores, newsstands, clothing stores, banks, golf courses, private dormitories, outside we find hotels, parking lots and places of entertainment. It might sound like a description of a welcoming place, so why do you often think of the airport, which is the connection to the sky, as something closed, fenced, not accessible from outside? Why is it that once you enter the airport you feel trapped inside, in these cages with no way out (fig. 01)? The increase in voyageurs mentioned in the previous paragraph due to an improvement in lifestyle and the birth of low cost airlines that allow you to buy flights at derisory prices, has turned passengers into a market to invest in and airports transformed into containers in which the traveler can walk, and buy, while waiting. Airports have turned into micro-cities to fool the traveler's waiting. To this micro-reality is added the fact that most airports are located outside the real cities, isolated, not communicating with the urban fabric and this position makes them complex, marginal and totally artificial and unnatural. We therefore deduce that the design and construction of an airport is rarely based on other aspects than innovative and functional ones, parameters, for example, focused on the dialogue with the place on which it will rise. This subject is extensively dealt with by the French anthropologist Marc Augé in the book *Non-Places: Introduction to an Anthropology of Supermodernity*.

Clearly the word 'non-place' designates two complementary but distinct realities: spaces formed in relation to certain ends (transport, transit, commerce, leisure), and the relations that individuals have with these spaces. Although the two sets of relations overlap to a large extent, and in any case officially (individuals travel, make purchases, relax), they are still not confused with one another; for non-places mediate a whole mass of relations, with the self and with others which are only indirectly connected with the purposes. As anthropological places create the organically social, so non-places create solitary contractuality (Augé, 1995, p. 94).

Among the non-lieux produced by supermodernity, Marc Augé also includes airports that he considers non-relational, non-identity, non-historical. These spaces focused only on the idea of our precarious present are frequented by average users, individuality that intertwines without creating relationships, without creating a dialogue between them and the place. Non-places are comfortable, ergonomic places, but they are places of transit where no one lives (fig. 02). In defence of airports, then, it is spontaneous to think: maybe the real identity of airports lies in the flow of people moving within them and, reminding Alain De Botton, in the feelings that the trip triggers in individuals and in the relationships that it creates. I believe it is so.

Arrival

The transiting is an absolute distinguishing feature of the concept of the airport, which is reflected in a world that travels fast and it is precisely this 'proceeding' that has changed drastically in the last period. In the past months flights have decreased by 85%. In the months of February, March, April and part of May the pandemic generated by Covid-19 forced the curi-

ous and frantic man we previously talked about to stay at home. In this extraordinary period of time air travel was allowed only if strictly necessary and only on some routes. I was one of those people who, during the pandemic, had the urge to fly back home. The three images enclosed in the text are frames of a video I made during my return home. I left March 27th at 9:00 a.m. from Lisbon, I landed at Charles de Gaulle Airport in Paris and waited there for six hours and then took a flight that made me land at Leonardo da Vinci Airport in Rome at 10:00 p.m. and, only an hour and a half later, I was able to get out of the airport because of the pandemic controls and forms to fill in for my return home (fig. 03). No farewell hug, no conversation born from a chance encounter; in the airports there were only a few people without voices, wearing gloves and masks, in line, one at a due distance from the other and the very absence of the crowd in usually crowded spaces made us understand how big and silent they really are and not at all dynamic if the human being doesn't move inside anymore. People without expressions in places, now it is fair to say, without soul. If before the move counted more than staying, in these months the situation has been reversed. The lockdown has not only accentuated the awareness of places and therefore increased the desire of the human being to be, in the sedentary sense of the term, in a place where you live well and are connected to the rest of the community at the same time, has brought and is continuing to bring the rethinking of many contexts and one of these is certainly that of public transport. In 2008, Pearman had already introduced the question of a necessary change in the airport architecture by writing:

(...) the task now is to design effectively for the whole physical, environmental and emotional experience of the airport over a wide area (Pearman, 2008, p. 236).

And Professor Sara Favargiotti of the University of Trento a few years later offers an interesting food for thought: "Airports have never played such a central role in city life as they do today, however, they still remain marginal and peripheral in many discussions" (Favargiotti Sara, 2012, p. 76). When the pandemic will be over, we will travel again, maybe less, maybe more cautiously but transit is now an intrinsic condition of the human being and now that this long blackout is giving the possibility to observe these silent places it is good to think about them and, starting from what we have, to redesign a different travel model.

Perhaps this experience of the immobilized city, beyond what could be frightening or fascinating, could become a cue for reflection that investigates the very reasons of architecture? (Baillly, 2020, p. 71).

Observing Peter George Elson's illustration *Tomorrow and Tomorrow*³ on a hypothetical future city we can observe that the artist had imagined a two-seater plane for every human being, thus transferring the increasingly unsustainable road traffic into the sky. Trusting this, not so close, hypothesis the question will be what to do with all these airports that perhaps will change the way they work or directly their function, they will turn into houses, schools, libraries, banks, universities and aquariums. The only thing we can be sure of is that something, in our habits, will change and with it also change our way of living spaces. And if, as Lionel Brett claims, the essence of the journey is drama and that the architect has the task of making it more lively and felt through the changes of scene, then we should start thinking about a new set design (Vidler Anthony, 2020).

Notes

1. Data available at the Airports Council International (ACI) World Airport Traffic Report.
2. The data was taken from the ICCT website. Title of paper: CO₂ emissions from commercial aviation, 2018, Authors: Brandon Graver, PhD, Kevin Zhang, Dan Rutherford, PhD Date: September 2019. It is interesting to know that every time we travel we can calculate the carbon emissions of our flight by visitig the ICAO Carbon Emissions Calculator's website.
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01. Learning music across the screen. Animesh Dev, 2020, property of the author.

The home graduands

Educational equity under confinements

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Keywords: Domestic space, Educational disparities, Education equity, Pandemic impacts, Remote learning

Abstract

The widening of education equity gap and generation of novel social differences through learning incompetency will be one of the significant social impacts of the Covid-19 virus outbreak in India. Where education empowers people and improves their ability to communicate, argue, and choose in informed ways (Sen, 1999), it is now selectively available mostly to the economically privileged group under the locked-in situation. Globally, the need for physical distancing has pushed over 1.2 billion children out of the classroom (Li and Lalani, 2020) and confines the learning process to home. The disenabling of economically marginalized learners raised the concerns for the inheritance of incapacities in an already education-deprived and unjust society.

Changing role of an earlier space of domesticity to now a robustly appropriated space for various work-learn engagements makes a house more than a shelter. Lack of adequate learning space, electronic devices and internet infrastructure and, competence to guide the learner are the new unexpected challenges which are faced in both urban and more acutely in rural India. In villages and small towns, where the majority of Indian population lives, not only encounters disconnect from education but also basic amenity distribution by government schools such as mid-day meals and sanitary pads. The permanent school dropouts will be many more as the need for earning livelihood has increased manifolds due to the reverse-migration induced unemployment leading to uneducated and unskilled child-labour force and many more child marriages. The unexpected circumstances raise many questions about the achievement differences among the students; economic capacity induced social strains and; the prevalence of sense of inferiority. To achieve education equity for an equitable society, this paper strongly recommends learning strategies during a locked-in situation.

Introduction

The Covid-19 pandemic has charted unique patterns of social differences through the uneven distribution of technology and skill driven-educational opportunities for 320 million students (Sudevan, 2020) in 1.4 million schools and 51 thousand colleges (Nanda and Khanna, 2020) in Indian. Unlike other discriminations in acquiring knowledge such as cast, gender, religious faith, different-abilities, amid the e-learning boom, the novel pandemic had brought new dimensions of discrimination through (in)accessibility of technology and availability of learning space in the domestic sphere. With the rising new cases of infection, India had imposed one of the sternest locked-downs in the world (OxCGRT, 2020) where the education has locked-in into the domestic space¹. The (self-)imposed isolation has induced an unforeseen situation where a house is not only utilised for a social living but also as a robust space where work, play and learning should also happen. The reluctance of authorities and establishments to let the lockdown affect academic calendars and the students learning trajectories are evident in various attempts² leading to 'unexpected' situations and upcoming unanticipated impacts. The symptoms for education equity gaps are evident when a child supports or contributes to the family's livelihood and through the instances of reverse migration-induced school dropouts, among many others. With countless uncertainties, making education reaching the last child is full of both challenges and opportunities.

On the margins of literacy

Over the foundation of educational and social justification³ (Ainscow, 2020), the right of children to free and compulsory education⁴ (RTE, 2010) had enabled children from economically weaker families to get a quality education⁵ with other children belonging to affluent families⁶. With the lockdown, students belonging to both the economic groups faced the challenges differently. For the economically-affluent group, challenges are limited to the fulfilment of academic expectations and engagements but more critically, for the economically marginalised, the challenge is to access and execute online education. For them, the challenge is not only limited to the access to shared electronic devices – like computer system, printer, smartphone and internet bandwidth⁷; and space to read and write (Yashee, 2020) with full mental concentration but also the family member's or caretaker's academic abilities to comprehend the given academic tasks to guide the learner (Ainscow, 2020). With this, as one of the illustrations in Nizamuddin Basti in Delhi, most of the economically marginalised are single-income families earning as barbers, butchers, cleaners, mechanics and others. They generally grapple for their basic needs (Chatterjee, 2012) and suffer from a sense of socio-economic inferiority who otherwise felt privileged by associating themselves with access to one of the best quality education institutions⁸. They also have no or limited exposure to English-medium education. Many of the home online-assignments demand infrastructure (shared electronic devices, updated software and applications and, uninterpreted internet and space); academic skills and confidence to mentor (Nanda and Khanna, 2020); and engagement time which are not always available to them.

With thin attendance, the learning process continues. Many have-nots now also do not have (quality) education learning, which may further widen the education equity⁹ gap by producing a new generation of illiterates. As per one online news report by Bedi (2020), a class 12th student of South Delhi government school highlights that his father works in a healthcare facility and needs his mobile phone when he steps-out. He further adds that this leaves them with no phone at home when the online classes happen. The student said their teacher had promised to get back to him with a solution (Bedi, 2020). In the most demographically literate

state of India and in less than a month from observing National Technology Day, Kerala witnessed a self-provoked demise of a young brilliant mind in the absence of availability of a smartphone and a working television which was keeping her deprived of attending online classes (Naha, 2020).

More than a house

The attributes of acute socio-economic marginalisation- significantly impacting the learning trajectories- is not limited to the availability of electronic devices and skills (which is due to inherited illiteracy and hence the socio-economic conditions) but also the affordability of isolated or dedicated learning space. During the virus attack, the otherwise dense domestic space¹⁰ is used for learning, work, play and recreational activities. With the sudden closure of schools, there is no boundary between the bedroom and the classroom, the drawing-room and the playfield, the terrace and the Yoga space anymore. Do we have our shelters robustly designed to imbibe the soul of such otherwise outdoor functions? It is evident in instances when learners vacate the only room of the house for the extended family with old members and negotiate to complete their group assignments from the kitchen during the night time. Here the old cooking counter is the *new* study table.

As toddlers of age two-and-half years subscribe to formal education, the living room is now a class-activity room and the father's online office shifts to the balcony while requesting the toddler to stay silent. With continuous yawning and lesser attention span, the toddler gets distracted and runs away. Many parents feel they are being put into too much trouble for relatively nothing (Yashee, 2020). To one extreme, when there is no space for learn-work isolation, Delhi's Mr Jain has decided to 'work-from-car' and return to the house only for the lunch while not encroaching other's work-space and understanding the necessity of various engagements (Sen and Menon, 2020). Such socio-spatial negotiations strengthen the social bonds within the family through compassion and care while the learning tasks partially get accomplished. Schools are multidimensional ecologies of social and cultural interactions and classrooms are palpable living spaces to foster diverse socio-psychological fulfilments. Under confinement, one of the only places to meet friends¹¹ is online classes. For a few privileged toddlers, it is this online space to establish the first social interaction with the outside world, whereas for many, at this very virtual space students depart from student life to professional lives (if made possible amid employment scarcity), all without actually meeting each other but on 'e-meets and e-teams; the serious businesses' from home (fig. 01). The socio-cultural learnings and recreational capacities are bounded under the four walls and sometimes only with the elder family members. The child's mental and physical development is bound to compromise as the learnings from essential experience with nature, activity-based learning (fig. 02), social interactions and emotional bonding/disharmony and other's everyday life activities among many others are replaced with unavoidable and compulsive extended screen-gazing.

The deprived rural and the ever-widening literacy gap

As education shifts from the real space to the virtual space, the rural-urban digital divide¹² catalyses existing India's learning crises¹³. In most of the government-aided schools, which are 80% of the total number of schools in the country (Chandra, 2014) predominantly caters to the children from low-income household both in urban and rural centres¹⁴, are experiencing scattered attempts to connect with a few - to an absolute pause from the online learning sessions. In the absence of internet connectivity, 39 students in Tsuruhu Village, Nagaland are bound to trek 3 km inside the dense forest to take their exams which is the only spot with internet



02. Activity-based group learning on a pre-confinement day. Immanuel Giel, 2018, Creative Commons Attribution-Share Alike 4.0 International license.



03. Distribution of school uniforms in a government-aided school. Amitagrwaltech, 2018, Creative Commons Attribution-Share Alike 4.0 International license.



04. For many mid-day meals are the only source of nutritious food. Jaisuvyas, 2016, Creative Commons Attribution-Share Alike 4.0 International license.



05. Women education - a fading dream. Amitagrawaltech, 2018, Creative Commons Attribution 2.0 Generic license.

connectivity (Chakrabarti and Longkumer, 2020). Majority of them are in the country's hinterlands where the uniforms (fig. 03), sanitary pads, stationaries and mid-day meals¹⁵ (fig. 04) are provided by the government whose production and manufacturing are halted due to the necessitated lockdown. In both urban and rural areas, many classrooms are now converted into isolation facility¹⁶ (Jayarajan, 2020). Under such circumstances, many questions remain unanswered. For the new COVID-dropouts, how long will it take to resume the learning process? How many students, especially the girls and women (OECD, 2008), would be able to ever return to school due to both - the social mentality towards the importance of education (which took a break) and, the student's mental-setback and willingness as an inability to cope-up with the pace for current academic session (fig. 05)? As one of the socio-economic consequences¹⁷ of the pandemic, a spike in child marriages (fig. 06) is yet to be witnessed which can reverse years of progress made. More critically, with the loss of livelihood by the bread-earner(s) of the family¹⁸, the temporarily new school dropouts are now helping to earn the livelihood (fig. 07) which may convert them into permanent child labour (fig. 08), as more hands will be required to feed a large family. In contrast to the schools in rural areas, elite schools in Central Delhi have explored and practised various online pedagogies for remote learning. During various events of school-closers mainly due to hazardous air quality, communal riots and extreme weather conditions, innovative teaching methods¹⁹ and parental participation techniques are adopted and upgraded (Sarfaraz and Iftikhar, 2020), which took a calculative effort of many years. The privileges also include the ability to afford and conduct online coaching for learners (Malkarnekar, 2020) (fig. 09) which further eases the time-bounded schedule of parents, however, the success of such adaptations needs to be assessed. Not only students but also the teachers acquired specific training to become conversant with the technology²⁰. While facing minor hiccups, the 'class apart' institutions can now reap the benefits.

The uncertain future

If similar virus-outbreaks become more frequent and stay effective for long durations (and also other 'stay home' situations), among the students there will be achievement differences (from fundamental abilities to read, write and calculate [functional illiteracy (Vágvölgyi *et al.*, 2016)] to a skilled job performing capabilities); economic capacity induced social strains (social production of a sense of economic backwardness (Brunnschweiler and Lujala, 2017) and risk of socio-economic marginalisation) and, the prevalence of sense of inferiority (Rue, 1990) (hampered holistic personal development and shame from the incapability of undertaking economic roles and responsibilities). Many will get deprived of basic education resulting in COVID-induced young generation of illiterates. What would be the nature of social differences among the two economic groups who use to co-learn in the same space which has now shifted to individual houses reflecting subjective capacities and capabilities? Our schools as a creedal of knowledge, values, skills and moral habits, what would be the impending effects of pandemics and lockdowns which will catalyse educational inequalities? Amidst the existing education equity gap²¹ (Trines, 2018), what can be the creative pedagogies while addressing diversity, inclusivity and dissent - on one hand, and ways to reduce the margins between the social classes through equal access to education - on the other as a post-pandemic scenario?

Possible ways ahead – Unlocking knowledge under lockdown

In contrast to equality, equity in education calls for an equal chance of success and prosperity in order to achieve parity in everyone's lifestyle (Leaders, 2020) even if it may require unequal



06. A rise in both infection cases and child marriage. Damgararavishankar, 2019, Creative Commons Attribution-Share Alike 4.0 International license.



07. Earning livelihood made important than education. Animesh Dev, 2020, property of the author.





distribution of resources and opportunities, as a reflection on individual's needs and circumstances. The Organization for Economic Co-Operation and Development (OECD, 2008), sets fairness and inclusion²² as the fundamental aspects of equity in education.

As a highlighter of widened education equity gap during the pandemic, this writing does not suggest radically new pedagogies (which may require immediate policy framework and infrastructural provisioning). Amidst the critical situation of confinements, it urges to refine and amalgamate the learning process and institutional structure which will ensure quality learning for everyone and hence a more just society. Some of the initial moves and strengthening areas which will require further reflections are:

Networked collaborative learning: With the bigger issues, comes the call for larger integrations, the learning resource sharing both - infrastructure and social capacities (as social capital) - acts larger than the sum of its parts. Advantages include the networking of educators across the schools and institutions (also) as Virtual Mentor (Zhang *et al.*, 2004) to foster quality education in otherwise deprived geographies. This will also reduce the shortfall of teachers which is common in rural parts of the country²³. The mutuality and generosity among educators are essential to share resources and services as there are no copyrights to learning. Instances of such collaborations can already be seen with internationally-renowned Khan Academy, United States (Sharma, 2020) which comes as an advantage with online education model.

Participative learning and co-learning: Under confinements, to encourage diverse opinions and questioning minds, a higher degree of participation (Arnstein, 1969) is essential. Consultations and co-working with parents²⁴, authorities, teachers, school administrations (and within the organisational setup; i.e. also participation among teachers (Somech, 2005), learners and everyone who has involvement in the learner's lives, can help in building partnerships beyond the school. It will encourage creative pedagogies, understanding of individual circumstances and challenges and, induce a *sense of ownership and encouragement* to the remote online learning process. This can be helpful in one-to-one awareness and persuasion-encouragements especially for dropouts. This will significantly strengthen the links between school and home in the new school which is *home*. The creation of parent support groups can help in diluting the unequal distribution of learning skills which is essential for the online co-learning model. In addition to existing collaborative learning and learning community models (Davis and Denning, 2020; Daradounis and Marquès, 2000) where people sharing some common issues, collectively learn and develop ways to address them, the pandemic induced illiteracy and future unemployment can be (locally and creatively) benefitted by these models.

Personalised and flexible learning: While keeping in mind the unexpected changes in everyday engagements of the children and everyone associated with their learning, a personalised and flexible learning program is necessitated. Wider and flexible timings for the classes (mostly in pre-recorded forms) and assignments will help the students and other family members schedule their own work calendars (Patrick *et al.*, 2013). It will be in reflection with individual circumstances, situations and availability of resources (availability of space, devices and in-person guidance). In addition to the temporal flexibilities, this concept will also provide instructional environments that are

competency-based (Patrick *et al.*, 2013) i.e. enabling students to make academic progress according to their level of individual ability. Such measures will also be beneficial for children with special needs who mostly stay deprived of learning.

Limited resource learning: It is well understood that the learner's engagement in digital education is highly dependent on their ability to access resources (Khan *et al.*, 2017). The new pedagogies shall request for lesser resources such as bandwidths, devices, learning activity objects and stationary. This can further reduce the sense of socio-economic inferiority while giving a fair chance of learning to all. Elementary and far-reaching technologies and services like radio, postal services and pen drives²⁵ or CDs (Compact Discs) with pre-recorded lectures can be made available to the learners.

Creative learning and assessments: It was widely accepted to use readily available live audio-visual platforms for conducting online classes as an immediate response to the lockdown. But it is not always available to a large number of students. Also, its efficiency among toddlers is under question. A number of creative pedagogical practices (Cochrane and Antonczak, 2015) are required to be explored addressing the uniqueness of the situation and provide effective learning. Treffinger (2002) clustered nuances of creativity into four broad categories—generating ideas, digging deeper into ideas, openness and courage to explore ideas, and listening to one's "inner voice." As a "21st century skill" (Lucas, 2016, p. 278) creative learning fosters the conducive setting that is intellectually dynamic, socially supportive, contextually reflexive, and receptive to novel ideas and activities (Cochrane and Antonczak, 2015). Here is also the opportunity to reduce the peer-pressure (both socio-economic and grades oriented) and competition among the parents for representational success who generally consider success only through marks.

Conclusions

The outbreak of Covid-19 pandemic has reviled deep-rooted educational polarities which significantly deteriorates the idea of a just and equitable society in India which has the largest child population in the world. The socio-economic disparities such as availability of space, parental skills to guide and, availability of electronic devices and internet connectivity have forced many have-nots to the margins of literacy. The cure of pandemics²⁶ or other natural disasters and social unrest – the various reasons for school closures - are usually prolonged. If left unaddressed, its impact will only be realised after a decade, when there will be a high rate of young adults who are neither in school nor employed. The extent of the loss is unknown yet, however one can co-relate to such losses with wars. At one level, the online class has shown the instances of creating limitations but on another, it is an opportunity for many. Considering this unfortunate event as a threshold to overcome the age-old learning barriers (both situational and inherited) and entering into a phase of flexible and far-reaching learning for all, many possibilities can be explored. Some of them can be associated with networked collaborative learning, participative learning and co-learning, personalised and flexible learning, limited resource learning and, creative learning and assessments.

It is uncertain to decipher the extent of socio-economic differences generated during such 'unexpected' situations. It also remains to be seen the degree of impact of pedagogies evolved out of Covid-19 crises, as an opportunity, be applied in eradicating the learning crises. But as a post-pandemic scenario, it is certain that the benefits of an online education system and

collective- social learning will significantly permeate in the existed education system - as an infrastructure provisioning and social acceptance.

Unfortunately, it took a pandemic to understand the condition of education equity and socio-economic differences in our villages and urban areas. The urbanism, as a social way of life, has created the disease. One can say ‘Society created disease and in turn, the disease creates society.’

Notes

1. To curtail the spread of the Covid-19 virus, one of the first socialisation spaces which were temporarily closed were the schools in Delhi on 6th March 2020 for primary schools and 16th March 2020 for all schools across the country at 114 numbers of Covid-19 cases out of which 17 were foreign nationals (Sisodia, 2020). India was one of the first countries to shut its school due to the virus spread (TOI-Online, 2020).
2. From free-to-air television channels, cellular calls, internet messaging, Short Message Service (SMS), Interactive Voice Responses (IVR) (Sharma, 2020) to live radio broadcast (Zahra-Malik, 2020), governments of developing economics are finding ways to connect with the students. As per a BBC report from Pakistan (Zahra-Malik, 2020), as many as 3.5 lakhs students in 2700 schools are getting benefited from live radio classes conducting six days a week. These broadcasts also share hygiene and Covid-19 precautions updates. Many private education institutes have explored, experimented and implemented various online professional meeting platforms (such as WebEx, Google Meet and Zoom) to conduct the online classes in groups as large as 180 students.
3. Educational justification responds to individual differences through inclusivity. Social justification is stewardship for a just and non-discriminatory society by changing attitudes towards differences.
4. By the right of children to free and compulsory education act, Government of India (RTE, 2010), schools were guided to admit 75% of the students of the neighbourhood and from the school's locality. It guides to offer admissions to the learners from less than one kilometre to up to six kilometres of distance.
5. United Nations Educational, Scientific and Cultural Organization (UNESCO) understand education as a “fundamental human right and essential for the exercise of all other human rights”(UNESCO, 2014). Education promotes individual freedom and empowerment, and it yields important development benefits.
6. Reportedly, only 12 per cent of children from the economically weaker sections attending private schools across the country instead of 25 per cent (Wattal, 2020). During Covid-19, many students from this economic section of the society have left the school either to earn the livelihood, at many instances by selling fruits and vegetables, or they have returned to their villages and helping their parents in agriculture farms to earn a livelihood. No one knows if a vegetable grown by one of the dropouts in rural areas is sold by another dropout in the urban area.
7. The assignment deadlines can not be set as parents struggle with patchy internet connections and hence assignments need to be evaluated at whatever hour they come, shares a school teacher from Bhayandar near Mumbai (Yashee, 2020), expressing negotiations with the infrastructural crises.
8. Delhi Public School, Mathura Road, New Delhi ranked 13th amongst top schools in Delhi Survey, 2016 by Education World (EducationWorld India School Rankings, 2016) with 1186/1500 points. The school scored 89/100 for Academic Reputation, 179/200 for Competence of Faculty and 96/100 for Sports Education.
9. Education equity comes with the idea of fairness and inclusion for all students and helps them in achieving their academic potentials (Leaders, 2020).
10. As per Census 2011, 69% of the total houses in India or 170 million households have one or two rooms. One of the interviewee, when questioned for the availability of space required for home isolation, responded “I know families with 10 to 15 members who are staying in a house as big as a kitchen of an apartment. Some hospitals are providing isolation rooms at a cost of Rs 1,000 per day” (Mallik, 2020) which is unaffordable for the most.
11. Many parents feel that the good part of education for toddlers is gone as children do not spend time with others of their age and alphabets are anyhow being taught by them. This also generates a feeling of isolation when the socialisation is limited to the elder members of the family.
12. As per the numbers from Key Indicators of Household Social Consumption on Education in India report, based on the 2017-18 National Sample Survey, a mere 4.4% of rural households are with computers in comparison to a higher figure of 23.4% in urban areas. On similar trends, internet access is 14.9% and 42% in rural and urban households, respectively.

13. Due to lack of resources and the risk of acting inequitable, the online classes from kindergarten to class 5 in Karnataka are temporarily banned from June 10, 2020 (Tandon, 2020) and new policies will be in place from July 2020.
14. As per India's Poverty Profile (The World Bank, 2016), 1 in 5 Indians are poor, out of which 80% resides in rural areas. To acquire free elementary education in a rural school, a household spends Rs 387 per child per year (average of levels of education) which is unaffordable for many as they grapple to provide clothing and balanced diet to the children. Also, the purchasing of required textbooks and stationery etc. is additional to the above cost (Tilak, 2002).
15. One of the world's largest Mid-Day Meal program provides 108 million school children meals everyday to help in retaining school enrollments (Education for All National Review, 2015).
16. The schools are converted as isolation facility as the Disaster Management Act, 2005, allows 'buildings and places to be identified and used as relief centres or camps, in the event of a disaster'. Covid-19 was characterised as a National disaster as early as 14th March 2020.
17. The pandemic is generating acute poverty which will result in forcing girls (much earlier than boys) out of school and into work or child marriage (BBC News, 2020). As per the UN News (2020), it is estimated that the pandemic will lead to as many as 13 million more child marriages globally over the next decade.
18. A reverse migration trend (from urban to rural) is observed due to the unemployment in the blue-collar jobs (mostly the street vendors, housemaids and construction labourers) induced by the Covid-19 nation-wide lockdown.
19. Students are encouraged to use the Central Board of Secondary Education (CBSE) learning apps. Teachers have prepared e-learning materials such as online lessons via videoconferencing, recorded video and audio lectures, presentation slides, podcasts, portable document format (PDFs), worksheets and activities on emails (Sarfaraz and Iftikhar, 2020).
20. Understanding that not every teacher is equally and adequately conversant with the technology, a seven-day training session for teachers by computer departments were organised (Sarfaraz and Iftikhar, 2020). *"Putting together interesting videos and online lessons are something they are still learning. We had to take to digital teaching suddenly and it is not something we were prepared for"* (Yashee, 2020).
21. As cited in World Education News Reviews, India currently has a tertiary gross enrolment ratio (GER) of only 25.8% (2017/18), compared with GERs of 50%, 48.4%, and 81.8% in Brazil, China, and Russia, respectively, which is well below the global average of 36.7%, according to the latest available UNESCO data (Trines, 2018).
22. As per the 2008 policy for education and equity by OECD (OECD, 2008), mentions 'fairness is making sure that personal and social circumstances – for example, socio-economic status, gender, or ethnic origin – should not be an obstacle to achieving education. And inclusion as a basic minimum standard of education for all – for example, that everyone should be able to read, write and do simple arithmetic'.
23. Similar instances are visible when volunteers of the Tsuruhu village's student union, Nagaland, had become de facto teachers as well as exam moderators who have access to smartphones (Chakrabarti and Longkumer, 2020).
24. 'Parenting in the times of Corona' is a Delhi government initiative to encourage teachers and parents to step in each other's roles to benefit the overall development and well-being of the children (Sharma, 2020).
25. The pen drives, loaded with study material were distributed by Nagaland government in places where the internet connectivity is poor or not available (Chakrabarti and Longkumer, 2020) along with broadcast on radio and television (Ministry of Information & Broadcasting, 2020).
26. Many health experts expect an effective vaccine is likely to become available by mid-2021, almost about 12-18 months after the novel virus has emerged (Gallagher, 2020).

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01. Confined homes connected by virtual reality in the Pandemic. Nikhil Dongaonkar and Shrabana Das, 2020, property of author.

Responsive living or a stark reality

Duality of a pandemic

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Keywords: Caged, Imaginarium, Social distancing

Abstract

On December 31st, 2019, the World Health Organization was alerted to Covid-19 or Novel coronavirus, a virus belonging to the same family as SARS or the common cold. By January 2020, many countries such as India, Italy, UAE, UK, Japan and the USA reported rising cases, gradually creating the situation of a global lockdown. With economies stagnating and unemployment on the rise, social distancing has become the new norm. With people confined to homes, pollution levels have dipped globally. Interpretation of time, work and leisure has warped, creating a new reality. A common interpretation of the human life today is that of a caged animal in the zoo, limited to its space and surviving on basic necessities. An assumption is that every home, every person and every neighbourhood has become an imaginarium, promising new avenues of growth, interaction and economy. This has given rise to a duality of the human mind – one where people are gaining new opportunity and another where people are succumbing to a dark and reclusive world. If the situation is prolonged, will the 'survival of the fittest mind' become true? Will we accept the reality of the situation and bring in a new era of coexistence or shall we lose ourselves in the enticing colours of our imaginarium?

Introduction

The pandemic caused by the Novel Coronavirus has brought the world into a controversial situation today. Originating in China, the World Health Organization was alerted to the severity of the infection caused by the Covid-19 virus (a pathogen belonging to the common cold or SARS family) in December 2019. With the global spread of the infection, major economies have stagnated. The primary mode of propagation of the virus being contact, basic activities like passing items to people, travelling via public transport and courtesies such as handshakes are strictly discouraged. A cautionary distance of six or eight feet has been deemed mandatory in many countries and remote working has become the norm. Erstwhile successful industries such as travel and real estate have indicated severe losses. Large scale layoffs in the formal sector and scarcity of work in the informal sector are leading to humanitarian crises worldwide. People are constantly advised to stay home, rely on basic necessities and wear protective equipment such as masks and gloves, alongside other sanitary precautions. In the initial phase of the pandemic, countries such as India, UK, USA and China invoked nationwide lockdowns in order to enforce social distancing and decrease the rate of infection. Within weeks of lockdown, stark changes in nature were observed. The air and water reportedly became clearer in otherwise heavily polluted urban areas. The ambient temperatures in cities conspicuously dropped and wildlife was sighted roaming freely in streets while people were restricted to their homes. Moreover, the regular life in humans was heavily curtailed due to the social distancing norms. As depicted in several cartoons in March 2020, it appeared as if humans were caged instead of animals in zoos. (Thomas, 2020) Since then, while economies have gradually opened, the independent household has seemingly become trapped in a time warp. The divided timelines of work, commute and leisure have blended into an endless loop. With work-from-home and social distancing becoming necessary, the interpretation of social interaction as we knew it has paused. This has led to two dominant opinions. The first school of thought believes that without constraints of workplace and commute and easy access to technology, there are boundless economic and leisure opportunities for everyone to pursue and create a differently engaging reality. The latter school propounds that with the constant solitude, looming economic crisis and career risk, the number of reclusive population and mental health sufferers will increase sharply. The human perspective has culminated into an imaginarium which can either promise endless opportunity or a deep chasm.

Collectivism vs Individualism

The historian Yuval Noah Harari stipulates the reason for the evolution of mankind to be social interaction or the ability to '*huddle up and gossip*' (Harari, 2014). The intricacy of human interaction through gestures, expression and contact, according to his book- *Sapiens*, is what allowed the advancement of science, politics and religion and relationships. Culture essentially is a set of normative social practices which humans have adapted to through time to create the reality we have today (Guan & Zhou, 2020). With the pandemic, the normative social atmosphere is challenged, leaving man defenceless against expressing his base emotions and perceptions. Especially in an individualistic society where the stress perceptions heavily rely on a person's individual career, social circle and growth, the social distancing and indirect home confinement can lead a person into despair and negativity. More often than not, in a collective society, predominant relations and inherent support from afar can encourage a person to explore new opportunities or find a way to share their fears. Hence, the society becomes the imaginarium which projects the duality of opportunity and despair.

The Imaginarium – Duality of Reality

The movie *The Imaginarium of Doctor Parnassus*, delves into the psyche of a person to show how individual choices and exposure to an alternate reality (as seen through media such as cinema and social influencers) can affect reality (Pizarro, 2005). In lieu of the good vs evil debate depicted in the movie, technology and social media has become the present imaginarium (*The Imaginarium of Doctor Parnassus*, 2009). Compared to the earlier decade, accessibility to information and digital connectivity has increased. Connecting remote geographies and cultures, the exchange of the information has changed the perspective and aspirations of people. Using virtual profiles, people have explored regions beyond the confines of the home, workplace and locality (fig. 01). By forging connections, they have tapped into uncharted markets for home-based economies for sustenance and interest. On the other hand, comparing the positive digital presence of others to one's own life can lead to a downward spiral and severe mental health concerns. The impact of social media can lead to a push in the right direction or create an unhealthy addiction. The duality of the situation is the imaginarium we are trapped in. The evolution of mankind has transcended beyond 'huddling' in the physical sense to virtual sense.

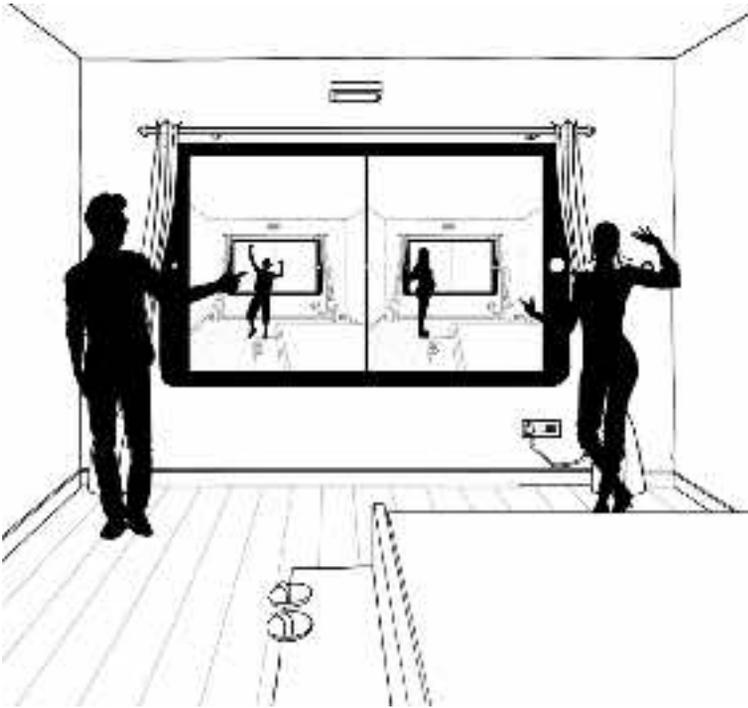
Duality in Nature

The dichotomy of perspective in the pandemic scenario can be seen in nature as well. The balance of energies, day and night, predator and prey; the world functions on a binary system. With the nationwide lockdowns and subsequent reduced activity, tourist footfall has significantly decreased in regions, culminating in lower greenhouse gas emissions around the globe. The pressure on natural fuel resources due to home to work commute, running offices and tourism have reduced. The air and water in several places have cleared, attracting erstwhile flora and fauna to thrive (Yunus P. Ali, 2020) (Lokhandwala & Gautam, 2020). To put it simply, the planet is healing. On the other hand, with the population restricted to their homes, dependency on resources such as water, electricity and cooking gas has shot up, leading to the additional demand for non-renewable energy sources (Chen, *et al.*, 2020). The weekday household energy consumption is almost comparable to pre-Covid weekend levels (BBC News, 2020). The prevalence of duality is preserved in the natural and the artificial spheres of the planet, impacting the everyday life of man and his/her consciousness.

Duality of the Human Mind: Survival of the Fittest?

The situation today offers a duality in everyday life. Being a part of nature, one can either succumb to the fear and limitations generated by the pandemic and lose their physical and spiritual well-being, or, persevere and prevail. In order to coexist, social behaviour evolving through the centuries have to be drastically forged anew. Simple traditions like shaking hands, parties and sports have to be replaced by similar levels of interaction, albeit without physical proximity. Technology has to be devised to cater to all ages and capabilities in order to preserve the social connections. Interpretations of space and use have transformed with social distancing and remote working. Professions need to adapt to the new normal. Coexistence is no more simply a remedy to war. It is an adaptation of a new reality (fig.02).

The theory of the Survival of the Fittest by Charles Darwin and Herbert Spencer explains that a successful biological specimen will be better adapted for the immediate, local environment (Darwin, 1869). Applying this concept to the world today, man is tested by his mental prowess instead of physical characteristics, which was the earlier norm in evolution. Every mind, family and home is a caged imaginarium today, an incubator of prospects or steep drop of





dejection. In the situation of India, the sharp decline in design jobs is matched with a demand for online teachers. Information Technology (IT) graduates, part-time teachers, housewives etc. became teachers overnight. They ushered in a mode of teaching derived from their own experiences, bringing in a dose of reality that students could relate to, thus bridging the gap between classroom and the world outside. As the reliance on restaurants decreased, small home-based cooking enterprises have mushroomed, bringing with it a demand for delivery personnel. Substitute careers for mainstream jobs are being carved out as people sense opportunity to cultivate passion into livelihood. The clock which was sharply divided into work, commute and leisure has transformed into an indefinite loop where people can choose to interpret and manipulate time. Families are using the time to reinterpret the familial bonds and duties while balancing work and leisure. Work has changed from man-hours to deliverables. Owing to the situation, careers have become redundant and loss in revenue has forced organizations to dismiss employees. With the possibility of unemployment looming around the corner, luxuries have been completely shunned for basic necessities and frugality. The volatility of employment has transitioned into alternative prospects which can have an impact on the reality and situation we live in. Concerns regarding leisure and comfort have changed into fear and worry for family and basic necessities (Van Bavel, *et al.*, 2020).

Returning to the duality, what was once seen as an individual expression has become a dark facet of an alternate reality. Global economies are at an all-time low. According to the ILO, approximately 25 million jobs will be lost in and after the coronavirus pandemic (ILO, 2020). The stress of losing one's livelihood coupled with the caged living situation turns a person towards the virtual world for escape. Today, the social media profiles of people have become mirrors of success. With the world physically disconnected, people rely on social media to connect, interact and unfortunately, to compare. The perceived success of other individuals, or, pseudo-success can either encourage one to become a follower or push them into realms of failure and despair. Due to a lack of traditional communication, it may get difficult to reach out to peers for help and let the alternate reality engulf oneself. In the deeper understanding of *The Imaginarium of Doctor Parnassus*, the mirror in the movie can be equated to the world through electronic screens which can show someone their inner desires or the darkness they fear. A simple choice allows the person to escape the alternate reality beyond the mirror or pushes the soul into Hell, or eternal despair. The duality of purpose is based on the will of the individual. The solitude that has come in the wake of the pandemic can either show itself as a path towards self-actualization or a downward spiral into reclusion (fig. 03).

Conclusion

Today, humans are faced with the predicament of contactless transfer of information, goods and services. With trepidation in every exchange, people submit to isolate themselves at home and take necessary precautions. This makes it a challenge to conduct group activities for work, education or services. A different existence beckons in a world during and after the coronavirus pandemic. Virtual reality and/or social media is the interaction which may persist and eventually become the primary medium of interaction. Social media is stimulating feelings and expressions in the mind, channelling the person towards an alternate reality. As observed in psychiatry, memories and attachments control a person's mind. Dominant negative memories combined with the false success of other social media profiles can create an irreversible memory paradigm, pushing the person into the stark abyss (Dillon, 2015). The power of the

virtual reality is palpably visible in the present scenario, where it can either be a tool to mobilize the public to actively vote for effective governance or, through fake rumour propagation, lead to mob lynching or genocide. The challenge is separating one's own physical reality and virtual profile while acknowledging others in a similar fashion. People with dominant positive memories tend to glean the opportunities and trends from others' achievements and respond in a successful manner to survive and excel. The world is heading towards single humanity, devoid of vernacular tradition, high dexterity in the virtual world, clarity of thought and a vastly different definition of achievement – survival. Perhaps, this is the present interpretation of the 'Survival of the Fittest', where the fittest mind shall survive (Guan & Zhou, 2020) (Van Bavel, *et al.*, 2020) (Chen, *et al.*, 2020) (Pizarro, 2005).

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