OS/ n. 1

The construction of urban-industrial spaces: the case studies of Fiat in Termoli (Italy) and Citroën in Aulnaysous-Bois (France)*.

La costruzione degli spazi urbano-industriali: i casi studio della Fiat di Termoli (Italia) e della Citroën a Aulnay-sous-Bois (Francia)^{*}.

MADDALENA CHIMISSO

Università degli Studi del Molise maddalena.chimisso@unimol.it

ABSTRACT

This paper intends to demonstrate the relationship between the city and workplaces in the Contemporary Age reflecting on the connection between big industry and the territory, considering the effects they had on the environmental context where new construction technologies could be experimented and "other" forms of workplace organization and cultural aggregation could be conceived. The attention given to the role of big industry in small territorial realities allows to study the outcomes and social and economical incidents which big industry had in the construction of urban and industrial spaces in context where important changes and rapid development took place.

The awareness of the fragility which still characterizes this research, especially with regards to the French case object of a recent ongoing study, in an attempt to underline similarities and differences between the Fiat plant in Termoli (Italy) and the Citroën plant in Aulnay-sous-Bois (France) using a comparative historical prospective.

The comparison of these specific case studies allowed for a research beyond national borders adopting a methodology of a «comparatisme de portées plus réduite, qui entreprendre l'étude parallèle de sociétés proches, ayant connu des évolutions de même sens, influencées les unes par les autres, soumises à l'action des mêmes grandes causes».

*A version of the article in Italian was published with the following title *La* costruzione degli spazi urbano-industriali: i casi studio della Fiat di Termoli (Italia) e della Citroën a Aulnay-sous-Bois (Francia) in Francesca Capano, Maria Ines Pescariello and Massimo Visone, edited by, *La citta altra. Storia e immagine della diversità urbana: luoghi e paesaggi dei privilegi e del benessere, dell'isolamento, del disagio, della multiculturalità/ History and image of urban diversity: places and landscapes of privilege and well-being, of isolation, of poverty and of multiculturalism, Acts from the VIII International Congress of the Interdepartmental Centre for Studies on the Iconography of European Cities 2018, CIRICE, Napoli 2018, B6, pp.115-124. As regards the French case, the research was made possible thanks to a Postdoctoral international fellowship offered by the Fondation Maison des sciences de l'homme to researchers in social sciences and humanities (Atlas Programme 2017).*

CODICI ERC

SH5_11 Cultural heritage, cultural memory SH6_8 Social and economic history SH6_6 Modern and contemporary history

KEYWORDS

Fiat Citroën Comparative approach Workplace Factory

Productive plants of the Fiat Factory in Termoli and of the Citroën in Aulnay-sous-Bois: initial comparative contributions

This essay intends to analyse the changes regarding industrial landscapes as well as territorial policies determining the economic developments in certain European regions. Starting from the policies for industrial economic development, which the countries introduced from the second half of the 20th century, it is possible to study specific cases of European industrial history during the contemporary age.

The principles introduced by François Perroux of the *pôle de croissance* and of polarized development² are the starting point to understand both the policies for regional development in France as well as the Italian ones influenced considerably by Perroux's theories.

At the beginning of the 1960s, the planning of new industrial zones by central governments could be interpreted as the achievement of a greater policy favouring economic growth and development towards the industrialization of territories lacking economic expansion. In addition to government intervention, the big industries took on major responsibilities and had a key role in the automobile industries two such examples are the Fiat³ Factory in Italy and the Citroën⁴ Factory in France.

The analysis and comparison between the Italian and French cases offer the possibility of studying the territorial transformations and social and economic impact of the big industries in small urban contexts not yet touched by the presence of industries. It also allows to concentrate on the relationship between big industry and territory (*aree industriali, zone d'activité industrielle*) as well as on productive plants, witnessing the changes brought on by big industry.

The Fiat Factory in Termoli represents a case study to elaborate on the strategy of expansion created by the Turin company in the first years of the 1970s when, thanks to government incentives favouring the industrialization of Southern Italy according to law n. 634/1957⁵, planned a series of investments in the south which so the involvement a both public and private capital to encourage economic development in areas lacking industrial development. The investment plan included the opening of a new plant in Termoli where still today the image of the industrial nucleus of the Biferno valley continues to be reflected in the Fiat Factory⁶.

Similar to other national realities (the Tekne in Taranto⁷, Italconsult in Syracuse⁸), Termoli's workplace is an expression of specialized technicians in the planning of industrial spaces, infrastructures and auxiliary buildings. The Fiat Factory and its structures were specifically designed by Fiat Engineering specialists who began to project and assemble both industrial and non-industrial buildings such as commercial, residential and tourist spaces⁹.

The Citroën Factory of Aulnay-sous-Bois also chose to establish the plant locally, fully inserting it in the national policies determining the areas of industrialization. The creation of the plant was decided according to an agreement between Citroën and the Comité Interministériel d'Aménagement du Territoire¹⁰.

The French factory began to function in 1973 two years after the Termoli plant (1971) becoming not only the factory which produced new cars but also «*l'usine d'un nouveau mode de production* [...] *intégrant au plus vite le progrès de l'automation dans le cadre de la robotisation*»¹¹: preceding the enlargement of the Termoli factory in 1985 by over decade, when the last of the three plans built (Termoli 3) represented the first accomplishment of a fully automatized factory (Fabbrica ad Alta Automazione)¹².

During the period of maximum growth determined by industry, Aulnay-sous-Bois and Termoli saw great progress in economic activities, an increase in demography and an intense level of urbanisation. Notwithstanding the similarities, there is an important

OS/ n. 1

difference: if for the French case the opening of Citroën determined the creation of an industrial area which developed in time, in Termoli the same dynamics did not take place in fact it can be considered a case of "industrialization without industrialization". Even if important environmental transformations took place to favour industrialization, the outcome was disappointing and industrial development was either weak or inexistent.



1. Termoli. Consortium of the Industrialization Nucleus of the Biferno Valley, General development plan 1991. (in II patrimonio industriale in Molise. Itinerari di un censimento in corso, a cura di Roberto Parisi e Ilaria Zilli, Crace, Narni 2012, p. 233).

The Fiat Factory in Termoli (1971-still active)

The Turin company was one of the first northern enterprises to establish its plants in the South of Italy. Fiat's investment plans in the South initially included the industrial complexes in Bari, casino, Vasto-San Salvo, Nardò, Termini Imerese, Lecce, Sulmona and Termoli.

The first true arrival of Fiat in Molise took place in September 1969, when a group of Fiat technicians¹³, headed by the engineer Luigi Ravelli¹⁴ conducted an on-site inspection of the area where the first plant would be built: the contract of sale of the land was signed on the 3rd of July 1973¹⁵. The Termoli plant represented fully the design characteristics that the Fiat division for construction and plants (*Divisione Costruzione e Impianti*) had devised a model for industrial buildings and plants: Plant X represented the idealization for the design of new factories to be built in the South of Italy¹⁶.

Fiat engineering imagined a complex regarding a daily production of 500 automobiles of medium cubic capacity, taking into consideration both the intermediate and final phases of production. The planning criteria adopted for the study contemplated various needs: technological functionality, the workplace, social service, the insertion of the plant in the landscape and Termoli represented the first example of this experiment.

Between 1971 and 1985, three production units were constructed on the land parcel in Termoli: if the *Termoli* plant (1971) represented a factory based on the Taylor-Ford model and the *Termoli* plant (1975) demonstrated the want to override the theory of Scientific Management, it was the *Termoli* plant (1985) which registered a directional movement towards an industrial production based on total automation. However, total automation soon reached a critical level in the new Termoli factory as the various types of motors and the extreme complications in the productive flow created problems in the assembly process¹⁷: the traditional modes of production were once again introduced alongside the more modern technological systems. A new hybrid model of organization and production (Taylor-Ford model and total automation model) was born and is still used today. After the Taylor-Ford model of the 1960s and that of total automation of 1980s the Termoli Factory case can represent an example this hybrid model which the San Nicola plant in Melfi had completely exceeded¹⁸.

The arrival Fiat not only influenced notable changes in the consortium but also transformed the territory and social economic conditions of the neighbouring urban centres. The attention towards the insertion of industrial plants within the referral context immerge from archival documentation regarding Plant X¹⁹ along with the technical accounts accompanying the creation of specific plants²⁰. The interest with respect to a superior political development of the territories can be found in the documentation regarding residential units built to face a problem of housing and offering all the necessary services for well-being beyond the workplace²¹.

The compartment of low-cost construction represented a strategic sector (social policies and the increase in earnings) for investments by Fiat Engineering. The choice to design houses for its workers by the Turin company was connected to the company's commitments in the advancement of typology projects, in the development of the innovative technological construction and in the predisposition of economical and financial plants²².

From 1972 the Construction and plant sector (*Servizio Costruzione e Impianti*) designed a Model residential complex for the social housing for the workers in the new Fiat industrial factories in the suburban areas of L'Aquila, Frosinone and Campobasso²³. Once again Fiat Engineering elaborated a model of referral just as it had done for the industrial establishments. The construction of social housing was created for the workers located in industrial areas of Frosinone (the municipalities of Piedimonte San Germano, Acquino, Pontecorvo, Sant'Elia Fiumerapido), the industrial nucleus of the Biferno valley in Termoli (the municipalities of Guglionesi, Campomarino, Termoli) and in the industrial area of Sulmona (the municipality of Sulmona). The geographic distribution was conceived so as to insert new housing in the social and economic context of each municipality without altering the natural state of the existing urban context and respecting the future urban expansion of the areas destined for the residences²⁴. One again the Molise region represented a fertile territory of experimentation for Fiat Engineering.



2. Termoli. Fiat Factory plant. (in II patrimonio industriale in Molise. Itinerari di un censimento in corso, a cura di Roberto Parisi e Ilaria Zilli, Crace, Narni 2012, p. 233).

The Citroën productive plant in Aulnay-sous-Bois (1973-2014)

The decision to launch a Citroën productive plant in Aulnay-sous-Bois was part of the political programming of the Comité Interministériel d'Aménagement du Territoire that had set a series of guidelines to stop the constant establishing of industrial plants in Paris, favouring decentralization during the second half of the 1960s.

Already in the first *demande d'agrément* in 1967²⁵, the establishment of this plant was indicated as one of the conditions that Citroën had imposed to initiate policies of decentralization to partially transfer its productive potential in the suburban areas. The new plants should have been established in the proximity of an urban zone so as to resolve the housing problems for the workers, to benefit from an existent infrastructural network and to have easy access to energy sources.

The 180 hectare lot of land bought in Aulnay-sous-Bois in 1966²⁶ fully responded to the necessary characteristics: it was situated north of an urban centre were other industrial complexes already stood, it was 16 km from Paris, it was in an area serviced by road and rail infrastructures which permitted access to the site, it was inserted in an urban context where the municipality had already programmed the construction of a new residential quarter and "Aulnay 3000" would had represented an excellent solution even for the establishment of the Citroën workers²⁷.

Similar to the plant in Termoli, even in Aulnay-sous-Bois, the planning of Unitè de production was carried out by the Bureau d'Étude Construction Citroën that had designed a plant «appelée à devenir notre Super-Usine de la région parisienne. Visible par tous, en bordure des grands axes autoroutiers, actuels et futurs, elle seraaux yeux des voyageurs, l'image d'un essort de la Marque»²⁸ construction of the Aulnay site began in July 1972, the plant began functioning in April 1973. In the Molise region and only with the creation of Termoli 3 in 1985 did the plant reach the highest level of automation, the new Unitè de production in Aulnay-sous-Bois immediately distinguished itself for its modern productive process: the entire plant represented the most advanced level of technology and automation in the production process.



3. Planimetry of the Citroën factory in Aulnay-sous-Bois. (in Jacques Malezieux, Emploi et résidence des populations d'origine étrangère: le cas d'Aulnay-sous-Bois in «Annales de Géographie», t. 94, n. 525, 1985, pp. 546-560, in part. p. 180).



4. Territorial organisation of Aulnay-sous-Bois. (in Jacques Malezieux, Emploi et résidence des populations d'origine étrangère: le cas d'Aulnay-sous-Bois in «Annales de Géographie», t. 94, n. 525, 1985, pp. 546-560, in part. p. 181).

In 1982 the Citroën plant faced an exceptional internal social conflict: innumerable strikes by the workers who manifested their disappointment towards a form of work organization which they consider «un véritable esclavage»²⁹. To cope with the internal crisis and handle the new global market, the French company decided to renovate and relaunch the factory. The objective was to construct a new automobile in the Aulnay plant, to implement a new mode of production which included the use of new technologies and the ulterior implementation of automation in the productive process. These aspects would have improved productivity and also reduced the number of workers thus limiting the number of workers' strikes.

In 2014 the economic strategies employed by the management at Citroën led to choosing Possy, Mulhouse and Sochaux as factories destined to the production of a new vehicles and marked the end of the C3 model production along with the closure of the Aulnay-sous-Bois factory.

The *Etablissement public foncier d'Ile-de-France*, having recognized the economic value, as recently acquired a good section of the lot where it intends to create a mixed quarter of residences and commercial activities: as of today, the project remains unexecuted. It is hoped that in the future even a partial recovery of the structures will bring to light the history and the memories of a factory which shaped the entire surrounding territory³⁰.

¹ Elise Julien, Le comparatisme en histoire. Rappels historiographiques et approches méthodologiques, in «Hypo-thèses», n. 1 (8), 2005, pp. 191-201, in part. p. 193.

² François Perroux, Note sur la notion de Pôle de croissance, in «Économie appliquée», n. 1-2, 1955, pp. 307-320.

³ Bibliografiat. Saggi, studi, ricerche sulla Fiat (1899-1996), edited by Maria Rosaria Moccia, Scriptorium, Torino 1998.

⁴ Jean Louis Loubet, Citroën, Peugeot, Renault: histoire des stratégies d'entreprises, ETAI, Bologna 1999.

⁵ Modifiche ed integrazioni della legge 29 luglio 1957, n. 634, recante provvedimenti per il Mezzogiorno, Gazzetta Ufficiale n. 186, 04.08.1959, in http://www.normattiva.it (last consultation: 22.02.2015). See Nicla Dattomo, La legge 634/57 e il progetto di sviluppo industriale per il Mezzogiorno, in «Storia Urbana» n. 130, 2011, pp. 45-74.

⁶ Maddalena Chimisso, Termoli città industriale? Il Centro di studi e piani economici di Roma e le prospettive economiche della regione molisana nel secondo Novecento, in VisibileInvisibile: percepire la città tra descrizioni e omissioni, edited by Salvatore Adorno, Giovanni Cristina and Arianna Rotondo, Acts from the VI International Congress AISU 2013, Scrimm Edizioni, Siracusa 2014, pp. 958-968.

⁷ Nicla Dattomo, Il piano Tekne per l'area di sviluppo industriale di Taranto, in «Storia Urbana», n. 130, 2011, pp. 137-167.

⁸ Fabio Salerno, Il piano dell'Italconsult del Consorzio Asi di Siracusa. Tra coerenza distributiva e grandi prospettive, in «Storia Urbana», n. 130, 2011, pp. 105-136.

⁹ Michela Comba, edited by., *Maire Tecnimont. I progetti Fiat Engineering (1931-1979)*, SilvanaEditoriale, Milano 2011; see Rita D'Attorre, *Disegni e progetti Archivio Maire Tecnimont*, in Comba, edited by., *Maire Tecnimont*, cit., pp. 144-247.

¹⁰ Jacques Malezieux, *Emploi et résidence des populations d'origine étrangère: le cas d'Aulnay-sous-Bois in «Annales de Géographie»*, t. 94, n. 525, 1985, pp. 546-560, in part. p. 549.

¹¹ Ivi, in part. p. 556.

¹² Domenico Cersosimo, Da Torino a Melfi. Ragioni e percorsi della meridionalizzazione Fiat, in «Meridiana», n. 21, 1995, pp. 35-68.

¹³ The group of Fiat technicians who undertook the site inspection in Termoli were the engineers Ravello, Fulcheri, Di Piramo, Villa, Melzi and the quality surveyor Ramassa. They were accompanied by Florindo D'Aimmo and Nicola Musacchio, respectively the president and secretary of the Consortium of the Industrialisation Nucleus of the Biferno Valley; see the Fiat Historical Archive (from now on, FHA) Fond A.1. Fiat S.p.A, sub-fond A.1.1 Fiat S.p.A-Capogruppo, box 496/1, file "Fiat-Termoli, Sopralluogo del 02.09.69".

¹⁴ The engineer Luigi Ravelli (1910-1976) graduated from the Polytechnic of Turin and worked in the studio of the engineer Vittorio Bonadè-Bottino for four years. In 1938, he joined the Fiat Plants Construction Service, becoming director in 1972, cfr. «IllustratoFiat», XXIV, n. 3, 1976, p. 11.

¹⁵ FHA, *Fond A.*1. *Fiat S.p.A.*, sub-fond A.1.1 Fiat S.p.A-Capogruppo, box 73, file "Termoli. Atti notarili. Volume N. 1757, Copia autentica dell'atto di compravendita in data 3 luglio 1973 tra [il] Consorzio per il Nucleo di Industrializzazione della Valle del Biferno e [la] Fiat S.p.A. –Torino".

¹⁶ The Maire Tecnimont Archive (from now on, MTA), box T641, file "Costruzione e Impianti s.p.a. Fiat Engineering, Fiat Stabilimento X. Relazione tecnica, luglio 1973".

¹⁷ Cersosimo, Da Torino a Melfi, cit.

¹⁸ Maddalena Chimisso, La Fiat di Termoli 1970-1992. Produzione industriale e trasformazioni territoriali nel Molise contemporaneo, PhD thesis in History of Europe, Academic Year 2014/2015, Università of Molise, 2015.

¹⁹ MTA, box T641, file "Fiat Stabilimento X, Relazione tecnica, luglio 1973".

²⁰ FHA, *Fond A.t. Fiat S.p.A*, sub-fond A.1.1 Fiat S.p.A-Capogruppo, box 496/1, file "Fiat-Termoli Stabilimento di Termoli".

²¹ Sergio Pace, *Abitare Fiat*, in *Maire Tecnimont*. I progetti Fiat Engineering (1931-1979), edited by Michela Comba, SilvanaEditoriale, Milano 2011, pp. 127-143, in part. p. 127.

²² Ivi, p. 128.

²³ Rita D'Attorre, Disegni e progetti Archivio Maire Tecnimont, in Maire Tecnimont, cit., pp. 144-247, in. part. p. 234.

²⁴ MTA, box D134, file "Servizio Programmazione, Fiat Progetto Case Sud. Progetto generale", p. 3.

OS/ n. 1

²⁵ Jacques Malezieux, La grande entreprise et la banlieue: Citroën à Aulnay-sous-Bois. Évolution récente des relations industrie-milieu, in Villes en parallèle, t. 2, n. 11, 1986, pp. 162-182, in part. p. 164.

²⁶ Centre d'Archive de Terre Blanche, Archives patrimoniales de PSA Peugeot-Citroën (from now on, CATB-PSA), Délibération du Conseil d'Administration, "PI2008AD-0093, Séance du 20 Septembre 1966".

²⁷ Archives nationales de France-Pierefitte-sur-Seine, Direction de l'habitat et de la construction, cote 19850059/5, "Construction de logements à Aulnay-sous-Bois".

²⁸ CATB-PSA, "DOS2017FIG, 20178 -Unitè de production de Aulnay-sous-Bois".

²⁹ Malezieux, La grande entreprise et la banlieue, cit., in part. p. 171.

³⁰ Sylvain Pattieu, Avant de disparaître: chronique de PSA-Aulnay, Plein jour, Paris 2013.