The foundation, planning and building of new towns in the 13th and 14th centuries in Europe: an architectural-historical research into urban form and its creation
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9 SYNTHESIS: GENERAL DESCRIPTION OF THE PROCESS OF NEW TOWN CREATION IN THE 13TH AND 14TH CENTURIES

Now that three specific groups of newly founded towns have been introduced and a number of specific aspects of new town creation in the 13th and 14th centuries have been discussed, this chapter will provide a broader view. In the first part of the chapter the process of the founding, planning and building of new towns will be described, treating the different aspects one at a time, largely in the order that they presumably came to play a role in the process of town creation. The second part of this chapter (pars. 9.11 to 9.23) deals with the various physical elements that commonly were planned with the creation of a new town. Together, these elements, such as roads, houses and defences, made up the form of the planned towns.

This chapter is built of evidence from a great number of different new towns of the 13th and 14th centuries in southern, western and central Europe. This material is mainly taken from scholarly literature, and part of it is based on the study of plans or of the situation as it presently exists. The information from the different individual towns is combined in order to make a ‘complete’ reconstruction of the process of the creation of a new town and a description of the various elements of such a town. This is necessary because there is not one individual case for which the sources provide ‘complete’ information. The combination of material from different cases is also intended to give a more or less general picture of new town creation in the period under consideration.

9 PART I: ASPECTS OF THE CREATION PROCESS

9.1 Motives for town foundation

The first thing one has to consider is why new towns were founded at all. It is likely that there often was more than one reason to set out on the venture of town plantation. In the following sections the most common motives for the foundation of new towns in the period under consideration will be discussed.

9.1.1 Gathering subjects

Most of the new towns of the 12th to 15th centuries in Europe can be described as ‘colonising centres’. Their main goal was to allow the founding lord to get a (stronger) hold on the land, people and economy in a specific area. But the explicitly intended functions of the towns varied according to the specific circumstances and the different motivations of their founders.

The essence of the foundation of any new town was to gather settlers to a specific place. This is, however, explicitly mentioned only in a few contemporary sources as a motive for a new town’s foundation. The population of western, southern and central Europe went through a phase of strong growth in the 11th to 14th centuries. This offered good opportunities to populate new villages and towns from the population surplus of existing settlements. With the foundation of the new town that was added to Cracow in Silesia in 1257 (fig. 9.1) Duke Boleslav V aimed to ‘[...] congregate men there from different regions [...]’. Another possibility for the foundation of a new town was to concentrate the older settlements of the surrounding countryside, as happened with the Florentine terre nuove and many of the new towns in southwestern France. The foundation of Serravalle in Tuscany in 1259 was initiated in order to ‘[...] congregate men and unite them [...]’, presumably also mainly with people from the nearby region.

The unexpressed motivation behind this gathering of settlers must have been that the founding lord would strengthen his control over the settlers in as much as they already were his subjects, and that he would...
increase the number of his subjects if they came from elsewhere. This could also give the lord a strongpoint in the political organisation of the land, in military or administrative respects. This motivation can be read in a foundation document of 1264, regarding King Premysl Ottokar II’s new town of Bezděz (Bösig) in Bohemia, in which it is stated that the ‘[...] honor, fame and power of the kingdom are based on the number and wealth of its faithful subjects [...]’. Some new towns of the period appear to have been founded not so much to attract new settlers but rather to prevent subjects from moving to towns that were created in other nearby lordships. This was an important motive, for instance, in the re-foundation of Fontanetto Po in 1323. This settlement was recreated as a small fortified town by the monastery of San Genuario and the marquis of Monferrato, after the city-state of Vercelli had founded the nearby town of Crescentino, about 70 years earlier, which had caused a substantial diminution of the number of subjects under the monastery’s lordship. The creation of various bastides and other new towns elsewhere seems to have been instigated by very similar motives. In particular, the creation of new towns only a short distance from each other in different lordships may often have been the result of such a competition in attracting subjects.

9.1.2 Motives of defensive and offensive character

Some town foundations were clearly military in character, in the sense that the new settlement was intended to serve in the defence of a territory. This may have involved the protection of a region previously occupied, as in the case of the Florentine new towns, which were founded, among other reasons, ‘[...] in order to oppose the malicious actions of the exiled citizens [...]’. New towns might also be founded for the purpose of defending newly conquered lands, in which case the motive might be seen as offensive rather than defensive in nature. This was the case, for instance, with most of the Edwardian new towns in Wales. A very rare, but clearly aggressive, town plantation was that of Victoria, by Emperor Frederick II in 1247. He founded it right before the walls of Parma in northern Italy, during a siege of this rebellious town, with the intention that old Parma

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[10] See par.5.1.4 and fig 5.2. A document concerning the bastide of Cançon mentions that it was founded in 1253 by the lord of Madailian because six other bastides that had been founded in the previous years in neighbouring lordships were gradually robbing him of his subjects. By founding the new town he tried to provide them with better prospects on his own land. (Berestford 1967, p.234) Similar motives may sometimes also have played a role in town foundations at greater distances from each other. When one lord did not have a town, while other lords in the region did have (new) towns, there was a significant danger of a draining of subjects, as well as of economic activity, which may have motivated new foundations.

[12] See par.1.5.1.
would be destroyed and the new town would replace it. However, despite its name and the careful astrological observations which were made in order to find an auspicious moment for its foundation, the new town was destroyed. In general, it seems that only great and wealthy lords had the means to found new towns purely for military reasons, being able to disregard considerations of economic viability, as only they could spend the large sums of money and use the great number of labourers necessary for such ventures.

The late 12th century foundation of Lippstadt in northern Germany is described in a heroic poem of circa 1250. It describes how Bernard II von Lippe (1167-1224), a middle class landlord in central Westphalia, asked the king for permission to build himself a fortified town, because he needed it in order to be able to defend his land. Bernard is also reported to have stated that fortified towns are a lord’s ‘source of power’ over the surrounding countryside. Thus, the motive for the foundation of this new town would have been primarily defensive, at least according to this text.

In his grant of the right of fortification to the town of Jaroměř in Bohemia, King Přemysl Ottokar II states that it is his ambition to solve the problem of ‘[…] how to beautify and strongly stimulate the lands under our dominion with a great number of towns, so that our heritage will be full of splendour and beauty, and will not be easily hindered by enemy attacks and by plundering hands’. Something similar is mentioned in the grant of fortification of Naarden in Holland. These considerations are made in order to acquire better protection, as, for instance, in the cases of Terranuova Braccioliini and the bastide of Cassegnes-Bègonhes. It is quite possible that it happened more often that new towns were founded by lords at the request of their subjects, but there are few towns for which this is actually documented.

A similar motive for town foundation was the protection of travellers, especially on trade routes, from harassment by robbers. This was an important motive in the foundation of (among others) the Florentine terre nuev and the bastide of Molières. In England there is a particularly interesting foundation by the name of New Eagle (1345), which was to be sited exactly halfway on the Foss way from Newark to Lincoln because, as the town charter recalls: ‘there have been felonies and robberies on the Foss way; the reason is the long open stretch without any vill […]’. All in all, it is evident that the need for better control over and policing of trade routes was an important motive for quite a number of town foundations.

In some cases the founding of new fortified towns was quite clearly aimed at increasing control over the population, in order to be able to tax it more efficiently - on which point I will elaborate below - or to prevent rebellion. With the foundation of the Edwardian new towns of northern Wales this was an important motive;
but a much clearer example is Lucera in southern Italy, which was founded by Emperor Frederick II in order to re-settle the Muslims who previously lived in Sicily (1233-1246). This example contrasts with most of the new towns of Wales, in the sense that in the latter the possibly rebellious Welshmen were specifically excluded.

In frontier regions, new town foundations could be intended for the purpose of the annexation of land, subjects and economic structures from neighbouring lordships. On the borders between different lordships the rights of dominion were often rather vague, as the boundaries of different dominions were not yet that clearly defined. Therefore, the building of a new town could create a clear mark in the landscape that signified the dominion of a specific lord, while at the same time reshaping older structures of settlement that possibly referred back to previous dominions. It should be considered, in this respect, that border areas tended to be underdeveloped in terms of economic exploitation and population, since borders often coincided with natural barriers in the landscape. Because of the growing population and the developing agricultural technology, these marginal areas became more and more profitable for exploitation in the 11th to 13th centuries.

In some cases, the plantation of a new town was, to a large extent, motivated by the wish to compete with an existing town in a neighbouring territory. This was an important motive, for instance, for the foundation of Radstadt in Austria by the bishop of Salzburg in 1289. This town was founded in competition with the town of Rotenmann, which was promoted by the duke of Austria in 1279. Hagestein in The Netherlands was founded in 1382 as a competitor of Vianen, which was sited just 2 km. away. This earlier town had been founded by the lord of a neighbouring territory only about half a century before. When a serious conflict broke out, in 1405, the lord and people of Vianen saw their chance to thoroughly demolish Hagestein, after which it was never rebuilt.

Towns that were founded to compete with existing towns would, for the most part, not grow into flourishing successful settlements, however, as it was hard to take over the central functions of the older town. So, either one - usually the newer one - or both towns would often suffer dearly from the competition.

The territorial claims on frontier regions by the foundation of new towns were mostly effected by political and economic strategies rather than by arms, except for in times of military crisis. The lords were after political and economic control over as many people, as much land and as much economic capacity as possible. This last aspect seems to have been a fairly new phenomenon in the 13th century, or at least it was becoming more important and more clearly visible. It is intimately connected with the swiftly progressing monetarisation of the economy and the accompanying increase in the ‘power of money’. The importance of this ‘power of money’ grew strongly in comparison to the number of subjects or the size of the territory: the ambitions gradually shifted from these capital goods themselves to their productive power; and in the organisation of this productive power the new towns played an important role. This phenomenon must have been a factor of great influence in the increasing number of town foundations in the 12th to 14th centuries, as will be argued in the following section.

9.1.3 Economic motives

It is clear that considerations of an economic nature often formed important motives for the foundation of new towns. Yet, the contemporary written sources very rarely provide information about these motives. One of the rare examples regards the new town of Langenau in Germany which, according to a source of 1381,
was founded by the local lord, Otto von Piliva, in order ‘[...] to raise the rent, the income and the gain of his domains [...].’ Another document that suggests that the economic motive was of utmost importance regards the rebuilding Berwick-upon-Tweed by King Edward I of England in 1296. The town was to be rebuilt in such a way that it would be ‘[...] to the greatest profit of Ourselves and of merchants coming to dwell there, and of others who happen to reside there.’ With regard to the foundation of the bastide of Montesquieu-Volvestre, a document of 1245 mentions that it served to increase the revenues of the church.

Economic considerations could be an incentive for town plantation in many different ways. It has already been mentioned above that the control of trade routes and the colonisation of new land could be motives for town foundations. There are various other specific motives, however, that could be placed under the heading 'economic'.

Economic exploitation of natural resources is one of these. For instance, many towns were founded as part of a process of the clearing and reclamation of new lands. This holds true for, among others, a number of bastides, such as Plagne and Baa; for the towns that were founded by the count of Flanders in the coastal plain of his county in the second half of the 12th century; for various towns founded in the 12th and 13th centuries in the plain of the Po in northern Italy; for the towns founded in 1300 on the island of Mallorca by King Jaime II; and for countless towns and villages founded in present-day Poland, specifically in Prussia, in the 13th to 15th centuries.

Many small towns were founded in order to intensify the existing agricultural exploitation of the land. In chapter 2 this has been described with regard to many of the new towns of southwestern France. This motive is explicitly given by a contemporary source regarding West Malling in England. The 12th-century Life of Gundulf, Bishop of Rochester reports: ‘That vill had been a wasteland from of old, with only the occasional inhabitant to till it. With the help of King Henry (I) he [Bishop Gundulf] made there for the use of the nuns a good-sized town well-suited to merchants, as may be seen today, [...] and crowds flocked from all sides and set up house.’ In the foundation document of the town of Polička in the present-day Czech Republic, which was issued by King Przemysł Ottokar II in 1265, the town’s creation is clearly linked to population growth and reclamation policy: ‘Knowing that the fame of the ruler is made up of the quantity of the people, and that the multiplication of subjects proves the honour and power of the royal lordship, we will make desolate and remote places of which the site is suited, to be brought into culture by man for the honour and embellishment of our kingdom, as religious devotion and the future welfare of mankind demand.’

There were also towns that were especially founded in order to facilitate the mining industry. Several towns were founded in England, for instance, within a relatively short period of time in the mountains of Thüringia and Saxony when new veins of silver, iron and other metals were discovered there. In Devon and Cornwall in England, towns were founded in connection with the mining of tin. In paragraph 1.4.2 it has already been suggested that the facilitation of mining may also have been a motive for town foundation in Wales. King Edward I also tried to create a new port town on the Isle of Purbeck, from which the valuable ‘Purbeck marble’ was to be shipped. This foundation was, however, aborted for unknown reasons.

Far more often, however, new town foundations seem to have been aimed at the facilitation and exploitation of trade and industry. This could be done in different forms. With a town foundation a safe port could be created for naval transport, as we have already observed for a number of bastides and the abovementioned projected town of Newton on Purbeck. Newly founded towns that became very successful, thriving because of their function as trading ports, were, for instance, Cardiff in Wales, (Kingston upon) Hull in England, La Rochelle in France, Manfredonia in Italy, Lübeck in Germany, Königsberg in Russia (present-day Kalin-
ingrad in former Prussia), and Riga in Latvia.\textsuperscript{42} A new town could also be founded in order to attract new economic activity. This was probably one of the main motives for the foundation of the Neustädte of Hildesheim in Germany, and of Wroclaw and Thorn in Poland, which seem to have been especially added to the older towns in order to settle craftsmen from the textile industry, which became of major economic importance in the period of the 12\textsuperscript{th} to 15\textsuperscript{th} centuries.\textsuperscript{43}

But probably most often, the economic goal of a new town foundation was to create a thriving market.\textsuperscript{44} In chapters 1 to 3 I have already stressed the importance of the markets in the new towns of the respective regions. By providing the infrastructure of the market and the freedom and protection that accompanied it (see below par.2), being connected to the infrastructure of the trade routes, and sited in a town where consumers and more or less specialised producers were concentrated, the economy of the place would be strongly stimulated. Founders aimed at attracting trade to the places where they had more control over it, thus being able to tax more of it.

A market was a lucrative institute for a lord, because the importation, sale and exportation of goods could all be taxed. Normally, agricultural produce was taxed anyway, mostly as a fixed percentage of the production, but when it was traded in the market, the lord could profit from it yet again. Apart from taxation, the founder could also make money from the market by renting out the places and stalls in it. The inhabitants of the town, and of other privileged settlements under the same lord, generally were partly exempted from market fees and tolls.\textsuperscript{45}

In chapter 3 it was described how the food reserves of the city of Florence were sometimes too low in the late 12\textsuperscript{th} and first half of the 13\textsuperscript{th} century, and how this was one of the motives for the foundation of the Florentine terre nuove, as market towns, as strong-points to control the countryside from, and as places for the safe storage of food produce.\textsuperscript{46} In fact, the legislative document of the short-lived terre nove plano Asenti project of 1249 clearly states that one of the main motives for the foundation was its market. The market town, which was to be sited on the border of the Florentine territory on a high-lying pass on a main road, was founded so that ‘people from the Casentino-valley and the province of Romagna come here with corn, grain, feed, and domesticated and wild animals and other victuals’.\textsuperscript{47}

Landlords who founded new towns could significantly increase their income not only through taxation, but also by the collection of rents, the administration of justice and monopolies.\textsuperscript{48} In terms of the yield from the land, towns probably always brought in more money to their lords than did agricultural exploitation, let alone the use of the land as common or wasteland. Beresford argued that new towns were often planted on ground that previously was used extensively, because the gain was relatively greater.\textsuperscript{49}

Probably without exception, rent and at least some of the taxes were exempted for the first few years that the immigrants lived in a new town, so that the costs of moving, building a house and starting up economic activity would be partly compensated.\textsuperscript{50} After this period, a fixed yearly rent was to be paid to the lord of the town for every house lot.\textsuperscript{51} On top of that, the lord would receive a special fee if the lease on the plot was given over to a different person, for instance in the case of the tenant dying or choosing to move elsewhere.\textsuperscript{52}

From his analysis of contemporary accounts regarding newly founded towns in England, Beresford found that, in some cases, the lordly income from the circulation of goods and other revenues was higher than from rents, while in other cases it was the other way around. From this, he concluded that the prosperity of the catchment area of the town market, the hinterland, was as important for the income that could be generated from a town as was the attraction of settlers.\textsuperscript{53}

\textsuperscript{42} In par.1.8. it is described how, in most of the Edwardian foundations in Wales, the port was also a crucial element; but here its importance primarily concerned the military infrastructure, as it presumably also did at Aigues-Mortes in southern France (Inventaire Général 1973, p.18; Lavedan & Hugueney 1974, pp.88–89). See also: Beresford 1997, pp.119–122.
\textsuperscript{43} Czacharowski 1990, pp.1–13.
\textsuperscript{44} Strahm 1950, p.397.
\textsuperscript{46} See pars.3.5.1.2 and 3.5.4. The 16th-century historian Vasari explicitly wrote that the towns of Castelfranco and San Giovanni were founded ‘... per comodo della città e dello vettovaglie, mediante i mercati [...]’ (October 1329; Friedman 1988, pp.34–44, 327, doc.12; Richter 1960, pp.354, 356, 381, doc.4) See also: Pirillo 1981, p.189. A similar case is Pietrasanta on the pass-road to Faenza, founded in 1284. (Davidson 1962, vol.IV, p.368; Pinto 1978, pp.107, 113, 300) Examples of towns that were founded mainly as market centres in northern Italy, are mentioned by Settia (1991, p.645).
\textsuperscript{47} ‘et Casentensis et aliis circumsessent et Romodioli conferrarent cum frumento, chilo, forfetico et bestiis tam domesticis quam silvestribus et aliis victualibus’ (October 1329; Friedman 1988, pp.34–44, 327, doc.12; Richter 1960, pp.354, 356, 381, doc.4) See also: Pirillo 1981, p.189. A similar case is Pietrasanta on the pass-road to Faenza, founded in 1284. (Davidson 1962, vol.IV, p.368; Pinto 1978, pp.107, 113, 300) Examples of towns that were founded mainly as market centres in northern Italy, are mentioned by Settia (1991, p.645).
\textsuperscript{49} Beresford 1967, pp.52, 65–71.
\textsuperscript{50} See par.9.9.
\textsuperscript{51} See par.9.11.
\textsuperscript{52} Saint-Blanquat 1985, pp.63–64.
\textsuperscript{53} Beresford 1967, pp.65–68. See also Keene 1990, p.100.
Another source of lordly income from a new town was the revenue from the administration of justice. Apart from fines on breaches of the laws, the lord of the court also received a fixed sum for every case that was brought before the court.54 Sometimes, the income from justice could even exceed that of rents or tolls and taxes.55 Furthermore, the lord also commonly made money from his other exclusive rights, for instance on brewing, fishing, baking at an obligatory oven or milling at an obligatory mill.56

During the period of about the 13th to 16th centuries it became more and more common for lords to lease out (or ‘farm’ out) specific sources of their income against a specified yearly rent. Such sources of income could be, for instance, the market taxes, the rents on market space or stalls, exclusive rights on mills or fishing, tolls, or even the complete revenue of a town. Initially, such fee farms were commonly leased out to entrepreneurs, but in the 14th and 15th centuries it became the more normal practice that the town community leased the collection of revenues, so that instead of a number of separate payments the lord received a single, specified sum. In a growing economy this would save the community money, and would save both the lord and the community the trouble of separate collections.57 In different regions or lordships one finds such fee farms in different forms or intensities. There is especially clear evidence of such lease agreements with the English royal bastides in Gascony.58

From his comparison of a range of different accounts from England, Beresford concluded that lordly income from newly planted towns, while considerable, was mostly relatively low compared to the average lordly manor. The advantage of town foundation, however, was that it provided extra income against relatively small effort and costs, for which expenditure the profit would be substantial.59

But apart from direct income from the town itself, the foundation of a new town could also have a positive effect on the economy of the surrounding countryside. New settlers - to the extent that they did not come from the immediate surrounding area - would raise the demand for victuals, raw materials and other goods. Together with the proximity of the new market, this would stimulate the increase and rationalisation of production in the surrounding countryside. This could lead to, among other things, new clearing and reclamation of marginal land that previously would not have been cost effective.60 In this way, the circulation of capital increased, which would lead to higher income from taxes and tolls, and the manorial lands of the lord could also be exploited more intensely, by both the sale of produce and the renting out of parts of its ground.61

So, town foundation could be very lucrative. This meant that, apart from landlords, entrepreneurs also engaged in urban creation. Paragraph 7.3 already discussed the so-called locatores, who engaged in the new foundation of towns and villages in the lands east of the Elbe as entrepreneurs who speculated on the future success of the new foundations. In that paragraph we also examined the case of Elburg in The Netherlands. (fig. 7.3), This town was re-founded and newly laid out in 1392 on the initiative of the local steward of the duke of Gelre named Arent toe Boecop. It appears that Arent made a lot of money on his scheme, since he owned a large part of the land that was parcelled out into house lots that were subsequently sold. He also made money on the mortgage loans that he gave out and on the sale of an existing house that was to become the town hall. As far as is known, there was no specific, pressing reason to re-found the town, so it seems likely that profit was the main motive for Arent, so, in this respect at least, he acted as an entrepreneur.62

9.1.4 Administration

Another important motive for the foundation of new towns and the concentration of the population of the countryside therein, was the desire to increase administrative control over the people and the land. This motive

54 Strahm 1945, pp.29-33; Beresford 1967, p.211; Saint-Blanquat 1985, p.91.
56 Strahm 1945, pp.29-33; Beresford 1967, p.211; Saint-Blanquat 1985, p.91.
58 Beresford 1967, pp.9-10, 29, 362. See par.2.5.4.4.
60 Beresford 1967, pp.75-76. This effect is particularly clearly visible in the process of systematic regional colonisation of the lands east of the Elbe, where urban and rural development went hand in hand. (see Higounet 1986; Erlen 1992, pp.176-202, 248-276; Bartlett 1993, pp.122-128, 139-140, 144)
61 Beresford 1967, pp.75-76; Saint-Blanquat 1985, pp.45-49.
62 See par.7.3; Rutte 2000, pp.2-4; Rutte, Visser & Boerefijn 2004, pp.122-123, 127-128.
is intimately connected with both the military and the economic motives. We previously encountered this motive in chapters 1 to 3, in the sense that the administrative institutions of the founding lords were established in the new towns. There they surveyed the populations of the new towns as well as of the surrounding countryside, which ability tightened the lord’s control over the population in economic, judicial and military respects. One could place this organisation of the administration of the territory under the heading ‘political organisation of space’. This motive never seems to have been clearly expressed in the written sources, however.

It is clear that the need for administrative control was particularly great in newly conquered or colonised territories, or in regions where the military, political or social situation was unstable, as was the case in Wales and on the margins of the Florentine territory in the 13th and 14th centuries. The large town foundation of Lucera in southern Italy by Emperor Frederick II in 1233-46 is one of the few clear examples of the creation of a real regional capital, in this case of the Capitanata. The fact that the city was to accommodate a weapons industry, a mint and a castle containing the imperial archives, a part of the imperial treasure and even Frederick’s art collection, shows that the city was also to be an important residence of its founder.

9.1.5 Other motives

Many new towns were built because older towns had to be moved for one reason or another. More or less common reasons were, for instance: the silting up of a harbour or river, which was the motivation for the new foundations of New Hythe and New Romney in England; the flooding of older towns, as at New Winchelsea in England and the bastide of Mirepoix; destruction by war, as at Naarden in The Netherlands, Neu Haldersleben in Germany and Lodi in Lombardia; changes in the political and territorial situation, as at Beaumaris in Wales and San Giovanni in Tuscany; or for basic pragmatic reasons, such as the need for drinking water, as at Albiano in Tuscany, or the provision of goods and services to the lord’s court, as at New Woodstock in England.

An additional motive for the founding of new towns may have been the prestige that it would bring to its founder. Thomas Aquinas explicitly referred to the possibility of making the name of the founder immortal by naming a new city after him. From about the 14th century on, the distinguishing attributes of French nobleman were the possession of a castle and, in its proximity, a monastery, hunting grounds and, not least, a town. If there were no town present, one could be founded, concentrating the population of the domain there. This was not just the case for noble lords, but also for men who came from lower ranks of society and who dearly aspired to acquire the status of a landed nobleman. Such was the case, for instance, with the foundation of the town of Purmerend in Holland. Willem Eggert, a wealthy banker, who also was treasurer and advisor to the count of Holland, was rewarded for his services in 1410 by being invested with a noble title and with the lordship of Purmerend and Purmerland, just north of Amsterdam. Almost immediately thereafter, Willem built himself a castle and made a town of the village of Purmerend. Apart from the economic motive, prestige must have played a considerable role here.

In paragraph 8.3 we examined the town foundations of Count Reinout I of Gelre and the Hussites and other heretical movements, which were motivated by more or less obscure Christian ideologies related to crusading ambitions and eschatological expectations. An ideological motive of a more practical kind drove Abbot Thomas Packington of the Benedictine abbey of Burton-upon-Trent when he ‘made a borough of Cattestrete [...] by reason of the great famine there was that year’. It seems that the town foundation was something
of a charitable scheme to provide land and, probably, employment to people affected by a famine.\textsuperscript{72}

In a number of documents regarding town foundation as well as other facets of his urban policy, edited at the court of King Přemysl Ottokar of Bohemia, formulations can be found that refer to the well-being of his subjects and of the country. In one document we read that ‘[...] the government has the assignment to bring the subjects prosperity and benefit’, and in the foundation document of the town of Polička of 1265 one can read that the town is founded ‘[...] as religious devotion and the future welfare of mankind demand.’ This should probably be seen in the light of any king’s duty as a good Christian ruler to found towns, an idea which was propagated by, among others, Thomas Aquinas.\textsuperscript{73} In many of the different foundation charters issued by Ottokar, his foundations may be seen to have been rooted in the Christian faith by his use of the expression ‘God-obeying’. According to Kuthan, this word must be understood as a reference to biblical texts such as those on king Salomo’s building activities.\textsuperscript{74}

In an earlier quotation above, from another of Ottokar’s charters, it was clearly stated that town foundation was motivated, not only by the desire to increase the power of the kingdom and the reclamation of new lands, but also by the idea that towns embellish the country.\textsuperscript{75} A similar motive was given in the foundation document of Mělník, from 1274, which says ‘The fame of our kingdom grows best by the beauty and ornament of the towns.’\textsuperscript{76} This striving for beauty by the foundation of towns can also be regarded as an idealistic motive. It seems quite obvious, however, that this was not a primary motive for the foundation of new towns.

9.1.6 Conclusion on motives

The prime motive behind practically every town foundation was the idea that the founder would gain something from it in the end, be it by collecting more rents and taxes, by a stronger military position, by having tighter administrative control or by enlarging his territory. The founding lords sought to enlarge or consolidate their power by using the growth of the population and the economy as their instrument.\textsuperscript{77} This was, however, rarely explicitly mentioned in the documents related to the foundations, and sometimes the prime motives may have actually been veiled behind pious and charitable formulations.

The different motives that have been treated above probably never came into play in complete isolation: in almost all cases there were different motives which combined to inspire the rulers over the land to engage in the creation of a new town.\textsuperscript{78} In the traditional historiography of town building the motives for the foundation of new towns in the ‘middle ages’ have mostly been described as being primarily, or at least to a large extent, military in character. It seems that modern scholars have generally not seriously considered that deliberate economic policy could play an important part in contemporary politics. This is fundamentally wrong, however, as has been argued above, and more specifically in the chapters concerning the bastides and the Florentine terre nuove.\textsuperscript{79} Often the two aspects of economic strategy and offensive territorial strategy converged in the foundation of new towns, and it is often difficult to establish just how great a part was played by either of these two, or by other possible motives. But it is a fact that determined economic policy was part of the politics of dominion over territories and subjects in the period, and that it played an important role in settlement policies. Although it is quite impossible to adequately and objectively set off the one motive against the other, it is my opinion that economic exploitation was far more important than military strategy for urban creation in the period under consideration.\textsuperscript{80}

\textsuperscript{72} Slater 1996, p.74.
\textsuperscript{73} ‘[...] die Regierung der wichtige Aufgabe habe, die Unterten Wohleichen und Nutzen zu bringen’; ‘[...] so, wie es Gottesfurcht und das künftige Wohleichen der Menschen Schönheit hiechen.’ Kuthan 1996, p.39; Aquino 1997, pp.117-119, 134 (see par.8.2) A similar motivation was given by Duke Barnim of Pomerania, who stated in connection with the foundation of Prenzlau in 1234, that he wanted ‘[...] to found free towns for the use and profit of his land, after the example of other provinces [...]’ (Kuhn 1956, p.79). In this respect the foundation of a town is comparable to the creation of churches, monasteries, roads, bridges and so on, for it was generally recognised to be the duty of a good Christian ruler to founded and built these, in the interest of society.
\textsuperscript{74} Kuthan 1996, p.39 Kuthan only gives the German translation Gottesehrenum of the original Latin expression. Biblical texts relating to Solomon’s building activities include, for instance, II Chronicles 8:1-6; I Kings 5-7; see also Ecclesiasticus 30:19.
\textsuperscript{75} See par.9.1.3. See also the citation from the fortification grant of Jaromír in par.9.1.1.
\textsuperscript{76} ‘Der Ruhm unseres Königreiches wächst am meisten durch die Schönheit und Zierde der Städte.’ (Kuthan 1996, p.39)
\textsuperscript{77} Kuthan 1996, p.39. See pars.1.4, 2.5 and 3.5.
\textsuperscript{78} Erlen 1992, p.154.
\textsuperscript{79} See pars.1.4, 2.5 and 3.5.
\textsuperscript{80} Regarding the German lands, both Koebner and Sydow acknowledge the importance of economic motives, and Beresford strongly articulates it with regard to England, Wales and Gascony. (Koebner 1964, p.44; Sydow 1980, p.190; Beresford 1967) According to Settia (1995, p.65) most of the new towns that were founded in northern Italy were founded mainly for economic reasons, and were only militarised in later times, once they had attained some importance.
I want to finish this rather extensive description of the motives of town foundations with the correction of two erroneous ideas. Some scholars have put forward the idea that new towns were founded in order to moderate the excessive growth of existing towns and cities. There are no contemporary sources, however, which support this view. Actually, this hypothesis contradicts the fact that the governments of various cities that were engaged in the founding of new satellite towns in northern and central Italy also planned large new extensions to the mother cities around the same time. The idea that the settlers of newly founded towns largely came from existing cities and that they settled in the new towns because they wanted to be active in agriculture, rather than in crafts or trade, must also be dismissed for lack of proof. In fact, there are many examples that rather show the opposite: that new towns were created to concentrate the population of the countryside.

9.2 Rights and privileges given to new towns

In order for a new town to be successful it needed to attract settlers of free status, especially those that were employed in activities involving manufacture and trade. Therefore, it had to be endowed with special rights and privileges. This is clearly put into words in a document of 1253 concerning Głogów in Poland, which speaks of ‘[...] a free and secure city, which can attract many people because of its freedom [...]’. Without such privileges or ‘freedoms’ - called immunitates or libertates in Latin, or frachigie, franches, Freiheite, liberties etc. in the languages of the various regions - the settlement would not be considered a town. In this juridical sense, the town is the geographical area in which the special rights are valid.

In general, it may be supposed that towns received specific privileges from their lords in order to allow them to function well in juridical, social and economic contexts. With every new foundation, the founding lords wanted to attract settlers to a specific location, often probably as many as possible. And therefore they needed to put attractive privileges at the disposal of the settlers, apart from good land at an attractive location. The donation of civic rights to Jaca, by King Sancho Ramírez of Andorra in 1063, may serve as an example. The king promoted the settlement where his castle, manor and the bishop’s seat were located so that it became a town. In the donation of rights it was clearly formulated why he gave the settlers the privileges they had asked for: ‘because I desire that it will be well-settled, I give and confirm you and all who will move to my town of Jaca, all the good laws, which you have requested, so that my town will be strongly populated’.

For the most part, the urban privileges were laid down in written form in a charter that was kept by the town’s administration. In some cases, however, especially in the earlier period up to about the late 13th century, the privileges were not written down initially and were only codified in a charter later on. Normally, the privileges were foreseen right from the outset of the foundation, but in most cases they were only instituted after some time, often a number of years, when there actually was a developing urban community to give the privileges to. These charters are, nevertheless, important sources for the study of town foundation, since they often are among the oldest preserved documents regarding specific towns.

The sets of privileges for a new town were mostly copied with little or no changes from existing sets of privileges enjoyed by older towns. In this way ‘chains’ of urban customs were created, in which one or more towns were indebted to an older town for their juridical constitution. There are various examples of groupings in which a great number of town charters stem from one single ‘mother-town’, thus constituting a ‘family’ of charters. The most widespread of these families of rights are probably those of Breteuil in Normandy, which were diffused over England, Wales and Ireland under the Norman colonisers; those of Magdeburg and Lübeck in northern Germany, which spread all through the eastern principalities of present-day Germany, Poland and the shores of the Baltic Sea; and the rights

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82 For instance Florence, Bologna, Reggio Emilia and Brescia. Often these urban extensions did not fill up with new settlers as quickly as was planned, due to the economic and demographic crises of the 14th century. (see par.0.1.5).
83 This idea has been put forward by: Vanetti 1973, p.188; Morini 1963, p.119. For the concentration of people from the countryside, see pars.2.8, 3.6, 9.1.1.
84 Bartlett 1993, p.167. A similar reason for the great attraction of settlers is given in the Lippiflorian of around 1250, which describes the foundation of Lippstadt in northern Germany: ‘People rush in, attracted by the many privileges’. (‘Leute strömen herbei, gelockt von der Fülle der Freiheit’) (Althof 1900, p.49)
85 See par.0.1.1.
86 Pitz 1991, p.381; see ch.8, n.131.
87 The bastides of southwestern France, for instance, often received their chartes de coutumes after one year if they were founded by the French crown, but other founders usually took more time before they actually granted the charters. (Lauret, Malebranche & Séraphin 1988, p.44)
89 See par.1.2.
of Cuenca-Teruel on the Iberic peninsula.\textsuperscript{90} Usually, towns founded by the same lord would be given the same customs. In the course of time, however, the customs tended to be adjusted in response to specific demands in the different places.

The town customs contained different sorts of privileges and regulations concerning private, public and often also criminal law. In general, three basic elements can be distinguished in the charters. The first and most important is the formulation of the relationship between the lord and the town community. In this respect, the town charter is a sort of contract between the lord and the settlers who take up plots of land within the specified area for which the customs are meant, in which the rights and duties of both are specified.\textsuperscript{91} The second element is the town’s constitution; and the third is a specific set of economic and material privileges that the members of the urban community receive.\textsuperscript{92}

The most important aspect laid down in these statements of customs is the general principle that the ruler over the land gave up part of his rights over and the revenues from the people living on his lands, to which he was entitled according to ‘feudal law’, in return for fixed rents to be paid by the settlers for fixed plots of land in the town. These rents progressively replaced the corvées and revenues that previously formed the duties of the settlers towards the lord.\textsuperscript{93} The plots (‘burgages’ as they were often called in England\textsuperscript{94}) would commonly be held from the landlord in hereditary tenure (iure hereditarium or burgagium), which means that they could be inherited and sold to other members of the town community.\textsuperscript{95}

The ruler also gave up a considerable part of his rights over aspects of the personal lives of the settlers on his lands. Formerly, many of the subjects of the lords were limited in their actions: they were, for instance, not free to go wherever they wanted, to grow what they wanted on their fields, to marry whomsoever they wanted, or to bequeath their possessions to their relatives. For the most part, these kinds of rights were given up by the lords when they founded new settlements. Of course, they did not do this out of philanthropic motives, but rather out of the necessity to make their new settlements attractive to settlers.

Members of the town community were often freed from military services for longer than a limited period of time (often one day per year) and from the obligation to pay certain taxes and tolls held by the founding lord, and sometimes also for tolls held by his vassals and associates.\textsuperscript{96} In return, the settlers had to swear loyalty to the lord.

The urban customs also contained privileges regarding the town as a juridical community, the administration of justice and the administration of the town. Of course, it was essential for the settlers that there was some sort of guarantee that there would be order: so that crime would be discouraged and punished, and that the settlers could live and trade safely. Often, the town received the right to have its own court for handling matters falling under the lower justice. Many a time, however, this privilege initially remained with the lord of the town. Furthermore, the statements of customs often also contained regulations regarding the defence of the town, concerning both men and fortifications.\textsuperscript{97}

A more important part of the privileges, however, were the elements of mint, toll and especially market rights. Originally these were royal regalia: in the Ottonian empire, for instance, only the king had the right to build fortifications and to establish mints, tolls or markets.\textsuperscript{98} But gradually, as the central power in the empire crumbled, lower lords like bishops and counts, and, later on, lords of even minor status, claimed the right to build strong fortifications and to found markets, towns and tolls.\textsuperscript{99} In areas outside the empire there

\textsuperscript{90} Quirin 1954, pp.120-121 (families of town charters in the present-day Czech Republic abb.5); Beresford 1967, pp.199-200; Erlen 1992, pp.20, 38-39, 198-166; Bartlett 1993, p.173; Lilley 2002, pp.76-93.
\textsuperscript{91} Planitz 1954, p.168; Koller 1978, pp.57-65.
\textsuperscript{92} In northern France the town charters of Lorris and Beaumont-en-Argonne were copied for many other towns, particularly for new towns founded in relation to new reclamation. (Higounet 1990, pp.147-148) That rights were copied for other towns does not automatically mean, however, that other aspects such as urban form, or the functions or specific forms of administration were taken over as well. This has long been assumed to have been the case for the towns around the Baltic Sea and east of the river Elbe that took over rights that originated in Lübeck (iure Libicensi), but this is only rarely supported by specific sources. (Hammel-Kiesow 1995)
\textsuperscript{93} Beresford 1967, pp.202-220; Platt 1976, pp.125-130; Saint-Blanquat 1985, pp.95-96; Erlen 1992, p.44.
\textsuperscript{94} Koebner 1964, p.44.
\textsuperscript{95} See par.5.11.
\textsuperscript{96} Erlen 1992, pp.35-45.
\textsuperscript{97} Quirin 1954, p.509. See also Platt 1976, p.116.
\textsuperscript{98} Erlen 1992, p.243.
\textsuperscript{99} Beresford 1967, p.64.
often was a similar development. In England, however, the king managed to hold on longer to his regalia.

Market rights were essential for the economic well-being of the town, as they provided inhabitants as well as buyers and sellers from elsewhere the possibility to trade freely. This freedom was limited to a particular place and a particular time: the market. Together with its other economic privileges, the freedom of property and inheritance, and a weekly market, the town formed a sort of equivalent to a modern ‘economic development zone’.

Apart from these basic elements, often there also were other features spelled out in the statements of customs, such as criminal laws and regulations of a social and environmental nature.

Sometimes, sets of specific rights were promised on the condition that first a specific minimum number of settlers had to inhabit the new town. In the bastide of Réjaumont, for instance, it was stipulated in the foundation charter that the institution of urban rights would be cancelled if no more than 20 houses had been built within a few years. Even when customs were already granted, they were not perpetual. They could be changed later on by, or with the permission of, the lord of the town; or they could be completely withdrawn by him. This happened to many small towns which, in the eyes of the lord, did not attract enough settlers. It also happened that customs were withdrawn as a way to punish a town community for misbehaviour towards the lord. It also happened that town communities that were not content with their rights spent large sums of money in order to receive more privileges. For instance, in 1338 a number of existing towns and villages in the district of Villelongue near Toulouse bought the same customs that were enjoyed by the royal bastides in the area, for the sum of 9,000 livres tournois.

It should be well understood that the privileges mentioned in the charters did not apply to everybody living in the town. The privileges were only valid for those who stood in a direct relation to the town lord, in the sense that they held a house lot in hereditary tenure from the landlord. In later stages of the town’s history, people who rented a smaller part of the original house lots, or part of a house, would often also receive citizenship if they complied with set conditions, such as living in the town for a certain period of time (usually one year), the payment of an admission fee and the possession of a certain amount of capital.

Similar sets of privileges were not strictly exclusive for towns: villages could also receive certain privileges. Normally these were limited in comparison to towns, but this was not necessarily always the case. A contemporary chronicler, writing of the foundation of a number of new villages by the monastery of Pegau in southern Germany, even commented that he found it ‘ridiculosum’, so many liberties did the abbot promise to the future settlers.

Overlooking the customs of new towns in the various parts of Europe, it is striking how many similarities exist among the various places. This can partly be accounted for, as in many cases they were simply taken over from older towns. But for others, the similarities of rights in different regions of Europe remain to be explained, all the more so since it is likely that in different regions they developed from different sources and in different ways, as Pitz made clear.

There is, however, an important general distinction in the purposes of town customs that seems to have been ignored in the literature. Rights and privileges that were granted to existing settlements were often the fruit of long and bitter struggles between the communities (which often had to pay considerable fees in order to get them) and the lords. But for the newly created towns the situation was different. The general contents of their customs were mostly promised at the initial stage of the foundation process, in order to

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100 Beresford 1967, p.216. Most towns also had one or several yearly fairs on particular days, often corresponding to the feast day of a saint who had some special relevance to the place. Especially in Eastern Europe, however, elementary victuals like beer and bread were excluded from free production and trade. These would be monopolised by the founding lord or his officer. (Erlen 1992, pp.44, 184-204)

101 Lauret, Malebranche & Séraphin 1988, p.89.


103 Hammel 1988. In the case of the bastide of Larrazet, the families that received the customs in 1265 were even mentioned by name. (Lauret, Malebranche & Séraphin 1988, pp.58-59)


106 Schwinkelöper 1890, p.164.


108 Within Western Europe the developments were rather different in the British Isles, the northwest of the continent, and Spain and Italy; still more different were Scandinavia, Russia and Byzantium. The great similarities are all the more remarkable since within older cities they often developed from different rights granted to distinct social groups. (Pitz 1991, pp.256-390; for the different rights for distinct social groups, see also Frenz 2000; Lilley 2002, pp.93-104)

109 It seems that historians who specialise in town charters have been timid to compare urban customs on an European scale, preferring rather to concentrate on individual charters or families of charters. The international comparisons of town charters that I know only appear in the margins of wider discussions of colonisation and town foundation. Erlen 1992; Bartlett 1993, pp.167-178; Lilley 2002, pp.49-55.
attract ambitious settlers from elsewhere and to create thriving economic centres. So, in the first case the rights and privileges were the result of bargains struck between inhabitants and lords; while in the second case, they were promised in order to serve as an attraction and stimulus to settlement.

The examples of Glogów and Jaca noted earlier in this section illustrate this point, but an even clearer case is the foundation of Queenborough in south England by King Edward III in 1368. The foundation charter states ‘In order that many might more readily come and live there he [the king] granted borough status, two markets a week, two fairs a year, the right to elect a mayor and two bailiffs, together with the independence from the jurisdiction of the Cinque Ports.’ As an additional privilege, the king also transferred the highly important staple rights for the export of the region’s wool from the older town of Sandwich to the new foundation.109

9.3 The town land

If someone wanted to found a new town, one of the basic prerequisites was, of course, the disposition of a piece of land that was suitable for the building of a town. The location had to offer at least some basic favourable conditions: the ground should be firm enough to build houses on; there should be drinking water available; and the area should offer the inhabitants the possibility of producing enough food products and raw materials to make a living. And, in order to insure economic success, the location had to be well sited within the larger system of settlement, so that the town would profit from its location within the regional or interregional transport network. If the founder did not yet dispose of such a site, he could buy or trade a piece of land. This happened, for instance, with the foundation of New Winchelsea in England. When the old town of Winchelsea was increasingly threatened by a rising sea around 1287, King Edward I wanted to move it to a higher site nearby. In order to do this, he had to trade a piece of land on a nearby hill with the lord and lady of Iham.110 Another possibility was to obtain the permission to found a town on somebody else’s land and agree to share the profits with them, as happened in the paréages that were agreed to for the foundation of many of the bastides of southwestern France.111 The specific conditions that were required in order to serve as a site for a successful town foundation, and the specific sorts of sites that were chosen, are amply treated in chapter 5.

9.4 Town names

At a certain point in the foundation process, a name had to be chosen to call the new town by, so that it would be easier to communicate about the subject and to give the place a specific identity. Sometimes a new name was made up, sometimes the old name of the site remained in use, and on yet other occasions a term was used that somehow described the status or the place of the new settlement. Many new towns of the period under consideration are still more or less clearly identified as new town foundations by their names.

One can often find terms that refer to the newness of the settlement. Examples are, in different languages, Novus Burgus, Newton, Newcastle, Newport, Villeneuve, Terranuova, Villanuova, Villanova, Nieuwpoort, Nieuwstad, Neustadt, Neumarkt and Nowy Targ. But such names were so non-specific that places could easily be confused: in the county of Hampshire in England alone there were three different settlements that were called Novus Burgus.112

Another type is the name that refers to the free status of the settlement, such as Villefranche, Villafranca, Castelfranco, Freistadt and Freiburg. The word bastide, which can be found in many names of new towns founded in southwestern France, directly refers to a certain condition (involving novelty) as well as a certain juridical status. Examples are Labastide-du-Temple (founded by Templars), Labastide-Saint-Pierre and

109 Beresford 1967, pp.457-459, 179-180, 337. Queenborough was to be the last town plantation in England until the early 17th century. Because of the demographic crises of the 14th century (in particular the Black Death) the new town did not prove to be a very successful venture. The start was good, with almost instant economic activity, but after the privilege of the wool staple was shifted back to Sandwich after ten years, the town seems to have withered.

110 Beresford 1967, pp.14-15, see also pp.102-104. A similar land swap took place for the foundation of Conwy in north Wales. In addition to the land traded, however, King Edward I also had to pay a large sum of money to the former owner of the site, the abbey of Aberconwy. (see par.1.7.4) For the re-foundation of Fontanetto Po in northern Italy it was the abbey of San Genuario that traded land with various members of the existing community in order to come into possession of the whole area for the new town. (Panero 1979, p.106) See also Cortese 2004, p.301 (Montecurliano).

111 See par.2.4.2.

112 Beresford 1967, p.383; Higounet 1992, pp.111-113. A precedent which is telling of the great continuity in colonialism and town foundation, is the Greek colonial town foundation of Neapolis. This city, which is presently known as Naples, was in origin a Greek colony of about 600 BC and was given the name Neapolis because it means ‘new city’. (Dilke 1971, p.202)
Labastide-de-Sérou, the latter was named after the river near to which it was planted.\footnote{113} A reference to the safety and peace that supposedly was to be a principal feature of town communities is to be found in names like Sauvetat, Salvatiera, Friedland, etc.\footnote{114}

Names for new towns were often simply taken over from local toponyms that already existed. According to Higounet, this is the case with almost half of all new towns of the high-period of town foundation.\footnote{115} Examples are Harlech in Wales, Aigues-Mortes in southern France, Bunschoten in the Netherlands and Villingen in Germany. Often the adjective 'new' was added to the toponym: for instance, New Sleaford, New Radnor and Neu Haldersleben.

There is a wide variety of names that were really newly chosen, but in this variety there are types of names that were more favoured. In many cases names were chosen in reference to the location of the town. Often the names have positive connotations, such as, for instance, Beaumaris, Beaumont, Mons Securus/Monségur, Podium Mirabile/Puymirol, Bonneville, Bonnegarde, Belvedere, Casterbon, Schoonhoven and Schönb erg. But there are also names of a general type which reflect the nature of the sites, often referring to fords or bridges (Stratford-on-Avon, Boroughbridge, Bridgeton, Pont-à-Mousson, Pontadera, Klagenfurt, Brück an der Mur); to harbours (Portsmouth, Port-de-Lannes, Portovenere Brouwershaven, Heiligenhafen); to hilltop sites (Grosmont, Montaut, Puigcerdà); to river mouths (Falmouth, Münden); or to woods (Mansus Sylvae / Masseube, Boso Ducis / 's-Hertogenbosch).\footnote{116}

Quite often, towns were named after older cities, preferably those of high status: Pavie (referring to Pavia), Bruges (Brugge), Tolosa (Toulouse), Bern (Verona), Frankfurt an der Oder (Frankfurt am Main), Kölnn (Cologne), Nizjini Novgorod (Novgorod) etc.\footnote{117} There were even new towns that were named after very exotic cities, such as Baldac (now Baldock) in England, referring to Baghdad, and Damiatte in southwestern France, referring to Damia\footnote{118}. Here, as with Grenade-sur-Garonne (after Granada), and other bastides named after Cordoba and Valencia, it is clear that Islamic cities could also be highly admired.

Many town names were chosen as a reference to the name of the founding lord or a relative of his. Examples are Charleville, Saint-Louis (the canonized Louis IX), Saint-Édouard (invoking the name of the saint as well as of the king), Libourne, Alessandria (c. 1168 named after pope Alexander III, but 15 years later renamed Caesarea when the community wanted to make peace with the emperor\footnote{119}), Giglio Fiorentino, Manfredonia, Montecarlo and Karlstadt. Some towns were named after the title ‘king’ or ‘queen’, such as Kingston, Villa Franca Regia (presently Villeneuve-sur-Yonne), Königsgratz (Hradec Králové), Queenborough, Burgus Reginae and Puenta la Reina. Quite a number of towns were given names that reflected the status of their founder or overlord: Bishop’s Castle, Newton Abbot, Montréal, Villeneuve-le-Comte, Villeneuve-l’Archevêque, Cittareale, Cittaducale, Villaréal, Herzogenrath, Bischofsburg (Biskupiec), etc.\footnote{120}

Of course, there are also a large number of towns that were named after saints, such as: Bury Saint Edmunds, Saint-Denis, San Giovanni, Annaberg, Marienburg and Santa Fé. Names with outright meanings are relatively rare. Battle and Victoria refer to battles won or to be won. Flagella means ‘whip’, a reference to one of the motives for the foundation of this city in central Italy by Emperor Frederick II, which was to punish the pope and his subjects in the nearby territory of the Papal State.\footnote{121} As described in par.8.3.1, a number of town foundations by the count of Gelre, which were piously motivated, were named Insula Dei, meaning ‘Godly Island’. Christburg, a foundation of the Teutonic Order, probably received this name because it was sited in the heathy country of Prussia. The town name Buonalbergo, in Tuscany, means something like ‘good place to stay’.

Thus, it appears clear that names of new towns were, for the most part, not chosen randomly. For instance, the names of four out of the six Florentine terre nuove discussed in chapter 3 originally referred more or less explicitly to the founder, in order to put a Florentine stamp on them.\footnote{122} In this manner the landscape was reshaped, at least to a certain extent, in the minds of the people. In historical colonisation processes, as in...
the Florentine situation, toponymy has been quite a common instrument used to re-create the landscape according to the will of the conqueror. This instrument was one of many which helped to appropriate the land and to legitimise this action.  

Sometimes, it appears that a name of an older toponym found more recognition with the people living in the area than a newly given name, which was gradually forgotten. Many towns were renamed later in their history, whether or not in other languages, depending on territorial changes or political circumstances.

### 9.5 Foundation rituals

From a small number of historical sources it is known that town foundations were sometimes symbolically inaugurated at a specific moment by a consecration ritual. With a number of bastide foundations, a pole (‘pulum’ or ‘pau’) with the arms of the founder or founders was placed in the centre of the settlement at a specific moment. This pole was often planted by the founding lord himself. Subsequently, the settlers swore an oath and the founder symbolically handed over the house lots, while God and specific saints were invoked as witnesses.  

Another ritual of town foundation is described for the foundation of the ‘siege-town’ of Victoria before the gates of Parma by Emperor Frederick II in 1247. In order to determine the most auspicious moment for the foundation ritual, the court astrologer was consulted. The best moment was calculated to be when Aries was ascending, since it is the sign of Mars, the god of war. At the chosen moment Frederick traced the circumference of the town with a plough on the ground. According to the source, this symbolic ritual was chosen because the ‘ancient magnates’ had used it. Indeed, in the distant past the ritual tracing of a town’s boundaries with a plough at auspicious moments had also been customary for town foundations of the Etruscans and the Romans, as well as of people in other cultures in the Near and Far East.  

A very similar ritual was enacted with the foundation of Cittadella in northern Italy in 1220, where an auspicious day was astrologically determined, on which the plan of the town was drawn on the ground. According to Fasoli’s descriptions of town foundations by north and central Italian cities, the actual inauguration was mostly done by the consoli (consuls) or the podestà (a sort of mayor) of the founding commune, who traced the boundaries with their own hands, probably in reference to the mythical foundation of Rome by Romulus. When King Manfred of Puglia and Sicilia founded the town of Manfredonia on the Adriatic coast in 1256, he had himself advised by two astrologers to find the best time to lay down the first stone. One month later, he came to the place in order to trace the walls and streets with his own hands and to begin the work on the east end of the town. The Florentine new town of Firenzuola was officially founded at the eighth hour of April 8, 1332, because it was at that hour that the sign of the Lion would be ascending, which would mean that its construction would be ‘stronger, stable and powerful’.  

The Lübeck Benedictionale of 1486 describes the ecclesiastical ritual with which a new settlement was inaugurated in the lands east of the Elbe. A priest would appeal to heaven for the health and growth of the settlement, by blessing all house lots with a small cross and a mixture of water, salt, consecrated ashes and wine. After this, the small cross was attached to a large cross that was put up in the centre of the settlement. With this ritual, Matthew 5, verses 13-16 would be read. This ritual is very similar to the dedication ritual of new churches.

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123 See, for instance, Pearce 2004. Remarkably, this does not hold true for the names of the Edwardian new towns of North Wales. For towns that were founded in such an offensive operation of colonisation, it seems quite strange that most of them carry Welsh names rather than names that refer to the glory and power of their founder. Apparently, Edward and his advisors were not interested in toponymy, and did not see any advantageous opportunities in it.  

124 See par.2.6. A similar ritual was staged with the foundation of a new town of which the name is not known, near Venzone in northeastern Italy. On May 21 of the year 1297, Patriarch Raimondo of Aquileia, as founder of the settlement, planted an iron cross on the place that was to become the centre of the new town. (Michele 1980, p.47)  


126 Rykert 1976, pp.132-143.  

127 Franceschetto 1990, p.52. Unfortunately, it is not specified in the source exactly how the plan was drawn.  

128 Fasoli 1942, p.202. Fasoli probably means that this was done with a plough. See also Wipfler 2005, p.204.  

129 Franchetti-Pardo 1999, p.367; Valente 1980, pp.15-21. After the chronicle of Matteo Spinelli, which was written some decades later.  

130 After the early-14th-century chronicle of Giovanni Villani (1823, vol.5, libro X, cap.199, p.252).  

Similar rituals as described above were also enacted with the foundation of new towns in later centuries.\textsuperscript{132} Apparently, there was a strong tradition in the rituals for town foundations. In fact, this is quite logical, since it is one of the main functions of rituals to place unique events in a long tradition. It is telling in this respect that Emperor Frederick II’s ritual inauguration of Victoria is specifically described in a contemporary chronicle as a tradition from the antiqui magnates.

\section*{9.6 The laying out of the plan}

No drawings of designs for new settlements from the period under consideration are presently known, and even written sources that describe the actual planned forms of new towns are highly exceptional. Nor do the written sources give much information about the way that planned structures were actually laid out. Therefore, the physical remains of the original layouts are an important source from which details of the process of planning and laying out a new town may be deduced. The following discussion of the laying out of town plans is, therefore, based on a combination of written sources and surviving physical evidence. The discussion primarily concerns newly founded towns but, in principle, it is also largely valid for the creation of new extensions to older towns in the period, since most newly founded towns were also created on the sites of existing settlements. Hamlets, castles, monasteries and villages were favourite places for the creation of new towns, which could be laid out either over or next to the existing settlements. Probably without exception there already were roads at the site of the new town, and often also fords and sometimes even market fields or ports.\textsuperscript{133} Later on in history, the newly founded towns mostly became the core of further extensions themselves.\textsuperscript{134}

With the actual creation of a new town, there must probably always have been some kind of scheme for the division of space. The founder had destined a specific piece of land for the new settlement, and within that piece of land different areas had to be destined for different functions, such as roads, markets, moats and house lots, or for different users: the various settlers, ecclesiastical institutions and the founder himself. A document from the 1280’s regarding the foundation of Newton on Purbeck, mentions that the founder, King Edward I, ordered two especially appointed officers ‘to lay out with sufficient streets and lanes, adequate sites for a market and church, plots for merchants and others in a new town with a harbour in a place called Gotowre super Mare in Studland Parish.’\textsuperscript{135}

The founder would normally not leave the organisation of space to the settlers. In fact, there is not one case for which this is actually known. Tábor is an exception, for it was not founded by the lord of the land, but by a group of people who simply took the land. Its irregular structure seems to have partly resulted from a lack of coordinated planning. (\figref{fig:8.5}) But there are also other towns that are reported to have been newly created, with plans that look like there was no planning dictated from above. (\seefig{2.18}) Possibly, the settlers were left free in their need for space, but unfortunately there are no historical sources that tell what actually happened in such cases.

The normal process of planning a layout for a new town probably must have consisted of the following steps. Early in the planning process it must have been determined, more or less exactly, about how many house lots were needed and what their size would be. At this stage the general plan also must have been determined. The main part of the structure of the plan was made up by the arrangement of house lots and their access by streets. Other relevant factors were the size of the streets and the site and size of market places, churchyards and possible further structures for religious, public or governmental use. Of course, these were not always all planned right from the outset; they could also be filled in later, within a roughly laid out framework. If defensive structures were originally intended, their spatial structure would also be determined more or less exactly in advance.

\textsuperscript{132} For instance, with the foundation of the mining towns of Annaberg and Marienberg in Upper Saxony in 1496 and 1521, where the perimeters were traced with a plough (Kratzsch 1972, pp.109, 43); with the foundation of Livorno in 16th-century Tuscany and the foundation of Grammichele in Sicily in 1693, where auspicious moments for the initiation were determined astrologically (Angelo Guidoni Marino, Grammichele. In: Zeri 1980, pp.407-442, pp.415, 422); and with the foundation of the fort-town of Terra del Sole by Cosimo I de Medici in 1564 and of many colonial towns in Central America by the Spaniards, where rituals like the ones in the bastides and in the Lübeck Benedictionale were staged (Franchetti-Pardo 1994, pp.367-368).

\textsuperscript{133} See pars.5.1, 5.2, 5.3.

\textsuperscript{134} See for instance Strahm 1950, p.396; Blair 2000, pp.246-258.

These elements had to be put together into a general plan, which may have been very basic or may have been more elaborate. It may have been an ‘ideal’ plan made up in the mind of the planner, irrespective of the actual circumstances; or conversely, a plan set out more or less clearly on the ground, taking into consideration the conditions of the site, like existing roads, water courses, slope, amount of space, etcetera. With this, new solutions could be ‘invented’ or existing models could be followed. Conformation to a model may have been a conscious choice for some reason, or it may have been unconscious, simply due to a lack of consideration of other possibilities.

Who the planners of the urban form of the towns were has already been treated in chapter 7. Contrary to what is often thought, they were rarely building masters or what we presently call ‘architects’, at least as far as the historical sources can tell us. The planners may just as well have been notaries, monks, army officers, merchants, officers of the founding lord, private investors or surveyors. It seems likely that the people who set out the plan on the ground often were of this last professional group. But in fact, the sources are poor, so one cannot be sure about that. It may even be doubted whether there actually were many full-time professional surveyors: notaries, military engineers, master masons and monks appear to have done this job on the side.

It is unclear to what extent the people who made the plans were the same as those who supervised their actual realisation on the ground. It seems likely that often they must have been the same, as it is most likely that accurate plans were rarely designed in advance. There are a few documents, however, that contain descriptions of urban structures to be newly laid out. This shows that at least sometimes more or less accurate designs were formulated in advance, acting as intermediary between planner and surveyor or between planner and patron.136

One would expect that when accurate plans were formulated in advance, they would have been drawn in a small scale. In contemporary highbrow architecture, such as in cathedral design, this was the case ever more often and with increasing accuracy since at least the early 13th century.137 However, there are no sources that testify to the existence of paper plans for urban structures that were to be laid out in the period under consideration. It is known, however, that town plans did exist. And there is even one plan from a new town that was only just created. But this plan of the Tuscan port town of Talamone was no design plan; it was only a schematic drawing on which the officials wrote the names of the settlers of the different lots in the town.138 (fig.6.31) But nevertheless, the fact that a plan was drawn for such a simple function, makes it seem quite likely that actual design plans of urban structures also existed. Possibly, they were all destroyed later on; but since there are no references at all to such plans, one must be very cautious with this assumption.

The extent of the area in which the particular new privileges were to be instituted would generally be marked by crosses, posts or ditches.139 There are various possibilities as to what would have been done within that area to prepare for the issuing of the house lots. In the one plantation the regime of spatial order may have been more or less free, as long as the size of the lots that was agreed on would be respected, and old or newly set out roads would not be intruded on. In this way, a structure could come into existence the form of which depended on the number of settlers. This may have happened in the case of simple plans of limited regularity, as for instance Pembroke in Wales. (fig.1.6)

In other cases, considerable works may have been executed in advance, for instance the raising or leveling of the ground surface, the layout of a drainage system with ditches, or the layout of defences such as banks and ditches, palisades or even stone walls.140 With smaller foundations, the ‘street system’ could consist of no more than one central axis. With bigger ones it is possible that, in the beginning, only the main streets and possibly a market place were set out, leaving secondary streets to be added later.141 Often, however, a more or less complete system of streets and alleys would be laid down, by which means street

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136 See par.8.6.3 and appendix A.  
137 Articles by Schöller, Müller and Ascani in Recht 1989, pp.227-277; Bucher 1972; Binding 1999; Binding 2002.  
139 In the bastides, for instance, with ditches or posts (Saint-Blanquat 1985, p.62), and in the new town of Naarden in The Netherlands with posts (Engen, Kos & Rutte 2000, pp.98-99).  
140 It could happen that the defences that were built initially did not correspond well with the number of house lots that were settled. At Marchegg in Lower Austria, for instance, stone walls and ditches were built around a large area that was to become the town, but it never really filled up with settlers, for which reason it became a village-like settlement within a ring of defences. (see par.9.8 and fig.9.6) Something similar happened at Bunschoten in The Netherlands. (see par.9.6.1 and fig.9.2) At Isseltstein in The Netherlands, a different solution was chosen. Here the shortfall in settlers was countered with the digging of a new ditch, which left almost half of the initially intended urban area, which was already moated and partly walled, lying outside the town. (Faftanie 1989, pp.212-214)  
blocks were created. These blocks need not necessarily have been initially cut up in, or composed of, individual plots. Sometimes all house lots would be set out initially, as was the case with the terre nuove Fiorentine, while in other cases only the lots that could be issued immediately, for which new settlers were present, would be marked out. This was probably the case in Elburg in the Netherlands, of which it is known that most of the plots had the size of 2 x 8 rods (1 rod = 14 ft.), but that plots of different widths were also issued. In this case, however, the layout was so compelling in its entire structure, that it was already clearly dictated how the various plots were to be set out. 

9.6.1 Regular plan forms

In the preceding chapters it already appeared that many new towns had more or less regular and orthogonal plans. In paragraph 8.6 it was even argued that straight streets and a regular orthogonal order probably formed the basic ideal in spatial urban layout. But the use of regular orthogonal layouts must also have had weighty motives of a practical character. Firstly, an orthogonal structure was easy to conceive and to transfer. Secondly, the uniformity or the simple dimensions of the plots would have made it easier to calculate rents and taxes on the basis of the area. And thirdly, an orthogonal plan is easily surveyable, and thereby made it easier to maintain public order than is the case with an irregular plan with winding streets. In some cases the more or less orthogonal plan may also have been suggested by the existing form of the landscape of the site. For instance, the plan may have been adapted to the structure of an already existing through-going road or crossroads, or may have been based on an older, more or less regular allotment of fields.

It must also be considered that when a predetermined plan is set out on the ground, the regular orthogonal plan is the easiest model. A predetermined plan that has rounded shapes, different angles and irregular dimensions is far more difficult to set out on the ground. This does not mean, however, that it is not difficult to set out a plan which is really accurately regular and orthogonal. In the process of setting out the plan and building the town there were always faults or inaccuracies of various sorts that caused smaller or greater irregularities.

On a flat piece of ground straight lines could be set out by sighting, and be marked by pegs or stones. Regular distances could be measured out along these straight lines with ropes, chains or rods of specific length. The only more complex action in the process would have been to set out right angles. This might have been done with a rope forming the pythagorean triangle of which the length of the sides have a ratio of 3 : 4 : 5; with two ropes on a baseline that touch on both sides of the baseline where their radii intersect; or with some sort of instrument with a fixed right angle, like a hook, a groma or a board with fixed points or pins that mark a right angle.

Relevant points in the plan were probably marked by pegs or poles hammered into the ground, or by stones set upright. It is known that surveyors used such simple techniques, although they are not testified to specifically with regard to the laying out of new town plans. An interesting source, in this respect, is the newly founded town of Bunschoten in the Netherlands. A large oval piece of land was assigned for the new town and was surrounded by a moat and an earthen wall. But the area never filled up with houses, apart from the central main street. (fig. 9.2) Most of the remaining land was used only for agrarian purposes. Within this area a grid of low earthen banks was laid out. This is an interesting structure, because these banks most probably mark the originally planned street pattern. The banks were straight but not completely at right angles, the directions being largely determined by the pre-existing field allotment of the land, which had been reclaimed from the marshes about two to three centuries before. The banks seem to have been thrown up in the same period as the digging of the moat and the construction of the walls around the area. Their exact purpose is not completely clear, however. They may have been thrown up in order to mark out

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142 See the case of Bunschoten in the Netherlands below, par. 9.6.1.
143 See par. 9.11. In the Neuenstadt Holzbrunnen extension of Burgdorf in Switzerland, the original plot boundaries suggest that corner plots on both sides of a block were first taken up, and that neighbouring plots which were taken up successively had their somewhat oblique side boundaries oriented according to the earlier plots, so that plots with slightly wedge-shaped forms remained in the end. (Baeriswyl 2004, pp. 69, 67; see also Müller 2004, pp. 89-90; Beutmann 2004, p. 96)
144 For instance, the structures of the plans of Schoonhoven, Nieuwpoort and Vianen in the Netherlands were based on pre-existent field structures with parallel ditches more or less at right angles to dyke structures. (Visser 1964, pp. 118-120; Henderiks c.c. 1990, p. 26; for Vianen this can be recognised in fig. 9.2, but not in fig. 9.16 because the structure of the fields surrounding the town appears not to be depicted correctly there) See also Burke 1956; Lavedan & Hugueney 1974, pp. 10-11.
145 That is, if there is no other, more complex geometrical system behind the plan design, like in the terre nuove, which is, however, unlikely since such complex geometry seems to have been used for town plan design very rarely. (see ch. 6)
146 See also pars. 6.3.3 and 6.4.3.2.
clearly the planned street structure, so that in the course of the slow process of the building up of the town, the original plan would be followed. But it is also possible that harder ground or sand was used in order to get a solid bed for the streets, instead of the soft boggy soil of the area.\footnote{Vervloet 1973, pp.427-429, 433-434. Bunschoten was newly founded by the bishop of Utrecht, probably in the second quarter of the 14th century. The earthen banks remained in situ until the re-parcelling of the land in 1950.} It is known, however, that earthen banks, as well as ditches, were also used elsewhere to mark out the lines of plans as they were originally set out.\footnote{According to Saint-Blanquat (1985, p.62) lines of division in new town layouts could be marked by embankments as well as by ditches or other obstacles. In Laufen in Switzerland archaeological excavation has brought to light a small ditch that may have served to mark the boundary between a street and the adjoining house lots. This ditch was filled before houses were built along the street. (Gutschler 2004, p.105) In various villages in northeastern Germany ditches, palisades and fences have also been found to have marked the original lot boundaries. (Biermann 2005, pp.107, 111) The regulation was instituted in 1193 or 1208. (Guidoni 1992, pp.337-338) See pars.1.2-3, 1.7-5.}

There are no clear sources which tell us how, exactly, streets were set out. It is not unlikely, however, that in many cases they were initially set out only along their central axis, instead of along both building lines. In this way, the actual building lines could still become rather irregular. \footnote{In order to understand the relation between the relief of the site and the form of the town plan, plans with contour lines (or with altitudes indicated at specific points) are of great value. Unfortunately, however, such plans are hard to find and are rarely depicted in the literature on historical urban form. (see Conzen 1968, p.120) This is one of the reasons why students of urban form should always try to visit the subject of their studies themselves.} The actual setting out of straight building lines, and the prescription to build along these lines, was a better instrument to use in order to create regular and straight streets. On the basis of the plans as they presently appear, it might even be argued that the technique of setting out both building lines in new urban structures only became a common method in the 13th and 14th centuries, but it is possible that later changes to the original structures give a misleading picture. As far as I know, the first documented regulation demanding a straight building line is a decree from Vicenza in northern Italy, from around 1200.\footnote{The regulation was instituted in 1193 or 1208. (Guidoni 1992, pp.337-338) See pars.1.2-3, 1.7-5.}

9.6.2 Irregular plan forms

There were great differences in the amount of detail by which new urban structures were planned. One town may have been meticulously planned in spatial sense, while another may have been left fairly free in regard to its physical structure. It seems that, in the one case a lot of effort was spent on the actual layout of the plan, while in the other the spatial form of the town seems to have been given little attention. In most cases the founding lord will have prescribed the terms for the geographical size of the newly created legal territory and the number and size of the plots that were issued. In some cases, the rest of the spatial organisation may have been left more or less free to be decided upon later.

Previously, we noted that regularity of plan was the spatial ideal for newly founded towns; but, in reality, one finds that many new towns of the high-period of town foundation have rather irregular plans, at least compared to present-day standards. The question is: how have these irregularities come about, if regularity was the ideal? There is no easy single answer to this question. Irregularities in the plans of new towns can have many different causes. The most common will be briefly discussed below. It should be noted here, however, that the matter does not just concern the centuries under consideration in this study, but is largely valid also for urban creation in other periods.

A common cause for irregularities in plan structures was the topography of the pre-urban landscape. For the most part, the site of a new town would not be completely empty or level. Nearly always there were features of natural or man-made origin that prevented a facile layout of a regular plan. For instance, the natural relief and the course of streams often made a completely regular layout difficult. So, if the founder did not want to invest much effort in changing the landscape, the plan had to be adapted. The irregular outline forms of Caernarfon, Aberystwyth and Ceské Budějovice, for instance, were clearly determined by the relief and the water around the more or less peninsular sites on which they were built.\footnote{A common cause for irregularities in plan structures was the topography of the pre-urban landscape. For the most part, the site of a new town would not be completely empty or level. Nearly always there were features of natural or man-made origin that prevented a facile layout of a regular plan. For instance, the natural relief and the course of streams often made a completely regular layout difficult. So, if the founder did not want to invest much effort in changing the landscape, the plan had to be adapted. The irregular outline forms of Caernarfon, Aberystwyth and Ceské Budějovice, for instance, were clearly determined by the relief and the water around the more or less peninsular sites on which they were built.} (see fig.2.11) The ridges on which Pembroke, Beaumont-du-Périgord and Bern were built also determined the outline and the direction of the most important streets.\footnote{The ridges on which Pembroke, Beaumont-du-Périgord and Bern were built also determined the outline and the direction of the most important streets.} (see figs.1.6, 2.14, 9.19) At Pembroke and Beaumont there are also secondary streets, the placement and

\footnote{148 Vervloet 1973, pp.427-429, 433-434. Bunschoten was newly founded by the bishop of Utrecht, probably in the second quarter of the 14th century. The earthen banks remained in situ until the re-parcelling of the land in 1950.}
\footnote{149 According to Saint-Blanquat (1985, p.62) lines of division in new town layouts could be marked by embankments as well as by ditches or other obstacles. In Laufen in Switzerland archaeological excavation has brought to light a small ditch that may have served to mark the boundary between a street and the adjoining house lots. This ditch was filled before houses were built along the street. (Gutschler 2004, p.105) In various villages in northeastern Germany ditches, palisades and fences have also been found to have marked the original lot boundaries. (Biermann 2005, pp.107, 111) The regulation was instituted in 1193 or 1208. (Guidoni 1992, pp.337-338) See pars.1.2-3, 1.7-5.}
direction of which are determined by the relief, allowing them to serve to drain surface water. These streets lead the water away from other streets because they are connected to them at their lowest points and they follow shallow natural gullies. But the pre-urban landscape was, for the most part, also formed by man-made features, such as property boundaries, canals, dikes, buildings and so on. These features also influenced the forms that newly planned structures took on. Some of the house lots in Thame and Stratford-upon-Avon in England, for instance, were formed on the basis of pre-existing agricultural fields. In Newborough in Wales two new streets were laid out, straight and almost at right angles, cutting through an older agricultural allotment of irregular layout. But for the new house lots no regular structure was chosen: the old agricultural plots were simply cut up into narrower lots. In Elburg in The Netherlands the opposite situation was more or less true. The pre-urban allotment was largely overlaid with an almost perfectly symmetrical plan structure, for which a brook was canalised to form its axis. But a pre-existing street with some adjoining lots also had to be fitted into the plan. The result is that this street is an anomaly in the town, with its slightly curved layout, and that it spoils the symmetry of the plan.

Whether or not planners were able to change existing spatial structures was not just a question of the amount of effort that could be brought to bear or of technical ability, but also of possession and power. The founder was not always in complete possession of the ground, so the ability to change existing settlement structures depended partly on the power he had over the inhabitants or possessors, or on whether he had the legal power to expropriate parts of the land. Of course, finances also played a role in this. These aspects may have been the reasons why, for instance, the existing settlement core around the church at Villeréal was left in place, disturbing the regularity of the new spatial structure. (fig.2.44)

Above, the form of the existing landscape is regarded as an obstacle to the realisation of a regular plan. It should be noted, however, that highly regular plans were also influenced by the structure of the existing landscape. Their location, orientation, inclination, and probably many other elements, were also determined by the existing topographical situation. 

153 See par.9.13.
154 See par.9.11.
155 See par.1.7.1.
156 Slater 1990, pp.68-70; Carter 1990, pp.189-190.
157 See also par.5.1.6.
158 For instance, at Flint in Wales the form of the plan was probably largely determined by the structure of the agricultural fields. (see par.1.7.1) At Fontanetto Po in northern Italy the direction of the whole plan and the situation of at least two of its seven streets were determined by the older church that was left in place when the town was re-founded and re-structured in 1323. (Panero 1979, p.107) (fig.8.8)
Many scholars from the late 19th century onward particularly admired the free adaptation of ideal regularity to the irregular landscape, which often resulted in the ‘picturesque charm’ that was appreciated so much in the form of old towns. Many observers have prized the way the planners made use of the form of the landscape in order to adapt the plan in such a way that nature and culture combined to make a structure that is optimally adapted to its environment. It seems that this view on the matter resulted primarily from contemporary aesthetic preferences which, themselves, originated in reaction to the monotony and grand scale of modern town planning.

Irregularities also came into being in structures that were originally conceived of as regular, but which were less regular in their laying out, due to the limitations of the techniques and equipment that were used for measuring and setting out the plan. From at least the 12th century onwards, the knowledge, techniques and equipment needed for the laying out of a regular orthogonal plan on more or less flat ground did certainly exist, but that does not mean that it was at hand in every individual case. Also, circumstances like bumpy, steep or wooded terrain made it more difficult to set out a plan exactly as it was ‘meant to be’. Another problematic circumstance, not unknown to modern surveyors, might have been that pegs or other markers disappeared or were moved before boundaries were converted into the more stable lines of buildings, ditches or fences.

It is also possible that a plan was set out to be more or less regular, but that not all of it was set out initially. As already mentioned above, it is possible that only one central line was set out to mark a street, so that the actual building lines remained to be delineated, or that only the main streets and market place were set out, while the boundaries of lots and alleys or back streets remained to be filled in later. This might have been the case, for instance, in Brandenburg Neustadt. It seems quite possible that only the two perpendicular main streets and the market place were set out initially, and that the other streets followed later on, as the town was gradually filled in and the lots on the main streets and the market were all occupied. The course of these secondary streets was, to a large extent, influenced by the irregular rounded shape of the island on which the town was built. This is in contrast to the situation in Ceské Budějovice. This town was built on a similar island-location with an irregular, rounded outline. But here the course of most streets was clearly predetermined, almost completely irrespective of the conditions of the site. Only the two streets in the northwest corner incline in order to follow the outline of the town, for some unknown reason.

Ideally, the size of the lots, whether measured out in advance or at the moment of occupation, would be equal, or at least proportional to the rent to be paid for them. In reality, however, accurate plan analysis shows that many lots are not very regular in size. This can partly be ascribed to changes in the lot boundaries over the centuries and partly to inaccurate measuring or setting out of the original plots. In particular, plots of irregular shape must have been very hard to measure out correctly, due to the irregular forms of bordering streets or other existing structures.

Whether or not the different house lots were set out very regularly was largely a question of accurate measuring and marking. This may have been determined by technique, equipment, experience or circumstances but, in some cases, the lack of regularity may be due to a limited importance placed on the accuracy of plot sizes. Probably, this would largely have been a question of ‘market value’. If land was relatively abundant, then the value was low and it would normally not have been a great problem if the distribution of ground was not all that regular. But when the land was scarce, the amounts received by the settlers would have been jealously guarded. Inequality of lot sizes in relation to the rent would probably not be a big problem if another aspect was valued much higher, such as, for instance, the privileges that the settlers received or the location of the plots.

One case in which it is known that the proportionate inequality of the lot sizes as they were distributed to the settlers was considered problematic, is that of the bastide of Grenade-sur-Garonne. In 1322, 32 years after its foundation, it was decided, in answer to a petition, that the town and its grounds would not be newly measured out, but that individual lots would be measured upon request, after which the rents would be adjusted. Nine years later, however, the situation apparently still was not

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159 For instance, M.G.R. Conzen praised ‘[...] the characteristically adaptive attitude of the medieval town planner to the natural site of the town and his equally free and flexible, but consistent notion of urban form [...]’ (Conzen 1968, pp.119-120).

160 See par.11.1.1.

161 See par.7.7, 10.2.2; Binding 1993, pp.340-348.

162 For plots for which the rents were differentiated according to their location, see par.9.11.
A probably rather common cause of deviations from an originally conceived town plan was a long lapse of time between the setting out of a plan on the ground and the actual occupation of the land itself. In chapters 1 to 3 it was described how, in many cases, it took some decades before the new towns actually filled up with settlers. It is only logical that the chance that the original structure would be gone or would have lost its topicality, increased with the time that lapsed before a planned structure was actually occupied. This is why in many towns the structure becomes less regular towards the outer limits of the original plan. Commonly, the centre was occupied first and the periphery later. In the bastide of Sainte-Foy-la-Grande for instance, there is a remarkable irregularity in plan near to the southeast corner of the town. In this area, which was only occupied a long time after the town was founded in 1255, three streets follow oblique directions that do not conform to the regular grid that was the basis of the original plan. Probably, these oblique streets were only created in the 19th century, when the town wall was breached in order to make connections to extra-urban roads. (fig. 2.21)

Often, it can be observed how the form and size of the lots get more irregular towards the margins of the town. This is mostly due either to the fact that these marginal lots were settled considerably later than those in the centre, or that they were depopulated in times of crisis - for instance with the ‘black death’ - and were restructured later on when they were reused as house lots or gardens. (see for instance figs. 2.13, 2.39, 3.6, 3.19, 9.1, 9.18) A similar phenomenon can be observed in the wall circuits of many towns. Since the walls were mostly built some decades after the foundation of a town, their circuits often are rather irregular, as they more or less followed the outlines of the towns for as far as they were built-up at the moment. (see for instance figs. 9.3, 2.14, 2.44, 10.7) It must be noted, however, that fortifications were often built with irregular circuits because they were also planned to use the form of the existing landscape as much as possible, in order to be optimally defensible and to save on costs. The wall circuits often follow steep natural slopes (figs. 2.11, 2.31, 3.19 west side, 7.1, 8.5, 9.19) or water courses (figs. 9.4, 9.5, 1.6, 1.20, 1.27, 5.4)

The loss of regularity during the period in which a town is slowly settled is, of course, dependant on the strictness of supervision over the distribution of plots and on the presence of building regulations and their enforcement. In the contemporary realisations of large and long term projects such as the construction of cathedrals, it is easy to observe how the passing of time resulted in changes in concepts and ‘styles’, causing deviations from the initial plans. In town planning, similar deviations from the initial plans may have occurred. Moreover, it is also relevant here that the plans had to be ‘filled in’ by individual landholders. Often, this seems to have happened without close supervision. There are newly set out town plans that were not occupied completely for many centuries, due to lack of development or to depopulation. Often this has led to a gradual dissolution of the originally planned structure. (see figs. 9.6, 2.29) But in other cases the structures have remained visible in the layout of roads, watercourses or fields. (see figs. 9.2, 2.36, 2.52-55)

The most common cause of the irregularisation of urban form, probably, are changes made to the original structure in the course of the centuries. In every old town there are structures that were originally realised according to a planned scheme, but which were altered later on in history. In the case of the towns from the high-period of town foundation at least six centuries have passed since their creation, during which time many greater or smaller piece-meal alterations were made. These alterations have often blurred the original picture, generally making the forms more irregular. (fig.9.7) It sometimes happens, for instance, that originally planned regularity has been blurred by the dissolution of the original lot division through subdivision or amalgamation of plots; by the occupation of open

165 See par.2.10.4.2, and par.9.17.
166 Conzen 1968, p.119.
spaces (for instance ‘market colonisation’, figs. 9.5, 9.12, 9.14); by the rebuilding of edifices in different form resulting in the alteration of older boundaries (fig. 1.13); or by not rebuilding at all after calamities or periods of depopulation.\textsuperscript{169} (figs. 2.29, 3.12 southern part of town, 3.7 corners)

\textsuperscript{169} Quite wrongly, the process of the slow ‘irregularisation’ of formerly regular urban structures has often been taken to be typically ‘medieval’, since formerly regular Roman town plans were gradually altered into less regular forms from about the third century onwards. (see for instance par. 10.2.1) The theorist/architect Gianfranco Caniggia even coined the term medievalizzazione for the irregularisation of urban form. This trend of thought completely ignores the fact that, in more recent periods, regular town plans also tend to be irregularised with almost every alteration.

\textbf{fig. 9.3: Plan of Bientina in Tuscany, from the early 19\textsuperscript{th} century.} (From: Ciampoltrini 2004) Bientina was founded by Archbishop Ubaldo of Pisa in 1179, replacing an older village and castle in a border region with the city-state of Lucca. It was settled with subjects of Lucca and other lordships. Remarkably, the highly regular orthogonal structure of streets and lots in the town was enclosed by an irregular circuit of tightly fitting stone walls and wide ditches, which had four gates at the ends of the intersecting main streets. The irregular wall circuit was built in the 13\textsuperscript{th} century, probably roughly following the contours of the town for as far as it was actually occupied at that moment.

\textbf{fig. 9.4: Plan of České Budějovice in Bohemia.} (From: Gutkind 1972) The town was founded in 1265 by King Przemysl Ottokar II, replacing an older settlement which lay one mile further north. The town was located at the confluence of the rivers Vltava (Moldau) and Malše with a smaller stream. The rounded outline is largely determined by the course of the water streams that surround the town. The market place measures no less than 130 x 130 m.
9.7 Preparation of the site

It may be assumed that, normally, the ground was cleared before a plan was set out. Low lying land often had to be drained by the digging of canals or ditches. For instance, with the building of the new town of Hagen, which was added to the older town of Braunschweig in northern Germany around 1166, two canals had to be dug in order to drain away the water from the low lying ground. The course of these canals, which was determined by the relief, subsequently had a great influence on the plan structure of the new town.\textsuperscript{170} The ground level was also raised with sand and logs.\textsuperscript{171} For various other new town creations the land was also artificially raised or provided with dykes, in order to prevent flooding.\textsuperscript{172}

A small number of new towns was laid out on land in which even small-scale pre-existent relief was levelled. This seems to have been the case with the Florentine terre nuove. Although they are all laid out on relatively flat land on valley floors, their sites appear as though they have been artificially levelled in order to clear away the micro-relief. At Unterseen in Switzerland the earth that was dug up with the creation of the town moat was used to level the slope of the shore of the river Aare on which the town was sited.\textsuperscript{173}

The foundation of Lippstadt in central Germany in the late 12\textsuperscript{th} century was also accompanied by the construction of extensive earthworks, according to the description in the Lippiflorium of around 1265: ‘Diggers hurry to the scene, they measure the length and width as well as the area, and a ditch cuts deep through the land. Earth is

\textsuperscript{170} This was the subject of the paper presented by Wolfgang Meibeyer, ‘Der planmäßige Ausbau durch Neustädte und neue Kirchspiele, aufgezeigt am Beispiel Braunschweig’, at the Arbeitstagung zur mittelalterlichen Gründungsstadt, 15-17 March 2001 at the Universität Göttingen. The new town was probably settled with immigrants from the Low Countries, possibly even because of their knowledge of techniques for draining the swampy land in which this part of the town was laid out.
\textsuperscript{171} Rötting 2001, p.418.
\textsuperscript{172} See par.5.2.1.
\textsuperscript{173} Gutscher & Studer 2003, p.192. Much the same happened at Burgdorf and Wangen an der Aare, which are also creations of the second half of the 13\textsuperscript{th} century in Switzerland. (Gutscher 2004, p.103)
thrown up, and soon the dam rises up high in the air, and a mighty wall winds around the settlement.¹⁷⁴

In Burgdorf and Laufen in Switzerland, archaeological research has shown that the various lots on the slightly falling slope were terraced. It seems, however, that this was not done initially, but only when the lots were actually settled.¹⁷⁵

9.8 Construction of governmental and public buildings

The founders of new towns often also took on the responsibility of building a number of edifices for communal or public use. Often, a chapel or a church was founded by the lord. When fortifications were planned, the lord would be responsible for the construction of at least the gates, while the construction of walls and moats may have been made the responsibility of the community. Sometimes, the founder also took responsibility for the building of a house for the administrative officials, where the court of law might also be housed, and which sometimes was also combined with a market hall, as for instance in San Giovanni Valdarno. (fig.3.15)

An unusual case that demonstrates quite well what powerful lords were capable of when they wanted to found a new town, is the town of Marchegg in Lower Austria. (fig.9.6) King Premysl Ottokar II of Bohemia, who was also ruler over large parts of Austria, founded this town in 1268 on the shore of the river March, on a site that does not seem to have been inhabited before.¹⁷⁶ This case is interesting because the relatively large town (in surface area) remained, for the most part, unpopulated. The most important motive for the foundation of the town was to have a fortress on the border with Hungary; but the site was not very well suited to support the economy of a large town. Therefore it was difficult to lure settlers to the new town, and consider-

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¹⁷⁶  According to Gutkas there had been a village on the site, which was cleared away for the building of the new town; but more recent research suggests that the village of Chundorf lay further west, and was gradually deserted by its inhabitants in favour of the new town. (Gutkas 1963, p.86; Gutkas 1977, p.147; Österreichischer Städteatlas 1985, s.v. Marchegg)
able damages suffered in various wars along the border did not help recruitment, either. In retrospect, the project was clearly too ambitious. So, houses were relatively scarce in the town until the 20th century, even despite later attempts to attract more settlers. But in the first few years after the foundation, a more or less complete infrastructure was built, consisting of, among other things, roads, a market place, stone walls with three gates, a castle, a church and an Augustinian abbey. It is estimated that the town was meant to contain about 10,000 inhabitants, but in reality it would never have more than 1,500 within its impressive circuit of walls.\footnote{Gutkas 1963, p.86; Gutkas 1977, p.147; Österreichischer Städteatlas 1985, s.v. Marchegg. With 10,000 inhabitants, the town would have been almost as big as the most important town in the whole region, Vienna. To me this number obviously seems too high. Nevertheless, the new town may have partly been intended as an explicit competitor to Vienna, although its main intended purpose was to act as a frontier base against the Magyars. (Gutkas 1977, p.147)} It seems, however, that this order of events in the process of creation of a new town was exceptional: usually a stone town wall would only be built, and a monastery would only be founded, once the new town was on its way to proving itself to be successful in a social and economic sense.

9.9 Settlers

Until far in the 20th century, the general idea has been that the growing urban population of the 12th to 14th centuries was mainly made up of fugitives from feudal oppression in the countryside. In paragraph 0.4.1 it was argued that the traditional idea of the opposition of ‘feudal countryside’ and ‘free town’ is largely erroneous. The idea may be even more incorrect when it comes to newly planted towns. With the foundation of a new town, the founder must have had an idea of where the future settlers of the town would come from. Generally, there were two possibilities: either people from the nearby territory of the lord would...
be resettled in the new town; or settlers were to be attracted from further away. The first possibility can be found with the replacement of older towns by new ones (as, for instance, with Naarden in The Netherlands and New Winchelsea in England), or with concentration of inhabitants of a region that was formerly settled in scattered farmsteads, hamlets or villages (as was the case with the Florentine terre nuove and most of the bastides). An especially impressive case of the concentration of a formerly scattered population is the new town of l’Aquila in the Abruzzi mountains of central Italy. According to tradition, this large new town was populated with settlers from 99 different settlements in the region, which were resettled as communities within their own neighbourhoods in the new town. These neighbourhoods or locali mostly had their own piazza and church, whose dedication followed that of the church of the original rural community. Such resettlement in groups together in the same neighbourhood seems to have been the normal procedure in cases involving the concentration of population from different settlements.

The other possibility was that a town was intended to attract settlers from further away, either from the territories of other lords or from existing towns and cities. This was the case with many of the new towns founded in Wales by Edward I, where most settlers came from England. The same holds true for the towns founded in northern Europe east of the river Elbe, where most settlers came from the west, and for the foundations following the reconquista in Spain, where many of the new inhabitants came from further north. In 12th-century Navarre, for instance, a number of towns were founded which were especially intended to be settled with immigrants from north of the Pyrenees, francos as they were called. Probably, however, in every town foundation, even those primarily aimed at the resettlement of people from nearby, settlers from further away would be warmly welcomed as long as they would contribute to the economy, because they would only increase the lord’s political power and income. For the town of Sarzana in Tuscany, which was moved to another site around 1170, it is known that the lord bishop of Luni reserved a hundred lots for the inhabitants of the old town and twenty for new settlers from elsewhere.

In particular, inhabitants from older towns and cities must generally have been favoured candidates as settlers for new towns, because they had experience with urban life and, more specifically, with the urban economy. There is little material from which one can get a picture of how large the percentage of new town settlers was that came from older towns, but it seems likely that, with the fast growing population up to the first half of the 14th century, urban dwellers that strove to start their own business must often have migrated to other towns where new possibilities enticed them.

For the most part, the recruitment of new settlers, whether from nearby or from far away, probably began soon after the decision to found a new town. Once again, there are no sources that clearly describe how this happened, but it may be assumed that in most cases it was announced orally that a new town was to be founded. Much as in the present, most probably, the attractions and advantages, such as the appealing location and the many privileges, were enlarged upon. A 15th-century chronicle gives an impression of the re-settlement of the non-newly founded town of Jaén. After its conquest by Ferdinand III of Castile ‘[…] he sent for settlers into all regions, promising great liberties to whoever came to settle there.’

In general, the founders did not aspire to attract just any settler. As mentioned above, they sometimes clearly aimed to resettle the inhabitants of the region. But in other cases they particularly strove to attract ‘investors’ that had something to offer: experience in craft or trade and knowledge of relevant (new) techniques, capital to invest, and the ambition to work hard. These ‘investments’ could all help to increase the circulation of capital and thereby stimulate the economy and the lord’s income. This often meant that the founding lord sought settlers who had experience with new agricultural and industrial techniques and who already were involved in the trade economy. According to the 12th-century Chronicle of Sahagún, King Alfonso
VI of Léon-Castilla ‘[…] decreed that a town should be established there, assembling from all parts of the world burgesses of different trades […] Gascons, Bretons, Germans, English, Burgundians, Normans-Toulousains, Provençals and Lombards, and many other traders of various nations and foreign tongues; and thus he established and populated a town of no mean size.’

In some of the towns of Wales merchants were so much desired as citizens that the possibility was offered to them to become non-resident burgurers. They were called ‘burgess of the wind’ or ‘of the wind and of the street’. A major disadvantage for the settlers was, of course, that they had to move, which would involve considerable effort. And, if they immigrated from far away, they had to build up a new business: they had to find new suppliers and customers, they may have had to clear and reclaim new fields, etc. Indeed, it could take years before a successful business was established. To compensate for these costs and efforts, the new settlers were freed from the duty to pay rents and other duties during the first years in the new settlement.

The term for this exemption from duties varied with the region, or sometimes with individual cases, or even with the specific piece of land. In southwest France it was often three years, while in eastern Europe it could be up to 20 years. The number of exemption-years generally depended on the attractiveness of the project for the settlers.

The new settlers were all assigned a house lot, or sometimes more than one. With this, they had the obligation to build a house on it, usually within one year. This regulation was to insure that the foundation would actually become a town in a physical sense, and to limit the possibility of speculation with the land - which nevertheless seems to have been considerable in many cases. So, the settlers were responsible for the building of the houses. In paragraph 9.12 the construction of the houses will be considered.

In the 19th century, many historians believed that Stadtluft macht frei (‘urban air makes free’) was the general motto of urban communities in the 16th to 17th centuries. They sketched an image of serfs that fled the countryside to escape oppression by feudal lords to towns and cities, where they were warmly welcomed and obtained freedom and human dignity, once they had stayed there for a period of a year and a day. In the towns and cities they were able to use their productivity and creativity to contribute to the free urban economy and culture, which eventually lead to the modern bourgeois society.

Though many people still seem reluctant to accept the fact, this view is largely wrong. Firstly, Stadtluft macht frei is no original ‘medieval’ juridical formula. It is a 19th-century construction based on the more general original formula Luft macht eigen, which means ‘air makes dependant’, actually implying the opposite of ‘urban air makes free’. Secondly, serfdom was not as general a status of the inhabitants of the countryside as is often thought. Full servitude of a major part of the country folk only existed in certain regions. As to the freeing of serfs, towns and cities had rather different policies, even if they were autonomous.

Many town charters stated that serfs would become free citizens once they had lived in the town for a year and a day. But there were also many towns that had laws that forbade serfs of specific lords, particularly of the lord of the town himself, to live there without permission, or which excluded serfs from becoming citizens at all. In the new towns founded by the commune of Asti in northern Italy, the settlers received certain privileges but, for the most part, they remained obligated to their old lords. Only specific settlers, probably the most important ones for the economy of the town, like traders attracted from foreign cities, received full freedom. In fact, many older cities had a rather two-faced, opportunistic policy. Subjects of hostile
lords were often completely freed from obligations towards them, while subjects of allied lords were often not admitted to the free communities or, if they were, they were only partly freed from their previous obligations. 197

So, serfs were often not allowed to settle in new towns. An important reason probably was that many serfs did not own important capital goods, like cattle, draught animals, tools, seeds for sowing and money. Therefore, in many cases they were not able to bring anything of the new settlement and therefore they may not have been particularly welcome. 198 In some cases settlers even had to pay a considerable sum of money to become citizens, which obligation often must have been hard for serfs. 199

So, it seems that quite a large part of the new citizens of new and old towns were already free from feudal bonds, at least to some extent. 200 But there are also new towns that were explicitly meant to be settled by the subjects of feudal lords, whether or not they were actually serfs. As we have seen above, Emperor Frederick II forced the Saracen people of Sicily to live in the new town of Lucera in southern Italy. His foundations of Altamura, Petrolia, Melehudi and Cesararea Augusta were largely settled by force with serfs from Frederick’s domains in southern Italy, the so-called revocati. It is not clear whether the main goal of this was to keep them under firm control, or to boost the urban development. The settlers were given ten years of exemption, but their freedom remained limited. 202

As discussed in chapter 3, the Florentine new towns were meant to be settled by the (former) subjects of the feudal clans that were the enemies of the city-state, in order to weaken the basis of power of these clans and to take over their territories. 203 Similar policies were followed by other city-states in northern and central Italy, and sometimes also by smaller lords in explicit competition to neighbouring lordships. In the towns of southern Germany, on the other hand, serfs could become citizens and yet remain subject to their former lord at the same time, which could obviously lead to complicated juridical situations. 204

If one accepts the old image of a country folk which was brutally oppressed by the feudal lords, it would seem logical that subjects of the feudal lords were always eager to settle in towns, where they would have enjoyed greater freedom. This was, however, not always the case. Settlers sometimes had to be persuaded by force. 205

With the Florentine terre nuove at least part of the settlers had to be forced to move from the countryside to the new towns. 206 Apparently the advantages to move there were too small in their eyes. In Wales, the inhabitants of the Welsh town of Llanfaes were forced by the king to move to the new town of Newborough. Many of them were fined for not obeying the royal command within the limited period of time that was set for it. 207 In these cases the foundation of new towns was specifically aimed at changing the structure of power through the mutation of the structure of settlement; but in other cases inhabitants of the countryside were probably forced to move to new towns because new settlers from elsewhere were simply too hard to obtain. For instance, the inhabitants of Kunowice in Moravia were forced to move to the new settlement of Uherské Hradiště in 1257. According to a document, this was ‘because this place is large enough for all’. 208 For a small number of bastides it is also known that settlers were forced to move to them. 209

Indeed, it is likely that forced deportation was more usual with the creation of new towns than the written sources indicate. Official foundation documents and chronicles often rather give the impression that settlers from nearby and far away were very happy to move to the new towns, but this was not always the case and should be regarded as propaganda, at least to a certain extent.

Some lords may have used force, but despite that there are many examples of towns that did not become as well populated as was planned. The charter of Wiener Neustadt of 1277, eight decades after its foundation, still

199 In many German towns, for instance, new settlers had to pay Bürgeraufnahmegeld (‘burgher-intake-money’); and in the new towns of southwest France they were charged droits d’entrée (‘entry fees’). (Engel 1993, pp.262-265; Saint-Blanquat 1985, p.65) In older towns and cities, sometimes deposits had to be made in order to guarantee good behaviour, or fees had to be paid for the right to practice a business.
200 Dodgshon & Butlin 1978, p.90.
201 Belfiore 1993, pp.17-19; Wipfler 2005, pp.197-198, 188.
202 See par.3.5.
205 Richter 1940, p.361; Friedman 1988, p.168. The settlers of Giglio Fiorentino, for instance, were selected by the government, and if they did not move in time, they were to be fined. Their old houses were to be demolished. (see also appendix A) A similar policy was used with the foundation of l’Aquila in Abruzzo, and probably also with the creation of towns in the Basque Country in the 13th and 14th centuries. (Higounet 1992, pp.47, 49)
206 See par.7.11.
207 ‘cum pro omnibus sit latus et capax locus ille’ (Fischer 1952, p.89)
208 See ch.2, n.270.
mentions that new measures were taken ‘[...] in order to replenish the city with citizens’. \[209\] (see fig.9.18) Large new foundations like Bunschoten in The Netherlands and Marchegg in Lower Austria, never completely filled up. (ffgs.9.2, 9.6) In the last case this was extra painful since, as described above, the costly stone defences and other infrastructural works were already built at an early time.\[210\]

It should be noted here, that apart from serfs, other social groups could also be excluded from citizenship. Many town charters contain bans on settlers from the nobility, as in the Florentine new towns, in many of the foundations by the city-states of northern and central Italy and in many bastides of southwestern France.\[211\] Clerics were also often excluded from citizenship,\[212\] and people of a specific ethnicity or religion, such as Jews or Moors, Welsh, Slavs or Prussians, could also be excluded.\[213\]

9.10 Later extensions to towns

Many newly founded towns did not become as large as they were planned, and others even perished completely.\[214\] (ffgs.1.25, 2.29, 2.52-55, 5.2, 9.2, 9.6) But many others were enlarged after some decades or centuries, as more space was needed to accommodate more tenants. Successful towns had to cope with natural growth of the population - at least until the Black Death - and with immigration, as more people sought to take part in the town’s economic success. In particular, the earlier town foundations of the 11th to early 13th centuries were often extended, as they could profit optimally from the population growth and the economic accretion, which was generally very high in the 13th century. Significant extensions from before the 19th century are much less common to new towns of the late 13th and 14th centuries.

In some towns large new areas were added that received their own charters and urban institutions, which means that they might be regarded as new town foundations themselves.\[215\] This happened relatively often in northeastern Europe. The town of Königsberg (present-day Kaliningrad) on the Baltic coast, for instance, was founded around 1255 by the Teutonic Order, and was named after the title of its protector King Premysl Ottokar II. It was first extended in 1299-1300 with the new town of Löbenicht, and then again in 1327 with the town of Kneiphof on an island in the river Pregel; both of these were more than half the size of the old town.\[216\] (see also fig.9.8)

The urban forms of town extensions could be very different. Some extensions are hard to recognise, as such, from the town plan or from the architecture. The exact identification of respective extensions is a matter of long running scholarly discussion in, for instance, the case of the English town of Ludlow. The main part of this town was still considered as one large Norman new town by the scholars of the first half of the 20th century but, since then, scholars have argued that it is an assemblage of different ‘plan-units’ that were created in various phases.\[217\] In many other towns the extensions are much easier to recognise, as they clearly form distinct units, which may even be separately fortified. (see figs.1.6, 1.24, 2.30, 3.12, 9.16, 9.19)

Sometimes the extensions have regular structures that clearly result from coherent planning, such as in the new town of Elblag in Prussia. (fig.9.8) But in many cases the structures of later additions are less regular in form, as they often were laid out in a piecemeal fashion, following tracks of roads, streams and property divisions in the suburban landscape. (see figs.1.6, 1.25, 2.30, 3.3, 9.4) Commonly, the lord or the administration of the town would sanction this development at a certain moment by officially extending the town, its rights and, if present, its fortifications to a larger area. The extra-urban structures were generally integrated into the town in their existing form, which generally meant that the allotments were rather irregular. Next to these existing structures, new structures could be created if the extension was made larger, in expectation of further growth.\[218\] The town of ’s-Hertogenbosch in The Netherlands, for instance, was extended in this way to a size of about eleven times as large as its original size in the early 14th century, about 120 years after its foundation.\[219\]
In the following part of this chapter, the various physical elements that were, or could be, planned with the creation of a new town are discussed in separate paragraphs. These elements make up the architecture of a town. Those elements that are part of every town, which are actually ‘necessary’ elements, will be treated first, while less common elements follow beyond.

9.11 House lots

The most important part of the towns, as physical entities, were the house lots. House lots were the basic element the town was constructed of. In most analyses of urban plans of the towns under consideration, streets are given primary attention, with only a secondary role granted to the house lots. This conceals the fact that the streets were planned to serve the house lots, and not the other way around.

The urban house lots went under different designations in different periods and regions. In Latin, the terms that were generally employed were area and placea; less common is the term curtilus.220 The lots would commonly be held from the landlord in hereditary tenure (jure hereditarium or burgagium), in which, in contrast to older systems of land tenure, the tenants remained personally free.221 The rent could vary from (relatively) high to virtually nothing, mostly to be paid in money, but sometimes in natura. Sometimes, the rent would be no more than a tribute to symbolise that the tenant recognised the lordship over the land.222 It was to be paid yearly on a specific day, usually a feast-day. In certain, rather exceptional cases the ground was actually sold.223

The lots in the new towns of the high-period of town foundation, just as in non-newly founded ones, are, with few exceptions, of an oblong rectangular form, with the house standing on the short side which faces the street.224 Often, the renters of the lots were obliged to fence them off from the streets, at least to the extent that

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220 In England the term generally was burgage or placea, in France local or ayl, in Tuscany casolare, the German word was Hofstatt and in Dutch it was hofstede. (Strahm 1945, p.22; Beresford 1967, p.147; Lauret, Malebranche & Séraphin 1988, p.85; Abbe 1997, p.310)
221 See par.9.2.
222 Strahm 1945, pp.25, 30, 35; Hammel 1986; Goudriaan, Ibelings & Visser 2000, p.IX.
223 This was the case in Elburg in The Netherlands, founded in 1392. (Rutte, Visser & Boerefijn 2003, pp.122-123)
224 Exceptions to this normal form of the plots are the smallest plots planned for Giglio Fiorentino (Tuscany, see fig.3.27) and the standard plots mentioned for Feniwiliers (northern France), which were square, and possibly the original plots in Bern (Switzerland) of which the width exceeded the length (see below). Concerning the position of

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9 PART II: THE PHYSICAL ELEMENTS OF NEW TOWNS

In the following part of this chapter, the various physical elements that were, or could be, planned with the creation of a new town are discussed in separate paragraphs. These elements make up the architecture of a town. Those elements that are part of every town, which are actually ‘necessary’ elements, will be treated first, while less common elements follow beyond.
the house or outbuildings did not do so. Sometimes there were even prescriptions concerning the material and the minimum height of the fences. In low-lying areas ditches could be used to divide the plots or the plots and the streets from one another, while at the same time serving the drainage of surface water and discharge. 225

Regarding the size, there are considerable differences, depending upon the regions and periods. In northern Germany, for instance, in the 12th and 13th centuries the general urban plot, as it would initially be issued, was about 15 m. wide and about twice or thrice as long. These plots were not completely built-up along the street front; spaces were left between the houses to allow access to the backyard. 226 This is rather different from the average Florentine plot in the 13th century, which was about 4-6 m. wide and 10-15 m. long. 227

In general, however, the average plot was about 6 to 15 m. wide and 12 to 40 m. long. 228 But there are quite a lot of exceptions to these general dimensions. Some towns had house lots of very great length, stretching to over 100 m. in extreme cases. 229 The originally planned lots generally appear to have become smaller over the course of time: in the 12th century they were commonly laid out larger than were those of the 14th century. 230 This process is most likely related to the increasing value of urban land and to changes in the use of the lots and to a general decrease in area of the normal house through the centuries, owing to the decrease in the social living unit from extended family to core family. 231

But there are also differences according to region. In Prussia, for instance, where many new towns were still founded relatively late, in the 14th and 15th centuries, the lots were larger than in southwestern France or in Italy. This can partly be explained by the fact that in the northeast of Europe there were still relatively few towns and there was still a lot of vacant land that had not yet been brought under the plow. So, ground was relatively cheap there and, since it was relatively difficult to attract settlers, the promise of large plots of land could help to lure them. But it is also relevant that there was a difference in building traditions. In the Mediterranean, towns, villages and hamlets were traditionally built very compact, and often in stone, while in northern Europe the more usual sort of house was free-standing, particularly for agricultural use very large, and built of wood, wattle and daub, straw and clay.

In newly founded towns, as well as newly laid out parts of existing towns, the lots often seem to have been planned with standard dimensions, or at least with a standard width along the street. For several towns such standard lot sizes are known from original documentary sources. Appendix C provides a list of standard plot dimensions mentioned in documents. For many other cases the original existence of a standard lot can be assumed as the documents speak of one standard amount of yearly rent for every settler. 232 And in many cases the standard lots can be reconstructed from later written sources like sale contracts and tax registers, or from town plans. 233 Such reconstructed standard lot sizes are separately listed in appendix C.

One must, however, be careful not to automatically assume that the intended lots, as described in foundation documents and charters, were indeed laid out and distributed correspondingly. Research has shown the probability of those standard lots being also issued in quarters, halves, one and a half sizes, or multiples. 234 In some cases it may have been anticipated right from the outset that the large standard lots would be built on with more than one house and would be divided. 235 Possibly, in such cases the originally mentioned

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227 Nicholas 1997, p.222.
228 According to Slater (1990, p.76), the most common surface area of the urban plot was about 0.1 acre (0.0405 ha.) in England.
229 Appendix C provides a list of standard plot dimensions mentioned in contemporary documents. Examples of towns with very long plots are Burton upon Trent, Hedon and Thame in England and Sondeck in Germany.
230 Fehring 1997. According to Kaspar, writing about northwestern Germany, it can be observed that the house lots in newly created towns got smaller specifically around the end of the 13th to the 1st century. Earlier towns still had large plots, much like those in villages, whereas later towns had smaller and narrower plots of a more ‘urban’ character. Around the same time, the most common house type became the typical burgher’s house, with its gabled facade in the unbroken line of buildings, each contiguous to its neighbours. It almost seems like this change had to do with a sort of sudden formation of an idea of what form a town should have. (Kaspar 2004, pp.155-156)
231 See par.9.12.
232 In England and Wales, the standard rent usually was one shilling yearly, and in continental Europe one often finds equivalents such as 12 Pfennig or 6 diners. (Beresford 1907, pp.42, 68, 73; Frölich 1975, p.206; Leblond 1987, p.50) A standard rent would, however, not always mean that there were standard lots (Schich 1993, p.92), because the rent sometimes was not so much actually for the amount of ground on which the settlers lived, but rather for the prerogative of being granted ‘membership’ in the urban community, with its special privileges.
233 Slater 1981 (1) and (2). In particular the earliest 19th-century cadastral plans may reveal such information.
235 According to the ‘Golden Charter’ of Bern in Switzerland (fig.9.15), the standard error measured 100 x 60 ft. and cost 12 Pfennig rent per year. In Strahm’s opinion these were

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standard lots may only have been a standard unit for the determination of rent for lots of different sizes. In the charter of Dobcyce in Little Poland of 1362, not long after the foundation of the town, it is mentioned that the rent will be calculated for whole, half, and quarter lots. It is not indicated, however, what the dimensions of the whole lot were; but apparently there was some standard size for it. In the case of New Salisbury, the founder, Bishop Poore, granted a charter in 1225, in which it is stated that the standard plot was to measure 7 x 3 perches (c. 115 ft. X 50 ft.), for which a rent of 12 d. per year was due. But it was also stipulated that tenants who held lots of other sizes were to pay more or less according to the area, from which it is evidently that, from the very outset, the tenements were to vary in size. This is reflected in the plan, which was partly laid out to accommodate standard plots - although few such plots are still traceable today - but which could not accommodate the standard plots everywhere since the bordering streets are not parallel.

An instructive example is the case of Lübeck. It has long been taken for granted that the house lots of about 25 x 100 ft. (8.1 x 32.4 m.), which can be found in large numbers in the 19th-century cadastral plans of Lübeck, were the original standard lots of the town as it was founded (or, more precisely, re-founded) by Duke Henry the Lion in 1158. Extensive archaeological research, however, has shown that this idea is wrong. It appears that at least a part of the new town was built in an area with an older structure of agricultural plots. These garden plots measured up to 110 ft. in width and 174 ft. in length, or possibly even more. In the early decades of the re-founded town of Henry the Lion the settlement was enlarged considerably, and the garden plots were gradually cut up into smaller house lots. In the 14th century, many of the plots in the central area of the city reached a size of about 8 x 35 m. Apparently, the process of plot division stopped when it reached the optimum for the size of a burgher’s house with back court, which occurred around the 14th century in the most valuable central area and in the 17th century in the more peripheral areas of the town. This process of plot-division by transactions on the urban land market is related to the increasing value of urban land and to changes in the use of the lots.

Despite the process of subdivision – and, in other cases, also amalgamation – of lots, ancient property boundaries and street patterns can, and often do, survive for very long periods of time in the urban landscape. This has been shown by archaeological excavations in many different places; even in locations where redevelopment demands have been high, such as in central London. This innate conservatism in town plans is so strong that even major fires or other grand-scale destructions often did not structurally change the framework of plots. The increase in scale of building projects in the 20th century has generally been the most important factor in the obliteration of ancient urban structures.

particularly in Europe north of the Alps, the plots in the early foundations were often initially very spacious. The plots were large enough to leave considerable space open at the back and sides of the houses, which was used for gardens, orchards, the keeping of domesticated animals, working space and storage, while cesspools and wells could often be found there as well. (see figs. 3.34, 9.10, 9.16) More and more, however, this space would be built over with stables, sheds, workshops or extensions to the house. At the same time, with the increase of the population, the plots were divided into narrower strips, and new houses were placed between the older ones, eventually resulting in the unbroken building lines that are nowadays regarded as
typically urban. Often, there were building regulations that forbade houses to stand out from the building line, because there was a preference for the straight line. Sometimes, parallel streets were laid out in later stages at the back of the original plots, and new houses were also built on side streets and alleys. In this way, closed building blocks were created, which would be repleted, up to the 20th century, with all kinds of outbuildings or with small tenements or cottages along narrow alleys which were often sub-let.

Amalgamation of plots, on the other hand, also occurred, particularly in places where the original plots were relatively small. In general this happened more often in the peripheral parts of towns. Both plot division and amalgamation are part of the process of diversification in the urban land market. The plots, as they were originally conceived, mostly appeared to offer not enough variation in size for the demand of the land market. Even in towns that originally offered a variation in plot sizes, such as the Florentine new towns, the plots were further diversified in the course of time. Apparently the small plots were small enough to meet the demand, while the large plots appear to have been too small, since a number of them were amalgamated.

In cases where uniformity of lots was part of the original concept, but where the situation of the site did not permit uniformity, length and width would sometimes be adapted to compensate, so that the area would remain more or less the same. This was done, for instance, in the Dammstadt of Hildesheim, which was founded in 1196. Apart from that, in many cases, the lots may not have been as uniform originally as the documents may suggest. Obviously, measuring was usually less exact than in the present, and tenants may have secretly colonised space from adjoining lots and streets.

In previous chapters the geometrically designed regular distinction into different classes of lot lengths of the Florentine terre nuove has been discussed. In a limited number of other towns something similar did occur, but this was always much less regular. Slater’s analysis of the plan of Lichfield in England (founded c. 1140) has shown that it is likely that originally there were two different standard plot area sizes. The larger
plots were probably conceived in order to attract settlers for the plots that lay further away from the market place.²⁵³ The town charter of Bartoszyce (Bartenstein in Poland), which was founded in 1332, mentions lots of 4 x 7 Ruten (60 x 105 ft.) on the market place and lots of 4 x 8 Ruten (60 x 120 ft.) on the surrounding streets.²⁵⁴ In both cases the higher value of the lots on the market place, due to their higher commercial potential, compensated for their smaller size.²⁵⁵ It is just the other way around, however, in a number of other cases. For instance, in the Florentine terre nuove, where the lots on the main streets are deeper than those on the secondary streets. (see figs.3.6-3.27) An early document concerning Sensburg (Mragowo in Poland), which was founded around 1405, mentions that the lots on the market place were one rod longer than those that fronted onto the streets.²⁵⁶

In some cases it seems likely that initial lots that were relatively large were purposely planned as such, in order to either attract settlers to less attractive sites (for instance at a relatively greater distance from the economic core, as in the abovementioned case of Lichfield), or on ground that still had to be cleared or drained.²⁵⁷ In some cases, larger lots were issued for specific social or professional groups that needed extra space, such as the urban nobility, traders or cloth workers.²⁵⁸ It seems that in central Europe larger plots for the nobility, agents of the lord or for churches or monasteries were sometimes explicitly sited next to the town defences, so that these people and institutions and their solidly built stone buildings could contribute to the defence of the town.²⁵⁹ (figs.5.4, 9.11, 9.18)

For some towns, early documents show that there were variations in rent for lots of similar size. In Cracow and Legnica in present-day Poland, the tax and rent varied according to the value of the site: for lots of the standard size of 36 x 72 ells sited at the market, full price had to be paid, while the amounts due were reduced in two stages for the lots further off. (fig.9.1) The document concerning Legnica explicitly mentions that the reason for the variation is the difference in the commercial potential of the various locations.²⁶⁰

²⁵³ Slater 1987, p.198.
²⁵⁴ Schich 1993, p.97.
²⁵⁵ See also Keller 1979, p.88; Beresford 1967, pp.22-24.
²⁵⁶ The lots measured 2 (-1 ell) x 9 Ruten (28 x 135 ft.) on the market place and 2 (-1 ell) x 8 Ruten (28 x 120 ft.) on the streets. (Schich 1993, p.97) The motive for the bigger size of the plots on the market probably was that the relatively narrow lots of 28 ft. width could well use the 15 ft. of extra length, in order to create lots that would be large enough for a successful trading business.
²⁵⁷ For instance in the Kniehof at Königsberg (Kaliningrad), where in 1277 lots of more than twice the normal size (4 x 5 Ruten against 2 x 4 Ruten) were issued for the eastern part of the new town, where the ground was low-lying and marshy. (Gause 1965, pp.35-38)
²⁵⁸ In some German towns, for instance, the urban nobility received larger plots, often at the periphery of the town. In Göttingen, for example, the specific plots for the nobility measured c. 38 x 38 m. (see Nitz 1996 (2)) The relatively large standard plots of 6 x 12 Ruten (44 x 140 ft.) of Hildesheim Dammstadt of 1196, were specifically meant for cloth workers, who needed a lot of space for their industry. Possibly, these lots still had to be drained, as the new town was founded on a marshy soil. (Schich 1993, p.86)
²⁵⁹ Research on this phenomenon was presented in a paper titled Adelshöfe als planmäßige Elemente von mittelalterlichen Gründungsstädten Nordwestdeutschlands by Arend Mindermann during the Arbeitstagung zur mittelalterlichen Gründungsstadt at the University of Göttingen, 15-17 March 2001; see also Meckseper 1982, pp.153-157, 228; Gutkas 1963, p.86. For the phenomenon of the siting of churches and monasteries in relation to town defences, see par.9.17.
²⁶⁰ Schich 1993, pp.99-100, 112-113; see also Beresford 1967, pp.22-24. A clear distinction based on profession was made in Großwüsterwitz, founded in 1159 by Archbishop Wichman of Magdeburg. There farmers had to pay rent per agricultural unit (monus) of a standard field and a house lot, while the burghers (traders and craftsmen) had to
Particularly in the 13th and 14th centuries, in towns in relatively densely settled southern, western and central Europe, the width of the lots was often dictated by the usual form of the house. The optimum span length of the beams that carry the floors in the houses determined the width of the normal house. By optimising between the functionality of the space within the house and the value of street frontage, which especially for shops often seems to have been more important than surface area, the normal house would be one span wide in a well-populated town, or sometimes double that. Since the maximum span of wooden beams was usually between 4 and 9 m., this would determine the standard for the width of the lot. In many towns there were alleys next to the houses, to provide for access to the back of the house, for draining surface waters from the lots onto the street, and for the suppression of fires spreading rapidly from house to house. The width of these alleys generally was between about 30 cm. and 2.5 m.

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262 These narrow alleys between the houses can be found especially in those regions where the ridges of the roofs were traditionally oriented at right angles to the street. See par.9.12.
The area and form of the plots were, of course, chosen so that they could optimally serve their functions within the given circumstances. But apart from that, it is clear that normally the length and width of the lots were chosen so that they were related in a harmonious proportion, and often the numbers in feet or ells would be rounded numbers in the decimal or the duodecimal systems. In appendix C it can be observed that there are few exceptions to this rule. 269 Most often, one finds the relation of width to length 1:2, then 1:3, 2:3 and 1:4. These rational dimensions and relations were easy to handle when setting out the plots or calculating rents and taxes. The importance of aesthetic considerations in the choice for harmonic relations and rounded rational numbers should, however, not be underestimated.264

It seems that there were not yet special types of house lots for sites on street corners. House lots were arranged in rows, and those on the end of the rows were originally not different from the others, at least as far as can be known from documents or archaeological research. 265 It is obvious, however, that this often changed rather quickly in successful towns, in the decades after their foundation. Corner plots were generally favoured, because there are more passers-by on street corners and because these plots had much more street frontage than other plots, which meant that wares and crafts could be well exposed to more potential customers. The relative abundance of street frontage meant that the corner plots were often divided in smaller plots along their length, which were sub-let or sold. These factors made corner plots be considerably more valuable than ‘enclosed’ plots of equal size. 266

In many cases, allotments could not just be laid out at will, since the budget, the time or the technical capability was not sufficient. Hence, the dimensions of house lots would sometimes be partly determined by the form of the existing landscape, just as it also often determined the course of streets, etc.267 We have seen above how, in Henry the Lion’s town of Lübeck, part of the house lots were created by the division of existing agricultural plots. The same happened in Newborough in Wales, where the two crossing streets were laid out cutting through an older agricultural allotment.268 (see fig.1.4.) In the towns of Vianen, Nieuwpoort and Schoonhoven in The Netherlands the length of a considerable part of the lots appears to have been determined by the pre-urban layout of fields that were divided by ditches. 269 In Stratford-upon-Avon the form and layout of the plots, with slightly bending side boundaries, were also influenced by the structure of pre-urban open field strips. (See fig.9.7.) And in Thame, also in England, the lots in one part of the town are even more clearly recognisable as relics of the pre-urban open field strips because of their great length, measuring no less than c. 60 x 650-700 ft.270 (fig.9.12)

To conclude this paragraph on house lots, one well documented exception must be mentioned which shows that the arrangement of the plots was not always as rational and regular as has been described above. This is the case of the town of New Winchelsea, which was founded in 1288 by King Edward I in southeastern England. (fig.7.1.) From the first rent roll of the town, of 1292, in combination with the evidence of later plans of the town, it appears that the plots (placeae) were all more or less rectangular, as were most of the street blocks (insulae). The size of the 716 plots, however, was quite irregular, although the street blocks, most of which are equally deep, could easily have been divided into uniform plots or plots with regular variations in their sizes. Apparently, the urban land market determined the plot division in this new town right from the outset. This also was true for the value of the rents of the different plots. As might be expected, the area around the market place was the most desired location for settlers. There the value of the land was highest; consequently, many of the smallest plots in the town are to be found there.271

That the situation at New Winchelsea was so different was probably caused by the fact that the new town was

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263 The dimensions of 52 x 100 ft. for the lots in Dießenhofen in Switzerland, for instance, are exceptional in their non-rational proportions. It is quite obvious, however, that the 52 ft. width was derived from the 50 x 100 ft. mentioned in earlier documents of the related towns Flumet and Bern. (Schich 1993, p.86.) Other exceptions are the extensions of Kleve and the related foundation of Kalkar: 44 x 140 ft.; Soldin: 4.5 x 7 Ruten (= 54 x 8 ft.); Osneman: 12 x 35 coudes (= ells); Bruges: 16 x 63 arzes.

264 See par.8.6.4.

265 A possible exception, however, is Scarperia, where (some of) the corner plots may originally have been 14 or 15 braccio wide instead of 12. (see appendix B, n.86) But the evidence is vague, and even if they were right, it would not result in a significantly different type of corner plots, as those would only be about 1 m. wider, at most.

266 I believe that Jenisch mistakenly has interpreted this development backwards, claiming that the boundaries of the streets (the building lines) of Villingen in southwest Germany were drawn between the higher and (seemingly) more prominent houses on the street corners. (Jenisch 1999, pp.303-304)


268 See pars.7-11.

269 The structures of the plans of these towns were partly based on pre-existent field structures, which had parallel ditches more or less at right angles to dyke structures. (Visser 1964, pp.68-69, 118-120; Henderikx c.s. 1990, p.26) For Vianen this can be recognized in fig.9.2, but not in fig.9.16, as the structure of the fields surrounding the town appears to be incorrectly depicted there.


created to replace Old Winchelsea, which was prone to flooding by the sea. Probably, the plot size was not standardised in order to be able to cater to the existing variation in social and professional standing within the community. The determination of rent values guided by the urban land market appears not to have been instigated by the desire to maximise the profit. The total yearly rent of the whole town was established in advance, at 14 pounds, 11 shilling and 5 3/4 pence, that being the annual value of the agricultural land that Edward had granted to the commonalty of New Winchelsea. The individual rents of the plots were calculated so that they added up to this total.272

9.12 Houses

One of the most characteristic features of a town is, of course, that there are relatively many houses grouped relatively close together. In many foundation charters it was stipulated that the lots that are taken up by settlers had to be built on with a house within a certain period of time, usually one year. This general rule was further specified in a number of newly founded towns in the region of Bazas in southwestern France, where the settlers were granted the possibility of building a facade in the first year and a second part of the house (by which may have been meant a second storey) in the next year, after which they were free to build on the lot according to their wishes.273

Normally, the houses were built by, or at the expenses of, the settlers. One of the very few exceptions is Queenborough, which was founded on the south coast of England in the 1360’s by King Edward III. Documents mention that in 1365-67 a sum of money from the crown treasury was spent ‘for building and roofing of 11 houses’.274

The original houses generally were modest in size and materials. The first houses in newly founded towns often seem to have been adaptations from the common house types found in rural villages of the region.275 (see fig. 9.10) In the Czech Republic archaeological research has shown that the houses of the first generation in a number of new towns of the 13th century were very modest dwellings that were partly dug into the

fig. 9.12: Plan of Thame in southern England, based on the Ordnance Survey plan of 1880. (From: Bond 1990)
The village of Thame was enlarged and re-created as a town, shortly before 1219, by the bishop of Lincoln. The very long plots to the southwest of the High Street originally measured about 60 x 700 ft. It is most likely that they were this long because they were simply adapted from pre-existing agricultural open field strips.

272 Beresford 1967, p.24. It must have been a very complicated operation to calculate the individual rents so that they added up to the pre-established total.
273 Lauret, Malebranche & Séraphin 1988, p.89.
274 Beresford 1967, p.458. In Rhuddlan in northern Wales, founded by King Edward I in 1277, the crown was possibly also involved in the building of houses, or at least in importing timber for their construction. (see par.1.8.3.5) In Kingston upon Hull, which was founded by King Edward in 1293, he commanded his officer Richard Opseel to have houses built (or repaired) for the workers of the mint that he founded there in 1300. (Shillaber 1947, pp.305-307)
275 Büttner & Meißner 1983, p.21. For northwestern Germany Fred Kaspar notes that it was only in the 13th century that the typical town house came to dominate the appearance of towns that already existed for some time and that had a typically urban economy. In the centuries before, there were a number of different house forms, which were related to the various ways of life of the different social groups that were absorbed by the towns from previous non-urban origins. (Kaspar 1994, pp.265-265; also Meischke 1988, pp.251-253 (on The Netherlands); Richter & Velimsky 1993, pp.104-107 (on the Czech Republic); Glaudemans 1999, pp.79-80 (on Maaseik in Belgium); Jenisch 1999, pp.150-156 (on Villingen in southwestern Germany); Schofield 2000, p.372)
ground. Commonly the first few generations of houses in new towns were made with walls of simple and cheap materials like wattle and daub, straw, rammed earth or wood, timber floors and often timber frames in the walls, and thatch roofs. Because of the ephemeral nature of the materials, these original houses have left little trace in the present, and they can only be reconstructed from archaeological and historical sources. From excavations in Malmö in southern Sweden, founded between 1260 and 1275, it appears that the first houses were even partly built from scrap materials such as barrel staves and parts of wrecked ships. Generally, it was only in the next generation, after the establishment of the town was secured, that the buildings came to be more solidly constructed. But, even then, for the most part they were still constructed of timber frames with planks, wattle and daub, pisé, mud bricks and thatch; the first houses of baked brick or stone generally only appeared in the early 14th century. The original houses for which there is more information are mostly those built in stone, which generally were not the common houses but rather the relatively luxurious ones. (see figs. 2.49, 2.50, 3.34)

The first houses in the newly planted towns, or at least the costly parts of them, were often moved from their former place of residence, if that was not too far away. In the cases of Ardres in northern France and Beaumaris in Wales, for instance, at least some of the timber houses were taken from the nearby settlements of Selsones and, respectively, Llanfaes. In the case of the never-realised Florentine new town of Giglio Fiorentino, it was already foreseen that the houses in the old villages of the settlers should be dismantled. Hence, it was obvious to move these houses to the new town or to reuse their material.

To the extent that old materials were not reused, new ones had to be found. Often, natural materials such as wood, clay and stone were put at the disposal of the new settlers by the founding lords. Thus, the settlers were allowed to cut wood on (certain parts of) the land of the founder, or certain parts of it, to quarry clay and stone, or to collect rocks, for the building of their houses.

A typically urban aspect of the first houses was their place on the front of the house lots. Often they were not yet built in an unbroken building line - when the lots were wide enough at least - , but they were set in a row, on the front side of the house lots along the street. It is not clear whether, or in what measure, this was prescribed by building regulations, or whether this was the most economical and therefore most obvious way to use the lots. There are a few exceptions to this situation in Switzerland. In the new towns of Le Landeron (1325) and Hermance (before 1247), for instance, the original houses used the town walls as rear walls, and had open yards to their fronts.

Because of the relative narrowness of the house lots (see above), the houses stood close to each other and, in most cases, this eventually resulted in the closed street frontage that is presently known as a characteristically urban element. The houses of traders and artisans often had a semi-open facade with a shop counter, which might even have projected into the street by a few feet. In the Mediterranean and eastern Europe many houses, especially on the main street and market square, had galleries projecting into the street, with a storey extending over it. In the bastides of southwestern

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276 Richter & Velinsky 1993, pp.104-107. Such houses, in which the living space is dug about 0.5 to 1 m. below ground level, are called Grubenhäuser in German. For outbuildings, meant for storage or working space, such simple constructions that were partly dug below ground level, were more common until about the 14th century. (see for instance Villingen: Jenisch 1999, pp.156-158)

277 In the north of Europe the wooden houses often seem to have been replaced or thoroughly repaired within a period of two decades. (Schäfer 2001, p.421)

278 Reisnert 2001, pp.477, 481, 489. An exceptional region in this respect was northern Italy. Particularly in the Po Valley brick had been a relatively common building material since the Roman period. Here houses in newly created towns may already have been built of brick in the 13th or even the 12th century. In documents related to the creation of several new towns, kilns are mentioned for baking bricks and burning chalk for mortar. (Fasoli 1942, p.203)

279 See Lilley 2002, p.198. In southern Europe, however, stone was a more common building material, but it still was far from the norm for the average house (see the regulations on the facades in Giglio Fiorentino and F’Aquila, below in this paragraph).


281 Schwineköper 1990, p.156; Taylor 1953, p.403. Beaumaris is c. 2 km. from the older, largely deserted, settlement of Llanfaes. (see par.1.7.10)


283 See appendix A.

284 This was the case, for instance, with many of the bastides. (Lauret, Malebranche & Séraphin 1988, p.89)

285 In the description of the project of Giglio Fiorentino of 15 May 1350 (see appendix A), for instance, specifications are given regarding the form of the house facades (see below), but nothing is specified about where, exactly, the facades should stand. In the surviving documents from the other Florentine new towns, even less is dictated about the form of the houses or their facades. (see Friedman 1988, docs. 1, 2, 3, 5, 7, 12-16) It is, nonetheless, clear that all house facades were built on the building line. In the law books based on the laws of Lübeck (ur Lücks), which were used in many towns in northeastern Germany, northern Poland and on the Baltic coast, the obligation to respect the building line was imposed from about 1240 on (Breslau/Wrocław). It is not clearly described in the regulations, but from the actual remains of the buildings it seems likely that this meant that the facades had to be built on the building line. (Holst 2004, pp.108, 114-115)

286 Büjard & Boschung 2001, pp.30-34, 42; Büjard 1997, pp.11, 19-23, 29-42. Other examples are Unterseen, Burgdorf, Boudry and Valangin. (Büjard 2001, p.42; Gutsch 2004, pp.104-105; Baeriswyl 2002, p.83; Büjard 2005, pp.21, 51-52, fig. 4. It is not entirely clear how the yards were originally closed towards the street, but it seems that there was less concern here for straight building lines. After some decades, however, the houses were extended up to the street front.)
France these galleries could even be about 3 to 5 m. deep when fronting on the market square, so that the roadway encircling the square would be (partly) covered. (fig. 2.42) Mostly, however, these galleries were not planned right from the outset of the new town, but were added later by individual house owners.\(^{286}\)

The specific types of houses varied by region and period, so I will not go into this here. A very general distinction can be made, however, between the tradition of the compact houses, built close together, often in stone, of the Mediterranean, and the often much larger, freestanding houses of the north, which were built of wood, clay and thatch. Another basic distinction that had an impact on the general urban form was the difference between houses with their roof ridges parallel to the street, and those with the ridges at right angles to it. This distinction seems mainly to have been caused by the difference in the traditions of house building in each region.\(^{287}\) Very broadly, one can recognise a dividing line across Europe: parallel ridges are to be found mainly in the south of Europe, while perpendicular ridges are to be found in the north.\(^{288}\) This also seems to be connected with the inheritance in the south of the ancient Mediterranean tradition of compact building. It probably was easier for houses with common side walls to have their roof ridges parallel to the street, as the gutters would otherwise have to be constructed at the top of the side walls.\(^{289}\) Contrary to what one might think, this difference did not necessarily lead to differences in the dimensions of the house lots: houses with ridges parallel to the street can be just as narrow as the transverse type. The latter, however, generally called for narrow alleys between the houses, so that the rain water could drip from the roof into the alley, the so-called ‘eaves-drops’.\(^{290}\) In northern Europe the rare roofs that lie parallel to the street are generally to be found in towns or areas of towns where building space had not become scarce.\(^{291}\)

Sometimes, specific forms or materials were prescribed for the houses. This often happened a long time after the foundation of a town, when urban regulations became ever more detailed, among other reasons in order to prevent the spread of fires or to beautify the most important public spaces. But for some towns it is known that specific forms and materials were prescribed already with the foundation or shortly thereafter. According to Fasoli, it sometimes happened in northern Italy that dimensions were prescribed for the houses. In particular...

\(^{286}\) See par.2.10.5.5. In the foundation document of Fontanetto Po in Lombardia of 1323 (fig.8.8), it is stipulated that those who own houses on the main street are allowed to build galleries in front of their houses. (Panero 1979, p.107) At present, several of the houses actually have galleries and some of these may indeed date back to the 14th century.

\(^{287}\) Meckseper 1982, pp.139-141.

\(^{288}\) Meckseper 2004, pp.24-25. In the text of the *Visio Godeschalci* of 1190 it is clearly mentioned that houses with gables turned towards the street were a typically urban phenomenon. (Legant-Karau 1998, p.92)

\(^{289}\) From about the middle of the 13th century on, however, common brick sidewalks with gutters on top between roofs with ridges perpendicular to the street were becoming more and more common in the north. In Lübeck and other northern German towns where building space was becoming very valuable, such sidewalks were even built for individual houses with facilities for the construction of eventual neighbouring houses in the future. (Holst 2004, p.110) According to Divonne (1993, p.92), the houses in the towns founded by the dukes of Zähringen in southern Germany and Switzerland, were originally built with their ridges perpendicular to the streets, but they were turned in a parallel direction later on, in order that the stone dividing walls between the attics might serve as firewalls, preventing a fire from spreading from one roof to the next.

\(^{290}\) On regulations on such narrow alleys in The Netherlands: Meischke 1988, pp.211-213. Common sidewalks, generally of stone or brick, with gutters on top, could replace the eaves-drops once the technique of building them had become sufficiently advanced for constructing these, but in many towns such common walls were not allowed until about the 15th-16th centuries.

\(^{291}\) Mührenberg 2003, p.860.
maximum heights appear to have been dictated. For the new town of Giglio Fiorentino it was prescribed in 1350 that the houses facing the main streets had to have facades 10 braccia high, built out of stone or brick. Although the document does not clearly say so, it is obvious that this was demanded in order to give the main streets a beautiful, wealthy and uniform appearance. For the town of l’Aquila it was specified in the statutes of the late 13th century (about two decades after its re-foundation) that those who had enough capital and who did not yet have a house there, had to build one two canne (rods) high and four long, out of ‘[…] good stones, chalk and sand, and covered with good tiles’. In general, it can be observed how the urban houses, or rather living units, gradually became smaller, just like the house lots. This may have had to do with the type of social unit: the extended family of the Germanic tribes, the Celts and the Romans, gradually changed into the social unit of the core family, with a married couple, some children, and often some grandparents. The time and speed of this change varied with religion, region and social standing, but in general it took place somewhere between late antiquity and the 14th century. In successful towns it often happened, however, that more families or individuals came to live on one property or in one house, as parts of them were let and sublet to subtenants.

At the same time, however, once the economy started to flower in new towns, individual houses were enlarged. Storeys were added, cellars were dug, and the surface area of the house grew into the former open space of the plot. Originally, there usually were some outbuildings at the back of the house, which mostly accommodated storage rooms, stables or workshops. Normally, these were humble structures, often not much more than covered pits or sheds. Later on, these humble buildings may have been enlarged and rebuilt in stone. For the most part, the houses were also extended with new additions towards the back of the plot. Often, this resulted in plots that were almost completely built on, only leaving open an inner courtyard for the access of daylight.

9.13 Street structures

In this paragraph some remarks will be made on the overall structure of streets and street blocks. In paragraph 9.6 it was already mentioned that the street structures of the new towns from the period under consideration generally tend towards regularity in their layout. Different kinds of influences could, however, result in irregularities.

One element that could have a strong influence on the course of streets and the whole urban plan is the course of intra-urban water streams. The street structure in New Salisbury, for instance, was basically a regular grid, but there are considerable deviations from the orthogonal, which seem to have been explicitly planned in order to make the streams that ran through the streets flow in the right direction. But the street structures, or even whole plans, also had to be adapted to another aspect of water management. In most towns the streets only had to carry water away when it rained. Of course, discharge water was also drained by the streets, but generally this only concerned a limited volume.

In this regulation probably measured 6.5 ft.

One of the conditions intended in this regulation was that the roofs must be covered with stones and tiles (‘lastre e tegole’). The canne intended in this regulation probably measured 6.5 ft.

Elsewhere, especially in low-lying areas such as river valleys and marshland, canals were dug for water...
drainage as well as for naval access. These canals sometimes were the remnants of the pre-urban ditches in
the polders, or they were especially laid out so that they would best serve the new settlement. The course of
these streams and canals very much influenced the layout of the streets and the over-all plan of the towns.

Of course, many other topographical features also had a strong influence on the form of the new town
and its street structure. In particular, the form of the relief is an important factor in this respect, but other
kinds of pre-existing elements, such as buildings, boundaries and roads are also significant. In paragraph
9.6.2 and previous chapters such cases have already been encountered, but here we might give one more
example. The plan of the bastide of Vergt in the Dordogne region has a rather strange, elongated form.
(fig.9.15) Sometimes such elongated plans can be found on elevated ridges, as in Pembroke (fig.1.6) or
Montréal (fig.2.28), but that is not the case here. In 1285 the count of Périgord founded this town anew,
using two older settlements to attach the new settlement to. Two small irregular cores were united by a
linear structure. The plan of Vergt took the form of two parallel streets with a number of narrower transverse
streets and a market place about halfway between the older cores. The typical elongated layout must have
come about, on the one hand, by the desire to connect the two older settlements and leave them more or less
intact and, on the other hand, by the natural form of the site with obstacles in the form of a stream on the
southeast side and a hill-slope on the northwest side. So here, the cultural as well as the natural conditions
of the landscape combined to inspire a rather uncommon street structure.

Another important factor in the layout of street structures was the form and size of the house lots and
the type of access to them. The form and size of the lots has already been discussed in paragraph 9.11.

303 The ditches of the pre-urban polders in The Netherlands largely determined the structure of parts of the plans of Schoonhoven and Nieuwpoort. (Visser 1964, pp.118-120;
Henderikx c.s. 1990, p.26) In Nieuwpoort the town was built around a canal, which formed its main axis. This canal drained the water from the town and the polder in which
it was sited, and also served as a transport route. Much the same holds true for Elburg, also in The Netherlands, but there it was a matter of a canalised section of a brook.
(see fig.7.3)
Concerning the type of access, the basic distinctions are: single or multiple, and via the short side or via the long side. The main access was always via the street-facing front; apparently it was not found desirable to facilitate access via neighbouring lots. Since the normal lot would face the street with its short side, the main access would generally be by the short front side of the lot. But in the case of lots that lay at street corners, the longer side could also serve for access. If the planners wanted the backs of the lots to be accessible as well - which was especially desirable if they were relatively narrow so that it would be hard to make room for a passage for large objects, like carts or animals by the front of the house - back streets had to be laid out. These back streets were narrower than front streets, since they were not designed for through traffic or representative functions. In some towns there are secondary streets that serve as back streets for the lots on main streets on the one side, and as front streets for secondary lots on the other side. This arrangement can be found, for instance, in Vianen and Schoonhoven in The Netherlands, Lemgo in northern Germany, and may also have been projected for Giglio Fiorentino in Tuscany. (figs. 9.16, 3.27) In the course of time, the original back streets often were gradually turned into front streets, as the house lots were subdivided, and houses were built on the former back sides of the lots facing the back streets. (fig. 9.16) An important question is whether the size and form of the lots and their built-on structure was visualised and decided on before the street structure and general plan were conceived; or was it the other way around? The latter possibility, that the form of the lots resulted from the choice for a particular street structure or plan form, seems illogical. But nevertheless, it appears to have occurred, especially where a certain structure was dictated by the pre-urban situation. As already discussed earlier, the two principal streets of Newborough in Wales were laid out straight and almost at right angles, cutting through an older agricultural allotment of irregular layout. For the new house lots, however, no regular structure was chosen: the old agricultural plots were simply cut up into narrower lots. (see fig. 1.43) With towns that were founded on high-lying ridges, the site would give the planners almost no other reasonable possibility than to lay out the new town as a 'high-street plan', a single road in the centre of the ridge with lots to both sides, as was the case in Pembroke and the bastide of Bassoues. (figs. 1.6, 2.25) In New Winchelsea in England a regular grid of streets was set out, but

305 In highly exceptional cases the lots may have been turned with the long side towards the street, as may have been the case with the original standard lots in Bern in Switzerland. (see par. 9.11) Sometimes the house lots had direct access to waterways, mostly by the short back side of the plot.

306 Additionally, back streets often also served to lead away the rainwater from the back sides of the lots.

307 Meischke 1990, pp. 17-18 (The Netherlands); Kaspar 1985, p. 127 (Lemgo). It was also possible that there would only be house lots on one side of the street, if it lay along a watercourse or at the periphery of the town. This could, of course, also hold for front streets.

308 For instance in the Florentine new town of Terranova Bracciolini (fig. 3.23) and in Poznań in Poland (Schich 1993, p. 107).

309 See par. 1.7.11.
the plot structure was left open, to be filled in according to the demand of the land market. Apparently, the structure of the streets was planned largely without a preconceived idea of the form of the plots.\textsuperscript{310} (fig. 7.1) It seems, however, that this was quite an uncommon procedure.

In most cases, probably, the rough number and dimensions of the lots must have been in the minds of the planners at an earlier stage, forming specific conditions to which the form and dimensions of the street structure had to fit. This was the case with the Florentine new towns. (figs. 3.6 - 3.27) There, as in many other new towns of regular form from the 13th and 14th centuries, the specific sizes of the lots and the structure of streets were both predetermined. (fig. 3.27) The distance between the parallel streets was given by the length of the lots, rather than arising from the street structure itself. But the way in which the lots were arranged was a result of the choice for a specific street structure. In this case, this structure was dominated by the parallel residential streets. Other possibilities could be, for instance, with lots arranged along streets perpendicular to the main axis (a ‘herringbone structure’) or arranged in square street blocks (a ‘chequer board plan’). Another choice relating to the street structure would be whether the market place would be a widened street or a rectangular space.

\textsuperscript{310} This also seems to have been the case at Bunschoten, see par. 9.6.1 and fig. 9.2.
With few exceptions, the newly founded towns were fairly spacious, with relatively wide streets. These streets easily served the traffic, which took up much less space than it does now; even in the present day, though, many new towns from the high-period of town foundation offer room enough for modern traffic and parking spaces. Originally, however, many main streets also served as market spaces. They were ‘market streets’, where stalls of a more or less temporary nature could be set up.312

In the towns and cities of the 13th and 14th century, as well as those of earlier and later centuries, streets did not necessarily belong to the public space. There was an administrative distinction between private and public streets. In the towns of Italy, for instance, a distinction was made between public streets (viae publicae), which were under the jurisdiction of the town government; neighborhood-streets (viae vicinalis), under jurisdiction of the parish or the ward; and private alleys (viae privatae) that were used by a limited group of people as access to their houses, workshops, gardens, etc. In the earlier centuries the public streets were rather sparse: this status was often limited to the main streets and the market place, while the rest of the streets were private or semi-private. This distinction between different types of streets basically stemmed from the old Roman law codes.312

It is obvious that, with the building of a new town, the lord or government, as founder, owner of the ground and legislator, had to provide for access to the lots that were assigned, for through roads that linked the settlement to others, and for open space for markets and public ceremony. Therefore, the government had to take responsibility for the laying out of streets and market places, and had to provide for their maintenance. Consequently, street structures were usually more intense and more rational in newly built towns, being closer related to the pattern of the lots. The space taken by streets and market places is relatively larger in newly founded towns than in the older towns and cities, which gradually developed in different stages over considerable time. The width of the streets generally was also more specific in newly built towns, as it was often specified with the laying out of the plan and protected by building regulations that forbade new structures from impinging on the existing building line.313 In newly planned towns such streets commonly were public streets.

In this respect, the new towns from the high-period of town foundation seem to have been ahead of the older towns and cities. Streets in newly planned towns generally were not only wider, straighter, and relatively more often paved, they must also have been ‘public’ streets more often.314

The actual width of streets varied with their functions and status. In general, three functional classes of streets can be discerned, which in towns and cities of long standing may have been more or less conformed to the three juridical types of streets mentioned above. The first class concerned the major traffic streets, which was the inner-urban part of a road of regional or super-regional importance. Secondly, there was the residential street. And finally, there was the service street or alley, which originally was meant to provide subsidiary access to the back of the lots, for drainage, or as cross-connections for pedestrian traffic.

In newly planned towns the width of main streets that were used by supra-local traffic could vary from about 6 to no less than 40 m.315 Streets wider than c. 10 m. were mostly also planned to serve as market spaces. Such wide market streets can be found relatively often in the British Isles, The Netherlands, southern

312 Braunfels 1953, pp.99-93; Friedman 1988, pp.211-218. In the statutes of Perugia of 1342, the minimum width for viae vicinalis is set at 8 feet (c. 2.4 m.); while for viae publicae it is set at 10 feet (c. 3 m.). In these statutes the public street was described as where ‘anyone may pass and which leads to a gate in the wall’; while a via vicinalis goes only to ‘certain places, and has no exit’. Over these latter streets the community could only exercise its authority with the approval of the neighbours. (Friedman 1992, pp.69-70) Other examples of cities where minimum widths were set for public streets are Doornik (Douai, 1243), Regensburg and Avignon (1243; width set at 2 ames, which is c. 3.8 m.; Le Geoff 1983, p.57) and Leiden (1370; minimum of 11 ft. width) (Gutkind vol. VI, 1971, p.30). In France the larger public streets were often called charitres because they were suited for carted transport. (Leguay 1981, p.54)

313 The foundation document of Fontanetto Po in Lombardia (732), for instance, ordained that the main street and residential streets of the town were to be two trabucchi wide, which is just over 6 m. (Panero 1979, p.197) The foundation charters of bastides sometimes also prescribed the widths of the streets. (Laurent, Malèbranche & Séraphin 1988, p.99). For instance, in Lignalaires (1265) and Ribouisse (1271), the width of the main street (carreria major) was laid down at 4 bacci (20 or 24 ft.) and the width of the secondary streets at 3 bacci (15 or 18 ft.). (Leblanc 1973, p.346) See also the project description of Giglio Fiorentino. (appendix A) For the planning of the new extension of Brescia the width of the normal streets was set at 18 bacci, which was relatively wide, about 10 m. (Guidoni 1992, II, p.69; see par.8.6.3) In Holland there were also regulations that had to guarantee that the urban canals were not made narrower by the dumping of refuse. (Guiraudian, Helings & Visser 2000, p.130)

314 Leguay 1981, p.24. That is not to say that in later times newly planned towns could also contain private streets. Mostly these would have come into existence in spaces that had remained empty for a long time or on larger lots that were ‘developed’ by the building of additional housing on the back side of the lots along alleys. In the Netherlands old urban regulations often mention that these alleys would become public streets if they were more than 12 ft. wide; and only then would the houses that were built along them be allowed to be sold. (Meischke 1990, pp.15-16)

315 According to Gutkind, the average width of the main streets of the new towns in Bohemia and Moravia was 49.2 ft., while the average for secondary streets was 32.8 ft. (Gutkind 1973, p.142)
Germany and the Alps, and in Prussia. (see figs.1.6, 1.11-13, 1.35-39, 9.8, 9.12, 9.16, 9.19) In Spisska Nova (Slovakia) the market street measures even more than 100 m. at its widest point. This extreme case seems, however, to have developed from the type of the village green rather than from the urban street or market place.

Secondary streets in new towns were usually less wide, with a minimum of about 3 m. Back streets were still narrower, sometimes no more than alleys, ranging between about 1 and 5 m.

It is hard to draw general conclusions about the original construction of the streets. Archaeological excavations in Freiburg im Breisgau have shown that, before houses were built, streets were constructed by taking off part of the topsoil and replacing it with gravel. In the Unterstadt of Burgdorf in Switzerland the street was covered with a layer of gravel before the house lots were terraced.

Initially, the repair of the streets was mostly the responsibility of the frontagers, but from about the 13th century on the maintenance of the streets gradually became a public responsibility. More and more streets were paved, with wood, stone or brick, the cost being financed by the institution of special taxes. Most newly founded towns did not have paved streets right from the start, as this was a rather expensive luxury which, in the earlier centuries, only wealthy towns could afford.

The streets often had gutters in the middle of roadway, to drain away the surface water. In many towns small water streams were led through the streets, serving as a water supply and as a drain for surface waters and waste. (fig.9.14) In rare cases there even were separate systems for the supply of fresh water and the discharge of dirty water. In Bern for instance, the Stadtbach ran through the three most important streets, probably through conduits of wood, while drainage canals ran through the middle of the street blocks at the backs of the lots. At the eastern end of the town the various canals joined together to drive one or more mills. (see fig.9.19) It seems that in some cases fresh water streams on market places also served the fish trade. The supply of water was also very important for the fighting of fires, always a great danger to towns and cities in those days. Later on, the streams were often culverted, becoming no more than sewers. In some towns, as for instance Lübeck in the 14th century, there even were closed water-supply systems; but such systems were certainly no part of the initial projects of new towns.

9.15 Access roads and navigation facilities

Apart from streets within the settlement itself, a town also needed access roads in order to facilitate communication with the surrounding area and other central places. Sometimes, such interregional roads had to be renovated, redirected or newly constructed with the creation of a new town. After King Edward I of England founded Kingston upon Hull in 1293, he had a new road laid out, because ‘(...) no roads have yet been made to our new town by which merchants may bring their goods and merchandise or the men of the town lead away their goods; which is well known to turn to our loss and to the hurt of the town and to men dwelling there and to merchants wishing to come there.’ In the 1263 charter of Newborough in Staffordshire four new approach roads through the forest are described as being ‘profitabiles ad burgum’. Old traffic routes were sometimes diverted in order to lead traders and clients to new towns. Often, this must have been part of the original scheme of the new town foundations. The Florentine new towns of Scarperia and Firenzuola, for instance, were explicitly sited so that they would lie on a new pass-road that was under construction at the time. In some cases, as at Bawtry in England, the diversion of the road can clearly be seen in the plan.

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316 The plan is published in Divorne 1993, p.261.
318 Gutscher 2004, p.105. The earthen banks that marked the grid of planned streets at Bunschoten, described in paragraph 9.6.1, may also have been made of a more solid material than the soft soil of the rest of the ground, but this is not certain. (see fig.9.1)
319 Leguay 1981, pp.40-43; Nicholas 1997, pp.334-337. Roads paved with wood seem to have particularly been a northern-European phenomenon, gradually replaced by stone and brick pavements from about the 14th century on. (see Meckspeer 1981, pp.246-247)
320 Leguay 1981, p.27.
321 Schwineköper 1980, p.120. Examples are Neath, Llandovery, New Radnor and Wrexham in Wales (Soulsby 1983, pp.163, 190, 207, 271); Lipsstadt and Höxter in northern Germany, Freiburg im Breisgau and Villingen in southwestern Germany; Bern in Switzerland (Divorne 1993, pp.87, 100-103; Jenisch 1999, pp.161-164; Baeriswyl 2003, pp.92-93); and New Salisbury in England (Aston & Bond 1976, p.98).
322 Baeriswyl 2003, pp.92-93. In Villingen there were also separate systems for fresh and waste water. (Jenisch 1999, p.164)
323 Schwineköper 1980, p.120.
324 Grabowski & Schmitt 1993, pp.217-222.
326 See pars.3.8.3, 3.8.4.
327 Other examples are Chipping Sodbury in England and Beverwijk in Holland. (see Beresford 1967, plate 6; Alders & Kruijsher 1988, plan)
Since towns were often sited on the banks of rivers or streams, bridges often needed to be built to lead the roads to the opposite bank. Often, this must have been envisaged in the original plans for new town foundations. The two parts of the bastide of Villeneuve-sur-Lot, on both banks of the river Lot, must have been planned to be connected by a bridge right from the outset. The importance of the bridge did not just touch the town itself, but went far beyond, since an important interregional road crossed the river here. The project was taken up in 1282, twenty years after the town’s foundation, by the commune with the help of the royal officer of the province. In the new towns of Elburg, Nieuwpoort and Schoonhoven in The Netherlands, bridges that must have been planned right from the outset actually form the very centre of town, with markets being held on and around them. (fig. 7.3)

New towns with illustrative names, like Bridgnorth and Boroughbridge in England and Puente la Reina on the pilgrim’s route to Santiago in Navarre, all appear to have been founded anew in connection with the building of new bridges on deflected traffic routes, and the same goes for Munich in Bavaria.

Just like access roads by land, navigation facilities were of great importance to the success of many towns. Therefore, the construction of such facilities sometimes also formed part of the scheme for new town foundations. In Wales, the river Clwyd was canalised to create an easily navigable connection between the new town of Rhuddlan and the sea. The plan of Elburg in The Netherlands was actually centred on the navigable stream that was canalised and lead right through the middle of the town. (fig. 7.3) With the foundation of Kingston upon Hull in England a new landing place was constructed for the ferry. In many other places, such as Monségur in southwestern France and Rhuddlan and Caernarfon in Wales, harbours and quays for the loading and unloading of ships were constructed with or shortly after the foundation of the towns.

9.16 Market places

In the period of about the 8th to 13th centuries, town markets were often held in churchyards or before the portals of churches. Primarily, this was to guarantee strangers who came to market the immunity of the church and to ensure a heavenly guarantee for the honesty of buyers and sellers. But this may have also been because in the churchyard there was a fair amount of communal space, which otherwise may have been scarce within the urban boundaries. In other cases, especially in the earlier centuries, markets were held in the main street. In larger towns there often were different markets for different products, held in different spaces. For the most part, however, the main market space had a central place within the town. But it also happened that markets were held outside the actual built-up area of town. This was the case in Caernarfon in Wales and it was prescribed in the foundation document for the Florentine new town of Giglio Fiorentino.

For the founding lords of new towns it was important to be able to control the trade in the market for the sake of taxation. In towns with castles, such as in Wales, the market place was often laid out in such a place and form that it could be observed from the castle. If there was no castle, the agent of the lord customarily resided in a house on or near the market place. The place generally also served for public congregation.

There are various theories about how the market square developed and spread over Europe in the 12th to 14th centuries. According to some scholars, the market square developed from the market street. In their theory, the street was widened at the centre, so that a long open space of more or less rectangular form was created,

328 Lauret, Malebranche & Séraphin 1988, p.117.
330 See pars.1.7.2, 1.7.5, 2.5.4, 2.5.4.4; Beresford 1967, pp.176-177.
333 For examples of castles that look out over market places, see par.1.8.2.3.
334 Caernarfon: Soulsby 1983, pp.41-42, 90. Giglio Fiorentino: "E che fuori della detta terra si faccia il mercato il sabato di ciascuna settimana." ("And outside the town the market shall be held on the Saturday of every week.") (see appendix A)
335 The house of the lord’s agent would often become the town hall in a later phase of more urban autonomy (c. 14th - 16th century).
and in later phases it became shorter and wider, so that the form got ever squarer.\textsuperscript{336} This may be true, but in my opinion this development existed concurrently with the autonomous model of the rectangular place, which often was formed by a number of lots or a whole street block that was left open. Generally, this model is younger than the market street model, only to be found from about the mid-12\textsuperscript{th} century on. Nieuwpoort in Flanders and Hann. Münden in Germany are early examples, being founded around 1160 and 1185, respectively.\textsuperscript{337} (fig. 10.7)

Meckseper has drawn a preliminary map of plan-types of newly created towns of the 12\textsuperscript{th} to 14\textsuperscript{th} centuries, which is based on a distinction between different forms of market places, within both the German-speaking area and the regions further east. (fig. 9.17) From this map it appears that in this part of Europe there is a clear difference between the south of Germany, Switzerland and the west of Austria on the one hand, where the market street model dominates, and northern Germany, eastern Austria, the Czech Republic and Poland on the other, where one finds plans with square or rectangular market places having a dimensional relationship of the sides of less than 2 : 1.\textsuperscript{338} In Meckseper’s map there are clear boundaries between the regions where these types can be found. Closer study suggests, however, that the spread of these types is not so clearly isolated in reality. In Bohemia and Prussia, for instance, both types occur side by side. In other countries, such as France, Italy, the Low Countries and Spain, both types may be found along with other possibilities (such as the triangular place), within the same regions. In the British Isles the quadrangular place was very rare: there markets were mostly held in (widened) streets.

According to Enrico Guidoni the orthogonal plan with central market square was invented and dispersed over Europe by the monastic order of the Cistercians. The specific orthogonality in the plans of the new towns would have been developed from the rational allotments in the relatively advanced agriculture of the Cistercian granges and from the Cistercian monastic architecture, which was often rigorously orthogonal. The market square, particularly with galleries surrounding it, would have been inspired by the cloister. Guidoni’s argument is not convincing, however, because, among other reasons, some of his examples have nothing to do with the Cistercian order, whereas towns that were founded by this order but that do not fit into his argument are ‘overlooked’. Arcaded cloisters are certainly not unique to the Cistercian order, and arcaded piazzas are just as easily found in towns the Cistercians had nothing to do with.

According to Harald Keller the ‘chequer board plan’ with central square was reintroduced in northern Italy around 1180, inspired by ancient Roman examples, from whence it spread northeastward to Austria and Bavaria, then to Moravia and Silesia, and subsequently to Bohemia and Prussia.\textsuperscript{340} Keller’s hypothesis is, however, rather weak because of the fact that several of the links of the ‘chain’ which he claims to have discovered, from northern Italy to Prussia, do not fit, in terms of either the form of the plans or the chronology. Besides that, one of the most important aspects which he uses to link the towns together, namely the arcades surrounding the town squares, is not valid, as those arcades were usually later additions.\textsuperscript{341} Therefore, Keller’s thesis is more or less generally regarded as invalid.\textsuperscript{342}

Some of Keller’s ideas were, however, absorbed in a genealogical hypothesis by Hans-Jürgen Nitz. In search of the origin of the type of the grid plan with central market square, Nitz proposed that there were two areas of origination, one being the Margravate of Meißen in eastern Germany, and the other being Wiener Neustadt (which also played an important role in Keller’s hypothesis, fig. 9.18).\textsuperscript{343} This bi-polar model certainly fits in better with the actual urban structures of the newly founded towns than does Keller’s single-source hypothesis. But, in my opinion, its scope is still rather limited. Market places of more or less square form were also created elsewhere, independently, as for instance in Belgium (Grevelingen and Nieuwpoort, c. 1160),

\textsuperscript{336} For instance: Meurer S.D., pp. 6-40; Friedman 1988, pp. 92-95.
\textsuperscript{337} Rutte 2002, pp. 59-60; Meurer S.D., p. 52.
\textsuperscript{338} Meckseper presented this map in his paper: Typologische Vergleiche von Plangrundrisse: Ein systematisches Ordnungsschema von Grundrißmodellen von Gründungsstädten des Mittelalters, presented at the Arbeitstagung zur mittelalterliche Gründungsstadt at the University of Göttingen, 16-3-2001; see also Meckseper 2004, pp. 21-24.
\textsuperscript{339} Guidoni 1978 (III); Guidoni 1992, p. 109.
\textsuperscript{340} Keller 1979, esp. pp. 134-142. On the theory of the urban form of the new towns of the 12\textsuperscript{th} to 14\textsuperscript{th} centuries as having been inspired by ancient Roman models, see par. 10.2.1.
\textsuperscript{341} See pars. 10.5-5.5, 9.12. Keller generally assumes that where arcades are still present, or where they existed in the 13\textsuperscript{th} century, they date from the time of the town’s foundation. This assumption is not backed up by historical or archaeological evidence, however. (see Keller 1979, pp. 75-77)
\textsuperscript{342} Meckseper 1982, p. 85; 1991, p. 65; Higoumet 1989, pp. 238-239. Higoumet contests Keller’s hypothesis of the diffusion of the motif of the more or less square market place. He argues that the squares at Wiener Neustadt (1154) in Austria (fig. 9.18) and Goldberg (1211), Löwenberg (1217) and Neumarkt (1223) in Silesia, are earlier than comparable forms in Italy, which only began to appear around 1250 (p. 225).
\textsuperscript{343} Nitz 2001, pp. 81-83. Hans-Jürgen Nitz presented a paper at the Arbeitstagung zur mittelalterlichen Gründungsstadt, March 15-17, 2001, in which his idea was laid out (not published).
France (Beaumont-en-Argonne, 1176) and Spain (Puente la Reina, c. 1121). Of course, it would make things comfortably clear if it was possible to trace the square market place back to one or two sources; but my opinion is that it is more likely that this spatial urban element – like others, such as wide market streets, cross-shape plans or orthogonal plans – was created at various places independently. After all, it was not a far-fetched idea, given that the market played a highly such an important role in urban life in the period.

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345 See par.10.2.1.
346 See pars.0.1.4, 1.4.2, 2.5.4.1, 3.5.4, 9.1.3.
fig. 9.18: Wiener Neustadt, plan based on a 19th-century cadastral plan. (From: Österreichischer Städteatlas 1 1982) This relatively large town was founded by Duke Leopold V of Austria around 1193, mainly to serve as a fortress against the Hungarians. The scholars H. Keller and H.-J. Nitz regard the plan of Wiener Neustadt as proof of the spread of the type of the urban grid plan with a central square from northern Italy to the area of the present-day Czech Republic, northeast Germany and Poland. However, this idea may be disputed. The plan shows that residences of monastic orders and of the duke himself were sited in or near the corners and gates of the defensive circuit (marked in a darker shade of red), so that these strong stone buildings and their inhabitants could strengthen the town’s defences. A very peculiar feature in the plan is the fact that the market place and most of the streets are directed north-south and east-west, whereas the directions of the wall circuit and the wall streets are slightly rotated.
There are indications that newly founded rural market fields from before the high-period of town foundation were often also laid out in rectangular form. In non-urban surroundings, market spaces could be very large, because space was abundant. But in some newly planted towns, the size of the market square was also very large; especially in the bastides of southwest France and the new towns of the present-day Czech Republic and southern Poland one can find very large rectangular market places. (figs.2.41, 8.7, 9.1) In the town of Ceské Budějovice in Bohemia the market place even measures about 130 x 130 m. (fig.9.4)

In the centre of the market place there usually stood a market cross: a more or less elaborate, often stepped, structure topped by a cross that symbolised the market peace. (fig.8.9) The sign of the cross was primarily adopted to symbolise that the market peace, which guaranteed buyers and sellers immunity from juridical claims during market hours, would be protected by heaven. But the cross often also stood for the judicial protection of the inhabitants and dwellers, and the administration of justice for the town. Therefore, it often played a role in civil ceremonies.

It happened quite often that market places, particularly the larger ones, were gradually partially built over by private and institutional buildings until about the 19th century. Market halls, town halls and guild halls were often built on the place, and the ephemeral structures of the market stalls were often turned into permanent buildings of shops and houses. This process has been called ‘market colonisation’. (see figs.9.5, 9.12, 9.14)

9.17 Town defences

Many (or possibly most) newly planted towns were not initially surrounded with a circuit of stone walls. Many towns, however, seem to have been delimited with some sort of barrier. This could be a small ditch, a thick hedge of thorn bushes, some sort of fence, an earthen bank, a wooden palisade or a combination of such barriers.

Defences of this kind may seem rather flimsy, but it should be understood that they not only served to protect the town from enemy armies but, just as well, or maybe even more so, against wild animals and (bands of) vagabond criminals. There are sources that clearly describe that earthen banks and wooden palisades were initially built, and were planned from the outset to be replaced by stone walls later on, when sufficient manpower and money would have been available. The legislative document for Giglio Fiorentino (1350) stipulates: ‘And the men of the said valley were forced to build and maintain at their own expenses palisades and brattices, until the town was walled in stone all around.’ Newly founded towns were often walled in stone at a later stage, up to about the 16th century. Generally, the gates would be the first to be executed in stone, after which the defensive towers and the walls would follow later on. Many towns, however, never got substantial fortifications at all.

Generally speaking, the town or its lord had to obtain permission to build defences from the sovereign lord, particularly when they were of stone. In exchange for such permission, the sovereign usually had to be paid a sum of money. The defences themselves were often financed by the settlers in combination with the lord of the town: the latter often paid for the building of the gates, while the inhabitants of the town, and sometimes also of its surrounding countryside, had to take responsibility for the construction of the walls and additional towers. The building of stone walls must have cost huge sums of money. Probably, it gene-

348 In Marciac the market place measures 130 x 77.5 m., in Wrocław 175 x 200 m., and in Cracow 200 x 200 m. (Meurer S.D., pp.77-78; Lauret, Malebranche & Séraphin 1988, p.101; Morris 1972, p.98; Gutkind 1972, p.143; Schich 1993, p.88).
349 According to Mumford (1961, p.251), the cross was already a symbol of the market peace in ancient Greece.
350 For instance, the cross in the market place played a role in the civil ceremonies of the foundations of bastides and villages in northeastern Europe east of the river Elbe (see par.9.5) See also Muller 1961, pp.202-220; Fischer 1952, p.79 and n.33.
351 For instance, Alnwick (Conzen 1960, pp.34-38) and Salisbury in England (Ancient and Historical Monuments in the City of Salisbury. 1980, p.XI) and several cities in Germany (Meckespeier 1982, pp.162, 181-182, and plans pp.21, 24, 34, 73, 173, 174; Schirmacher 1988, plan p.67).
352 Contrary to what is generally considered to be typical for ‘the medieval town’, this holds just as well for many towns that gradually were promoted to urban status. (Planitz 1954, pp.229-230; Tracy 2000, p.27 and table 3.3) In England and Wales for instance, of the c. 700 settlements with borough status in the period up to 1500, only 46 are known to have had substantial defences. (Barley 1956, p.57)
353 For instance, in Alnwick the gates were built by the lord and paid for by the inhabitants, while in Scarborough (Conzen 1960, p.92) the gates were built solely by the inhabitants, who paid for them. (see also n.149 above. In the Low Countries and Germany many newly created villages were also provided with such simple defences. (Biermann 2005, pp.91-104)
354 This clearly appears from an anonymous text from Worms in Germany of c. 1030. See Binding 2002, p.640. See also Biermann 2005, pp.104-106.
355 Haase 1950, p.80; see also n.149 above. In the Low Countries and Germany many newly created villages were also provided with such simple defences. (Biermann 2005, pp.91-104)
356 ‘Stecchatos quoque et bertescas homines dicte vallis eorum sumptibus facere compellantur et manutene donec terra ipsa murata fuit circum circa.’ (Friedman 1988, p.345, doc.20) Giglio Fiorentino was never actually built, but of its sister town Scarperia it is known that it was first surrounded by a wooden palisade, which was later replaced by a stone wall. (see par.3.8.3)
357 Tracy 2000, p.76.
358 This was the case, for example, with the Florentine new towns (see par.3.9.3.1) and with the bastides Peymir and Monflanquin. (Trabot-Cussac 1954; Lauret, Malebranche & Séraphin 1988, p.133)
ally was by far the most costly among all the projects that were communally financed.\textsuperscript{358}

The desire for stone defences was, to a certain extent, also a consideration of prestige and symbolism. Stone walls stood for power, wealth, urban independence, unity amongst the inhabitants and civic pride. Especially when provided with many towers, they could also serve as an allusion to other great cities, such as Rome or Constantinople, or even the Christian societal ideal of the biblical heavenly Jerusalem.\textsuperscript{359} Although town walls had an important symbolic function and the gates were often named after saints, they were not held to be sacred, as they had been in many ancient civilisations.\textsuperscript{360}

Apart from giving protection and an aura to the town, the fortifications also served to delimit the area of the town proper, particularly in its juridical aspects. Therefore, the town gates also served as toll stations. Circuits of ditches, banks, hedges or just balks might even have been constructed mainly for such reasons.\textsuperscript{364} And in some cases real gates, with or without stone walls or other delimiting structures, were built solely for non-defensive reasons.\textsuperscript{361}

Fortifications were often laid out in such a form that their defensive capability benefited maximally from the barriers in the natural landscape, particularly the relief and watercourses. From the late 12th century on, however, there was a general tendency for the circuits of defences to become more straight-lined and, in newly planted towns, even more symmetrical, thus tending towards rectangularity.\textsuperscript{365} At earlier times, but occasionally also later, the walls had rounded circuits, because in this form there were no vulnerable projecting angles, while a maximal surface was enclosed within.\textsuperscript{364} But the bent stretches of urban fortifications were often also, or possibly mainly, dictated by the form of the landscape.\textsuperscript{365} (see figs.1.24, 1.20, 2.11, 2.31, 8.5, 9.4, 9.5, 9.19)

Stone walls generally were between 0.8 to 2.5 m. thick and, especially from about the 13th century on, they were often crowned by through-going galleries behind battlements. (fig.3.31) The gates could be rectangular in plan, with a tower on top, or could be flanked by projecting D-shaped towers. (figs.3.30, 3.32, 1.27, 2.16) Along the walls stood towers, preferably at regular intervals, in order to provide high points from which to keep watch and attack enemies with projectiles. In the 13th and 14th centuries the tactics of flank defence became widespread, wherefore the towers had to be built projecting from the walls, which had straight stretches in between them. The walls and towers generally were as high and strong as could be financed.

\subsection*{9.18 Ecclesiastical buildings and cemeteries}

It was regarded as of great importance that new urban communities were provided with the required elements for the spiritual life. This was no less important than taking care of the arrangements for the urban economy, administration or defence. It was considered of significant and real importance that God was given a house in the settlement, so that it would enjoy His blessing and protection. Possibly, this was sometimes considered more important than the physical protection provided by the town’s walls.\textsuperscript{360} Apart from the fact that Christian spirituality was a dominating aspect in every man’s life, this element was also important for the new town in order to make the congregation of settlers into a real community in which they could feel at home, since the church also served as a sort of community centre.\textsuperscript{357}

Ideally, the town would form a distinct parish. But often it was difficult to achieve this, because the eccle-
siastical institutions involved often did not want to change the existing ecclesiastical organisation. Many town founders and new town communities came into conflict with abbots and bishops over the foundation of a new church or parish. Sometimes they had to turn to the pope to have the matter settled, or they had to buy off the parson of the old parish with a yearly donation. Hence, small settlements would often be left without a parish church, and towns founded near existing parish churches had to do without a church of their own. In such cases, however, a chapel would often be founded in the town in the decades following the plantation and, in most cases, the town would eventually get its own parish church, be it after centuries. Sometimes though, small towns may still be dependent on an older church standing remote from it, in a hamlet or alone in the fields.

A parish church would normally be accompanied by a parish cemetery, which usually lay in the church-yard. For a community it was highly significant to have a cemetery of its own, since it was found important to have deceased relatives nearby, and preferably also nearby the house of God. In most towns, the church was the major public building and, apart from being a place of congregation for spiritual services, it could also be a place for public assembly, storage, burial and even business and defence.

Town churches were often built at the margins of the urban area. In some cases this location may have been advantageous for the use of the church as a defensive structure. In regions like southern France, Prussia and Austria, for instance, churches were often built into or close to the town defences, in which they may have been placed to stand right next to the houses. Cemeteries do not seem to have been provided for originally.
have served a defensive function. In Austria, for example, town churches and monasteries often functioned as strongholds, and played a significant role in the defence of the towns. They were often positioned at a corner of the town, next to or within the circuit of defences, as at Retz and Bruck an der Mur. Already existing monasteries were sometimes even moved into a new town, to add to its defensive strength. In a document related to the translation of the collegiate monastery of Badbergen of 1261, it was mentioned that the monastery was moved to the oppidum of Quakenburg because, among other reasons "[…] this fortified place will be increased in strength by the residence there of the canons."

Another advantage of the siting of the church in the periphery of the town could be that in that location the relatively large area needed for a monastery or a churchyard would not occupy valuable commercial space. In many other cases, however, the church or chapel would be built right in the heart of town, on or at the market place, as often happened in eastern Europe. Quite often the church was sited at the highest point of the immediate area, which could be in the centre of town as well as in the periphery. This was the case, for instance, in Monmouth (St. Mary’s; fig.1.3) in Wales, Beaumont-du-Périgord (fig.2.14), Monflanquin (2.31) and Cordes (2.11) in southwestern France and Tábor in Bohemia (fig.8.5). The choice of siting in or on the market place or on high locations was probably determined by the wish to give the building, which was most highly regarded for its spiritual value and which commonly also was the most elaborate and costly in town, a place of extra symbolical importance, where it would also be most visible. An additional aspect for siting in a high location may have been that the church tower was often also used as a watchtower, for which purpose it would be most useful when it was built on a high point. Conversely, it probably also played a role as the building that marked the town and that could be made out from far away, symbolising the importance of the settlement and its ‘godfearingness’. It should also be considered here that the church, as ‘house of God’, was commonly believed to give protection, because of the taboo against damaging churches as well as because of divine intervention.

Apart from parish churches and chapels, monastic houses were highly important for the spiritual life of towns. Real monasteries were relatively rare shortly after the foundation of a new town, because they generally were founded only in towns that already had achieved considerable size and wealth. Lesser houses like priories, friaries, nunneries and hospitals run by monks or nuns were more common but, ideally, real monasteries would be among the standard elements of a town. In the Florentine terre nuove as well as in many town foundations of the Bohemian king Přemysl Ottokar II, monasteries, mostly of mendicant orders, seem indeed to have been an integral element of the town plantation. In the bastides of southwestern France on the other hand, this was a rare phenomenon.

Although ecclesiastical institutions were an essential element in towns, the rulers of the towns were often also eager not to lose too much power, influence and income to these institutions. It was especially important to limit the amount of land that was in the hands of ecclesiastical institutions, since they were exempt from the payment of taxes and rents. And because these lands were not personally owned, they would never be handed down by inheritance, so the lord of the town or the communal administration would not be able to profit from the land. A further danger was that the ecclesiastical possessions would keep on growing because individuals would make donations and, theoretically, the ecclesiastical institutions were not allowed to sell their property. Therefore, urban regulations were introduced to avoid the uncontrolled growth of ecclesiastical property within towns.

374 See par.2.10.5.3. According to Meckseper, there is an original document which proves that the stone buildings of the monastic orders were explicitly integrated into the fortifications of the new town of Nymburk (Nimburg) in Bohemia in order to make them stronger, right from the moment of its foundation by King Přemysl Ottokar II in 1259. The idea is probably much the same as with the explicit siting of the residences of the lord’s officials and settlers from the nobility next to the town walls, which can be found in various towns in central Europe. (Meckseper 1982, p.228; see par.9.11)

375 Fischer 1952, p.84; Sydow 1990, pp.109-111.

376 ‘[… ipso muro per annos nonem ac resideniam fortitudinis renovant incrementum’

377 Haverkamp 1987, p.137. The taboo against damaging churches was an aspect of what is generally called ‘ecclesiastical immunity’.

378 Platt 1976 (1), pp.158-159. Reinout I, count of Gelre in The Netherlands, even centred a number of town foundations on hospitals run by fraternities of crusader knights. (see par.8.3.1) Many other new towns throughout Europe were founded by monasteries, and were often also centred on a monastic house. (Beresford 1967, pp.110-111; for the sauvetés in southern France, see par.2.3.1)


380 Partry, this was due to the fact that many bastides were (co-)founded by monasteries, which would not be happy with the concurrence of other monastries. (see par.2.4.2, 2.5.4.3) Often, it would even be stated in the foundation documents, such as the charte de paréage, that religious orders were not allowed to settle in the town. (Saint-Blanquat 1985, p.45)

381 In Holland and France ecclesiastical landed property was therefore revered to as being held ‘in the dead hand’ (‘in de dode hand’ or ‘dans la main morte’), whence the English legal term ‘mortmain’.

382 In the Welsh new town of Conwy, for instance, the abbot of Aberconwy acquired lands within the borough in 1356, about 70 years after the town’s foundation, ‘[…] which
9.19 Market halls and town halls

Markets were preferably held sheltered from the climatic conditions. In many towns market halls were built to accommodate at least a part of the market where the more vulnerable products were traded. These buildings also often provided space for the town administration and for civil ceremonies. For the most part, it was only by the 14th to 15th centuries that the building where the administration was housed and where the council met could properly be called a ‘town hall’. Only by then, would many of the newly planted towns of the period under consideration get the autonomy that made this function more important, and only by then would buildings be specially built for the purpose of housing the urban administration.383

For some towns it is known that market halls and real town halls were planned simultaneously with the town foundation.384 But it seems that in many new towns they were not projected initially. For the most part, the first ‘town hall’ would rather be the house where the lord’s local officer was housed. Early town councils with representatives of the inhabitants often met in such a private house or in a church. In order to build a market hall or a town hall, especially on communal ground, special permission was needed from the lord of the town.385

When a market hall was eventually built - usually some decades or even centuries after the foundation of the town - it was preferably built right in the middle of the market, if there was enough space.386 (figs.1.7, 1.8, 1.12, 2.42, 2.44, 2.48, 3.15, 9.5, 9.12) The halls were often open arcaded structures built out of wood or stone. If there was a storey above ground level, that would often function as a ‘town hall’ for the urban administration.387 (fig.2.46) Town halls that were not accommodated with the market hall were mostly also located at the market place or otherwise centrally in the town, where they could act as a sort of symbolic core for the town. (figs. 3.21, 3.27)

9.20 Mills

By the 13th century, almost every town, as well as many villages and mansions, had one or more water mills. For the town of Fienvillers in northern France, it was determined with its foundation, in 1204, that the knights Hospitaller of Fieffes, who founded the town in paréage with a secular lord, received the right to build a mill powered by wind or by horses.388 At Conwy in North Wales the building of a new mill was started together with the first work on the creation of the town. Flint received a mill with its foundation, along with the permission to build another town mill, against a yearly rent of ten pounds.389 There does not appear to be much other evidence, but it may be assumed that, at least for part of the newly founded towns, the building of a mill must have been planned right from the outset.390 This is all the more likely since mills were lucrative institutions for the lords of towns. For the new town of Bern in Switzerland, for instance, it is highly probable that it was planned to have one from the very first instance, as it was sited on a location that was ideal to take advantage of a good site for a watermill.391

Usually mills were powered by an artificial or canalised stream of water, in which the supply of water thing is contrary to common law […]’, as was written in a document by which the Prince of Wales commanded the ground to be seized. (Tucker 1966, p.33) See also: Erlen 1992, p.243; Fischer 1992, p.62, n.7; Franchetti-Pardo 1982, p.59; Kocken 2004, pp.227-229.
384 For instance, the foundation charter of Frankfurt an der Oder in Germany (1253) already mentioned that a market hall (teatrum or koyffhues) was to be built. (Meckseper 1982, p.184) The coutumes of the bastide Revel (1342) also provided for the building of a market hall combined with a town hall. (Lauret, Malebranche & Séraphin 1988, p.214) At Caernarfon in Wales the town charter (1284) already provided for a town hall, and so did the document describing the projected town of Giglio Fiorentino (1350). (Soulsby 1983, pp.42, 58, n.59, 90; app. B)
385 The commune of the bastide Revel, for instance, had to pay 200 livres to the French king in 1377 for permission to build a market hall with a town hall. (Lauret, Malebranche & Séraphin 1988, p.106)
386 If the market space was not large enough, the market hall could even be built over the street, as happened in the bastides of Bassoues and Gimont. (see figs.2.25, 2.26, 2.27, 2.48) This was, however, a very rare phenomenon, and it is not clear whether these halls were planned right from the outset.
387 See pars.1.8.3, 2.10.5, 3.9-3.3.
388 Higounet 1990, p.300.
389 See Bleie 2005, p.176. With the creation of New Alesford in England in 1200 the founding lord had an older fulling mill rebuilt (Beresford 1985, p.52), and with the re-foundation of Fontanetto Po in northern Italy in 1223 it was arranged that the settlers were to help rebuild the water mill of the town lord, the abbey of San Genuario, and to reconstruct the canals that fed it (Panero 1979, p.109).
390 Baeriswyl 2003, pp.88, 92.
391 Panero 2004, p.94.
could be regulated, but sometimes they were placed on ships floating in the river. Windmills were used from at least the 12th century, but only from about the late 13th century did they become more common, at least in the flat lands of northwestern Europe, where wind was more available than water with a substantial fall.  

Most commonly the mills were used to grind cereals, but they could also be used for the grinding of other products, for sawing wood or pumping water. If possible, a mill would be located within the town itself. Windmills were always built on a high point, often on artificial hills, or earthen banks or the towers of the urban fortifications. (figs.1.38, 9.16) Water mills depended on running water with a certain fall, which often was not present in the town itself, for which reason they were mostly located just outside the urban core. (see figs.1.6, 1.26-27, 1.29, 1.38, 2.22, 6.3, 9.5, 9.19)

The construction of a mill was a relatively expensive operation, which was probably mostly undertaken by specialist engineers at the cost of the lord of the town. The exploitation and the use of a mill was not a free right. In most parts of Europe it was a seigneurial right, and therefore the lord could force his subjects and the free settlers on his land to use his mills, for which, of course, they had to pay a fee. Often, however, he would grant, sell or farm out this right to an entrepreneur or a community.

9.21 Wells

Every town needs fresh drinking water. Therefore, the construction of one or more wells was probably usually a part of the original urban project. In the description of the project for Giglio Fiorentino, of 1350, it is prescribed that a well was to be made in the piazza. Regarding the bastide of Baa, it is known from a document that, with its creation in 1287, two men were paid to look for springs, dig out wells and carve motifs upon the superstructures.

Wells were constructed anywhere where water was needed and where it could be tapped relatively easily. The preferred location, however, would be in the centre of town, if possible in the market place. (figs.3.13, 3.25, 9.11, 9.18) In some towns, where the water was close to the surface, many wells were dug later on, sometimes so many of them that almost every house had its own, in the backyard or sometimes even within the house.

9.22 Fortresses

A fortress was surely not a fixed necessary constituting element for a new town. But since new towns were mostly founded by feudal lords who used to reside in (and exert their power from) castles, towns were often connected to fortresses. Many towns were founded next to existing castles. This was the case, for instance, with many boroughs in Wales, many new towns in the Alpine countries, and the castelnaux of southwestern France, which were distinguished as a separate type of urban settlement by the presence of a castle. (figs.1.7, 1.34, 1.33, 2.8-10, 3.4, 9.11) Seigneurial castles could be very large, and newly founded towns could be very small, for which reason it sometimes happened that the castle with its forecourt was even larger than the town itself. In other cases castles were built together with new towns. This happened, among other places, in the boroughs of northern Wales founded by King Edward I and in many towns founded in Prussia by the Teutonic Order, the knights of which resided in the castles. (figs.1.11, 1.22, 1.31, 9.6, 9.8, 9.18) In Giglio Fiorentino a small fortress was planned at the corner of the town, but in this case not as a residence of

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393 Apart from water- and windmills there were, of course, also mills that were driven by manpower or by draught animals, which were generally smaller.
394 Meckseper 1982, pp.165-166.
395 In the town of Villingen in southwestern Germany, six watermills were sited just outside the town at least from the 15th century. (Jenisch 1999, pp.76-80) The mills probably were not sited in the town itself because the streams were divided into many small branches there.
396 Berosford 1967, p.178; Soulsby 1983, pp.43-44.
397 Bartlett 1993, p.143; Berosford 1967, p.178. See also: Fischer 1952, p.52, n.13. In the lands east of the river Elbe many mills were often granted to the locatores that organised the new creation of villages and towns there. (see par.7.3)
398 See appendix A.
399 Berosford 1967, pp.177-178.
400 For instance in the bastides of Mirande, Cologne and Montfort-du-Gers. (Lauret, Malebranche & Séraphin 1988, p.113)
401 Fischer 1952, pp.87-88.
402 See par.3.2. According to Palliser, Slater & Dennison (2000, p.262) three-quarters of the English towns founded between 1066 and 1150 adjoined castles, as did virtually all Scottish burghs founded up to 1266.
403 This was the case, for instance, in Caerphilly in Wales (see Soulsby 1983, p.92) and Laag Keppel in The Netherlands. (see par.1.8.3.2, 1.7.1-1.7.10; Hamm 1989, p.103; Gutkind 1987 (1), pp.36-39.)
the representative of the lord but purely as a keep. There are also fortresses that were added later onto towns that were already well established.

The fortresses were almost without exception located at the edge of the town, preferably on a point where they could overlook the town. In most cases they had a gate facing the town and another one facing the open country. From this it can be deduced that the castles were not only meant as protecting strongholds, but also as instruments to exercise control over the inhabitants of the town: in the event of popular uprisings the gate from the castle to the outside could be used to supply the castle with victuals and additional troops.

9.23 Extra-urban town land

Apart from gardens within the town, the settlers sometimes had gardens in the area directly surrounding it. It seems that in some cases such extra-urban gardens were regularly distributed by the founders with the initial creation of the town. In other cases the extra-urban gardens may have come about by the cutting up of agricultural fields or common grounds. The residents of the new towns often earned at least part of their income from agriculture. Hence, many towns had fields of arable and common land which was used as meadow land, pasture and source of firewood. Just as with the gardens it is mostly not clear how these grounds were originally distributed. When towns were newly founded in areas that already were brought into culture and which were well-populated, it would be difficult to distribute new land to the towns and their settlers. But often these towns were populated with people that had been living in the surrounding area, for which reason it was not necessary to distribute land anew: the settlers could just go on to exploit the land that had been theirs before.

For the bastides and the new towns that were founded in northeastern Europe there is some more information on the subject. Especially with the latter group the founding of towns (or villages) mostly accompanied new clearing and reclamation or the re-parcelling of existing agricultural land. The towns often were provided with a substantial agricultural area of, say, 40 to 300 hides (hufen, the normal unit of a farm on fertile soil). Often, these towns were founded in combination with villages, so called Stadtöder, that fell under the same bailiwick as the town, sharing meadows and woodland and forming a collective taxation unit.

9.24 Other physical elements

The most common physical elements that were part of new town creations have been described above. Of course there were also other objects that were built along with individual new towns. For instance, a rare source reports that at New Alresford in England a boulting house, where bran was sifted from flour, and a town oven were built at the expense of the founder, the bishop of Winchester. The inhabitants were probably obliged to have their bread baked at the lord’s oven, since this was often the lord’s monopoly.

Many other small elements were probably created for new towns, but these have not left traces in the documentation. In regions where brick was a common building material, such as the Po valley in Italy, ovens for baking bricks and tiles were probably among the earliest structures that were built. They were commonly built at the clay pits themselves, outside of town, and they were only meant for temporary use. Small devotional chapels must have been created in many new towns, probably at the expense of the settlers. Furthermore, one can imagine that, for instance, fishponds may have been dug, firehouses may have been built and gallows may have been erected. It is not useful to elaborate on the creation of such objects here, however, since they do not seem to have played important roles in the planning of new towns.

405 See appendix A and par.3.0.3.1.
407 There are a number of documents concerning bastide foundations in southwest France that provide information about the organised distribution of garden plots outside the towns. (see Abbe 1997, p.311, fig.1; par.2.10.6) There are also documents with similar information regarding the new town foundation at Poznań in Poland (1253) and Tuchola and Bytów in Prussia (both 1346). In the last two cases the size of the garden plot outside the town is related to the size of the settler’s house lot in the town. (Schich 1999, pp.112-116, nos.64-65)
408 See par.4.1.
409 This was the case with the Florentine new towns, see par.3.6.
410 For the cases of organised distribution of fields with bastide foundations, see par.2.10.6.
413 Beresford 1985, p.52. New Alresford was founded in 1200.