AGROPOLITANA. DISPERSED CITY AND AGRICULTURAL SPACES IN VENETO REGION (ITALY)

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ABSTRACT:

In the Veneto central plane, historically shaped by agriculture, countryside is interested by a particular form of urban sprawl, where cities, villages, single houses and industries cohabit with agriculture. This phenomenon is analyzed mainly as a typical urban/rural conflict, and the sprawl gets criticized as a countryside destroyer.

This paper proposes a different reading of the Veneto urban sprawl, starting from an analysis of the agriculture "layer" inside it.

Is this a rural area simply becoming an urban one, or is this a new, contemporary form - neither urban nor rural – of agricultural landscape, where farming spaces can have a public role, strictly linked to the urban population's needs? Can this character be preserved through the metropolisation process now envisaged by regional policy and planning?

KEYWORDS: urban/rural, dispersed city, agricultural landscape

1 INTRODUCTION

In the north east of Italy, in the Veneto rich and populated central plane, the countryside between the main cities is interested by a particular form of urban sprawl, where towns, villages, single houses, single industries and industrial areas cohabit with agriculture. Named "città diffusa" in the 1990s (Indovina, 1990), it was, and still is, strongly criticized for its land consumption effects, high public costs, private-car-based mobility, waste of agricultural land (among others Gibelli and Salzano eds., 2007).

But dispersed city has also been read in different ways (Bianchetti, 2003), for example as an embryonic status of the new European contemporary city of the XXI century (Secchi, 1996). Seen in this way, the *città diffusa* is not an enemy to fight, but a territory needing to be (re)designed (Munarin and Tosi, 2001), starting from the "materials" it is built with.

In this paper I will consider one of these materials that is often forgotten by planners: agricultural space. Simply considered either as urbanization background or its victim, agricultural space had instead a great importance in how the *città diffusa* was born, in how it works nowadays, and maybe, in how it can face the sustainability challenge in the future.

This paper moves from some conclusions drawn in a PhD research, discussed in 2007 at the IUAV University of Venezia, about the most relevant transformations of the agricultural landscape in the Veneto region in the past, and about how it is transforming now, due to the Common Agricultural Policy and urbanization processes. A better understanding of the uncommon relationship between urban/urbanized spaces and agricultural spaces in central Veneto plane, is the main issue of a new personal research now beginning, whose first results this paper intends presenting.

The new regional spatial plan, some regional data and some observations on the field, are the starting material for the reflections presented in the next paragraphs.

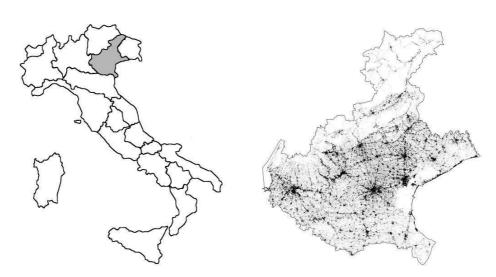


Figure 1 The Veneto region in the Noth East of Italy (left) and the dispersed and polycentric urban structure (right) of the central plain (Veneto Land Cover, GSE-Land - Urban Atlas, 2007).

2. SPRAWL AS A COUNTRYSIDE DESTROYER. "LAND CONSUMPTION" STUDIES IN ITALY IN THE SECOND HALF OF THE XX CENTURY

Sprawl is surely one of the spatial phenomenon most discussed in the beginning of the XXI century. Considered as a degeneration of the city growth, the sprawl was largely criticized at least since the 1920s (Bruegemann, 2005) and considered as a form of land misuse (Stamp, 1948).

In Italy the problem of urbanization as land consumption and misuse (in Italian "consumo a spreco di suolo") was studied by G. Astengo (Astengo, 1982). With the It.Urb.80 project, Astengo, who, in the 1970s was the Italian referent at the Urban Affairs Committee of the OCSE, wanted the Italian researchers and administrations to reflect about land consumption as a consequence of increasing urbanization, that was strongly hitting Italy in the Sixties and Seventies. The "consumo di suolo" became a popular concept thanks to a slight change in its meaning due to the Italian expression, where "suolo" means both "land" and "soil" in the pedological sense. These are equally limited resources, in danger because of the changes towards urban use. The It.Urb.80 research, which involved the major Italian schools under the guidance of Astengo between 1983 and 1990, was centred on the idea of measuring, even quantitatively, the land misuse, especially intended in terms of consumption of agriculture land. Economic crises that hit Italy in that period made the problem of protecting agriculture activity a primary issue in the national policy, trying to reduce, with the "piano verde" (green plan) the Italian food dependence from abroad. In this political climate it became important to understand the interferences between urbanization processes and agriculture activities. In the same years, another national research that involved many Italian universities: "Interaction and Competition between Urban Systems and Agriculture for Land Use Purposes" was aimed at identifying and describing the conflicts and positive or negative interaction between urbanization and agriculture due mostly to two factors: abandonment of areas waiting to be urbanized, and the difficulty to rationally cultivate areas included within the urbanized territory (CNR-IPRA, 1988). Nevertheless it became clearer and clearer that the reality was a little bit different. First of all the Italian feed deficit in the late 1980s was over, and the CAP was facing now instead a problem of overproduction. Other functions of farming land, besides production, are then "discovered". "Instead of focusing exclusively on the shortage of land as a productive factor capable of meeting food requirements [...] the problem of land use/abuse [must be considered] from the point of view of the transformation of farming land in relation to the consequent problems determined in the satisfaction of needs associated with the quality of life" (CNR-IPRA 1988, XXV).

Moreover, in certain areas, particularly those where agriculture was accompanied by industrial activity, the interaction between agriculture and urbanization is not necessarily negative, actually often agricultural activities in urbanized areas receive more of an impulse to better itself in production techniques: even if it is true that urban growth does not consider the need of the farm, and has instead promoted the fragmentation of

farms and fields and favoured precarious jobs, urbanized areas do not necessarily create the conditions for abandoning farming activities. This was particularly true in Veneto, one of the regions studied by CNR-IPRA research, where a particular kind of interaction between farming land and urbanization could be observed.

3 THE CENTRAL VENETO "CITTÀ DIFFUSA"

In the last thirty years of the twentieth century, Veneto central plain (and in particular the area between the cities of Padova, Mestre, Treviso and Castelfranco), within the more general context of the North East of Italy, underwent a strong development, characterized by the rapid transformation of the rural economy into an industrial one, based on small and medium enterprises. Urbanization process exploited the traditional polycentric structure of the territory, based on a repeated micro-hierarchy of cities, towns, villages and isolated houses, directly linked with the farmland. The development was sprawled everywhere in the central plane, and the whole society enriched sensibly, so that this growth was called the North-East miracle. "For every house a shed", for every village an industrial area (and more than one): the territory was exploited in a manner that was apparently approaching anarchy.



Figure 2 The typical pattern of the first central Veneto sprawl with urbanization along the roads and industrial buildings spread around, in a well maintained and still diverse farming land (By courtesy of D. Longhi).

The widespread construction of disparate, yet highly urban elements onto a predominantly rural social fabric has deeply transformed the Veneto landscape, really muddling the traditional categories of town and countryside, making the previous settlement system denser, already dispersed due to the agricultural activity. Since the 1980s the population density is strongly increasing out of the consolidated cities, directly in the countryside. People living in the città diffusa don't come from cities, as victims of gentrifications: on the

contrary they normally move from a village to another, maintaining strong relationships with the original family and previous friends; they use the territory as a large village, whose "squares" are indifferently shopping malls and historical centres, to be travelled over by car. Normally these people have chosen to live here, "in the countryside", or in this "urban-rural structure" (as some of them call it), because they consider the city as the place of traffic, chaos and conflicts, "an extraneous dwelling place, not beloved, not desired" (Dolcetta, 2005). They appreciate the possibility to have a private garden, to keep pets and other animals, to travel by car, to park it easily, to know all their neighbours, to be free, to keep close to "nature" and connected with the countryside (Castiglioni and Ferrario, 2007), where they keep a lot of informal relationships. Nearly everyone has a grandfather, an uncle, a friend who owns a piece of farmland. That is why it is so important to look at the territorial layer shaped by agriculture, if one wants to know the città diffusa better.

4 THE "AGRICULTURE LAYER" AND ITS PARADOWES

The observation of the agriculture layer in the città diffusa is not evident. Unlike urbanization processes, easily reconstructed by cartography comparison, transformations in farming space could be more appreciated going personally around the città diffusa, than with the cartographic help. Only recently, with the large diffusion of new instruments such as googlemaps, with the liberalization of the regional ortophotography, and finally with the fulfillment of the new land-cover map of the entire region, extended to the V level of the Corine Land Cover system also to the exurban territory (Veneto Region, 2009b), one can have a more precise idea of the consistence and form of the agricultural space all over the region.

Combining zenithal glance with the necessary contact with the people that live in this space, use it, and have opinions on it, observation of agricultural space within the città diffusa can give us an unexpected view. This happens especially if we compare it to the territory outside the mostly urbanized area, in the rural parts of the region, where agriculture has no strong economic competitor, and land ownership is much less fragmented, that is where agriculture activity can be more "rational". Three paradoxes can be recognized:

Firstly, agriculture as an economic activity inside the città diffusa is still rentable. The economic value of agriculture per hectare is high, so that also small and smallest land tenures are still cultivated. This happens probably because of the high fertility of the soil, because of the presence of some typical production of very high income (as for example the red "radicchio" of Treviso), and finally, maybe also because of the easy exchange with city markets.

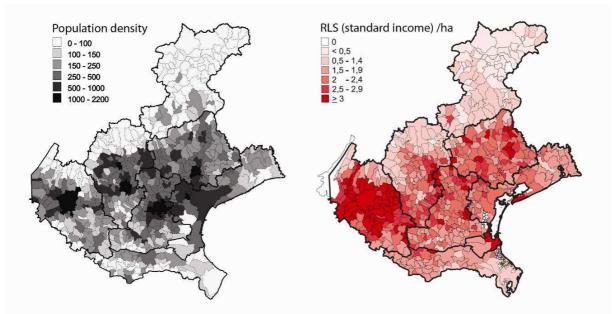


Figure 3 Agriculture as an economic activity inside the città diffusa has the highest income per hectar. Population density (left) and RLS (agriculture gross standard income) /ha (Elaborated from Atlante dell'Agricoltura veneta official data, 2003)

Secondly, agricultural space has a better ecological value inside the urbanized territory than outside. A strongly fragmented ownership of the farmland inside the città diffusa territory, prevented those rationalizations and simplifications that elsewhere made the complex hedges and trees system on the field borders to be lost. This does not mean that here we do not find the usual problems of pollution by chemicals fertilizers and disinfectants and reduction of the fertility of soils, but at least "fragmented" farmland prevents its ecosystem fragmentation.



Figure 4 Two farming land pattern in comparison. The highly urbanized agricultural landscape in the centre of the plain (left) preserved hedges and paths; the low urbanized agro-industrial landscape in the south of the Veneto region is instead very simplified (right). They contribute differently to ecological network (Reven fly 2006, by courtesy of Veneto Region).

Thirdly, historical agricultural landscape is better preserved within the città diffusa than in the "rural" territory. Even if, due to the mechanization of the 1970s, of the famous mixed farming landscape with cultivation of vineyard on the trees (dated from the Roman Empire), only a few remains and are preserved, the agriculture landscape within the urbanized areas is still very typical, and is often used by people around as a sort of territorial park (Ferrario, 2007).

These paradoxes highlight something very recently acknowledged to agriculture space: its multifunctionality. Not only multifunctional production (food, but also energy and ecological network), but also multifunctional use: farmland within the città diffusa has a role as space for leisure, and in a certain way it is a space of living. In this sense it could be read as a contemporary agricultural landscape.

Nevertheless, nowadays the situation is changing, and the *città diffusa* is going to face a new situation.



Figure 5 Sunday afternoon in the città diffusa. Behind the main roads where urbanization is denser, between an industrial settlement and an ancient countryside path, people use agriculture territory as a park.

5 METROPOLIZATION PROCESSES

In the last few years, in fact, global economy has brought our "Veneto way" in question, shaking its principles of "small is cool" and "do it yourself" from their very foundations. If in the economic field a selection seems to have taken place in which the bigger companies are prevailing, the Territorial Regional policies are following the same direction. It is now time for "big" things: the passage of European V corridor in the centre of the plane, the new motorway bypassing Mestre, the highway at the foot of the Alps arch, the Valdastico South motorway, Veneto City (a large real estate operation of private initiative, that should take place in a 500.000 square meters area at the junction between the A4 motorway and the new Mestre bypass motorway), according to densifying issues in urban planning some skyscrapers are going to be built. These operations move in the opposite direction with respect to how the middle Veneto system of living and working goes. They might change radically the functioning of this region, while, in the intention of the region administration, they guarantee the fact that a new Veneto metropolis is under way.

The urban materials that nowadays make up the *città diffusa* are already very different from the ones employed until the Nineties: no more self-built single houses and small roads quickly paved in between private gardens, no housing scheme to build series of similar semidetached or detached houses, but instead wide spaces with block of flats promoted and built directly by the building trade, and big roads for fast car traveling. No more small company sheds next to the old farms, but unifying and rationalizing of big and small companies areas. All of this, together with the population increasing environmental awareness, can explain also the growing territorial conflicts observed in this area (Vallerani and Varotto, 2006).

Also agriculture space is facing some new transformations that are not always going towards a higher sustainability. The growing surface occupied by industrial greenhouses, for example, can become a problem because of the loss of natural ingredients in the soil under the cultivation. In this case agriculture itself is endangering the quality of agriculture space.

A similar risk comes from the expanding surfaces dedicated to biomass for energy production. Despite wood has good ecological performances, biomass cultivations are not so environmentally friendly and the risk is again simplification of agricultural landscape.

In this simplifying, polarizing and densifying scenario, if the central Veneto must become a metropolis, what space will be left for good quality agriculture space?

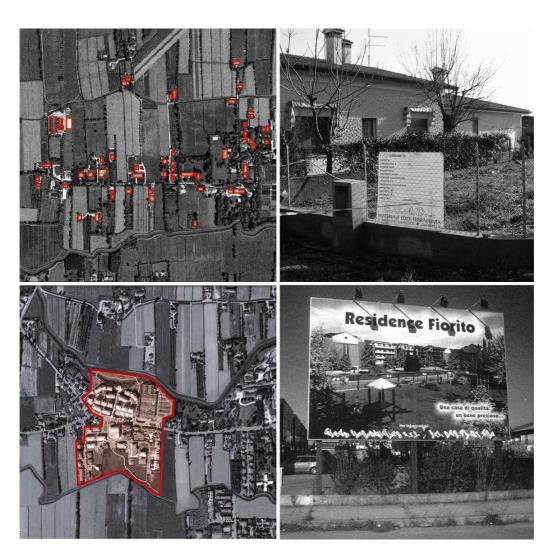


Figure 6 Different urban materials make up the first and the second città diffusa. Next to the self-built small villas (above) we have today real estate operations of a much bigger scale (below). This is happenning also to industry buildings and infrastructures, albeit with different timing (Graphics and photos V. Ferrario).

6 THE REGIONAL SPATIAL PLAN AND THE IDEA OF AGROPOLITANA

One possible reply comes from the New Regional Spatial Plan, recently adopted by the Veneto administration (Regione Veneto, 2009).

The agriculture space problem is not new for the Veneto regional planning, since the first (but never adopted) regional plan, at the end of the 1960s, with the idea of "campagna urbanizzata" (urbanized countryside), coming from the coordinator G. Samonà, as a "system of services locations technologically and culturally advanced, that make living in the rural area similar to living in a town" (Samonà, 1969). "*Campagna urbanizzata*" was a lucid reading of what it was happening at the local level in the time when the first *città diffusa* was under construction, and the first attempt at managing it at a regional level.

Fifteen years later, the second regional plan instead, divides agriculture space in four categories, based on its "integrity": more o less compromised by urbanization process. Behind this idea there is now the concepts of land consumption and ecological problem, that are thought to be resolved with protected areas.

The newly adopted regional plan has new issues nowadays. The first one is surely the landscape, highlighted by the European Landscape Convention, where the spatial planners are asked to consider not only the outstanding landscapes, but also the everyday or degraded landscapes, among which we can include the città diffusa.

The second issue is the construction of the European ecological network, involving the Veneto region in a new systemic reflection about biodiversity, and about diversity in agriculture, far from the idea of protected areas.

The third problem is climate change. In this region in fact it could have a strong impact because of the plain being just above sea-level and the high demand of water for industry and agriculture.

Agricultural space is strongly concerned by all these issues, as well as by that of the new Veneto metropolis. It can offer multifunctional services and performances not yet completely explored.

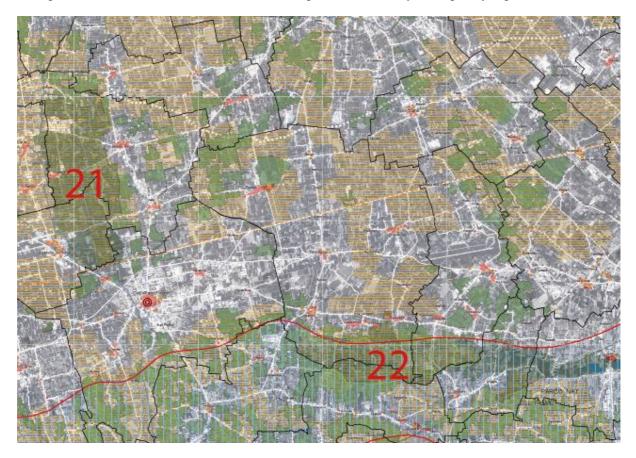


Figure 7 A particular of the 1:50.000 new Veneto spatial plan with areas with high rate of farming land use (yellow), agropolitan areas (grey), urbanization (white) and ecological network (bordeaux and green).

Aware of its importance, the new plan try to observe Veneto agricultural space in its characteristics, considering both real and potential contribution to biodiversity, the relationships with urbanization, the conservation of landscape, services to the people and the environment. Four kind of agricultural areas were recognized, covering altogether the whole plain.

Aree ad elevata utilizzazione agricola (territories with high rate of farming land use) in which the prevalence of agriculture land use is desirable and needs protection, for economic, environmental and landscape reasons.

Aree ad agricoltura mista a naturalità diffusa (territories with mixed rural land use and high natural gradient) are those, mostly situated on the hills and mountains, in which an extensive agricultural activity is conducted in between the natural system and with a large presence of meadows and prairies.

Aree ad agricoltura periubana (territories with peri-urban agriculture) close to the main urban areas, where the function of farming space is mainly maintaining the "green" into the urban fabric and giving direct services to urban dwellers.

Aree "agropolitane" ("agropolitan" areas) are those where agriculture is (it is forecasted or envisaged it will be) more mixed with stronger urbanization in buildings and infrastructure, while still producing food and preserving its economic, environmental and social value.

Such a distinction, quite clearly defined and designed on a 1:50.000 map together with ecological network, is unfortunately not followed by such clearly defined norms: in the end it doesn't make much of a difference if a certain territory falls within one or the other of these categories.

This weakness is probably due not simply to a lack of political will, but perhaps to a real difficulty in imagining how this territory could become in the future, growing without losing its specific "agro/urban" character.

7 CONCLUSIONS AND OPENINGS. AGROPOLITANA AS A RESILIENT CITY?

Urban agriculture, vertical agriculture, edible cities, wake urbanization (Branzi, 2005): there are many symptoms that agricultural space integration is nowadays globally in the urban design and spatial planning agenda. The Veneto region had developed a model for this integration. This model was maybe not the best possible one, but had some positive aspects, that cannot be forgotten in favour of an only land consumption-based judgment, nowadays newly relished.

Land consumption must be considered not only in quantitative way, but as a problem of form of the territory, having a better or worse performances face to the new challenges, first of all that of sustainability.

Agriculture space has the capacity to host different contemporary functions as food production, energy production, environmental values, leisure and other social services. It's permeability has good performances in case of rain picks and at certain condition it can be used in emergency as flooding areas. The actual long agricultural and food chains of production (for example the chain mais cultivation - cattle breeding - beef to export) could be shorten to increase sustainability. In case of need, food for its inhabitants could be produced by the territory itself. To small scale and part-time agriculture should be recognized their role of landscape and environment conservation.

In this sense the presence of agriculture space inside the upcoming Veneto metropolis, must be considered a warranty for a sustainable future, since it may improve the urban structure resilience (Urban Agricolture, 2009).

Agropolitana - the name was suggested in the very beginning of the new regional plan process (Bernardi, 2004, maybe quoting Friedmann, 1978) - is not only a way to read città diffusa agro/urban structure, but also a way to imagine a possible future for the Veneto metropolis: a metropolis with agriculture inside it.

This idea, however, must be explored integrating better the agriculture space into the urban development design, having a concrete project for this space, a project for its multifunctionality.

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