

Two Experiences of Urban Agriculture in Medieval Piedmont

A Comparison of Chieri and Novara (Twelfth and Thirteenth Centuries)

Abstract: The main line of investigation that led to the comparison of a proto-city such as Chieri with Novara was the discovery that urban agriculture was influenced by the city's network and relationship with the environment. The arid clay soils around Chieri and the scarcity of water pushed it towards specialised production of wine for markets and the creation of areas inside the city for the processing of agricultural products. In contrast, the Roman urban model of Novara and the character of its surrounding countryside facilitated the development of vegetable gardens and peri-urban crops. Two different urban structures and two different territories generated two diverse forms of urban agriculture.

Key Words: Chieri, Novara, Piedmont, Middle Ages, urban structure, urban agriculture

Introduction

This contribution aims to identify the different forms of resilience of urban cultivations, their structures, and the urban landscapes that derive from them in two cities in present-day Piedmont, Chieri and Novara, which are very different in terms of their geographical and political location. The chronological choice of the twelfth and thirteenth centuries was suggested by the profound demographic, institutional, economic, and urban changes which in those two centuries affected, to varying degrees, all the cities of northern Italy. Chieri and Novara are two cities founded in Roman times, the first one near Turin, in a hilly area subject to drought, the other – gravitating to Milan – near the River Ticino, in the irrigated plain. In the passage from Late Antiquity to the first centuries of the Middle Ages, both were affected by the process of urban decline triggered by the fall of the Roman Empire. It led to the disappearance of most Piedmontese cities because of their peripheral location. The urban layout of Chieri and its *municipium* (administrative district, *districtus*) disappeared completely between the fifth and sixth centuries AD, perhaps as a result of the devastation caused by the long Greek-Gothic

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War (535–553 AD), in favour of the nearby city of Turin. In its place remained a village surrounded by a constellation of small settlements, each with its own tiny administrative territory (*poderium* or *fundus*). Its inhabitants, formerly citizens (*cives*) with self-government, fell to the rank of peasants, legally subject to territorial lords. The spaces once occupied by urban buildings were converted into agricultural land distributed into small farms (*mansi*) according to the *curtis* system. In the twelfth century, however, Chieri recovered its urban characteristics and its inhabitants returned to self-government and managed to rebuild, during the thirteenth century, the original urban structure and the large administrative district. The disappearance of the Roman town-planning system conditioned Chieri's subsequent forms of usage of the city's land from which, unlike in Novara, crops disappeared. In the same way, even the countryside subject to urban administration was reorganised according to the changing consumption needs of citizens and urban markets, even going so far as to force the exclusive dedication of the land to the extensive cultivation of the vine.

Novara, on the other hand, was more resistant, undergoing only an urban and demographic contraction without losing the status of a city, seat of an episcopal see, and administrative centre of a district (*comitatus et districtus*). The persistence of the Roman urban layout also preserved the internal spaces of the urban *domus* dedicated to vegetable gardens and orchards (*viridarium*). Those spaces were later used for intramural urban viticulture and private horticultural cultivations. During the Middle Ages, in the countryside of Novara's *contado*, agriculture was reorganised by the municipal administration, which controlled every aspect through public officials appointed by the city to apply a strict regulation. This was in response to the different role of Novara as a centre of consumption and production of goods, and to the changing economic needs of urban society.

The two cases, similar to each other but with significant variations due to the different geopolitical characteristics and economic and social organisation, thus allow us to identify the different forms of resilience of crops and rural activities developed by Piedmont's cities in the communal age. This study is part of a wider research project still in progress, conducted jointly by the authors, on the concepts of "territory" and "landscape" in the Alpine and sub-alpine urban world in the Middle Ages. The comparative research conducted on Chieri and Novara is based on unpublished, published, and archaeological sources and on the existing bibliography. The first city, Chieri, was the subject of one co-author's doctoral thesis, focused on the thirteenth-century *Estimi* of the town, an exceptional source for the Middle Ages, preserved in the municipal archives of the city. These are an uninterrupted, though incomplete, series of books, one for each of the four urban districts, compiled by municipal officials from the year 1253 to 1289. Despite the name, they are not land registers but reports of the income of the heads of families (about two thousand), that is, a registration of all movable and immovable property, described in detail. The *Estimi* of Chieri, still unpublished, are the oldest documentary source of this kind preserved in Italy, a tool used by all Italian urban municipalities for assessing and collecting taxes. This was the most sophisticated form of direct taxation formulated by the medieval urban ruling classes. The analysis of the *Estimi* has been integrated with other types of published sources, such as the registers of official acts of the municipality of Chieri (twelfth and thirteenth centuries), the urban statutes of the thirteenth century, and the collections of charters drawn up by religious bodies and neighbouring urban municipalities. The study of Novara, in contrast, was complicated by the serious lack of documentary sources, due to a fire that devastated the municipal archives in the fourteenth

century. The author responsible for this part therefore proceeded using ecclesiastical sources, imperial diplomas, and the surviving urban statutes from the thirteenth and fourteenth centuries, as well as archaeological data and bibliography.

Chieri

From oppidum to villa murata (tenth to thirteenth centuries)

The town of Chieri is located about 15 kilometres from Turin. Although the Po River and the steep slopes of the Turin hills separate it from the capital of the Piedmont region, administratively it belongs to the metropolitan area of Turin. This situation would have disappointed the citizens of Chieri during the twelfth and thirteenth centuries: at that time, although it was not legally definable as a city due to the episcopal seat being in Turin, Chieri was administered by a fiercely independent council, capable of conducting itself in all respects as a true urban body.

The first mention of Chieri is from the second century BC, when *Carreum Potentia*, as it was then called, was a Roman *civitas colonia* and the seat of a thriving *municipium*, which had grown on the site of an older Celtic-Ligurian *oppidum*.¹ Although in the classical period it seems to have been a flourishing town of some importance, situated near the Via Fulvia,² a major artery of communication between Rome and Gaul, during the early medieval period it experienced a serious decline, and it seems to have been one of those many Piedmontese towns that disappeared in late Antiquity.³

After this brief period of oblivion, its name reappears in the written sources at the end of the tenth century. By this time, all traces of the Roman urban plan had been lost, to such an extent that even recent archaeological research has been unable to recover them.⁴ Chieri is mentioned for the first time in a document dated 995 AD, now referred to as a simple village with restricted territory, owned by an institution or prominent persons who were in posses-

1 The first part of this article, concerning Chieri, synthesizes parts of the doctoral thesis of Mirella ("Mira") Montanari: Mirella Montanari, *Demografia, urbanistica ed economia in un centro minore dell'Italia occidentale. Chieri nella seconda metà del Duecento*, Firenze 1994. Most of the notes that follow will refer to this thesis. For the Roman period see G. Cresci Marrone, *I romani nel Chierese*, in: Museo archeologico di Chieri. Contributi alla conoscenza del territorio in età romana, Torino 1987, 27–34; Ada Gabucci, *Carreum Potentia. Nascita e declino di una città romana*, in: Gabriella Pantò (ed.), *Archeologia a Chieri. Da Carreum Potentia al comune bassomedievale*, Torino 2010, 29–50.

2 Cf. Giuseppe Corradi, *Le strade romane dell'Italia occidentale*, Torino 1968, 36–41; Gerhard Radke, *Viae publicae romanae*, Bologna 1981, 267–270; Pantò (ed.), *Archeologia a Chieri*.

3 Cf. Cristina La Rocca, *Da Testona a Moncalieri. Vicende del popolamento sulla collina torinese nel medioevo* (Biblioteca Storica Subalpina, vol. 192), Torino 1986, 16–92; Cristina La Rocca, "Fuit civitas prisco in tempore". Trasformazioni dei "municipia" abbandonati dell'Italia occidentale nel sec. XI, in: *La contessa Adelaide e la società del secolo XI = Segusium* 32 (1992), 103–140.

4 Archaeological excavations carried out in various parts of the city, including recent ones, have only been able to detect the existence in situ of a large temple, perhaps dedicated to the goddess Minerva, beneath the foundations of the collegiate church of Santa Maria, built in 1037 under the orders of Bishop Landulf of Turin (for which see the following note). See Gabucci, *Carreum Potentia*, 29–50.

sion of the land and who exercised local authority.⁵ However, the settlement, probably already fortified, still occupied a strategic location near the medieval Via Francigena or Romea, in the region between the cities of Asti and Turin.⁶

In about 1037 the new lord of Chieri, bishop Landulf of Turin, enlarged and strengthened its ancient castle, while also granting it valuable market rights and an important collegiate church and baptistery, the *pieve* (*plebs*) of St. Mary (*S. Maria*), in order to capitalise on its strategic location.⁷ This created the conditions for a rapid urban rebirth: the regular markets held in specific areas of the town attracted significant capital and new inhabitants, including foreign merchants and financiers, especially from Asti and transalpine areas. The district of the *pieve* was the model for the formation of an extensive municipal jurisdiction and administrative district, called the *contado* (Latin *comitatum*), which in the thirteenth century exceeded 50 square kilometres. There were about thirty hamlets and villages – often with castles – in the countryside, each with its own territory (*poderium, fundus*), which, taken away from their former lords, were administered directly by Chieri. The provision of a fortified settlement, guaranteeing protection but also enabling the exercise of jurisdictional power, acted as a magnet for wealthy and influential families from other cities and from its future territory, leading to the formation of an autonomous municipal body.⁸

In the eleventh century a mighty tower stood out on the rocky spur of St. George (*S. Giorgio*), the probable site of the ancient Celtic-Ligurian *oppidum*: this was the fortified part of Landulf's village of Chieri (see figure 1). This *castrum* dominated the *villa* below, situated on the plain, near the *pieve* of St. Mary and the Via Francigena. The urban layout seems to have been a loose-knit network which was mostly made up of farmsteads.⁹ In this period agricultural activities and processing of products, and the cultivation of vegetable gardens, orchards, and vineyards, occupied wide areas within the built-up area of the *villa*, while in the *castrum* the houses abutted each other, so much so that the cattle market was limited to a narrow street, instead of a square as was the norm elsewhere.¹⁰

During the twelfth century a *borgo* (*burgus*) arose between the *castrum* and the original *villa*, joining them together.¹¹ In fact, both the slow but continuous immigration from the surrounding area and the broader demographic growth contributed to the creation of outlying inhabited areas concentrated on the south-eastern slopes of the castle hill, immediately behind and outside its walls. The most important reason for this was the area adjacent to the *castrum*, left clear to accommodate the precious cloth market known as the *Mercadillum*.¹² In Chieri, as elsewhere, the new annex to the castle was known as the *borgo* but, unlike what happened in all other cases, it did not end up defining the whole settlement; it did not include the castle itself and therefore did not denominate the place as a whole. The presence of a

5 Cf. Mirella Montanari, *Castelli e politica territoriale sulla collina torinese nell'età del vescovo Landolfo* (secc. X–XI), in: Giampietro Casiraghi (ed.), *Il rifugio del vescovo. Testona e Moncalieri nella diocesi medievale di Torino*, Torino 1997, 82.

6 Cf. Giuseppe Sergi, *Potere e territorio lungo la strada di Francia. Da Chambéry a Torino fra X e XIII secolo*, Napoli 1981; Montanari, *Demografia, urbanistica ed economia*, 96.

7 Cf. Montanari, *Demografia, urbanistica ed economia*, 84–90.

8 Cf. *ibid.*, 96–97.

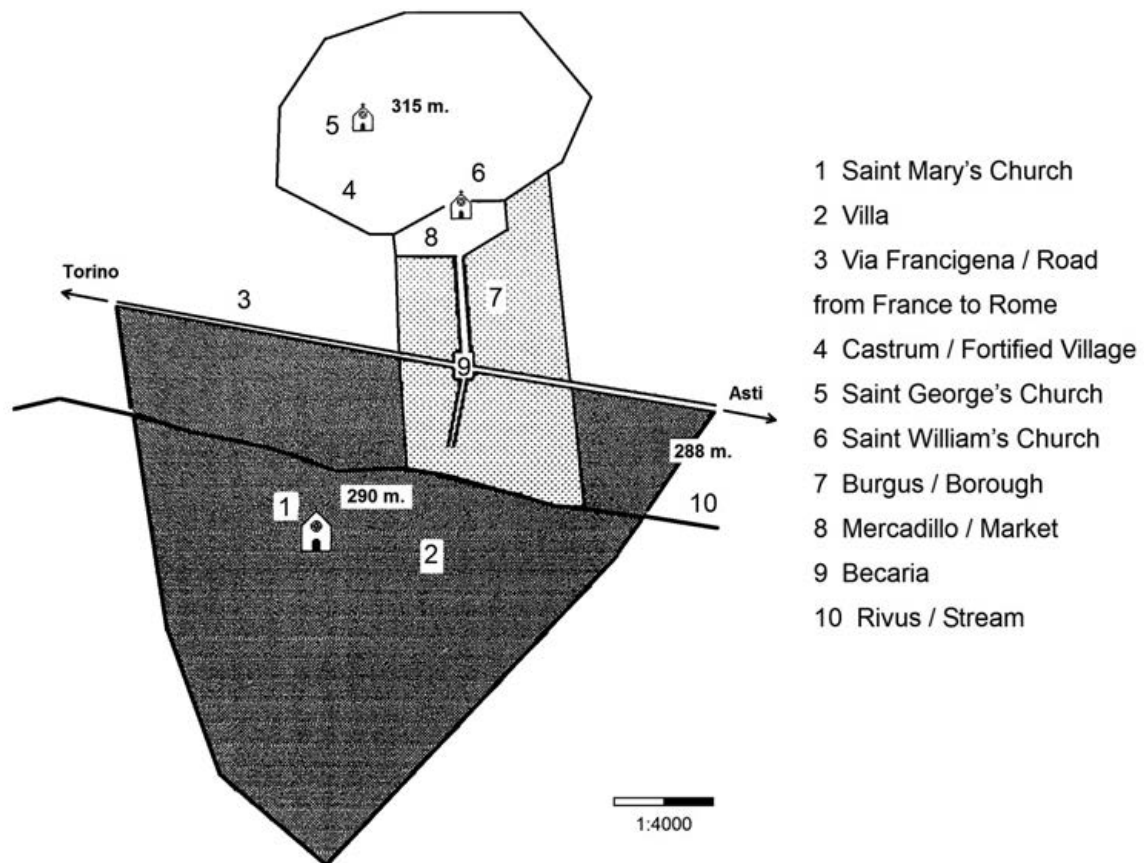
9 Cf. *ibid.*, 97–99.

10 Cf. *ibid.*, 197.

11 Cf. *ibid.*, 97–99.

12 Cf. *ibid.*, 110.

Figure 1: Chieri at the beginning of the eleventh century



Source: Mirella Montanari, *Demografia, urbanistica ed economia in un centro minore dell'Italia occidentale. Chieri nella seconda metà del Duecento*, Firenze 1994, 444.

large, sturdy *villa* proved to be the determining factor, and it was this that surrounded the complex of the *castrum-burgus*, giving its name to the whole concentric structure. So Chieri was never called *borgo* by its inhabitants, but was always defined precisely as *villa murata* (a walled settlement).¹³ The new, larger tripartite settlement was already surrounded by walls and moats by the mid-twelfth century, appearing in the eyes of the Emperor Frederick I as a “maxima et munitissima villa” (big and strong settlement).¹⁴ In this period crops were largely squeezed out of the urban area and concentrated in the outskirts; the plots of land inside the new city walls were densely occupied by residential and service buildings, so that the urban area was densely built up and inhabited “in the manner of a city”.

13 Cf. *ibid.*, 111.

14 Cf. the letter of Frederick I to Otto of Freising in Georg Waitz/Bernhard von Simson (eds.), *Otonis et Rahewini Gesta Friderici I. imperatoris* (*Monumenta Germaniae Historica. Scriptores rerum Germanicarum in usum scholarum*, vol. 46), Hannover 1912, 2; Mirella Montanari Pesando, *Villaggi nuovi nel Piemonte medievale. Due fondazioni chieresi nel secolo XIII: Villastellone e Pecetto* (*Biblioteca storica subalpina*, vol. 208), Torino 1991, 13.

The thirteenth-century expansion and the new areas reserved for urban farming

At the beginning of the following century, the municipality of Chieri, composed mainly of members of a hundred family groups (called *hospicia*) dedicated to money-lending and local, supra-local, and transalpine trade activities, achieved full autonomy from any seigneurial power by means of military actions, cash purchase of entire villages with their territories, submission of territorial lords through political pacts, and the foundation of new villages.¹⁵ The increase in the financial and mercantile activities of the Chierese ruling elites, which extended to the port of Genoa and the trade fairs, cities, and royal courts of France, Germany, Switzerland, and Flanders, brought to the *villa murata* a lasting economic prosperity.¹⁶ Both these factors enabled Chieri to fully recover its ancient urban dimensions, although *de facto* rather than *de iure*: it became the political-institutional and economic hub of a vast area, able to exercise the role of privileged interlocutor with neighbouring cities and the imperial power.¹⁷ As a result, the new “city” experienced a dramatic increase in population, reaching 12,000 inhabitants;¹⁸ but since the area enclosed by the twelfth-century walls was too small, the new Chierese settled outside, forming populous suburbs beyond the walls.

The municipality soon expanded the protective circuit of defences by excavating a circle of large moats, reinforced by massive earth terraces known as *barbacani*, and building towers with portals along the main exit routes from the *villa*, to correspond with those already existing along the walls¹⁹ (see figure 2). The moats, the *barbacani* and the towers together were called *cerche* or *cirche*. The new expansion of housing during the thirteenth century, however, did not reach this protective circle, from which it remained separated by two concentric bands consisting respectively of farmsteads (or *airali*) and of market gardens, initially the only plots that directly adjoined the internal barbican of the moat, often climbing up onto it. This location for the vegetable gardens, which needed constant irrigation, made sense given the need to remedy the chronic water shortage suffered by Chieri due to its location on chalky and sandy soils and the lack of springs in its vicinity.²⁰ Chieri was close to two torrential rivers with an inconstant flow of water, and only in Roman times had it succeeded in solving its serious water problems by the construction of an aqueduct, which had, however,

15 Cf. Montanari Pesando, *Villaggi nuovi nel Piemonte medievale*, 14.

16 Cf. Massimo Montanari, *Origini. Cittadini e prestatori*, in: Renato Bordone/Franco Spinelli (eds.), *Lombardi in Europa nel medioevo*, Milano 2005, 45–62.

17 Cf. Montanari Pesando, *Villaggi nuovi nel Piemonte medievale*, 13–14; Mirella Montanari, *La popolazione di Chieri e del suo distretto alla fine del secolo XIII*, in: Rinaldo Comba/Irma Naso (eds.), *Demografia e società nell'Italia medievale (secoli IX–XIV)*, Cuneo 1994, 137–145.

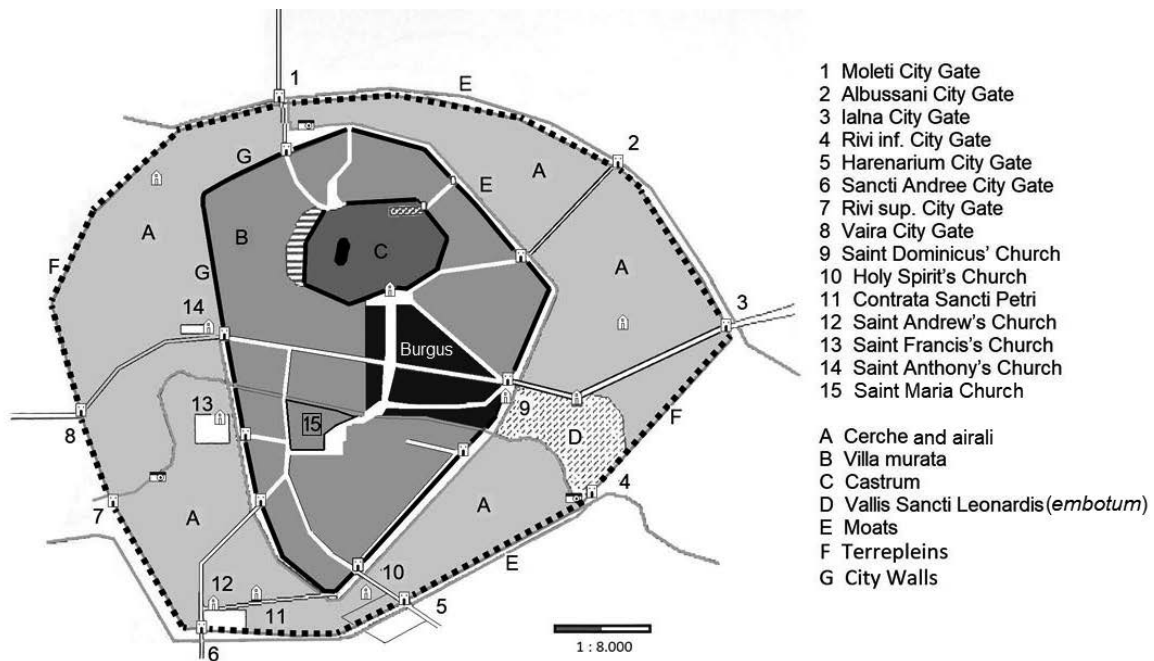
18 Cf. Montanari, *La popolazione di Chieri*, 137–145. However, the proposed estimate of 9,000 inhabitants must be revised to at least 12,000 in the light of Montanari's doctoral thesis: Montanari, *Demografia, urbanistica ed economia*, 141. For comparison, at the end of the thirteenth century Turin had 4,000 to 5,000 inhabitants, while Vercelli and Novara ranged between 11,000 and 12,000. Alessandria was the most populous with 15,000 (ibid.).

19 Cf. Montanari, *Demografia, urbanistica ed economia*, 109.

20 Cf. Mirella Montanari Pesando, *Carenza idrica e attività molitorie nella Chieri medievale (secoli XII–XV)*, in: Rinaldo Comba (ed.), *Mulini da grano nel Piemonte medievale*, Cuneo 1993, 11–46.

since disappeared.²¹ In the eleventh and twelfth centuries, the rivers were channelled into the “city’s” moats. The proximity of the concentric bands of agricultural and horticultural plots to these moats, into which the water of the River Tepice flowed, meant that (during periods of rain) the owners of the gardens were more easily able to irrigate their land by digging little channels to access small quantities of water, which was combined with that obtained from the numerous rainwater wells.²² The natural bed of the River Tepice continued, as in ancient times, to flow through the city next to the *pieve* of Santa Maria, acting as an open sewer. The urban sewage made the water foul-smelling, so the stretch of the stream in the area of the *cerche* was called *rio Merdario* or *Merdero*.

Figure 2: Chieri in the thirteenth century



Source: Mirella Montanari, *Demografia, urbanistica ed economia in un centro minore dell'Italia occidentale. Chieri nella seconda metà del Duecento*, Firenze 1994, 446.

The *airale*, a characteristic feature of the population centres of western Piedmont in the medieval period, consisted of a full farmstead, and all the agricultural activities took place there, with the products sold conveniently in the markets of the city, without additional transport costs.²³ The area of the *airali* therefore presented a more extensive and diffuse settlement structure than that of the residential nucleus and its new suburbs, encompassing green spaces such as vegetable gardens, orchards, and large farmyards. It also differed from the residential areas due to the presence of buildings typical of the rural environment such as sheds, barns,

21 Cf. *ibid.*, 14–15. The thirteenth century “Estimi of Chieri” refer to a part of the Albussano district known as *Canalis*, a term used in the Medieval period to indicate the pipelines of the Roman aqueducts.

22 Cf. *ibid.*, 41, note 70.

23 Cf. Montanari Pesando, *Villaggi nuovi nel Piemonte medievale*, 74; Montanari, *Demografia, urbanistica ed economia*, 109.

warehouses, cellars, stalls and animal shelters, and dry mills using animal traction,²⁴ as well as the presence of low-quality materials used in the construction of houses, which were often still roofed in thatch.²⁵ The brick kilns and wine presses were also situated in this area. At the end of the thirteenth century, however, in the Gialdo district, the *airali* were transformed into an *enbotum*, an entirely porticoed area consisting of warehouses and shops, devoted to the great flow of goods and people that drove the economy of this constantly growing city.²⁶

In the case of Chieri, it is clear that, between the tenth and thirteenth centuries, urban development and land use *intra moenia* were the direct consequence of its political-institutional development, supported and directed by economic and social changes. As has been said, in the residential area formed from the early *castrum-burgus-villa*, the houses abutted each other. The turreted buildings of the urban aristocracy each occupied an entire block, certainly including large courtyards but dedicated solely to artisanal activities and other services; in no cases were they used for cultivation, nor was there space for gardens, apart from the indispensable wells for the collection of rainwater.²⁷ The town squares, as well as the areas around the churches, were encumbered with sales counters. In other cities, these spaces were used as *broilum*, a kind of fenced garden, vegetable plot, and orchard, but in Chieri religious cloisters were used for trade, hosting markets, loan desks, warehouses cluttered with merchandise, and workshops. Always, especially in eastern Piedmont and in Lombardy, the municipal buildings were called *broletti* because they were constructed next to the cathedral church or near it, taking advantage of the *broilum* of the bishop's seat, which was often the only sufficiently large plot of free land to build on in the heart of the city. This was not possible in Chieri, and the municipality had its own seat only from the end of the thirteenth century, settling in an existing building on the main market square, next to the church of St. William (S. *Guglielmo*), where it had already been meeting for some time.²⁸ In essence, during the twelfth and thirteenth centuries the green spaces were completely eliminated from the town and were relegated to the band of *airali* and market gardens, which by 1280 was also under attack from buildings used for trade.

At the same time, the Chierese managed to provide their municipality with an impressively large territory called *contado* (*comitatus et districtus*), in which they concentrated their landed properties (see figure 3).²⁹ The citizens who owned rural land were mostly the numerous members of the magnate class such as financiers, traders, and craftsmen of high level, Chieri's businessmen organised into societies called *hospicia*.³⁰ The *hospicia* were holding companies, each composed of multiple families. Their head offices were the showy urban towers, status symbols of their economic power and, at the same time, strongboxes for money and merchandise. In a systematic effort to rationalise agriculture, they resorted to innovative systems of division of their large landed properties into small and medium farms. These were

24 The animal-powered mills were so important in Chieri that the 1289 cadaster, the most complete, recorded in the *airali* of the city the presence of about fifty private mills driven by horses and donkeys: cf. Montanari Pesando, *Carenza idrica e attività molitorie*, 28.

25 Cf. Montanari, *Demografia, urbanistica ed economia*, 160.

26 Cf. *ibid.*, 324.

27 Cf. *ibid.*

28 Cf. Montanari, *Demografia, urbanistica ed economia*, 330.

29 Cf. *ibid.*, 183, 201.

30 Cf. Montanari, *Cittadini e prestatori*.

rented to independent farmers, under an arrangement designated by historians as “non-classic sharecropping” (*mezzadria non classica*).³¹ The rental contracts were for short terms from a minimum of three to a maximum of five years. They allowed the owners to repossess the property with ease and control the choice of crops. The mobility of rented land in a *colonia parziaria* and the involvement of tenants in its management presents the image of a Chierese agriculture linked to a market economy rather than centred on the self-sufficiency of the individual farmer. The vine, as a very valuable crop, was influential in bringing landownership into the circuit of loans and finance: plots cultivated with vines were generally used as a pledge to obtain loans in cash and as a rich dowry for women of the dominant class.³² That is why it was decided to grow the fine Nebbiolo grapes on a large scale, to obtain high-quality wines capable of ageing, a practice still rare in northern Italy. The landowning citizens moreover opted to extend the intensive cultivation of the vine throughout Chieri’s territory, in both hilly and lowland areas, even less suitable ones, and to the detriment of forests and pastures. The *coltura assiale*, i.e. the mainstay of Chierese agriculture thus became the combination of cereals and vines, sometimes grown on the same land in alternating rows (*griciatum*). While extensive wheat and spelt crops for human consumption were being promoted at the expense of minor grains used for animal husbandry,³³ hemp and flax plantations were encouraged for the production of export-oriented fabrics. To this end, the Chierese ruling elite significantly reshaped the landscape of the countryside, successfully founding a new village near the confluence of the Stellone Torrent with the River Po, today called Villastellone.³⁴ Here were concentrated the water mills equipped with machinery (*folloni*, fullers) for the production of hemp and linen fabrics and the processing of wool. This was a brilliant expedient to remedy the problem of the chronic water shortage that afflicted Chieri and its immediate surroundings.

The agricultural world of Chieri was precisely regulated by the city statutes, which established the correct distribution of agricultural resources between villages and towns, the types of crops, the methods of production, and relations between owners and tenant farmers. They also protected the cultivated and uncultivated areas, through both the periodic election of public officials called *campari* in charge of control over the territory, and the use of direct and indirect taxation applied to agricultural landholdings and to agricultural and livestock products. This way of organising agriculture impressed itself on the local economy, which consisted partly in the production of goods for export but above all in trading in merchandise and money transactions. These characteristics probably account for the system of land organisation inside the walls. In order to store agricultural commodities and to process them easily and safely for the domestic and foreign markets, it was decided to concentrate the

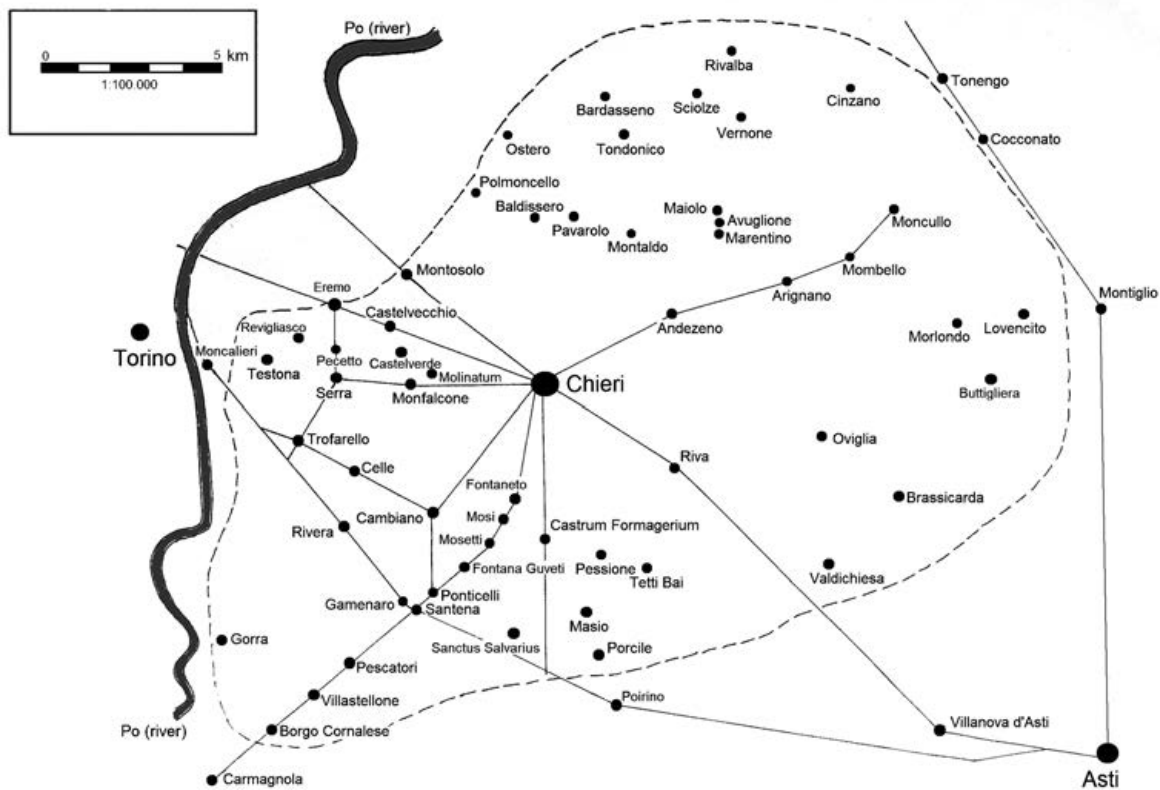
31 As is well known, the *mezzadria non classica* was the direct predecessor of “classic sharecropping” (*mezzadria, métayage*): Antonio Ivan Pini, *Campagne bolognesi. Le radici agrarie di una metropoli medievale*, Firenze 1993, 93–135.

32 The municipal *Estimi* are clear in this regard, such as the tax return of Martina, wife of Oddo de Planca and daughter of the powerful financier Matteo Fresio, who had received as dowry from her father a Nebbiolo vineyard several dozen hectares in size, worth hundreds of *lire* of Asti: Montanari, *Demografia, urbanistica ed economia*, 216, note 42.

33 This was peculiar to Chieri and did not happen in neighbouring cities such as Turin, Moncalieri, and Chivasso, where oats, millet, and barley were still cultivated to the same extent as wheat and spelt.

34 Cf. Montanari Pesando, *Villaggi nuovi nel Piemonte medievale*, 23–92.

Figure 3: The *districtus* of Chieri (dotted line)



Source: Mirella Montanari, *Demografia, urbanistica ed economia in un centro minore dell'Italia occidentale. Chieri nella seconda metà del Duecento*, Firenze 1994, 448.

urban *airali* and the string of market gardens within the circle of moats, particularly in two districts, Arene and Albussano. Agriculture had found a place in the city, since it was functionally inserted within the economic and financial system established by the ruling elite: in Chieri, *airali* and urban gardens were a necessary link in the chain of transactions between the countryside and the city markets.³⁵

In the thirteenth century the use of urban peripheral space for agricultural purposes at Chieri shows the close link between finance, commerce, and agriculture. This link was so important that, in a period when housing was in short supply, building sites (*sedimen*) – albeit peripheral ones – were sacrificed in favour of the creation of *airali*, planned in accordance with market needs. The same *airali* also provided hospitality to foreign merchants, who could stay there temporarily to shelter their animals and goods. These places functioned alongside the network of hostels and private mansions in offering well-organised hospitality of a high standard, in this way again supporting the city's main economic activities.³⁶

The importance of urban agriculture in thirteenth-century Chieri perhaps sufficiently explains the choices made by the local ruling elites, which were based on the need to support production, at the expense of aesthetic considerations.

35 Cf. Montanari, *Demografia, urbanistica ed economia*, 201–206.

36 Cf. *ibid.*, 324.

Novara: a case of urban continuity

Novara³⁷ was also a Roman *municipium*, but unlike Chieri, its history continued unbroken into the medieval period; however, it did not enlarge its walls, which in the Middle Ages largely followed the Roman ones, some fragments of which are still visible today. The city, located in the heart of the Po Valley, about 50 kilometres from Milan, lay on a naturally confined site to the east of the River Ticino (about 14 kilometres away) and to the west of the River Sesia (17 kilometres).³⁸ Novara was the recognised seat of a bishopric and therefore merited the title of city. However, the historical transition of Novara from late Antiquity to the early medieval period is not easy to interpret. In general, “the history of the city in the fifth century [...] is poorly recorded”: according to tradition, unsupported by documents, the alleged first bishop of Novara, Gaudentius, held the see between 398 and 418 AD.³⁹

In the fifth century the demography of Novara was already complex, since the city was the seat of a *praefectura Sarmatorum*, and therefore had a military contingent of *foederati*. As in other places in Piedmont, this resulted in a mix of urban ethnic and cultural elements.⁴⁰ The great city baptistery was constructed between 433 and 466 AD, and its existence confirms the presence of an episcopal seat in the city as, in this period, only the bishops could baptise the faithful.⁴¹

37 This section of the article, concerning Novara, has been contributed by Roberto Leggero.

38 In fact Novara succeeded in resisting, thanks also to the intervention of Vercelli, the “expansionist” claims of the Biandrate settlement, which might have become an annoying competitor on the same bank of the Sesia through the actions of the counts of Biandrate, belonging to the consortium of the counts of Pombia, which had clashed with the Novarese bishop in the eleventh century for control of the foothill and mountain areas of the province. Maria Giovanna Virgili, I possessi dei conti di Biandrate nei secoli XI–XIV, in: Bollettino storico-bibliografico subalpino 72 (1974), 633–685; Walter Haberstumpf, I conti di Biandrate in Oriente nei secoli XII e XIII, in: Walter Haberstumpf, Dinastie europee nel Mediterraneo orientale. I Monferrato e i Savoia nei secoli XII–XV, Torino 1995, 153–175; Giancarlo Andenna, I conti di Biandrate e le città della Lombardia occidentale (secoli XI e XII), in: Formazione e strutture dei ceti dominanti nel medioevo: marchesi conti e visconti nel regno italico (secoli IX–XII) (Nuovi Studi Storici, vol. 39), Roma 1996, 57–84; Giovanni Deambrogio, Antologia di scritti, ed. by Gabriele Ardizio, Mercurio 2009, 113–124 (La rugia que vadit Casalimum o rugia nova novariensis ed il distretto medievale di Biandrate) and 181–186 (La Baraggia di Zerboli ed i confini del distretto medievale di Biandrate); Mirella Montanari, Comunità, città e signoria vescovile: fra Piemonte e Lombardia nei secoli XII–XIII, in: Renato Bordone et al. (eds.), Lo spazio politico locale in età medievale, moderna e contemporanea, Alessandria 2007, 69–77.

39 Simona Gavinelli, La Vita sancti Gaudentii nei codici carolingi, ed. by Fabbrica Lapidea della Basilica di San Gaudenzio, Novara 2013, 8. See also Battista Beccaria, Alle origini della provincia. La diocesi come “prototipo” del territorio novarese, in: Mirella Montanari (ed.), Una terra tra due fiumi: la provincia di Novara nella storia, vol. 1: L’età medievale (secoli VI–XV), Novara 2002, 37–74; Battista Beccaria, La “questione di san Gaudenzio” nell’ultimo mezzo secolo. I problemi intorno alla figura del primo vescovo e la loro soluzione, in: Novarien 40 (2011): San Gaudenzio nel III centenario della traslazione, 9–36, where it is proposed that Gaudentius should be considered an historical personage, despite there being no reliable evidence attesting his existence. Furthermore Il Cristianesimo a Novara e sul territorio. Le Origini: Atti Del Convegno, Novara 10 ottobre 1998, Novara 1999.

40 Paolo De Vingo, Il fenomeno della sovrapposizione della popolazione nel Piemonte centro-meridionale: le trasformazioni di una società mista tra tardoantico e altomedioevo, in: Archeologia Medievale 34 (2007), 303–327, 304, note 9, for the information about the *praefectura*, and 303–304 for the discovery in Pollenzo of the burial of the wife of a senior officer commanding a division of *foederati*. See also Beccaria, Alle origini della provincia, 56.

41 Beccaria, La “questione di san Gaudenzio”, 13: “The dating of the first major buildings of the Novarese episcopal church (basilica and baptistery) did not allow us to go back further than the age of Laurentius, the third prelate

It can be assumed that some of the urban changes in this period were connected with the critical phase of the war between the Goths and the Byzantines (535–553)⁴² and with the arrival of the Lombards. In this context Novara played a significant military role in the defence strategy of the city of Milan, as described by Procopius of Caesarea.⁴³ Furthermore, the construction of the *Basilica Apostolorum* on the initiative of Bishop Honoratus could signify a building recovery in the city in this century.⁴⁴

Despite all this, however, the documentary evidence shows “beyond any doubt that Novara, while remaining an episcopal seat, officially lost its pre-eminence as a regional capital”: this role passed to Pombia, a well-placed and well-fortified locality on the main waterway of the area, the River Ticino, which became the capital of an administrative region (*iudiciaria*) and then of a *comitato* “that came to include the city [of Novara] itself”.⁴⁵ Perhaps the loss of status can be linked, as in other cases, to the city’s resistance to the Lombard occupation.⁴⁶

In such a complex political situation, the demographic picture within Piedmont, and also Novara, was no more stable than in previous periods.⁴⁷ Hence, perhaps between the sixth and seventh centuries, the city would have shrunk towards the area of the forum, which was reinforced by towers, at least three according to the archaeological finds of 2005 and earlier. Perhaps this could be the *castrum* created by Bishop Honoratus in 490, the position of which has been debated for some time.⁴⁸ The shrinking of the inhabited part of the city would have been determined by the decline in political prestige and by a demographic decline that left

of Novara: approximately 430–450 AD. The accurate thermoluminescence examinations carried out by the Piedmont architectural superintendent on a large sample of bricks from our baptistery, placed its construction in the period 433–466” (translated from the Italian by the authors).

42 Andrea Bertani, Il ‘castrum’ dell’isola di S. Giulio d’Orta in età longobarda, in: Silvia Lusuardi Siena (ed.), *Fonti archeologiche e iconografiche per la storia e la cultura degli insediamenti nell’Altomedioevo: atti delle giornate di studio*, Milano-Vercelli, 21–22 marzo 2002, Milano 2003, 247–271.

43 Procopius, *History of the Wars*, Book V and VI: *The Gothic war*, London/Cambridge, MA 1919, 397.

44 Maria Motta, *Novara medioevale: problemi di topografia urbana tra fonti scritte e documentazione archeologica* (Memorie dell’Istituto lombardo. Accademia di scienze e lettere, vol. 38/3), Milano 1987, 173–348, 206.

45 Aldo A. Settia, Gariardo “de castro Fontaneto” e i castelli novaresi dell’alto medioevo, in: Giancarlo Andenna/Ivana Teruggi (eds.), *Fontaneto: una storia millenaria. Monastero, concilio metropolitico, residenza viscontea. Atti dei convegni di Fontaneto d’Agogna* (settembre 2007, giugno 2008), Novara 2009, 15–27 (translated from the Italian by the authors).

46 “Finally, we note that even Novara, in the post-Carolingian age, appears to have lost the role of administrative capital and to have been placed within the district of Pombia (although not within the alleged ‘duchy’ of S. Giulio d’Orta), a situation that could imply a fate similar to those cities which had been punished for resisting the Lombard conquest” (translated from the Italian by the authors); Aldo A. Settia, *L’alto medioevo ad Alba. Problemi e ipotesi*, in: Rinaldo Comba (ed.), *Studi per una storia d’Alba*, vol. 5: *Alba medioevale. Dall’alto medioevo alla fine della dominazione angioina: VI–XIV secolo*, Alba 2010, 23–55. On Pombia, see also Mirella Montanari, *Vicende del potere e del popolamento nel Medio Novarese* (secc. X–XIII), in: *Bollettino storico-bibliografico subalpino* 102 (2004), 365–411; Mirella Montanari, *I borghi nuovi come fulcri dell’espansione commerciale urbana: il caso di Novara* (secc. XII–XIII), in: Renato Bordone (ed.), *Le villenove nell’Italia comunale. Progetti di governo territoriale nel riordino dell’insediamento rurale* (Atti del I Convegno Nazionale di Studi, Montechiaro d’Asti, 20–21 ottobre 2000), Montechiaro d’Asti 2003, 119–133.

47 De Vingo, *Il fenomeno della sovrapposizione della popolazione*, 307.

48 “For the city to be able to resist attack, it had to be protected by effective defences; and this consideration would support the hypothesis that the ‘castle’ built by Bishop Honoratus at the time of Ennodius can be identified, as some have suggested, with a strengthening of the defences around the cathedral. The recent discoveries of towers inside the city (for which there are no official archaeological reports as yet) could be evidence of this. Indeed, it cannot be ruled out that these towers belonged to the circle that delimited Novara as a ‘retracted city’

large areas uninhabited within the perimeter of the walls. The toponyms *pasquarium*, *pasquirolo* and *ortellum*, contained in later documents, “certainly refer to a period of depopulation, if not also of urban ruralisation”⁴⁹.

So, during the period of Lombard domination and also during the Carolingian period, Novara remained “in the shadows”. Its inclusion in the administrative region of Pombia, where the public official in charge of administering the county was located, marked a rather unusual situation, though one not entirely unknown to historians, since the seat of a county was usually located in an urban centre.⁵⁰ Moreover, as some scholars have stated, in the sixth to eighth centuries the possession of an episcopal seat was not enough to define whether or not a place was a city.⁵¹ In the case of Novara, which shrank into a fortress city⁵² and lost its status as an administrative centre, and whose first two bishops are attested only by later tradition, it can be assumed that its urban status was particularly weak.

All this is relevant to the theme of urban agriculture because, with the city experiencing a demographic decline, withdrawing into a smaller area and leaving free or partially free space between the inhabited areas and the ancient walls, the conditions were established for the beginning of intramural agricultural activities.

The political and economic recovery of Novara took place due to several factors. The collapse of the political and administrative role of Pombia, as a result of the shattering of the Carolingian empire, was important, but so was the presence of the bishop, with the episcopal see providing cultural patronage⁵³ and supplementing the civil power. And of course the underlying importance of Novara should not be forgotten, as a transit stop for those heading to Vercelli and Turin from Milan or Como and vice versa.⁵⁴

However, despite the renewed importance and prestige of the city, housing density was still not high in the eleventh century. This is shown by the fact that, even without taking into account the market and other public spaces, there were still areas without buildings, on which crops were grown.⁵⁵

In order to understand the relationship between the city and the countryside, and therefore the constituent elements of intramural and peri-urban agricultural production, it is important to consider the particular circumstances of the Novara region from the orographic and

of which other examples are known” (translated from the Italian by the authors); Settia, Gariardo “de castro Fontaneto”, 18. Furthermore Beccaria, La “questione di san Gaudenzio”, 25 and 29–30.

49 Motta, *Novara medievale*, 227 (translated from the Italian by the authors).

50 Montanari, *I borghi nuovi*, 119.

51 Tiziana Lazzari, *Campagne senza città e territori senza centro. Per un riesame dell'organizzazione del territorio della penisola italiana fra tardo-antico e alto medioevo (secoli VI–X)*, in: *Città e campagna nei secoli altomedievali* (Settimane della fondazione Centro Italiano di studi sull'alto Medioevo, vol. 56), Spoleto 2009, 621–652, 636.

52 *Ibid.*, 632.

53 The ruling bishop, Tito Levita, was active in the episcopal scriptorium: Paolo Rosso, “Constituatur magister idoneus a prelate”. La ricezione in area subalpina delle disposizioni dei concili lateranensi III e IV sull'istruzione del clero, in: *Reti Medievali Rivista* 17/1 (2016), 467–562, 485, <http://www.rmojs.unina.it/index.php/rm/article/view/4939/5522> (last visited 25 Sept. 2019). Furthermore Beccaria, La “questione di san Gaudenzio”, 32.

54 Mirella Montanari, *La Valle dell'Arno e le comunità del Seprio meridionale dall'età tardo antica alla fine del medioevo (secc. VI–XV)*, in: Roberto Ghiringhelli (ed.), *Oggiona Santo Stefano: una comunità del Seprio nella storia*, Oggiona 2004, 50–81.

55 Motta, *Novara medievale*, 281.

hydrographic points of view. The River Sesia had a torrential character, while the Ticino, with a more constant flow, was intensively used for the transport of goods and people, becoming the “symbol of international openness” of the Novara area⁵⁶ (see figure 4). In addition the region was crossed by many other rivers of a torrential character (the Agogna, the Terdoppio, the Arbogna) and dotted with springs, water meadows (*pratium marcidum*), and marshes.⁵⁷ To support livestock farming, which was practiced intensively in the area, limiting transhumance to the hilly and alpine areas of the region, it became necessary to regulate the water from the twelfth century by digging a network of ditches and canals.⁵⁸ The urban and peri-urban agriculture of Novara was probably also determined and conditioned by these factors, favouring the cultivation of high-value crops, in particular the vine, within and in the immediate vicinity of the urban walls.

The description of nineteenth-century Novara provided in the contemporary *Dizionario geografico* of Goffredo Casalis provides a rough idea of the possible link, in the pre-industrial period, between cultivation inside the city and peri-urban agriculture. Casalis, describing the squares and public gardens of Novara, stated that the city, thanks to its elevated position above the plain, offered beautiful views of the surrounding landscape in which to immerse oneself when taking a short walk from the city centre. In fact, at the time when Casalis was writing, the great seventeenth-century bastions that separated the city from the countryside, with their wide glacis, had been partially demolished. The countryside was indistinctly defined and a forest bordered the winding course of the Agogna River.⁵⁹ Describing the peri-urban crops, Casalis stated that

“the suburbs, within three miles, are cultivated with wheat, rye, maize, and oats, in dry but irrigated meadows, and with vines mostly mixed with wild cherries. The land is very fertile and produces cereals, hay, and grapes in great quantities [...]. Near the walls of the city one can see many vegetable gardens that produce all kinds of green vegetables”.⁶⁰

56 Giancarlo Andenna, *Una terra d'acque tra due fiumi, un lago e montagne bianche di neve*, in: Montanari (ed.), *Una terra tra due fiumi*, 13–34. See also Roberto Leggero, *Dando eis locum idoneum. Identità politica delle comunità rurali del Novarese in età medievale*, Milano 2008.

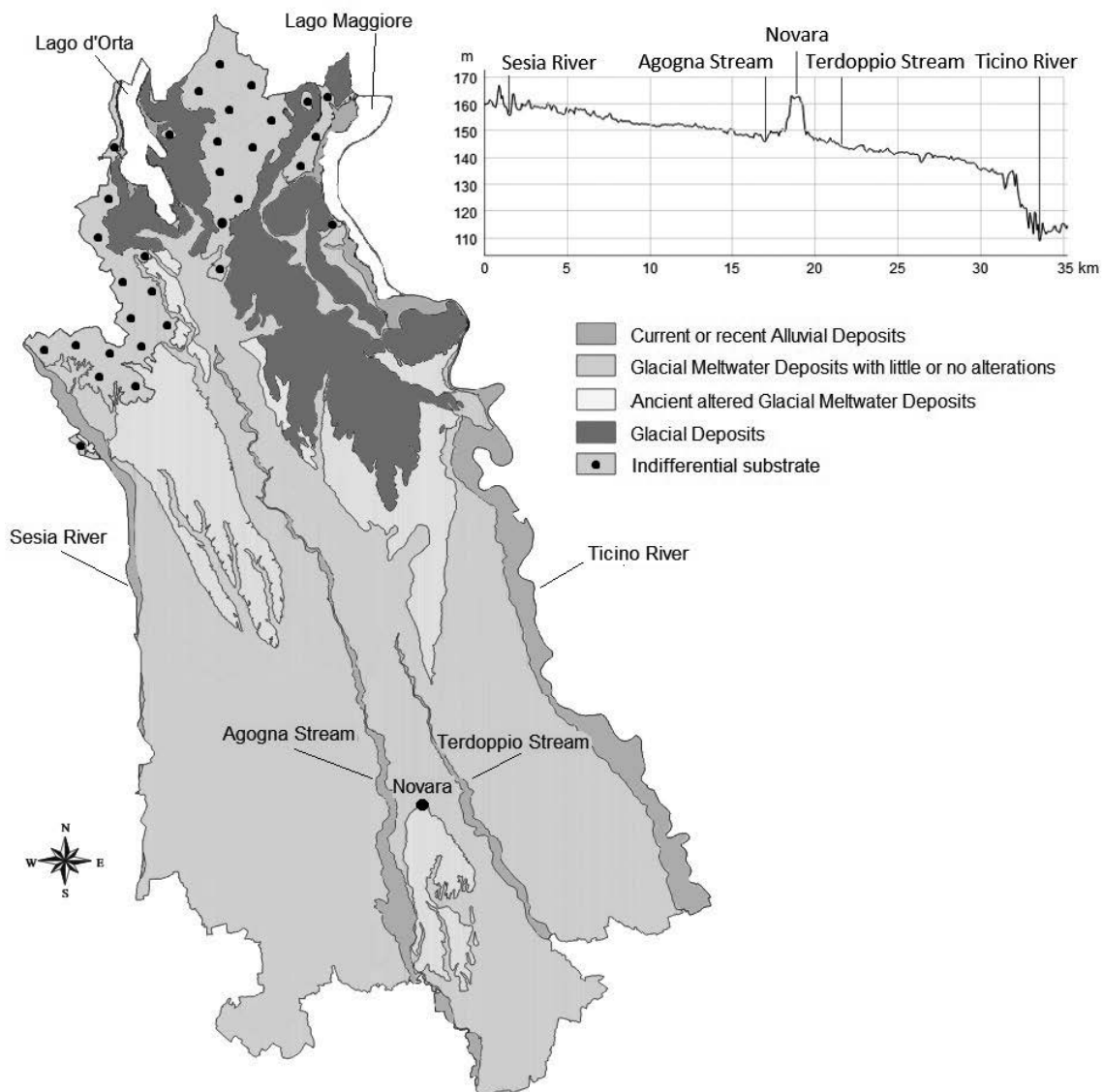
57 Annalisa Bove et al., *Idrogeologia della pianura piemontese*, Torino 2005; Andenna, *Una terra d'acque tra due fiumi*.

58 Montanari, *I borghi nuovi*, 121: “The ruling classes of the leading municipality of Novara made an astute and innovative decision to use the abundance of waterways, which had earlier on been channelled into a complex system of irrigation ditches, for the purpose of irrigating the dry lands of the middle and lower plains, in order to create pastures for the raising and breeding of livestock. This led to the growth of artisan groups who worked with hides and leather [...] from the mid-twelfth century, water management, water meadows, the production of hay, cattle breeding and leather processing accounted for two thirds of the economic production of Novara” (translated from the Italian by the authors); Andenna, *Una terra d'acque tra due fiumi*, 24–25.

59 Goffredo Casalis, *Dizionario geografico storico-statistico-commerciale degli stati di S.M. il re di Sardegna*, vol. 12, Torino 1843, 128. It should be noted that the fortifications of the modern period, which overlapped the Roman and medieval ones, had been demolished both as a result of the decision of Napoleon, who at the beginning of the nineteenth century had ordered the dismantling of most of the bastioned walls of the Piedmontese cities, and by the will of the House of Savoy in the 1840s, as Casalis himself recalled.

60 *Ibid.*, 133 (translated from the Italian by the authors).

Figure 4: Geological map of the current Province of Novara



Source: Adapted from <https://www.provincia.novara.it/Ambiente/DifesaSuolo/PAEP/3geologia.pdf>.

This scene, if we subtract those plants imported from America, provides a useful impression, allowing us to also visualise the forms of peri-urban agriculture in earlier periods.

Novara stands on a rocky spur, about twenty metres above the plain below. Therefore, between the gate of St. Stephen (*Porta S. Stefano*) and of St. Agapius (*Porta S. Agabio*), there was a slight slope down towards the east-northeast and east-southeast. Here the crops caught the morning sun, and indeed the vine has been cultivated in this area since the tenth century. However, the best-oriented areas of the city were those that faced south-southeast.⁶¹ It is

61 In Piedmont, especially in the Langhe area, the term *söri* or *sorito* (sunny place) identifies “the best locations for vineyards” (Disciplinare di produzione dei vini a denominazione di origine controllata e garantita “Dolcetto di Diano d’Alba” o “Diano d’Alba”, 8, <http://www.langhevini.it/pagine/ita/denominazioni/dolcetto-diano-alba-docg.lasso> [last visited 26 May 2018]), which determine both the quality of the wine and the price of the land

therefore not surprising that the earliest document mentioning the presence of vines near the city but outside the walls refers to an area at the eastern end of the *cardo*,⁶² near the gate of St. Mary (*Porta di S. Maria*).⁶³ The document is an agreement dated March 899: Novempertus, deacon of the important church of St. Gaudentius (*S. Gaudenzio*), exchanges landed property with the bishop of Novara, Garibaldo. The high value of these properties is evidenced by the fact that it is the bishop and a deacon of St. Gaudentius who are respectively owners of one *terra vinea* of 5 *perticas* and 16 *tabulas* and another of 3 *perticas* and 13 *tabulas*. The lands subject to the exchange were “in loco qui dicitur Caselle [...] prope civitatem Novaria”, that is “in the place called Caselle” in the village of St. Mary (*S. Maria*), therefore outside the city but near the town gate from which the village took its name.⁶⁴ Among the listed owners of the properties adjoining the two plots of land are other religious bodies and priests, further confirming the quality of the properties. Two further deeds from 1234 and 1299 refer to the locality of Caselle and provide evidence of the continuity of winegrowing in the area.⁶⁵

However, vineyards are also documented within the city. The earliest document that identifies the presence of vines and fruit trees within the walls dates to 924 AD. In it the bishop of Novara, Dagiberto, exchanges a *iugerum* of land comprising “casis, curtis, edificiis, vitis” (houses, courts, outbuildings, and vines) located outside the city near the church of St. Stephen (*S. Stefano*), for a plot of two *perticas* and seventeen *tabulas* which included “casarum, tectis, vitis [...] pomiferis” (houses, sheds, vines, and fruit trees), located near the *forum* and therefore within the circle of walls. The landholding must have been near the intersection of the *cardo* and the *decumanus*,⁶⁶ where today there are the remains of one of the towers, thought to be defensive structures newly built in the period of the shrinking of the urban perimeter.

Throughout the southern area of the city there were numerous properties belonging to the church. To some extent this situation has continued to the present day. Maps of the city from the eighteenth century show a prevalence of green areas in this sector (see figure 5, the dark grey areas), while even today the largest private area located within the perimeter of the old walls coincides with the episcopal gardens in the southern part of the city.

on which the vineyard stands. The Langhe, in fact, are a series of hills, the slopes of which are not all suitable for the planting of vines. Nowadays, the regulations for the production of Dolcetto di Diano d'Alba with a Designation of Controlled Origin prohibit the planting of vineyards on the slopes facing north (Disciplinare di produzione, 2). The reason why a similar term is not used in the Novara region lies in the fact that most of the vineyards are on a plateau. In fact, along the road to the Valsesia between Fara and Romagnano, where most of them are located, the hill rises suddenly, and although these slopes are home to very well exposed soils, immediately behind them lies the morainic plateau on which most of the Novara vineyards are situated. The latter, precisely because they are on a plateau, do not have a prevalent exposure. We thank Dr. Andrea Agnes of the Agricultural Sector of the Territory of Novara and of the V.C.O, Agriculture Department, Piedmont Region for the bibliographic information and for the reasons for the lack of use of the term *sōri* in the Novara region.

62 The main road that cut through Roman cities from south to north.

63 Motta, *Novara medievale*, 273.

64 Carlo Francesco Frascioni, *Topografia antica di Novara e suoi sobborghi*, in: *Bollettino Storico per la Provincia di Novara* 86 (1995), (Fonti) 1–262, 178–179. Furthermore Mario Crenna, *In margine alla Topografia antica del Frascioni*, in: *Bollettino Storico per la Provincia di Novara* 86 (1995), 845–872.

65 Frascioni, *Topografia antica di Novara*, 179.

66 The main road that cut through the roman cities from East to West.

Figure 5: Map of Novara from c. 1790



Source: Alberto Oliaro/Andreino Coppo, *Novara. L'evoluzione urbanistica attraverso l'iconografia storica*, Novara 1983, 29.

It is remarkable that twelve documents between 924 and 1000 AD⁶⁷ indicate the bishop as owner of eight farm holdings out of fourteen, all located in urban or suburban areas. Twice, the owner of the property turns out to be the *sancte Novariensis ecclesie* (the holy church of Novara). Of five properties with vineyards, three belonged to the bishop, one to the Novarese church, and one to a private owner. A document from 950 indicates the presence of a royal property near the market. The land, donated by Lothair II, king of Italy, to the rectory of St. Gaudentius, was surrounded by the public road and by properties belonging to the rectory of St. Mary.⁶⁸ The intramural area called “the vineyard of the king” or “royal vineyard”, still owned by the cathedral chapter in the twelfth century, but no longer identifiable topographically, perhaps stems from this legacy.⁶⁹ The “royal vineyard” is also referred to in a document

67 Motta, *Novara medievale*, Appendice I, 324–325.

68 Luigi Schiaparelli, *I diplomi di Ugo e Lotario, di Berengario II e di Adalberto*, Roma 1924, 286–288.

69 Crenna, *In margine alla Topografia antica*, 860.

from 1003, when bishop Pietro cedes a piece of land “with walls and stones and buildings of houses within the city of Novara where it is called ‘royal vineyard’”.⁷⁰ The toponym reappears in 1122 when Attone, canon of St. Mary, is endowed, before bishop Litifredo, with two existing houses in Novara, one of which is within the vineyard “of the king”.⁷¹

Documents from the eleventh century tell us that within the walls there was vacant land and that much of this was located near churches (St. Ursus, St. George, and St. Vincent), both within the walls and just outside, near the gates (St. Mary, St. Stephen, and St. Gaudentius).

Besides vineyards, other types of cultivation are mentioned in the sources. Near the gate of St. Agapius, attested by later documents of the fourteenth and fifteenth centuries, there were vineyards and many vegetable gardens bordering the defensive moat that surrounded the suburbs (*fossato seu circa*).⁷²

In the tenth century a *buscalia* (a small wood?) is mentioned as the property of the bishop, near the gate of St. Agapius, while a document from 1182 refers to a *braidia* (a suburban field, usually fenced) *castanea* in the court of Novara. Francesco Frasconi commented on this: “The addition of chestnut to our *braidia* or *brera* can perhaps be taken from some existing chestnut grove in the countryside”.⁷³

It is also worth noting the existence of buildings and equipment related to agricultural work and production, such as warehouses,⁷⁴ stables,⁷⁵ mills located outside the walls,⁷⁶ ovens,⁷⁷ oil presses, crushers,⁷⁸ and so on. The latter are cited in a section of the statutes of Novara from 1277. The municipality, in fact, forbade the production of linseed oil, and more generally the use of crushers, within the city walls.⁷⁹ On the other hand, the statutes were also very strict in prescribing, for example, that those bringing animal feed into the city should unload it directly at the *broletto* (*bloretum*),⁸⁰ without straying from their path and without depositing it elsewhere.

The role played by the statutes in urban and extra-urban agriculture was fundamental.⁸¹ Section 151, for example, forbade the planting of trees or reed beds inside or outside the city if the neighbour’s property was less than four arms away (about 2.4 metres according to the Novara measurements).⁸² It made an exception for vines, even if they were growing on

70 Frasconi, *Topografia antica di Novara*, 157.

71 *Ibid.*; Motta, *Novara medievale*, Appendice I, 330.

72 Frasconi, *Topografia antica di Novara*, 168 and 170.

73 *Ibid.*, 161 (translated from the Italian by the authors).

74 *Ibid.*, 24 (caneva); Motta, *Novara medievale*, 289 and 292.

75 Frasconi, *Topografia antica di Novara*, 26.

76 Antonio Ceruti (ed.), *Statuta Communis Novariae anno 1277 lata*, Novara 1879, 68 (“*Molendinarios Novariae*”) and 124.

77 Motta, *Novara medievale*, 332; Ceruti (ed.), *Statuta Communis Novariae*, 69.

78 Ceruti (ed.), *Statuta Communis Novariae*, 76, CLVI and 282 for the identification of *torcular* (press) with *maza*.

79 *Ibid.*

80 See “*Bloreto Communis Mediolani*” in: Isaia Ghiron, *La credenza di Sant’Ambrogio*, in: *Archivio Storico Lombardo* 4/1 (1877), 70–123, 109.

81 Merely as an example: Aldo A. Settia, *Ambiente e vita associata negli statuti di Ozzano Monferrato (secolo XV)*, in: Andrea Terreni (ed.), *Gli statuti di Ozzano Monferrato (1491)*, Ozzano Monferrato 2008, 15–24, especially paragraph a. *L’agricoltura*; Riccardo Rao, *Il Monte di Bergamo e gli incolti collettivi della città (secoli XII–XIII)*, in: Riccardo Rao (ed.), *Bergamo e la montagna nel Medioevo. Il territorio orobico fra città e poteri locali = Bergomum*. *Bollettino annuale della Civica Biblioteca Angelo Mai di Bergamo* 104–105 (2009–2010), 51–74.

82 Giacomo Giovanetti, *Degli Statuti novaresi commentario*, Torino 1830, 214.

rural maple trees and fruit trees. It should be remembered that the authorities controlled the physical aspects of the city, both public and private, in detail: not only the urban gardens and crops inside and outside the walls, but also the fountains, wells, balconies, arcades, and so on.

The Novarese statutes also provided clear guidance about the produce that entered the city market: from fodder to legumes, from oats to barley, from spelt to broad beans. The city's merchants were also trading flax, oil,⁸³ wine, chestnuts, tallow, whey, fresh and salted meat, fresh and salted fish, bread, flour, bran, salt, and wood amongst other things – and, of course, all types of wild and farm animals. In particular, cattle were very important for the city's economy in the thirteenth century, both cows and calves,⁸⁴ and both for breeding and for their hides, the latter being used by the shoemakers' guild.

The statutes of Novara are also fundamental to understanding the impact of the city's agricultural policy on the countryside. Indeed, a difference can be seen between Chieri and Novara: while the former was a *de facto* city, it was not so in strict legal terms, and this perhaps made it more effective and quicker in dealing with problems; while Novara was characterised by a more deliberate approach, determined by its full urban status. Its need – and its responsibility – to confront other powerful municipalities, its expansion over a vast territory and its need to organise areas located a considerable distance from the city, all slowed it down and restricted it compared to the more “nimble” proto-city of Chieri.

The municipality of Novara, in fact, did not just control and organise urban and peri-urban agriculture, but also that of rural areas. It did this in various ways, protecting the crops, planning the excavation of canals, establishing grazing rights, and setting the dates for the harvesting of crops.⁸⁵ According to the statutes, within the *curia* of the city (the *poderium* – that is, up to three miles from the city itself), the task of protecting the gardens, fields, and vineyards was assigned to two officials, called *potestates campanee*,⁸⁶ for each city gate. They had to verify, evaluate, and compensate any damage to and destruction of crops, and they also had to choose at least four guardians of the gates. They were in charge of inspecting all those who attempted to enter through the city gates carrying wood, grass, hay, corn, or grapes, and detaining them unless the carrier came from his own property or was in possession of a permit (*eo quod liceat*).⁸⁷ The statutes also obliged the owners of vineyards in the *curia* to harvest after the feast of St. Michael, unless they were inside the circles of the villages that were adjacent to the city – that is, presumably, inside the ditches and embankments built to fortify the settlements that arose outside the city walls near the gates.⁸⁸ However, as regards the property of the citizens that was in the *ville* and suburbs, as well as that of the inhabitants of the countryside, it was guarded by the *campari*.⁸⁹

It is clear that there was a profound relationship between the city and the countryside and that the decisions made in the city had an important impact on both rural and urban

83 Andrea Fabbri, *The Olive in Northern Italy. A Mediterranean Tale*, in: *Rivista di Storia dell'Agricoltura* 57/1 (2017), 25–56.

84 Ceruti (ed.), *Statuta Communis Novariae*, 160–162, CCCXXVII.

85 See above the section on Chieri.

86 Ceruti (ed.), *Statuta Communis Novariae*, 169, CCCXLVIII; but see also 41, LXXXVI, *De dampno dato in curia Novarie emendando per comune Novarie*.

87 *Ibid.*, 170, CCCLI.

88 *Ibid.*, 116, CCLXIX, *De vindemiis curie Novarie*.

89 *Ibid.*, 81, CLXVII e CLXVIII.

agriculture. It is impossible to understand the organisation of urban agriculture without taking into consideration the decisions of the municipality regarding rural agriculture. Even today, indeed, it is not possible to understand urban agriculture in contemporary cities as a spontaneous phenomenon. It is profoundly connected to local policies; even to decisions taken at the highest levels, as shown by the case of the home garden at the White House. For the same reasons it is not possible to consider medieval urban agriculture as a phenomenon that comes into existence and continues spontaneously.

General conclusions

After having seen their urban functions (*civitas* and *municipium*) shrink or even disappear – because of the devastating conflicts that followed the fall of the Western Roman Empire –, and after a long period of slow but constant recovery, on the threshold of the Communal Age the medieval cities of northern Italy once again appeared as large and populous centres of production and consumption of goods and culture. Moreover, they were constantly experimenting with new forms of political and social organisation. This lively and changing urban civilisation placed the cities in the middle of large territories, where numerous smaller settlements with their own agricultural districts lay. These were coordinated and administered by the city authorities. Owning and governing the largest possible swath of countryside was an indispensable condition for every city not only to ensure its survival, but to achieve stable prosperity. A city's territory was composed of an inner suburban strip about three kilometres deep called *poderium* and of the county (*contado*) extending up to 100 kilometres out. It provided, first, the essential food supply for the urban population; second, the control and maintenance of the judicial independence of the urban municipality (also through the possibility of attracting many men to the army); third, the tax levy necessary to the municipal coffers; and fourth, the full functioning of urban markets, through the control of the road network and the signing of agreements with other urban centres (including transalpine cities) for the creation of a network of markets. In short, the well-being and power of the city and its inhabitants was guaranteed by a difficult and changing balance of factors. The first of these was undoubtedly a proper organisation of the countryside and crop choices. The comparative study of Chieri and Novara has highlighted the divergent transformations of the agricultural world in the course of time and the contrasting choices made in the organisation of the countryside. Those choices were motivated by both the different geographical location and quality of the soils occupied by the two urban districts, and by the different needs of the municipalities, an expression of their specific social compositions and economic organisations. In Chieri, the dominant class of financier-merchants were also the owners of the most extensive landed properties. Therefore, they were able to condition the structure of the countryside by experimenting with new forms of land lease and directing the choice of crops. This was done by resorting to new types of agricultural contracts for the specialised cultivation of grains for human consumption, of precious grapes, and of vegetable fibres for the production of fabrics. All these crops were designed to be distributed on the market. Livestock breeding was sacrificed, but the citizens of Chieri, thanks to a precise legal regulation established in the urban statutes, never suffered from food shortages, and their economic well-being grew at least until the end of the thirteenth century.

In contrast to this, at Novara, located between two large river channels and resurgences, the choice fell on the exploitation of the irrigated plain that extended to the outskirts of the city. There, the Novarese experimented with the water meadow (*marcita*) and with irrigated lands (*prati irrigui*) that allowed more harvests of hay per year, and the permanent rearing of cattle. This enabled them to vigorously relaunch the production of leather goods, and the guild (*universitas*) of shoemakers became prominent in the government of the city. The ruling classes of Novara assured a constant and adequate food supply to the citizens through the compilation of a legal corpus of rules, the statutes of the city, that also governed the surveillance, protection, and encouragement of agriculture.

Even within the circuit of the walls, the two cities made different choices. Chieri, on the one hand, had to regain an urban aspect and dignity in order to claim the political and jurisdictional prerogatives reserved for real cities. For this reason, and in order to better perform the task of mercantile and financial hub, the vegetable gardens, orchards, and gardens, while precious for the survival of citizens, were removed from the centre, which was densely built up around specialised market squares. Gardens and orchards were confined to the margins, first near the city walls, then close to the new outer defensive perimeter.

Here there was also a complex of urban farmsteads, the *airali*, for the shelter and processing of agricultural products from the countryside of Chieri, the port of Genoa, and the markets in northern Europe. Also because of the serious water shortage, on account of its location on sandy and calcareous soils, Chieri founded a new village (Villastellone) near the River Po, where the construction of water mills for the production of wool, hemp, and linen fabrics was concentrated.

Novara, on the other hand, preserving the urban layout of the imperial age as well as the dignity of a *civitas*, reused the spaces inside the blocks and near the churches and the urban monasteries to keep alive the ancient tradition of the cultivation of table grapes, vegetables, and fruit for daily needs. Instead of the *airali* belt, the people of Novara preferred to give space to large suburban vineyards, common gardens, and orchards within the walls, for the immediate satisfaction of daily food needs.

In conclusion, the construction of the circuit of the walls and urban moats made clear the intention of the citizens to operate an ideal separation of the refined and complex urban world from the rough mosaic of the surrounding countryside. Yet it is equally evident that at the same time they were fully aware of the essential bond that linked the city to its countryside in a single body. From the countryside flowed a vital flux of goods, just like the blood for the human body.

The turreted city gates were like open mouths by which, without interruption, people, food products, merchandise, culture, experiences, and techniques were entering and leaving. This is why the *cives* never stopped taking care of the countryside, this is why they worked hard to tie it inseparably to their cities and keep it alive and vital, from time to time transforming and reshaping it.