

Ecological transition and new dwelling paradigms

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Abstract

We are living a historical phase in which phenomena of enormous significance intersect: the *digital turn*, the “ecological transition”, the pandemic contingency, against the backdrop of a unique event in the history of human civilization and of Earth itself: for the first time behaviours and choices of a living species are among the main causes of a biotic transition (or mass extinction). The way of thinking, planning, building cities and houses faces with new scenarios. Human and social sciences are called to a deep and fundamental reflection, in the sign of complexity and of the overcoming of scientisms.

This contribution, starting from a radical re-thinking of dwelling, intends to provide a critical review of some concrete perspectives of “urban and housing transition” towards new spatial and relational models.

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1. Introduction

At the current stage of technical civilization, the “ecological transition” necessary for trying a rebalancing between humanity and the Earth that hosts it should be characterized by a radicality and intensity very far from the rhetoric that politics and the cultural industry feed us with.

Actually, it appears quite unlikely at the moment that some effective form of planning and implementation of a concrete path of “salvation of the Earth” will be achieved. Not to mention that the very phrase “*salvation of the Earth*” contains within itself a profound anthropocentric imprint. It is not the Earth that we are called to save, not the world in an absolute sense but *our world*, human civilization or a relevant part of it. If we failed, the planet and millions of animal and plant species would continue to exist for millions of years, some would even proliferate precisely because of the changed conditions, new species more suited to the changed conditions would be forming. After all, paleontology has ascertained at least five *biotic transitions*² (or *mass extinctions*) in the last 450 million years, the last of which (65 million years ago) generated the conditions that – much later – led to the appearance of hominids who then evolved into *Homo sapiens*³, us.

According to many, a sixth mass extinction⁴ is already underway, largely dependent - for the first time in the history of life - on the behavior of a species. This introduces an element in some ways paradoxical: for the first time the primary cause of a mass extinction can act on itself and partly intervene on the outcomes of the transition underway, at least slowing it down (Greco, 2013, 22); in the awareness, however, that «the biosphere is necessary

² The locution “biotic transition” is more precise and effective than “mass extinction” (which, however, is the prevalent term in common parlance) as it actually consists of a massive transformation of life on the planet, which involves the disappearance of many species but also the appearance of new life forms. With “mass extinction”, therefore, we must not mean the disappearance of all living species but rather the extinction of a significant number of species in a short period of time (in geological terms, however in the order of a few thousand years), due to a subversion of the terrestrial ecosystem. The great mass extinctions of which we have certain proof were five (“*big five*”). In the best known to the audience of non-experts, the Cretaceous-Palaeocene one (about 65 million years ago), which caused the extinction of the dinosaurs, about 35% of the species survived. The most catastrophic is the Permian, with an extinction rate of 96%. But later every great extinction, in the span of a few million years life flourishes again with enormous wealth and then undergoes new transitions. Moreover: on an average of 10 million years more limited extinctions occur, involving, however, about 30% of the species.

³ About 200.000 years ago.

⁴ To deepen the topic: Leakey e Lewin (1992); Barnosky *et al.* (2011); a useful recent summary can be found in: Pievani (2015).

for the survival of *Homo Sapiens*, on the contrary, *Homo sapiens* is not necessary for the survival of the biosphere» (Pievani, 2015, 15).

The *complex* discourse of rethinking dwelling paradigms is grafted onto this background scenario. “*Complex*” not so much and not only in terms of technical difficulty but in the broadest and epistemological meaning of the term. It is a theme that involves a series of disciplines and specific skills but which also requires capacity for integration and synoptic vision, to avoid the concrete risk of hyper-technical contributions, scientific in their degenerative inability to grasp the integral and radical nature of the question.

It is a commitment of thought which implies the typical domain of “*foresight*” rather than the one of “*forecast*”. These are two related but substantially different fields. In a nutshell, “making a forecast” means “calculating” the projections by extrapolating them from available data: we are in the context of continuity and moderate change and, within certain limits, of predictable repeatable patterns. While “making foresight” means “imagining”, having a vision, which may include deep discontinuities with the present⁵; not a vision of *the* future but of different possible/probable futures. In this, we should not simply “project a curve” in the subsequent Cartesian plan but imagine completely new scenarios, resulting from the disrupting events ongoing, and face the paradigmatic break which comes out of that (Derbyshire and Wright, 2017; Tuomi, 2019).

This is what is needed nowadays, an approach that has little to do with scientific models, often formally fascinating but seriously unsatisfactory in terms of effectiveness of predictions, sometimes with even lower performance than predictions based on completely randomly generated values.

The moment requires to go beyond the schemes, in the awareness of the complexity and deep interdependence of phenomena, countering habits of thought superficially ideological and/or demagogic and/or just “trendy”; being wary of what may seem easy solutions “*if only the politics wanted...*”.

2. The roots of dwelling

As Giorgio Agamben (2018) reminds us, the Italian word “*casa*”⁶ is a polysemic term that expresses at least two notions in some way connected but independent: on the one hand the *house-dwelling* that expresses belonging (the Latin *domus* is the place of the *familia* and *gens*), the place of feeling at ease, safe and comforted, on the other hand the *house-building*, the living space

⁵ On the difference between “*forecast*” and “*foresight*” and, more generally, on the epistemology and methods of “*future studies*” we recommend reading Poli (2016; 2019).

⁶ In Italian language the word stands for both the English terms/concepts “*house*” and “*home*”.

(*aedes*, in Latin). *Domi* is being at home which is a “feeling at home” and may be in itself partly independent from physical space, to mean instead a relational context.

When it comes to “dwelling” an essential reflection is that traced by Martin Heidegger in his “*Building, dwelling, thinking*” (1951). Heidegger explicitly warns that his essay does not represent an attempt to think about building from the point of view of architecture and/or technique, but rather to get to the roots of the phenomenon of dwelling and of the relationship between dwelling and building. But precisely because of this radical and non-technical nature, Heidegger’s reflections are of extreme importance when what needs to be rethought, before the technical solutions of building, is the fundamental meaning of dwelling on earth today.

First of all, dwelling is meant in a broader sense of relationship with what is built and is therefore not limited to housing. A school, a bridge, a supermarket, a highway are not a man’s accommodation and yet man dwells them.

Heidegger thinks the relationship between dwelling and building in an extremely original and insightful way, certainly identifying the instrumental function of the second on first but also deconstructing and subverting it, since using the only «means-end schema we block our view of the *essential relations*. For building is not merely a means and a way toward dwelling, to build is in itself already to dwell» (Heidegger, 1951, Eng. transl. 1971, 144). The etymology helps to recover the original and profound sense of the relationship between dwelling and building.

The Old English and High German word for building, *buan*, means to dwell. This signifies: to remain, to stay in a place. (...)Where the word *bauen still* speaks in its original sense it also says *how far* the nature of dwelling reaches. That is, *bauen, buan. bhu, beo* are our word *bin* in the versions: *ich bin*, I am, *du bist*, you are, the imperative form *bis*, be. What then does *ich bin* mean? The old word *bauen*, to which the *bin* belongs, answers: *ich bin, du bist mean*: I dwell, you dwell. The way in which you are and I am, the manner in which we humans *are* on the earth, is *Buan*, dwelling. To be a human being means to be on the earth as a mortal. It means to dwell. The old word *bauen*, which says that man *is* insofar as he *dwells*, this word *barren however also* means at the same time to cherish and protect, to preserve and care for, specifically to till the soil, to cultivate the vine. (...) Building in the sense of preserving and nurturing is not making anything. Shipbuilding and temple-building, on the other hand, do in a certain way make their own works. Here building, in contrast with cultivating, is a constructing. Both modes of building – building as cultivating (Latin *colere, cultura*) and building as the raising up of edifices (*aedificare*) – are comprised within genuine building, that is, dwelling» (Ivi, 144-145).

But what is the deeper essence of dwelling? The gothic *wunian* is equivalent to *bauen* as *to remain*, to *stay close* but with a much stronger connotation of “having peace”, “being happy”, “being well”, “staying safe”. The essence of dwelling lies in this feeling of belonging, of protection, of being free. «To dwell, to be set at peace, means to remain at peace within the

free sphere that safeguards each thing in its nature. The fundamental character of dwelling is this sparing and preserving» (*Ivi*, 147). It is this a fundamental and enormously significant passage of thought in the wake of a new paradigm of eco-sustainable living, which can then be translated into architectural practice. A movement of thought which focuses on the connection of *caring for* things in their deep and essential intertwining. The intimate *unity* in the quadruplicity of what Heidegger referred to as “*Geviert*”, the *Fourfold*: heaven and earth, mortals and divinities.

The primary feature of men’s dwelling is preserving the *Fourfold*. That is, the essence of their dwelling is to save the earth, not so much and not only avoiding dangers but in the most radical meaning of *setting the things free in their own presencing*. This salvation passes through a non-subjugation of the Earth and is incompatible with a “technical” endless and limitless exploitation, with an acceleration that makes each and every day a harassed unrest.

The reference to *divinities* in Heidegger may seem surprising and unsettling. However, it should be understood not in a strictly theological sense but as a human experience of the *sacred* in social and cultural terms.

In this sense, some scholars (including: Young, 2006; Weidler, 2012) interpret Heidegger’s *Fourfold* as referable to a more basic duality between *nature* (the heaven-earth axis) and *culture* (the mortal-divine axis). The experience of the holy, in this sense, must therefore be read by moving away from a sense of “absolute” and instead referring to the *life-world*, to ways of interpreting and transmitting ideas relating to the supernatural inscribed in the memory of a community, to forms of identity and representation culturally shared. Because, in one way or another, there is no human society without a relationship with the supernatural⁷. Thus a sociological dimension is introduced in which the divinities themselves are irrelevant and what remains central is instead the social phenomenon of their generation and their “use”.

«Only if we are capable of dwelling, only then can we build. Dwelling, however, is the basic character of Being in keeping with which mortals exist» (Heidegger, *op. cit.*, 158). But the attempt to think about dwelling and building is a fundamental step to bring out that building belongs to dwelling and how it receives its nature from dwelling (*Ibidem*).

Heidegger’s warning – and hope – is very clear and gains the more power and urgency the more the humanity is overwhelmed by the technique, of which it gradually becomes a product. «The real dwelling plight lies in this, that mortals ever search anew for the nature of dwelling, that they must ever learn to dwell» (*Ivi*, 159). Hope is in the thought. Hope is in the fact that «*Wo aber*

⁷ On this topic it is interesting the reading of Sturzo (1947).

Gefahr ist, wächst Das Rettende auch»⁸. Heidegger's reflection ends with a question and an answer. How can the humans bring dwelling to the fullness of its nature? Building out of dwelling, and thinking for the sake of dwelling. This is the answer.

3. How to think the “dwelling transition”

For what concerns the rethinking of dwelling – understood in a broad sense as the organization of living spaces, domestic and non-domestic – we are experiencing an absolutely crucial moment, in which three extremely relevant phenomena are intertwined: the digital turn (an objectively irrefutable fact), the so-called *ecological transition* (in some ways still cloaked in utopia) and the pandemic situation. The latter, which today seems to us the most impactful, is actually the most transitory... Except that, in a near future, epidemics and pandemics could recur in more extreme and much more frequent forms, to the point of representing a chronic element of our living. Despite its transience, the Covid-19 pandemic has accelerated and/or amplified some dynamics that, in a more or less latent way, had been triggered for some time. A sort of synergic relationship has been created between the pandemic and a further acceleration of the digitization of life and the stimulus to the process of ecological transition.

With specific regard to the question of urban and housing scenarios, it should be remembered how, historically, there has frequently been a strong relationship between epidemic events and urban mutations; also in modernity and also – perhaps above all – through the regulatory and “bio-political” role of the State. Just to give an example, the construction of the huge London sewerage system, found its impulse in the devastating cholera epidemic of 1854. And, going back even further in times, it's good to recall how the most disastrous epidemic in European history, the *Black Death* which plagued the continent in the mid-fourteenth century⁹, was an impressive *driver* of change, capable of triggering profound mutations in the social stratification, in the layout of the territory, in the organization of urban services (for example, more rational and organized practices for the removal and disposal of waste and for the regulation of burials). The crisis and the “palingenesis” induced by the black plague lasted several decades, continuing until the mid-fifteenth century, and

⁸ «*But where there is danger, there grows also what saves*». This is the famous verse by Hölderlin that Heidegger quotes in both in both essays *Die Frage nach der Technik* (*The question concerning technology*) (1954) and *Wozu Dichter?* (*What are poets for?*) (1950).

⁹ To get an idea of the size of that catastrophe: it is estimated that about 2/3 of Europeans died (50 million deaths out of 75-80 million inhabitants).

for some historians, the “turning point” generated by the terrible epidemic of the mid-fourteenth century was by far the event more incisive for the overcoming of the Middle Ages¹⁰.

In a troubled, confused and turbulent phase like the current one, from urban planners, architects and social scientists it is expected to learn what the city and dwelling of tomorrow will be like and how to plan and design them today. This is obviously impossible.

But the contribution that philosophy and sociology can provide is relevant and should take place, hopefully, in the line traced by Edgar Morin, that is a path of thinking capable of connecting the knowledges and placing them in the concrete and complex world, to allow an *integral* reflection, a panoptic vision that «contains within itself the sense of the irreducible bond of everything with everything» (Cerruti, 2016), all the more necessary because of the progressive hyper-complexification of life, beyond the hyper-specializations and scientisms¹¹, beyond “-isms” tout court, as Martin Heidegger would say¹².

The *complex* approach allows us to consider the factors in their co-evolution. And much attention must be paid to ensuring that our foresights do not consist in personal desires or ideologically anchored wishes.

So, how can we proceed to think about the cities of the future?

In metaphorical terms I would say: not with the “logic of the map” but with that of the “compass”. Orienting oneself on a map presupposes that there is a drawing, a precise scheme down to the smallest detail; the map is a tool with a fairly high degree of precision but, at the same time, rigid. While the compass is an extremely flexible tool.

What we can/must aim for today is not to draw the “map” of the future city but to anticipate the different possible directions of (co)evolution of the factors involved, working in parallel on different scenarios and different possible futures, to avoid catastrophic displacements due to unforeseen events (unpredictable if not in a very generic way), those that Nassim Taleb (2007) has icastically defined “*black swans*”.

It will therefore be necessary to develop more lines, more hypotheses, to be ready for more eventualities, in order not to run into catastrophes. We do not

¹⁰ To deepen the topic: Bergdolt, K. (1994).

¹¹ These lines by Edgar Morin (2016, 113-114) seem almost a manifesto against scientism: «We must avoid what we call rationalization, that is, logical systems without any basis nor foundation. We must avoid dogmatization, that is, the hardening of our ideas, the refusal to compare them with experience. We must abandon a closed rationality (...) to devote ourselves to an open rationality, able to know its limits and aware of the irrationalizable. We must continuously struggle not to believe those illusions which are capable of taking on the solidity of a mythological belief. In this global world we face the difficulties of global thinking, which are the same difficulties of complex thinking. We live the beginning of a beginning» (my translation from Italian edition).

¹² In particular, reference is made to “*Brief über den Humanismus*” (*Letter on Humanism*) (1947).

know when *black swans* will show up and what they will consist of. But we know they will be out there, as always. And we must be flexible enough to deal with them with a minimum of effectiveness.

What can be done therefore is trying to think in an *integrated, complex* way that is not inspired by demagoguery, that must not be satisfied with the propaganda through which “the power”, the world capitalist order, the politics aim to implement actions of *reputational engineering* based on *green washing*, capable of restoring an image of mobilization, ecological sensitivity, commitment, concreteness, foresight ...

It may seem trivial to say this, but it is also necessary and inevitable: the rhythms of contemporaneity prevent politics from being far-sighted, take its breath away, force it to adopt the criteria and methods of product marketing, where immediacy and instantaneity of results (and satisfaction) prevail. Byung-Chul Han peremptorily (perhaps even too much!) wrote that, in the digital society, «the future, as the time of the political, is disappearing» (Han, 2013, Eng. transl. 2017, p. 17). Politics, in essence, gripped by the need for immediate consensus (from citizens whose lives, in turn, are devastated by the acceleration), cannot *think in a complex way* and so it is compromised what would be one of its primary functions: governing complex processes. In some ways politics is self-devouring, and it is consuming individuals, and even parties, exactly as if they were commercial goods.

4. Some concrete relevant perspectives

To return to the heart of our theme, also in connection with the pandemic shock: 20 months of pandemic have deeply affected some of the most significant innovations of metropolitan landscapes of last decade, born and raised in the wave of the *shared economy*: *Airbnb*, *Uber*, diffusion of *co-working/housing/living*... The effects on the real estate market are striking. In the immediately pre-pandemic years, profound changes were prophesied around, changes that would have almost subverted *the house* as we know it: from the progressive disappearance of the kitchens (or at least of large kitchens, supplanted by micro-kitchenettes) to the radical compression of the square meters of the apartments, up to a much more flexible and nomadic version of living, somehow “liquid”. In this frame, *Covid* has introduced elements of reversal of trends which seemed to be consolidating. Now large homes are required, possibly equipped with outdoor spaces, functional and comfortable kitchens, the possibility of setting up efficient workstations for remote work.

Of course, it is true that some of these characteristics of demand will have a transitory character, but it is equally true that on processes such as *smart-*

working, which for some time had been in a stage of latency – characterized by substantial availability of technologies but also by important resistances in the organizational culture and in the legal system – *Covid* has generated a “passage”, probably irreversible, to a “next level” with no return. In the next few years there will be phases with different intensities of growth of the phenomenon, but by now the path seems to have been drawn. This will have significant repercussions not only on the organization of living spaces and on the real estate market but also on the general structure of urban development/reconversion choices, on mobility, on the centre-outskirts and city-villages relationships, on the revitalization of internal areas, etc.

However the domestic internalization of life of this pandemic times has limits and thresholds that will not – hopefully, should not – be exceeded. And it is foreseeable that once the pandemic emergency has passed, there will be a rapid readjustment of many phenomena. The philosopher Emanuele Coccia said that “there is not sufficient consideration of loneliness, anguish and above all violence related to the domestic space. Inviting people to coincide with their own home means creating the conditions for a future civil war” (Coccia, 2020, quoted in Molinari, 2020, p. 12).

At the same time, the mutation power of pandemics should not be underestimated, it is enough – again – to look at history. Moreover, consider that our pre-pandemic years represented already by themselves a turning point or a liminal stage in such many fields (the digital one, in particular). In this cases, the pandemic is even more likely to have an structural impact.

Think of e-commerce: in many areas of the world it had already a great success, yet some reluctances of various kinds persisted, for example related to electronic payment methods. The pandemic period, representing a sort of compulsion towards the option of e-commerce for many individuals, has contributed to a direct knowledge of its mechanisms, to familiarization with it and to the growth of trust; this has also led to an organizational and logistical strengthening of the sector. In this case, only a part of the new behaviours is reversible but certainly the pandemic has significantly determined the mutation of consumption patterns that were already in a “limit zone” before the outbreak of the infection. All this will have its physical manifestation in the urban spaces of traditional commerce and also of hypermarkets and large shopping centres (which, in truth, in many contexts already showed signs of difficulty in the years preceding the pandemic).

In the rich debate on the future of cities, some of the most popular “formulas” deserve mention and concise reflection here.

- *15 minutes cities*. The basic criterion is simple (perhaps even too much): to strive for an urban organization that allows every citizen to reach everything he needs in 15 minutes on foot or, at least, using

means of transportation with a very low environmental impact, such as bicycles. It is not a new idea, since it was proposed at the beginning of the 1900s (not only in general terms but also in terms of design and real application in some areas of New York) by Clarence Perry¹³, in terms of what he defined “*Neighborhood Unit*”: an autonomous community cell for certain types of services (school, church, local shops, park and playgrounds ...) but also necessarily connected to the rest of the city for other services and needs .

In essence, this is the idea of a liveable *quartier* that, after all, inspired the urban layout of many cities in the 1900s, until the advent of mass car-mobility.



Figure 1. A schema of “*neighbourhood unit*” (Perry, 1929, p.88).

This is an interesting solution that must always be kept in mind by planners and policy makers, but the media interest it has been arousing lately seems excessive compared to the real scope of the concept. To begin with: having essential services within walking distance of 15

¹³ For an in-depth analysis of Perry’s studies see: *The Neighborhood Unit* (1929).

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minutes or biking distance within 15 are very different conditions. We are talking about a radius of about 1.5 km versus one of about 5 km: in terms of urban planning this is not a small detail. Now, it is evident that a basic criterion of common sense to be taken into account for urban liveability is to ensure a “fabric of proximity” for basic services and chances of human relationships. But what services are we talking about? A pharmacy, a general practitioner, grocery stores and other local businesses, banking and postal services, kindergartens and schools (let’s say up to middle school?). Of course. These are repeatable and fairly “standardizable” services in the urban system. But the real point is that the soul of the cities lies precisely in the unrepeatability and uniqueness of their non-reproducible and non-serializable elements. Contemporary consumption models are less and less based on standardization and more and more based on differentiation, on personalization, on the variety alternative choices available. The “added value”, or at least the “specific” value of living in a city, or in a metropolis, rather than in a small village, is precisely that of having a much greater range of choices and possibilities than those offered by a small town. But the “unique” and unrepeatable services of a city are based on a criterion, often unavoidable, of a minimum *critical mass* of users/customers/consumers necessary for economic sustainability of its provision (as Walter Christaller had already clearly explained in his studies on localization and urban hierarchies in the 1930s)¹⁴.

The logic of 15 minutes may include a soccer field not the stadium, a family physician not the hospital ward specializing in cancer care, an elementary school not the university, the bookshop, not the historical library or the science museum, a bakery not a Lebanese restaurant ... Another big question is that related to work: doing your job within 15 minutes on foot from home is a chimera referable to a small percentage of the population but the vast majority of individuals need to move using the car or the public transport, even for considerable durations. And they need to stay outside the neighborhood of residence for most of the day (which also implies carrying out other activities that are not purely

¹⁴ Specifically, Christaller’s *Central Place Theory* (1933) aimed to analyse the localization phenomena, especially in terms of size and distance between the various urban centres of a territory as a function of their “hierarchy” and of economic activities and services provided therein. The Christallerian paradigm has long since been superseded, nevertheless some of its elements have been widely used in subsequent theorizing and, in some cases, still remain valid today. This is the case of the concept of “*threshold*”, defined as the distance that delimits a circular area, which includes the minimum quantity of population sufficient to guarantee a level of demand such that the service is produced efficiently, or that of “*range*”, understood as the maximum distance beyond which the consumer is not willing to face the time and costs necessary for the purchase of the good or the use of the service.

professional). The members of a medium-class contemporary *urban family* work, study at the university, attend language courses (perhaps Chinese, Spanish), play sports, go to the theatre and cinema, dine out in restaurants... These are obviously not sporadic or occasional but daily activities. What the 15-minute model neglects is that you do not practice “a” sport but “that” specific sport, which generally is not chosen primarily because of proximity to home (being this only one of the factors evaluated¹⁵); you do not go to see “a” movie but “that” particular movie; you do not go to “a” restaurant but to “a specific” restaurant (perhaps Greek or Mexican)... All this implies a series of daily movements hardly compatible with the logic of 15 minutes on foot but also by bike and, probably, also by car, by metro... and by any other means.

- *Transition towns*, based on an “ecological” existence and on the concepts of community and participation. The pillars are represented by: energy self-sufficiency, through renewable energies and the total elimination of fossil sources; building criteria that adopt the canons of bio-architecture and tend to the construction of *passive houses*¹⁶; participatory models of choice that directly involve citizens as an active part of the necessary change, through inclusive decision-making processes. The “*transition movement*”, born in England from the initiatives of Rob Hopkins, around 2005, has grown a lot in the following years and today has several thousand initiatives around the globe, which also participate in sharing and exchange networks of practices. Although this is a logic that can be theoretically applied also to the dimension of neighbourhood, it is evident how its more proper and effective application is in towns or villages, of small size and easily circumscribable. In some ways they are *enclosures*, *gated communities*, in which exchanges with external reality tend to be controlled and limited. Models of this type can generate problems due to the closing and separation spirals that are triggered¹⁷. In any case, these are solutions difficult to conceive in urban megalopolises with a high population density or anyway in large urban contexts.

¹⁵ The maximum distance that the individual is willing to travel depends on many elements, including: the type of activity and the presence of similar activities, the costs, the quality of the service, and so on. For example, if a teenager intends to practice swimming, he will hardly fall back on soccer or gymnastics as a function of mere localization elements.

¹⁶ These are buildings made with materials and techniques (such as solar greenhouses, storage walls or solar collectors) which cover most of the energy needs for heating or cooling spaces without external energy supplies.

¹⁷ For a reflection on the possible drawbacks associated with “closed” residential models, see, among others: Sennet (1992), McKenzie (1994) and Petrillo (2006).

- *Constellations of villages.* It is an intermediate solution centered on the enhancement of villages and small towns in which it is easier to create conditions of residential well-being and sustainability, also placing them in an “organic” relationship, based on forms of sustainable mobility, with metropolitan centers. This is an approach that arouses interest especially in countries such as Italy, characterized by the presence of a large number of villages and “internal areas” at risk of depopulation and abandonment (with repercussions also on the care of the territories and soils). Providing these areas with an efficient telecommunication infrastructure and other basic services but also with real possibilities of connecting physically with urban centers and encouraging people to reside there, on the one hand can save this territorial heritage in extinction, on the other it can facilitate the choice of those who intends to move away from metropolitan chaos, from yet another it would allow cities to decongest and be able to redesign their liveability more effectively. According to Stefano Boeri (2020), today it is possible to think of «a pact, an alliance, a reciprocity contract between the city and the system of villages, whereby those who plan to move their lives to a place other than the city are guaranteed to be within a circular economy circuit on agriculture, forestry, craftsmanship and intellectual work linked to the big city»¹⁸. It is a prospect worthy of attention, as long as it can count on large public and private investments and on forms of incentives. The risk, also in this case, could be represented by the fact that solutions of this kind may end up concerning above all – as has already happened in some internal areas of prestige – high social classes, thus generating, or widening, housing inequalities and “resortistic” logics. An interesting perspective could be that of «involving a social and generational mix, to the point of providing (...) also settlement solutions for immigrant populations, in line with the so-called ‘*Riace model*’¹⁹» (Spaziante, 2021).
- *Urban transformation in the strict sense.* We could use this label to define the perspectives of the skeptics towards the logic of progressive de-urbanization. They believe that the effect of current and future

¹⁸ Speech at the first seminar of the cycle “*Ascoltare l’architettura*” (Listening to architecture), held online on June 8th, 2020; quoted in: Ordine degli Architetti, Pianificatori, Paesaggisti e Conservatori di Roma e Provincia (Association of Architects, Designers, Landscape Architects and Curators of Rome and Province) (2020). Order of Architects, Planners, Landscape Architects and Conservators of Rome and Province (2020).

¹⁹ Riace is a town in Calabria (South of Italy) where an innovative, and criticised, immigration/re-population model has been experimented starting from 2004. For further information see: Perfetti-Ronconi (2021), Gaffuri (2019).

technologies will not be to encourage counter-urbanization at all, but to support a real transition towards more advanced forms of organizational and management intelligence of metropolitan processes. Large cities will maintain their attractiveness, thanks to the superior richness and flexibility of the offer in a series of services, occasions, relationships. Technologies will be the main pivot to pursue liveability and sustainability. For example, digitization, big data, Artificial Intelligence and *IOT* can be used to achieve the optimization of energy consumptions, to regulate rationally road traffic and parking²⁰, to manage queues through advanced booking systems.

It is certainly a pragmatic solution and in line with the pace of technological progress. Obviously, it carries with it the risks of a further extremization of dependence on technologies. But there is a reflection to do: given the condition of decay of the environment we have reached through technologies, it is very likely that even a sudden *de-technologization* (only theoretically conceivable) would not have healing effects, if not through a global slow-down of huge proportions which would generate social catastrophes that likely, in turn, would lead to wars, famines, involution of health systems ... Paradoxically, the technical acceleration has brought us to a point where, perhaps, only technology can significantly slow down the decline of the species. But even this presupposes that we begin to make a much more enlightened and equitable use of it. And this is very far from happening.

In thinking “complexly” on these issues, the huge costs that could be linked to de-urbanization processes must be carefully evaluated. For example, it is easy to say that *smart-working* will expand enormously. But, leaving out the likely socio-relational and psychological repercussions²¹, the possible consequences connected to the disposal (with relative collapse of real estate value and consequent decay) of millions of cubic meters of buildings intended so far as workplaces “in presence”, ranging from the need (and the difficulties, technical and financial) for a reconversion of these spaces to the impact on all the activities linked to work in presence (above all catering and business services). In short, the *smart-working* revolution does not only involve organizational and re-organizational issues (: working times and methods, management models, family relationships...) but has its own precise (and

²⁰ As an example, think of intelligent systems for automatic regulation of traffic light times based on the data on traffic flows transmitted in real time and “projected” a few minutes forward.

²¹ On this see: Corposanto, Pagano, Gardini (2021). For broader approach to *smart-working*, among the extensive sociological literature on the topic the recent De Masi (2020) should be noted.

huge) impact on urban spaces, as well as on the conception of the domestic space²².

5. Conclusions

In the light of the various stimuli and ideas, even rather conflicting, on the *urban transition* underway, it seems possible at least to underline some essential elements.

We must not fossilize on “one model” of future city. As it has always been, there will be various city models and various futures for the city. However, it is important to carry out a critical and *complex* reflection that seeks to interconnect points, imagine scenarios, anticipate the benefits and criticalities of the various ways of urban transition, in order not to be completely displaced in front of *black swans* and/or devastating *heterogonies of ends* of the policies we are now implementing.

In addressing the discourse on cities and their futures, it is desirable not to be *West-centric* and not to have in mind, therefore, only the European or North-American urban “ideal-types”. If we talk about ecological transition, the quality of life and liveability are outlined in still essentially local horizons but the future of human civilization is played out on a planetary level. Thinking about the cities of tomorrow means having in mind the African shanty towns, the Asian megalopolises, the desperate suburbs of South American cities... May our reflection, which even legitimately focuses on our context, not be limited to it; otherwise it will not lead to plausible solutions but often only towards demagogies and empty triumphalism, propaganda or merely symbolic narratives.

The *Covid-19* pandemic has amplified some socio-economic inequalities, including the housing one. Just think of the *lockdown* phase: spending it in a welcoming home, where each member of the family has their own spaces and equipment for connectivity, perhaps with a terrace or garden available, is very different from suffering it in a council house in the “*Vele*” of Scampia²³. The

²² A further theme that can be glimpsed is that of the productivity asymmetry between the wealthiest workers, who can afford to set up domestic spaces suitable for remote work, and those economically disadvantaged, whose housing situation does not allow congenial solutions (small and/or overcrowded homes, with less efficient connectivity equipment...). This could be a factor of further widening social inequalities and gaps in career advancement opportunities due to social class of origin (see Corposanto, Pagano, Gardini, *cit.*).

²³ The “*Vele di Scampia*” (*Sails of Scampia*) is a large urban housing complex built between 1962 and 1975 in the Naples’ neighbourhood of Scampia. The name comes from the triangular shape, wide at the base and narrowing as they rise, of the seven massive apartment blocks that compose the complex. The original idea behind was to provide a huge public housing project, where hundreds of families could socialize and create a community. Because of various causes

impossibility of leaving one's home context and one's neighbourhood, one's own alley... In short, the preclusion of "escaping", of using "other" spaces, extremes and exacerbates ordinary dwelling inequalities. This is to say that in any declination of future dwelling the theme of *housing dignity* cannot be ignored.

Like it or not, the future challenges for the biological and social life of the planet now depend heavily on *information technology* and on the production, distribution (sometimes, alas, predation) of those *Big Data* which are the "crude oil of the digital age". A significant *cyber-crash* of computer networks would suddenly place in a serious danger the safety and life of millions of individuals and many urban ecosystems. One of the next *black swans* could be, in fact, a devastating *cyber pandemic*. In thinking about the future of cities and our future tout-court it is good not to neglect this huge risk and immediately prepare countermeasures capable of mitigating the damages.

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it turned out to be a ghetto. Many families without shelter started to occupy the apartments illegally, tolerated and ignored by the authorities. Things got worse by the total lack of police presence, resulting in drug trafficking, illegal street racing, gangs. Nowadays "*le Vele*" are considered a symbol of urban decay.

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