

CITIES AND GARBAGE: AN *UN-SUSTAINABLE* RELATIONSHIP*

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Abstract

The paper focuses on the relationships between cities, metropolitan regions, and the growth of waste production. One of the aspects of the un-sustainable development of the cities in Italy is the delay in understanding that also the waste issue engraves on the environment and on the climate change.

In particular, this paper proposes a reflection on the landscape modifications in relation to the rubbish crisis in a number of Italian realities. The origin of such problem is the lack of integration between the spatial planning and the waste management planning: we assist to situations of crisis in which the landscape needs are put in the background.

If on the one hand the emergency conditions are used for setting aside the indications and the rules of planning, on the other hand the waste problem is absent in the planners' agenda; this situation imposes a reasoning about the project of spatial planning for the landscape and for the cities development.

Starting from the observation of different urban contexts, more or less in crisis, and from the analysis of spatial plans, it is possible to notice how the waste issue is faced not according to a logic of integration but exclusively in sectorial terms.

With regard to the exploitation forms of the environmental resources that the effects of the waste cycle usually determine on the landscape and the consequent change of the landscape configuration, this paper intends to investigate the role of the spatial planning as well as understanding how to interact with the landscape transformations depending on the characteristics of the ecological structure of the territory.

Keywords

Urban sustainable development, landscape, ecological network, core areas, identity

1. Naples and the Campania Region: the garbage crisis

Between 2007 and 2008 Naples and the whole Campania Region went through a terrible crisis connected to the rubbish management. As the international press underlined «just over 3,500 tonnes of uncollected garbage still clogged the streets of Naples, slightly down from 7,100 tonnes, when the army first began intervening in the strike»¹

A condition of crisis over the last fifteen years has produced a situation of *collapse*. A glimmer of resolution appeared when the Italian Prime Minister Silvio Berlusconi held the first cabinet meeting of his new government in Naples, in May 2008, a token of his commitment to solve the city's longstanding rubbish emergency². «The causes of the “emergency garbage”, initiated in 1994, are complex to be analyzed because they see an interlacement among political affairs, technical-administrative limits and local interests legal and illegal. The crisis endures also because the city is being held hostage by the Camorra, the Neapolitan equivalent of the Sicilian Mafia. Gerardo Marotta, a lawyer, told the daily newspaper *L'Unità* that the origin of the rubbish crisis in Naples was the use of the region by industries of the north as a cheap way to get rid of toxic waste. “For more than 40 years the industries of the north of Italy have saved the cost of cleaning up their toxic waste by entrusting the job to the Camorra, who disposed of it in illegal dumps in the south,” he said»³.

In Italy there is no common politics regarding the garbage management system, and, above all, a tendency to exclude this theme from the urban and territorial planning seems to emerge.

Laino (2008) underlines the gravity and the underestimation of the problem concerning the selection of the areas to settle the garbage disposal installations; the lack of an accurate and farsighted planning has caused the settlement of installations in zones already jeopardized by the environmental point of view.

In the specific case of the Campania Region, a series of political, technical and administrative concomitances, have determined situations such as that of Acerra, in which, as observes Gribaudo (2008), the settlement of the new incinerator has been decided without any consultation with the local institutions neither with the population, but only considering the economic evaluations of a private enterprise that showed little regards for the problems, the characteristics, and the history of the territory.

Furthermore, we must add that “the camorra is not responsible for the failure of the

* This article should be considered as a result of the common work and reflections of the authors, but in detail Paola Marotta wrote paragraph 1, Giulia Bonafede wrote paragraph 2 and Filippo Schilleci wrote paragraph 3.

¹ AFP Staff writers (22 January 2008), *Naples under 3,500 tonnes of garbage as strike endures*, Rome: Agence France-Presse.

² Decreto Legislativo n. 90, Naples 23/05/2008.

³ Peter Popham (22 May 2008), written at Naples, "Berlusconi takes Cabinet to Naples to tackle rubbish", *The Independent* (England).

plan and the organisation for the waste management. The camorra, expounding one of its classical roles, has managed the gaps within the system and has taken advantage of the historical incapability to check out the results of the works of the institutions and of the public administrations in Campania” (Gribaudo, 2008, p. 34). Just to give some data and to understand the dimensions of the problem, we can consider that the volume of business of the ecomafia is of around 45 million of Euros; in Campania there are 8.5 million of eco-bales that must be burned in the incinerators (only one is operative, the other ones have not been realized yet), and it will take between 10 and 12 years⁴.

It seems evident that, if in an urbanistic planning the sites are not individualized or the criteria for the settlement of the garbage disposal installations are not defined, the economic, political or also illegal expectations (as in the case of Campania) will always prevail on the characteristics of the territory and the landscape.

If we read the *Guideline of the Regional Territorial Planning of Campania (Relazione e Linee guida del Piano territoriale regionale della Campania)*, there seems to be a prevailing attention to the management of the risks liked to the presence of the refusals; there is not any definition of the criteria to be used for the correct selection of the areas to settle the garbage disposal installations.

Actually, in the *Territorial Planning of Campania* politics of mitigation, management of the environmental risks connected to the legal refusals and above all to the so-called ecological bombs of the illegal sites are defined; there are not politics of prevention nor actions related to the effects of the garbage cycle on the landscape.

A second question concerns the specific case of the city of Naples.

The legislative decree approved by Berlusconi’s government⁵, having rid the roads of Naples and its province from the immense heaps of waste, has started such process where the characteristics of the territory, of the environment, of the landscape, are put in the background.

Actually, as the decree establishes that the areas of garbage management constitute areas of *national strategic interest*, checked by the military army, every possibility

⁴ “Roberto Saviano, the author of a gripping and brutal account of how the Camorra works, has carefully studied the nuts and bolts of the group's waste-management business. It allows northern regions, like Tuscany and Umbria, to remain bucolic, while illegally dumping their waste at low costs in the south. The Camorra has disposed of all kinds of dangerous toxic wastes from northern companies — printer toners, residues from leather tanneries, harmful dusts from pharmaceutical companies. That gets mixed with cement, non-metal car parts and even the remains of the dead from paupers' graves (which have to be disposed of every 50 years).” See: Poggioli S. (2008), *Many Think Mafia Involved in Naples Trash Crisis*, www.npr.org.

⁵ “Naples - This may be the only city on Earth where the nation’s prime minister was forced to send a well-armed military regiment to guard the garbage dump. The soldiers are dug in, ready to fight. At this moment, it’s not clear whether they are preparing to take on residents, who riot and rampage every time the city tries to open a new dump, injuring police and firefighters - or the Mafia that controls the region’s refuse business and has been known to decapitate enemies with a circular saw. No matter. That’s what it has come to here, lending proof to the popular aphorism making the rounds in Brussels: Naples is the worst-managed city in the worst-managed country in Europe.” Naples’ trash crisis hits the big cheese - Joel Brinkley - Sunday, July 13, 2008 - This story was found at: <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2008/07/12/INOQ11K899.DTL>

of integration with the landscape transformations and with the local organisation of life disappears.

The decree, in order to rid streets and squares in Naples from the urban refusals, and waiting to start and to complete the whole system for the re-cycle of the refusals, pointed to the green area of the *Parco Metropolitanamente delle Colline*⁶, in the Lallero Quarry, also called Polygon Quarry, for the settlement of the dumping ground in Naples. But how is it possible that one of the most protected areas of the city has been chosen to settle a dumping ground? Why, despite a number of sustainable policies, the free green areas, that should be the most valuable ones, keep on being the weakest ones? Two important observations have to be made: first, the absence of the garbage theme in the spatial planning; second, it is not recognized to the free green areas an active role in terms of compensation, valorisation and environmental development.

If on the one hand the main responsibilities of this crisis can be attributed to a political-administrative incapability and to the pressures operated by the criminal organizations, on the other hand there is no integration between the urban and spatial planning and the garbage management. If the theme of the selection of some areas to garbage disposal is not inserted within the frame of the territorial transformations, the technical expectations will prevail on the environment and the landscape expectations. In this sense, the case of Campania must set up a serious reflection about the integration between the garbage planning and the spatial planning with relation to hypothesis of sustainable local development.

2. The limits of waste

The waste disposal problem is an evident limit of our society and our economies that inevitably affects the capability of the planning to operate adequately, not only with regard to the citizens' health but also in order to set off virtuous economic processes that may have repercussions on the quality of the landscape, considered in a broad sense as an interaction among the various components. But then again, what is a limit, if not a resource in itself?

First, we must be fully aware that the increase of waste production is a limit. We cannot generate more rubbish than what we produce, because we are at the risk of a continuous emergency. Thus, this is the first step: we must take this balance into consideration. The second step is to realize that reduction, re-use and re-cycle are the necessary instruments to set off a really virtuous process that may turn the system from the emergency to the management. The third step is to go back, first think and

⁶ This Park is in the north area of Naples. The project was launched by the Municipality in 1994 with the redaction of the new urban plan. One of the principal aims of the plan is the safeguarding and reclaiming of the physical integrity and cultural identity of the territory in which the agricultural landscape and the hill are important component of the natural conformation and cultural set-up of Naples.

then operate, that is to say to plan, and therefore to plan the integration between the real economy of a territory and the capabilities of its inhabitants to manage such processes. Also this integration is an essential mean that at least reduces, if not eliminates once and for all, the possibility of interferences of the Mafia in the management. Of course that of the garbage must not be treated as a separate field: also the other industrial sectors of a certain geographical area with their capability to re-cycle their own products and what is generated by other similar industries must be taken into consideration. In this way, it is possible to define physical ambits within which these relationships take place effectively. In brief, optimal territorial ambits must be established. It is not insignificant that within these ambits there is the waste produced by the cities that, on a large scale, can be considered as a third kind of industry generating waste, in addition to the industrial districts and the areas of actual accumulation (various dumping grounds). In this case we have considered an intermediate level of planning, the provincial one, but with the proper differences we can adapt the same reasoning to the other levels, the regional and the urban ones. It is important to ordinate these relationships because it is the only way to understand on the one hand the roles that cities play in this process and on the other hand how they interact within the landscape. Afterwards, if we want to consider also the urban level that is another landscape ambit, a more accurate analysis should be needed in relation to the possibilities of reducing, re-using, and re-cycling the waste produced by the industrial areas and those of the services, of the equipment in green spaces, of the residence, just to keep to the subject of the prevalent functions; they are one of the numerous ways of distinguishing the different kinds of waste production and they are quite consistent with the ways of arguing typical of urbanistic and territorial planning. The same reasoning works if applied to a regional level.

At this point it is important to underline that the sectorial planning on the one hand takes in low consideration the economical planning, but on the other hand it uses – except in rare cases – the outcomes of territorial and urban planning more as a mere support aimed at writing analysis of eligibility for the localization of the disposal installation, rather than to converge in it. In other words, the sectorial planning instead of investigating some specific issues entering into relations with territorial, urban, and thus landscape planning, rather seems to live independently.

Hence, we do not want to disclaim the necessary role of in-depth analysis that the sectorial planning has concerning the waste management, but rather we want to underline that the dialogue among the various fields of the physical space planning must be necessarily integrated in a common temporal process capable of rationalize the landscape resources and the economic activities in order to set off virtuous processes of re-use and re-cycle of the waste produced by the real economies.⁷

⁷ These reflections are the result of a research carried out over the last years about the issue of urban solid waste and territorial planning that started from a doctoral thesis titled “A removed from the Italian Urban Planning. Systems of management of urban solid waste and territorial planning”, from the university of Reggio Emilia (Department of Environmental and Territorial Sciences, DSAT)

3. The role of the landscape in the building of the project

The landscape requirements, and thus the project of city planning for the landscape, stress the need to put these requirements within an integrated process between the territorial planning and the planning of the processes related to the waste cycle.

Generally speaking, the landscape cannot be thought of as «an image exclusively linked to the nature» or as «an image that is complete only from a formal point of view, even if it can be a place of extraordinary beauty, as in the case of the furrows in the ploughed fields» (Gulì, 1997, p. 7). The meaning of the landscape, on the contrary, must be referred «to the aspects it is composed of, to their integration, to the value of their mutual relationships and moreover to the way in which these elements are experienced and perceived» (Gulì, 1997, p. 8).

The use of territory has changed. Men have progressively modified their approach to the changes he makes in it, modifying also the relationship with it, and nowadays the waste issue is one of the main constituent of this change.

We find long periods in the past during which men established a relationship with places, seeking their true meaning and finding their place, with the utmost respect, in the natural system. But then came a time when this relationship of “mutual respect” became distorted, because men began to “impose himself on places”. The *relationship* becomes a *conflict* (see Hösle 1991). Starting from an environmental standpoint, an important value is, for example, the enrichment of environmental variety and complexity. A viewpoint that focuses on the *use* of territory, after the advent of the technological age, may be conditioned by economic factors that see it as having another kind of value as an inexhaustible mine from which to draw without limits (see Meadows et al. 1972).

It is clear from the above that human action and preservation of environmental values are closely connected. Researchers of this relationship rightly state the need for ethical rules that inform human behaviour, and consequently the present and future effects of their actions (see Pearce and Turner, 1990), while also constructing methods and policies that promote development.

Reflecting on the relationship between the preservation of the resources and their exploitation as a mean to promote development, we want to circumstantiate this concept with the adjective *ecologic*, with the aim of perceiving each phenomenon in its connection with the environment, as Morin suggests (1980). In fact, in such relationship the two main actors are man and environment; today this relationship seems to have become a problem, a problem that has arisen, increased, sometimes been faced, but not yet solved. The *relationship* becomes a *conflict* (see Hösle 1991). Since men have started to change their settlement models for reasons connected with new economies, putting aside every ethical approach, considering the landscape as a

valueless object and being driven only by reasons of personal interests, the relationship with the territory seems to be based on factors that are evaluated, economically speaking, in “monetary monocriterial terms” and not also in “multicriterial extra-monetary terms”.

Nowadays the intervention in the project of territory is a complex, delicate and interdisciplinary process. Together with the fact-finding phase, the analytical phase, and the constructive phase, we must also highlight the role of the historical/environmental values and that of the relationship system, which have to be considered as the basis for the project. Within this project, a relatively recent instrument that can be taken into consideration is the ‘ecological network’. It has a relevant potential because of its peculiarities both as an interpretative paradigm and as a project which analyses and at the same time regulates the relationships between elements and places. Thus, it is an instrument that considers the territory as a system, and not only as a mere container of elements to be exploited according to the current needs.

Over the last 20 years this subject has become increasingly well-established through research and practice. These are based on the initial idea that an ecological network can be understood either as a set of natural (or semi-natural) areas interconnected through *linear infrastructure* or, in a somewhat detached and abstract manner, as relations and connections between actors. These may be independent of the location of the linkages, and tend to cancel out any tendency to confine natural areas to numerous little islands each ignoring the other (see Nowicki et al. 1996; Bennett and Mulongoy 2006).

A superficial reading of the above definition may suggest that this approach favours only the naturalistic values of the territory, preserving the areas of high naturalness. Going beyond, on the contrary, we can easily understand that such system aims to overcome this method of isolation and to work on the rest of the territory so that its use can be consistent with the principles of environmental connectivity.

The elements that constitute an ecological network are both punctual (areas of high naturalness or core areas) and linear (ecological corridors). As Jongman clarified during the 1st Italian Workshop on the ecological network, «ecological corridors are various landscape structures varying in size and shape from wide to narrow and meandering to straight, representing links between landscapes and maintaining or re-establishing natural connectivity. They are mostly multifunctional landscape structures. Most of the ecological corridors found today are primarily the result of human intervention in the natural environment: hedges, dry stone walls, mosaic landscape with small woods, canals and regulated streams. Their density and spatial arrangement change according to the land use. Their capability of connectivity may vary according to their structures, to their composition, to their placement in the space-landscape and to their management. The ecological corridors play an important complementary role in the need of interconnection among habitats, that

may vary depending on their typology. As a consequence, the approach to landscape planning and management of the ecological corridors may vary depending on the case⁸».

4. A reflection: beyond the conflict

The project of the city planning for the landscape cannot keep on relegating the waste disposal issue to specific sectorial fields. The project of territory, according to an innovative cultural approach, cannot disregard an idea of integration which includes also the reasons of the ecology and of the landscape. The overcoming of the restriction approach and of the sectorial view over important issues, together with the knowledge of the ecological structure of the territory, are the fundamental steps towards the building of a project of city planning for the landscape.

Once again we see reiterated the need to work towards an operational approach that no longer considers the territory as a “container of economic activities” but rather as a place rich in “values” that must strongly influence the rules of the transformation. Such approach, as Patrick Savidan suggests, should seek to establish truth and valid principles while also drawing up a framework that any citizen may use to decide if an action is moral (see Larmore and Renaut 2004).

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⁸ Robert Jongman, from the Department of Environmental Sciences, Land use group, in the Netherlands, has made detailed studies regarding ecological networks and has experimented such principles – at least with a theoretical application – in the Dutch Nature Policy Plan. He presented this experience at the 1st Workshop of the National Agency for the Protection of the Environment concerning the ecological networks, which took place in Rome in November 1997. For further information about this topic, see Jongman R. H. G., *Nature conservation planning in Europe: developing ecological networks*, 1995.

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