AGROPOLITANA: COUNTRYSIDE AND URBAN SPRAWL IN THE VENETO REGION (ITALY)

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Abstract
Agropolitana: countryside and urban sprawl in the Veneto region (Italy)
In the Veneto central plane, historically shaped by agriculture, the countryside is being taken over by a particular form of urban sprawl, called città diffusa (dispersed city), where cities, villages, single houses and industries live alongside agriculture. This phenomenon is generally analyzed mainly as a typical urban/rural conflict, and the sprawl gets criticized as a countryside destroyer.
By observing some paradoxical situations in the città diffusa in Veneto, the contrary is apparent – urban sprawl seems to have been rather a conservation factor for the ecological and cultural richness of the agricultural space. Agricultural space itself plays an important multifunctional role in this territory. If seen from this point of view, dispersed urbanization in the Veneto region can be seen as a sort of prototype of a new contemporary form - neither urban nor rural – of cultural landscape, where farming spaces can have a public role strictly linked to the urban population's needs.
Can this character be preserved through the metropolization process now envisaged by regional policy and planning, and already happening? Can the “Agropolitana” concept introduced by the new Regional Spatial Plan help to imagine and obtain a resilient metropolis, while maintaining a strong agricultural layer inside it?
Key words
urban sprawl, città diffusa, agricultural landscape, agropolitan development

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1. Introduction

In the northeast of Italy, in the rich and densely populated Veneto central plane, the countryside among the main cities is being taken over by a strong urbanization process, where towns, villages, single houses, single industries and industrial areas live alongside agriculture. Called città diffusa (dispersed city), in the 1990s (Indovina 1990), it was, and still is, strongly criticized as a form of sprawl (Gibelli and Salzano eds. 2007, among others). Nevertheless, it has been defined in many different ways (Bianchetti 2003), exciting various opinions about it; for example, as an embryonic status of the new European contemporary city of the 21st century (Secchi 1996). Seen in this way, the città diffusa is not an enemy to fight, but rather, a territory needing to be (re)designed (Munarin and Tosi 2001), starting from the "materials" with which it is built.

In this perspective, this paper will analyze one of these materials, too often forgotten in the studies dedicated to the città diffusa. Simply considered either as a natural urbanization background or instead its victim, agricultural space has had great importance in how the città diffusa was born, in how it works nowadays, and maybe, in how it can help facing sustainability challenges in the future.

This paper moves from some conclusions drawn from a PhD research study discussed in 2007 at the IUAV University of Venice, about the most relevant transformations the agricultural landscape has undergone in the Veneto region and how it is transforming now, due to Common Agricultural Policy and urbanization processes. A better understanding of the uncommon relationship between urban/urbanized spaces and agricultural spaces in the central Veneto plane is the main point of this new research, whose starting hypothesis I will present here. The new regional spatial plan, some regional data and some observations in the field are the starting materials for the reflections presented in the paragraphs that follow.

Fig. 1: The Veneto region in the Northeast of Italy (left) and the dispersed and polycentric urban structure (right) of the central plain (Veneto Land Cover, GSE-Land - Urban Atlas 2007).
2. Urbanization as a countryside destroyer? “Land consumption” studies in Italy in the second half of the 20th century

Sprawl is surely one of the most discussed spatial phenomena at the dawn of the 21st century. Considered as a degeneration of city growth, the sprawl has been largely criticized since at least the 1920s (Bruegemann 2005, also for a vast bibliography in the English language) and generally considered as a form of land misuse (Stamp 1948), even if recognizable as one of the most common urban forms in contemporary western countries (Sieverst 1997, Ingersoll 2003). This largely negative judgment is generally based on its private-car-based mobility and high public social and environmental costs (Burchell et al. 1998), and as a problem regarding the “protection of the countryside”, for example in the town and country planning system in England (Hall 1973). In this last approach, the mix between urban space and agriculture (Bauer and Roux 1976) is seen as a waste of agricultural land, a degeneration of rural landscapes and as an obliteration of the countryside by the technical progress of the town (Juillard 1973).

In Italy, the problem of urbanization as land consumption and misuse (in Italian “consumo 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, which 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 its double-meaning in Italian, where “suolo” means both “land” and “soil” in the pedological sense.

These are equally limited resources, both in danger from the changes towards urban use. The It.Urb.80 research study, which involved the major Italian schools under the guidance of Astengo between 1983 and 1990, was centred on the idea of measuring, even quantitatively, land misuse. This was especially intended in terms of consumption of agricultural land: the economic crises that hit Italy in that period made the problem of protecting agriculture activity a primary issue in national policy, which tried to reduce Italian dependence on food from abroad with the “piano verde” (green plan).

In this political climate, it became important to understand the interferences between urbanization processes and agricultural activities: in the same years, another national research study that involved many Italian universities: “Interaction and Competition between Urban Systems and Agriculture for Land Use Purposes” aimed at identifying and describing the conflicts and the positive or negative interaction between urbanization and agriculture, due mostly to two factors: abandonment of areas waiting to be urbanized and the difficulty in rational cultivation of 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 food deficit in the late 1980s was over, and the CAP was now facing a problem of overproduction instead. Other functions of farmland besides production were 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 farmland 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 was not necessarily negative; actually, agricultural activities in urbanized areas often received more of an impulse to better themselves in terms of production techniques. Even if it was true that urban growth did not take into account any of the natural needs of the farm and had instead promoted the fragmentation of farms and fields and favoured precarious jobs, urbanized areas did not necessarily create the conditions for abandoning farming activities.

This was particularly true in Veneto, one of the regions studied by the CNR-IPRA research, where a particular kind of interaction between farmland and urbanization could be observed.

3. The central Veneto città diffusa

In the last thirty years of the twentieth century, the Veneto central plain (and in particular, the area among the cities of Padova, Mestre, Treviso and Castelfranco), within the more general context of the Northeast 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. The whole society was enriched sensibly, and this growth was called the Northeast miracle. The development was accompanied by a strong increase in population not only in the consolidated cities but also within the countryside and by a strong urbanization process that exploited the traditional polycentric structure of the territory, based on a repeated micro-hierarchy of cities, towns, villages and isolated houses that were directly linked with the farmland.

The widespread construction of disparate, yet highly urban elements into a predominantly rural social fabric (Fig. 2) has deeply transformed the Veneto landscape, confusing the traditional categories of town and countryside.

People living in the città diffusa don’t come from cities, as victims of gentrifications. On the contrary, they normally move from one village to another, maintaining strong relationships with the original family and previous friends; they use the territory as a large village, whose “squares” are 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 to be the place of traffic, chaos and conflicts – “an extraneous dwelling place, not beloved, not desired” (Dolcetta, 2005). They appreciate the possibility of having a private garden, keeping pets and other animals, travelling by car and parking without too much effort, knowing all their neighbours, being free and keeping 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 or 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 “agricultural layer” and its paradoxes

The observation of the agricultural layer in the città diffusa is not evident. Unlike urbanization processes, easily reconstructed by cartography comparison, transformations in farming space could be more appreciated by personally visiting the città diffusa, rather than with cartographic help. Only recently, with the large diffusion of new instruments such as Google Maps, with the liberalization of the regional ortophotography, and finally with the fulfillment of the new land-cover map of the entire region (which now also covers the exurban territory with data up to the V level of the Corine Land Cover system; Regione del Veneto, 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 necessary contact with the people who live in this space and have opinions on it and 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 agricultural activity can be more “rational”. We can then spot these three paradoxes.

Firstly, agriculture as an economic activity inside the città diffusa is still rentable. The economic value of agriculture per hectare is high, so the small and smallest land tenures are still cultivated (Fig. 3). This happens most likely because of the soil being highly fertile, allowing for the production of very high income (for example, from the red “radicchio” of Treviso), and finally, maybe because of the quick and easy exchange with city markets.

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 has prevented those rationalizations and simplifications that have caused the complex hedges and trees system on the field borders elsewhere to be lost (Fig. 4). This does not mean that we do not find the usual problems of pollution by chemical fertilizers and disinfectants and reduction of the fertility of soils here, but at least “fragmented” farmland prevents fragmentation of its ecosystem (Romano, Paolinelli 2007).

Fig. 3: Agriculture as an economic activity inside the città diffusa has the highest income per hectare. Population density (left) and RLS (agriculture gross standard income)/ha (Elaborated from Atlante dell’agricoltura veneta official data, 2003).
Fig. 4: Two farmland patterns in comparison. The highly urbanized agricultural landscape in the centre of the plane (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 the ecological network (Reven fly 2006, by courtesy of Veneto Region).

Fig. 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 agricultural territory as a park.
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, only a few examples of the famous mixed farming landscapes (with the cultivation of grape-vines “married” to the trees in the “piantata” system, dated from the Roman Empire, as in Desplanques 1959) remain and are preserved, the agricultural landscape within the urbanized areas is still very typical, and is often used by people who live nearby as a sort of territorial park (fig. 5) (Ferrario 2007).

These paradoxes highlight something only very recently acknowledged to agricultural space: multifunctionality. Not just multifunctional production (food, energy and ecological network), but multifunctional use: farmland within the città diffusa has a role as space for leisure, and in a certain way, it is a living space. In this sense, it can be explained as a contemporary cultural landscape. Nevertheless, nowadays the situation is changing, and the città diffusa is going to face a new situation.

5. Metropolization processes

In the last few years, the global economy has brought our “Veneto way” in question, shaking the 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 prevail, the regional policies follow the same direction. It is now time for “big” things: the passage of the 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 will take place in a 500,000 square meter area at the junction between the A4 motorway and the new Mestre bypass motorway) and, for population density issues in urban planning, some skyscrapers will be built. These operations move in the opposite direction with respect to how the middle Veneto system of living and working goes. They might radically change the functioning of this region, while, as were the intentions of the regional administration, they guarantee that a new Veneto metropolis is under way.

The urban materials that make up the città diffusa nowadays are very different from the ones employed up 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 blocks of flats promoted and built directly by the building trade (fig.6), and large roads for travelling around quickly by car. No more small company sheds next to old farms, but unifying and rationalizing large and small companies' areas. All of this, along with the population's increasing environmental awareness, can explain the growing territorial conflicts observed in this area (Vallerani and Varotto 2005).

Agricultural space, too, is facing some new transformations that are not always leading towards 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 cultivation. In this case, agriculture itself is endangering the quality of agricultural space. A similar risk comes from the expanding surfaces dedicated to biomass for energy production. Despite the fact that wood has good ecological performances, biomass cultivations are not so environmentally friendly and the risk is, again, in the 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 agricultural space?

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

6. The regional spatial plan and the idea of Agropolitana

The New Regional Spatial Plan recently adopted by the Veneto administration (Regione Veneto 2009) tried to give an answer to the question of efficient spatial planning including space for agricultural activities.

The agricultural space problem is not new for Veneto regional planning: the first (but never adopted) regional plan began at the end of the 1960s, with the idea of “campagna urbanizzata” (urbanized countryside), coming from the coordinator, G. Samonà, as a “system of technologically and culturally advanced service locations
that make living in the rural area similar to living in a town” (Samonà 1968).

Fifteen years later, the second regional plan, divides agricultural space into four categories based on its “integrity” – whether it will be more or less compromised by the urbanization process. The concepts of land consumption and ecological problems that are thought to be resolved with protected areas now appear in light of this idea. 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 regarding biodiversity and diversity in agriculture – far from the idea of protected areas.

The third problem is climate change. In this region, in fact, climate change could have a strong impact owing to the fact that the plain is just above sea level and there is a high demand for water for industry and agriculture.

Agricultural space is strongly affected by all these issues, as well as by the new Veneto metropolis. It can offer multifunctional services and performances that have yet to be completely explored.

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

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

Aree ad agricoltura mista a naturalità diffusa (areas with mixed rural land use and high natural gradient) are those areas, mostly situated on the hills and mountains, in which extensive agricultural activity is conducted among a vast quantity of meadows and prairies.

Aree ad agricoltura periurbana (areas with peri-urban agriculture) are close to the main urban areas, where the function of farming space is mainly maintaining the “green” in the urban fabric and giving direct services to urban dwellers.

Aree “agropolitane” (“agropolitan” areas) are those areas where agriculture is (forecasted or envisaged to be) mixed with stronger urbanization in buildings and infrastructure, while still producing food and preserving their economic, environmental and social value.

Such distinctions, quite clearly defined and designed on a 1:50,000 map along with an ecological network (Fig. 7), 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 change in the future, growing without losing its specific “agro/urban” character. That is, there is a lack of territorial projects.

Agropolitana - the name was suggested in the very beginning of the new regional plan process (Bernardi, 2004, probably quoting Friedmann 1987) as a way to explain città diffusa agro/urban structure - could also be a way to imagine a possible future. The Veneto central plane is not an urbanized countryside: it is a metropolis with a lot of agriculture inside it.

7. Agropolitana: an idea for the future?

Since their beginnings, urbanization processes have been interpreted not only as countryside destroyers, but also as a potential form of cooperation of rural and urban inhabitants, resulting in the disappearance of the town/country dichotomy (Juillard 1973). In the past, this long-lasting idea inspired several famous urban theories - from Howard’s garden-city (1902), to Schwartz’s stadtlandschaft (1946) - and fascinating predictions - from Wells’ diffusion of cities (1902) to Sorokin and Zimmermann’s rurbanisation (1929).

The present debate will stress the need for a new relationship between cities and open territory, giving agriculture a new centrality in our territories’ future. If we should “delegate to nature” many of our cities' needs (Sassen, 2009), urbanization should become “awake”, learning not by industry processes, as it did in the 20th century, but by agriculture, capable of gently manipulating nature (Branzi, 2005). The presence of agricultural space in urban structures is extremely important since it may improve their resilience (Garnett 1999, Mougeot 2005, Urban Agriculture 2009).

Could the Veneto città diffusa be considered to be a sort of prototype for this integration? This model is maybe not the best possible one, but has some positive aspects, despite the land consumption issue. Land consumption must be considered not only in a quantitative way, but also as a problem of territorial form, having a better or worse performance in the face of new challenges, the first being sustainability.

Agriculture space, in fact, has the capacity to host contemporarily different functions like food production, energy production, environmental values, leisure and other social services. Its permeability performs well in cases of heavy rain and, under certain conditions, it can be used as an emergency flooding area. The chains of production (for example the corn cultivation - cattle breeding - beef to export chain) can be shortened to increase sustainability. When needed, food for inhabitants can be produced by their own territory. We should also acknowledge the role of small scale and part-time agriculture in landscape and environment conservation.

In this sense, the presence of agricultural space inside the upcoming Veneto metropolis must be considered as a warranty for a sustainable future. The agropolitana concept, however, must be explored in order to better integrate agricultural space into the design of urban development. Devising a concrete project for this space – a project for its multifunctionality – is what still needs to be done.
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Summary

In the Veneto central plane, historically shaped by agriculture, the countryside is being taken over by a particular form of urban sprawl, called città diffusa (dispersed city), where cities, villages, single houses and industries live alongside agriculture. This phenomenon is generally analyzed mainly as a typical urban/rural conflict, and the sprawl gets criticized as a countryside destroyer and a land consumer. As observed since the Eighties by some researches about land consumption, in the areas where agriculture was accompanied by industrial activity, the interaction between agriculture and urbanization was not necessarily negative; actually, agricultural activities in urbanized areas often received more of an impulse to better themselves in terms of production techniques. Even if it was true that urban growth did not take into account any of the natural needs of the farm and had instead promoted the fragmentation of farms and fields and favoured precarious jobs, urbanized areas did not necessarily create the conditions for abandoning farming activities. On the contrary agriculture landscape was in a certain way “protected” by urban sprawl and agriculture marginalization. This was particularly true in the Veneto central plane. 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, where agricultural activity can be more “rational”, we can then spot these three paradoxes. Firstly, agriculture as an economic activity inside the città diffusa is still rentable, with production values per hectare higher than in the rural territory. Secondly, agricultural space has a better ecological value inside the urbanized territory than outside. Thirdly, historical agricultural landscape is better preserved within the città diffusa than in the rural territory, and it is often used by people who live nearby as a sort of territorial park. If seen from this point of view, dispersed urbanization in the Veneto region can be seen as a sort of prototype of a new contemporary form - neither urban nor rural – of cultural landscape, where farming spaces can have a public role strictly linked to the urban population's needs. In the last years Veneto region is facing a metropolization process. The new simplifying, polarizing and densifying scenario asks to reconsider the place that agriculture and agriculture space has. If in the past urban sprawl seems to have been rather a conservation factor for the ecological and cultural richness of the agricultural space, we now must say that agricultural space itself plays an important multifunctional role in this urbanized territory. Agriculture space, in fact, has the capacity to host contemporarily different functions like food production, energy production, environmental values, leisure and other social services. Its permeability performs well in cases of heavy rain and, under certain conditions, it can be used as an emergency flooding area. Agriculture space will probably be obliged in future to reply to increasing and conflicting requests.

Agropolitana - the name was suggested in the very beginning of the new regional plan process as a way to explain città diffusa agro/urban structure - could also be a way to imagine a possible future. The Veneto central plane is not simply an urbanized countryside: it is a metropolis with a lot of agriculture inside it. In this sense, the presence of agricultural space inside the upcoming Veneto metropolis must be considered as a warranty for a sustainable future. The agropolitana concept, however, must be better explored in order to integrate agricultural space into the design of urban development. Devising a concrete project for this space – a project for its multifunctionality – is what still needs to be done.