

Rethinking urban environmental-morphology (the case of Rome-East periphery)

The following premise concerns the case study presented to the ISoCaRP Congress to be held in Dalian (China) in September 2008.

Its purpose is to recall some of the most significant world events - now history - apparently not strictly connected to the issues of "urban sprawl" (theme of Congress) and to the urban problems but, however, closely linked to each other.

These events concerned the period from the beginning of '900 to our days.

The far motives of the "urban sprawl"

The world population in its spiraling increase is putting enormous problems to governments and institutions worldwide. The migrations from poor countries and poverty areas in the world are generally oriented to reach the city, which in the past was able to metabolize the gradual migratory processes from less productive countryside and from small towns far away from the cities.

The exodus from rural areas accompanied the evolution of the industrialization processes, their logic, their territorial strategies, often their arbitrary violence.

The forced migration of African slaves, in the XVII and XVIII centuries, allowed the birth of enormous settlements in the American territories and the construction of new cities.

The most recent migrations in the United States (especially of Hispanics from Mexico) are now controlled and, to some extent, they tend to integrate the newcomers through labor in the vastness of the modern country.

In the nineteenth century the eruption of new advanced building technologies – iron, reinforced concrete and new materials – enabled the cities development in height, following the examples of major United States cities, as Chicago, New York, San Francisco, but the same happen also in other parts of the World: as Moscow, Leningrad, Warsaw and gradually all the others.

The Second World War that followed the dramatic economic “depression” of the years ‘30 - not only arrested urban development, but it decreed the systematic destruction of cities: Berlin, London, Leningrad and, in the case of Hiroshima and Nagasaki, they were entirely razed to the ground with all its inhabitants and every forms of life.

Anyway the destructive bloody Great War reactivated and put in motion the World economy.

The reconstruction of cities after the war

The problem of the post-war reconstruction of large European cities led the worker's migrations toward countries where human and material destructions were more serious. The contribution - well known – of Turkish, Slavs and Maghrebians workers to the reconstruction of European countries was relevant.

The physical reconstruction in many European countries was accompanied by the definition of new laws relating to urban planning, which accompanied the reorganization of the industrial productive systems, the development of the economy and then the reconstruction of the social life of the cities.

In this historical moment the recovery of the economy and population growth imposed to bodies state and in particular to local authorities to deal between the various “logistical” problem: that of housing and services for the urban population rapidly growing, jointly determined by the slow but continuous exodus of farmers from countryside and emigrants or refugees from poor countries.

The European countries, according to their own cultures and legal systems, faced the major problem of the uncertain 'hospitality' to immigrants from the South of the world, a problem

which is still open and that today is becoming more complex because the arising of two facts: an extreme escalation of cultural and 'religious' conflicts (terrorism!) and the emergence of the globalization process characterized by the new dimensions of the capitalism and the finance in the world.

The combination of these two facts and the spread of the globalization process - whose final effects are difficult to assess - has strongly accelerated the economic growth and the physical development of the cities which assumed unpredictable dimensions, but which also further impoverished, in the South of the World, the poor and the starving populations to which the colonizers and the local despots never allowed to benefit from the immense resources on their territories.

In today's world the development of production capacity, technical-scientific knowledge and wealth, very little distributed, have become determinants of urban growth and of its unlimited expansion.

The big city is now at the heart of this process that needs to be deeply investigated in its traditional scientific components, but whose new wider horizon can only be that of the Earth Planet on which we live, with its natural limits and its laws.

For now the vital signs of awareness of this wider horizon seem to be very feeble in the populations and above all in the rulers politically responsible.

It is comfortable then to know that scientists of many disciplines are trying to disseminate scientific knowledge of their research about the life of the planet and of the living beings that populate it; but unfortunately this scientific knowledge doesn't seem to be still accepted by the stronger political powers, while levels of harmful emissions at a global scale are now becoming unsustainable: think only to the negative attitude of the biggest countries toward the Kyoto Treaty.

It is useful here to recall the relevant research conducted in recent years by Saskia Sassen, which provides important scientific information on the meanings that, in the globalization process, took over the city, the metropolis, the "Global City" (1)

The "urban sprawl" illegally generated

The ISoCaRP Congress proposes to participants to investigate particular issues and problems of "urban sprawl" in the context of the current situation as above outlined.

Therefore topics and issues are no longer aimed at traditional cities of the last century, but are facing a completely different thing: the metropolis or megalopolis of the XXI century.

The theme, or rather the problem of "urban sprawl" is certainly not new for those who have professionally met it in the past and those who are taking care of the today urban problems.

An example helps to understand: in the United States the "urban sprawl" phenomenon has been observed repeatedly and seriously considered both by institutional action and theoretical reflection, (2) and that because the "urban sprawl", that is urban diffusion, is somehow linked to a culture of colonization whose basis was availability of an 'exterminated' territory in relation to the population, an immense territory to which have been added new territories (Mexico, Alaska). Similar land situation, in some way, was the colonization of Africa. Rather different was in Europe the planned growth of the cities.



**Gegecondu in Ankara
(source: see note 3)**

Many are the expressions of the "urban sprawl".

Today in Europe generally the planned growth of cities (and regions) is a 'must' because the land is limited and population growth must be affordable.

In the Mediterranean countries, is peculiar the case of the "urban sprawl" as effect of the illegal house building produced by squatters, as happens in many huge cities: Istanbul, Ankara (3), Tirana, Roma, Cairo and in the large cities of North Africa; but this phenomenon is present all around the world (4).

It is possible to say in this case that "urban sprawl" consists of the spontaneous illegal growth of the periphery of the city, a phenomenon more or less slow but continuous, almost inexorable. A way of city growth without sufficient public control, therefore unsustainable, but alive and real.

At this time in the Italian large cities an uncertain dialectic between the centre and the peripheries is always acting. The availability of any kind of soil, especially near streams, and the lack of public control are the two facts that make possible a precarious, illegal settlement.

What is in Rome the answer to this kind of "urban sprawl"?

In the Capital City the identification of new areas to be built is the choice that generally the local administration fulfills to enable private builders - owners of large building areas in the city - to 'create' huge blocks of medium-small apartments, sold at market price: practically reserved to a small part of people which has the economic availability. (5)

To all the foreign immigrants (squatters), aspiring citizens, with their different cultures from that of the host city, there is no other way to 'stay' in the city, that to find a place where to sit down and rest: a river embankment, a shelter under a bridge, an abandoned building. etc., where to stay and wait for an improbable citizenship.

Generally the illegal settlements of new immigrants tend to stay and to grow where control is not enough rigorous. They are made of small shanties carried out on public or private land, initially with materials collected in landfills or, at best, this is the parking of shabby roulettes or tents.

In many cases, these precarious settlements generate an illegal economy (drug trafficking, prostitution, criminal associations etc.). Then over time they suffer transformations and consolidations with abusive tie to the public



Immigrants illegally landing on the Sicily coast (source: "urbanistica pvs", n.48/49, 2008)



power supply lines and to the city fountains of drinking water.

The continuous landing in Italy of migrants or refugees, especially from African, Asian or East European countries and the difficulty for the city to metabolize and assimilate the newcomers, is putting a serious problem to the cities that - also if labors are needed - certainly can not accept the growing and then aggravating urban sprawl problem, unsustainable from human and social point of view.



Views of Casilino 900, a “regular nomads camp”, so defined by local authorities.

The case of Rome East

It is not necessary here to recall the sense, the meaning given to the urban growth in the great British experience of the "Garden City" and "New Towns", later 'adopted' in many countries inside and outside Europe. It is enough to recall the meaning that this great experience of urban "sustainability" won in history of modern urban planning.

More useful for reflection can be to recall the Dutch Randstad Holland experience (6), planned in the '60s, namely the rigorous, insurmountable delimitation of a wide regional area designed and devoted to the environmental conservation, not for buildings, surrounded by three big cities: Den Haag, Amsterdam and Rotterdam!

It is the planning principle, which is recalled here, not certainly the great dimension that brings near the Dutch Randstad experience to the proposal that is presented here for Rome-East.



Rome East in two stages: 1880 – 1996. The urban sprawl is evident (source: national research “City and archaeology”, University of Roma Tre, maps elaborated by Cecilia Scoppetta)

In the case of Rome-East, the considered territorial area presents a whole of medium-small constructions more or less informal, born without a plan, close to a radial road directed toward the center of Rome.

Although the dimensions are not those of a "global city", the Roman suburbs characters are those generally of a metropolis, a fragmented conformation of "islands" bounded by visible, invisible and sometimes temporary borders.

Some fragments are clearly linked to different times of public construction (or at different stages of illegal settlement). Other fragments concern today "no places" or "super places". In other cases, the definition of the fragment is linked not to "physical" forms but rather to something "intangible" as the sense of membership or the existence (or memory) of a community. A sense of "ownership" that - however - nowadays tends to result in closure of "gated community".

In some cases fragments definition appears to be given by insecurity linked to a temporary use (consumption) of physical space which tends to result in "degradation". It means not only of immigrants favelas along the Aniene river, but also "attending" areas of building speculation, or archaeological protection areas.

What seems to link the several fragments is the suburban condition of "distance" from the city which is the exclusion as result.

In this sense, the condition of immigrants living in illegal shelters may be, in some way, interpreted as category of metropolitan dimension, emphasizing insecurity aspects: the territory can be seen as an "uncertain" place, because temporary and "flexible" are the life projects.

Moreover, these presences - officially ignored - show clearly the role of market in the construction and re-construction processes of the city as well as the relationship between the acceleration of soil consumption, with the particular dynamics of the building market: from 30 million hectares of free lands in the second half of '900 to less than 19 million hectares today.

Over the past 6 years investment only in national housing (almost totally of free market) increased from 58 to over 71 billion euros (23%), with over 800,000 rooms just in the year 2002. In the first half of 2006 constructions increased of 3,1-3,2% on the previous year.

In the decade 1992-2002 the purchase of houses have touched a peak of 62%.

In this way the contribution to GDP of the building sector was fundamental.

In parallel, there has been in Italy a strong restriction of housing for rent: in Rome 24% while only 30-35 years ago was 50%.

As a result, Rome has lost 180.000 inhabitants (but it has gained 400.000 new inhabitants regular immigrants).

Certainly this phenomenon doesn't concern only Italy: the urbanized land in Europe (1990-2000) are today a surface three times larger than the Luxembourg State. This surface will be doubling in the next hundred years on consumption of energy and territorial resources and, especially, greenhouse gas emissions and climate changes.

For this reason, the European Union is seeking a possible solution: an example is the Report No 10/2006 of the European Environment Agency on dispersed settlement in Europe and on sprawl control or policies taken in Germany, France and the UK.

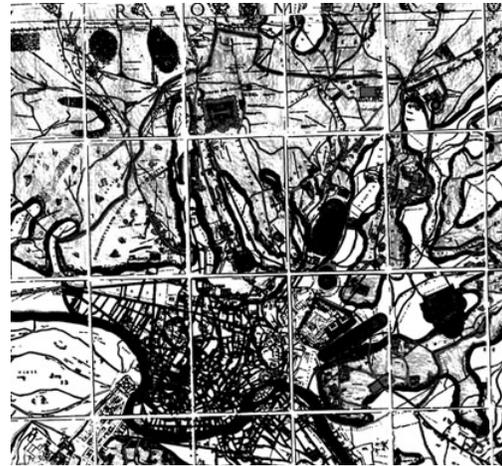
Another hypothesis is to subdivide allocations of Cohesion Structural Funds 2007-2013 according to the specific guidelines for sprawl control.

It is difficult, however, to imagine a solution that doesn't take in account the specificity of the local contexts. In the case of Rome, it consists precisely in the peculiar historical relationship between open spaces and the built ones: the Bufalini's map (1551 a.C.) shows how the rural land penetrate inside the urban walls in form of orchards and vineyards in the midst of which is possible to observe the Roman ruins. This situation will remain unchanged for centuries (it is shown in the wonderful Nolli map 1748).

The changing city limits between built city and countryside will come after the second World War, with the more general transformation of a society until then basically rural. Attempts to plan that change usually came too late after those impetuous transformations.

At a larger scale, the current situation seems to reflect old structures: in the fragmented sprawl, previously described, there are still large areas of "Campagna Romana" – the one of the Grand Tour, of painter as Haeckert or Coleman - saved by its particular ownership structure, organized in large estates cultivated mainly to arable crops ("ville", "tenute").

Alongside the conservation of this "urban countryside" and in order to delimit the expansion of illegal growth, a proposal could be to entrust to the forestation the realization of an interstitial planned green system with the function of connective frame between built and free areas.



Bufalini's historical map (1551)

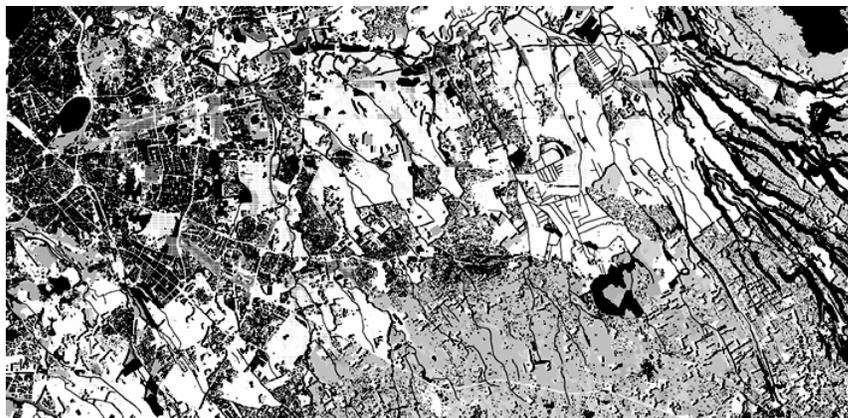
The "energetical" reforestation was included in the Kyoto Protocol targets for reducing greenhouse gases among the measures to be taken by governments as a return of pollutant emissions.

Regarding biomass plants and the so-called "energy crops", the research has developed studies on species that have a high energy efficiency and require the same care limited with regard to fertilizer, irrigation, processing, land.

The pursuit includes different objectives: social inclusion, regeneration of urban areas, rebalance of the flow of matter and energy between cities and ecosystems, "support" for participation of social actors in the chain of local government and strengthening of ecological capacity.

As regards the Italian case, the limited experience of urban forestry for energy purposes, however, seem to have brought to light the potential of the strategic plan as a process that involves different "tools", a place of bargaining between public and private sectors.

Federico Malusardi, Cecilia Scoppetta, Rethinking urban environmental-morphology (case study Rome-East), Italy



Rome East 1996. The urban sprawl and the open land areas, in which it is possible to realize a green system (source: national research "City and archaeology", University of Roma Tre, maps elaborated by Cecilia Scoppetta)

Notes

- 1 Sassen Saskia (1991), *The Global City*, New Jersey, Princeton
- 2 Giacillo Lucio (2008) *Urban Sprawl - Una storia urbana contemporanea degli Stati Uniti*, Roma, PhD Thesis, University Roma TRE (in publication)
- 3 Malusardi Federico (1999) *Formal and informal Settlements in Ankara, Turkey*, in *Informal Settlements upgrading: The demand for capacity building in six pilot cities*, Nairobi, Kenya, UNCHS
- 4 Malusardi Federico, Kammeier Detlef (2003) *Informal settlements in Bangkok 1960 – 2001 – Upgrading policies and housing development*, Roma, Casa Editrice Università La Sapienza
- 5 Berdini Paolo (2008) *La città in vendita*, Roma, Donzelli Editore
- 6 Several Autors (1985) *Stedebow Nederland – 50 jaar BNS*, Amsterdam, De Walburg PERS,