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Ecological territory and ecocity as result of smart, sustainable, integrated planning policies

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Ecological territory and ecocity as result of smart, sustainable, integrated planning policies

The current crisis, can be a turning point - the meanings of the originary Greek word κρίσις - of the model based on the industrial paradigm (Kuhn, 1962) whose limits were declared in *The Limits of Growth* (1972). This paper suggests to replace the industrial model of “making the city” with the ecological approach that starts from the local conditions such as indications of plan/project/construction for the transformation of the anthropocosmos (Fig.1). That is to relate the λόγος, discourse, analyses, with the οἶκος, the environment (www.ekistics.org): finally the purpose of Smart City.

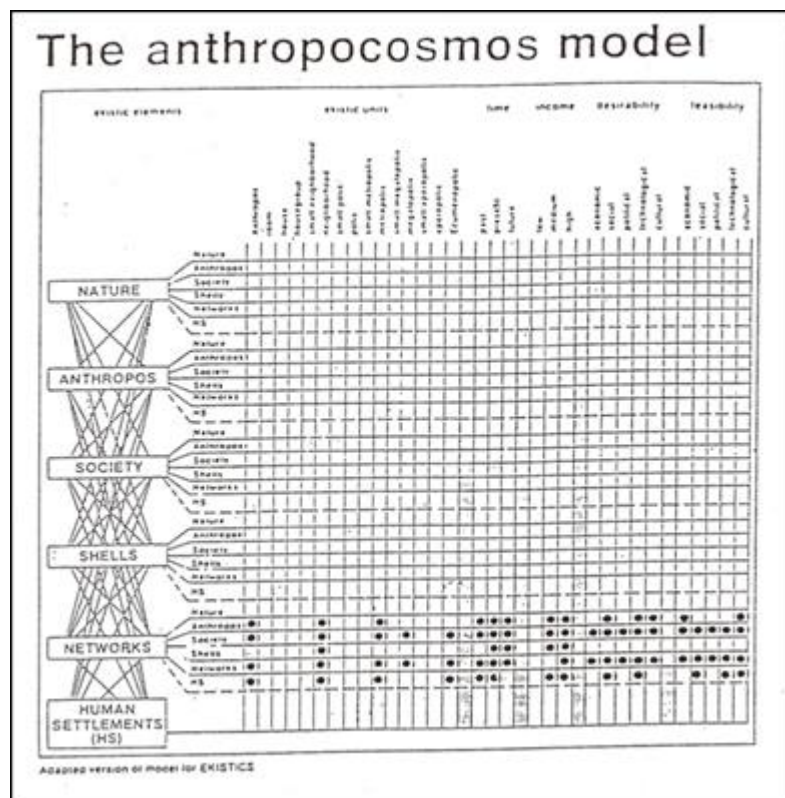


Fig.1 The Ekistics model

Town planning and design has to be based on an ecological approach (Appold, Kasarda, 1990). Because Ecology is οἶκος, oikos, home, environment, and λόγος, logos, speech, analysis of the relations through: Shell, Network/s, Behaviour. This approach allows to overcome the technologicistic philosophy in “making” the town that has dominated since the first industrial revolution. For having higher effectiveness and efficiency it is required a “technological culture” (Del Nord, 1991) able to overcome the technological approach in the use of innovation.

The Ecological town planning means, at vast scale build continuity among bio-territory, bio-urbanism, bio-building, bio-materials. Then set integrated new national and local strategies among urban, metropolitan and rural areas (The Leipzig Charter, 2007) for realizing horizontal linkages, spatial reticular patterns, synergies between local actors (Dematteis, 1985, 1986, 1990, 2005). As relevant case the relationships with the “minor” places of the inlands. They require daily presence for territorial safety: it is “upstream” preventive protection that gives “downstream” benefits. Moreover the management of human and natural resources goes toward the “placed based economy” proposed by Barca (2009). All that participates to the construction of “the sense” of the territory.

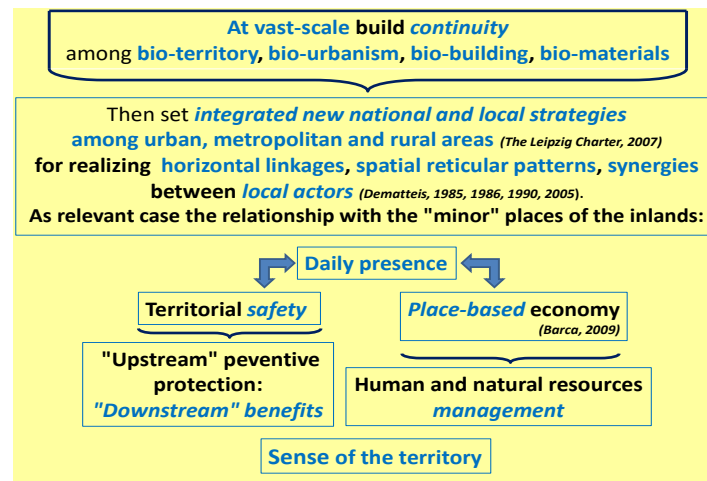


Fig. 2 The continuity in the “ecological planning approach”

It needed to develop scenarios and action led by the new ecological approach to space that connects social, economic and environmental issues - that is the objectives of Smart City - thanks to integrated policy strategies for the territory (Fig.3¹). At the local level, emphasizing the collective public spaces, to be redevelop or create in the more or less recent peripheral areas. That means revitalize roads and urban places such as theaters, cinemas, markets and re/design the pedestrian and cycle paths, the principal axes of the territorial and urban space² thus giving more substance to the city without barriers i.e. for all³.

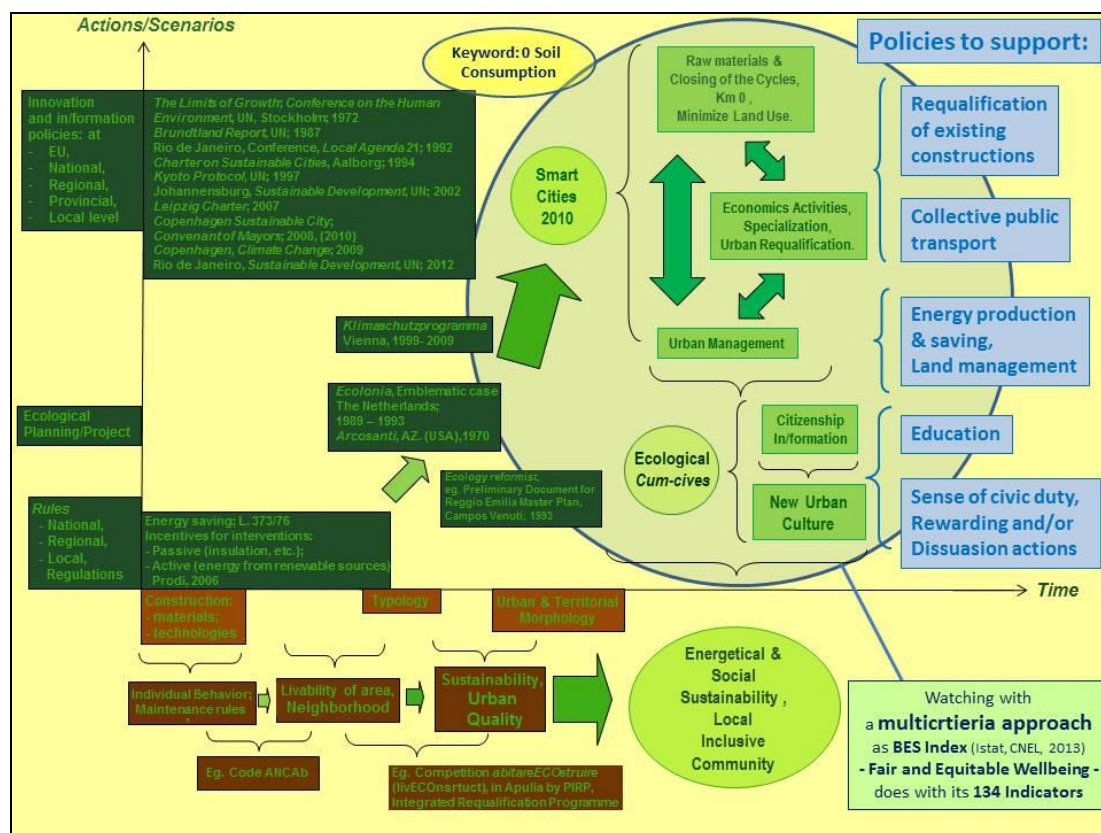


Fig.3 The formation of ecological culture of the territory and cities

¹¹ Evolution of schemas by Aragona 2015.

² Vienna's Klimaschutzprogramm 1999 - 2009 is a relevant example case (Vienna_Eco_Buy_final_edited_11-9-11).

³ Echoing the themes of the two Biennials of the Public Space and previously thought in *The Regulatory Plan of girls and boys* of the 90s (Aragona, 2003).

3. An exemplary case of “good practice”...but

Faenza (Ra) is a small/medium size town, 58.541 inhabitants, 215,76 km sq. ,in Italy: the country of the “100 steeples” like this one (Fig.4).

Town planning is considered as a *project process* based on: 1) “Elements” i.e. Territory, City, Neighbourhoods, Tissues, Details and 2) The “Verification” that means the concrete result, visible and measurable. The method of work, useful for all the stairs, consists in *Principles*, diversified for the countryside, the city, and the historical centre; *Performances* related to safety, sustainability, identity; *Assessments* that are connected to incentives, alternatives, design hypotheses.

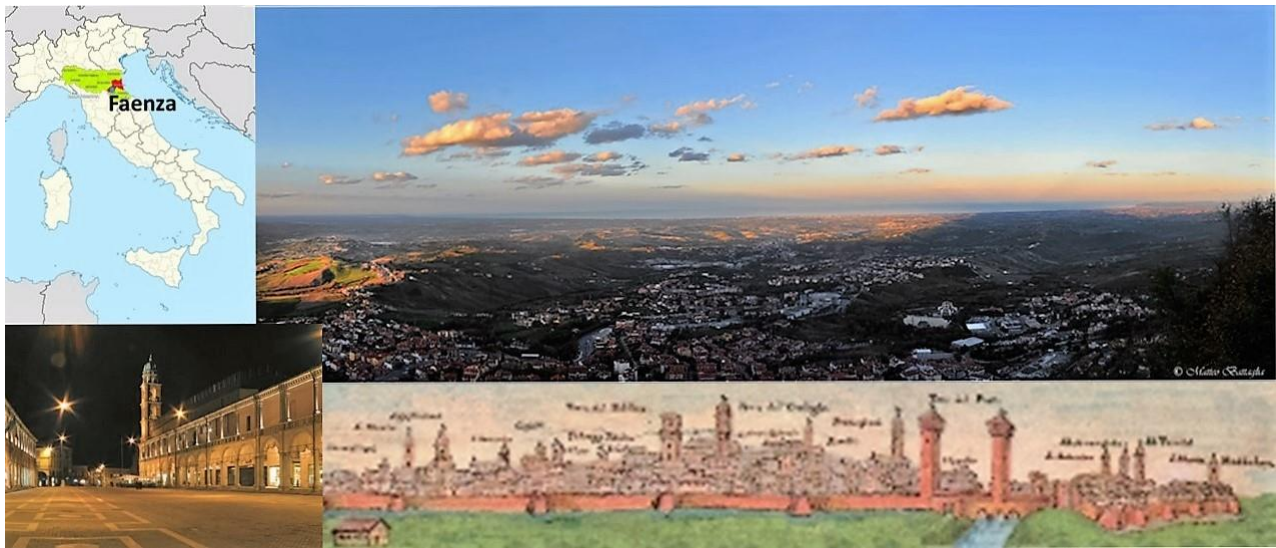


Fig. 4 Descriptive images of Faenza

The Department for the Territory of the Municipality of Faenza has elaborated the following 10 points for a) Sustainable urban planning; b) Sustainable neighbourhoods; c) Sustainable historical centre.

The 10 points for *a sustainable urban planning* are: 1) The urban center bounded in clearly identified boundaries; the net limit between town and country; 2) Freedom for the use destinations: de-zoning; 3) The alternative to zoning: the landscape value area; 4) Less value to traditional building parameters; 5) The urban planning incentives: t

he market of the quality; 6) The agreements with the private sector: the operational pacts; 7) The presumptive rules and not prescriptive: a new way to “interface”; 8) Specific projects designed for each area; 9) Regulatory simplification; 10) Continuous updates of the Plans: the monitoring (fig.5).



Fig. 5 How re-generate districts of social housing: with realism and participation; Faenza, Fornarina street

The 10 points for *a sustainable neighbourhood*: 1) The acoustic environment; 2) Seismic and urban safety; 3) Flood safety and the use of water; 4) Biobuilding and energy sustainability; 5) Free building typologies; the compactness and density; 6)-The characterization of public spaces and the social integration; 7) Energy conservation and the use of renewable sources; 8) The road system on a human scale and without barriers; the calm spaces; 9) A dynamic and multifunctional district; 10) The architectural quality and contemporary art; identity and recognisability (fig.6, 7).



Fig. 6 How do dense neighborhoods: using directives; Faenza, District “La Fornace”, San Martino street

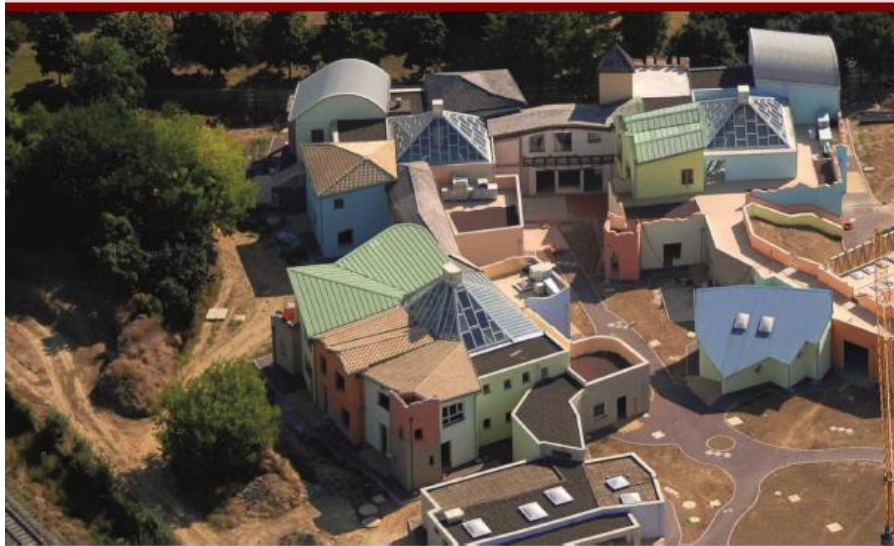


Fig.7 Public works and bio-architecture: acting with public example; Faenza, Don Milani school

The 10 points for *a sustainable historical center*: 1) Maintain the originary residence and increase the population of the historic center; 2) Not to decentralize public services and the general interest activities; 3) Favor the functional mix and provide tax incentives for activities with public attendance; 4) Increase sustainable mobility thanks to incentives for bicycles, the public transport, the “park and ride systems”; 5) Use the public real estate in its entirety, with divestment of the non-strategic one; 6) Pursue maximum formal simplification of interventions with subtraction operations as an alternative to the additions (visual cleanliness); 7) Bring back to the original material quality and the typological facades of the altered old town; 8) Reorder the abnormal volumes, especially in the roofs, to design restores aimed at the re-compacting according the history of the site; 9) Introduce a uniform and targeted signage (for cultural and historical reasons, and for services) by highlighting the excellence of the center; 10) Equip the main courses and the squares, with permanent and compatible facilities, to attract events (figg.8, 9, 10).



Fig.8 How to promote a new mobility model: public bicycle, stopping floor, electric bus; Faenza, GreenGo Bus



Fig.9 How to work in a museum: the City Hall: the function of art, architecture, urban planning



Fig.10 How to turn building public areas in urban parks: with planning strategies

This strategy that slackens some regulations of town planning and building can be effective, that is, be useful to the people, with the following conditions. First, a vision of the city as a common good. Secondly, the participation of the population to the Municipality's choices. Third the effective monitoring of the transformations. Otherwise the risk consists in leaving field to building speculations and to gentification processes.

In Italy two operational and effective instruments are already usable The River contracts and PAES, Plan of Action for Sustainable Energy. Both are based on information and participation in the proposition and construction of agreements between public and private entities. In fig.11 there is the framework of the existing “River Contracts” in Italy to 2015.



Fig.11 “River Contracts” in Italy to 2015

Some conclusive insights and next steps

The goal of Smart City is to build socially and environmentally Sustainable Communities. Faenza case suggests that urban policies can be effective and not only efficient: Efficiency must be a “tool” for effectiveness.

Next step is to assess the outcome of examples like Faenza with a multi-criteria approach to quality and quantity, thus going beyond the assessment, indispensable but only quantitative, as in the case of Ecolonia (Aragona, 2012), Netherlands, 1989-1993 (Fig.12).



Fig.12 Ecolonia, Netherlands (Aragona, 2012)

Useful tools for this purpose The BES, “Fair and Equitable Wellbeing”: a complex indicator for evaluate the life quality conditions of the inhabitants (ISTAT, Italian National Institute of Statistics) or The Charter of Quality proposed by AUDIs (Association for the Urban Disused Areas) for the urban regeneration.



134 diverse indicators

In 12 different areas:

- **Health**
- **Education**
- **Work and conciliation of life's time**
- **Economic well-being**
- **Social relations**
- **Politics and Institutions**
- **Safety**
- **Subjective well-being**
- **Landscape and Cultural heritage**
- **Environment**
- **Research and Innovation**
- **Quality of services**

Fig.12 BES, “Fair and Equitable Wellbeing”

A relevant note

In Italy there is the unresolved issue of considering the territory and the right to build as “a natural right” and not given by the community, i.e. the state or the municipality. The law n.10/77 which replaced the building license with the building permit were declared unconstitutional in 1980. So the private but also the public, it is much freer than other European Nations. Free to put cement on the territory: “cementification” of it /fig.13). Except that the municipality decides to undertake a battle to prevent this.



Fig.13 Student'house ruins, Reggio Calabria (Source: Aragona S., 2013)

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www.ekistics.org

Source of data and photographs of Faenza: D. Nanni, Director of the Planning Office, Faenza

Source of Faenza and landscape in fig.4 from left bottom to right: www.confartigianato.ra.it-, Matteo Botteghe, www.historiafaentina.it