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in

Camarda D. (ed.), Grassini L. (ed.).

Interdependency between agriculture and urbanization: Conflicts on sustainable use of soil and water

Bari : CIHEAM

Options Méditerranéennes : Série A. Séminaires Méditerranéens; n. 44

2001

pages 327-335

Article available on line / Article disponible en ligne à l'adresse :

<http://om.ciheam.org/article.php?IDPDF=2001604>

To cite this article / Pour citer cet article

Pizzido G., Micarelli R. **From suburban conurbation to the "established bioregion": which ecology for contemporary cities?**. In : Camarda D. (ed.), Grassini L. (ed.). *Interdependency between agriculture and urbanization: Conflicts on sustainable use of soil and water*. Bari : CIHEAM, 2001. p. 327-335 (Options Méditerranéennes : Série A. Séminaires Méditerranéens; n. 44)



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APPROACHES TO ECOLOGICAL PLANNING

FROM SUBURBAN CONURBATION TO THE “ESTABLISHED BIOREGION”: WHAT ECOLOGY FOR CONTEMPORARY CITIES?

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Introduction

Facing the dramatic alteration of ecological conditions in our cities, we have to answer them in a holistic way, searching a new involving relationship between city, inhabitants and environment. At the same time, we will have to achieve reach adequate local strategies.

In such a reality we encounter a multiplicity of different dynamic conditions which require new epistemological consciousness and new specific attention addressed to the very different conditions we are facing. For this reason, we have to assume ecological principles and abandon our former scientific paradigms. In this way, we will be able to deal with such a complexity of phenomena, no longer through predetermined methods but by durable activities promoted at different scales, ranging from participated processes in urban planning to experimental activities of social ecology.

The current urban and metropolitan structures are no longer made only of urban centres and suburbs, but also of nebulae of urban fringes, of a more and more dense and continuous conurbation, with more and more residual empty urban spaces inside. However this established model, not easy to be defined, even among experts, and marked by very unexpected results, is totally decontextualised and, often, has no relation with the surrounding territory anymore. This peculiarity marks a deep difference with the historic city which, as it is well known, used to base its primary survival just on the relationship with its own “reference territory”, receiving, on the other hand, not only material but also cultural and aesthetic conditions of great relevance (in Italy Venice and the lagoon system of the High Adriatic Sea, Siena and the hill watershed between Arno and Ombrone Rivers).

With the Industrial Phase and even more with the global Post-Modern Phase and the computer science technologies, cities were thought to be finally freed of their ties with surroundings. There was no awareness this change would only mean the cities and their inhabitants would become eradicated from any proper environment.

However, the need for a change in opinion related to this attitude is progressively emerging, especially in relation to the difficulty of closing the local environmental balances and of endowing again the local communities with significant environments for their life or, at least, sufficient, or rather useful, even in the international competition. To reach this goal, it is obviously necessary to reverse the present trend existing in the “human settlements-territory” relationship and finally assume a different point of view.

A new point of view could then consist in endowing the urban settlements again with new “reference territories”, this time not aiming at the primary elementary survival, as it was for the historic city, but at the “primary ecological survival”, as it is necessary for contemporary cities.

It is therefore necessary to inquire if it could be possible to endow the present urban structure with a territorial context such as to make it “live ecologically again”, with such an environmental contest as to contain it again.

To do so, it is necessary that the environmental system, which will contain the urban structure, take the shape of a living structure itself, taking at the same time all the features to become a “Bioregion”. By Bioregion we mean a complex, inter-related, fertile area from many points of view, able to become a “wide living context”, a system of ecosystems. Such a place should first of all assure life, mainly and intensively for itself, and as a consequence for the host city and its inhabitants. It is a complex procedure, almost the renewal of the city re-foundation rite, but reversed, almost the re-sacredness rite for a desecrated territory, starting by the city itself – even debating about it – to recognise and recompose its territory, and finally to adapt the city itself to the newly found territory. Therefore, this is a very complex and problematic re-foundation of a context, of a city, of their relationship. A re-foundation from the inside of the urban structure itself and of its environment. Probably, a more enthusiastic re-foundation compared to the foundation from the outside, also because it is a collective operation.

- In such a re-foundation process, the landscape and the ecological nets could play important, or rather strategic, roles:
- the landscape, since it is a holistic structure, capable of providing a reference apparatus which organises the great many relations among society, nature and culture;
- the ecological nets, being a concrete territorial organisation which, based on the existent agricultural landscapes, on the urban empty spaces, on the existent and potential connections, will constitute the relation net for the reconstruction of new premises for the existence and the feasibility of the Bioregion structural net.

Therefore the “established Bioregion” is a territorial structure inside which a precise life dynamics can be developed, and such to be able to originate evolutionary, autonomous and significant processes. These evolutionary processes will be so as to

contain, almost as a womb, a human community with all its activities and constructions, even the temporary ones, which will have to be, of course, such as not to question the system that includes them. On the contrary, the community will have to set up a "learning activity", in the Bateson's ecological sense, or rather in the sense of a "Mind Ecology", such as to make the community itself and its actions to be part of it, just in relation to the evolutionary dynamics that the Bioregion means. Evolution and learning will therefore be the main two stochastic and homologous dynamics, upon which we will base the co-evolutionary processes which represents the main goal of a project we could name "living the Bioregion". Again, evolution and learning will be the two basic criteria adopted in the re-foundation processes of the renewed relation between city and territory, and therefore of the Bioregion itself, considered as the ideal "place" for that relationship.

The becoming of landscape and the becoming of the landscaping project in the established bioregion

With reference to the definition of Landscape suggested by the European Council ("Part of a territory considered in its human and natural process of transformation, as it is perceived by the population and the human society"), we would like to stress its dynamic character of a process in act that we must ascribe to landscape, both during its natural and anthropic transformations and in the society's modalities of local or general perception. Therefore a double dynamic order, both for its territorial structure (and consequently for its dimension of ternary relation among man, nature and society), and for its perceptive dimension by the established population and their reciprocal interrelations.

So, dynamism is an intrinsic characteristic of landscapes, even if it is generally more common to stress the values of continuity of the landscape itself. Thus, we think it could be very interesting to work out a research, experimentation and operational project which does not inquire about the landscape becoming as a bothering element, external to the values of information communication and to the landscape qualities, but a project which considers the landscape becoming as a living feature, both in the natural and the cultural sense, and therefore continuously in evolution, able to characterise the structure of the landscape itself.

In fact, if we consider the landscape as a structure in becoming, we will have to make a special reference to the time factor in such a phenomenon. And, if we consider on the basis of the contemporary sciences the "inner time" of phenomena, we have to face a multiplicity of different inner times, from the biological ones to the economic, cultural and the environmental and territorial retro-action ones, or rather the perceptive behavioural ones of the different local generations, and so on. All different times, each of them having a more different speed of evolution.

Therefore temporal complexity corresponds to the complexity of the landscape phenomenon: we face a phenomenon of “multiple rhythm” which has its temporal, spatial and material reference for the actions and the becoming of landscape in the concept of evolution (of course we mean it in a stochastic sense!).

Such a statement demands an epistemological, linguistic, and operative revision of the scientific and political problems of the landscape, but also a check up of its “possibility to be planned” and of its every day popular activities, since this is probably the only possible way to directly start a co-operative relationship with the interested populations.

In fact, in such a becoming perspective, it may be easier and even more spontaneous to ask the involved populations for a really active participation, better, yet, a creative one, far beyond the simplest approval, to all the plan and construction activities of their own environment. It is our opinion that the experimentation in the living tissue of the realities of the territory is the only road to run along to be able to experiment, scientifically and following the program, the project hypothesis (including the landscape and the environmental ones, and even more the urban one), considered as dynamic processes. Working in such a way, we will go far beyond the “drawn project”, always so important as foreshadowing, to get closer on the contrary to the creative process, to the “Project as Evolutionary Process”.

In this way, the project is not restricted by the plan to build only a new systemic modality, yet so much useful for the city, for the landscape and the social cultures involved in these contexts, but tries to be innovative, by opening new modalities to creativity and to the relation modality of connecting different projects, both human (individual and social) and natural, in a continuous and reciprocal intercommunication.

This could make an evolutionary and co-evolutionary process to start from the acknowledgement of the qualifying structures characterising any landscaping project, to continue through the identification of all tendencies to change, through the assessment of all possible projects and evolutionary scenery, and, finally, to get to the opening of a biunique dynamic process (the one we have mentioned before), a process aimed at evolution and learning, unforeseeable but oriented, toward “conservation and transformation”. All this should be made in accordance with the involved populations, since they would have a chance to rediscover the joys to “build” their own living environment and to live in a better built environment and landscape.

There are many different real situations among the many possible ones that this re-founding project will face, but our experience allows us to consider that the project will have anyway to make a special reference especially to:

- “The complex character of the urban structure” and its changing in time. The re-founding project should mostly acknowledge the sense of any peculiar human settlement, its becoming and displaying modalities. The re-founding project will

have to catch, in every single place, its deep essence merging in people, in society, in places and in their historic interrelated becoming;

- “The complex nature of the environmental context”, with both the characters of the original condition and the conditions of the present situation, more or less altered, more or less still living and communicating. The re-founding project will have to seek the living important components to better acknowledge the environmental features of the Bioregion;
- “The relationship existing between the urban structure and the environmental context”, and the information message that this relationship manages to express. Moreover, the re-founding project will have to identify the conditions of the relationship itself, its history and the steps it has made, as well as its evolutionary potentialities.
- “The becoming of all the above mentioned phenomena”, especially the relationship ones, and therefore the landscape becoming, as expression of the relationship showing itself and of the condition of the “established Bioregion”.

We should therefore consider the built environment (from the micro territorial one to the urban and metropolitan ones) as a complex phenomenon in continuous transformation, and we should as well consider the “inhabited Bioregion” as the territorial reference condition for both an articulated living modality and the re-enhancement of the living environment of the reference environmental context. But, on the other side and better yet, we should develop the idea of Bioregions as their co-evolutionary relationship.

It is therefore necessary to find experimentation phases on many different levels, because it is only from the oriented and aware experimentation that it becomes possible to extrapolate significant and consciously identified directions for a progressive construction activity of a project such as to allow us to develop in time the above mentioned conditions, from the micro-contexts to the Bioregion, trying at the same time not to miss a chance and to loose any opportunity coming out from even partial innovating and strategic signs, should they ever show up in different and distant situations. The re-founding Bioregion project needs to deal with such a complexity to better catch up any possible renewal incentive in a participated way.

In fact, this experimentation has two main characters:

- It should be renewable. In other words, it should not jeopardise once and for all the involved environments: it could therefore be called a “sustainable experimentation”.
- It should develop along all the possible levels of the re-founding experience of the bioregional contexts, when possible in unitary terms, but also according to disciplinary areas and diversified experimental occasions.

In such a way, the project experiment may be as articulated in as many case studies, useful to provide the herein-sustained hypothesis with cues and observations. Those are projects developed at different levels, moving:

1. From the hypothesis of environmental redrawing of a metropolitan area
 2. To the environmental and urban re-qualification of a small municipality (in a wider territorial project), including:
 - 2b The participated project of the schoolyard of the municipality itself.
 3. To the landscaping studies for a tourist area,
 4. To the environmental arrangement of a municipal centre,
 5. To the arrangement of a lake park area.
1. The environmental project for the structural scheme of the area Florence-Pistoia-Prato, under the direction of Professor Astengo. The subjects of the ecological re-connection were the basic elements both for the re-qualification of the environmental context and for the renewal of the urban structure, especially the suburban areas, up to the re-constitution (even figurative) of a new living context and to the development of a wide district, according to a new establishing modality and, at the same time, to a new environmental modality, the one we have properly named “established Bioregion”.
 2. The studies for the Structural Plan for Civitella Valdichiana. This Plan is based on the re-discovery of the reference settlement-territory relationship, referring both to the old landscapes still present but in need of being activated again, and to the new living spaces to be yet arranged for the most recent settlements, which often lack of significant reference points. These Plan studies are included in a wider research titled “A Landscape for the Environment City”, aiming at inquiring about some agricultural-urban Tuscany contexts (Valdambra, Lunigiana), typical of the spread city, and in referring to which a new urban-environmental settlement model, the so-called Environment city, had been conceived, very much close to the content of our “Established Bioregion” proposal.
 - 2b The experimentation concerning the environmental participated project. “The Garden of Soil”, and “The Garden of Water”, set up in collaboration with the schools of the Municipality of Civitella. The research aims at creating a garden as a space for the re-birthing of soil and of water, and as a chance to deepen the social knowledge of the public parks and gardens in history, in the memory and in the direct experimentation and maintenance. The two gardens have been planned by the schoolteachers and pupils in co-operation with experts and the structures of the municipal organisations (libraries, technicians). The “Garden of Soil” has been already realised and is directly maintained by the school itself.
 3. Landscape studies for a tourist district in Val di Cornia (Piombino-Livorno). This district, including heavy industries and harbor activities, is actually being productively re-converted, and is going to be re-qualified on the base of the archaeological, historical and landscaping richness, present both along the coast and inland. Especially by creating a park system spread all over the territory, it has been possible to launch a new tourism, oriented both to the coast and to inland. In this program, the landscape studies have acquired a strategic role and are giving an important contribution to the solution of many project’s problems.

The application of the Local Agenda 21 Program in this territory has been foreseen.

4. Environmental arrangement of a municipal centre, Siena, satellite quarter of San Miniato – Square and Municipal Centre Contest. The necessity to plan a possible step-by-step implementation of the Municipal Centre has taken to the winning solution of a "Soil and Water Project". This project is based on the establishment of a web of engineering plants, which are already qualifying elements for the urban centrality. The public buildings (theatre, church, hotel, and market) which are planned could also be realised according to different and significant variations, in relation to the popular needs, inside an already planned project.
5. Arrangement of a lake park area: Polvese Island, Trasimeno Lake, (National Contest, mention). The project has been presented as an example of light transformation of a territory, and at the same time as the possible evolution of the territory itself from the point of view of the water recycling and the utility modalities, with updating to present needs.

All the above mentioned cases refer to different conditions, so that confrontations and comparisons are possible. Some of those cases have been only study opportunities, rather than operative field activities. Many are the inquiring reasons and include new urban and settlement models, the ecological necessity to count on a new reference environment, the necessity to create new job opportunities, the necessity to protect an extraordinary heritage of landscapes, of local knowledge, of quality products, threatened by the more and more aggressive and global commercial models.

These phenomena may be understood in their unit and more significantly through the historical and built environment and the landscape, which should not be considered only as a given value (threatened and at risk of being altered), but also as a phenomenon in continuous becoming, a change that is also becoming increasingly destructive. Being a phenomenon in continuous becoming, it is therefore necessary to refer to a problem of cycles and rhythms, to a problem of natural and anthropic dynamics, nowadays both to be considered in a phase of deep and reciprocal transformations and to be managed with new instruments.

Conclusions

All of these instruments can be renewed referring to the concept of relation and relational practice, and we are orienting our studies and our more recent experimental research activities toward this direction, toward an epistemological renewal still in progress (unfortunately we cannot explain here its modalities). However, both the studies and the experiments on landscapes, both the ecological webs and the participated projects are ambits among the most fertile ones for the experimental, collective, as well as scientific and aesthetic learning, when aiming at a new model of "Ecology Planning".

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