# **Towards a Productive Mesh** of the European City-Territory



Roberto Sega

With the aim of identifying different perspectives for the future of territory—starting from the dimension of production in the context of diffuse urbanization—this Ph.D. research intends opening a critical reflection on the dynamics of territorial polarization and marginalization underway in Europe. According to the last European Competitiveness Report drawn up by the European Commission, production is still to be considered as an engine of prosperity linked to the real economy and to the development of the territory; thus the need for a new re-industrialization program for Europe. In recent decades production has been one of the territorial elements exposed to more extensive changes, while at the same time it has become one of the elements least subject to reflection in terms of spatial construction of the territory. In order to avoid the risk of a dualistic model of development, that opposes urban areas to productive and secondary territories, this article claims the need to include production in the debate on the structural specificity and potentialities of the European city-territory as one of its constituent elements.

<sup>&</sup>lt;sup>1</sup>The expression "city-territory" was used in Italy in 1962 by Piccinato, Quilici and Tafuri to describe not only the widespread urban condition of some territories, but also to focus the attention on a possible method of development necessary to define a new urban dimension.

#### The Role of Production in Constructing the City

The setting up of production and manufacturing facilities in the outskirts of existing cities or within the limits of industrial cities drew workers from the countryside, leading to the consequent abandonment of marginal territories. On the other hand, the decentralisation of production in peripheral, outlying places—due to the cheap offer of labour or to functional reasons—led to different phenomena of urbanization.

The need to solve—in a hygienist way—the large imbalances produced by the cities of the industrial revolution, led to the devising of urbanism based on zoning (CIAM), leading to the recognition and separation of the different materials that compose the city. In 1918, between Lyon and St Etienne, Tony Garnier devised his idea of the "ville industrielle", where he shows how different functions (including manufacturing and production), "[...] give rise to different principles of settlement and different relations with the topography and the main infrastructures. Thus zoning became a design tool of urban planning, not only an attempt to separate and adequately distance the different functions according to their degree of compatibility or incompatibility" (Secchi 2005). Despite the ambitions of spatial continuity and balance, zoning quickly became a planning instrument for fragmenting the territory and isolating those activities that are incompatible with residential dwelling (such as the industrial zones), in actual fact depriving production and manufacture from the key role it had hitherto played in constructing the city up until that moment in time.

Over time production has abandoned the city. There are many spatial reasons why this has occurred: for instance because of the transport congestion due to an incompatibility between goods traffic and urban traffic, the given dangers and drawbacks underlying particular production processes (pollution, coaling systems, noise etc.), or due to economic logic tied to land value. Hence we have witnessed the conversion of factory buildings into lofts, museums, and universities or more simply into office blocks and new residential plots subsequent to demolition. These seem the only economic operations in which policy-makers are able to deal with the cumbersome physical legacy of areas of production and factory districts. One of the issues of the change in strategy is raised by great scale of the plots, the presence of heavy constructive materials or of dedicated infrastructure like rail and technical networks, or indeed the possible pollution of the soil. Re-cycling projects destined for public use, or programs of mixité between residence and production, remain exemplary and not everywhere feasible. At any rate, it is clear that productive and manufacturing activity, in a Post-Fordist economy, are seen to be incompatible with the traditional idea of the compact city.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup>We quote here as reference some Italian press and istitutional reports that describe the dramatic situation of the secondary sector: (Istat 2011); (Valori 2014); Il Sole 24 Ore (Bricco 2015); Nomisma (De Nardis 2015); (Oggionni 2015).

One of the major reasons is precisely the loss of relevance of the real economy within society (Harvey 1989). Both, urban growth and production, have become evermore hostage of financial and fiscal rules tending towards a marked detachment from the physicality of territory.<sup>3</sup> However, production has the capacity to bind itself to the territory, drawing strength from it, at the same time ensuring its economic development. The relationship between city and production—that today appears to have lost its spatial aspect—is on the contrary still present and indeed essential in terms of economic and social issues. According to Calafati, "the territorialisation of the investment depends both on the (economic) relational context of the enterprise and on the (social) relational context of individuals working for that company" (Calafati 2009). A new form of growth driven by the concept of wellness, could introduce new standards regarding the territorialisation of enterprises and the capacity of a site to attract investments.

# **Production and Manufacture Within the European City-Territory**

Production can be both active element in constructing urban dispersion (Indovina 2013) or a passive element when, over time, it has found itself surrounded by urban growth (Figs. 1 and 2). If today it seems that production is no longer part of the traditional cityscape, it is on the contrary one of the constituent elements of the European city-territory. Looking at the maps, it is evident that most of European productive and manufacturing sites are located in the outskirts of cities or in urbanized territories between the same.

If the purpose is to maintain and encourage the presence of manufacturing in Europe, <sup>4</sup> the relationship between production and a new condition of urbanity should be studied and designed. By analysing closely the territorialisation of production in different regions, we can recognize and conceptualised at least four categories that are followingly detailed (Fig. 3).

# **Industrial Suburbs Serving City-Centres**

The localization of production complies with the traditional model of land value. Activities tend to locate where land costs are lower, or devalued by the presence of heavy infrastructures or by the proximity to low quality urban material. Depending on the growth of the city, production activities tend to be located in peripheral areas

<sup>&</sup>lt;sup>3</sup>"In the Era of globalization, companies are no longer ingrained but anchored in a territory" (P. Veltz).

<sup>&</sup>lt;sup>4</sup>"For a European Industrial Renaissance" European Commission (2014).

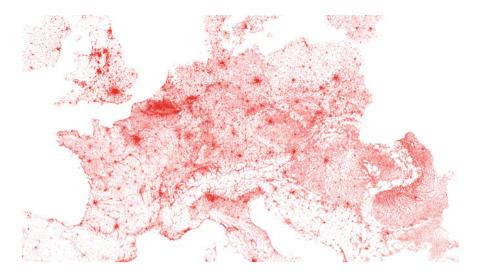


Fig. 1 Urban areas in Europe. The red shows the residential dwellings. Elaborated by the author. *Data* Corine Land Cover 2006, EEA



Fig. 2 Industry in Europe. The productive activities are marked in black. Elaborated by the author. *Data* Corine Land Cover 2006, EEA

increasingly far away from the city-centre, occupying agricultural areas. For logistical reasons these are located close to efficient motorway junctions, thus allowing them to be less affected by urban traffic congestion. Their relationship with the city is sometimes conflicting, anonymous but at the same time indispensable.



Fig. 3 Territorialisation of production in Europe. Drawn up by the author

Examples of this category are the large and medium-sized cities isolated in the territory and having a precise, concentric shape (Ile de France).

### Industrial Corridors Between City-Centres

Production grows along the main interlinking routes between existing cities. It is one of the constituent elements of a particular pattern of settlement. Its structure is linked to the presence of a strong linear road infrastructure (seen as pipes). It may also be tied to a particular morphology (for instance the presence of valleys, canals or rivers). Production and manufacture takes advantage of the visibility deriving from its location along the infrastructural corridor to advertise its business. It is in fact essential for the economy of the territory where it is located. It is often subject to tax and legislative concessions by the local government to ensure its presence.

Examples of this category are the territories of: Valais, Via Emilia, the territory along the Rhone river between Lyon and Avignon.

# One-Factory Cities

Cities reached a crisis together with their factories. Cities forced to transform their economies following the crisis in the economic groundbase. The massive closure of production and manufacture has left important traces in the structure of these cities. Infrastructures, buildings and whole parts of the city have been redesigned and rationalized following the drop in production and manufacturing facilities. There are experiments of 'functional *mixité*' and 're-cycling' projects made possible by a strong political will for urban renewal.

Examples of this category are the cities of: Barcelona, Bilbao, Manchester, Lyon, Karlsruhe, and Turin.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup>This category of "one-factory cities" and cities listed as examples are drawn from Calafati, from his book "Economie in cerca di città".

#### Productive Diffuse Territories

This category refers to diffusely urbanized territories. Where production and manufacturing facilities are present alongside other materials that comprise the territory. This is accompanied by considerable road network and by the presence of a high level of access to services. In some Italian cases, production even became the reason for the urban sprawl in the first place. In these spaces, each act of territorialisation of production at the same time leads to the redesign of the selfsame city, constituting a step towards the construction of a territorial figure denoted as city-territory.

Examples of this category are the territories of: Veneto, the area around Milan, Flanders.

# Re-manufacturing Europe: A Project for the Horizontal Metropolis

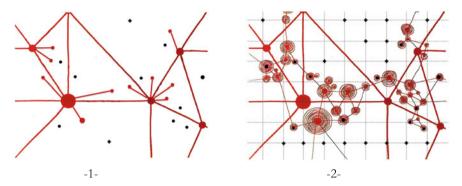
"The city after the economic crisis will be radically different from the city as we know it today" (Secchi 2013).

Today, Jeremy Rifkin introduces the advent of the "Third Industrial Revolution" (Rifkin 2011): a democratization of manufacturing, based on renewable energy resources, characterized by the presence of new ways to use, exchange and store energy. The possibility of storing energy and exchange it, using it at different times of day and year would in fact have a considerable spatial impact on the organisation of territory. Without trying to rely on technical solutions to solve all our problems, it becomes central to reflect on new scenarios of production in areas of diffuse urbanisation, using the energy crisis and climate change as stressors for interpreting new trends in production, transport infrastructure, and from the possibility offered by a delocalized energy production.

In a moment in time when technological progress is ushering in changes in manufacturing and production processes, all those involved in planning the city-territory, in order to recover the spatial role of production in constructing city, need to go back to closely looking at the spatial relations between production and other urban materials nearby.

# Towards a Productive Mesh of the European City-Territory

The relationship between production and others materials that make up the city-territory is, quite often, the result of coincidences and necessity rather than deliberate planning. On the contrary, the hypothesis corresponding to the question posed by this research study, is that production affects, or may affect, the



**Fig. 4** The polarized model versus a more horizontal growth pattern. Drawn up by the author. In the diagram on the left, centres interact with each other, but peripheral areas and territory between poles still depend on the 'city-pole', to which they refer in order to access a larger scale of relations. Secondary territories are isolated and suffer from a social and economic marginalization. In the diagram on the right, a lower hierarchy between elements is ensured by a complex pattern of overlapping relationships. The heterogeneous elements work in balance and spatial continuity without internal contradictions

functioning of a city-territory. Hence, planning and designing its relation with the urban areas and the territory in general could be a way of intervening on the specific structure of each single city-territory. In a period where latching onto the economic recovery becomes essential, an opportune growth strategy, capable of enhancing the endogenous potential of the territory through the design of a European 'productive mesh' would be desirable, rather than that the indiscriminate increase of the density in rural and suburban areas. We are referring here to a new physical support of development that allows inhabitants of the European city-territory to enjoy all the heterogeneous elements comprised in the same, without suffering the differences of not living in a compact traditional city (Fig. 4). In this scenario the condition of marginality of the city-territory would hence no longer be superseded via logics of polarisation and densification, but thanks to the implementation of a productive support capable of resolving—by way of 'prototypes of complementarity' between urban elements and production—the 'functional incoherencies' that the project of the compact city has failed to solve. A point which in actual fact has caused and led to the exclusion of productive and manufacturing activities from the landscape of the traditional compact city.

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