Cultural Heritage Adaptive Reuse: the role of connective civic infrastructures

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Sustainable development challenges in a "new urban world"

The world population is – despite structural ageing processes in many developed countries - rapidly increasing in size. Rapid urbanization processes are linked to increasing migration flows, which threaten the identities of historic cities worldwide and the conservation of historic rural landscapes in abandonment. Cities are becoming centres of agglomeration dis-economies where soil consumption, pollution, social inequalities and unemployment are increasing. On the other side, cities are the places where the most urgent challenges of the "new urban world" can be addressed and where 'smart citizens' experiment innovative solutions to enhance quality of life for all (Fusco Girard, Baycan and Nijkamp, 2012; Schaffers, Ratti and Komninos, 2012; Esposito De Vita and Oppido, 2016; Haas and Westlund, 2017).

In this critical scenario, which city future is going to be built? How can we reshape this future in a more desirable vision? Which choices to orient/manage development towards an improvement of the city quality of life, of the sense of wellbeing?

This urban transition will pose enormous problems to the capacity of the cities to face ancient and new needs: to guarantee the economic growth, to reduce the increasing social poverty and the ecological crisis. These are the most important challenges of our time.

Cities have a great potential to reduce social divides and ecological crisis, and to enhance the economic development, if they become able in particular to improve existing approaches to planning, managing, governing the city systems, adopting new strategies, approaches, tools. New concepts of "smart as circular city" are emerging (Ravetz, Fusco Girard and Bornstein, 2012; Nobre and Tavares, 2017).

The future of cities/metropolitan cities is in their creative choices and in their creative

capacity to identify cooperative win-winwin solutions, characterized by synergies and symbioses, able to increase the metropolitan productivity through the scale economies, the agglomeration economies, the "synergy economies" (Fusco Girard, Baycan and Nijkamp, 2012).

The New Urban Agenda and the "humanization" of cities

In October 2016 the New Urban Agenda (NUA) was adopted in the UN Habitat General Assembly in Quito, Ecuador, as a call for actions to "fight against" poverty in all dimensions: in social, ecological, economic dimension, in coherence with the Agenda 2030 strategic goals and targets.

The NUA promotes a paradigm shift based on the "Science of cities" (United Nations, 2017). This paradigm shift addresses the way we plan, govern, manage cities towards a sustainable development (§15), strengthening (inter alia) urban governance and long term integrated (urban/territorial) planning tools. Many challenges are evoked for implementing the sustainable/desirable city. In parti-

- The challenge of health/well-being
- The image of the "smart city" is evoked in § 66.
- The notion of "circular economy" is included in many paragraphs (§§ 71,73,74 and also 122, 132,137,152).
- The "climate change" and impacts and measures to face it are underlined many times (see § 79 etc.).
- The availability of effective governance tools
- The need of new evaluation processes is evoked in different paragraphs (§§ 92, 104, 110, 115, 138, 147, 158, 161).

All these require the production of new knowledge to be effectively implemented: the science is the heart of sustainability.

Key challenges for improving development city strategies can be identified:

- Urban quality of life, well-being, liveability (as the general goal of sustainabili-
- Climate change (as the most urgent challenge to be faced);
- Smart/intelligent city (as the city of new digital technologies);
- Circular economy/city (as the new model for development);

- Material and immaterial connectivity (social values/community for the development...);
- Big data management systems (as the city capacity to use in a structured way all the most of formal and informal data that city produces).

The final goal of this process is to "humanize" the city (see §26 of the NUA) towards a new model of "Human Sustainable Development", enhancing the "connective infrastructure" of cities: their natural, cultural and social capital linked in a synergic systemic approach to urban development.

The HUMAN SCALE of city development is the challenge of our times, in which the dehumanization is growing in our cities and territories. Planning can contribute to this human scale of local development.

Culture and cultural heritage as connective infrastructure

This Humanization process is linked to cul-

This is the real challenge of our time. It means in particular to become able to contribu-

- Regenerate the "connective infrastructure" of our city/society, going beyond the hyper-individualism and embracing interdependencies
- Regenerate community bonds, through regenerating the collective memory
- Helping subjects to move from I to US: to cooperate each other

The circular economy depends on the capacity to overcome the growing hyper-individualistic culture.

The Circular Economy is the co-evolutive economy, the economy of synergies, cooperation, collaboration, which is put in relationship with the circular city model and with cultural heritage, that have not been put in relationship before.

All the challenges of our time, from the implementation of the circular economy for sustainability, to the realization of the circular city, to new production and consumption models, to new rules/norms etc. are linked to this cultural challenge: to the capacity to produce and share not only a scientific/ technological innovationsbut also a CIVIC CULTURE, that is the base of the "civic responsibility" (see §156 of the NUA).

We need a real capacity to use the new pro-

duced knowledge in the good direction: this is THE CULTURAL CHALLENGE.

Certainly, many other new and specific challenges are incorporated in the UN Agenda 2030 for Sustainable Development (United Nations, 2015) and in the NUA, and in particular in the Sustainable Development Goal 11 (resilient, inclusive, sustainable, safe cities) and the related targets.

The notion of "resilient infrastructure" to "support the human well-being" is introduced in the SDG 9.

Civic connective infrastructures are here considered critical to face these emerging challenges: growing diseconomies of agglomeration, high density, lack of community sense (social capital), climate change impacts, threats to local identity (to cultural heritage/landscape), reduction of self-organization capacity of systems.

The Horizon 2020 CLIC project

The 2020 CLIC project (Circular models Leveraging Investment in Cultural heritage adaptive reuse) is focused on the relationship between the adaptive reuse of cultural heritage and the processes of local sustainable development. This project has been funded by the European Commission under the Horizon 2020 Framework for Research and Innovation, in coherence with the priority themes of the Urban Agenda for the EU (the circular economy) and the place-based planning (and thus on the people-based approach). A key place-based resource is the cultural heritage. In which way is it possible to create the above relationships?

"Through the elaboration of innovative business, financing and governance models able to put together, in a reciprocal and circular flow of benefit, the three main players:

- The private sector, both the entrepreneurs and the owners
- The public sector
- The local community

So, the CLIC project is focused on the interdependence of these three elements for the identification of:

- new business models
- new financing models
- new governance tools

for implementing the adaptive reuse of cultural heritage" (Fusco Girard, 2018).

In this perspective, cultural heritage is a key cultural connective infrastructure, the memory itself of the city system (European Commission, 2014, 2015; European Parliament, 2017). Through processes of Adaptive Reuse of Cultural Heritage, local communities can become active players of city regeneration. New creative uses for "old" buildings, sites and landscapes are able are to promote in the best way the "connective infrastructure" of our cities, taking into account the coherence of use values with the "intrinsic" value of cultural heritage (Fusco Girard, 1987; Fusco Girard and Gravagnuolo, 2017; Fusco Girard et al., 2018) within the circular city model.

Key elements for governance choices, financial and business decisions, and for the achievement of SDGs, are the integrated evaluation tools. New improved evaluation tools are required, able to incorporate all the multidimensional impacts: from socio-economic impacts, to environmental, to visual, to cultural, etc. impacts.

The objective of this CLIC session is to identify tools and experiences that contribute to the regeneration of the European "connective infrastructure" in economic, social and environmental dimension, also through the creation of "heritage communities" (Council of Europe, 2005) that directly and indirectly contribute to places attractiveness.

Note

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