

The Resilient Metamorphosis of Cities

POSITION PAPER

Carlo Gasparini

The multiplicity and breakdown of risks, their mutual interaction and amplification, as well as the multidimensionality and multi-scale nature of their natural and anthropogenic causes and effects on the city and the communities, are fertile contents of a growing cultural, social and technical awareness of an ever-increasing range of actors facing the precariousness and uncertainty of the future that is fuelled by those risks.

It seems increasingly clear to the “risk society,” as defined by Ulrich Beck, that the few risks that we can consider to be of exclusively natural origin, such as seismic and volcanic ones, intersect and overlap the many risks of an anthropic nature, i.e. produced by the ways in which cities have been built and their metabolism has been consolidated: from hydrogeological and hydraulic risks to those related to the pollution of the soil, water and air, to micro-climatic risks, by impoverishment of ecosystems and desertification. Some of these have consequences on a planetary scale, contributing to climate change - from global warming to extreme rainfall and atmospheric events in general, to rising sea levels - which return like a boomerang effect at the local scale, amplifying the structural criticalities of urban conditions. This circular local/global dynamic is combined with the risks associated with the increasingly intense processes of social exclusion in cities in this long-lasting crisis of urban economies and of intense migration in many parts of the planet.

Despite the marked asymmetries that can be detected in the growth of learning and capability to cope with risks, also due to these social imbalances, awareness is growing not only of what should not be done, but also of what should be done; developing strategies and tactics that are capable of stimulating and governing a resilient metamorphosis of the

city. It is a continuous management of adaptive, visionary and pragmatic regeneration, ecologically oriented and socially shared. Therefore, it is a long-lasting process of proactive and non-defensive adaptation to the various specific risk conditions, aimed at a widespread, incremental but profound change in the relationship between urban settlements, communities and new geographies, ecologies and economies, through systemic and timely tangible and intangible actions.

This way of looking at the environmental question within the “new urban question” that we have been discussing for over a decade, allows us to go beyond an exclusively regulatory and defensive concept of sustainability.

As for economic and traditional urban development models, appealing to regulatory and restraint principles and turning to arrangement rules seemed in the past to aim at regulating such models, perhaps at redesigning and using them most effectively, possibly resorting to presumed objective indicators, parameters and “carrying capacity” protocols, at a local or global scale. Under the aegis of their alleged scientific nature, such tools have often been used to support planning resolutions in public assessment procedures, turning in a vague and ambiguous relationship with the open field of planning interpretations and with the intentions expressed by the local communities, at times and places where decisions come to a head. In a sense, this approach to sustainability seemed to be the technically upgraded and equipped heir of that therapeutic dimension peculiar to the hygienist root of urban planning, in which neither a modern urban city nor its mechanisms of production were substantially challenged. It was meant instead to steer them through procedures, tools and standardized mechanical processes of investigation and intervention, in which the planning dimension was implicit and unquestionable and an original concept of city, different from the past, was substantially absent.

A similar well-founded mistrust - along with maybe overenthusiasm - has been reserved to those planning rhetorics that recommended radical urban alternatives and abandoned any idea of reformability of the existing city, willing to put into practice “elsewhere” a future of reconciliation between man and nature, occasionally attracted by neo-pastoral temptations aimed to dissolve the city into nature.

The nineteenth-century urban planning failed to adequately respond to such stimulations, without understanding or fully developing the innovative significance of a possible paradigm shift. In fact, the gravitational change that may have resulted from the irruption of the ecological dimension and its values – already present in embryo in the troubled phase of twentieth-century modernity – was sterilized and limited over time to little more than a quantity rebalancing procedure, surmountable with minimum standards of green. Rather than fertilizing its own controversial and plural roots, urbanism took the easier way out and turned itself into a manifesto of performance goals or, conversely, disappeared supported by the political fears for any material and social effect to the city’s living body and to its

communities, such as demolitions, urban thinning-outs and displacements. The city had to be beautiful, efficient and even equal, but not ambiguously “healthy” anymore, to use an obsolete term.

Therefore, for many decades urban planning has lost the opportunity to change the terms of the discourse. It has lost the chance to imagine a city that is “healthy” due to its ability to shape its own regeneration through a new pervasive urban metabolism, and thus even generating non-rhetoric beauty, practicable efficiency and more social equality. In brief, it has lost the chance to guarantee more habitability, to offer an alternative economy to traditional industrial models and to reduce inequality.

The sudden irruption of the extension of risks, of climate change among those, has underlined the cultural, interpretative and proactive weakness of such roots. The worsening of the environmental conditions of the city and the changes in the disruptive dynamics of water, soil, energy and waste cycles have fully shown the gap of awareness and experience between the different urban and cultural areas in Europe and all over the world.

The wide-ranging international debate about the relationship between city, landscape and ecology that has arisen over the last decade – largely influenced by the stimulations of Landscape Urbanism and of Ecological Urbanism – picks up the threads of a discussion that has repeatedly gone aground due to strong and settled alleged disciplinary statutes.

This increasing awareness allows to go beyond weak and acquiescent perspectives toward sustainability thanks to a resilient and proactive approach of the environmental dimension that goes beyond the need for further thematic maps or multi-criteria procedures. Such approach implies a radical turn-around of the traditional categories of interpretation, design and behavior that are peculiar to urban planning.

In other words, it enhances the promotion of program and design contents that aim to set up, both in terms of negotiation and participation, places with value-related density and to rediscover the geo-strategic dimension of the city, intended as an opportunity to create new forms of livability, urban quality, economy and inclusiveness.

At present, the power of this innovation process cannot be attributed just to specialist and elitist debate on climate changes and to the elaborated protocols that derive from it. We are faced with a deep stirring that originates also, and in particular, in a wide geography of practices that are producing significant effects on the city and on the creation of its spaces, with which local communities want to establish less ambiguous and temporary relationships.

This innovation power and these practices are grounded on an increasing awareness of the ecological dynamics linked to the substantial changes affecting primary resources (water, soil, air, energy) and responsible for the vulnerability of our territories. They encourage to repossess the living spaces of our cities, produce real changes in lifestyle and come to the top of the agendas of national and local governments. For these reasons they

allow to imagine, with well-founded optimism, even positive effects on our knowledge and its paradigms, on ways and forms of planning in processes of resilient urban regeneration and on the strengthening of a proactive and adaptive attitude in urban planning.

This stirring gives priority to scarce and jeopardized natural resources (water and soil) and to those that are out of control (energy and waste), which are considered as public goods not in a rhetorical and ideological way but in a programmatic and planning sense. More and more projects, policies, funds, recycling and reclamation activities and non-traditional practices, even for temporary use due to lack of public funding, have focused on such resources. The novelty lies in the increasing awareness of the need to combine the local and fragmented dimension of the tactics with the centrality of adaptive and resilient urban strategies.

In a cultural climate that still feels in debt to the golden age of morphological studies on urban fabrics developed from the 1960s, the aim to imagine the existing city by rethinking its urban metabolism suggests today a new era of urban studies largely unexplored. An era when the focus moves from the interpretation of aggregation and conformation devices of urban fabrics towards the potential of environmental regeneration that lies in the differentiated patterns - such as water and green networks, energetic and road infrastructures, soils and areas of waste and refuse - in order to include the recycling processes of these crucial resources within the overall "metabolism of cities" that Abel Wolman introduced in the debate of the '60s.

This tendency aims to imagine new life cycles for those buildings and open spaces that over time have reshaped the urban palimpsest and combines this goal with those projects that rediscover the city's geostrategic value, after a long period of expansion that is currently decreasing in large parts of the world. This new direction is perhaps one of the most promising fields of work as for designing effective and appropriate strategies to adapt to climate changes, both in historical layered territories and in areas still undergoing through urbanization.

Nevertheless, this is not just an alteration in space grammar or a more updated survey of the physical dimension of the city, which is meant to be more and more resilient. This is also a desirable structural rethinking of urban economies that, beside wider internationalization processes, move towards innovative production methods in manufacturing industries and services related to green economy and to urban creativity and in production chains of growing urban and peri-urban agriculture industry.

At the same time, attention shifts inexorably towards new socio-economic actors and unusual forms of interaction between them and their recent centrality – not just proximity anymore – in the creation of public spaces. In this regard, beside the intensification of marginalization and exclusion processes, it is also worth mentioning the activation of inclusive processes

such as social and symbolic appropriation of spaces related to the public goods and to environmental issues. Therefore, public recycling operational prospects themselves change by means of pactional and solidaristic relations with and among private citizens. Even authorial and self-referential architecture undergoes a drastic weakening in its value and role, beyond the impact of the financial crisis, both in theory and practice, in favour of expressive forms, dimensions and operations that are less invasive, low cost and more related to the geographical rediscovery of the city.

The spread of projects and practices in the environmental field, along with the search for new meaningful configurations for the archipelago of cities that has emerged with urban explosion, gives new significance to the need of investigating its relational density. In other words, the latest tendency aims to embed new public spaces within multi-scalar relational systems, capable of gathering the latent or fragmentary identities of existing or future cities - still strong or perhaps weakened by the spreading and metamorphosis processes - and guide them towards more structured and recognizable configurations, making the dialectic among scales even more meaningful. In the most recent urban experience, a vision and a planning practice emerge, more and more relevant and attached to both tangible and intangible assets typical of the contemporary city. In this context, the dynamic of networks and of their applications become more complex and asymmetric and the interaction between flows and places tends to produce much more well-structured and fertile results than expected, according to some technological prophecies and concerns of deterministic nature.

Urban regeneration by means of green and blue infrastructures takes shape through several specific actions in the environmental geography of the city, in its meanders, in its abandoned areas, even in the complex fragmentation of its properties, fabrics and boundaries. It searches for synergies with infrastructural, energetic, digital and slow mobility networks, in order to thicken over time a connective system of multifunctional open spaces. These landscape networks are meant to turn themselves more and more into the new frame of resilient cities, of their public services and of the ecological, social and meaningful values of the communities that participate in their construction.

Carlo Gasparini, architect and urbanist, is a Full Professor of Urbanism at the University of Naples. He is the author of several urban, regional and landscape plans and projects, which include the masterplan for the eastern area of Naples, the Vesuvius National Park Plan, the city plan and the strategic projects of Rome. He has published numerous researches, monographies and essays on the contemporary city and the themes of landscape and ecological regeneration. He is a member of various scientific and advisory boards of international magazines and journals, including *The Plan Journal*.
E-mail: gasparini.carlo@gmail.com