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## Rejected Landscapes - Recycled Landscapes

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### Abstract

This research shows the changes of the landscape in the presence of waste, reality that invades the territory in many different surprising ways in time and space. At first, the issue of garbage is faced according to language of creativity and in a second moment on how the inevitable accumulation of garbage designs new landscapes, how waste becomes a place. Then, through a list of projects for more or less controlled recovery altered areas, it is explained how the present territorial dimension is inexorably besieged by garbage and consequently of how it is exposed to a substantial environmental, cultural, economic and political transformation. In this way, a sort of ‘indicative atlas’ takes form, where synthetically some interesting and model recovery plans are illustrated. So the statistical, quantitative ‘numerical’ aspects concerning the production of waste in order to highlight the surprising conditions that today the modern city is presented and therefore the reasonable need to investigate. With a careful, knowing eye it describes, through a cartographic survey, the present conditions and the effective distribution of plants for waste disposal and collection on the Italian territory, in particular and generally on the European one. Then it is singled out a territorial section touched by the phenomena: The Lombardy region, and then the territorial morphology so altered and the inevitable environmental transformations. The study becomes more and more detailed, pro-active and conscious of the state of needing corrections, substantial improvements and experimental developments. On the light of this, the investigation along highway A4 between Milan and Brescia and more specifically the Province of Brescia where the concentration of waste disposal becomes more and more intense is considered. Then, through a careful study of the present territorial status conceptual, indicative and synthetic models take form of possible and potential scenarios, present and future, of altered areas of the presence of waste and collection plants. Moreover, how their distribution takes place is explained and even how, substantially, it takes an articulated structure of actions and reactions able to design a territorial recognizable and consequently, a base for future potential planning.

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Finally, the study of these areas makes up a unique path to observe and evaluate the modern urban structure, where presently it is clear, necessary and essential to have a correct, valid and definite location, leading to territorial changes in different ways.

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## 1. Introduction



Figure 1. Waste in creative language

Let's start from the beginning that is how we experience waste in our daily life, in imagination and how we elaborate it in creative language. Often, artist, novelists, poets, directors have found in waste the very material, the feeling of their works; for example 'Junk Girl', by Tim Burton; or films regarding the theme of garbage; it seems to renew itself in continuation, as shows the animated film, WALL-E. Instead, going back more than half a century ago: Michelangelo Antonioni in the 1948 documentary 'Garbage men' of the life of garbage men in Rome, as Pier Paolo Pasolini in 1967 in 'What are clouds?' when the last scene of film is directed in a landfill.

Beyond time and space, beyond peremptory and sketchy preconception, Pasolini, probably, is the best poet of waste. The world he describes was and is, in effect, a mass and magma indistinct of infinite material and physical waste. Consequently, thanks to the description of the author, and of others that have treated the topic 'waste', unusual images suggest distinct glances, thoughts... which have helped to investigate in an innovative way, a reality that is just as present as it is hidden. Waste, in effect, is in the foreground as well as the background, 'independent' and at the same time connected to the city context. (as Michael Braungart highlights in 'Cradle to Cradle: A Call for a Revolution of Abundance' it is explained how a different way of planning has to pass inevitably through a new way of viewing and perceiving waste).

## 2. Loosing trace. Extreme examples



Figure 2. Waste become places

Waste makes up a world a part, a complex and symmetric one to that of goods: waste is the ‘dark side’ of a single reality, which indissolubly associates resource and waste. The entire path, from the production and the reuse, up to the elimination, should, however, be subject to particular attention and considered as one only reality. We live in effect in a world where the idea of reuse should be taken on, even from the same industries that produce. So, garbage is transported far from the city limits within bordering states and toxic waste is exported, quite often to Third World countries. Waste is usually deposited in the borders of settlements, in areas where people with no power live, where rights on land are weak and there are no controls. Consequently, in the Third world, as a result, many ‘garbage-cities’ real ‘dump cities’ in which the population lives, have risen in forced agreement finding, moreover, the source for their livelihood. The scenario is certainly less simple than what I have tried to simplify here, however, there are mysterious losses of dangerous waste and lots of ‘dump cities’, there are illegal markets and people without scruples. This and much more exists. It is necessary to consider, however, that in some cases garbage, instead, has become a reason of social emancipation, for example the Norman Forster's & Partners' project for Masdar city, comes to mind as an eco-compatible city, zero-carbon, zero-waste. Infact, Masdar will be a city exempt from polluting emissions, there won't be any waste storage because waste will be 99% recycled while the remaining 1% will end up in the appropriate compost plants and incinerator.

### 2.1. Bring back a ‘sense’ of place

Abandoned objects, in some way are protagonists and evoke something that is no longer there, they give us back unpleasant images, hostile and sometimes even catastrophic... however there are new architectural languages connected to waste management and disposal: incinerators and controlled dumps are an example. They create new architectural scenarios, landscapes always closer to urban centers. We have to learn to live with and consider as planning opportunities. So, today, is necessary a study not only about a restoration of healthy conditions and also exhaustive technical-functional but as an opportunity for a real, effective spatial planning in order to consider the place in its becoming the capital changing geographic and environmental regeneration which should be potential ‘sense’ of place more than just a ‘correction’.

### 3. Statistical demonstration

Let's begin with the demonstrative phase. The problem of collection and disposal of waste is ancient as that of wastewater, but has become a crucial issue in relatively recent time, as far as quantity to recuperate, recovery of resources to deal with, novelty and variety of materials to destroy and disposal techniques at hand. In fact, every time we throw an object, by choice or obligation, we produce waste. From that time on, the object disappears from our sight, but its life is not over. The process of discharge is divided: it is linked to the type of refusal (urban and special, dangerous and not dangerous), to materials by which it is composed and to treatment plants and disposal on the ground (recycling plants, incinerators, plant composting, landfills etc.). So, as shown from statistical-quantitative investigation, over our heads, hands over a mountain of garbage that absolutely get rid of. In general, the solutions adapted to eliminate waste are simply a means of taking them away from our senses: in particular, from our sight and from our sense of smell. Therefore, waste is 'buried' in landfill sites; it's melted down in meteoric waters and in water courses going into the sea; it's abandoned in external landfills; consigned to the catharsis of fire and by this sent to the sky or just simply left to external landfills to be taken care of by atmospheric agents. So, we need space: an 'empty' space, whether land, water or sky, in order to deposit everything, we no longer want to see. Therefore, every country uses different techniques at different percentages for waste disposal. Generally, more use storage in dumps or incineration plants (in 2008 in Europe there were 358 incineration plants in 18 nations. In some situations, such plants have long been included in urban contexts, such as Brescia, Vienna, Paris, Copenhagen).

#### 3.1. Cartographic study

Following the investigation the state in which Italy presents the current distribution of plants for disposal and collection waste is detailed. This way it is evident the uniform distribution throughout the country. Every year, in fact, in Italy more than 30.000.000 tons of municipal waste are produced, managed by the municipalities, whose disposal is due to multiple issues: environmental, political, economic, social...

First, it is important to know their location, state of reclaim, activity degree or their nature so a synergy of different skills and specific planning responses to every territorial condition found is imposed. Any way one thing on which we must reflect upon, comparing the collected data, is that large portions of territory are degraded by the phenomenon of landfills and it is clear that from the point of view of the area, the regions primarily interested are: Puglia, Veneto and Lombardy. For this reason, the research continues with a detailed study about a section which is particularly subject to this phenomenon, therefore: The Lombardy region, and the highway area from Milan to Brescia where most Lombardy plants are located. Generally, locating a new plant for recycling and waste disposal should not be an element of urban blight. For this reason, the location of some portions of unsuitable land is fundamental to plan and realize these plants. So, regional criteria define the areas where waste disposal plants are excluded and the areas where there are limits for the realization of specific types of plants. Moreover, regional responsibility is also to investigate preferential factors, that is, those logistic/economic elements that can contribute to evaluate the strategic suitability. For example, location of industrial areas given a good viability of access or the presence of closed business can be preferential elements. With this study it is not intention to report on the presence of waste disposal plants and waste storage to support innovative removal techniques, garbage recycling. Instead, what it wants to do is to survey the state of the fact, the environmental impact, the urban 'sense' that sometimes these things take on, in these peculiar disseminated places that outline new metropolitan scenarios.

##### 3.1.1. Places subject to the presence of garbage

In order to evaluate, more objectively and concretely, how this peculiar urban issue interacts with the urban and territorial system the plants in Province of Brescia are studied individually.



So it was possible to put together an outline of the real or probable landscape scenarios that have been altered by waste. This phase reveals surprisingly places subject to the presence of garbage. These territories that seek a new architectonic redefinition with the aim of being integrated into the urban contemporary system. Although they almost always appear as inaccessible or closed systems. Therefore, from the real exploration of these areas, particular urban scenes clearly emerge. Their variety and articulation comes from a simple declination of three types of plants: incinerators, dumps and waste treatment plants clearly emerges.

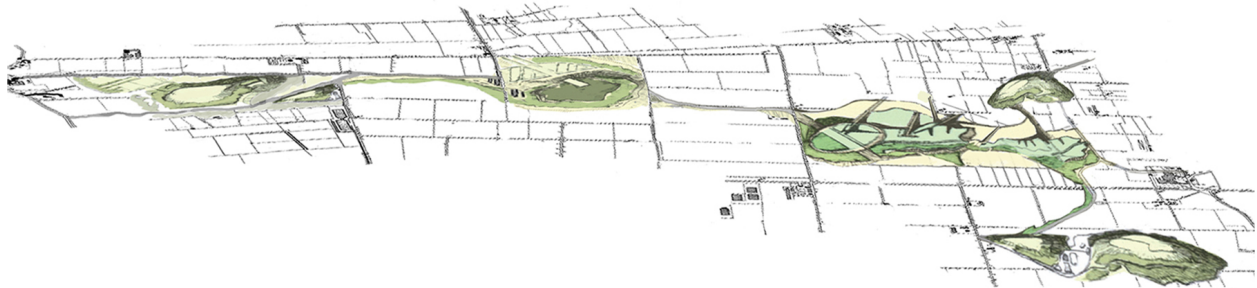


Figure 3. Possible strategy for the interrelation between waste plants and between the plants and the land

However, spaces of this type are huge complex facts, and as all urban facts, it is not easy to put them into pseudo-analogical typologies. Anyway, common issues to each these realities are separation, expulsion and isolation that these places have in the contemporary urban system and at the same time we will see the attempts to reduce or mitigate the environmental impact that arises being inadequate, defective and incomplete. In affect it is clear that city of Brescia has plenty of opportunities to locate plants for waste storage primarily because it is characterized by many caves. In addition, the city has an extended and well-constructed road infrastructure so it has roads that are well connected to the surrounding urban area which connect strategically the wasted disposal areas. In this way, the streets and roads become technical spaces of connection and service.

#### 4. Conclusions



Figure 4. Example of recycled landscape

In order to open a window on the present context, to critically, clearly and synthetically illustrate and interpret present or future potentials, to give territorial scenarios that take form in these areas, common factors have been investigated and searched for each of these multiple realities. It was explained about plural scenarios because the experiences registered are many not single. In this case, it does not want to define just one thought, just one imperative solution or even find the beginning of possible regulations. Instead, what it wants to do is begin a dialogue among many subjects: political, technical, management or environmental and define in particular, possible territorial relations, among plants, (even past, present or future ones) and among plants and the urban system itself.

These numerous spaces can become very active structures in the urban context, they can connect to other urban spaces, whether they are constructed or not, they can be connected to use and not, and they can be a reference point by taking on an identity, a role or other.

Actually, waste plants, are a geographic, exploitable capital. They are components in a project of reconfiguration and requalification of territory. The purpose of this research is to give a detailed study of what is and define strategic maps possible, of what can become a project of recovery in an 'ecological context' able to give the future meaning to the word 'ecologically sustainable' society. Plans, for recovery of spaces that guarantee not only safety, but healthiness and functional performance actively, coherently and in an organic way to better the urban territory as a whole.

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It is worth mentioning that statistical quantitative data reported in this written paper obviously refer to the doctoral period and were, synthesized in a qualitative way, or rather according to the logic of meaning and territorial influence. This aspect is of absolute importance in this paper that actually has the intention of showing and sometimes explaining the transformation subject to the territory as a result of the invasion of waste, which was more or less controlled.

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