

# Urban fringes and their renewal for local livability and network reconnections

a cura di Cassandra Cozza

Politecnico di Milano, Dipartimento di Architettura e Studi Urbani  
(cassandra.cozza@polimi.it)

*Urban fringes are strategic resources for contemporary cities. They contain uncertain spatialities which could host significant open space enhancements through design actions aimed at climate adaptation and mitigation, to improve local livability and reconnect cross-scalar networks. They are places of multiple relations where different conditions – natural and agricultural green spaces and corridors, infrastructural networks with nodes and connections, decentralized historical and rural fabrics, slow mobility networks, marginal areas, abandoned spaces and leftovers – come together. This section collects papers and design experiments which investigate fringe renewal in relation to various spatial elements: architecture, abandoned spaces, open spaces, green areas and forestation.*  
Keywords: fringe renewal; contemporary public space; livability

## **La riqualificazione dei margini urbani per la vivibilità locale e la riconnessione delle reti**

*I margini urbani sono risorse strategiche per la città contemporanea perché contengono spazialità incerte che hanno il potenziale di ospitare azioni progettuali finalizzate all'adattamento e alla mitigazione del clima, al miglioramento della vivibilità locale e alla riconnessione delle reti interscalari. Sono luoghi caratterizzati da multiple relazioni nei quali si incontrano condizioni diverse: spazi verdi e corridoi naturali e agricoli, reti e nodi infrastrutturali, tessuti storici e rurali decentrati, reti di mobilità lenta, aree marginali, spazi abbandonati e aree di risulta. Questo servizio raccoglie saggi e sperimentazioni progettuali che indagano il tema della riqualificazione dei margini in relazione a diversi elementi spaziali: l'architettura, gli spazi abbandonati, gli spazi aperti, le aree verdi e la forestazione dei territori.*  
Parole chiave: riqualificazione dei margini; spazio pubblico contemporaneo; abitabilità

Received: 2022.10.24  
Accepted: 2023.06.09  
Doi: 10.3280/TR2022-103007OA

Urban fringes are strategic resources for contemporary cities due to the presence of many uncertain spaces of different scales, characterized by various spatialities which have the potential to host important open spaces enhancements – a physical-spatial, social, and environmental renewal – that acts both on local livability<sup>1</sup> and cross-scalar network reconnections. They are places of multiple relations where different situations occur together – like natural and agricultural green spaces and corridors, infrastructural networks with nodes and connections, decentralized historical and rural fabrics, slow mobility networks fundamental to re-connect surrounding broad natural and agricultural areas to the city, marginal areas, abandoned spaces and leftovers as well as discontinuous spaces, in-between spaces and large exceptional urban functions.

A fringe is a strip with an uneven, jagged shape along its borders which, sometimes, is defined by boundaries that act as physical limits, or by more porous edges that act as thresholds. And these thresholds are crucial for transformations because they can be seen as zones of transformation and passage<sup>2</sup> (Benjamin, 1999: 494).

Peri-urban areas host multiple dynamic relations and are characterized by incomplete parts and stratifications, potentially hosting a set of spatial qualities that have not yet been made manifested. Moreover, they are full of transformative and regenerative phenomena (Bonfantini, 2006; Bolocan Goldstein, Bonfantini, 2007). Urban fringes are complex places, historically located between the compact urban fabrics and the countryside. They were developed later to host several different functions, including infrastructure, logistic warehouses, industries, hospitals, and urban heterotopias. They are dynamic places where significant changes at the big scale can be achieved through the incremental renewal of public open spaces – in terms of both physical elements and performance – at the local scale.

Their dynamicity is primarily enclosed in some indefinite places – open spaces like abandoned, embedded, uncertain urban voids of poor quality and leftovers – located between the urban fabrics and the infrastructural network, and it has the potential to trigger significant transformations through design operations on open spaces. The gradual renewal of «urban facts with a small grain» (Bolocan Goldstein, Bonfantini, 2007: 12) could improve the livability of these places and activate an ecological transition on a larger scale (Cozza, 2022).

In these places, the coexistence of natural, rural, agricultural, ecological, urban and infrastructural elements allows to



1 Pre-existences, co-existences, and stratifications. A view of the area of the former Richard Ginori factory from the Ortica bridge with the towers that surround it in the background. Photo by the author.

experiment with numerous design operations, but this coexistence generates a great spatial complexity that requires adequate descriptions: careful synchronic and diachronic morphological readings; urban sections with details on the stratifications between infrastructures, open spaces and urban fabrics; qualitative and quantitative performative analysis and photographic surveys to illustrate their spatial quality and identity.

#### **A need for change**

We are facing an unprecedented climate crisis that is causing uninhabitability and uncertainty at different levels and scales. The livable future of both remote lands and wealthy cities is threatened not only by the effects of climate change but also by natural catastrophes, pandemics, economic crises, and conflicts. These cause social transformations with a clear impact on spaces and places at both territorial and urban levels showing the bridge between climate and democracy and technical and political issues. According to Holly Jean Buck, a livable climate future

requires meaningful environmental governance: «what's clear is that we need a social imagination to match our technological imagination» (Buck, 2019: 161).

Climate care leads us to rethink how we live, move, produce our goods, use technology, choose the materials we use and how we use them, and design architecture and public space. We need to develop 'critical design skills' to put in practice mitigation, adaptation and restoration actions, as well as to implement new technologies and enhance the natural process towards decarbonization (Buck, 2019).

Architecture can contribute to tackling decay, abandonment, pollution, urban poverty, inequality, and 'planetary exhaustion'<sup>3</sup> (Otero Verzier, Trujien, 2021: 20) by providing spatial responses to «a condition of radical uncertainty» given by «interconnected forms of [territorial] fragility» (Pasqui 2021: 3).

Suppose we want to achieve sustainable behavioral changes. In that case, we need to increase the ability to imagine and design the future: thinking outside the box, asking questions, and searching for answers by experimenting and testing design solutions.



2. The complex of infrastructural lines from the city towards the Segrate railyard between via Tucidide and via Camillo and Otto Cima. The section is made by a sequence of many types of infrastructures – sidewalk, road, 10 rails placed on several levels, sidewalk, road, sidewalk, cycle path – with the A51 Tangenziale est in the background. Photo by the author.

Suppose architecture is «The art of forming, through technical and constructive means, usable spaces for the purposes of human needs» (Treccani, n.d.). In that case, it is no longer possible to distinguish between «human needs» and those of the Planet. We need to strengthen the «fruitful dialogue between man and nature» (Prigogine, Stengers 1984: xxvii–xxviii), trying to «overcome an infinite entropy barrier» (*ibi*: xxix).<sup>4</sup> Urban landscapes are complex, predominantly man-made environments where human actions should strengthen the relations between nature and architecture to tackle climate changes and biodiversity loss, crucial issues of the Anthropocene.

#### **Thematic approaches and design experimentations**

This service collects different essays that offer specific points of view on thematic approaches linked to the central theme of the fringes' renewal as an opportunity for the ecological transition together with design experimentations on a representative case study which investigates the topic on other spatial elements

and scales: sustainable architecture, abandonment, open spaces of urban fringes and peri-urban areas, and forestation of territories.

Emilia Corradi, Valentina Dessì and Cassandra Cozza investigate and illustrate the potential of the margins to improve the quality of the whole city by analyzing the topic of fringes' renewal from different perspectives: Multilayered UE taxonometry and sustainable regeneration, Urban quality and environmental resilience, and Contemporary public space features, performance and multiscale relations.

Corradi in «Taxonomies. Architectures, scales and themes for a peri-urban sustainable regeneration» analyzes themes and spaces of the architecture for the regeneration of peri-urban areas as places to experiment with a multilayer taxonomy based on the programs to combat the effects of climate change 'Green Deal' and 'New European Bauhaus'.

Dessì in «Urban quality and environmental resilience at the edge» reflects on the concept of the margin as a limit, a dynamic threshold that changes according to the 'health' of ecosystems

affirming that this physical limit is a place of transition between two conditions, often separated by infrastructural barriers, where hybrid and uncertain conditions represent an opportunity. Cozza illustrates below in the paragraph «Milan Eastern fringe renewal» and in the text «Fringe renewal. Enhancing urban and peri-urban fragile areas», the features of the Eastern fringe of Milan and the topic of urban fringes' renewal where open space incremental renewal at the local scale produces significant changes at the big scale.

Doctoral design-driven research on the Milan Eastern fringe completes that contribution, illustrating different possible topics and approaches for its regeneration – Streetscape and livability, Urban relations and reconstructions, Urban climate and bio-climate regeneration, Depollution and reclamation – tested on four different areas of the selected case study.

Two broader reflections complete this section by questioning the crucial contemporary topics – sometimes used as mere buzzwords in the architectural discourse – of sustainability and forestation and going beyond existing ideological convictions and inspiring design approaches.

In the essay «Experiments and utopias of a sustainable architecture», Alessandro Rocca investigates the concept of sustainability, its application in the technical and cultural field of architectural design practices and experimentations and unveils its values and contradictions.

Sara Impera and Rosa De Marco in «Reading as designing the forests: notes for a sustainable reconfiguration of the territories» reflect on the complex topic of plantation and forestation for living environments that require a long time and deep ecosystemic knowledge to be integrated with life in its different forms – vegetal, mineral, animal, and human.

The shift between praxis and alternative practices – repetition *versus* experimentation – is where we can find possible evolutions of the discipline, researching for specific knowledge and sustainable design solutions that go beyond the inward-looking norms of the discipline. According to Knorr-Cetina, creative and constructive practices can have affective and relational links and accommodate dissociations (Knorr-Cetina, 2001). As said before, if we want to achieve a paradigmatic shift towards an ecological transition and overcome the Anthropocene, we need to imagine future design solutions based on deeply sustainable principles and search for alternative ways of practice with a holistic approach.

### **Milan Eastern fringe renewal**

The Eastern fringe of Milan is both a periphery and an urban fringe; it has been chosen to test design methodologies based on different interpretative frameworks described in the following essays that consider the ecological transition an urgent need. From the scale of the architecture to the wider one of urban open spaces and peri-urban and suburban forests, the authors attempt to reimagine existing places and stimulate a paradigmatic shift. Design plays an essential role in synthesizing the complexity of the existing condition with future visions and putting together various spatial, technical, and social disciplines. The proposed experimentations test visions and suggest design toolkits to claim specific spaces for this ecological transition in a complex, stratified, dense city where new interpretations

and needs confer other meanings to existing elements. They check the possibility of coexistence for new spatialities within the existing city with its identity and complexity.

Peri-urban areas and urban fringes' renewal acts both at the local and city level and has the potential to create community spaces and reconnect the spaces inside and outside the city through slow mobility networks and their connection with public transport and to enhance local walkability, and livability.

In this way, they will overcome the «general definition of periphery [...] [referred] to the lower attractiveness of a place» where «the distance from the city centre persists as a relevant factor of [their] representation [...]». In a word, to re-shape peripheries in Milan (nowadays and in the future) we need to extend our perspectives beyond the administrative borders and take into account the growing gaps in terms of urban qualities and access to services and opportunities beyond the city limits» (Bricocoli, 2021: 13-14).

Moreover, peripheries play a central role in the vision of the Milan 2030 Plan, which «places among its strategies that of 'regenerating the city' by 'placing the peripheries at the centre'. An approach that focuses on punctual urban and environmental regeneration interventions, mainly in marginal areas» (Valente, 2021: 8) and aspires to turn 'peripheries' into 'neighborhoods' with their own name, identity and specificities. In this context, design should be meant as an interdisciplinary tool aimed at stimulating urban regeneration where actions of requalification of physical spaces and buildings meet the needs of the people, propose various uses, create dynamism, strengthen local identity, broaden urban relations and reconnect open spaces and mobility networks.

It's crucial to develop methodologies to read and describe common characters and morphological continuities as well as to recognize the peculiarities of the various neighborhoods and the local identities made of current traces and preexistences, decentralized historical and rural fabrics, and abandoned or repurposed industrial heritage. To do it properly, we must rewrite «structural signifiers» (Orsini, 2021) of places' identity.<sup>5</sup> Indeed, fringes' functional and typological mix and random territorial organization «determine the loss and degradation of the identity values of the landscape», but in these edges, «we can identify in varying degrees – albeit disjointed, contradictory and often trivialised – evidence and systems of signs, also relevant from an environmental and cultural point of view, of a previous structure of the territory. These elements, if properly exploited, can constitute the potential key values for constructing a new relationship with the existing city and with open spaces that give an identity to places, as well as to improve the overall urban quality»<sup>6</sup> (Città Metropolitana di Milano, 2021).

The Eastern fringe of Milan is a peri-urban area where a significant infrastructure meets a sort of green belt constituted by the sequence of urban parks located along the Lambro river – 'Parco del Lambro', 'Parco della Lambretta', 'Parco Forlanini', 'Parco Monluè', 'Parco Elio Vittorini', 'Parco Trapezio Santa Giulia', 'Parco Gino Cassinis', 'Parco Porto di Mare', 'Parco della Vettabbia' e 'Parco Agricolo Sud' – and therefore has peculiar morphological characteristics. This strip is limited on the West side by the railway belt that connects the main



3. A view of the walkway on the water pool located under the A51 motorway passing across the Lambretta park – former Water park – located in the area of the former Innocenti-Maserati industrial site in the Rubattino district and designed by Land. Photo by the author.

train stations and railyard of the city – an embankment that clearly separates it from the compact historical urban fabrics – and on the East side by the overlapping of the A51 highway ‘Autostrada Tangenziale Est’ and the Lambro river.

The Western border of this strip is more robust and less porous than the Eastern one. Still, both are characterized by the infrastructural stratification of these three elements that have an essential physical and environmental presence and a significant impact on both the porosity and the accessibility of the different neighborhoods, causing some conditions of marginality and various fragilities. Moreover, the presence of other infrastructures – the underground ‘Passante Ferroviario’, important radial roads exiting from the city center, an eastbound branch of the railway – and the proximity of others – Linate airport, Segrate railyard, various underground stations, Rogoredo train station and highway junctions – makes its morphology even more complex but with good accessibility on average.

Stratified elements like embankments, flyovers, and tranches create intercluded areas, leftovers, and poor-quality spaces along infrastructures; fragile unbuilt areas that, together with abandoned and underused areas, can host adaptive public

spaces and contribute to creating a network. Some of these spaces already host informal vegetable gardens, shared gardens, little parks, dog areas, playgrounds and sports facilities but an orderly design and an identity are often missing.

It is essential to strengthen the multiple spatial relations, re-connect the different parts, and create a network of slow mobility paths in order to locate here the doors of the big urban parks.

This fringe contains multiple heterogeneous fabrics and spatialities with complex identities and different urban quality and livability; significant transformations have already taken place in former industrial areas which have been developed in line with different design approaches, from the adaptive reuse to the demolition and brand-new construction; for example, in the following areas: rcs Crescenzago, ex Faema Lambrate, PRU Rubattino, ex Tre Marie-Sammontana, ex De Nora, ex Ginori, Eastend Studios, Mecenate79.

The Northern edge of this vast and long strip is the radial street made by viale Monza and viale Italia, the southern one is that of corso Lodi, both exiting from the circle road ‘circonvallazione esterna.’



Four contiguous neighborhoods of this strip were selected as case studies for a doctoral design-driven course (a.y. 2020-21, AUID phd programme, DASTU-POLIMI, professors E. Corradi, C. Cozza and V. Dessì) aimed at testing innovative design solutions on contemporary public spaces for the ecological transition. In each of these four places, it is possible to identify numerous fragile areas to be renewed and enhanced by strengthening the existing spatial relationships, expanding and reconnecting the networks of paths, and open spaces, improving the livability and health of the places and, at the same time, their ecological sustainability and biodiversity. Each case study is bounded – also from North to South – by various infrastructural elements and has different fragilities and potentials that were used to select specific design approaches to gain an urban regeneration based mostly on open space renewal and enhancement. After a phase of studying and surveying, different topics and themes have been associated with each area based on its specificities.

The case study of Rubattino-Ortica has already been consistently modified and has many developments going on. The choice to work on the topic of streetscape and livability was motivated by the will to enhance the quality of community spaces, strengthen the walkability and, at the same time, improve the quality and the performance of the existing open spaces and streets.

Significant infrastructural elements enclose the case study of Forlanini. Still, it is also the gateway to the big peri-urban park with its network of green and agricultural spaces and sports facilities. The main topic aimed to improve urban relations and reconnect the different parts to make it more porous and create continuity from the inner to the outer parts of the city on a broader scale.

The case study of Forlanini-Quartiere Taliedo hosts both residential and industrial fabrics with different heterogeneous spatialities and typologies. The design experimentation works on the urban climate and bio-climate regeneration proposing design actions aimed, at the same time, at re-using and repurposing the abandoned buildings of the industrial core and the neglected open spaces.

The case study of Corvetto-Rogoredo-Santa Giulia is a very dynamic area hosting many developments and well-connected to the metro and high-speed train lines but still highly fragmented and lacking identity. The experimentation aims at taking care of fragile areas through actions of depollution and reclamation to tackle soil, water, air and noise pollution through architecture and urban design.

All the design explorations described in the next pages of this section are based on surveys and datasets; they propose design strategies through specific toolkits to frame current needs and community spaces and react to climate change. On one side, the design aims to reinvent and reclaim existing spaces, and on the other, to search for innovative and creative infrastructure reuse. In fact, the design of contemporary public open spaces no longer corresponds to the defined typologies. It poses spatial and technological challenges for creating healthy and livable open spaces with environmental and social resilience, as well as strengthening existing urban spatial relationships and mending slow mobility networks in morphologically very complex places. Heterogeneity and contradictions are peculiar features of the Eastern fringe of Milan and it's important to recognize this richness and its different potential for both urban and landscape design in order to avoid the «doggedness to the homologation of landscapes» (Metta, 2022:93)<sup>7</sup> and freely explore various design solutions.



4a-b. The imposing presence of the infrastructure – a permeable threshold between the building fabrics and the public park – mirrored in the water. Photo by the author.

5. Piazza della Lambretta is a bridge over the Lambro river that connects the Lambretta park to piazza di Vigili del fuoco – designed by Luigi Caccia Dominioni – through the pedestrian walkway leading to the new open courtyard buildings. Photo by the author.

## Notes

1. Livability here refers to the Italian word 'abitabilità': «qualcosa di più e di diverso rispetto ad altri termini ad [...] esso associati, come qualità urbana, qualità della vita, sostenibilità. Con il termine abitabilità alludiamo a una proprietà complessa e multidimensionale, qualitativa e prestazionale di un contesto territoriale/ something more and different than other terms [...] associated with it, such as urban quality, quality of life, sustainability. With the term livability, we allude to a complex and multidimensional, qualitative and performative property of a territorial context» (Provincia di Milano, *La città di città. Un progetto strategico per la regione urbana milanese*, DIAP – Politecnico di Milano, 2006: 41; quoted in Bonfantini, 2007: 158). The concept of livability is broader and more holistic than that of urban quality; it puts the human scale of urban dwellers at the center of the discourse, and it brings together urban environmental qualities and cultural features.

2. «The threshold must be carefully distinguished from the boundary. A Schwelle < threshold > is a zone. Transformation, passage, wave action are in the word schwellen, swell, and etymology ought not to overlook these senses. On the other hand, it is necessary to keep in mind the immediate tectonic and ceremonial context which has brought the word to its current meaning» (Benjamin, 1999: 494).

3. «Exhausted. Bodies feel exhausted, from the scales of the individual and social body, to that of the planet» (Otero Verzier and Trujien, 2021: 20).

4. «The evolutionary paradigm, including the concept of entropy, has exerted a considerable fascination that goes far beyond science proper. We hope that our unification of dynamics and thermodynamics will bring out clearly the radical novelty of the entropy concept in respect to the mechanistic world view. Time and reality are closely related. For humans, reality is embedded in the flow of time. As we shall see, the irreversibility of time is itself closely connected to entropy. To make time flow backward we would have to overcome an infinite entropy barrier» (Prigogine and Stengers 1984, xxix).

5. «Regeneration stands out as an invitation to rewrite the city's meanings using a minimal residual power in being able to read and recognize the identity of places. While transformation produces the ex-novo rewriting of

the structural signifiers of a place, regeneration focuses on the reinterpretation and therefore on the rewriting of the meanings that are traditionally associated with that place» (Orsini, 2021: 28).

6. Translated by the author. «Tali ambiti [di frangia urbana] sono caratterizzati da una frammistione funzionale e tipologica e da un'organizzazione territoriale casuale che determina la perdita e il degrado dei valori identitari del paesaggio. Essi costituiscono una risorsa strategica per la riqualificazione del paesaggio urbano e per uno sviluppo durevole della stessa città. La precarietà e la perdita dell'attività agricola in tali ambiti si ripercuote non solo sul settore agricolo in quanto tale, ma anche sulla salvaguardia delle risorse naturali, sulla protezione della qualità della vita degli abitanti delle città e sulla gestione equilibrata del territorio. Gli ambiti di frangia urbana possono essere identificati orientativamente per il contesto costruito dei contorni (trama delle infrastrutture che determinano un elevato grado di frammentazione e limite dell'edificato), per la prossimità al centro della conurbazione e per la presenza di spazi rurali contermini fortemente frammentati ed erosi dalla crescita dell'urbanizzato.

Nel tessuto di frangia, seppure disarticolato, contraddittorio e spesso banalizzato, si possono rintracciare in misura variabile testimonianze e sistemi di segni, anche rilevanti sotto il profilo ambientale e culturale, di una precedente strutturazione del territorio. Tali elementi, se opportunamente valorizzati, possono costituire i potenziali valori cardine per la costruzione di un nuovo rapporto con la città esistente e con gli spazi aperti che attribuisca identità ai luoghi e persegua il raggiungimento di un più elevato grado di qualità urbana complessiva» (Città Metropolitana di Milano, 2021). For further deepening, see also: Quaderno n. 19, *Il paesaggio delle frange urbane*, Città Metropolitana di Milano (Gibelli, 2003).

7. Translated by the author.

## References

Benjamin W., 1999, *The Arcades Project*. (R. Tiedemann, ed., H. Eiland & K. McLaughlin, trans.). Cambridge, MA: Belknap Press of Harvard University Press.

- Bolocan Goldstein M., Bonfantini B. (eds.), 2007, *Milano incompiuta. Interpretazioni urbanistiche del mutamento*. Milano: FrancoAngeli.
- Bonfantini B., 2006, «Esplorare per itinerari». *Milano oltre Milano. Racconti della città che cambia 1990-2005* del Consorzio METIS del Politecnico di Milano, Numero unico di giornale: 18-19. Ginevra-Milano: Skira.
- Bonfantini B., 2007, «Senza immagine guida. Dalla visione di sintesi alle figure progettuali». In: Bolocan Goldstein M., Bonfantini B. (eds.), *Milano incompiuta. Interpretazioni urbanistiche del mutamento*. Milano: FrancoAngeli, 153-160.
- Bricocoli M., 2021, «References and Perspectives in Re-shaping Peripheries: Italo Calvino's Olinda versus the '15 Minutes City'». In: Orsini F., Laura P. (eds.), *Milano. The Future of Peripheries. Re-shaping the Metropolitan City*. Milano-Torino: Pearson Italia, 12-15.
- Buck H.J., 2019, *After Geoengineering: Climate Tragedy, Repair, and Restoration*. New York: Verso.
- Città Metropolitana di Milano, 2021, «Frange urbane». [www.cittametropolitana.mi.it/pianificazione\\_territoriale/paesaggio/Studi-e-approfondimenti/frange-urbane.html](http://www.cittametropolitana.mi.it/pianificazione_territoriale/paesaggio/Studi-e-approfondimenti/frange-urbane.html) (access: 2022.08.10).
- Cozza C., 2022, «Milan and its ecological transition design emerging paradigms». In: Berlingieri F., Cavallo R., Corradi E., Boer H. de (eds.), *Design Actions for Shifting Conditions*. Delft: ru Delft Open Books, 146-151.
- Gibelli M.G., 2003, ed., *Quaderno n. 19 - Il paesaggio delle frange urbane*, Città Metropolitana di Milano. [www.cittametropolitana.mi.it/pianificazione\\_territoriale/Studi\\_piani\\_area/quaderni\\_piano/quaderno\\_piano\\_n19.html](http://www.cittametropolitana.mi.it/pianificazione_territoriale/Studi_piani_area/quaderni_piano/quaderno_piano_n19.html) (access: 2023.02.28).
- Knorr-Cetina K., 2001, «Objectual practice». In: Schatzki T.R., Knorr-Cetina K., von Savigny E. (eds.), *The Practice Turn in Contemporary Theory*. London-New York, 184-197.
- Metta A., 2022, *Il paesaggio è un mostro. Città selvatiche e nature ibride*. Roma: Derive Approdi srl.
- Orsini F., 2021, «The Metamorphosis of the Peripheries: Architecture and Public Space as a Paradigm». In: Orsini F., Pogliani L. (eds.), *Milano. The Future of Peripheries. Re-shaping the Metropolitan City*. Milano-Torino: Pearson Italia, 26-35.
- Otero Verzier M., Truijen K., 2021, «BURN-OUT. On Planetary Exhaustion and Alternative Public Infrastructures». *Ardeth*, no. #08: 18-29. Doi: 10.17454/ARDETH08.02.
- Pasqui G., 2021, «Territori Fragili. Un progetto transdisciplinare per il paese». *TF Giornale*, no. 1: 3.
- Pogliani L., 2021, «Milano Peripheries and the Public Space Design». In: Orsini F., Pogliani L. (eds.), *Milano. The Future of Peripheries. Re-shaping the Metropolitan City*. Milano-Torino: Pearson Italia, 36-43.
- Prigogine I., Stengers I., 1984, *Order Out of Chaos: Man's New Dialogue with Nature*. New York: Bantam Books.
- Treccani, n.d., 'Architettura'. [www.treccani.it/vocabolario/architettura/](http://www.treccani.it/vocabolario/architettura/) (access: 2022.07.11).
- Valente I., 2021, «Re-shaping Peripheries. Student's Projects for a Better City». In: Orsini F., Pogliani L. (eds.), *Milano. The Future of Peripheries. Re-shaping the Metropolitan City*. Milano-Torino: Pearson Italia, 8-11.