THESIS - Vol. 9, No. 2, Autumn 2020

International Research Journal

ISSN: 1848-4298 (Print) ISSN: 2623-8381(Online)

The 'new' invisible Landscapes of Covid-19

Andrea Oldani

How to cite this article:
Oldani, A. (2020). The 'new' invisible Landscapes of Covid-19. *Thesis*, 9 (2), 81-98.

Published online: December 23, 2020.

Article received on the 20th of October, 2020.
Article accepted on the 2nd of December, 2020.

Conflict of Interest: Author declare no conflict of interest.

Review Article

The 'new' invisible Landscapes of Covid-19

Andrea Oldani *– arch. Ph.D.*

Department of Architecture and Urban Studies - Politecnico di Milano
E-mail: andrea.oldani@polimi.it

Abstract
The landscape is the result of the relationship between the perception of a subject and an object. Such phenomena, in times of Covid-19, assume a new 'invisible' form, where the microscopic dimension re-orients our way of using the space, influencing a consolidated idea of the landscape. Everywhere, at the first alarm, some form of self-protection will be triggered, making the 'ordinary' landscapes uncomfortable and potentially dangerous. However, there is also something positive in this unforeseen critical period. It is the emergence of territories able to play an antagonistic role in the spread of coronavirus. Spaces that were more marginalized territorial forms can now assume a unique, central role. The residual and enclosed space of large metropolitan areas appears as the centre of a new landscape design hypothesis, where new grounds impose themselves as antagonists to the dynamics that represent the crisis of our territories.

Keywords: Landscape; density; pollution; residual and enclosed open space; landscape design.

Introduction

In the extraordinary and recent popularity and also contradiction that accompanies the concept of "landscape", a fixed point is undoubtedly represented by the clarity that establishes the origin of this phenomenon. In fact, despite vast differences in the

way they understand its nature, meaning and purpose, most of the authors agree that the landscape is constituted by the relationship between a subject who perceives, feels and imagines, and an object (Roger, 1997; Jacob, 2008; D'Angelo, 2010).

For this reason, there is a line of research that reflects on the relationship between landscape and psyche, as a further extension of this complex concept. The Italian epistemologist Silvano Tagliagambe (2018) well described the theoretical nature of the space where this phenomenon develops. The landscape appears in "an intermediate area between exteriority and interiority that is inhabited by the balances and tensions between the physical space and the psychic universe. This is a sort of interactive field in which the outside enters in our perception and imagination which, in turn, penetrates in the landscape. For this reason, with an effective neologism, we can say that the landscape, which is 'environment, horizon, space, soil, territory', becomes mindscape, 'landscape of the mind', in the process of mutual influence and dependence. This process makes the scene in which we live not limited to a rigid and stereotyped series of stimuli producing only a restricted repertoire of standardized responses, but as something extended, where the exploration of an infinite series of possibilities can be combined in an infinite series of places in the psyche" (p. 15).

This is a perspective, shared with many scholars, that makes evident how everyone owns more experiences, part of each background that can be emotionally reactivated through a place or an object. Every time we are in front of something somehow stimulating, this process produces a change in the nature of our perception, giving freedom to our subjectivity. In these cases, which involve the landscape in an extended way, "our relationship with the object will have changed both the object and ourselves forever" (Lingiardi, 2017, p. 181). Under

those circumstances, it is clear that when we mention something related to a particular landscape, we always have to consider that we are talking about a sublimated reality, which everyone sees in a different and personal way.

From this reflection appears the complexity that underlies every definition and reasoning about landscape, for this reason, it is interesting analysing the role of a virus, as the new coronavirus SARS-CoV-2, questioning if it can represent the genesis of a 'new' landscape as well as discussing its possible effects or generative role on the existing 'ordinary' landscape. Correspondingly, another question is how this phenomenon can redirect the course of our territories in crisis and their design.

In front of a 'new, invisible' landscape

The worldwide spread of Covid-19 pandemic disease between December 2019 and January 2020 produced and will continue to generate a series of consequences of such magnitude that today it is impossible to think, understand and comment extensively and coherently. However, it is not unreasonable to make some considerations about the impact that the virus may have about a concept like the landscape. This is true considering that the virus introduces a new way of looking at reality and forces us to reconsider the existing reality from a new perspective.

Although there have been several pandemics during the last century, for sure Covid-19 has only one precedent, the 1918 'Spanish flu', in terms of diffusion, gravity, and social and economic implications. Since that time, people did not experience in such a universal, and obsessive way recalls to stay at home, use facial masks, keep social distancing, and worries about the severe economic impact. Such a scenario has been re-proposed only a century later, when the memory of the previous

one had almost disappeared, revealing many similarities and analogies (Hershberger, 2020).

In any case, the fact that should be stressed is that in the last months, on a worldwide scale, people have been able to realize the presence of a small enemy, invisible but intrusive, capable of influencing our habits and our way of inhabiting any space. As a result, the perception of a microscopic universe is now widespread, s universe which is invisible, dangerous, extremely effective in impacting and modifying our behaviour. Nowadays we are experiencing an active phase of diffusion of the virus, its presence is recognizable, and its dangerousness can be felt in many ways: for this reason, we have all concentrated on adopting measures to protect ourselves and others. Under those circumstances, it is difficult to speak of the manifestation of a 'new' landscape. Although it may already exist, its presence will be even more evident at the end of the pandemic, when the world will find a new 'normality'. At that time, the humanity will be immersed in a 'new' invisible but recognized and recognizable landscape, ready to manifest itself in the riskiest conditions, activated by our memory, following the resurgence of the emotions that have accompanied our lives during the pandemic period.

The seriousness of the current critical situation makes it clear that this memory will not be destined to disappear quickly, remaining latent for a long time, inevitably competing with the remembrances of the 'ordinary' landscapes. By all means, it can be supported with reasonable certainty that humanity will face a period of unexpected duration where the microscopic dimension will re-orient our way of inhabiting space, profoundly influencing the system of relations on which a consolidated image of the landscape has been based.

The gathering places in crisis

The well-known drawings and words of Louis I. Kahn on 'the room, the street and human agreement' (1971) help to understand and make clear how the invisibility of the post-Covid-19 landscape can change the way of living and perceiving every space. Starting from the room, the basic unit of architecture, up to the street, to the city, the potential or imaginable presence of viruses, bacteria, or other carriers of diseases, will redetermine our approach to each place and the public life, modifying our behaviour. The pandemic puts in crisis the most ancient ways of dwelling and awakens the provocations of the utopia that has always accompanied periods of revision and crisis. The 1965 metaphor of the Un-House by Reyner Banham and François Dallegret, a concept for Transportable Standard-of-Living Package included in the article "A Home is not a House" stimulates some interesting reflections. The hypothesis of a completely isolated life in an individual-based microcosm, as well as a close relationship with technology, is something that has never fully materialized: despite this, it assumes a critical meaning because of the Covid-19. During the lockdown, humanity experienced self-isolation, with many difficulties from the psychological, and emotional point of view, entrusting technology with the possibility to continue some 'normal' activities.

The previous reflection makes evident that the invisible dimension could, therefore, orient two strongly negative attitudes. In the first place, moving people away from conventional or less conventional collective spaces, and second, at extremes, producing phenomena of self-isolation and technological alienation.

Also, after the epidemy, always and everywhere, at the first alarm, our memory will be activated, and some form of self-protection will be triggered. The spaces of congestion, including

the places of globalization, will become the image of a universe where we should move with particular caution, paying utmost attention to preserving intact a lifebuoy, shield of our individuality.

Many places will no longer be perceived positively but as insecure. New fragilities will arise, which will involve particular forms of space and figures of the landscape that had imposed themselves as dominant, whose remains will indelibly mark our territories.

These effects are not only to be evaluated in negative terms but must be understood in relation to the current condition of urbanity and in a design perspective essential to reduce the possibility of risk. In this sense, it is interesting to explore some forms of a possible relationship between urbanization and infrastructure conditions, triggering factors responsible for the origins and the spread of pandemics, also looking for the way forward.

Urban condition, density, coronavirus spread and disease

The Italian case reflects a condition where it is possible to identify some relationship between higher density areas and the spread of covid-19. Comparing the map of population density with that of the virus spread at the beginning of the pandemic shows an exact correspondence between the most densely inhabited regions and the number of cases (fig. 01).

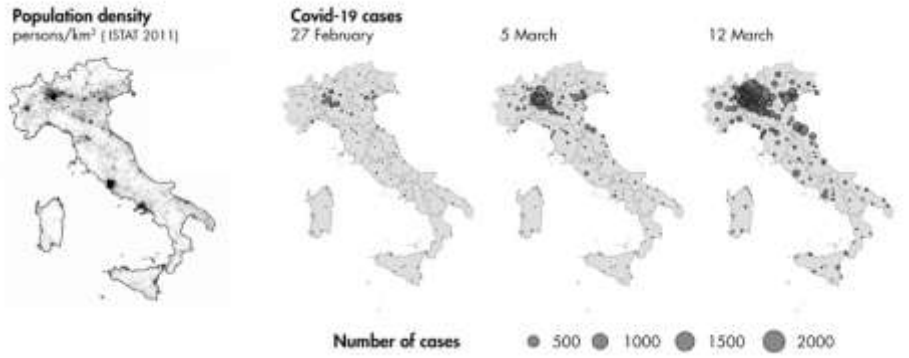

Fig. 01 - Relationship between population density and covid-19 spread (elaboration by the author)

This condition certainly depends on the concentration of more population in the densest areas but is also influenced by some variables related to the character of the urbanization, and multiple geo-environmental determinants.

Several studies, among those recently published following the spread of the new coronavirus, clearly show the existing relationship between density, urban concentration, pollution and virus diffusion. The research of Mario Coccia (2020) is particularly relevant as it focuses on the Italian case and shows not only the importance of the relationship between population density and diffusion, but also reveals how "the accelerated and vast diffusion of COVID-19 in North Italy has a high association with air pollution of cities measured with days exceeding the limits set for PM10 or ozone". The same study also clarifies how this situation is made even worse by the geographical condition where the pollution is associated to "low wind speed, a high percentage of moisture and number of fog days, that seem to have an environment that fosters a fast transmission dynamics of viral infectivity in society". The findings of this and other papers also reveal the "importance of future improvement of air quality

in the area [Milanese region], according to the European Community standards in order to increase people's immunity to severe viral infections like coronaviruses are" (Zoran et al., 2020). Such necessity depends on scientific evidence that demonstrates how the "chronic exposure to PM 2.5 causes alveolar ACE-2 receptor overexpression. This may increase viral load in patients exposed to pollutants, in turn, depleting ACE-2 receptors and impairing host defences. High atmospheric NO2 may provide a second hit causing a severe form of SARS-CoV-2 in ACE-2 depleted lungs resulting in a worse outcome" (Frontera et al., 2020).

With this in mind, it is easy to understand how these criticalities deal with a plurality of urban and socio-spatial implications (Bray, 2020; Salama, 2020). By all means, also considering the difficulty of objective analysis for an on-going pandemic, it appears obvious that viruses, bacteria, and other disease diffusers, will be significantly determining in re-orienting the project of the city, the territory and the landscape in the next years. This realistic hypothesis also confirms how we are facing the existence of the 'new invisible landscape' previously described, with all its implications: material and immaterial; visible and invisible; social and economic.

Spatial legacy of Covid-19 diffusion

The consequences of the emergence of this new phenomenon are not yet predictable with certainty. Indeed, they will depend on the evolution of the pandemic and the reaction of people. In any case, there will be several critical issues that could affect some places and types of spaces. It is the case of all the concentration places such as commercial malls, markets, meeting spaces such as cinemas and theatres, gyms, swimming pools, sports arenas, but also bars, pubs, restaurants; as well as nodal points, like

hubs, terminals and stations, and of course all the means of transport that move along public transport networks. People will undoubtedly continue to frequent these places, but at the announcement of the arrival of any form of flu, at the first sneeze or cough, the memory will be activated, and the way of perceiving their safety and comfort will change immediately. For this reason, it can be assumed a mutation of these types towards more open models, which include direct and immediate contact with the exterior for a better natural air refreshment.

This framework appears quite apparent and, although it offers an impression of uncertainty and negativity, it does not bring only negative consequences. As a matter of fact, the mutation of the way of using the mega-spaces of concentration and globalization, to which we have been accustomed in recent decades, could correspond to a revaluation of some more traditional forms of urban space. It is not easy, however, to make predictions in this sense. The unpredictability and habits acquired by people offer too many components that play for or against this hypothesis.

Conversely, what must change, at the expense of our own survival, is the relationship between the densely populated areas, large conurbations, sprawl territories, infrastructure networks and open spaces. Here it is essential to build biodiversity and provide new environments that can help resolve an impressive range of environmental imbalances.

Of course, this action also corresponds to a reversal of perspective that will perhaps bring to the revaluation of individual spaces of introspection between man and nature. A result that could have the not irrelevant advantage of reducing the dependence on the spaces of concentration and intensification. Moreover, forms of non-places (Augé, 1992) realized in recent decades, at the expense of vital environmental

resources, like the soil, and other environmental infrastructure, which design and protect, are now more necessary than ever.

A closer look to the Milanese region

Observing the density of the Milanese metropolitan region (fig. 2) and focusing the attention on the open space system, especially in proximity of the conurbations, means concentrating on a collection of fragments, the importance of which is now vital in the emergence of these new 'invisible landscapes'.

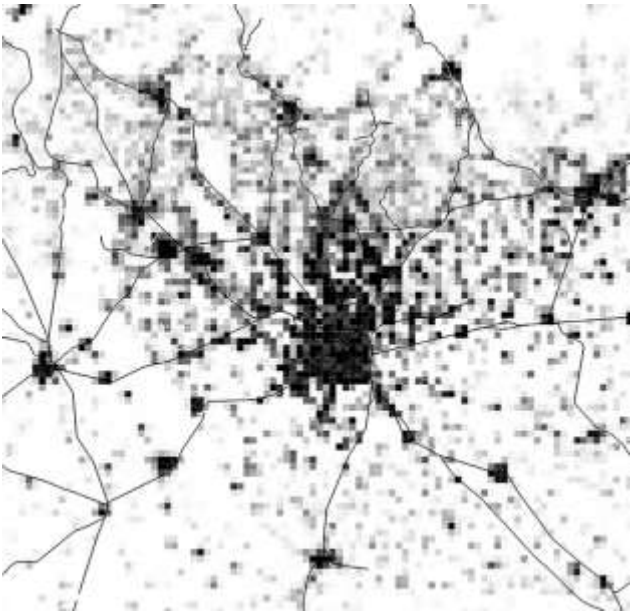

Fig. 02 – Urban density in the Milanese region (elaboration by the author)

These are residual open spaces, in part still active for agricultural production, fragmented and without evident environmental and aesthetic qualities. Their condition depends

on the unpredictability of the city's development dynamics concerning the economy and, more recently, from the legislative attempt to reduce land consumption.

The reality is a constellation of residual scraps, plots that miraculously survived processes of urbanization that seemed unstoppable, fragile areas, for their intrinsic condition and a set of economic, social and cultural problems. But at the same time, there will be privileged areas of redemption, constituting the only resources that the city can rely on to improve its resilience.

It is evident how those spaces can be meaningfully transformed into places and environments in which to experiment solutions aimed at reducing the pollution and creating biodiversity, as well as a reserve of green space for new forms of individual recreation. One can glimpse a future for these spaces in which they become resilient landscapes that will grow up as a response to the emergence of the 'invisible landscape'. Representation of territories able to play an antagonistic role in the spread of coronavirus. Spaces that until a few days ago were uncertain territorial forms, that now can re-assume a unique, central role. Open fields for new territorial networks, capable of reconstructing the biodiversity, providing ecosystem services and imposing themselves as significant spatial devices.

Residual open spaces as new landscapes

It appears that the new "invisible landscape" of Covid-19 has the strength to increase or improve the collective consciousnesses towards a greater awareness of environmental problems and their weight in ensuring the habitability of our planet.

This process requires a reversing course by a global society that has lost the ability to take care of and develop a fondness for the earth, its forms, its materials and its balance. The hope is that

this awareness will be translated into the desire to imprint a recognizable quality to the available forgotten, or misused resources. As architects, it brings forth the features of an experimental design program for the network of spaces of the proximity of our cities. It is a project based on the desire to combine environmental quality with beauty and a meaningful narrative plot, capable of stimulating every possible form of affection with space. Only in this way will it be possible to build new landscapes, capable of fostering a new individual and intimate relationship with our land, its shapes and its ecosystem. This vision should happen following a logic of degrowth, antagonistic to the dynamics of concentration and globalization (Latouche, 2017).

It is a process that requires reconsidering some indispensable components of the environment, as well as new strategies and introducing new figures of the landscape design, capable of responding the complexity and the contradictions of our age: the Anthropocene (Tsing et al., 2017).

The first component on which it is essential to make an observation is the soil. It is a vital infrastructure (Pavia, 2019) that regulates most of the essential mechanisms of the planet and guarantees the resources we need for survival. For this reason, it is unbearable that, especially in the densest territories, soil and sub-soil appear mortified by consumption and exploitation. Their nature is flawed, and their value reduced, lacking any form of complexity and narrative potential. At the same time, their airtightness reveals some precious relics as well as unexpected meanings that are still able to reveal some traits of the original complexity and offer an interpretative key capable of orienting new visions.

This particular interest for the soil should be combined with a reflection on another indispensable element for survival, water. The role of this matter must be rethought entirely, from

its cycle to its infrastructure (Oldani, 2020). To have an initial idea, suffice to think about the abundance that could represent the waterways buried under our cities concerning the management of the effects of climate change.

The theme of water, combined with soil, also speaks to us, however, of a procedure, that of depaving. This practice, born in an experimental and demonstrative context (Register, 2003), is slowly becoming part of the agenda of all the most virtuous cities. It is, therefore, necessary to dig, in a physical and metaphorical sense. Give backspace to the water in order to make itself running, filtering, and collecting. To make its vectors re-emerge from the ground and build around it a new identity of urban and peri-urban open spaces. The genetic code of a new landscape resides in the dense palimpsest of the soil and its redesign through the cross-section.

The scenario introduced cannot be compelling without rethinking the current way of intending agriculture. During the last seventy years, increased mechanisation, the spread of intensive forms of land use, monoculture, and extensive use of chemical substances have precipitated the quality of the rural landscape, and many of its original features have disappeared. Today, it is fundamental to reduce the land rush due to the ever-decreasing availability of fields, and to re-balance the quantity of ground given to agriculture and that one that is indispensable and vital to ensure biodiversity and life. In this sense, it becomes essential to think about new forms of agriculture, able to compensate for the increasing scarcity of soil and to protect the environment and its balance better, also recurring to technology, construction and innovation (Waldheim, 2010; Koolhaas, 2020).

Any effort to rethink the peri-urban territory in an ecological direction requires giving a predominant role to vegetation. In this sense, it is essential to abandon some consolidated forms of land-use in favour of more invention

(Gandy et al., 2020). The reorganisation will therefore have to be based on a variegated pattern, which includes some areas in which to experiment on wilderness, developing some techniques for the conscious displacement of high de-anthropized areas.

It seems almost obvious that this process requires a notable trend of change, which also includes some substantial renunciations. In addition to the already mentioned need to reorganise and modernise agricultural activity in a more sustainable way, there is also the need to demolish some urban and peri-urban strata, in search of lost land, and more convincing forms of urbanity. It is the case of many industrial, tertiary and commercial areas that are underutilised, degraded and abandoned. Nevertheless, this is the case of infrastructures whose design can be varied, improved and integrated, taking advantage of the great opportunity offered by a now obsolete allocation that needs intensive maintenance and that in some cases can be rethought more coherently with the needs of an environment in severe crisis.

Conclusions

The traced path allows us to summarise some substantial issues and formulate some conclusive considerations.

It is clear how the advent of the pandemic has led to the emergence of a new landscape. This phenomenon is an unexpected event, with an imperceptible power, that is demonstrating itself capable of destabilising the remains of an already fragile cultural, social, and economic framework. It is a process happening in a context characterised by an evident weakness, not only in the low resilience of the forms of the city and the public space but also and in a lacking political interest for the environment, considered as a complex, fragile and already ruined ecosystem.

It is paradoxical and destabilising that Covid-19 pandemic appeared almost at the climax of an on-going ecological-environmental crisis, whose effects are now visible, despite not fully recognised by politics and society. There is, in fact, a tendency to deny the existence of the problem and to consider the environment as something separate from life in general, continuing to preserve the arrogant right for unsustainable social and collective practices associated with a lifestyle that is the most natural fruit of capitalism and consumerism.

For this reason, the gravity of the situation we are experiencing every day must not be exhausted in the illusion that everything will go back to the way it was before because it is precisely those conditions that represent the trigger mechanism for the form of fragility we are facing now.

This contrast opens up a design hope (Maldonado, 1970), which can be summed up in the awareness of being able to bend events in favour of real progress, capable of recognising the points around which to build a project of differences, prefiguring an environment, and a society capable of responding to the present and future crises. The path described in the paper interprets this necessity, concerning a plural theme such as the landscape, placing a discourse that must naturally be not only a political-social programme but also a common intent and a manifesto of interdisciplinary dialogue.

The invisible landscape generated by Covid-19 will thus find an antidote capable of awakening interest in the ruins of the contemporary world around which our existence unfolds.

References

Augé, M. (1992). *Non-Places: An Introduction to Anthropology of Supermodernity*. Le Seuil: Verso.

Banham, R. (text), Dallegret, F. (drawings), (1965). A Home is not a House. *Art in America* #2.

Bray, I., Gibson, A., White, J. (2020). Coronavirus disease 2019 mortality: a multivariate ecological analysis in relation to ethnicity, population density, obesity, deprivation and pollution. *Public Health*, 185. https://doi.org/10.1016/j.puhe.2020.06.056

Coccia, M. (2020). Factors determining the diffusion of COVID-19 and suggested strategy to prevent future accelerated viral infectivity similar to COVID. *Science of the Total Environment,* 729. https://doi.org/10.1016/j.scitotenv.2020.138474

D'Angelo, P. (2010). *Filosofia del paesaggio*. Macerata: Quodlibet.

Donadieu, P. (1998). *Campagnes urbaines*. Arles: Actes Sud/ENSP.

Frontera, A., Cianfanelli, L., Vlachos, K., Landoni, G., Cremonaa, G. (2020). Severe air pollution links to higher mortality in COVID-19 patients: The "double-hit" hypothesis. *Journal of Infection*, 81. https://doi.org/10.1016/j.jinf.2020.05.031

Gandy, M., Jasper, S. (eds.), (2020). *The Botanical City*. Berlin: Jovis.

Giurgola, R.; Mehta, J. (eds.), (1981). *Louis I. Kahn*. Bologna: Zanichelli.

Hershberger, S. (2020). The 1918 Flu Faded in Our Collective Memory: We Might 'Forget' the Coronavirus, Too. *Scientific American*. August 13, 2020. Accessed 10 Oct 2020. https://www.scientificamerican.com/article/the-1918-flu-faded-in-our-collective-memory-we-might-forget-the-coronavirus-too.

Indovina, F. (1990), La città diffusa. Venezia: DAEST.

Ingersoll, R. (2004). Sprawltown. Roma: Meltemi.

Jakob, M. (2008). *Le paysage*. Gollion: Infolio éditions.

Koolhaas, R., AMO, (2020). *Countryside, A Report*. New York: Guggenheim/Taschen.

Maldonado, T. (1970). *La Speranza progettuale. Ambiente e Società.* Torino: Einaudi.

Latouche, S. (2007). *La scommessa della decrescita*. Milano: Feltrinelli.

Lingiardi, V. (2017). *Mindscapes. Psiche nel paesaggio*. Milano: Cortina.

Oldani, A. (2020). *Acque e paesaggi d'invenzione. Descrizione, meraviglia e nuova interpretazione di infrastrutture e architetture dell'acqua.* Melfi: Libria.

Pavia, R. (2019). *Tra suolo e clima. La terra come infrastruttura ambientale*. Roma: Donzelli.

Rastandeh, A., Jarchow, M. (2020). Urbanization and biodiversity loss in the post-COVID-19 era: complex challenges and possible solutions. *Cities & Health*. https://doi.org/10.1080/23748834.2020.1788322

Register, R. (2003). L'asfalto per una città ecologica, in: Zardini, M. (a cura di:), *Asfalto: Il carattere della città*. Milano: Electa, 223-227.

Roger, A. (1997). *Court traité du paysage*. Paris: Gallimard.

Salama, A.M. (2020). Coronavirus questions that will not go away: interrogating urban and socio-spatial implications of COVID-19 measures. *Emerald Open Research*, 2. https://doi.org/10.35241/emeraldopenres.13561.1

Secchi, B., Viganò, P. (2011). *La ville poreuse*. Geneve: Metispresses.

Tagliagambe, S. (2018). *Il paesaggio che siamo e che viviamo*. Roma: Castelvecchi.

Tsing, A., Swanson, H., Gan, E., Bubandt, N. (eds), (2017). *Arts of Living on a Damaged Planet: Ghosts and Monsters of the*

Anthropocene. Minneapolis, Mn: University of Minnesota Press.

Turri, E. (2004). *La megalopoli padana*. Venezia: Marsilio.

Véron, J. (2008). *L'urbanizzazione del mondo*. Bologna: Il Mulino.

Waldheim, C. (2010). Notes Toward a History of Agrarian Urbanism, *Places Journal*. Accessed 10 Oct 2020. <https://placesjournal.org/article/history-of-agrarian-urbanism/>

Zoran, M.A., Savastru, R.S., Savastru, D. M., Tautan, M.N. (2020). Assessing the relationship between surface levels of PM2.5 and PM10 particulate matter impact on COVID-19 in Milan, Italy. *Science of the Total Environment*, 738. https://doi.org/10.1016/j.scitotenv.2020.139825