

# Utopia and Fascist foundation cities

## The case of Torviscosa

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### Abstract

The foundation cities were the principal expression of Fascist urban planning that was linked to the industrial urban utopias of the 19th century. This construction pursued a new social model that envisioned harmonious co-habitation among the residents, the relative end of class conflict, the promotion of autarchy, the organisation of the new anthropological model of a radiant society in which the dichotomy between city and countryside would be superseded. In this article, we analyse the case of the town of Torviscosa, founded in the lower Friulian plain in 1937, amidst swampland subject to reclamation whose economic activity, the production of viscose, was a response to international sanctions that were applied to Italy after the invasion of Ethiopia the preceding year.

### 1. Utopias and ideal cities

The word Utopia should be understood in its most authentic meaning. If we limit ourselves to the etymology of the term, we find two meanings: the first, *u-topia*, negates itself, being a non-place. The second, *eu-topia*, emphasises instead the possibility of a happy place. The numerous texts that summarise these reflections may be grouped into two principal schools. On one hand, those regarding tales of utopia, referred to by writers such as Thomas More, Campanella, Paruta, Francis Bacon, Cyrano de Bergerac, Fontanelle, Tissot de Patov, Swift, Morelly, Voltaire etc., and the industrialist utopia of Socialist and collectivist inspiration that appeared in Europe during the 19th century. Although it was a milestone in its literary genre, Thomas More's *Utopia* of 1516 represents in reality a chapter of a much longer literary tradition that began with Plato. The novelty of his work, which would influence many of the later utopian writers, lies really in the fact that the utopian narration is used as

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a critical tool of contemporary society. The industrialist utopia however does not propose itself as an antithesis of the new course of history; instead it accepts this as a basis even as it criticises history and attempts to offer solutions to what it considers distortions.

Several elements are common to the two traditions, such as the search for liberty and an ideal social model, confidence in progress, technology, science, in the future of humanity (Bénichou P., 1977). Next to these characteristics, the geographic-political potential that accompanies these projects should be emphasised. Representations of the city and of society go hand in hand. Thomas More, in his famous book, hypothesises an ideal state closed on an island but surrounded by regions that are equally distant among themselves, each with defined residential institutional, communitarian and production spaces. Similarly, Fourier and Owens and the other industrialist utopians thought of a new model of urbanisation that was to have been extended progressively at a planetary level. The majority of utopians are, finally, social reformers and their conception of the city remains quite vague. For these reasons, their urban idea is usually a derivation of their social critique.

Quite different instead is the school of thought regarding ideal cities that Greek tradition of the Milesian school takes, which returns to the fore with Humanism, developing at the same time as the reflections on utopia. Meaning and function of the aesthetic dimension of the ideal cities as well described in the first treatise on architecture of the modern era *De re aedificatoria* by Alberti, finished in 1452 and published in 1485, which influenced the studies that accompanied cities with works of art during the Renaissance. City and State, in Renaissance philosophy, are related concepts, in part interchangeable, in the sense that it becomes natural to see in the city the expression of the magnificence of the State and vice versa (see Burckhardt J., 1980). The foundation of an “ideal city” did not respond to reasons of necessity but aspired to create a superior model of social cohabitation. In this context, an extreme possibility was represented by the attempt to translate utopia into an urban structure.

According to Krufft, the elements that define the ideal city are utopia, aesthetic reflection and urban transposition (See Krufft H.W., 1990). The common motif that links ideal cities and utopias lies in the faith that it is possible to achieve earthly or extra-earthly improvement of the individuals who decide to participate in this experience (Rosenau H., 1974, pg. 13). The transposition of the social structure in a form of utopian cohabitation to identify the ideal city, moreover, is not sufficient but requires also urban-planning and architectural reflection. If utopia, however, envisions the awareness of the inhabitants that they are protagonists of an original project, in the case of the ideal city this awareness should be the jurisdiction only of the creators, whose intent in any case is to confer an exemplary character to their creation which will exceed reality, thus improving it.

The case of Torviscosa reaffirms these considerations. This was an attempt to create an ideal city, with evident utopian components, aimed at creating an exemplary model, the synthesis of political, economic and social exigencies in a territory which in the past had been both marginalised and depressed.

## 2. Fascism and the rural revolution

The reclamation projects undertaken by Italian Fascism are to be inserted into a wider ideological framework given that they were a response to the need to eliminate the social tensions that threatened the new Fascist order, they pursued an improvement in national agricultural productivity, but above all they should have represented the pillar of a new national social geography. Since 1917, faced with rural protests, Fascism had emphasised the need to tie the poorest farmers to the land through a generic agrarian reform. These proposals became a priority within a more systematic governing programme following the so-called “Speech of the Ascension” held by Mussolini in 1927 (Mussolini, B. 1927). In his monologue, the Duce considered the question of the physical health of the Italian people. Having noted the low fertility rate, less than 27 per thousand, he introduced a demographic challenge as a precondition for the economic and moral success of the country. The reasons for the low Italian birth-rate were to be found in industrial urban development, which had weakened the nation and were at the origin of the decadence under way in contemporary western civilisation.

In later days, in an article in “Il Popolo d’Italia”, under the emblematic title *Sfollare le città*, (Dispersing our cities) Mussolini explained the guidelines of the new territorial organisation which the government pursued (Mussolini B., 1928). The strategy to follow, if necessary also with coercive means, was rural life, a solution that would have bypassed the conflict between free-market capitalism and socialism, defended the patriarchal family, a hierarchical and authoritarian microcosm, increased procreation by Italian women, stopped migratory flows, favoured development, independence and the expansionist designs of the regime. This road would also have sanctioned the productive primacy of modern agriculture, integrated with industry, creating a new figure among agricultural workers, linked to the land and aware of the most authentic values of Italian culture. To this end, laws that were undoubtedly effective were promoted to intervene in the under-utilised areas to produce profound changes in the landscape, in the productive model and in the social organisation of the Italian rural landscape.

On the whole, the results of the project were contradictory and in any case, below expectations especially since a basic overall strategy was lacking. Urban development did not stop, agricultural land speculation was never really blocked, private initiative was often in conflict with public initiative, the exponents of industrial and agricultural capitalism, who represented an economic base for the new strategy and consensus of the regime, maintained their privileges – while the environmental impact was neglected. Beyond this general strategic defect, the regime obtained local and partial successes, in particular with the creation of twelve towns, defined as being “foundation” cities, built between 1928 and 1940, accompanied by the construction of numerous minor settlements with differentiated functions and an autarchic industrial vocation, in Italy, Italian East Africa and in the Dodecanese (See Nuti L., pg. 231-246).

Even though in a majority of cases the economic objectives that guided the construction of these centres were never achieved, the more interesting aspects, carefully exploited by the regime's propaganda, regarded their rapid production schedules, the pleasant architectural and urban composition, the concentration of services and sport structures as well as, especially in the case of Torviscosa, where private initiative was freer from the shackles of the regime, the integration into the productive system of areas that were formerly marginal, the improvement of the inhabitants' material conditions.

The search for a new way to conceive of the city found its manifestation in two principal types: the agricultural cities, deriving from the great land reclamations and those industrial that exploited the presence of particular raw materials. These nucleus centres were not cities in a total sense, as Mussolini himself often repeated<sup>2</sup>, more likely that included centres created for the control of a territory that had been colonised only recently, and from whence an administrative structure, that linked the peasants to Fascist organisations and through them to the national policies of Fascism. The example of the foundation of the Roman military colonies influenced these realities through the orthogonal road layout that permitted the easy division of the settlement in functional and hierarchical sections, with typically an emphasis on four or five areas: an area of houses for the executives, those dwellings for the office and factory workers, the production area and a zone reserved for institutions.

The Ancient Roman elements are noticeable also in the constant presence of porticoes in the piazzas and the use of local construction materials that wound up giving the foundation cities an aspect of sober dignity that would later become a symbol of autarchy and national pride. At the same time, the foundation cities recalled the medieval towns for their urban profile, with the town square and the towers that adorned the *palazzi* of the municipality and the *Case del Fascio* while inspiration was taken from Modernism for the geometric simplicity of the buildings. The overall image of modesty, which did not spare public edifices, was compensated at the end by the harmonious alternation of green spaces and built-up surface areas, by the attention paid to the sunny illumination of the buildings and the direction of the winds as well as the search for panoramic effects over the surrounding landscape.

Table no. 1. *The twelve new cities in order of completion.*

Mussolinia (today Arborea)	1928	OR	Reclamation
Littoria <sup>3</sup> (1) (today Latina)	1932	LT	Reclamation
Sabaudia	1934	LT	Reclamation
Pontinia	1935	LT	Reclamation
Guidonia	1935	Rome	Air Force service centre
Fertilia	1936	OR	Reclamation

<sup>2</sup> In an earlier stage Mussolini had rejected the definition "city" for these centres, preferring instead the label "rural municipalities". His criticism of the metropolis was later eased, in consideration of the needs of the regime's propaganda. On this topic see Nuti L., 1988, pgs. 231-246.

<sup>3</sup> This was the only city elevated to a provincial capital.

Aprilia	1937 LT	Reclamation
Arsia	1937 Croatia	Coal-mining
Carbonia	1938 CA	Coal-mining
Torviscosa	1938 UD	Reclamation
Pomezia	1938 Rome	Rural Centre
Pozzo Littorio	1940 Croatia	Coal-mining

Source: Ghirardo D., 2003

### 3. The Lower Friulian Plain

Lower Friuli refers to that part of the Friuli-Venezia Giulia Region that goes from the Latisana district on the east bank of the Tagliamento River to the municipalities of Cervignano, Aquileia and Grado<sup>4</sup>. In the middle of this flat territory there is the municipality of Torviscosa, originally a rural town whose place name was Tor di Zuino<sup>5</sup>. The Friulian territorial structure, certainly the product of a certain continuity with Rome and the Latin world, is the promiscuous and complex result of many eras and peoples. For various reasons this is a land where the chronological succession between pre-history, ancient history, Middle Ages, modern history and contemporary history is not completely applicable. More realistically, it has been observed that there are areas in which pre-history and the Middle Ages have often been present down through the centuries (see Tentori R. 1982): most of all, Feudalism, with the presence of several of its more typical institutions that survived at least until Italian unification. The lack of a bourgeois age, comparable to that of other Italian regions, delayed the development of the territory and its inhabitants. Especially in Lower Friuli the socio-economic situation up to the end of the First World War was more or less the same as the end of the 18th century<sup>6</sup>.

As noted, Friuli was long a land of emigration<sup>7</sup>. The only areas with exceptions in this sense were those registering the persistence of large landed estates, as in Lower Friuli. The flat territory, marshland in origin, characterised by the presence of endemic illnesses such as pellagra and malaria, was subject to repeated land reclamation projects beginning with the end of the 19th century. These initiatives, before the Torviscosa project, did not have a systematic character, were not integrated within a larger project of economic development and were left to the

<sup>4</sup> This definition is not undisputed. In fact, if we take as supporting cartography the *Carta politico-amministrativa della Patria del Friuli al cadere della Repubblica Veneta* (Political and administrative map of the Friulian Fatherland at the fall of the Venetian Republic) the district of the municipality of Portogruaro up to the Livenza River is included in Lower Friuli. On this topic see Bertolini G., Renaldini U., 1913.

<sup>5</sup> The geographic coordinates of Torviscosa are the following: 45° 49' 0" N 13° 17' 0" E.

<sup>6</sup> For more on the historic evolution of socio-economic structures in Friuli, see Gaspari P., 1976.

<sup>7</sup> At the beginning of the 20th century, Friulian emigrants alone represented one-fourth of all Italian migration. On this topic see Di Caporiacco G., 1967- 69.

efforts of single actors<sup>8</sup>. Without entering into details that are outside the scope of this treatise, it is possible to summarise the history of these places through a long succession of property transfers among aristocratic families and ecclesiastic agencies over the centuries. After the end of the First World War, the peasants were still oppressed by a system of large landed estates, burdened by debts deriving from unfair contracts that regulated the metayage share-cropping system and field labourers, deprived of any possibility of saving money that might permit them to escape a condition of permanent exploitation. Similarly to other Italian regions, also in Friuli, the demobilisation of the soldiers increased the ranks of the unemployed, provoking social agitation and the occupation of fallow lands<sup>9</sup>. The disorders, that lasted a few years, stopped with the arrival of Fascism which on one hand used a repressive police apparatus and on the other hand, began a series of territorial transformations destined to influence the overall organisation of the area quite significantly.

These transformation took two principal directions, that of land reclamation and the creation of an agro-industrial centre solidly controlled by capital from outside the region. By 1926, a project proposed by the Bignami Anonymous Company, supported by Lombard capital, offered to build a hydraulic and irrigation system of about 70,000 hectares by combining the small properties into bigger units of at least 100 hectares each, destined for the production of fodder so as to feed industrial livestock raising. This project, although supported at a national level by the party, was diametrically opposed to the traditions of the Friulian rural world, more typically made up of a significant number of small owners who risked having their lands expropriated. To avoid altering the established balances and hierarchies, an alternative project, being less invasive, which immediately enjoyed a wide consensus and was in fact put into practise, was developed by several Friulian notables. The initiative led to a modest improvement in productivity but substantially left the preceding social system unaltered, with all its structural deficiencies. Overall, the high fragmentation of the properties was unable to support the families of small owners, who were forced to supplement their income through share-cropping or seasonal labour<sup>10</sup>. In practise, there were glimpses of the excess of labour that would define the crisis of the agricultural world in later years.

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<sup>8</sup> At the beginning of the 20th century in Lower Friuli, 50,000 hectares of terrain were marshland. The population of these lands was around 70,000 inhabitants which was not distributed equally given that entire areas had been abandoned. Agriculture was practised on not more than 20,000 hectares and was often conditioned by the flooding of unmanaged rivers and by the lack of adequate roads. On this topic see De Piero G., 1975.

<sup>9</sup> The landowners of western Friuli, for example, asked their sharecroppers to pay back rents relative to the harvests of 1917 and 1918, after these peasants had abandoned the land due to the Austrian invasion. In 1921 about three hundred sharecropping contracts were cancelled and several thousand in the province of Udine. In the same year, some 500 workers were fired from the shipyard of Monfalcone. On this topic see Bortolotti G., 1988.

<sup>10</sup> According to the data of the Agrarian Land Registry of 1929, in Lower Friuli some 51% of the farms were led directly by their owner, with an average surface of 4 hectares each covering 40% of the cultivated land. Some 13% of the farms, equal to 8% of the surface, were subject to a rental contract, some 10%, equal to 22% of the surface were led by metayage sharecroppers. The farms under mixed management amounted to 26%, covering 31% of the surface land. *Catasto Agrario*, 1929.

In the end the victory of the principal exponents of the regional economy gave a particular profile to Friulian Fascism, with the political component that progressively delegated the management of the economic sphere to the system of older notables, reserving for itself control of trade union activity, propaganda and education. This compromise between agricultural and commercial elites and the political leadership consolidated a traditional, hierarchical, moderately authoritarian, mostly static system. These reasons explain why agriculture in Friuli under Fascism remained the centre of the local economy while that process of industrial restructuring that involved other areas of the country after 1930 did not occur. In this context, Torviscosa represented a novelty and at the same time a synthesis between Feudalism and Capitalism. In general, Fascist land reclamation processes responded to the exigencies of the agrarian bourgeoisie that supported the regime, in that it integrated perfectly with the philanthropic and paternalistic character of that era's capitalists. The colonisation of virgin lands, in fact, favoured the application of modern industrial agriculture without radically altering the delicate, pre-existing social balance of the countryside. The reclamation works involved underdeveloped agricultural areas, thus launching, together with industry, a close relationship of subsidies with the State.

Beginning in the second half of the 20's, Friulian agriculture experienced a profound crisis in its fundamental production that lasted for more than a decade (see De Piero G., 1975). The peasant society, with the end of the period of trade union organisations, returned once again to the traditions of migration. Beginning with the 30's this phenomenon, in addition to the normal foreign destinations, also saw Friulians headed for other Italian regions with greater industrial development such as Piedmont, Lombardy, Liguria, as well as towards places in which vast public works reclamation projects, such as the Pontine Marshes, were undertaken. Even if a bit late, Lower Friuli was also involved in state intervention of this type which was aimed at transforming a marginal area into a highly-specialised productive centre<sup>11</sup>.

#### **4. The area around Tor Zuino and Malisana**

The Italian textile industry, especially that of artificial fibres, had experienced strong expansion on world markets in the 20's. For these reasons it enjoyed a certain autonomy vis-a-vis the state which could not achieve the same level of control it did, for example, in the coal mining sector. Snia Viscosa<sup>12</sup> was the dominant company in

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<sup>11</sup> Land reclamation projects envisioned by Italian Fascism belonged principally to two categories. The first, of national economic-sanitary interest, envisioned state financial intervention for up to 75% of the cost. The second, defined as a local interest, envisioned state financing between 30% and 50%. On this topic see Serpieri A., 1948.

<sup>12</sup> The company Snia (Italian-American Navigation Company) was founded in Turin in 1917 upon an initiative by the Gualino family and supported by capital from the Agnelli family. Two years after the end of the war, Snia became interested in the production of textile and chemical fibres, buying a controlling share of Viscosa in Pavia and the Italian Union of Viscosa Factories in 1921, changing its name into Snia Viscosa. Nuti L., Martinelli R., 1981, pgs. 75-85.

the sector and after the crisis of 1929 it was directed by Senatore Borletti<sup>13</sup> and Franco Marinotti, the creator and founder of the city of Torviscosa<sup>14</sup>. Given that production was heavily dependent upon the importation of raw materials, the National Agency for Cellulose and Paper was founded in 1935 with the intention of promoting research for the production of cellulose from local shrubs with a short reproductive cycle. This agency developed a process of cellulose extraction from giant cane (*Arundo Donax*) later applied by Snia Viscosa<sup>15</sup>.

The guidelines for the choice of the site, shared by the state and the company, excluded land already prepared for intense agricultural use and in an advance productive cycle, preferring instead those areas with a high concentration of labour, with pre-existing or easily constructed roads, equipped with adequate reserves of water sufficiently ample so as to guarantee adequate production. The land that most corresponded to these requisites were those subject to reclamation. The choice of the territory included between Torre di Zuino and Malisana became practicable given that this was an historically depressed area that offered cheap labour and might take advantage of such an important state road as the Napoleonica, the railway line between Trieste and Venice, as well as the proximity to the sea. The overall surface, involved in the initiative was 5,300 hectare, of which 1,410 covered by marshland or fallow, only 710 destined for agricultural use and the remaining divided between woods and pastures. The land was divided into four principal properties, that of the Armenian Brothers, the Bignami family, followed by the Montuoro and Beltrami families, while the remaining was fragmented into over three hundred small property-owners.

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<sup>13</sup> Senatore Borletti (1880-1939) was an eclectic entrepreneur from a family of industrialists. In the 1920's he was the owner of the newspaper *Il Secolo*, founder and president of *Rinascenza*, and from 1926 to 1928 president of the Internazionale football team. On this topic see Turani G., 1987, pg. 2.

<sup>14</sup> The full biography of Franco Marinotti (1891-1966) is not entirely known. He began his career in 1911 as an office worker in a firm from Milan that produced silk waste, thanks to which he was able to spend long periods in Poland and Russia to acquire quite some experience in the sector. A report of the Milan police station from 1926 describes him in this fashion: "*In the industrial environment of Milan... there are rumours of hoarding and removal of precious stones... such that Marinotti may not return to Russia as he is compromised in corrupt affairs with Soviet functionaries... many of whom seem to have been executed... Overall, Marinotti is described as a greedy person... without scruples, gifted with astuteness and duplicity...*" This phase in the life of Marinotti, in any case, is not clear. In 1921, Marinotti became director of the CICE (Italian Company of Foreign Commerce). A report personally requested by Mussolini, at the beginning of the 30's, indicated that: "*Cavaliere Marinotti Francesco... demonstrates excellent moral and political conduct... is director of the CICE... in the commercial, industrial and political sectors enjoys a reputation as a serious and honest person*". In 1929 he became director general of Snia Viscosa, and in 1932 managing director, while in 1939, upon the death of Borletti, president, a position that he maintained together with the absolute control of the company until his death in 1966. On this topic see Bortolotti G., 1988 and Nuti L., 1981.

<sup>15</sup> The question of patenting of the process of extraction throws some shadows on the figure of Marinotti. The vice-president of the National Agency for Cellulose and Paper, the chemist Francesco Giordani, who had developed an extraction process of cellulose from giant cane, had official recognition of his discovery cancelled following a secret accord between the IRI (Institute for National Reconversion) and Snia Viscosa that managed also to obtain the paternity of the patent thanks to the appropriate political support. On this topic see Faucci R., 1975, pgs. 607-630.

The reclamation, begun on 28 October 1937, envisioned three cycles. The first included the arrangement of the land and the construction of rhizomes in 1,200 hectares of the land, the construction of the industrial structure and the necessary infrastructure for the first city nucleus, such as schools, public buildings, residential housing, swimming pool, the industrial area; successive cycles with the cultivation of another two lots, respectively 2000 and 2100 hectares and the completion of the industrial complex and the irrigation channels<sup>16</sup>. The first phase of the work was finished in 320 days, a period of time that was defined by contemporaries as miraculous and which the regime exploited ably for its propaganda while the Futurist Marinetti celebrated with the *Poema di Torre Viscosa*. At the end of the initiative the landscape appeared profoundly changed. Some 132 km of road had been built, 65 km of reclamation canals, 744 km of dykes and main ditches, 783, 661 cubic metres of soil leveled, 600,000 poplars planted to border the canals and three groups of de-watering pumps. After having created the boundaries of the territory on the basis of the road network and the principal canals, the lots were subdivided in common surfaces that varied between 1 and 1.5 hectares (Bortolotti M., 1992, pgs. 79-81). In addition to the monoculture of giant cane, the intensive raising of cattle was introduced to guarantee the natural manure fertiliser needed for the new lots.

Between 1939 and 1945, the cultivation of giant cane was extended throughout the territory. The district was divided into six “model estates” of about one thousand hectares that each hosted about one thousand persons. Each estate was equipped with a combination of buildings arranged around a rectangular court, according to a layout that recalled traditional architecture and located at the centre of the appropriate holding. The entrance, including a central portico, is flanked by two simple symmetrical buildings, in which originally there was on one side the administrative offices and the residence of the director and on the other there were lodgings for the labourers families. The façade continued into a warehouse and concluded with a chapel. The other sides of the complex included garages for machinery, stables, a shop for foodstuffs and various articles. The geometric simplicity of the construction is interrupted by references to monumental architecture such as the entrance structure framed by four high columns. Nearby each estate a building, equipped with showers, wash-rooms, meeting halls, an infirmary and canteen, was erected that served to house the seasonal labourers who in the busy periods, usually between November and December, numbered up to four thousand persons.

As a whole, the “model estates” and the industrial plant were planned so as to perform their productive activity autonomously should conditions be modified, as in effect happened after the war, when the cultivation of giant cane was replaced with poplar groves, given the altered geopolitical conditions that once again permitted and

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<sup>16</sup> A new company was created for the occasion, S.A.I.C.I. (Anonymous Agricultural Industrial Company for Italian Cellulose Production) created by a merger between Snia Viscosa, S.A. Bonifiche Torre di Zuino and Società Bonifiche del Friuli, previously the property of the Bignami family, the principal large landowner of the area who had already participated in the preceding agrarian reform plan. On this topic see Fabbroni F. and Zamò P., 1973, pgs. 11-82.

even made convenient the purchase of timber from nearby Yugoslavia. The consequent reduction in manpower, which before the war had constituted 40% of company costs, led to the partial abandonment of the estates which today, despite still being active, are in need of important restructuring (See Deluisa L., 1966).

## 5. The town of Torviscosa

In addition to the transformation of the land, the highlights of the project were the construction of a town nucleus and the factory<sup>17</sup>. The initial idea envisioned a town of about five thousand inhabitants but the dimensions were soon reduced and the municipality never exceeded some 4,143 persons. It is interesting to note, confirming the subjection of the regime to private initiative and Marinotti's rampant capitalism, that the *Casa del Fascio*, one of the buildings characterising the architecture of Fascist foundation cities, was never built in Torviscosa. As a whole, the project was inspired by the European urban industrial developments of the preceding century and its Italianess was reduced to the exalting of several typically Fascist symbols, such as for example the swimming pool, the two towers in which the outline of the fasces was recognisable, the neoclassical touches on the façades of several buildings. Other constructions, envisioned in the original project, were never made concrete, as for example with the market square that was to be built at the back of the town hall, shifting the centre of the future settlement, or the lodgings for the school teachers and the priest planned in front of the church; the royal tennis court. De Min's design encompassed several persistent elements of the ancient settlement of Tor Zuino, such as the east-west road axis, over which several old peasant houses faced, renovated for commercial and residential use, with the 18th century church at the centre.

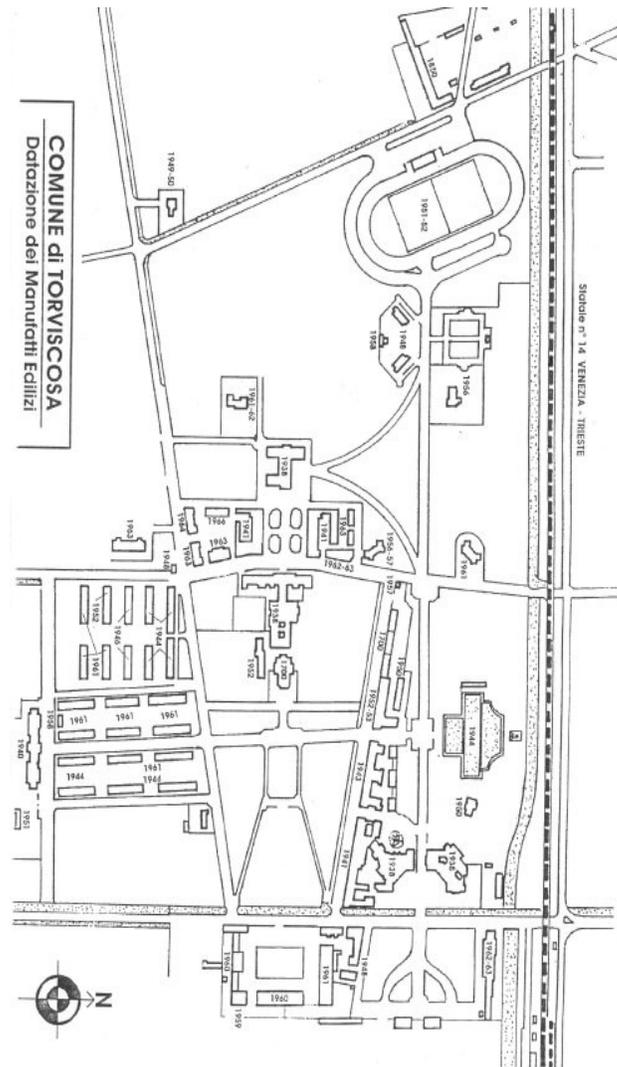
Differently from the layout that generally characterised the other Fascist foundation cities, in Torviscosa there was no Roman orthogonal plan or the medieval arrangement with its centrality of public buildings. For these reasons the urban structure of the town features an interesting, if not unique, example of contamination between a scholarly urban model of the 18th century and a strictly modernist functional arrangement. The first predominates and organises the public parts, the second determines the territorial distribution of the workers' quarters. The phenomenon of the workers' cities that became common in Europe between the end of the 18th century and the first decades of the 20th had as its origin reasons of a productive character linked to particular geographic situations. The birth of these settlements occurred when peripheral industrial locations, conditioned by a productive cycle depending upon a particular territorial resource, by the lack of pre-existing settlements and by the absence of rapid transportation, also included in their fixed capital workers' residences (See Tentori R., 1970, pgs. 90-93).

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<sup>17</sup> The man responsible for the project was Giuseppe De Min, an architect who was not especially famous in the Italian panorama of the period but who was related to Franco Marinotti and who had already collaborated with other projects on behalf of the company. On this topic see Ciucci G., 1989.



Figure. no. 2. Construction Dates



Source: Autonomous Region of Friuli-Venezia Giulia, 1990

In Italy too over the same period the creation of so-called factory quarters were recorded. These initiatives were usually headed by philanthropic businessmen, sensitive to those new ideas that from the end of the 18th century had linked agricultural and then industrial activities to capitalist paternalism regarding peasants and factory workers<sup>18</sup>. Torviscosa offered a synthesis between the factory quarters and

<sup>18</sup> The most important cases are those of Schio built by the Rossi family between 1872 and 1890, Canonica d'Adda, built by Crespi in the last quarter of the 19th century and especially Rosignano Marittimo with an initiative by Ernest Solvay which is developed as a road network that converges toward the factory and residential stratification as the urban reality closest to Torviscosa. On this topic see Nuti L., 1988, pgs. 231-246.

the foundation cities. In general, the Fascist foundation city proposed a territorial hierarchy that saw its greatest architectural expression in the civic centre, made up of the town hall and adjoining public edifices to then become more simplified and shift towards the periphery. In the case of Torviscosa, it almost seemed as though private initiative was to be indicated as superior to politics, the most prestigious materials were reserved for the factory whose façades were covered in red bricks and whose architectural styles were more prestigious. This material was used also to cover the façades of the school, kindergarten and gymnasium, all public structures but constructed and financed with private capital<sup>19</sup>. The town hall instead, the only representative of official architecture, was simply covered with cement and decorated with natural or artificial stones, following a model of dimensions that reproduced a well-established module common to different foundation cities (See Martinelli R., Nuti L., 1978). Leaving behind the centre, the use of brick becomes progressively rarer, being limited to a few decorations.

Overall, De Min's architectural language is geometrically simple, almost gaunt, and becomes neatly expressive exactly for this reason. These characteristics are provoked also by the speed with which the layouts were drafted and which did not permit much reflection or refinement to the choices made. The details chosen to transform this bare urban landscape are reproduced with an obsessive repetition of arches and frames.

The latter surround the openings, decorate the nude wall surfaces of the theatre, school and the executive building of the factory. In the case of the municipal lodgings for the workers, they perform the function of a linking element between blocks of flats or entrance gates for the internal court. The former, instead, perform an almost unitary function of the urban layout of Torviscosa. At times, they are used as an element of monumental architecture that references Roman classical styles. In other cases they serve as mere decoration, for the façades of houses and the porticoes of public buildings. These edifices do not boast technical wonders, virtuositities or original materials, a choice which has permitted the decent preservation of the town nucleus as compared to certain avant-garde experiments in the 1930's that later decayed quickly.

The urban layout confirms the bipolar matrix and the search for a balance between the private-economic element and the public-political one, and proposes the functional and hierarchical division of the territory, creating areas dedicated to residential, industrial, agricultural, sport and administrative use and from which there emerges the influence of differing urban development theories. The first area is represented by the industrial complex, the sport structures and the first houses for the workers. The second by the town hall and the adjoining buildings. The wide square in front of the factory, whose name was originally *Piazza Autarchia*, is bordered by a semi-circular profile that includes the buildings of the cinema-theatre, the office staff club and the after-work recreation centre. This group of buildings functions as an

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<sup>19</sup> The use of red brick celebrated without a doubt the local tradition of the furnaces and tilers, but was also an homage to the 20th century Milanese School in which De Min had been trained. See Tentori R., 1970.

entrance into the recreational area of sport centres, accessible along the ancient *Viale della Giovinezza* (Youth Boulevard), later renamed Via Villa and marked at its sides by a 20th century style that re-creates a sort of architectural promenade. Taken as a whole, there emerges a triumphal image that De Min wanted to give to the factory entrance as focal point for the entire settlement and to which the other structures are subordinated.

The town hall, together with the two lodging complexes for office staff and the elementary school, line the main square of the town. The building is equipped with a tower that creates a sort of dialogue with the tower of the after-work recreation centre, both however dominated by two towers positioned inside the factory that are 54 metres high and represent two fasces. It is interesting to observe the sculptural iconography present in Torviscosa. Contrary to other foundation cities that celebrate physical power and the capacity to build of the new Fascist man, in this case the two groups of sculptures created by Leone Lodi (1900-1974) are not heroic in style but propose rather a sort of adolescent grace and delicacy that generically recalls Greek classic art. This the only concession to aesthetics in a place where “beautiful” coincides only with what was useful. The true monument of the town is instead the tower, over sixty metres high, designed by Cesare Pea in 1965, who succeeded De Min as the court architect, which are located just outside the factory gates. The only function of the edifice is to offer a sort of panoramic view from whence Marinotti could contemplate with a glance the factory, the town and the farm – in effect all his territory. In this central zone, beyond the houses for the office staff, a residential area with houses for executives was also envisioned. The multiplication of public spaces, through a succession of squares, repeated the intentions of the architect to reinforce the functional and hierarchical division of Torviscosa. In this context, in addition to the layout of the rather varied public sections, De Min proposed a more rigid layout, with parallel streets seen in other 19th century industrial quarters that took their inspiration from the “garden cities” of the Anglo-Saxon world.

There are two types of worker housing, condominiums and row houses. The first were constructed on two floors, composed of five flats each with a separate entrance, designed for skilled workers or for command responsibilities. The internal surface area of about 80 square metres is sub-divided into four rooms plus a bathroom, small kitchen, storage and terrace. The green area on two sides and a loggia, usually made up of arches, re-create that rural dimension sought after by the regime, re-proposing in a contemporary context the elements of the peasant houses which in those years were being re-discovered. The row houses or “yellow houses” were two-storey buildings with a common entrance for four flats, originally destined for general labourers. The lodgings are made up of four rooms, including the bathroom, plus a small cellar. Around the residential complex the families had a small lot for gardening. Differently from the condominiums, these houses had no central heating.

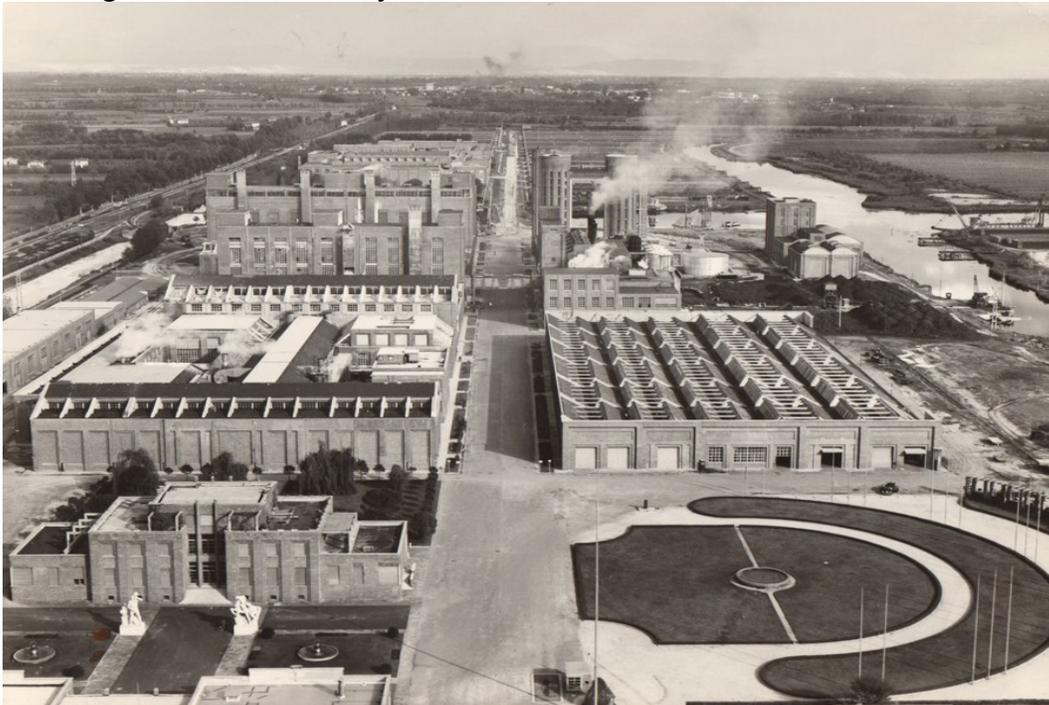
The houses of the office staff, concentrated principally in the centre of the city, presented different styles, with slightly bigger floor space, but are without an individual garden.

Figure no.3. Panoramic view of Torviscosa



Author: Rustico S., 2010, ([www.companytowns.unipd.it](http://www.companytowns.unipd.it))

Figure no. 4. The factory



Author: Rustico S., 2010, ([www.companytowns.unipd.it](http://www.companytowns.unipd.it))

The rent of the employee houses which was on average low, including the cost of the household bills, was deducted directly from their pay and was proportional to the number of persons in their family.

Along the original Viale della Giovinezza, finally, there rises up the houses of the executives, amongst which Villa Marinotti stands out, a two-storey construction, surrounded by a large park that re-proposes a synthesis between the geometric rationality of Fascist modernist architecture and Liberty motifs, today transformed into a modest hotel for visiting workers.

### **5.1. The social model**

The productive model of the factory tended to be pervasive and regulated the lives of the employees even after working hours. After-work activities were managed completely by the company which substituted in this context the *Opera Nazionale Dopolavoro* (O.N.D.), created by Mussolini in 1925 with the objective of “...promoting the healthy and efficient use of free time by intellectual and manual workers with institutions and initiatives aimed at developing their moral, physical and intellectual capabilities in the spiritual climate of the Fascist revolution...” (See *Opera Nazionale Dopolavoro*, 1938). The recreational activities of the O.N.D. ranged from theatrical plays to professional training courses to sports events. Their organisation, controlled by the party, guaranteed a series of subsidies to the subscribers, creating in this way a link of dependence that reduced possible forms of dissent towards the regime. The O.N.D. was housed in the *Casa del Fascio* which however in Torviscosa was never built, given that its functions were absorbed by the S.A.I.C.I. Fascism in Torviscosa was present only to the degree that Marinotti permitted it. His figure tended to substitute the Duce’s and exercised its influence even after the fall of the regime.

The recreational and sports structures were all concentrated in front of the factory and along the boulevard that led to it, performing the function of social filter that the worker met before reaching his lodging. The company in fact, in its intent to tie the worker to its own productive model, had put into place a well-developed control apparatus of welfare that envisioned training courses and professional certification, scholarships, diplomas, training schools, sports competitions with awards in money and honorific titles, artistic competitions and prizes for the best balcony decorated with flowers. From the beginning, the welfare initiatives of the company were progressively brought into conformance with the needs of government policy in the area of demographic development and the spread of the insurance system respectively with the creation of the *23 March Foundation* that assigned awards for weddings and births to employees with the approval of the plan proposed directly by Borlotti to Mussolini in 1933 that envisioned social security through the I.N.A. for the over five thousand employees. In replacing the O.N.D., the company established summer camps in various areas of the peninsula for the children of the workers.

The link to the company was in the end reinforced by the possibility offered to employees to purchase, after a certain period, the house in which they lived. The construction of workers' housing followed a precise economic reasoning according to which the cost of the lodgings was considered part of a useful company system<sup>20</sup>. The initiative of Snia which gave a house to its own workers was depicted by Marinotti to the Duce as an act of generosity. In reality, in the report prepared for Mussolini regarding the report of the president, held in front of the assembly of partners on 21 March 1942, several details reduced the dimensions of this initiative. The report referred to the widespread discontent of skilled workers at different levels of the company as a result of continuing trade union labour disputes and slowdowns, the low wages of the labourers with respect to other industries that were "healthier and less disadvantaged" were emphasised, the impossibility of quitting given that since the workers had been mobilised by civil authorities they could be referred to the military authorities, and the dangers to the health of the workers<sup>21</sup>.

The control of the town by Marinotti responded to the exigencies of a philanthropic and narcissistic personality, to the company's private interests and to the political interests of the regime. Torviscosa had in fact a double function, productive and as a representative symbol, given that similar to other foundation cities, it served to communicate to the world the ideas and new productive model proposed by Fascism. In this context, the territory of the S.A.I.C.I. was recognised as

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<sup>20</sup> This concept is clearly expressed in the Snia publication "La casa a chi lavora" (Houses for those who work) in which, after an initial affirmation describing the social aims of the operation, declared: "The employer assumes the burden of creating special funds destined for the specific purpose of gifting houses to the workers. These should be built on the basis of the economic results of the company as an act of generosity, to later pass to a different technical and juridical definition of the problem which will consider said funds as expenses related to management, destined for the ideal integration of the physical fatigue of the worker in the same way that the company treats the wear-and-tear of machinery, will evaluate how much this might influence its own net worth or productive efficiency and make repairs in the course of its activities of reintegration reserves. In this way the funds destined for the houses of the workers are deducted from the financial results of each single reporting period, but constitute working capital that accumulates over time and is to be assigned after demonstrated faithful labour". Snia Viscosa, 1943, pg. 53.

<sup>21</sup> The report indicates SNIA wages in these terms: "L. 3.10 per hour for a skilled labourer, L. 2.90 for a manual labourer, L. 1.30 for female labour. In other industries hourly pay was respectively Lire 4.70, 4.20 e di 2.50. The report continues in these terms: "... As a consequence the workers make this little calculation, we are 25,000 at SNIA; if the company pays us one lira less an hour, each day it saves 200,000 lire and each year 50 million which once being given something to the "houses for those who work" which this year was reduced to five million, and then keeps the rest for itself. In addition it happened that various workers, who reached fifteen or eighteen years of service last year or this year, were sacked because they asked to be put to work in healthier departments having already ruined their health". The report continues by making reference to the testimony of several workers regarding the terrible working conditions: "... It is said that the majority of the labourers who work with acids do not resist for more than a month. For this reason, Viscosa is forced to change personnel every month, calling them up from every part of Italy. This month some fifty arrived from Venetia. The worker at Viscosa is paid 2.43 Lire an hour and with that pay must procure at least one litre of milk per day as a reagent to the action of the acids. The workers say that the acids are so strong as to wear out clothes, provoke aches for teeth, eyes and lungs. All this news is commented with words that are unfavourable to the Regime...". Bortolotti G., 1988, pg. 43.

an Autonomous Municipality on 26 October 1940, baptised with the name of Torviscosa. In reality, it re-proposed the typical feudal dynamics of the area, with the state that delegated the administration of an entire territory to a company that was owner of the land, houses, services and to a certain extent destinies of the inhabitants. Not coincidentally, Marinotti received the noble title of Count of Torviscosa and at the same time the position of Fascist *podestà* (mayor), the share-cropping contracts were maintained and the municipality deposited a sum of money for the rent of a building belonging to Snia.

Figure no. 5. Row houses for workers



Author: Rustico S., 2010, ([www.companytowns.unipd.it](http://www.companytowns.unipd.it))

Figure no. 6. Condominium for workers



Author: Rustico S., 2010, ([www.companytowns.unipd.it](http://www.companytowns.unipd.it))

Figure no. 7. Row Houses for Office Staff



Author: Rustico S., 2010, ([www.companytowns.unipd.it](http://www.companytowns.unipd.it))

Figure no. 8. The Municipality



Author: Rustico S., 2010, ([www.companytowns.unipd.it](http://www.companytowns.unipd.it))

Notwithstanding the grave damage the factory suffered from bombardments during the Second World War, the population of Torviscosa between 1936 and 1951 increased by 84.4%, reaching some 4,143 inhabitants. After that date the demographic decline was constant up to the current number of 3,024 persons as at 31 December 2011. After the war, Snia converted its production, principally specialised in cellulose for paper, introducing new trees, importing from abroad a part of the raw materials and reducing, already in the 1950's, its labour force<sup>22</sup>. The situation worsened as a result of the bankruptcy of several industrial groups that had handed over control of the company to one another starting at the end of the 1970's. In that period, the market for cellulose fibres entered into a definitive crisis and the farm was re-dimensioned while the industrial complex was converted into a chemical production site. Together with these developments, the decline was accompanied by the progressive redistribution of the population in nearby towns that were better served and which had become more attractive due to the presence of new professions that were no longer linked to agriculture.

<sup>22</sup> In 1951, those working in the company were 1,396, of which 700 in the chemical works and the rest in the support structures, such as the electrical station, the railway service, the port, administration and research. Seven hundred persons found work in the supply chain. As at 31 December 2011, those employed by the company, today owned by Caffaro s.p.a., were 150, and 70 in temporary redundancy. On this topic see I.S.T.A.T, 1951.

In any case, the model created by Marinotti continued to exercise its influence on the social organisation of Torviscosa even after his death, such that it would be appropriate to question whether or not the experience of Torviscosa can be described only by the label of a Fascist city<sup>23</sup>. From census data of 1951 for example, there emerges that out of a real estate stock of 760 lodgings only 29 belonged to families while the others were property of the company and only rented out. In 1971, the real estate holdings of Snia still represented 80% of the residential buildings available and in 1981 some 60%. To this data must be added the almost total ownership by the company of those buildings destined for commercial use. Beginning in the 1960's, the town of Torviscosa as other towns of the Lower Friulian plain were subject to public housing projects and beginning in 1979 a regional law facilitated the purchase of the houses put up for sale by Snia. thus progressively normalising the situation.

It should be remembered nevertheless, that the town council from 1951 to 1970 was led by the same mayor, who, so as not to disturb the pre-existing equilibrium was always available to accommodate the needs of the company. The residential land destined for public housing, originally the property of Marinotti, was never expropriated, preferring instead solutions of compromise that included donations and land grants for free use by the company. In exchange for these concessions, SNIA exercise heavy influence on the most important policy choices, deciding the type of buildings to construct, the nature of the zoning plans that continued to propose territorial separation according to the type of work performed inside the company by the inhabitants, attending itself in several cases to the construction, providing for the maintenance of park areas, relegating de facto the mayor and town council to the role of simple film extras. After Marinotti's death, the company assumed a less personal image, detaching itself from welfare commitments to its employees whose work position became defined by national category contracts while many of the properties were put up for sale.

## 6. Conclusions

That of Torviscosa was an operation fully integrated with capitalism and represents a more advanced operation with respect to the utopias of Owen, Saint Simon, Fourier. The paternalist ideal pursued by Marinotti was that of community, intended as a big family dominated by the figure of the father-boss, expression of natural hierarchies and with the presumption that everyone identified themselves in common objectives notwithstanding the evident social differences. The capitalist substituted the "old wise man" present in Thomas More's Utopia, performing the mission of leading

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<sup>23</sup> Marinotti distanced himself from Mussolini after 8 September 1943. He was later arrested by men of the Republic of Salò and incarcerated for 21 days. After his release, he sought refuge in Switzerland. Re-entering Italy in the immediate postwar period, he was arrested by the CLNAI and subjected to a purge trial: he was condemned to suspension for six years from the functions of managing director, but thanks to the intercession of several members of the political world, was soon rehabilitated. He re-entered Snia fully by 1947. Spadoni M., 2007.

development, while farmers and workers must be educated to this role, and at the same time exploitation must not be exaggerated since it would give rise to social conflicts that would be a useless obstacle. This organic conception tends to modify historical and political reality and feeds the conviction of having created a privileged place, a sort of happy oasis, a reality of security opposed to the precariousness of the outside world. The microcosm created by the company emphasised social tranquillity to be achieved with the acceptance of the proposed model.

In the experience of Torviscosa there are several of the essential elements that distinguish the incompleteness of 19th century industrial utopias. If we consider utopia as somewhere else without conflicts, without the prediction of regressions, then we have a world without history, without hope, where the parts of society to play their roles must adhere to a repertoire of pretence. Secondly, the difficulty of utopia to relate to History is reinforced by the role of the boss. If we look at the past, we must recognise that attempts to build different utopias depend upon the stubbornness of a charismatic leader. Paradoxically, the general lack of reflection on the nature of power and the best antidote against the totalising drift of utopia. Death or still worse challenges to the leader is an event that utopias are able to manage only with great difficulty, and which usually coincide with disorder and the abandonment of the original ideal<sup>24</sup>. While observing the complex personality of Marinotti we see other characteristics that in part are linked to 19th century utopians and which have marked indirectly the development of Torviscosa: trust in progress and work, a prudent optimism regarding the destinies of mankind, the conviction that man is the artifice of his own destiny, the rejection of a revolutionary view of history to which, instead, the management of social conflict and gradual changes managed rationally, are preferred.

In the end other aspects distanced the case of Torviscosa from other attempts to create utopia in the past: the absence of a systemic critique of the contemporary capitalist society by its creator, who adhered to it completely; the lack of reflection and experimentation concerning the sphere of affection and sexual behaviour, a central element of the 19th century industrial utopia but which, in this case, was relegated instead within the confines of established Catholic tradition<sup>25</sup>; finally, we would emphasise the absence of any environmentalist ethic, a behaviour that continued for decades, even after the death of Marinotti and at the origin of an ecological disaster that has involved Lower Friuli up to the coast and whose true immense proportions have only been revealed in recent times (See Lega Ambiente, 2007, pgs. 9-13).

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<sup>24</sup> “Father” was a term with which the Saint-Simonians referred to Prosper B. Enfatim during the period of the Paris Commune. On this topic see Bernard J., 2001.

<sup>25</sup> Sexuality in the industrial utopias was a central theme of socialisation. The Saint-Simonians, for example, made free sex one of the pillars of their system and Charles Fourier argued that in *Harmony* every person has the right to a minimum of guaranteed sexual enjoyment. Other authors, in any case, for example Etienne Cabet, Pierre Leoruux, and Proudhon himself, suggested behaviour that tended toward sexual repression. On this topic see Paquot T., 2002, pgs. 61-67.

## References

- Bénichou P., 1977, *Temps des prophètes*, Gallimard, Paris.
- Bernard J., 2001, *L'épopée saint-simoniene. Saint-Simon, Enfantin et leur disciple Alexis Petit: de Suez au pays de George Sand*, Guénégaud, Paris.
- Bertolini G., Renaldini U., 1913, *Carta politico-amministrativa della Patria del Friuli al cadere della Repubblica Veneta*, Società Storica Friulana, Udine.
- Bortolotti G., 1988, *Torviscosa nascita di una città*, Casamassima Editore, Udine.
- Burckhardt J., 1980, *La civiltà del Rinascimento in Italia*, Sansoni, Firenze.
- Catasto Agrario, 1936, 1929, VIII, *Compartimento del Veneto, Provincia del Friuli (Udine)*, fasc. 26, Roma.
- Ciafani S., Le Donne K., 2007, ( a cura di), *Lo stato dell'arte sulle conversioni degli impianti cloro-soda in Italia*, Lega Ambiente, Roma.
- Ciucci G., 1989, *Gli architetti e il fascismo*, PBE, Torino.
- De Piero G., 1975, *L'agricoltura della Bassa friulana attraverso i tempi*, Ribis Editore, Reana del Rojale.
- Deluisa L., 1966, *Da Torre di Zuino a Torviscosa*, Arti Grafiche Friulane, Udine
- Di Caporiacco G., 1967-69, *Storia e statistica dell'emigrazione dal Friuli e dalla Carnia*, Edizioni Friuli Nuovo, Udine, 2 v.
- Fabbroni F. e Zamò P., 1973, "La S.A.I.C.I. di Torviscosa (1937-1940), Capitale, fascismo e movimento operaio" in *Storia Contemporanea in Friuli*, v. 9, anno III, n. 4, pgs. 11-82.
- Fauci R., 1975, "Appunti sulle istituzioni economiche del tardo fascismo, 1935-1943" in *Quaderni Storici*, 29-30, maggio-dicembre, pgs. 607-630.
- Gaspari P., 1976, *Storia popolare della società contadina in Friuli. Agricoltura e società rurale in Friuli dal X al XX secolo*, Officine Grafiche Piffarero, Monza.
- Ghirardo D., 2003, *Le città nuove nell'Italia fascista e nell'America del New Deal*, Il Gabbiano, Roma.
- Kruft H.W., 1990, *Le città utopiche*, Laterza, Roma, Bari.
- I.S.T.A.T., 1951, *Censimento Generale dell'Industria e del Commercio*, Roma.
- Mizzau A., 1966, *Lotte contadine in Friuli: 1919-1923*, Del Bianco, Udine, 1966.
- Mussolini B., 1928, "Sfollare le città", in *Il Popolo d'Italia*, 22 novembre 1928, n. 278.
- Mussolini B., 1927, *Discorso dell'Ascensione*, Libreria del Littorio, Roma-Milano.
- Opera Nazionale Dopolavoro, 1937, *The Opera Nazionale Dopolavoro*, Società Editrice Novissima, Roma.
- Nuti L., Martinelli R., 1981, *Le città di strapaese, la politica di fondazione nel ventennio*, Angeli, Milano, 1981.
- Nuti L., 1988, "La città nuova nella cultura urbanistica e architettonica del fascismo" in Ernesti G. (a cura di), *La costruzione dell'utopia*, Edizioni Lavoro, Roma, pp. 231-246.
- Paquot T., 2002, *L'Utopia*, Mimesis Eterotopia, Milano.
- Rosenau H., 1974, *The Ideal City. Its Architectural Evolution*, Harper and Row, London.

Serpieri A., 1948, *La legislazione sulla bonifica*, ONC, Quaderno 2, Roma.  
Tentori R., 1982, *Udine: Mille anni di sviluppo urbano*, Casamassima, Udine.  
Snia Viscosa (a cura di), 1943, *Premio XXI aprile. La casa a chi lavora*, Industrie Grafiche Marché, Milano.  
Spadoni M., 2007, *Protagonisti. Franco Marinotti*, [www.storiaindustria.it](http://www.storiaindustria.it)  
Tentori R., 1982, *Udine: Mille anni di sviluppo urbano*, Casamassima, Udine.  
Turani G., 1987, “La saga dei Borletti” in *La Repubblica*, 11 Settembre, Sezione Affari e Finanza, p. 2.