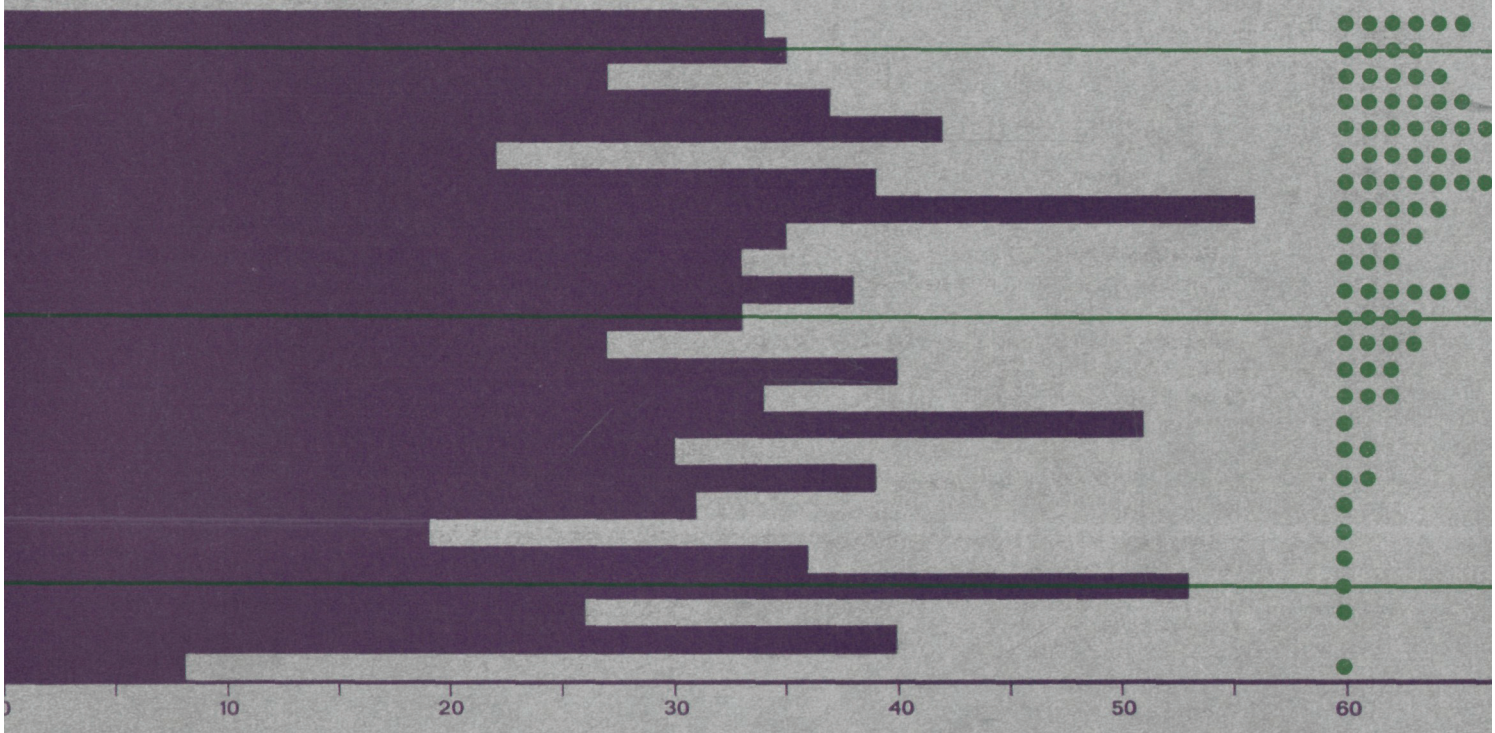
25 jaar Rijksdienst Oudheidkundig Bodemonderzoek



Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek

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ROB

Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek

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Digging in Dutch Towns: Twenty-Five Years of Research by the ROB in Medieval Town Centres

figs. 1–19

1 INTRODUCTION

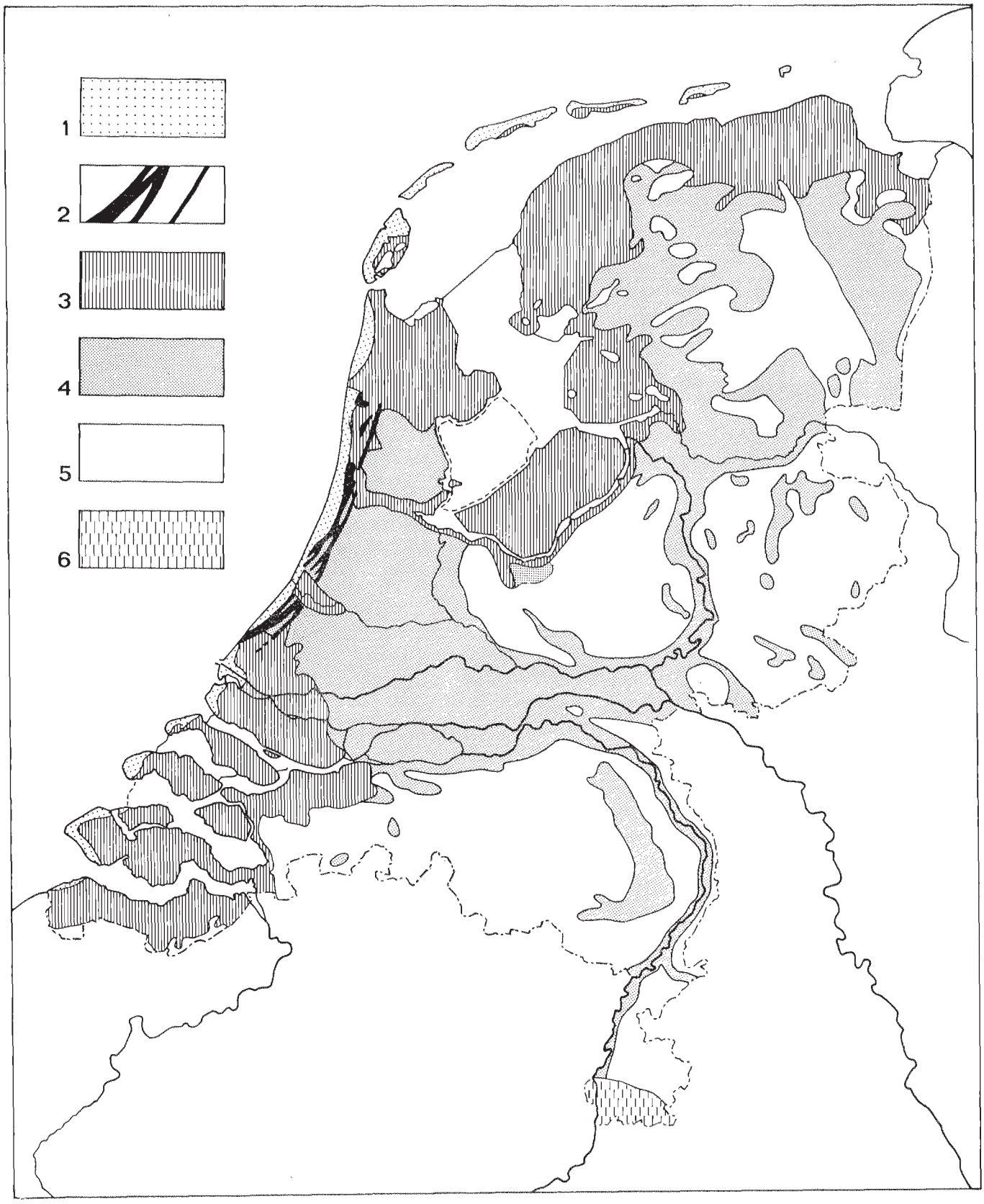
What is a town? At what point does a medieval settlement become a town? The question has often been asked, and it has been answered in many ways, especially since the last century. After all the lengthy discussions we are convinced that a single, all-encompassing answer cannot be given. Historians and linguists, jurists and economists, geographers and sociologists have all had their say. We can consider the findings of archaeological research as being among the more 'youthful' solutions, but even in this field the many-headed monster seems to be invincible. The all-embracing synthetic theorizing that gave an exact definition of the concept 'town' has long since made way for a more subtle approach. The impressive theory that defines the origin of medieval towns in terms of the increase of trade (Henri Pirenne) dominated the scene for several decades, but nowadays trade is regarded as merely one factor of many. The classification of the different contributing factors has led to the compilation of typologies of towns, but in recent years the relative value of adopting certain criteria has been pointed out.[1] What is it that determines a settlement to be a town? The number of inhabitants *(critère statistique)*? The historical development *(critère historique)*? The acquisition of municipal rights, autonomy *(critère juridique)*? Medieval terminology *(critère de la terminologie)*? Or is it, after all, economic forces *(critère économique)*? None of these factors by itself can explain the whole: they all play a part, often intermittently – a part that also varies with place and time.

One of the most modern approaches to the problem uses two concepts derived from sociology: structure and function. Very simply this amounts, in the first case, to regarding each town as a separate phenomenon in its own right (geographic situation, growth, its charter, its law, *etc.*), whilst in the second case the town is considered in terms of its interaction with its surroundings (economically as a market place, administratively as a centre of government, *etc*). It is obvious that this method of research cannot solve all the problems, but it does open new possibilities of gaining a better view of the essence of the medieval town. It has been argued that the three points of departure – definition, typology, and structure/function – should henceforth be combined in the historical research of medieval towns.[2] It would seem that this combined method is also well suited to the archaeological investigation of town centres. For in archaeological research the different aspects play a part, they crop up intermittently and can be subjected to material examination. As far as the origins of a town are concerned it is possible to trace the exact location, to determine the exact age, and to explain the geographical position; furthermore, subsequent expansions and contractions of the oldest town centre can be traced. Institutional elements such as churches, town-halls, dwellings, walls, moats, and so on must also be examined. The relation of the town with its surroundings may, for example, be reflected in portable finds which indicate the practising of crafts, the position of the town as a central market place and in its trade relations with other countries.

In archaeology medieval town-centre research occupies a special place, one with its own possibilities and limitations. These will be examined a little more closely. The most important limitation is the uncertainties of the space available for research. They vary – in a modern town – from a trench dug for a sewer system to a complete district within the framework of redevelopment. Neither the town as a whole nor all important historical objects are ever available. Thus by its very nature medieval town-centre research is inevitably incomplete, and the systematic planning constantly suffers from the unsystematic avail-

1 Joris 1965; repeated in Joris 1969.

2 Schledermann 1970.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ability of the areas to be examined. Yet it is possible, however, to obtain a certain picture from this instability. Next to the search for material sources the use of written sources is one of the characteristics of town-centre research. The latter may provide an identification of the phenomena which are known through archaeological methods, in some cases, the dating will be absolute – a much-felt want in pre- and protohistory. For the direct testimony of our predecessors is always the best guide for the critical dating problems. Mostly however, even in medieval archaeology, the current archaeological methods have to be employed. In these cases the stratigraphy of the finds, mainly pottery, is generally used. Besides there is a dating element in inorganic building materials: stone of different types, and bricks of time-tied sizes.

The scientific methods of absolute dating vary in usefulness: palynology, in general, is unsuitable and the radiocarbon is not precise enough to answer detailed questions. But good possibilities for absolute dating are offered by dendrochronology.[3] A possibility of clarifying the pattern of the town's contacts with the outside world is provided by important articles present among the finds, in this case mostly pottery. Gradually a reasonable knowledge of this last category has been obtained. The occurrence of certain imports shows the existence of some sort of contact, indications of trade relations are supplied only by distinct quantities of material. To establish this it is necessary for the finds to be of a sufficient quantity, *i.e.* a large and complete collection. It is obvious that in this way the interaction between archaeological finds and written sources can strengthen the image of the town as commercial centre.

In theory, one could choose every medieval town for archaeological research. Ideally, the whole stratigraphical range of archaeological evidence, ranging from the present moment back to the origin of human activity in that area, should be examined. In view of the possibilities and the limitations, but also in view of the inadequacy of explaining in general the phenomenon 'town' by archaeological means, it is the writer's opinion that in practice a selection will always have to be made among the group of medieval towns, in the town centre chosen, and between the archaeological layers at the site. The town-centre archaeologist, like the town historian will have to concentrate his research *à l'intérieur d'unités organiques soigneusement délimitées pour une période déterminée.*[4]

◁ Fig. 1 The Netherlands: geological map in outline. 1. Younger Dunes; 2. Coastal Barriers; 3. Holocene Clay; 4. Holocene Peat; 5. Pleistocene Sands; 6. Cretaceous Sediments

2 MEDIEVAL TOWNS IN THE NETHERLANDS

Can the Netherlands be considered as such a clearly defined area? We venture to doubt it, in spite of the limited size of this country. Perhaps it is better to consider the country as it is today as an agglomerate of several old regions whose borders shifted a number of times during the Middle Ages.

Several Dutch towns have a Roman history. Yet, in most cases there are few connections between their Roman past and later developments. Perhaps the only exception is Maastricht in the extreme south of the country where the kind of town life dating from Roman times seems to have continued – though on a much smaller scale – during the Migration Period and Frankish times. In this town, too, Roman Christianity established a bishop's see, which, having been moved from Tongeren in the fourth century, was moved again in the eighth, this time to Liège. We do not know of any other centres of Roman Christianity in this country, because larger urban agglomerations, in which the early Church preferred to establish itself, simply did not exist. The medieval towns where Roman traces have been found – Nijmegen, Cuyk, Utrecht, Aardenburg – are of military origin. Towns which had enjoyed a civilian habitation in Roman times did not automatically survive into the Middle Ages. Many settlements were abandoned for good, others were reoccupied but lacked continuity with previous developments.

The period of the early Middle Ages, the seventh to tenth centuries, went through a somewhat similar development. Large trade emporia emerge, such as Dorestad near (the late-medieval) Wijk bij Duurstede, and an *anonymum* near Domburg on the island of Walcheren, but they disappear towards the end of that period. Circular forts were built

3 This method has only been recently applied in Dutch town-centre research. As most of the excavations mentioned in this paper were executed some time ago, remarks will be limited to an indication of the method used.

4 Joris 1965, 100.

along the coast, as refuge for the population: Den Burg on Texel, Burg on Schouwen, Middelburg and Souburg on Walcheren, Oostburg in Zeeuws-Vlaanderen. But these, too, were abandoned, and only one, Middelburg, developed into a medieval town after the foundation of an abbey there in the twelfth century. The origins of towns such as Groningen, Deventer, Utrecht, and some others certainly go back to the early Middle Ages, but even in these cases the early beginnings had sometimes but little to do with later developments. Indeed, this study of Dutch medieval towns is focused on the urban centres that have existed since the year 1000.

In the first centuries after the year 1000 the distribution of towns in this country was quite simple. Utrecht in the centre, with its bishop's see, was the 'capital.' In the Middle Ages the diocese of Utrecht comprised a large part of what is now the Netherlands, notably the centre (north of the River Maas), the west (including Zeeland up to the mouth of the Scheldt) and the north (except the extreme northeast, which was ruled by the Bishop of Munster) (fig. 2). The Bishop of Utrecht, as an official of the German Imperial Church, also became the secular representative of the German king. In keeping with the centralist state policy he was to hold the delta regions of the main rivers, in order to counterbalance the centrifugal forces of principalities developing towards independency. To this end the secular powers of the bishop were extended to cover large parts of the diocese in the course of the eleventh century. The most important towns in the newly formed episcopal state of Utrecht were, besides Utrecht itself: Staveren and Groningen in the north, Deventer in the centre, and Tiel in the south; no urban centres had developed in the west at the time of the rule from Utrecht. South of the Maas, where the diocese of Liège began, a similar development took place. A bishopric with secular authority was also established in Liège in the course of the eleventh century, although it was much more loosely structured than in Utrecht. The focus of this region lay on the area halfway up the river Maas, with Maastricht, Huy, and Dinant as the main urban centres.

Although the centralistic policy met with initial success, it collapsed completely soon after the year 1100. As a consequence of the subsequent decentralization of governmental power, the principalities expanded considerably throughout the twelfth and thirteenth centuries, leading to an increasing degree of autonomy. In terms of present-day geographical conditions they were: the County of Holland-Zeeland, large parts of the County of Gelre and the Duchy of Brabant, and a small part of the County of

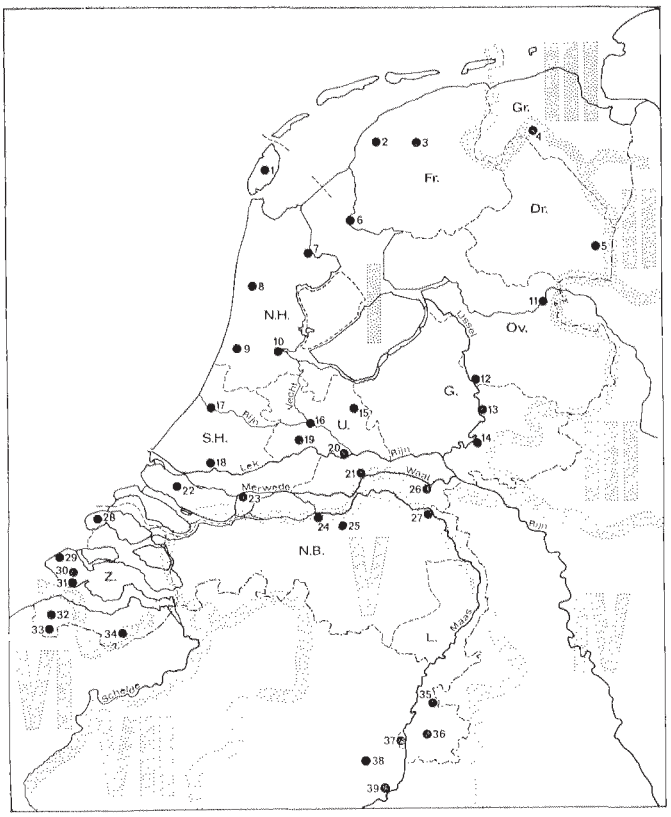


Fig. 2 The Netherlands. Medieval bishoprics: I Utrecht; II Osnabrück; III Münster; IV Köln; V Liège; VI Doornik/Tournai; VII Kamerijk/Cambrai.
Modern provinces: Dr(ente), Fr(iesland), G(elderland), Gr(oningen), L(imburg), N(orth) B(rabant), N(orth) H(olland), Ov(erijssel), S(outh) H(olland), U(trecht), Z(eeland).
Places mentioned in the text: 1. Den Burg; 2. Franeker; 3. Leeuwarden; 4. Groningen; 5. Emmen; 6. Staveren; 7. Medemblik; 8. Alkmaar; 9. Haarlem; 10. Amsterdam; 11. Hardenberg; 12. Deventer; 13. Zutfen; 14. Doesburg; 15. Amersfoort; 16. Utrecht; 17. Leiden; 18. Rotterdam; 19. IJsselstein; 20. Wijk bij Duurstede; 21. Tiel; 22. Geervliet; 23. Dordrecht; 24. Heusden; 25. 's-Hertogenbos; 26. Nijmegen; 27. Cuyck; 28. Burg; 29. Domburg; 30. Middelburg; 31. Souburg; 32. Oostburg; 33. Aardenburg; 34. Axel; 35. Sittard; 36. Valkenburg; 37. Maastricht; 38. Tongeren; 39. Liège

5 The original mouth of the Old Rhine via Leiden near Katwijk was probably filled during the 12th century. The outlet of the Rhine via de Waal–Merwede and especially the Lek shifted more to the south.

Flanders; the Frisian regions in the north managed to obtain a certain degree of 'independence,' which in Dutch historiography is often described as 'anarchy.' Lastly, in the southernmost province of Limburg, a conglomerate of very diverse counties and seigneuries emerged.

One of the effects of the tendency towards decentralization was that the number of towns increased to such an extent that the lords may be said to have followed a straightforward urbanization policy. Thus the town of Zutphen on the IJssel was patronized by the counts of that name during the twelfth century as a counterpart of the episcopal town of Deventer. In these years the counts of Holland stimulated the growth of the town of Dordrecht, situated in a strategic position where the lower reaches of the Maas and Rhine came close together.[5] Utrecht's trade interests in the river area were now partly taken over by Dordrecht, and the importance of Tiel gradually diminished in favour of Cologne, which had grown considerably in the twelfth century. On the island of Walcheren in Zeeland, Middelburg developed (entirely under Flemish influence) around the Premonstratensian abbey, which had been founded in the old circular fort in the twelfth century. Across the mouth of the Scheldt, in the northern part of Flanders, the count encouraged the growth of the town of Aardenburg. Lastly, the Duke of Brabant tried to gain command over the lower reaches of the Maas by founding 's-Hertogenbos (Bois-le-Duc) on the northern ridge of the Brabant sands: this town became the northern capital of the duchy.

In the thirteenth century the tendency toward urbanization became incomparably stronger, giving rise to a very complex distribution of towns. A list of names is not very relevant in this context: the reader is referred to the comprehensive survey given by Fockema Andreae.[6] It is, however, interesting to note some main features of the development as a whole. The towns patronized by the rulers in their respective principalities sometimes evolved from existing settlements, in which case a village was promoted to the status of town, but new foundations of the characteristic 'new town' type were regularly made. Numerous seignories which were initially still independent were located in the border areas between the counties. Their overlords soon followed the example of their powerful neighbours, especially towards the end of the thirteenth century. It seemed as if every seignory insisted on having its own town. Generally speaking, these were the typical 'new towns' – this is recognizable even today in their often rigid layout. In the first half of the fourteenth century the policy of urbanization was rounded off. A pattern of towns had now emerged which in fact has continued largely unchanged until today,[7] except for two major post-medieval developments: the construction of a number of fortified towns in the late sixteenth and seventeenth centuries, and the growth of the large industrial centres since the end of the nineteenth century.

The development of medieval towns was undoubtedly also influenced by the interaction between man and the surrounding countryside. Around the year 1000 the possibilities of occupation in this type of country (fig. 1) was still comparable to the situation in late pre-historic times, in the Roman period, and in the early Middle Ages, *i.e.* the relatively high grounds in the north, south, and east of the country were reasonably fit for habitation. Life in those regions depended more on fertility and the accessibility of the soil than on its firmness. The latter condition, however, was a decisive factor in the centre and the west, where the rivers Rhine, Maas, and Scheldt together constituted one vast delta area, where habitation was possible only in areas with firm subsoil, notably the fossilized riverbeds, embankments of existing rivers, clay deposits in the estuary region, and the sandy belts of the Old Dunes along the coast. The large tracts of fenland in between were virtually impassable. The considerable population growth led to large-scale land reclamation. Towards 1300 reclamation in the western Netherlands came to a close with the colonization of the Holland-Utrecht fens. Although the cultivation of the western Netherlands was initially agricultural by nature, later – particularly in the thirteenth century – the population increased considerably by settling in new towns. So while the west of the Netherlands had a late start in urban development, this lag had been fully recovered after just more than a century. Mention should be made of a second factor in the development of towns in the west of the Netherlands as a result of geographical changes: the severe floods of the Dunkirk III B transgression phase from the second half of the twelfth century onwards. One consequence was that the altered course of some waterways rendered the location of old communities unfavourable as regards transport, so that new centres were established on more favourable sites.

6 Fockema Andreae 1948, 30 ff.

7 It is perhaps unnecessary to point out that shifts of emphasis have obviously occurred within the group as a whole.

It is the combination of these specific political and geographical factors, in combination with socio-economic factors into which we cannot go further now, that determined the development of medieval towns in the Netherlands.

3 RESEARCH INTO TOWN CENTRES: POINTS OF DEPARTURE

Archaeological research into Dutch towns has been carried out anything but systematically. The chief investigations in the major urban settlements have recently been summarized by Van Regteren Altena (1970). This summary begins with the agglomerations dating from the Carolingian period, but, as stated, we wish to distinguish between these and the later medieval towns. Of the latter group Staveren, Amsterdam, and Dordrecht were studied: the main theme of the investigations there being the development of town planning, notably the extension of part of the town into a river.

This aspect, which is so important in the development of Dutch towns, was amply illustrated by the detailed studies. Besides the few major excavations, a large number of small-scale investigations have been conducted in Dutch towns.[8] These were in general incidental and to a high degree dependent on non-scientific factors, so that a summary of systematic research into town centres would seem, at this point, to be premature.[9]

Despite the inevitable heterogeneity of town excavations, it is possible to draw up a general outline. For this purpose we shall divide the objectives of archaeological research into the following three groups.

a) the motives underlying the development of a town: the town as residence of authority; as a market place or centre of trade; as a deliberate foundation (new town); the town in connection with a castle; the fortified town;
b) the alterations in the town's layout;
c) the different elements of the medieval town: chapel or church, monastery, castle, 'administration' buildings, dwellings, workshops, streets, port, wall, gate, canal, and moats.

These themes will often overlap, but each excavation can contribute substantial information on one or more of these aspects. This implies that the combination of the three points of departure, so highly valued in modern town centre research, *viz.* definition, typology, structure/function, will come about almost of its own accord.

Naturally, the research into town centres conducted by the ROB also presents a kaleidoscopic picture. Between the large-scale investigations at Deventer in 1951–52 and those in Dordrecht in 1968–71, excavations have been carried out in 35 towns. Although the object of this study is to give an outline of this town-centre research, and notably to do so according to the above-mentioned themes, there are not sufficient examples to illustrate all aspects equally well. In so far as good examples are not available, we hope that this study may also be of service as a programme for future town-centre research. For the time being we shall attempt to answer the question: what is the outcome of twenty-five years of digging in Dutch medieval towns by the ROB? We hope thus to make a contribution to systematic town-centre research.

The answer is divided into three parts, according to our distinction of the motives underlying the town's development, the alterations of the town's layout, and the elements of the medieval town. Each part contains a survey of the principal investigations by the ROB in this specific field and each survey is followed by an elaborate example of one particular site.

4 MOTIVES

Probably one of the oldest *raisons d'être* for a town was its function as the residence of government authority: this has been so throughout the ages. The decentralization of government power during the Middle Ages had far-reaching consequences in the Netherlands. Since society was at first mainly agrarian, with few ancient traditions, the number of residences of authority was small. After 1000 the number of such centres increased rapidly, giving rise to the dualistic developments of the later Middle Ages: the intensification of central governmental power was accompanied by a proliferation of seignories, thereby greatly increasing the number of residences, both large and small. Indeed, the picture presented by the distribution of towns at this time is complex. The archaeological research conducted in Dutch towns by the ROB has dealt with several aspects of this problem.

8 Reference is made, for instance, to the bibliography in De Weerd 1965, 162–168.

9 At present, however, systematic town-centre research is a pressing matter, because many medieval town centres as historical sources are threatened with destruction by building activities and redevelopment schemes. A survey like *The Erosion of History* (Heighway (ed.) 1972) published in Great Britain is needed for the Netherlands also.

There was a royal residence in Nijmegen (Province of Gelderland): Valkhof Castle, situated high up and overlooking the river Waal. It was in use as such from the eleventh to the thirteenth centuries: in 1796–97, most of the complex of buildings was torn down, except for an octagonal chapel and the choir of a semicircular closed chapel, both Romanesque style.[10] There was a second royal residence in the episcopal town of Utrecht: Lofen Palace, situated northeast of the Dom (Cathedral). The cellars of the palace still exist as the foundations of the present buildings.[11]

Utrecht was in the first place, however, the home-town of the bishop. The episcopal residence was situated south of the royal palace, and southeast of the Dom. Only a small part of this residence has been excavated and studied – long before the ROB came into existence.[12] The bishops of Utrecht had a second residence in Deventer. When in 1046 they were granted the secular authority over a large part of the northern Netherlands, Deventer became their northern capital. The bishop's residence that was built as a consequence of this political move has been thoroughly investigated by the ROB: in connection with the specific theme of residences in medieval towns this archaeological research will be discussed at some length below.[13]

The sites of the residences in the principalities that sprang up alongside the bishopric of Utrecht have in many cases not been traced, let alone examined archaeologically. One example, however, has been thoroughly excavated: the residence of the Count of Zutphen.[14] At some time in the historical twilight of the eleventh century the county of Zutphen came into existence, with a small settlement that subsequently developed into the town of Zutphen (Province of Gelderland). The residence in this town became known in later years as the 'Gravenhof.' Towards the end of the thirteenth century the county of Zutphen was joined to the county of Gelre by inheritance, and in 1338 both became part of the Duchy of Gelre.

The Gravenhof was situated southwest of the Walburgis church on what is today a large square. Excavation[15] has shown that the residence of the counts of Zutphen was built in two stages. The first was a timber hall (28 × 8 m) with close-set vertical timbers in the long walls, suggesting that the walls may have consisted of planks fitted into grooves in the posts. A short row of posts on the northwest could indicate an outer staircase with a gallery leading to an upper floor where, as usual, the most important room, the Hall, was located. Unfortunately, the finds were too scanty to allow the buildings to be dated; but on historical grounds it may be assumed that this hall, as the residence of the first count of Zutphen, dates from *c.* 1100. The timber hall was eventually destroyed by fire and replaced by a tufa building. The only finds relating to this second stage were the robber trenches of the walls. The new hall was a slightly larger than the first (31 × 10 m) and had an almost square construction protruding from the middle of the northern wall: this has been interpreted as a porch with steps leading to the hall on the upper floor. The ground floor has been divided into four sections. Obviously we know nothing of the superstructure, but most probably there was a large hall extending over the whole area of the building – or at any rate over its total length. This second building cannot be dated by archaeological finds, but again, historical sources suggest a date in the first half of the twelfth century.

The residence in Middelburg on the island of Walcheren was of a completely different nature. The centre of the town is marked by a late ninth-century circular fort in which a Premonstratensian abbey was founded in the early twelfth century. The abbot of Middelburg gradually succeeded in gaining seignorial authority over the entire island and as such the abbey could be considered a seignorial residence. A small-scale investigation has been carried out by the ROB in one of the wings where, in the mid-fourteenth century, a two-aisled brick hall with cellar was added to the abbey buildings.[16] The present residence of the provincial Governor of Zeeland is situated on the site of this medieval building, while the offices of the Provincial Government are also housed in the abbey: even today the abbey of Middelburg may be considered a seat of government authority.

The residences in many medieval towns were castles. Mention has already been made of the royal residence on the Valkhof in Nijmegen. Another twelfth-century exam-

10 Unfortunately, excavations executed during the beginning of this century have never been published. See also Weve 1925.

11 No archaeological research has been executed here; for a description of the existing remains see Haslinghuis 1956, 78–84.

12 Labouchère 1927.

13 See pp. 377ff.

14 This excavation was executed in 1946 by the Rijksbureau voor de Monumentenzorg (Department for the Preservation of Monuments), just before the ROB was established; in some respects this may be seen as a pre-natal ROB excavation.

15 Renaud 1950; Doornink-Hoogenraad 1950.

16 Trimpe Burger 1964.

ple is Valkenburg Castle (Province of Limburg), while perhaps also the twelfth-century Burcht in Leiden can be considered as such. In the thirteenth and fourteenth centuries the number of residential castles increased along with the number of seignories and many became the centre of a small (sometimes newly-founded) town. Many of the towns dependent on a castle did not grow from their original size; some even, after an all too ambitious start, eventually shrank to the size of mere villages.[17] In most cases the castle has disappeared – even in the towns that did thrive.[18] Archaeological research has been concentrated mainly on the abandoned castle sites, but the historical development of the town itself has never been incorporated into the analysis.[19]

The studies undertaken by the ROB were also focused on the castle in such towns. The current research at the castle of Valkenburg is yielding interesting data on the oldest history of the fortress which can be traced to the twelfth century.[20] Situated on a hill the castle overlooks the valley of the Geul and the small town at its foot. The archaeological investigations in Valkenburg, however, do not include the town. The situation is much the same in the research being conducted in Leiden. In the centre of the town, on the tip of an island between two arms of the Rhine, there is a high motte with a shell keep at the top, the Burcht. The as yet incomplete research has revealed that the tufa curtain dates from the twelfth century, but also that there may be an even older motte with a wooden palisade dating from the eleventh century within the mound.[21] The development of the Burcht is tightly bound up with the development of the county of Holland. Obviously it is no less closely related to the growth of the town at its foot; archaeological investigations could throw more light on this matter. It should be realized, however, that such investigations are very time-consuming due to the minimal and infrequent accessibility of the excavation sites.

The situation in Heusden (Province of North Brabant) is typical of a seignory, but here too the castle has alone been examined in detail. Probably Heusden originated in Oud-Heusden, *c.* 700 m to the south on the border of the firm soil of Brabant. There is a road leading from this village over old deposits of the river Maas to the mainstream further north; at the end of the road by the river a castle with a settlement was founded in the late twelfth century, or should one say a settlement with a castle? Today the town is situated on a slight elevation, the site of the castle (which has disappeared) was lower down on the western side, and completely surrounded by water. The origins go back to before 1200, when the overlords of Heusden left Oud-Heusden to establish a new seignory on the bank of the main river.[22] Excavations in the castle[23] have shown that the earliest period of construction proved to correlate satisfactorily with historical data. The oldest construction consisted of a central tower, octagonal on the outside, and a virtually square hall built in the bank, which surrounded the first castle: the lower part of the buildings was covered with earth, like a part of a motte around the buildings. The earth from the moat was used to raise the level of the inner bailey by more than two metres, so that the lower part of the buildings was covered up with earth *(eingemottet)*. Around the year 1330 the castle was thoroughly rebuilt, at which time the hall and the tower, which were of stone, were incorporated into a new curtain of brick. This curtain was circular on the eastern side, but on the western side it was straight in the places where lodgings were built. An extensive outer stronghold was built on the north. This large-scale reconstruction must have had some connection with the extinction of the Heusden family line in 1330. The ensuing complicated feudal struggle for the seigneurial rights was at first won by the Duchy of Brabant, but in 1357 it was forced to give up Heusden to the county of Holland. This change of ownership must have accounted for the last-but-one major reconstruction, namely the erection of a sturdy octagonal tower on the east, outside the curtain wall, and the repair of the wall facing the tower. The last major reconstruction to be carried out (still under the rule of Holland) dates from the first half of the fifteenth century: additional living quarters and a new tower (with cellars) were built on the north

17 Fockema Andreae 1948, 117–119.

18 A broad survey of still existing castles in Van Reyen 1965; in this study the emphasis is completely on the castle itself, the relation with the town being ignored.

19 An exception may be the many years' research in Groningen (Van Giffen-Praamstra 1962; Van Giffen-Praamstra 1966); the research on the castle sites however, has not been published.

20 Renaud 1973.

21 Renaud 1952; Renaud 1971.

22 Rentenaar 1963, 1–11 for the history of the Lords of Heusden.

23 Renaud 1949.

and northwest corner of the main edifice. Compared to the detailed history of the castle our knowledge of the historical development of the town of Heusden is rather scant: where exactly did the settlement originate? How old is it and where was the earliest centre located? To what extent can the town and castle be said to have influenced one another? All these questions could be answered by archaeological research,[24] while also more light could be shed on the exceptional position of Heusden in the eastern part of the dike surrounding the Grote or Zuidhollandse Waard. The latter area constituted, from the beginning of the thirteenth century until its destruction from 1421 onwards, Holland's most extensive and ambitious medieval reclamation.[25]

A second *raison d'être* of medieval towns – for which there is also archaeological evidence – was trade. Trade played a part in nearly all towns, although the importance of the commercial town varied between that of a district marketplace to that of a large port with transshipment facilities, depending both on the location and on the political constellation of the surroundings. Utrecht and Deventer, both dating from Carolingian times, may be counted among the oldest medieval trade centres in the Netherlands. Tiel and Staveren, dating from around the year 1000, represent a middle generation. The younger generation, from the twelfth century onwards, is characterized by Dordrecht, while Amsterdam and Rotterdam for instance, which date from the end of the thirteenth century, may be considered as belonging to the very youngest generation. Archaeological research, including a number of ROB investigations, has been conducted in all abovementioned towns and cities. For the purpose of studying the phenomenon of trade from an archaeological point of view, the knowledge of the provenance of the finds alone is not enough. The place of origin does indicate commercial links, but to acquire an overall view of the trade relations it is necessary first to establish the relations between the various quantities of objects.

The only trade item that is suitable for such research up till now is household pottery – providing that it is collected in sufficient quantity. Obviously only large-scale excavations can yield sufficient material. As far as this is concerned the research carried out in Tiel (Province of Gelderland)[26] was too limited in scope. Such imports as are mentioned come from the Rhineland and Maas valley regions, which is usual for river towns in the Netherlands. This specific aspect was also excluded from the extensive research into the Nieuwe Markt in Deventer (Province of Overijssel). This is not surprising in a sense, since the knowledge of chronology and provenance of medieval pottery was limited at the time when the investigations were carried out. Indeed, the extensive material found in Deventer has been published as the compilation of a general series of medieval pottery rather than in direct relation to the actual excavations.[27] However, the published reports do show that the imports consisted mainly of products from the Rhineland; this is not surprising in view of the direct link with that region over the river IJssel. The same can be said of the imports both during the Carolingian period and throughout the Middle Ages. Conversely, the sparsely glazed pottery from the Maas valley, typical for the eleventh to fourteenth centuries, rarely occurs in Deventer; this substantiates the historical theory that trade along the river Maas concentrated on the western Netherlands. In Staveren (Province of Friesland) the town extensions to the old centre built in the twelfth and thirteenth centuries have been investigated.[28] Ceramic material was found in considerable quantity, but it has not been thoroughly studied as yet. The preliminary report mentions many Rhineland imports such as the twelfth-century painted pottery in the Pingsdorf style, and from the thirteenth century onwards, stoneware in the style of Siegburg. Imports from the Maas valley (Andenne and Brunssum-Schinveld) also occur frequently. The position of Staveren on the trade route from the Rhine, along the Maas and Vecht, to the North Sea, may serve to explain the considerable number of imports from the Maas valley. Pottery finds from a number of wells demonstrate links with some ports on the west coast of the Continent. In addition to pottery from Flanders or northwest France,[29] one jug came from Saintonge, the famous potters' centre in southwest France.[30] A general view of pottery imports in the subsequent centuries has been provided by excavations in the centre of Dordrecht.[31] This town

24 More so as the total medieval records were destroyed during a fire in the town-hall in 1572 (Van Oudenhoven 1743, 9).
25 Fockema Andreae 1950.
26 Glazema 1950.
27 Dorgelo 1956, 58 ff.
28 Halbertsma 1964; see also following pp. 391–403.
29 In the style of the late 13th-century pottery found at Aardenburg (Trimpe Burger 1962–63, 507–511).
30 Dunning 1968, 45 and fig. 22.
31 Sarfatij 1972, 664 ff.

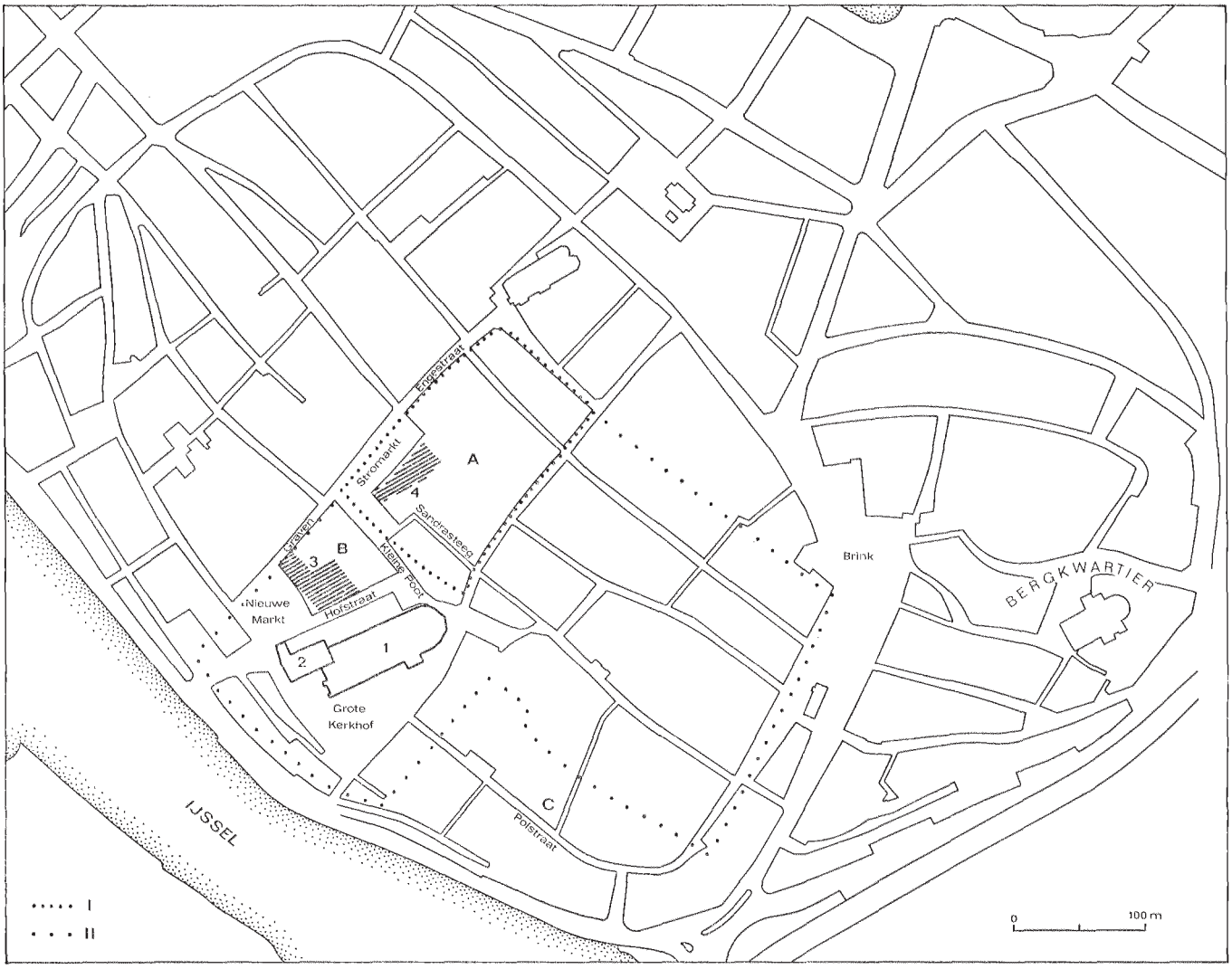


Fig. 3 Deventer: Town Centre. A. Royal Domain; B. Bisschopshof; C. Portus. 1. Lebuinuskerk; 2. Mariakerk; 3. Excavation 1951–52; 4. Excavation 1967. I Boundary of the Royal Domain; II First Town Wall (I and II after Koch 1957)

was the main centre of commerce in the western Netherlands during the fourteenth and fifteenth centuries. That trade played a major role in the life of this city is evidenced by the fact that imports exceeded local ware in the ratio of three to two, while local ware normally exceeds imports by far.[32] Dordrecht lies just west of the confluence of the Waal (the continuation of the Rhine) and the Maas rivers, and during the Middle Ages it was the main meeting-point of river and sea traffic. Trade with the Rhineland was of prime importance there, as is demonstrated by the large quantities of stoneware from that region found in Dordrecht. This merchandise probably came in bulk from the Cologne region directly to the market in Dor-

32 *Cf.* Baart 1972, 15.

drecht, which served as the distribution centre for the western Netherlands. Faulty specimens among the finds suggest that 'second choice' goods remained on the local market of Dordrecht. Finds from the Upper Rhine – notably ceramic goods from the Palatinate, also point to commercial ties with that region. A second group of ceramic finds consists of products from the Maas valley centres such as Andenne and Brunssum-Schinveld but also Elmpt; the finds in this group are considerably fewer, which may in part be explained by the deterioration of the Maas valley export industry towards the end of the fourteenth century. Besides these two main groups of finds there is a small third group of very diverse provenance: a number of imports, generally labelled 'Aardenburg ware' (from Flanders?), a few of Brabant origin (Mechelen?), and a few rare imports of majolica from the south of Europe, among others from the well-known centre of Manises, on the east coast of Spain.

The phenomenon of the 'new town,' the completely new foundation which is particularly characteristic of the second half of the Middle Ages, should certainly be considered among the various origins of the medieval town. There are many instances of this well-known European development in the Netherlands. The main feature is usually the rigid layout of the town plan, dominated by right angles. A second characteristic is that the set-up was often too ambitious, so that development stagnated and the population dwindled or even left the area. Although there are many examples of this in the Netherlands,[33] the phenomenon of the new town has never been the specific object of archaeological research. And, as we have seen, in those cases where there was a connection between the castle and the newly founded town, only the site of the castle was examined. The dating of the oldest core of the town, the lay-out and extent of the first constructions, the consistency in types of housing, *etcetera*, could constitute important themes of archaeological research.

Lastly, mention should be made of the function of the medieval town as a stronghold, because this aspect of urban development can also be subjected to archaeological research. Although earthworks, enclosing walls, fortified gates, and the like have always been essential to a town, in the later Middle Ages (since the fourteenth century) these defence structures became an increasingly dominant and monumental feature. The development of such defence structures was on the one hand related to the refinement of the techniques of warfare and siege (cannon!) and on the other with the emancipation of urban autonomy. However, the archaeological investigation of this aspect of medieval towns has also been neglected. The ROB has investigated parts of town walls, it has excavated towers and gates,[34] but in most cases this was not done within the framework of a systematic research into the historical development of the town as a whole.

DEVENTER (PROVINCE OF OVERIJSSEL) AS A MEDIEVAL RESIDENCE: THE ELEVENTH-CENTURY BISHOP'S PALACE AND COLLEGIATE CHURCH; A SUNKEN HUT DATED TO C. A.D. 1100

Introduction

The town of Deventer stands on the right bank of the river IJssel at a point where the eastern sandy soils run down to the river. The very well-preserved medieval centre consists of three parts (fig. 3): (1) the area north of Engestraat is a new town, an addition to the old middle part; (2) the central part, between Engestraat and the Brink, is dominated by an unusual double-church, the Grote Kerk or Lebuinuskerk and, connected to it, the Mariakerk; (3) east of the Brink is the Bergkwartier, which can also be considered a later addition to the middle part. The latter will be discussed in more detail below. For a long time the Lebuinuskerk has been considered the nucleus from which Deventer developed. Modern historical and archaeological research has, however, changed this point of view in several aspects.

Historians maintain[35] that Deventer owes its origin to its function as a Frankish base against the Saxons both *in militaribus* when the Saxon territory was conquered by Charlemagne and *in religiosis* for the Christianization of the heathen country by Lebuinus and his successor Liudger. Deventer's origin may therefore be dated to the second half of the eighth century. There is tenth-century evidence of an *urbs*, a demesne of the German king. According to Koch (1957, 168–171) this was situated in a rectangle northeast of the church. The site of the Lebuinuskerk and the area around it is not included; later, however, this appears to be property of the bishop of Utrecht, but whether it dates back to the first church in

33 Fockema Andreae 1948, 33 ff.

34 See also p. 407.

35 Early history drawn from Koch 1957 and Koch's preface to Ter Kuile 1964, 3–6.

Deventer built by Lebuinus is still an unsolved question.[36] During the second half of the eighth century there must have been not only the *urbs* but also a *portus*, a commercial area, whose location should be looked for along the river. With these facts in mind, the conclusion is that Deventer was an important royal seat during the ninth and tenth centuries. It became the second most important town in the bishopric of Utrecht and even functioned as refuge and residence for the bishops of Utrecht during the Norman invasion in about A.D. 900. Due to the changes within the German Church during the tenth century, the bishop as its representative acquired considerable secular power in the following century. Deventer again became the second town after Utrecht. In respect to this, control over the county of Salland was transferred to the bishop in 1046, and it is quite possible that on this occasion the former royal *urbs* passed into his hands as well. The count of Salland's see was now assumed by the dean of the probably simultaneously instituted chapter, related to the newly built Lebuinuskerk. Near this new church, and attached to it, a *palatium* was built on episcopal territory. At the same time, or slightly later, this area was entirely enclosed by a wall, thus creating a monumental episcopal terrain – the Bisschopshof – opposite the former royal domain. Due to revived trade contacts the third centre, the *portus*, developed into a flourishing commercial area during this period. Around A.D. 1100 the former royal domain, the episcopal terrain, and the commercial quarter were enclosed by walls for the first time. The medieval town of Deventer, as initially formulated, had been formed.

A relatively large number of archaeological investigations have been undertaken in Deventer by the ROB. Part of the *portus* in Polstraat was examined in 1948,[37] followed by an excavation (1951–52) at the Nieuwe Markt where parts of the *palatium* and the Bisschopshof were discovered. During 1961–62 excavations took place inside the Lebuinuskerk; these revealed the original plan of this church; at the same time a short survey was made of the choir in the Mariakerk. In 1967 it was possible to investigate part of the Stromarkt, which was inside the old royal domain. The excavations on the Nieuwe Markt and in both churches, in particular, solved questions concerning Deventer in its capacity as episcopal residence. Although some of these investigations have been published to some extent, the present study will attempt to highlight the specific theme of the town as residence by means of a new analysis. The Stromarkt excavation offered the possibility of comparing aspects of the episcopal residence proper with phenomena outside it, in what is, in fact, the oldest area of the town.

Nieuwe Markt – 1951–52

The excavation took place in the southwest corner of the middle part of Deventer's medieval inner town. The streetplan is very regular, and in the main is adapted to the course of the river IJssel. Only the Nieuwe Markt area, the two churches, and the Grote Kerkhof are exceptional in shape and orientation. These deviations were largely explained by the excavation northeast of the Lebuinuskerk, on the former Bisschopshof.

Soil-marks

The lowest level, at 3 m below ground-level, *i.e.* 5.10 m+ NAP, showed a closely packed pattern of soil-marks in undisturbed sand. Post-holes, wall-trenches, and rubbish pits could be recognized, but no complete plans of buildings could be discerned.[38] Imported and local Carolingian pottery was recovered.[39] These marks represent the first medieval occupation there, and probably belonged to the first Frankish settlement and missionary post in the second half of the eighth century. Neither soil-marks nor finds, however, indicate the presence of one or more churches. Two important factors are evident: a number of soil-marks are intersected by all later features, all of which show a southwest–northeast orientation, similar to what is left of the plan of the middle part of the town. This was probably the original orientation of the lay-out of the entire central area, and also indicates the orientation of the oldest settlement.

36 During the excavations inside the church nothing older than the eleventh century was found (Ter Kuile 1964, 44).

37 By A.E. van Giffen (not published). N.B.: officially, this was one of the first excavations carried out by the new ROB; in fact, it was executed by the BAI, and since then is considered as such.

38 The analysis is based on the study of part only of the field plans (the rest could not be traced), an unsigned report (probably written by P. Glazema), and Dorgelo 1956. Unfortunately, the reports are imcomplete and the finds could not be examined; Dorgelo's publication (1956) also proved to be inadequate in this respect.

39 Dorgelo 1956, 60–72.

Stone constructions: Building A

The initial occurrence of stone building presents a similar situation: some rubble in foundation-trenches belong to one elongated, rectangular (?) building (fig. 4: A). Only part of the northern wall and adjoining structures could be examined. The remains consisted mainly of a trench of a robbed tufa wall (1.10 m wide) with a foundation consisting of erratics (inferred wall width 0.95 m). The west end of the wall tails off in later disturbances; the east end and the anticipated return wall could not be investigated. A rectangular structure had stood against the eastern part; the excavators identified this addition as a turret (Aa). Evidence of inner construction consisted of a slightly curved trench of a tufa wall with a heavy erratic foundation; this could have been the sub-structure of a large hearth (Ab). It is not easy to explain this. It may have been the remains of the first stone residence of the bishops of Utrecht, for which Dorgelo (1956, 42) suggests the period of the bishops' exile during the ninth and tenth centuries. No definite dating evidence is present, however. It was established that the wall-trench intersected several Carolingian soil-marks and may therefore be later, but earlier than the construction of the eleventh-century *palatium* (Building B). The wall-trench of the *palatium* in turn intersected one of the trenches of Building A. The axis of Building A also corresponded with the main orientation of earlier soil-marks, although not with the axis of the eleventh-century Lebuinuskerk which is more precisely east–west. Building A probably belonged to an older church which, with other buildings, must have been situated in the near vicinity. Building A itself hardly resembles a church, and no burial remains were found there. No remains of a church earlier than the eleventh-century basilica, however, were discovered inside the present Lebuinuskerk. Any previous church must have lain between Building A and the present Lebuinuskerk, that is, mainly under the Hofstraat.

Stone construction: Building B

This consisted of a large rectangular structure (fig. 4: B), the south enclosure of which could not be examined. The walls were completely removed, as in Building A; only one piece of the standing construction and some remains of foundations were found in the wall-trenches. The external width of Building B was 14.50 m; the length could not be determined. The construction material consisted of blocks of tufa of different sizes: 32/40 × 8.5 × 13/15 cm; on the west side these were laid directly in sand, but the east wall had a foundation of granite and lumps of tufa. The wall construction consisted of a filling of lumps of tufa embedded in white mortar, ironstone, pieces of other stone, and fragments of red Bremer sandstone between two layers of tufa; here the total width of the wall was 1.20 m. The depth of the foundation (4.00–4.15 m + NAP) could be determined, but there were no remains of any passages, floor-levels,[40] or inner constructions. The width of the building suggests that it comprised two aisles. Building B may have been the episcopal *palatium*, which was present in Deventer since *c.* A.D. 1050. This building, as mentioned before, cut through both the earlier soil-marks and the wall-trench of Building A and must, therefore, be dated later. The change in orientation is remarkable: the axis of the building has a new southeast–northwest orientation at right angles both to the present Lebuinuskerk, and the eleventh-century basilica within it. A sherd of *Reliefband*-amphora, now unfortunately lost, was found in the mortar core of the wall.[41] Later types of this ware occur well into the eleventh century and so may be a *terminus post quem* for the wall.

Stone structure: enclosure wall and Building C

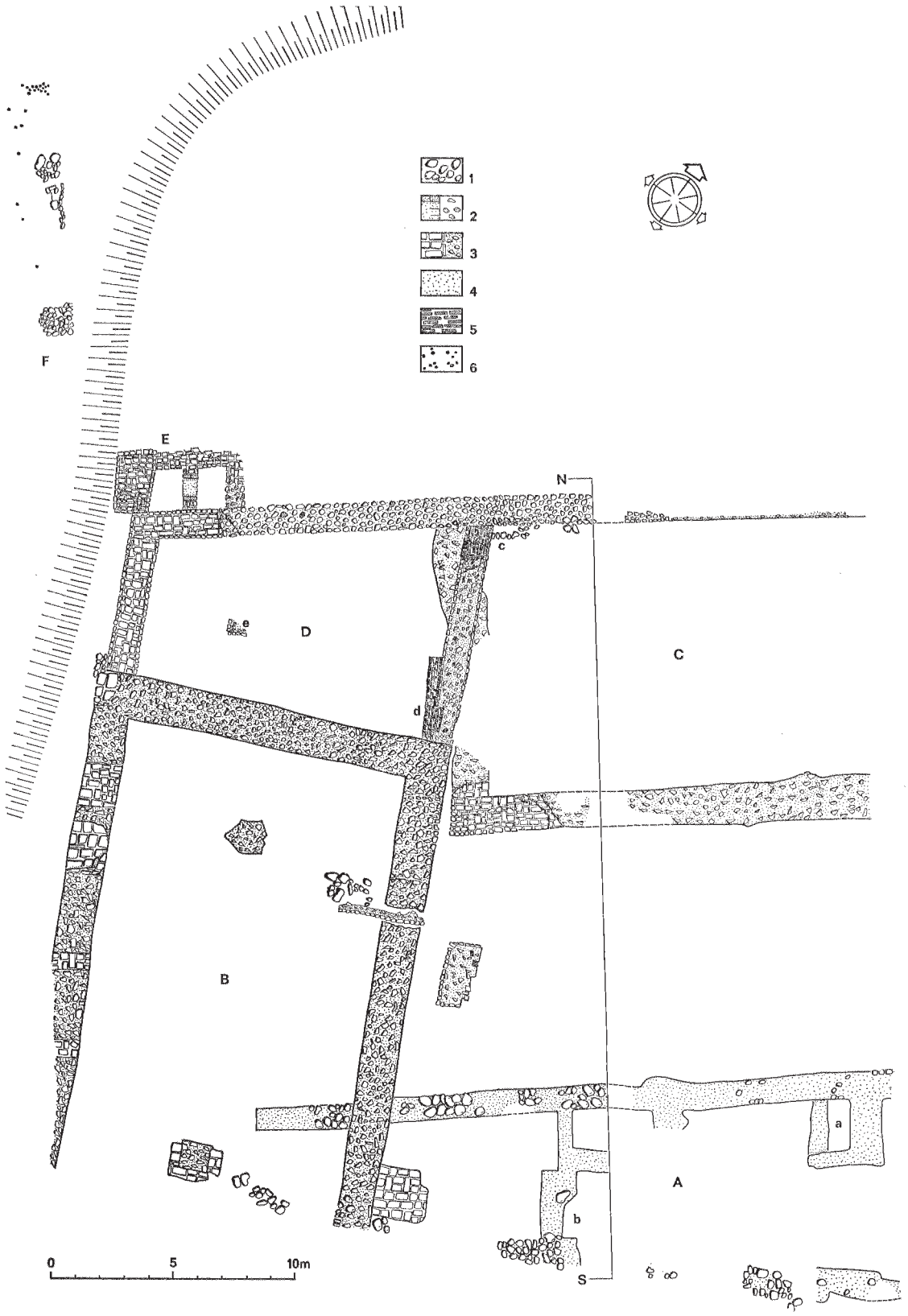
The whole area to the north and east was enclosed by a wall, which abutted the west wall of Building B to form a continuous line. At a point 7 m to the north, the wall turned east at an obtuse angle. This wall was not as deeply founded (4.60 m + NAP) as the west wall of Building B and differed in construction, that is, a strong foundation of erratics, covered with tufa. The enclosure in fact consisted of two parts: the west wall, which ended just before the corner, and the north wall against which it abutted. The duality also became clear from the different sizes of tufa used. Yet, in view of the similar foundation and construction, the enclosure must have been built during one period, albeit in several stages. Evidence of floors was not found here either, except in one place at 5.60 m + NAP where the wall had a smooth surface.

The dating of the wall is based on very weak evidence: one potsherd of Pingsdorf ware, dated *c.* 1100, was found in the foundation of the north wall.[42] This wall was erected certainly after the construction of Building B, but presum-

40 Dorgelo (1956, 48), on the grounds of a preserved wall fragment, concluded the floor-level to be higher than 5.00 m + NAP.

41 Dorgelo 1956, 44 and 71 (fig. 25).

42 By Dorgelo (1956, 48); unfortunately, there was no illustration of this potsherd either.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ably not long afterwards. Its eastern orientation is well-known, not only because of the examinations carried out on the Stromarkt and the Kleine Poot, and the discovery of the connection to the north choir chapel of the romanesque Lebuinuskerk,[43] but also because of a late sixteenth-century survey of the Bisschopshof terrain (figs. 7 and 8). From this an area of *c.* 0.65 ha can be estimated for the Bisschopshof, that is, the area between the Nieuwe Markt and the Stromarkt/Kleine Poot, and between Graven and the Lebuinuskerk. Building C (fig. 4), built against the northern enclosure wall, was situated in this estimated area. The excavation yielded no information about the phases of construction of this building, whether it was constructed before, at the same time as, or after the erection of the wall. Although the building shows the original southwest–northeast orientation, there is good reason to choose for the latter. The robber trench of the building – and thus the wall also – was wider than the trench of the enclosure wall, while some difference in foundation depths was also apparent. As earlier construction should have left a wide trench, and simultaneous building is not likely because of differences in construction, it may be deduced that C was built after the enclosure wall. It was also evident that the outside of the southwest corner of Building C slanted slightly inwards; this can only be explained as a means of avoiding the northeast corner of Building B. Building C was probably constructed against the north wall after Building B and the enclosure wall, most likely in the course of the twelfth century.

Stone structure: Addition D

The west wall of C appears to have been pulled down to allow for the extension of the east wall of Building B. A trapezoid building, Addition D (fig. 4), was thus constructed in the northwest corner of the Bisschopshof, and consisted of three existing walls (the north wall of B, and the west-north enclosure) and the new wall. This new east wall was composed of three or four layers of re-used stones, topped by a regular wall of tufa (width 1.10 m). The flat ends of the wall showed clearly that it was placed between existing walls. The wall's filling was characterized by the presence of fragments of brick. The lower part of this wall was preserved for its whole length; it appeared that it had originally contained an aperture which was later blocked with big bricks (Da). On the excavator's drawings it seems that these bricks were 30 × 14 × 7 cm, so that it may well have been blocked during the thirteenth century. An inserted window in the south part of the wall (Db) suggests that the ground floor was used as a cellar. A floor-level at 5.80 m + NAP, compared to the eleventh-century church floor of *c.* 7.00 m + NAP also suggests a construction mainly below ground-level. The remains of a possible base for a vaulting arch of tufa (Dc) are the only vague indications of a vault which must have been present in this space. Addition D was built later than C and certainly should not be dated before the twelfth century; D was also built before extension E, dating from the thirteenth century (see below). The dating of Addition D to around A.D. 1200 seems justified when the first appearance of brick for wall-filling and the blocking of the aperture with big thirteenth-century bricks are taken into consideration.

Stone structure: Extension E

Extension E (fig. 4) is the last phase of tufa building in the Bisschopshof. It was situated at the outside of the northwest corner of D, and probably was a two-roomed privy. Not only had it an exceptionally high foundation (at 5.50 m + NAP), but also a peculiar building-construction: a T-shaped wall seems to have abutted the north enclosure wall, the west side terminated in a block of solid masonry – a buttress, in the excavator's opinion – while the east side was closed by a very light wall. A passage was found in the stroke of the T with a threshold of blocks of iron-stone and sandstone. Although the height of the threshold is not given, it probably was several decimetres higher than the foundation of the privy. In view of the function of Extension E it seems improbable that the adjacent space in D, with a floor at approximately the same height as the threshold in E, simultaneously served as cellar; the proximity of the privy may have led to the north part of D falling out of use, after which the aperture was bricked in. In the privy right up against the foundation, a jug of South Limburg ware was found, originating from transitional II-transitional III (Bruijn's dating system);[44] the jug is attributed to *c.* 1250, and gives a good indication for the date of the construction of Extension E.

◁ Fig. 4 Deventer: Nieuwe Markt, the Bishop's Palace. 1. Erratics; 2. Iron-stone; 3. Tufa; 4. Mortar; 5. Brick; 6. Wood

43 Dorgelo 1956, 47; Ter Kuile 1964, 39 and fig. 13.

44 Dorgelo 1956, pl. XIII, 2; Bruijn 1959, 158 ff. and 1962–63, 400).

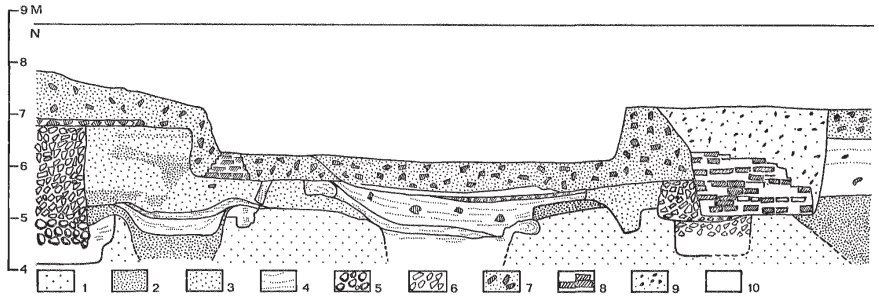


Fig. 5 Deventer: Nieuwe Markt, Section N–S. 1. Sand; 2. Occupation Layer; 3. Disturbed Ground; 4. Alternating Rubble Layers; 5. Stone; 6. Tufa Debris; 7. Brick Debris; 8. Brick Wall; 9. Mortar; 10. Recent Layers

The Moat

The heavy buttress of extension E had subsided considerably on the west side, as it was standing on an unstable subsoil. This was the filling of a moat (fig. 4: F) which surrounded the episcopal residence at least on the north and west sides. To the north the moat was about 15 m away from the enclosure and was estimated to have been 14 m wide. The orientation of the wall must have been determined by the moat. The moat turned at the corner of E, and went south just outside the west enclosure and the west front of B. The last two seem to have been built on the water's edge and the enclosure cut through a part of the moat's filling (Dorgelo 1956, fig. 11, 3); thus the silting of the moat may have started at the beginning of the twelfth century. Much is still obscure concerning this moat. Its further course to the east and south is unknown, as is its dating. The question also arises whether it was a ditch or a natural stream. But perhaps both were true: the north part dug as an artificial boundary, the west part a former bank of the river IJssel. The moat may be the original boundary of the Carolingian occupation, although there is no evidence from the excavation to support this. There is, however, a remarkable consistency and similarity between the main orientation of this occupation and the north part of the moat. It seems as if this part – Graven in the present topography – was also a factor in the general planning of the middle part of Deventer's oldest centre. Pingsdorf ware and globular cooking-pots were found in the oldest filling of the moat and early stoneware in upper layers, although not the vitrified stoneware made after A.D. 1350. In view also of the building in by the construction of the privy in *c.* 1250, it would appear that the silting-up process begun in the twelfth century had completely filled the moat by about 1350. This could be attributed to the great fire of 1334 which led to various reconstructions of the Bisschopshof, in which the moat was no longer of any importance.[45] Consequently, the survey of the old episcopal land carried out at the end of the sixteenth century shows no traces of the moat.

Lebuinuskerk – 1961–62

The connection between the episcopal *palatium* and the collegiate church of St Lebuinus is obvious. Excavations carried out in this church, combined with the many romanesque remains still to be seen in the present church, made possible a complete reconstruction (in main outline) of the former romanesque church. As the investigations in the Lebuinuskerk have been published in detail by Ter Kuile,[46] only a short summary is given here.

The romanesque church, constructed with tufa, was a large, three-aisled basilica with a crypt, two transepts, and a so-called *Westbau*. Internally, the three apses in the choir were semi-circular; externally, they were semi-octogonal. The east part of the church showed great similarity to the Pieterskerk in Utrecht. This church is one of the group of so-called Bernulphus churches,[47] named after Bishop Bernulphus of Utrecht (1027–1054). The Deventer basilica also belongs to this group and the construction, or at least its commencement, must have been undertaken in the second quarter of the eleventh century. The reconstruction of the nave and the aisles had to be based on comparative information because of the lack of archaeological evidence caused by the many burials. The nave must have had nine bays, with arches resting on columns.[48] Both transepts had square ends, and were almost identical in shape and measurement. The west transept was unusual because of the turret-shaped additions to the corners on the west and the east sides. The lower part of the additions on the east must have been chapels accessible from the transept, the ones on the west merely stair turrets. The tripartite *Westbau* was situated between the latter, built against the west side of the transept. On the ground-floor the west choir was formed by the rectangular central part, which opened into the western crossing with a large arch, and ended above in a heavy central tower. The squares on both sides of the western choir contained the entrances to the ground-floor; above they formed smaller flanking-towers. This *Westbau* with a raised central part is characteristic of the Maas region. The Maasland *Westbau* combined with a towered transept was recognized by Ter Kuile only in the eleventh-century cathedral of Verdun.[49] In his opinion, both churches are typical examples of the severe grandeur of Salic architecture.

The *palatium* and the eleventh-century Lebuinuskerk resemble each other most closely in their foundations. Most of the soil under the church seems to have been disturbed to a great depth; the upper surface of the undisturbed sand lay at 5.45 m + NAP or lower – which means 1.50 below the oldest ground-level. In general, the foundations of the walls were much more solid and wider than at the Bisschopshof, a result of the size of the church. The foundations in the west part of the church were about 4.50 to 5.00 m + NAP deep, which is approximately 0.50 m higher than in Building B, the *palatium* itself, but corresponds with the enclosure and Building C. The composition of the walls is also significant. The church foundations contained erratics, iron-stone, and tufa. The abundance of iron-stone is remarkable; this material was also found in the Bisschopshof, but not in such quantities. In both places the lowest layers appeared to have been laid without mortar, and the superstructure was executed in skin-wall technique – the latter a usual technique when tufa is used. The height of the foundation in the church itself

45 Dorgelo 1956, 52–54.
46 Halbertsma 1961, 1962; Ter Kuile 1964, 39–43.
47 Ter Kuile 1959: the collegiate churches of St Jan and St Pieter, and the abbey church of St Paulus in Utrecht, the collegiate churches in Deventer and Emmerich.
48 Ter Kuile 1964, 45.
49 Ter Kuile 1966.

was 1.80–2.00 m, on top of which the superstructure was built; this height corresponds well with the oldest floor-levels, situated roughly between 7.05 and 7.15 m + NAP. A comparison of the foundation levels in both the Lebuinuskerk and the Bisschopshof suggest that there was little difference between the two floor-levels although that of the church may have been somewhat lower than the Bisschopshof. There is some reason to set this level at about 6.50 m + NAP. Levels found in the Bisschopshof under later disturbances presumably belonged to cellars. This holds good for Addition D in particular.

Mariakerk – 1961

As will be discussed later, the connection between the *palatium* and the Lebuinuskerk is only hypothetical because investigation was restricted. It was possible, however, to carry out a small examination northwest of the church, inside the Mariakerk.[50] This church came into existence as a parish church after separation from the Lebuinuskerk, which was originally dedicated to St Mary and St Lebuinus. The Mariakerk, however, always kept the status of chapel. It is not exactly known when this separation took place; the first textual evidence about the existence of the church is an indirect communication of 1334. It appeared from excavations that the Mariakerk was originally a Gothic basilica with a very short, square-ended choir of the same width as the nave (fig. 8). There were two reasons for the shortness of the choir: (1) a large choir in the parish church was not really necessary, both because the adjacent collegiate church had a long presbytery and the parish church needed the largest possible space to house the parishioners; (2) while the terrain to the east was limited by the *palatium* and its connection with the Lebuinuskerk. The connection itself could not be included in the investigation – unfortunately, as was mentioned before.

Episcopal Palaces

Before the complex of the Deventer palace as a whole is discussed, some general remarks should be made concerning the residences of the Bishops of the German Imperial Church, even though very little relevant information exists.[51] The location of the Deventer palace northwest of the church, although dictated by local circumstances, seems nevertheless also to conform to a certain tradition. The episcopal residences of Minden, Würzburg, Bamberg, Worms, and Liège were also situated northwest of the cathedrals; the position was definitely not statutory, as other locations could also be cited, but, in my opinion, some sort of tradition should not be excluded.[52] The situation in the episcopal town of Utrecht is complicated: there the bishops' residence, known since the beginning of the eleventh century, lay someway southwest of the romanesque Dom but due west of the Salvatorkerk.[53] Both churches are said to have formed a double cathedral in Utrecht and the latter may have been the *Thron- und Erscheinungskirche* of the bishop.[54] Illustrations of the Utrecht episcopal residence merely show a medieval building; it later underwent considerable alteration.

In general, very little information is available concerning the outward appearance of romanesque *palatia*, even those of other episcopal towns. There is an illustration, however, of the palace of the archbishops of Cologne, to which Utrecht belonged, which provides good evidence. The long, rectangular shape of the building and the duality in construction are characteristic. A room with small windows, in all probability vaulted, can be seen on the ground-floor; on the upper floor is a kind of recessed balcony behind which the large hall was probably situated. In front of the palace was a square bounded by buildings.[54a] A comparable construction characterizes the episcopal palace at Paderborn. According to a twelfth-century source there were two floors and an attic, and also

50 Halbertsma 1961, 205; Ter Kuile 1964, 56–61.

51 Much more information is available concerning the layout of the royal palaces also to be found in the episcopal towns of the German Empire and other royal seats, either through excavation (Paderborn, see note 55) or from the well-known extant buildings. The palaces of the secular princes were also built in this manner; a Dutch example is the Gravenhof in Zutphen known from excavations (see p. 373). As a distinguished town-house the type of building still exists; Temminck Groll (1963, 20 ff.) called it first-floor hall, an early type of town-house that became extinct in about 1300. In general it can be considered as a type of building rooted in antiquity, with a distribution throughout the whole Christian and Islamic world (Swoboda 1969, 312 ff.).

52 Herzog 1964 *passim;* Classen 1963.

53 Haslinghuis 1956, fig. 1 (p. 12) and p. 84.

54 Peeters 1964, 107.

54a Pictures of the episcopal palace of Utrecht in Struick (1968, 101 and 282); for the palace of the archbishops of Cologne see Swoboda (1969, Tafel XVIII b).

two chapels. Recent excavations revealed the foundations of the building.[55] The palace was situated southwest of the Cathedral (Dom); it was a long, narrow rectangular building (*c.* 60 × 13.2 m) with an east–west axis. The palace was built by Bishop Meinwerc (1009–1036) who both entirely renovated the royal palace and added a *domus episcopalis* to it.

Only the main outlines are known about the structure of episcopal palaces. Apart from the *palatium* itself, there were one or more chapels, and trade establishments, stables, and barns. In front of the *palatium* was a square which had various functions, although these cannot always be defined clearly; the square, however, had never been used as a cemetery.[56]

The episcopal palatium of Deventer

After a discussion of the different excavations and a brief examination of the general features of episcopal palaces, an attempt will be made to arrive at the chronological development of the Bisschopshof in Deventer by combining excavation results with some historical data.

The remains from the site of the Bisschopshof are no earlier than the Carolingian period. Chronologically, they are connected to the missionary activity of Lebuinus and Liudger, but no recognizable traces have been found of churches founded by them. The orientation of the earliest remains is southwest–northeast, and is similar to that of the general topography of Deventer's oldest centre. The area was encircled by water on the north and west side. The bishops of Utrecht resided at Deventer around A.D. 900. For this there is no archaeological evidence other than, possibly, Building A.

The situation does not become comprehensible until after the revival of the bishopric of Utrecht, for which there is monumental evidence from the eleventh century. In Deventer this was expressed by the building of a large basilica and a palace by Bishop Bernulphus (1027–1054). A completely new concept is followed: both the site and the orientation of the palace also departed from previous practice. It should, however, be pointed out that these changes in site and orientation are not unusual in church rebuilding during the eleventh century. The axis of the romanesque basilica lies more precisely east–west than before, even though a deviation to northeast–southwest can be detected, possibly because of the water on the west side (a moat or an old bank of the IJssel?).

To this new orientation the episcopal *palatium* (Building B)[57] was built at right angles, *i.e.* along the same line of the west transept of the new basilica. The dimensions are large, and, although no details are known about the structure, an impression of the palace can be formed from analogous buildings. In this case it probably had two floors and an attic with two aisles on the ground-floor, an almost completely featureless front on the west side, and a more open front with windows and possibly a recessed balcony on the east side. Many details are still unknown, such as the total length, the number or location of the entrances, and so on. A group of buildings was created, which, when seen from the river, must have been very impressive: the imposing west side of the large collegiate church and the wide front of the *palatium* to the north, both constructed in tufa.

Building C, although somewhat later as stated above, was also a part of the first complex of buildings. The function of C is completely obscure; a domestic office seems the most likely. Nothing is known about a separate chapel at the Deventer Bisschopshof. Nor is any definite information available concerning the square usually situated in front of the palace. The area bounded by the enclosure, the church, and the *palatium* could have been this square, because in 1266 the bishop referred to it as *atrium*.[58]

From textual sources dated 1233, the Bisschopshof must have been in ruins at the beginning of the thirteenth century, a situation which stimulated Bishop Diederik van Ahr (1198–1212) to restore it.[59] This ties in with the demolition of Building C around 1200 and the construction of Addition D, which was built at this time. It also appeared that the robber trench of the south wall of building C was covered by a demolition layer of tufa, found in several places (although sometimes sparsely); on the evidence of the finds, the layer should be dated to the thir-

55 Winkelmann 1972, 213 ff., esp. 215–216.

56 Herzog, 1964, 234–236.

57 Names: 1233 *de censu domus episcopalis* (this refers to events from *c.* 1207) (OBU, 863); 1223 *de hominibus castri . . . Daventre* (OBU, 710); 1310 *in palacio* (OBO, 584); 1326 *in domo episcopali*, but also *in aula . . . Daventriensi* (OBO, 822, 794, and 818 respectively).

58 *atrium ante domum nostram* (OBU, 1693).

59 1233, 24 July, Bishop Wilbrand (1227–1233) confirms among other things an obituary by Bishop Theodericus *de censu domus episcopalis . . . cum ipse domum episcopalem, qui ruinosa fuerat, propriis reedificaverit expensis* (OBU, 863).

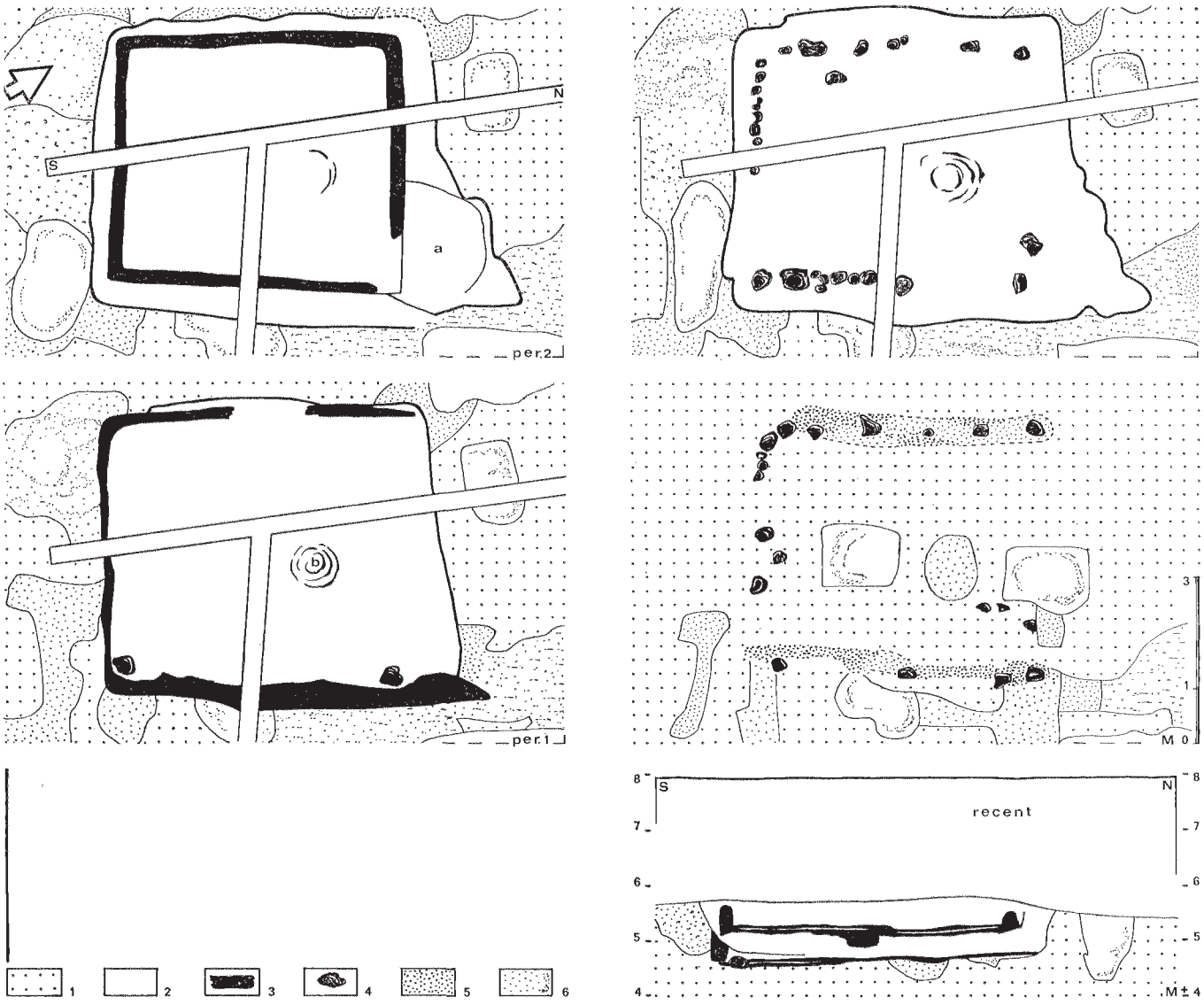


Fig. 6 Deventer: Stromarkt, Sunken Hut. 1. Sand; 2. Hut Filling(s); 3. Wall and Floor of Loam; 4. Erratics; 5. Foundation Trench; 6. Disturbed Ground. a. Entrance; b. Hearth

teenth century.[60] The function of the addition, however, cannot be identified. As it adjoined the *palatium* and the privy (Extension E) was on the outside, a domestic purpose for Addition D is probable. The partial abandonment of Addition D must have taken place during the thirteenth century, especially when Extension E was constructed. The privy was the last construction of this romanesque complex, in which erratics, iron-stone, and tufa were used. The layer of tufa debris, mentioned before, appeared to be completely covered by a layer of burnt material. The highest point of this layer was about 7.00 m + NAP, approximately the level of the oldest church-

60 Dorgelo 1956, figs. 6 and 7 (the field-drawings, however, are more distinct), 55–56.

floors. Right on top of the layers of burnt material were recent mixed layers, finds from which, however, date from the fourteenth century. Dorgelo concluded from this fact that this burnt layer must have been the result of the big town fire of 1334.[61] This fire must have also destroyed the buildings of the Bisschopshof.

After the fire the *palatium* was rebuilt in brick in Gothic style. No historical information is available concerning this rebuilding. There is only a little evidence for the later history of the new palace. Nor is there any archaeological indication of its existence, as all strata above the burnt layer were disturbed during the construction of cellars of seventeenth-century houses and later buildings on the site of the Bisschopshof. The only remains of the Gothic palace is a brick stepped gable in the north wall of the west transept of the Lebuinuskerk. A mid-fourteenth-century date for this gable is not available, as the size of the bricks used could not be examined.[62] The gable suggests that the new palace was narrower than its predecessor; while the east front remained unchanged, the west front was 2 m further to the east; a space of 4 m was thus created between the palace and the choir of the Mariakerk.[63] The complete building seems to have shifted to the south, so that the south front was situated on the same place as the transept wall upon which the above-mentioned stepped gable was constructed. In our opinion, the survey of the Bisschopshof of *c.* A.D. 1580 was based on the new situation.[64] Only one picture is known of this Gothic building, a bird's-eye view of the town painted in 1578;[65] it shows a rather cramped building, with a north–south orientation, connected to the church. Almost in line with the west front of the palace there is a wall going to the north; this may be the remains of the old tufa buildings. The view also shows a curved enclosing wall to the west ending against the Mariakerk; this wall was also indicated in the survey of *c.* A.D. 1580. After 1334 the water on the west side was evidently no longer of importance in the planning of the Bisschopshof; this is confirmed by the results of the archaeological research. Briefly summarized, it may be said that the Gothic reconstruction of the Bisschopshof after 1334 was very different from the previous romanesque buildings, both in planning and in architecture.

In 1610 the Gothic Bisschopshof was pulled down to make way for the present Hofstraat, due north of the Lebuinuskerk and the Mariakerk. The extant ruins of the romanesque buildings were cleared away at the same time and the tufa foundations also removed; textual sources for this are available.[66] Confirmation of this clearance was found in the fact that, during the excavations, the robber trenches of the romanesque walls generally came from a high level, even in the case of Building A (fig. 5). It may be that a quantity of undamaged remains are only to be found in the area of the new Hofstraat; some observations have confirmed this,[67] and it is to be hoped that archaeological research may continue in that area in the future. The demolition of 1610 (after the buildings had already been secularized in 1528, and after Deventer for a short period, between 1559 and 1577, had become the see of a new bishopric) signified the end of all of the town's outward show as a residence of the bishops of Utrecht. A tradition had come to a close; one which began among the episcopal exiles of the ninth and tenth centuries, was planned on a grand scale by the bishops of the eleventh century, and one which during the following centuries was sustained by successive ecclesiastical Lords.

Stromarkt – 1966–67

Adjacent to the episcopal area was the old royal *urbs*, after 1046 the seat of episcopal secular power. Subsequently, the position of the count of Salland was filled by the dean of the chapter of the Lebuinuskerk who resided in the building, afterwards called Sandra House, situated at the junction of the Sandrasteeg and the Stromarkt.[68] In 1966–67 investigation in the area was possible because of new building work northeast of this building, and gave the opportunity of comparing through excavation part of the royal *urbs* with the episcopal residence.[69] The upper metres in the section at the Stromarkt were so severely disturbed in recent times that recognizable medieval strata were no

61 Dorgelo 1956, fig. 12, 56.
62 Ter Kuile 1964, 45.
63 Dorgelo 1956, 47.
64 From this, the discrepancy can be explained between the actual romanesque walls found and the Gothic walls as suggested by Ter Kuile (1964, 33 and fig. 11).
65 It depicts the siege of the town by Rennenberg in that year; the picture is in Stedelijk Museum De Waag, Deventer. Relevant detail in Dorgelo 1956, Plate VII, 2.
66 Dorgelo 1956, 57–58.
67 Dorgelo 1956, 44–45.
68 The extent to which this building represents the old deanery is open to discussion. Remains of a trachyte wall could date from the tenth century (Koch 1957, 170–171); according to Ter Kuile (1964, 83), however, this wall should be dated to the twelfth century on technical and historical grounds.
69 Interim report Halbertsma 1967.

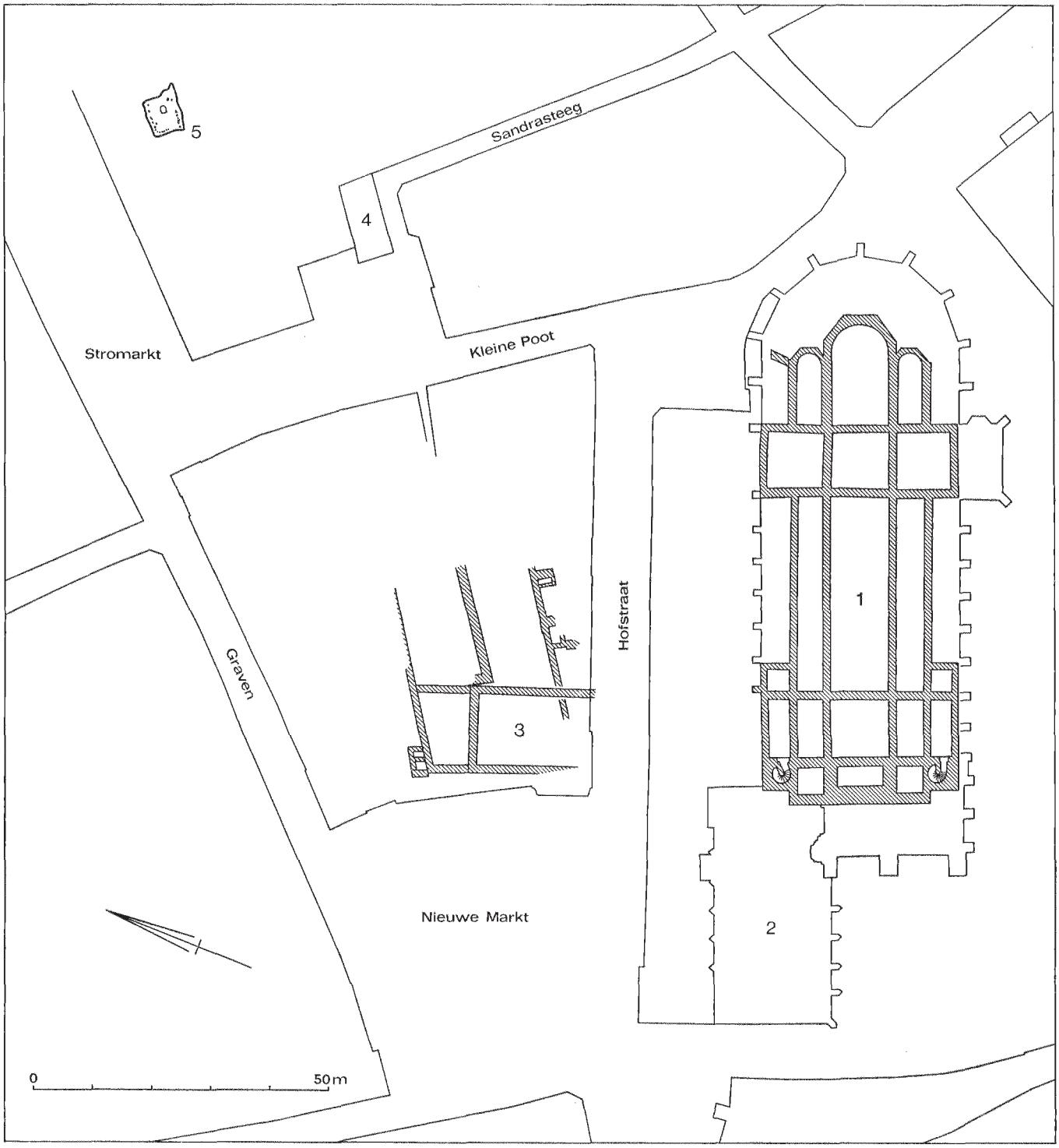


Fig. 7 Deventer: Lebuinuskerk and Bisschopshof (10th(?)–13th centuries). 1. Lebuinuskerk (after Ter Kuile 1964, Figs. 7 and 14); 2. Mariakerk (after Ter Kuile 1964, Fig. 20); 3. Bishop's Palace; 4. Deanery (Sandra House); 5. Sunken Hut

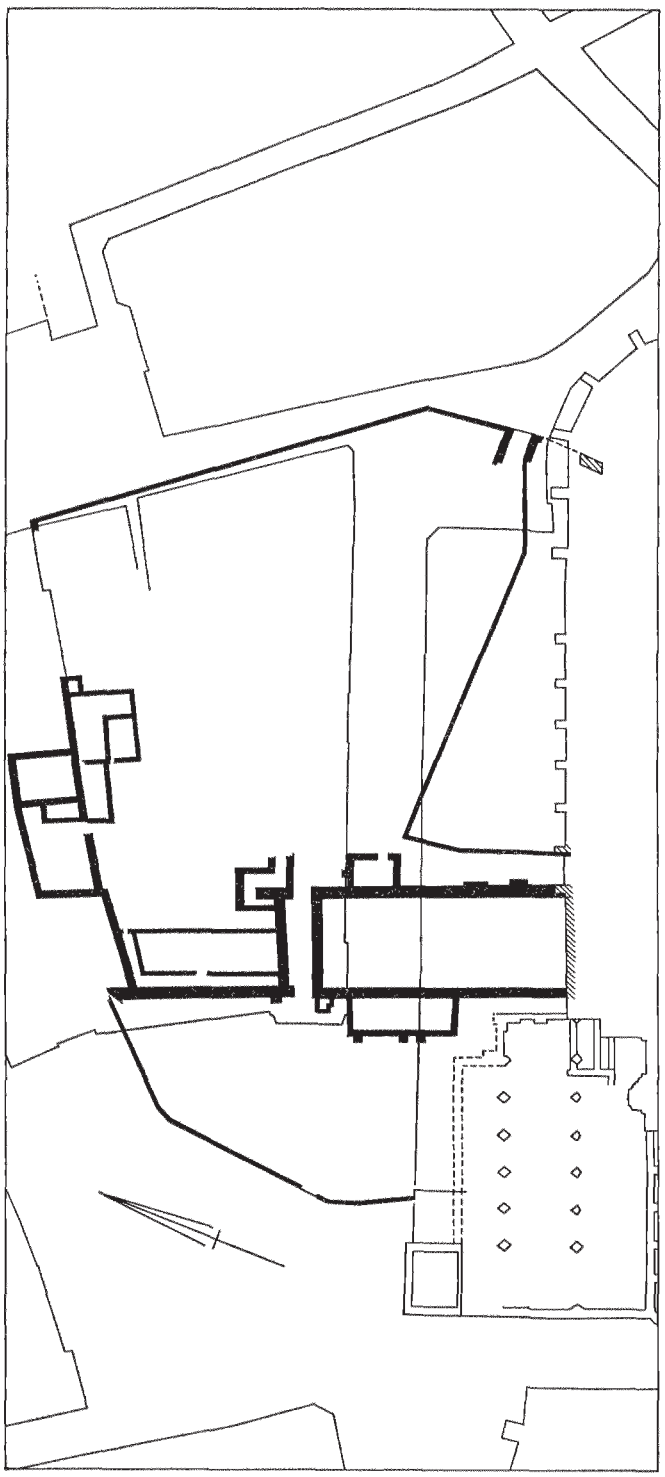


Fig. 8 Deventer: the Bisschopshof in the sixteenth century; the original survey (Municipal Archives Deventer no. 1128) transferred to the modern plan

longer present. In the undisturbed sand, at an average height of *c.* 5.75 m + NAP, many traces of occupation (post-holes and rubbish pits) were discovered; these date from the Carolingian period. Several finds from earlier periods came to light, but here, as in the Nieuwe Markt, the first real occupation was established only since Carolingian times. The lack of stratigraphy and the existence of countless overlapping features made it impossible to discern meaningful patterns; this was also the case at the Nieuwe Markt. Here also the overall picture revealed clearly the orientation of the occupation area, which was southwest–northwest or at right angles. This orientation was that of the deanery and also of the early planning of the town whose streets lay parallel with and at right angles to the IJssel. In other words, the orientation of the street pattern within the royal *urbs* must have been a continuation of the original Carolingian plan. Moreover, it accorded completely with the earliest orientation of the Bisschopshof on the Nieuwe Markt.[70]

Sunken hut

Only one phenomenon could be clearly recognized among all soil-marks belonging to both the Carolingian and later periods: a rectangular sunken hut, built in two phases, and remarkable because of its relatively late dating (fig. 6). The level from which the dwelling had been dug was no longer present, due to the already mentioned recent disturbances. The only remains were the lowest parts of the sunken walls, and two floors and some pits belonging to the building.

The first phase consisted of a rectangular floor, *c.* 4.75 × 6.00 m, with walls on three sides. The east side had been left open, apparently to serve as entrance; although there was no other evidence for an entrance, the vertical sides of the building-pit suggest that the hut was only accessible by a ladder. The first phase of the hut was dug more than 1.20 m into undisturbed sand, to an average height of 4.60 + NAP. The walls, on average 25 cm wide, were composed of a smooth loam; turf banks usual in this type of wall were not present. The walls were set into – founded would be too strong a word – a rather loose row of erratics: granite, iron-stone, and marl, all with traces of mortar

70 see pp. 378–379.

suggesting previous use. Moreover, the long walls (north and south) were inserted into a shallow trench. The floor consisted of a layer of loamy material which became thicker from the centre to the west – the part farthest removed from the entrance – and appeared to be mixed with lime mortar; there were no traces of a hearth, nor any traces indicating specific use of the dwelling. It was possible to date the building by pottery found in some pits covered by the floor (earlier), the floor itself, and the filling of the hut on top of the floor (later); all finds dated from the end of the eleventh and the first half of the twelfth centuries.[71] The first phase of the hut must have been constructed during that period.

The second phase was a rebuilding with a nearly identical construction on the same spot, this time, however, 0.40–0.50 m above phase one. There is no apparent reason for the reconstruction.[72] From the external measurements it appeared that the floor-plan had diminished slightly in size (4.75 × 5.25 m) in this phase. The east side was walled as well; only the southeast corner had an opening of *c.* 1 m, which contained an entrance. At the level of this entrance the dark earth of the hut fillings extended outside the edge of the building-pit; this extension of dark earth was, however, the only evidence of the entrance. The walls had a construction similar to phase one, and again were based on the characteristic erratics. The east wall, however, did not have these erratics, except for some near the entrance. The bottom of the floor lay at an average of 5.10 m. The floor itself consisted of at least three loam layers containing fragments of lime mortar, separated by humic layers; these could possibly have been the remains of three floors. Again there were no traces of a hearth. The finds above the floor of phase two differed in no way from the finds relating to phase one, mentioned above. It may be concluded that phase two also dates from the end of the eleventh and the first half of the twelfth centuries.

Both phases of the Deventer sunken hut show many similarities to one excavated at Emmen (Province of Drenthe).[73] Shape and size are almost identical. The depth at Emmen was 1.40 m below ground-level, and the homogeneous wall filling, which was also present, was explained as filling-soil between the side of the pit and the wooden or wattle wall of the hut, although no trace of such a wall was found either in Emmen or Deventer. But, in Deventer there was no trace of a bank of turf like that in the sunken hut at Emmen. As in the Deventer phase two, the Emmen entrance was found near one of the corners in a long wall, although this entrance was somewhat wider than in Deventer, and was characterized by post-holes and remains of a threshold. A similar extension was found near the entrance. No structural remains, such as a saddle-roof supported at ground-level, came to light either in Deventer or in Emmen. A final similarity lies in the dating. Although the Emmen hut is dated to around 1000, the pottery depicted suggests a somewhat later dating; in any case, the finds are almost identical with the sherds from the Deventer hut. As was the case in Deventer, no traces or other finds were detected to indicate a definite use of the hut. The Emmen hut remains a somewhat isolated phenomenon; the construction in Deventer is especially interesting because of its location.

The investigation into the sunken hut supplied a piece of new information concerning the medieval topography in the old royal *urbs* of Deventer (fig. 7).

The hut was situated in the area which had belonged to the deanery since 1046, *i.e.* on a plot obliquely behind, that is north of the deanery buildings. At the end of the eleventh and the beginning of the twelfth centuries, this plot was probably a relatively remote part of the grounds where few other buildings stood. A connection between the hut and the remaining topography appears from its orientation which is similar to that of the deanery and the old street plan. The orientation of the hut forms an eleventh-century link between the earliest Carolingian remains and the present day street plan. With this in mind, the deviation in orientation of the eleventh-century collegiate church and the adjacent *palatium* on the near-by

71 The finds consisted of pottery of Pingsdorf type with painted decoration, which, according to Bruijn (1959), belongs to this period; also vitrified ceramics with rouletting; thick-walled yellow relief band amphora; and coarse to very coarse tempered thick-walled globular cooking pot. It should be noted that Paffrath ceramics are almost completely lacking in this context. Roman finds, including a roof-tile with the stamp of the Leg. XXX, are comparable to similar finds from the Bisschopshof. These finds were probably brought to Deventer via the river IJssel among building material from the demolition of Roman fortresses along the Rhine.

72 Halbertsma (1967) suspects that the high level of the river IJssel was important here. But this need not have led to complete reconstruction, as the raising of the floor-level would have been sufficient.

73 Van Es 1964.

episcopal terrain is even more remarkable. Since the eleventh century, the bishop's residence has exerted a substantial influence upon Deventer's development.

5 ALTERATIONS

The flexibility in the size of medieval towns has through all time been considerable. There have been extensions and reductions; a number of towns even disappeared completely. In the main the extensions attract most attention, but the study of the reductions is also of importance. In the author's opinion, the archaeological examination of medieval town extensions should deal with three topics.

First of all, there is the settlement which became a town by gradual extension of a pre-urban nucleus. The development of Alkmaar (Province of North Holland) from a village situated on the Old Dunes (9th–10th centuries) into an urban trade centre (12th century and later) is a good example. The original foundation was an agrarian settlement situated on a north–south oriented dune-ridge along which was carried an important road; a river ran due east and parallel to the dune. Road and river converged near Alkmaar, a favourable position for an urban centre to come into existence. Consequently, the town was extended from the dune-ridge (where the oldest medieval finds were made) towards the waterway. A number of archaeological observations in the town centre demonstrated this development.[74]

A second topic for research is to be found not in the gradual extension of the town but in the planned creation of new suburbs, which were often walled in. Such new quarters could be considered as some part of a 'new town', and it is not surprising to meet repeatedly the toponym 'Nieuwstad' in medieval town centres as the name of a street or of an entire quarter. The archaeological research by the ROB into this theme has been limited to some observations in IJsselstein (Province of Utrecht). This little town almost doubled in size at the end of the fourteenth century. In this extension, the Nieuwpoort, in the south–east, some remnants of the medieval street plan and the town-wall were found. Parts were also excavated of a Cistercian monastery that originated in the same period. The occupation was forcibly abandoned by the town of Utrecht at the end of the fifteenth century.[75] The Nieuwpoort, deserted fairly soon after its founding, shows clearly the swing of the pendulum in the planning of medieval towns.

The third and last aspect which should be mentioned is (as far as the Netherlands is concerned) characteristic for the town planning of the low-lying west: extension towards the water. Fillings and level-raisings, together with extensive timber reinforcements of the new land have been a normal phenomenon in the medieval towns of the western part of the country. On the one hand this was done to improve the access to the waterside in connection with the expansion of the trade-traffic, but next to this the wish to extend the building areas played a big role. This important aspect of medieval town extensions has been examined thoroughly by the ROB in two towns: Staveren (Province of Friesland) in the twelfth and thirteenth centuries, which will be discussed below as an example of mobility of planning, and Dordrecht (Province of South Holland) in the thirteenth to sixteenth centuries.[76]

TWELFTH- AND THIRTEENTH-CENTURY EXTENSIONS OF STAVEREN (PROVINCE OF FRIESLAND)

Introduction

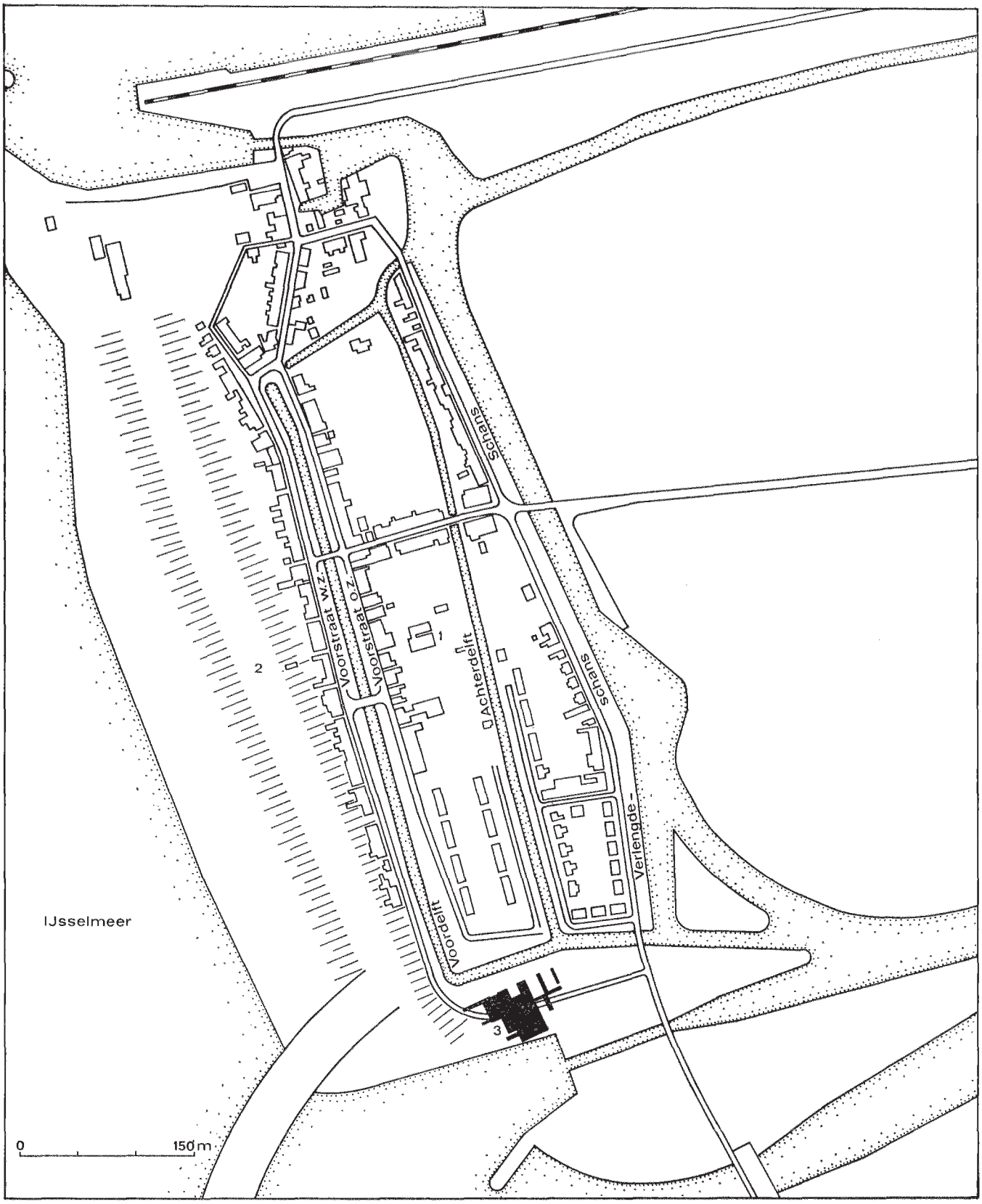
The town of Staveren is situated in the southwest of Friesland on a favourable spot along the long waterway from Rhine-IJssel and Rhine-Vecht to the North Sea. It originated in Carolingian times around a monastery (St Odulphus, founded in the eight thirties) and subsequently developed into a predominantly commercial town. Expansions and contractions of the town were determined by the tides of economic activity, but also the ebb and flow of the near-by sea exerted its influence, and in fact changed the topographical situation to such a degree for it to be exceedingly difficult to form an idea of the original size of the medieval town.

Staveren today borders on the south Frisian fenlands which, in the past, extended much further to the west and south. It is impossible to tell the exact extent of this area in the Middle Ages, since large parts were flooded and washed away. It is probable that Staveren first originated

74 Cordfunke 1972. N.B.: strictly speaking, the Alkmaar investigations are not ROB excavations but extensive observations by local amateur archaeologists; relations have been so close from the beginning, however, that these observations may be considered as an exceptional form of ROB town-centre research.

75 Visser 1964, 117–8, 130, and fig. 5; *NKNOB* 1949, col. 190–1; *NKNOB* 1956, col. 124, col. 139, col. 193; Stooker 1938.

76 See note 130; the relating passage also in Sarfatij 1973, 41.


IJsselmeer
Voorstraat W.Z.
Voorstraat O.Z.
Achterdelft
Voordelft
Schans
Schans
Verlengde
1
2
3
0
150 m

on the banks of a channel that was directly connected with the main watercourse through the southern marshes, the Vlie. This stream was an extension of the river Vecht which in turn branched off the Rhine at Utrecht. From the twelfth century onwards severe floods caused the Vlie to widen to such an extent that eventually a gulf was formed: the Zuyderzee (now IJsselmeer). The vast marsh along the channel was originally drained by a large number of streams and rivulets that emptied into the Vlie, but most of these also disappeared as a result of flooding in the Middle Ages. The upper reaches of two of these streams still exist, namely, the Linde and the Tjonger; they probably drained the northern marshes. It is not inconceivable that Staveren was situated on a similar watercourse, and it has been suggested that the present-day Voordelft (the central canal in Staveren) is in fact a 'descendant' of this stream,[77] possibly canalized.[78] The mound upon which the monastery stood, west of the present town, also succumbed to the floods in the Middle Ages: after the violent attacks by the sea in the second half of the twelfth century matters worsened during the fourteenth century, and, eventually, in 1415, it became necessary to move inland. The original site of the monastery disappeared under the sea and now lies 800 m west of the present harbour.[79]

Besides the topographical changes caused by natural forces, many changes in Staveren were brought about by man. Although much precious land was lost to the sea, it was the sea that enabled trade to flourish and thus caused the town to expand. Extensions to the town were normally undertaken toward the south, and in the twelfth and thirteenth centuries a whole area of new town had been built along the elongated Voordelft (figs. 9 and 9a). The size of these medieval extensions to Staveren is not known. It is probable that construction continued along both sides of the water, causing the inner harbour to become considerably larger. The entire western part was eventually destroyed by the sea, and any remaining traces must now be buried under the sea-dike and are thus inaccessible to further investigation. On the north the extensions adjoined the original centre of Staveren, which, according to H. Halbertsma, had developed along both sides of the Voordelft.[80] The southern boundary of the extensions to the town could not be established with any accuracy since it lay outside the area of excavations.[81] The buildings themselves were constructed on a fairly narrow ridge along the water, a common feature in many medieval towns in the low-lying west of Holland.[82] The new part of the town, built in the twelfth and thirteenth centuries, fell into disuse towards the end of the fifteenth. A renewed occupation started in the early seventeenth century and lasted until the end of the eighteenth century. During the last quarter of the last century the site was levelled off to a considerable extent; many traces of the old occupation periods were lost. A new housing project today has made the site part of the city for the third time in its history (figs. 9b–d).[83] Prior to the final destruction of all medieval traces of occupation an archaeological investigation was undertaken by the ROB in 1963 and 1964, over an area of *c.* 50 × 60 m.[84] The flexibility of medieval town plans is the background against which this part of our study should be seen: some aspects of the development of Staveren may serve to illustrate this. Many traces of the medieval extensions to the town still existed, but unfortunately the above-mentioned digging in the last century proved to have destroyed most of the floor and street levels. Although vertical stratigraphy was thus out of the question, several interesting traces could be distinguished quite clearly on the horizontal plane.

Raised levels and artificial deposits

The stream along which the extensions of the town were built had cut its way through the peat down to the underlying sand (fig. 12). In the excavation site the surface level of the sand varied between 2.25 and 3.00 m —NAP; the layer of sphagnum that had grown over the sand had

◁ Fig. 9 Staveren. 1. Church; 2. Sea-dike; 3. Stadsfenne (Excavation 1963–64)

77 According to Halbertsma (1960, 443–444 and 1964, 257–258) this could be identified as Nagele, which we know from historical sources, but which has completely disappeared today; this waterway comprised the lower reaches of the Tjonger, Linde, and Overijsselse Vecht.

78 See p. 394.

79 Halbertsma 1960, 444–445.

80 Halbertsma 1964, 258.

81 In southern direction probably no further than the boundary dating from later times (17th century), which has been adhered to again in the modern extensions.

82 See p. 400.

83 Called *Stadsfenne* since the last century (= 'the common').

84 Provisional reports by Halbertsma (1963; 1964).

been compressed to an average thickness of 1 m by the deposits laid down to raise the ground-level.
In various places, probably in slight depressions in the peat, there was a sediment of clay silt, undoubtedly brought down by the stream. The stream must have been rather broad, sloping gradually down from the peat layer which was severely eroded on the surface. The frequent spade-marks in the eastern slope may indicate a period of peat-cutting prior to the extension of the town or perhaps they point to a previous canalization of the natural course of the stream. The first step in extending the medieval town consisted in heightening the peat embankment and narrowing the stream, obviously for the purpose of reaching the deep water of the stream. The bank was heightened with 1 to 1.5 m of clay containing large quantities of peat and wood debris; the original stacks of clay sods could still be clearly distinguished in places. This heightened area extended toward the east (inland) over a distance of at least 45 m. The clay that was deposited in the water was much cleaner, except for the remarkable presence of a great amount of chips of wood. The embankment, having thus been founded on a firm substratum, was then divided into rectangular plots at right angles to the waterfront. Nine of these plots, varying in width between 4.50 m and 7 m, could be examined.[85] Material evidence of the plots consisted of the remains of wooden fences running over the bank and onto the clay-fill in the stream. Rows of posts, upright boards, and wattle structures formed long partitions. Thus the plots did not end on the bank proper but continued onto the adjoining wharves constructed on the reclaimed land.
In order to stabilize the deposits, short rows of posts, wattle, or planking were fitted across each wharf (fig. 10). Three such cross structures were distinguished in the profile cut in plot 1, but their number probably varied in the different wharves. The combination of partition fences and cross-fences resulted in 'boxes' which made the reclaimed land much firmer. The wharves 'outside the dike' ended on the waterfront with a common border of squared and pointed solid oak piles driven into the river-bed at regular intervals; the embankment was faced with oak planks.
This heightened area, without traces of construction (apart from the wooden divisions), was then gradually covered by an habitation layer, a thick bed of dirty clay in which most of the occupation traces were found. Only the lower part of this layer remained: the floor was 0.50 to 1.00 m–NAP, but the surface of the deposit was impossible to establish due to recent disturbances (down to *c.* 0 NAP). This is all the more regrettable since the medieval buildings were constructed on crest of the heightening. It was, however, possible to distinguish in section the slightly convex surface of the occupation layer between the divisions between the plots; this again points to the assumption that gradual and individual raising of the level was undertaken after the main base had been laid. The occupation layer extended from the highest point of the embankment over the filled area down to the revetment. Beyond this oak revetment the layer of coarse clay continued as a thin band more than 20 m to the west.
The raised embankment together with the filled area, the final wood revetment, and the overlying occupation layer may be seen as the result of a continuous process starting in the twelfth and thirteenth centuries. Although the remains suggest that land reclamation was undertaken very gradually, the lacunae in the stratigraphy make it impossible to distinguish the various stages.

Road, jetty, and buildings
The remains of this new part of the town all indicated that the buildings were wooden. A road, a jetty, buildings from two different periods, and some other traces of construction will be dealt with below (figs. 10 and 11). The remains of a street or path were found in the area between the bank and the infill of the stream. This road, 5–5.50 m wide, followed the course of the river (north–south) and intersected all the plots at right angles; it continued in both directions beyond the excavation site. The wooden

Fig. 9a Twelfth- and thirteenth-century extensions in the ▷ southern part of the town. a. Fen stream; b. Wharves; c. Road; d. Buildings

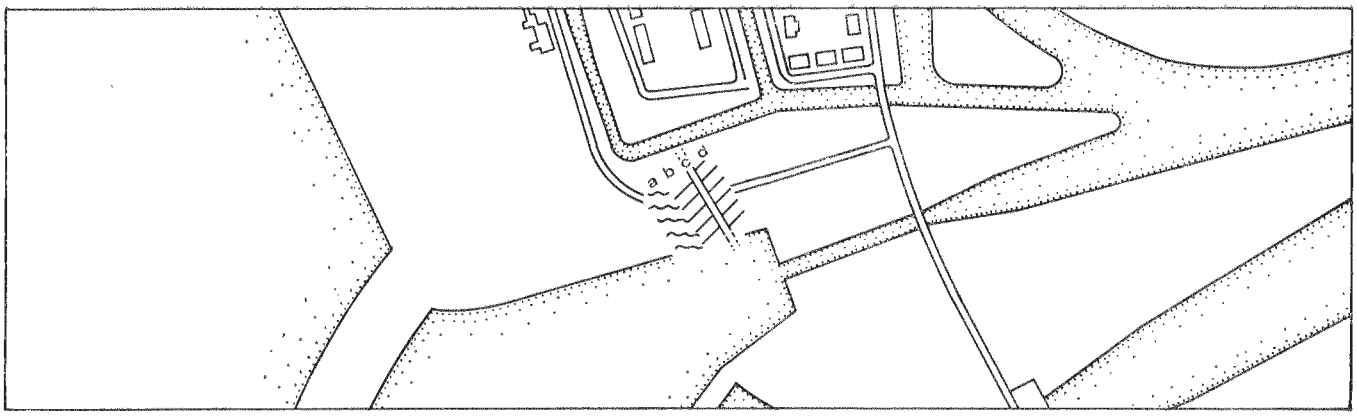
Fig. 9b The southern part of the town *c.* 1560, after the map of Jacob van Deventer (The shading on the Figs. 9b–d represents the built-up area)

Fig. 9c The southern part of the town in 1616, after the map of N. Geilkerck

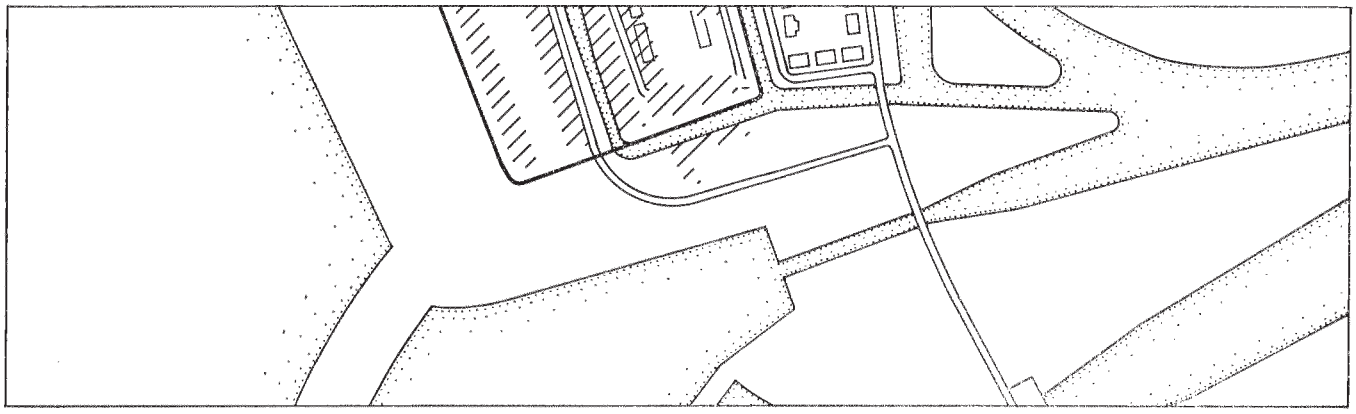
Fig. 9d The southern part of the town *c.* 1830, after the first cadastral survey

85 Width plot 1 – 5.00 m; 2 – 6.00 m; 3 – 4.75 m; 4 – 4.50 m; 5 – 6.00 m; 6 – 6.50 m; 7 – 4.00 m; 8 – 3.50 m; 9 – over 7.90 m. It is quite possible that plots 7 and 8 formed one single plot until they were divided during the second period of construction.

9a



9b



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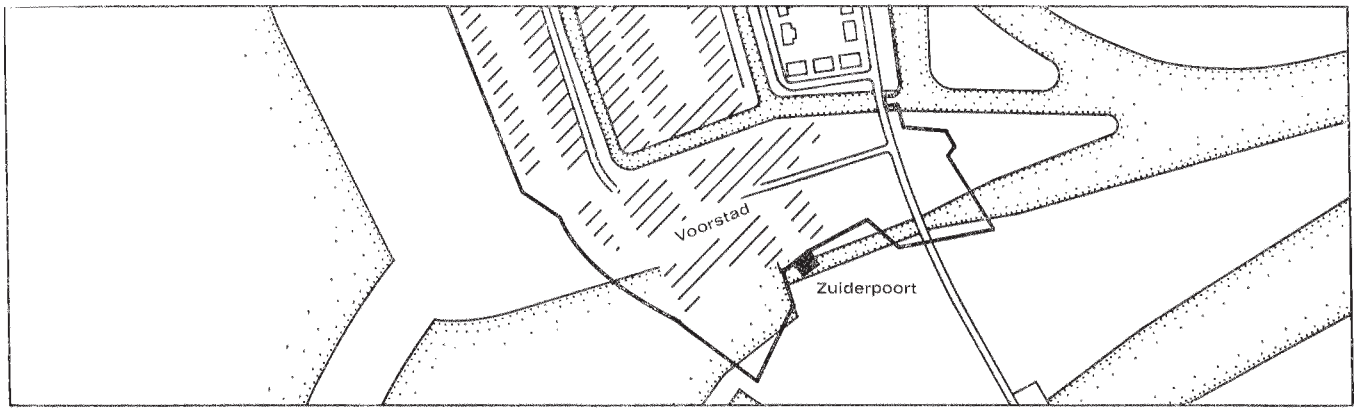

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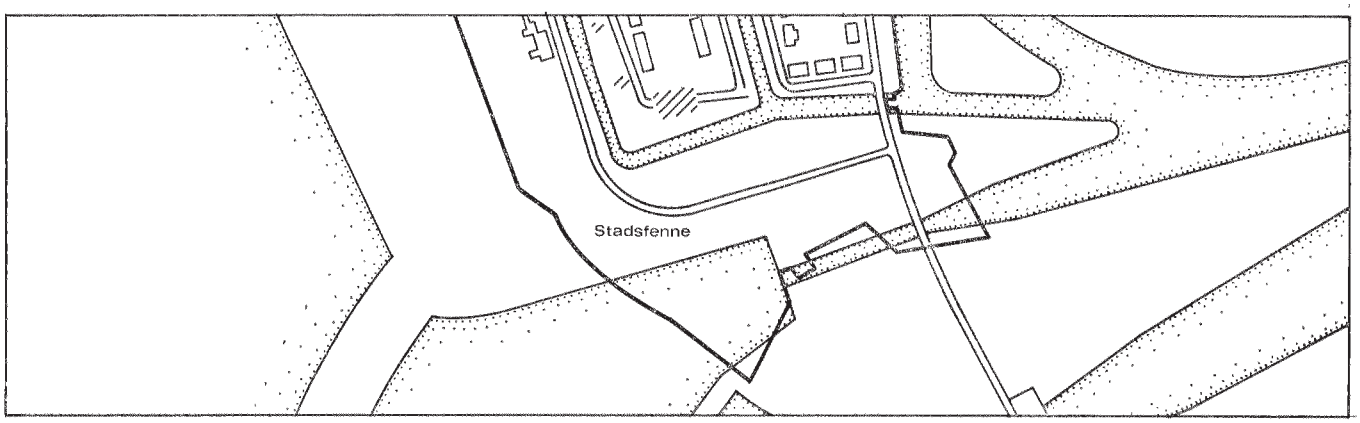

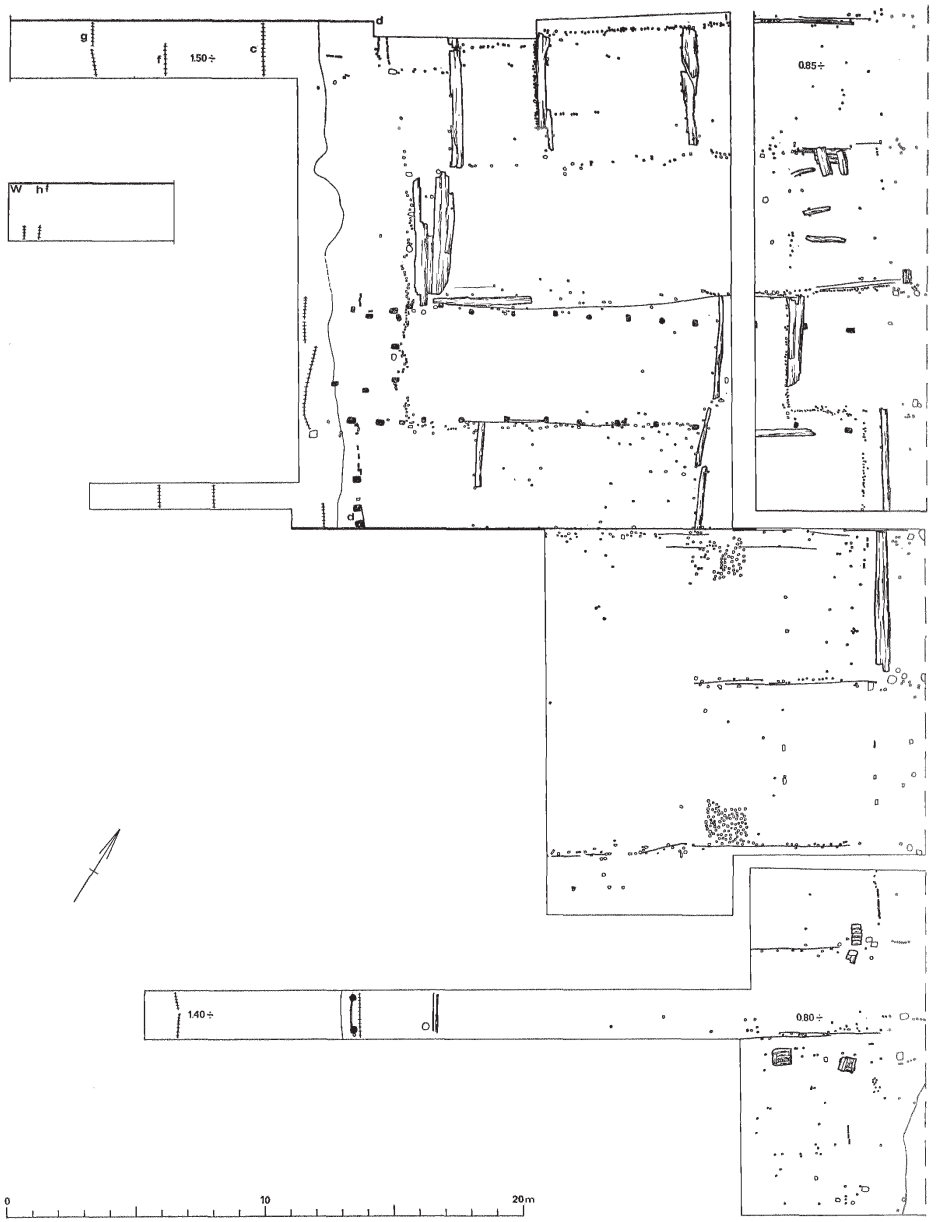

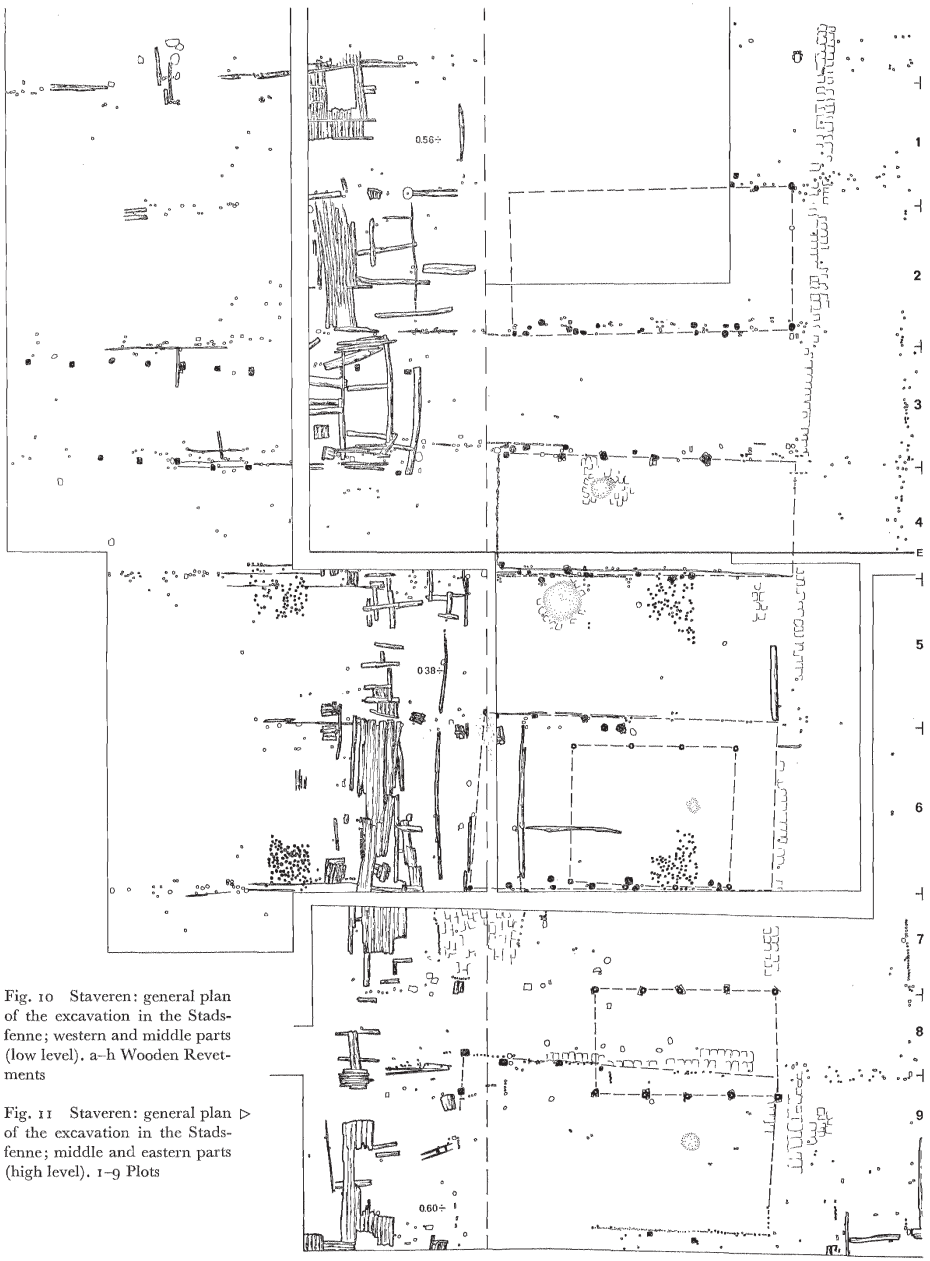

◁ Fig. 10 Staveren: general plan of the excavation in the Stadsfenne; western and middle parts (low level). a–h Wooden Revetments

Fig. 11 Staveren: general plan ▷ of the excavation in the Stadsfenne; middle and eastern parts (high level). 1–9 Plots

path consisted of a base of cross-beams supporting a surface of longitudinal planking. Despite the fragmentary state in which these traces were found, one remarkable feature could be observed: the length of the planks was equal to the width of the plots.[86] The wooden planking is the only clue to the level of the path, but the varying levels of the different plots and the relative depth (0.20–0.40 –NAP)[87] make it seem unlikely that this path was a pedestrian thoroughfare. A few stones were found on a higher level (paving? or possibly remains of a floor or a secondary construction?)[88] but they were so fragmentary that a satisfactory explanation for their occurrence cannot be given.

The situation in plot 3 seems to be the most straightforward: two long rows of squared oak posts ran in a direction that differed slightly from that of the boundary lines of the plots. The total length of the rows was 14 m; they were placed 4 m apart. From the fact that both rows of posts slanted inwards it may be concluded that they formed the substructure of a pier or jetty. This jetty joined the buildings on the landward-side (about which more will be said below), across the road and the wharf, to the wooden quayside. It should be added that the jetty was situated in front of the unobstructed passage between the buildings on plots 2 and 4.

The buildings just mentioned were situated to the east of the road. In fact they were constructed on a building-line that virtually coincided with the eastern border of the road. Characteristic of the buildings was the application of much worked wood, generally in rows along the partitions of the plots, *i.e.* in the slight depressions between the strips of habitation. Thick posts and thin ones (which probably supported walls), planks and wickerwork (indicating walls and fences) were used alternately. An arrangement into specific groups according to the different building periods is very difficult on account of the faulty stratigraphy. However, the finds, which date from the twelfth and thirteenth centuries, do indicate a direct relationship between these periods and the heightening undertaken during extensions to the town. In so far as any classification of the buildings may be attempted, we may distinguish some kind of a system in which empty plots were alternated with built-up plots. In our opinion, there were constructions along a common building-line on plots 2, 4, and 6; possibly these buildings belong to one and the same period. Evidence of a second building period was found in two buildings situated further back (east) in plot 6 and the combined plots 8 and 9.

The buildings from the first period were very similar, unaisled, and with walls corresponding to the plot divisions. As an illustration plot 4 will be discussed in some detail. The fairly heavy vertical oak roof-posts usually had a flat bottom resting on some small planks.[89] Only one post was placed in a post-hole (repair?); the almost complete lack of post-holes may indicate that the buildings were constructed at the same time as the formation of the occupation layer. The long walls were double: horizontal planks (presumably anchored to the posts belonging to the raising and extension of the plots) on the interior and a row of vertical planks on the exterior. The short front wall (on the west side) was made of wattle; the wall at the back had disappeared. This construction measured 11.50 × 5 m. No traces suggesting interior partitions or an entrance were found. The floor, too, had been removed by recent disturbances; a small charred area was the only possible evidence of a hearth. But in spite of this, it seems unlikely that this building was inhabited: in our opinion, it must have been something in the nature of a barn or silo or other type of warehouse.

What has been discovered in relation to the buildings of the second period? The only traces of the construction on the combined plots 8 and 9 were two rows of five oak posts marking an area of 7 × 4 m. These posts too were flat-bottomed and rested on small planks. No traces of a wall construction were found either on the long or on the short side. We cannot therefore exclude the possibility that the row of roof-posts represents only the central nave of an aisled building, in which case the walls would have been further apart – but once again no traces of these walls were found. Whatever the case may be, the building does represent a later period of wooden constructions. In the first place it was situated further back (east). (Had the road and thus the building-line become obsolete?). In the second place it overlaid the old partition between plots 8 and 9; moreover, all the posts stood in post-holes and the bottom of the posts rested on a higher level than in the previous period. In all respects this building could be compared with the construction on plot 6, which was also

86 This is clearly to be seen in plots 2, 3, 6, and 9.

87 The reconstructed floor level of the buildings lay above NAP, presumably between 0.15 and 0.20 m +.

88 The height in this case permitted comparison with the level mentioned in the previous note.

89 The ends reached down to between 0.30 and 0.60 m – NAP.

situated further back. The function of these buildings, however, is even more difficult to establish than in the case of the first period.

After the road, the jetty, and the building, it seems that a last period of wooden constructions is represented by four foundations formed by piles in the plots 5 and 6. These piles were placed together in 'bundles' measuring 2 × 2 m, and were located in the four corners of a rectangle measuring *c.* 17 × 12.50 m. This rectangle was enclosed by the land on one side and by the waterfront on the other, and also included the road. The piles (average 10 cm in diameter) were found directly under the recently disturbed level, from where they extended a minimum of 2.25 m, so that the pointed ends reached down to 2.20 m –NAP. Although these piles clearly belong, stratigraphically, to the medieval occupation, they must date from a later period than the buildings, road, and jetty. In several places the piles had been driven through the remnants of the structures, and the second-period building on plot 6 was also constructed within the above-mentioned area and must eventually have been covered by the structure on top of the pile-foundation. The possibility that the traces of the stone floor mentioned on p. 398 belonged to this construction should not be excluded in view of a certain similarity in the location of these finds. There is not sufficient material, however, to indicate the nature of the building that was constructed on the pile-foundation. Perhaps some stacks of wood found between the pile-foundations also belonged to this building. These stacks consisted of four to six layers of short pieces of wood, piled up crosswise, usually three per layer, and may be interpreted as supports for the joists of the ground floor. They were located near the road, on three of the partitions between plots 5 and 6. That they were positioned after the road was built is indicated by the fact that one of these stacks of wood rested on the road surface. Moreover, in view of their relatively high stratigraphic position, it is quite likely that they constituted part of the pile-foundation. But even so this combination does not make it any easier to establish the nature of the superstructure.

Conclusion

The twelfth- and thirteenth-century extensions to the south of the town of Staveren were the result of the economic prosperity of the time. The position of the town was very favourable: it was situated between the Frisian domain (which shook off all central government authority during the thirteenth century) on one side, and lay to the northeast of the county of Holland on the other. Staveren benefited from the more or less peaceful political relations between these two regions,[90] but when the political climate worsened Staveren's position became very unstable, as we shall see. The prosperity of the town was probably also directly influenced by great storms which caused severe flooding from *c.* 1170 onwards,[91] and damaged the north side of town. It is possible that these storms, by washing away large tracts of the surrounding peat bogs, opened a new passage from the south of town to the Zuiderzee. The fen stream, on whose banks Staveren originated, initially drained the marshes in northerly direction (possibly the same watercourse as is known historically as Nagele),[92] and now also became accessible from the sea to the south. The inhabitants of Staveren must also have been interested in extending their brisk trade-relations towards the south.

The frequent spade-marks in the peat embankment suggest that the fen stream was canalized. An attractive site for occupation was thus formed in the extension of the old inner harbour, the Voordelft.

The embankment of the fen stream was raised considerably and subsequently divided into plots at right angles to the river. The breadth of these plots varied greatly. The heightening was undertaken in combination with deposits in the water along the bank. Thus wharves with a communal quay-side emerged in the area 'beyond the dike.' The object was obviously to reach the deep water of the stream. Another indication of this is the jetty which extended over the full length of one of the wharves linking the original bank and the quayside. The jetty crossed over a wooden path parallel to the stream which had been laid previously and cut across all the wharves. Behind the path, on the raised bank, buildings were erected, never more than one deep and on alternating plots. The buildings had a single-aisled construction and were as wide as the plots on which they stood.

The extension of towns by heightening banks and filling in waterlogged areas may be considered a common feature of medieval towns. Nevertheless, only in recent archaeological researches have these phenomena been observed *in materialibus*. In the waterside towns of the low-lying

90 Heeringa 1893, 27 ff.

91 Gottschalk 1971, 196–197. Also the St Odulphus monastery eventually had to be moved (p. 393).

92 See p. 393, note 77.

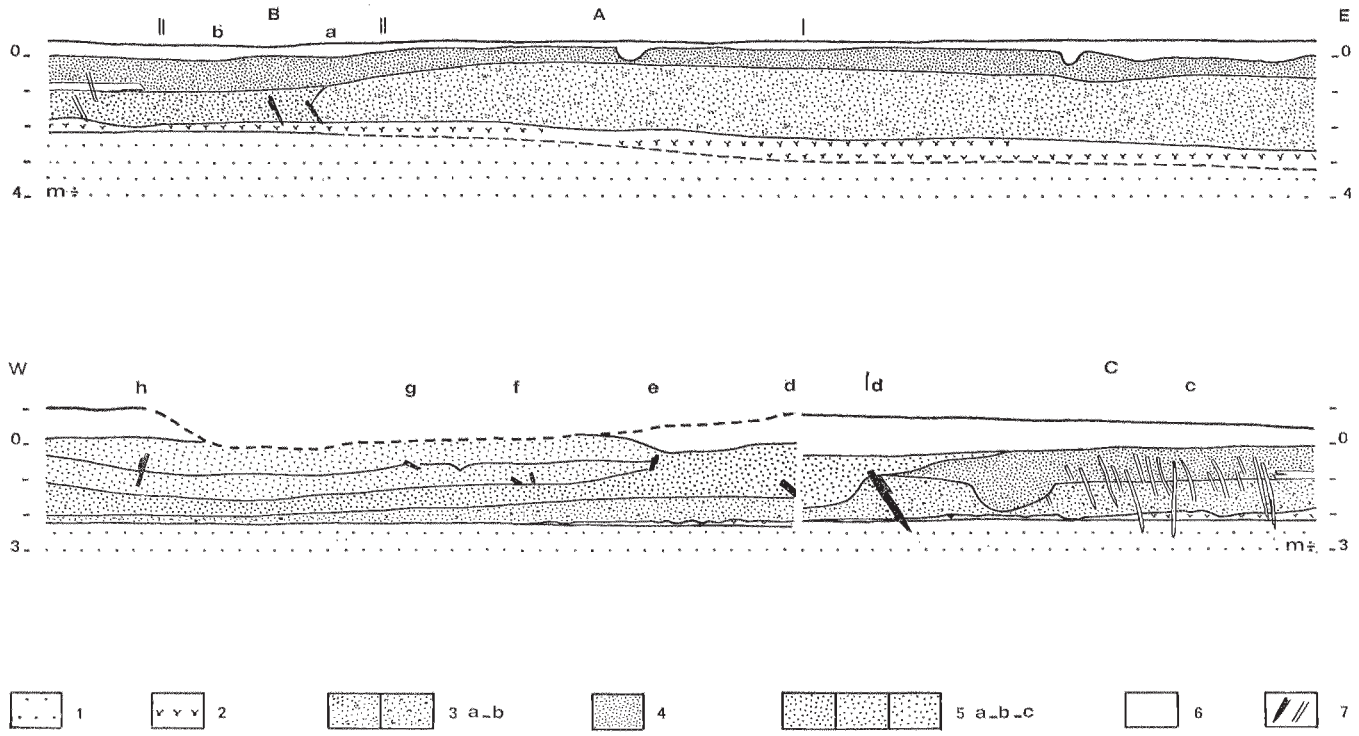

Fig. 12 Staveren: Stadsfenne, section W–E. A. Building; B. Road; C. Wharf. a–h Wooden Revetments. 1. Sand; 2. Peat; 3a. Fillings of Sods of Clay; 3b. Fillings of Clay with Chips of Wood; 4. Medieval Occupation Layer; 5a–c. Late-medieval Fillings; 6. Recent Layers; 7. Timbers

western part of the Netherlands this form of expansion must have been inevitable. Excavations at Dordrecht (Province of South Holland)[93] have shown clearly that the process of raising started before 1250 and came to an end not before the sixteenth century. The lay-out, however, was unlike Staveren. The river into which the town of Dordrecht was extended ran behind the houses that were situated along the main street. The extensions were initially confined to limited groups of plots, thus forming abutments that protruded into the river. A lane was constructed along the abutment to connect the main street to the wooden revetment at the end. This lane shows similarity to the jetty at Staveren. But the extension there seems to have been carried out in an unbroken line. The same was found in Amsterdam (Province of North Holland),[94] where the river Amstel formed the axis. The embankments on both sides were also enlarged, as it seems, in unbroken lines in the fourteenth and fifteenth centuries, thus narrowing the river-bed considerably. At Staveren, Dordrecht, and Amsterdam the same phenomenon of successive revetments to prevent the earth from slipping down into the river was found on each plot.

The investigations at Staveren and Dordrecht into groups of plots revealed that the position of the revetments differed on each plot. An overall concept of planning was only found in the continuous partitions of the plots and wharves and in the communal quay at the riverside. A similar duality showed the wooden path at Staveren: on

93 Sarfatij 1972, 625–628.

94 Van Regteren Altena 1968, 124–130; Van Regteren Altena–Zantkuyl 1969, 235–242.

one hand the uniform construction along one trace, on the other a divided surface of planks and different levels apparently in connection to individual plots. Other instances of this duality such as the difference between the uniform heightening level and the habitation level on the bank which varied from plot to plot and the constructions of individual buildings on a common building-line appears to reflect a typical medieval system of organizing large-scale earthworks. Also the reclamation of fenland and (initially) the construction of dikes, were based on the principle of a general plan carried into effect individually. Excavations in Bergen (Norway)[95] and King's Lynn (Great Britain)[96] have shown that this approach to urban expansion was common in other parts of Europe, too, where construction sites were gradually enlarged by extending the embankments further into the water.

The new section of Staveren must have adjoined the old town further north. In the middle of the last century, regularly spaced rows of tree-trunks and planks were found ('across the canal' = east of the Voordelft?), which were compared, at the time, to the well-known wooden paths through the fenlands of Drente.[97] Our wooden path could be the extension of this 'road'. However, the construction of the excavated part of the Staveren road was different from that of the fenland wooden roads, and was much wider than usual.[98] Roads with wood paving are a common feature in medieval towns, but to my knowledge they invariably consisted of a surface of planks or logs laid across a base of lengthwise timbers,[99] and are furthermore generally narrower than the road in Staveren. Besides, a correspondence between road sections and the breadth of the plots has not been found outside Staveren.

Unfortunately, the remains of the wooden superstructure were insufficient to permit classification according to one of the known types of timber constructions of north-western Europe. Only the buildings on plots 4 and 8/9 allow for a tentative classification (fig. 13). They are closest to the type of construction with wooden uprights defined and described by Rudolph and characteristic of northern Germany and the west Netherlands.[100] As usual

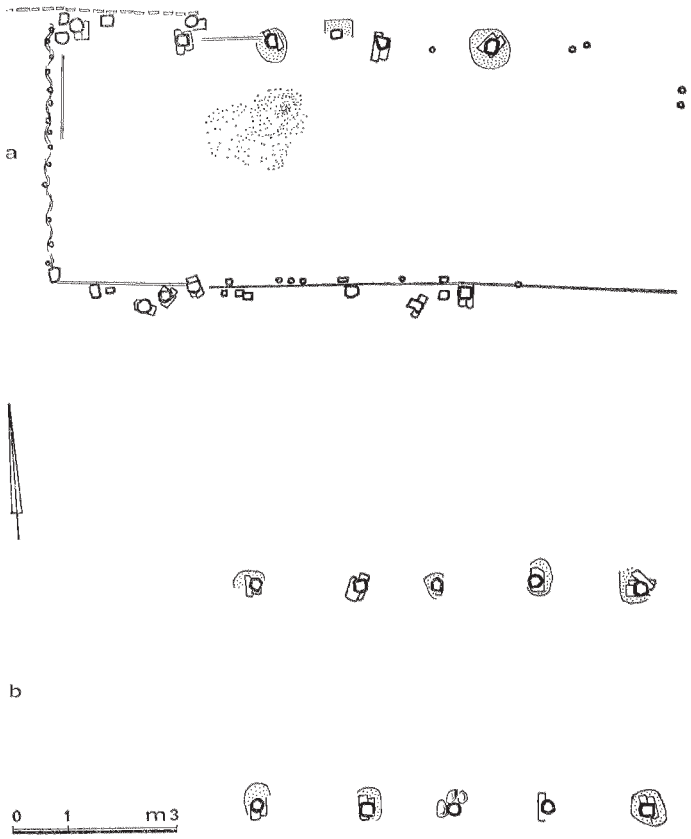

Fig. 13 Staveren: Stadsfenne. a. Building on plot no. 6; b. Building on plot no. 8

in this type of construction, the wooden posts in Staveren were only partially worked: no traces were found of wall attachments (only the lower parts in the foundation were preserved). We can only guess at the nature of the connection between the vertical posts and the superstructure. An additional difficulty is that the vertical posts occur in pairs – as is necessary for this type of construction – in plot 8/9, but only in two sections of plot 4. Nevertheless, the sparse remains of the walls, consisting of an interior wall of horizontal planks and an exterior of vertical planks

95 Herteig 1969.
96 Clarke 1973.
97 Pleyte 1877, 50.
98 Hayen 1957. The road in Staveren comes closest to the types B and C mentioned by Hayen (1957, 177); however, there are considerable differences in number and position of the underlying cross-beams.
99 Type A in Hayen (1957, 172–176). *Cf.* Novgorod (USSR) (Thompson 1967, 13 ff.), Haithabu (W. Germany) (Schietzel 1969, 19–26), Århus (Denmark) (Andersen *et al.* 1971, 30 ff).
100 Rudolph 1942, 109 ff.

(without a trace of a structural connection with the uprights), are still an indication of the typical construction with upright timbers. That the uprights rest on short planks, however, is an extraordinary feature of both buildings, while the sinking of posts (in plot 4) into the occupation layer itself has not been encountered elsewhere at Staveren.

The construction of the buildings gives no indication of their function, and it was hard to find traces of occupation. Some traces of a fireplace were found on plot 4, but the only charred area that could be evidence of a hearth was found in the second-period building on plot 6. The problem of the function of these buildings was further complicated by the recent removal of earth down to a level below the medieval floor. But in spite of this these buildings should, in our opinion, be considered as barns, warehouses, or silos rather than as dwellings. In view of this the twelfth- and thirteenth-century extensions were probably intended in the first place to enlarge the harbour area.[101] In our opinion, the contemporary wells behind the buildings, with their contents of varying origin, also reflect the commercial nature of this new section of town.[102]

The economic growth of Staveren in this period is linked up with the revival of Frisian trade. This trade, which connected north and east Europe to the western part of the Continent, had its roots far back in the seventh century.[103] A strong decline occurred in the ninth and tenth centuries as a result of the Viking invasions, but the commercial relations across the North Sea and the Baltic never seem to have been interrupted completely. When the Frisian trade revived in the eleventh century, Staveren regained a central position.[104] Its predominance in the growing market of the twelfth and thirteenth centuries was expressed in the enlargement of the town. The end of the fourteenth century, however, signified a turn in the town's welfare and the decline became increasingly evident after 1400. Three factors were involved: first, the sea became a direct threat to the town (an indirect effect was that old watercourses were silted up and new ones formed, a development which coincided with the emergence of a new trade route from Holland/Flanders to Scandinavia and the Baltic countries). Besides this geographical factor, there was an economic factor: the emergence of stiff competition, notably by the Hanseatic League led by Lübeck, which made the use of other ports for transshipment such as Brugge more convenient.[105] Third, there was a political factor characterized by the growing anarchy in the rule of Friesland during the fourteenth century, which unfortunately coincided with an urge for expansion on the part of the county of Holland. Since Staveren had long been a bastion of Holland in hostile country, the town became deeply involved in these political developments. The result of these disputes was that trade came virtually to a standstill towards the end of the fourteenth century.[106] The sad end of the affair was the sacking of Staveren, followed by a fire in 1420 or shortly after, which is presumed to have destroyed the south and southeast sections of the town. After this calamity the town was rebuilt on a much smaller scale and, during the fifteenth century, it led a very modest existence 'forgotten and far away.'[107]

A good example of the archaeological traces left by this historical development are the continual fillings along the wharves (fig. 12). In the western part of the excavation site, on either side of the wooden quayside facing, traces were found of the various successive deposits. These deposits formed the upper layer of the area from the quayside, over the sloping embankment, up to the level marked by the recent digging. Filling was continued beyond the quayside until the fifteenth century. The reclaimed land was raised to NAP level with sods of sphagnum and sand, and also, as in the past, strengthened with wood. Four wooden revetments mark the chronological development of land reclamation in western direction between the fourteenth and the first half of the fifteenth centuries.[108] The last one was built 20 m away from the first, but filling also continued beyond the last revetment. The final stages of the entire process could not be examined because the levels concerned have now disappeared under the sea-dike. It is quite possible that a similar development took place on the opposite bank of the fen

101 The twelfth-century efforts of the town of Staveren towards economic independence is also apparent in the direct support by the emperor in 1123 (Niermeyer 1937, 17–18).

102 See p. 375.

103 Jappe Alberts–Jansen 1964, 20 ff.

104 Jappe Alberts–Jansen 1964, 48–51.

105 The improved construction of ships made longer voyages over more open sea possible.

106 Heeringa 1893, 42 ff., 69 ff.

107 Heeringa 1893, 90, 96.

108 Finds from the deposits against the revetments date from the 14th, 14th to 15th, and the first half of the 15th centuries, respectively.

stream, but any remains of such deposits would now also lie under the present sea-dike (figs. 9 and 9a). In view of the sparse find material from the fifteenth and subsequent centuries, it would seem that the southern part of the town (known as Voorstad at the time) fell into disuse in the course of the fifteenth century. One might suppose that the recent diggings could be blamed once again for the lack of archaeological material, but the absence of deep water-wells from the relevant period indicates that occupation really did cease at that time.

On the oldest map of the town (dating from *c.* 1560)[109] the medieval section is marked outside the town walls (fig. 9b), but towards 1600 it became part of the town once more and was gradually re-occupied. The seventeenth-century plans of the town show that Staveren was fortified in that period, at which time the resettled Voorstad was enclosed by a wall, a gate, and a moat (fig. 9c). Obviously, the shallow traces of the new occupation were the first to be disturbed by recent digging. The only archaeological evidence to be found were ten wells with contents from the seventeenth and eighteenth centuries. Also part of the fortified gate from this period was excavated: it consisted of heavy brickwork in the shape of the letter E, founded on a sturdy wooden construction of horizontal and vertical posts. This was probably the abutment into the outer moat which served as the foundation for the gateway. The size of this construction indicates that the gate must have been at least 10 m wide. The square structure of the gate with the usual drawbridge over the moat is confirmed by seventeenth-century maps giving a bird's-eye view of the town, and by the name of the gate, 'Zuiderpoort' (South Gate).[110]

Building continued in the Voorstad throughout the seventeenth century, but a contrary development of decline and contraction set in towards the end of the eighteenth. Early in the nineteenth century the fortifications were demolished and the Voorstad was abandoned once again (fig. 9d). On the oldest cadastral survey of the town, dating from about 1835 and on the municipal map from 1865, the area is marked as 'Stadsfenne' (or common).[111] Not long afterwards 'a complete levelling of the terrain formerly taken up by houses and streets but now falling into decay and becoming common land, in order to alleviate the dire poverty by the sale of this fertile terp earth'[112] was undertaken. The present-day plans to extend the town in the same direction (for the third time in history) occasioned the archaeological investigations conducted in 1963 and 1964. The alternated use of the site as Voorstad and common is a good example of the mobility of the town plan during eight centuries, of which the medieval period was by far the most important.

6 ELEMENTS

It is apparent that the possibilities of carrying out archaeological research in medieval town-centres are extremely uncertain. Often only a small part of the town is available for examination: one building, some house plots, a part of the town wall. Yet every element has certain urban aspects that may be worth while. The town-centre research executed by the ROB in many towns was concerned with a variety of such elements, which could be examined partly or completely. The first impression is that there seems to be little or no coherence between these excavations. Nevertheless an attempt will be made to arrange groupings in the somewhat kaleidoscopic picture in such a way that the elements can be placed in a wider setting. Again, the observations will be followed by a more extensive discussion of one of the excavations.

Churches form the largest group of separately examined town elements. Although ROB excavations in churches were initially a consequence of destruction during the war and post-war building, at present the restoration of ecclesiastical buildings is in most cases the reason for archaeological research. Church excavations have become so numerous that it is justified to speak of some sort of specialization within the archaeology of the Middle Ages.[113] Because of their general presence in both the town and the country, churches are perhaps the least characteristic as an urban element. The urban character is still expressed in its spacious, voluminous dimensions: a town church had to house many worshippers. This may be illustrated by one example, the St Maartenkerk at Doesburg (Province of Gelderland).[114]

Archaeological research indicated that the present church was preceded by a basilica in tufa (outside measurements *c.* 30.00 × 17.30 m). The three aisled church had a tower on the west side; chancel and aisles ended in semicircular

109 By Jacob van Deventer (Fruin (ed.) 1916–24).

110 The earliest illustration, by N. Geilkerck, dates from 1616 (Emmius 1616).

111 Kuyper 1865, Municipality of Stavoren.

112 Halbertsma 1964, 259.

113 Since its foundation the ROB has executed many church excavations; see Mank–Loeb 1972.

114 Halbertsma 1968; Ter Kuile 1958, 59–65.

apses. Presumably the building was erected shortly after 1235, but this is uncertain. The church was rebuilt on a much larger scale from the end of the fourteenth century onwards (dimensions now approx. 69.00 × 26.50 m) in brick with partial use of tufa. The rebuilding was carried out in an unusual way: from west to east, so that the old tufa church could have remained permanently in use during building operations. The new church also acquired a tower, west of its predecessor, built into the body of the church. The new basilica was eventually completed sometime between 1517 to 1521. The new edifice now had a 5/8 chancel and square-ended aisles.

A group of religious buildings typical for the town was formed by the friaries of the later Middle Ages. They were introduced by the mendicant orders since the 13th century. The monastic lands occupied relatively large areas compared to the limited size of most medieval towns. They were usually situated out of the centre and near the town walls, where unbuilt sites were still available. Sometimes sites were also found in the middle of the town, especially in those cases when terrain was donated to the friars. Preaching was one of the main tasks of the mendicant orders; consequently, their conventual churches were usually large and spacious. The communities of friars often played an important part in medieval urban society; meetings of the town council and the guilds were frequently held inside the friary. The monastic buildings were therefore of direct importance to town life. In effect the archaeological research of friaries has as yet covered only some aspects. The large monastic grounds above-mentioned are seldom completely available for research.[115]

A relatively extensive excavation was executed by the ROB in the Dominican friary at Haarlem (Province of North Holland); this will be discussed later in more detail. At present an examination of the Dominican friary at Leeuwarden (Province of Friesland) is in progress. Finally, reference should be made to the many chapels and religious buildings in the town, associated with small monasteries, communities, almshouses, and hospitals. Some of these were either completely or partly examined. As was the case with the churches, the ground plans of the chapels differ so little from their rural counterparts that they can hardly be called urban by the external form.

On the contrary, buildings used by the town government, that is, town-hall, market hall, and other public buildings, may be called typically urban. One of this group, the house of aldermen at Axel (Province of Zeeland) was partially excavated by the ROB[116] A small section of a hall running north-south was found; to the south side was a conglomerate of additions, among which were two barrel-vaulted cellars. There were various but barely distinguishable building periods. The remains were in such a poor condition that the identification with the historically known house of aldermen is a notion, although a strong one. The oldest remains dated from the end of the fourteenth century; the final dating concurs very well with the period around A.D. 1588, the year when the hall was demolished.

The castle in a town may also be considered as one of the urban buildings. The aspect of the development of a town next to and in direct relation with an existing castle has been discussed above.[117] In those cases the relation was between one castle, usually of respectable size, and one town. The number of castles has multiplied sharply during the process of penetrating more deeply into medieval society. Particularly on the lower strata the castle diminished from a big stronghold towards a fortified house, which was still defensible but very often merely formed a status symbol for its owner. These houses are characteristic for country and town in the late Middle Ages. In the last case they developed into fortified town-houses which in the Netherlands can be found most frequently in the town of Utrecht.[118]

A similar house, a late medieval tower house, was excavated by the ROB in Franeker (Province of Friesland).[119] It consisted of a rectangular brick building: outside measurements 8.25 × 11.75 m, average thickness of the wall 1.20 m, brick size *(kloostermop)* 29.5/31 × 15/16 × 8.5/9 cm. Of the original west front 7 m of a standing wall had remained as a part of a later addition. The entrance door was more than 3 m above the old ground-level; there is every reason to consider this door to have been the only entrance to the tower. The entrance could be covered by a system of slits and a kind of machicolation built inside the wall. Liquids could be poured through the wall from the parapet walk via the machicolations with the opening in the wall 1.50 m above the door. The openings were 1.10 m high and connected to the parapet walk by

115 Many changes in usage have taken place since the secularization in the Reformation.

116 Trimpe Burger 1967, 43–46.

117 See p. 374.

118 Temminck Groll 1963, 11 ff.

119 Halbertsma 1973.

brickwork ducts 0.50 m long. The parapet walk probably had a crenellation into which the slits were built. It may be concluded from the levels of two floors of which the remnants were found right above each other inside the building that the tower must have been at least 8 m high.[120] The floors belonged to a room at ground-level – although walled in on all sides, it was not a cellar. The building could not be dated by the size of the bricks because this type of brick has been in use for several centuries. The machicolations, however, indicate a construction of shortly after the second half of the fourteenth century. It is known from historical sources that the tower, at the beginning of the fifteenth century, came into the possession of the nobleman Sicke Sjaerda, called *hoofdeling* ('captain') in Franeker, and a powerful man according to Frisian standards. Reasons exist to consider this lord the builder of this tower, as was assumed by the excavator.[121] This type of tower is called a *stins* in the Frisian language, and because of its builder's family name the Franeker tower was called Cammingha *stins*.[122] The building with its elevated dwelling floor, exclusively accessible via an outside stair, with underneath a completely closed-off space (storage-room?) originated from the countryside, where the *stins* was the defensible brick house of a farm of considerable size, in Frisian called *state*. The combination *stins* and *state* occurred in several places in late medieval Friesland.[123] This combination, however, is also found elsewhere; the brick house, fortified or with only the idea of fortification, is then called a *stenen kamer*.[124] The Cammingha *stins* at Franeker is a good example of the filtration of this originally agrarian type of house into the town. Matters are much more complicated in the case of the ordinary medieval urban houses. To establish connections with the agrarian type of house much more town-centre research is necessary than has been done up till now in the Netherlands. Many traces of houses dating from the ninth century were found during an examination in the Polstraat, Deventer (Province of Overijssel). Parts of buildings of both wood and tufa were excavated, but the very brief, provisional report revealed nothing more conclusive about their nature.[125] Relatively early remains of wooden and tufa buildings were found during excavations at Tiel (Province of Gelderland). Although no dating of the latter was given in the excavation report, its age may be deduced from the fact that the foundations of a tufa building were intersected by some old burials.[126] The timber structure in Tiel gave some indication that it may have been a farm. A part of a farm dating from the twelfth century was also excavated; thick dung layers confirmed its agrarian use.[127] When such a feature is lacking it is difficult to make a definitive statement, especially in view of the incompleteness of many town excavations. At Sittard (Province of Limburg) a row of heavy posts alternating with lighter poles was excavated; this sequence is assumed to have represented the wall of a medieval house. The remains dated from the twelfth to the thirteenth centuries.[128] An example of the almost complete indefiniteness of small town excavations is the house 'De Moriaen' at 's-Hertogenbos (Province of North Brabant); the excavation determined only that an addition must have been built in the courtyard behind the distinguished patrician house during the Late Middle Ages, and that the addition must have been altered many times later on.[129]

Dordrecht (Province of South Holland) provided the ROB with the opportunity for research into a large town's redevelopment.[130] A series of houses from the fourteenth and fifteenth centuries situated along a side-street were excavated here. The street, initially perhaps only a footpath off the main street, became more important in the course of time and the buildings on it kept pace with this development. In fact, they were built in the backyard of the house on the corner of the main street; it is remarkable that the depth of the houses on the side-street did not exceed the width of this single plot (approx. 5 m). In this way shallow houses of identical width were constructed along the street, but with a changing length of minimal 5 m to more than 20 m. The small ones were almost square and are

120 See plan and reconstruction by W.J. Berghuis in Van der Molen 1971, Fig. 2 and Fig. 8 (p. 45).
121 Halbertsma 1973, 38.
122 See Van der Molen 1971 for the complete history of the Cammingha-*stins* up to the present day.
123 Spahr van der Hoek 1962.
124 Meischke 1969, 66 ff; Van Regteren Altena–Sarfatij 1969, 215–221.
125 *NKNOB* 1949, col. 49.
126 ROB excavation south of the Caecilia Chapel (*BROB* 1950/22, 3).
127 ROB excavation in the Ambtmanstraat (*BROB* 1950/12, 23–24; Glazema 1950, 23).
128 *Opgravingsnieuws* (Excavation news) June–August 1955.
129 Renaud 1962a.
130 Provisional reports: Sarfatij 1972 and the publications in *NKNOB* 1968, 1969, 1970, and 1971; a definite publication is in preparation.


Kruiswegg
Jansweg
Sint
Kruisstraat
Zijl
Straat
BEEK
Bartelorisstr
Jans
straat
Sint
Grote
Markt
a
b
c
Damstr.
Koningstr.
Houtstr.
Veerstr.
Korte
Veer
SPAARNE
Kleine Houtstraat
Houtstraat
straat
Nieuwe
1
2
3
4
5
6
0
300 m

known as *cameren* in many late medieval towns.[131] Building, however, did not develop consistently but went ahead with leaps and bounds, after which the gaps were filled in. Centuries of habitation had brought about great changes in the interior of the houses: the positions of narrow side walls were shifted occasionally, changes which resulted in a chronology of lengths in one and the same house; sometimes there was also a partial or complete rebuilding with foundations on the original walls. Yet there were a number of constants in these houses which stress their coherence. First of all there was the narrowness which was restricted by the width of the plot; a result of this was that all houses were unaisled and consisted of two rooms at the most. Presumably most of the houses had one floor. The upper part of the building was perhaps partially or completely made of wood, the material used for the lower part was always brick. All in all, these houses may be called typically urban; there is nothing which could indicate an agrarian origin. This origin did emerge in Amsterdam where houses were found from the same period; their two-aisled form shows evident relations with the surrounding countryside.[132] Dordrecht was much more urbanized than Amsterdam during the fourteenth and fifteenth centuries, but it is possible that at some places in Dordrecht characteristics of vernacular buildings will be found also. Continued archeological research in this town will have to indicate this.

The last elements of the medieval town which will be discussed are the elements of public character, such as the town gate and wall, moat and port, insofar as they were examined by the ROB. In Geervliet (Province of South Holland) the foundations of a gate called Landpoort were examined; the gate appeared to have consisted of a simple rectangular building with a passage in the middle.[133] The gate called Kamper Buitenpoort in Amersfoort (Province of Utrecht) was more complicated; there the gate itself, known since 1427, was a rectangular building in the town wall; the abutments and arches of the connecting bridge across the moat were found on the outside.[134] At the end of the sixteenth century the gate was incorporated in the town's new fortifications. Parts of town walls are occasionally uncovered during general building or construction work. Thus part of the town wall of Hardenberg (Province of Overijssel) was excavated by the ROB.[135] It appeared to have been constructed with iron-stone. On the outside the slope of the moat, afterwards completely filled up, could be traced. Comparable excavations were executed at Sittard[136] where the town wall consisted of marl blocks. The profile of the downward course of the moat slope was noticed here as well. Investigation of long phenomena such as walls and moats is usually limited to a few sections. This is also the case with harbours. A trench dug into the filling of the Oude Haven at Medemblik (Province of North Holland)[137] showed that this harbour initially had a depth of over 6.5 m. The width remained unknown because only one side could be examined. As is often the case, the port was originally a natural stream, whose banks were made suitable artificially for harbour activities. It could be established that after the earliest occupation at Medemblik in the ninth century, and certainly since the thirteenth century, the banks were reinforced with posts and planks to provide mooring places for ships. The bank itself was raised during its lengthy use, so that an elongated terp, a so-called *walterp*, was formed along the harbour. The preliminary report compares the situation at Medemblik to the harbour works in the Voorstad at Staveren, the opponent on the other side of the Zuiderzee. The development of the harbour in Medemblik, however, went much more in vertical direction than in Staveren.[138] Additional research will have to be carried out at Medemblik to clarify the importance of this medieval port.

◁ Fig. 14 Haarlem: Town Centre. a. Dominican Friary; b. Counts' Hall; c. Grote Kerk. 1. Conventual grounds; 2. Water; 3. Subterranean Course of the Beek; 4. Thirteenth-century Town Wall; 5. Town Wall *c* 1550; 6. Sand-ridge of the Old Dunes

THE DOMINICAN FRIARY AT HAARLEM (PROVINCE OF NORTH HOLLAND)

The buildings which house the present town hall of Haarlem incorporate part of the remains of the Dominican friary that existed in Haarlem from the thirteenth to the

131 Meischke 1969, 83–85.
132 Van Regteren Altena 1968, 126–133.
133 Hoek 1968, 83 and 86.
134 Halbertsma 1965.
135 Renaud 1962b.
136 Renaud 1961.
137 Halbertsma 1971.
138 See pages 393–394.


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2
4M

sixteenth centuries. Some archaeological observations were made while the town hall was being restored,[139] when it was possible to investigate part of the old church and fragments of other monastic buildings. A part of this paper is devoted to the position of the friary in the medieval town. Ever since their foundation in the thirteenth century the mendicant orders were closely associated with towns and had a great influence on many aspects of urban life. The archaeological investigation will deal with two features of the Haarlem friary: its situation in the town and its building history.

Introduction

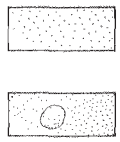
The medieval centre of Haarlem (fig. 14) lies on one of the ridges of the Oude Duinen (the Old Dunes), a sandy deposit running parallel to the coast. An old road running along the dune ridge and a waterway, the Spaarne, due east of the ridge both serve to connect north and south. This river was originally the drainage stream for the vast peaty area behind the sandy coastal barriers, which were enclosed by two branches of the Rhine delta: the Oude Rijn in the south and the IJ in the north.[140] During the Middle Ages the Spaarne was an important connection with the IJ, and thus also with the northern part of the county of Holland, and even with Friesland. Haarlem began where the land route and the waterway converged. The oldest record of Haarlem dates from the tenth century, but the exact location of the first settlement is still a point for discussion. It could be along the land route on top of the ridge, because an early medieval find was made there (*i.e.* on the Grote Markt), but difficulties in stratigraphy suggest that this find belongs to remains of a settlement elsewhere.[141] Whatever the case, it is certain that the first settlement at Haarlem did not have the character of a town. It was not until 1245 that Haarlem was granted municipal rights.[142] It presumably did not expand until after the middle of the thirteenth century when it occupied almost the whole breadth of the Oude Duinen ridge.[143] As will be seen, the distribution of finds lends archaeological support to this historical picture.

Land belonging to the counts of Holland lay within the boundaries of the thirteenth-century town. It was situated on the west part of the ridge near the junction of two roads: the above-mentioned road, called Heerweg, to the east, and Zijlweg which crossed it to the north. This area was bounded on the south by a ditch, the Beek, which was probably dug through the ridge during the first half of the thirteenth century to drain the peaty basin to the west into the Spaarne.[144] To the east the counts' property bordered a square, formerly 't Zand, now called the Grote Markt (Market Square). The counts' hall, the Gravenzaal, still stands on the square, and is now part of the town hall. This building, however, dates from the middle of the fourteenth century at the earliest, and its building period is related to the town fires of 1347 and 1351, during which an older hall was destroyed. Presumably shortly after the new house was finished, but definitely before 1388, the count donated it to the town, which has used it as town hall ever since.[145] Before that time, the counts of Holland allowed the Dominicans to build a friary on the site behind the hall. The year of its foundation is unknown, but it probably took place *c.* 1290 during the time of Count Floris V (1256–1296).[146] What did the early Dominican foundation look like? How did the monastic buildings develop? What was the older hall(s) like? Excavation enabled at least some of the points to be clarified.

Traces of timber buildings

Traces of occupation were found down to about 1.50 m below ground-level. The occupation layers started at approximately 0.25 m + NAP, immediately above the Old Dunes ridge (fig. 17). The top of the sand was covered by a 20-cm-thick layer of disturbed, sandy soil, into which a number of post-holes had been dug. The post-holes were

◁ Fig. 15 Haarlem: southern part of Pit c; timber buildings.
1. Post-hole Phase 1;
2. Post-hole Phase 2



139 Between 1954 and 1958 by the Dienst Gemeentewerken, Haarlem; more extensive excavations by the ROB in 1956. A first publication by H.E. Phaff in Royaards *et al.* 1961, 124–134.

140 De Cock 1965, 18–20.

141 De Jong 1973, 240.

142 Temminck 1969, 118.

143 *Cf.* De Jong 1971, enclosure (map). The oldest plan was made by the famous cartographer Jacob van Deventer.

144 De Jong 1971, 135–137 and 145–146; the Beek may have also been a drain for the new town – its water strongly polluted with domestic refuse makes this plausible.

145 Royaards *et al.* 1961, 11–12.

146 Henderikx.

few in number and formed no recognizable pattern (fig. 15). Finds from the occupation layer and from a few post-holes date the first sign of habitation to about the middle of the thirteenth century, possibly within the first half, but definitely not before 1200.[147] It should be added that no earlier finds occurred as intrusions in later contexts.[148]

The earliest occupation material was covered by a thin burnt layer at *c.* 0.45 m + NAP. Such raising of the ground surface by 15–20 cm may have been connected with one or more new timber structures, for which large post-holes, 50–80 cm deep, were dug through the burnt layer; the level to which these post-holes belong was destroyed at a later period. The new timber structure must have been an impressive building, even though the ground plan is far from complete (fig. 15). On the one hand the area available for excavation was far too limited, on the other the ground was severely disturbed by later digging. General features only could be established. It appeared that the building had an almost true north–south orientation. Only the northern gable was found; it consisted of two parallel rows of posts, of which the inner row had an interpolated post-hole at the eastern and western ends. This pattern may represent the end of a three-aisled building, although the few lines of post-holes in the interior which could be traced do not form good evidence. The building must have been over 8 m long – the row of post-holes along the south wall of the excavation-trench cannot have been a gable. The width could not be established. Finds from the post-holes and from above the burnt layer suggest that this second wooden construction dates to the second half of the thirteenth century.[149]

The post-holes were then covered by a layer of earth used to raise the ground-level. Although its thickness could not be determined precisely, as its top was mixed with the disturbed recent upper layer, it must have been considerable. The traces of new structures in this layer suggest that the height must have been increased by 0.50–1.00 metre.[150]

Brick structure

The new structures consisted of brick buildings of the Dominican friary. Robber trenches of the east end of the church were found in the heightening layer on the site of the above-mentioned timber constructions. There is hardly any information about the middle part of this church, because of modern building development in the area. The west front, of which the foundation still exists, was available for archaeological examination.

The external measurements of the church were *c.* 51 × 17 m, while the longitudinal axis deviated slightly north-west–southeast from true orientation (fig. 19). The east and west ends of the church imply that it consisted of a nave and one north aisle; both chancel and aisle ended in 5/8 apses. The position of the north wall of the church could be deduced from small parts of the wall of the north apse and the north corner of the west front. A line between the junction of the two apses and a buttress at the inside of the west front indicated the position of the arcade separating nave and aisle; investigation on the site of the most westerly pillar, however, only produced an area of debris (fig. 19: Pit B). The suggested internal arrangement was, however, supported by the presence of traces of pilasters on the north side of the partly extant south wall of the church, which is now incorporated in the north side of the cloister. Investigation established two places with protruding courses of brick which were almost completely cut away to foundation level; from these foundations it appeared that the pilasters must have been at least 1.40 m wide and have projected 0.62 m at the most. In view of the 5.75 m intervals between the pillars, a reconstruction of a church with seven bays is suggested.[151]

A narrow annex parallel to the south side of the church gave at first sight the impression of a square-ended southern aisle. In that case the south wall ought have been an arcade; no indication of this was found, however, on the existing wall, especially on the former exterior. Moreover, it appeared that the west front of the church did not extend beyond the corner of the south wall of the church. The annex to the southeast part of the church must therefore have been a part of the complex of monastic buildings which had lain here. The depth of the foundations (0.05–0.45 m + NAP), and the size of brick used (28/30 ×

147 The most remarkable find from this layer is a rim fragment of Andenne ware from period IIIa (*c.* 1225–1300) (Borremans-Warginaire 1966).

148 The lack of Pingsdorf, Paffrath, early Andenne, and local thin-walled cooking-pots is surprising as this is the usual association of finds in the Netherlands during the second half of the twelfth century.

149 The finds consist of many fragments of thick-walled globular cooking-pot of hard fabric and decorated with brush strokes plus some early Siegburg ware.

150 This also appears from the deepest burials (see p. 413).

151 Royaards *et al.* 1961, fig. 4.

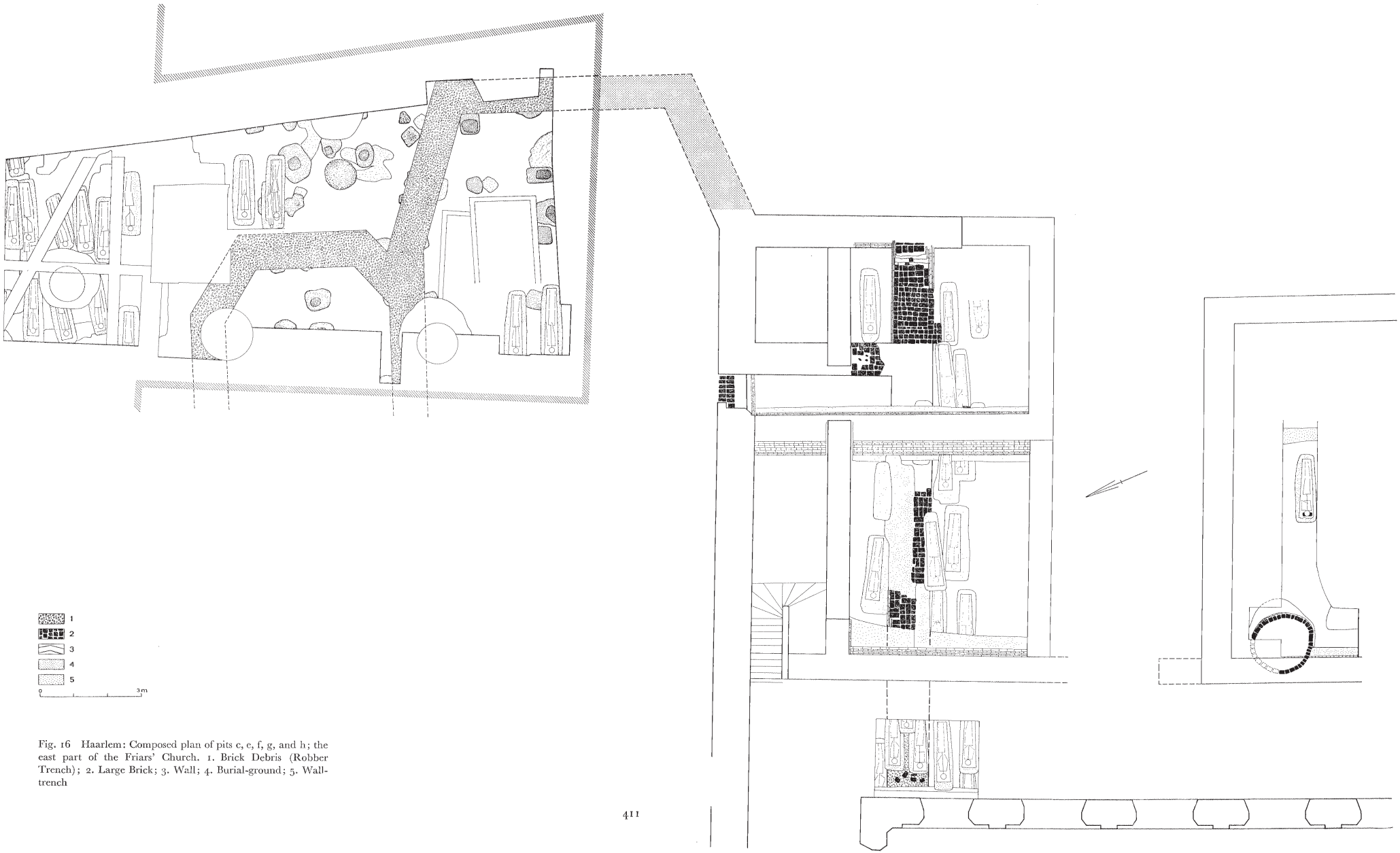


Fig. 16 Haarlem: Composed plan of pits c, e, f, g, and h; the east part of the Friars' Church. 1. Brick Debris (Robber Trench); 2. Large Brick; 3. Wall; 4. Burial-ground; 5. Wall-trench

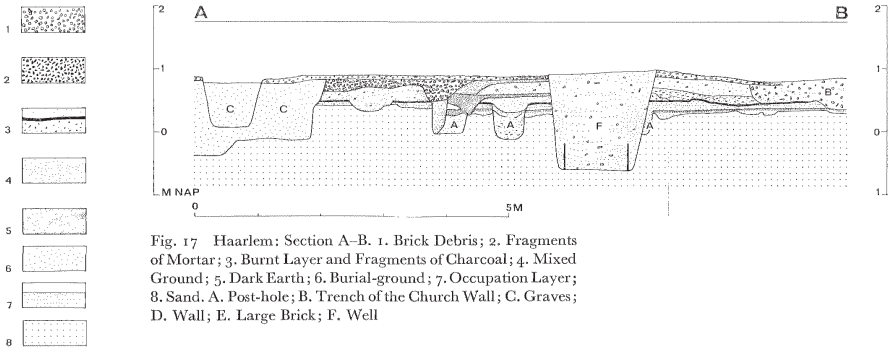
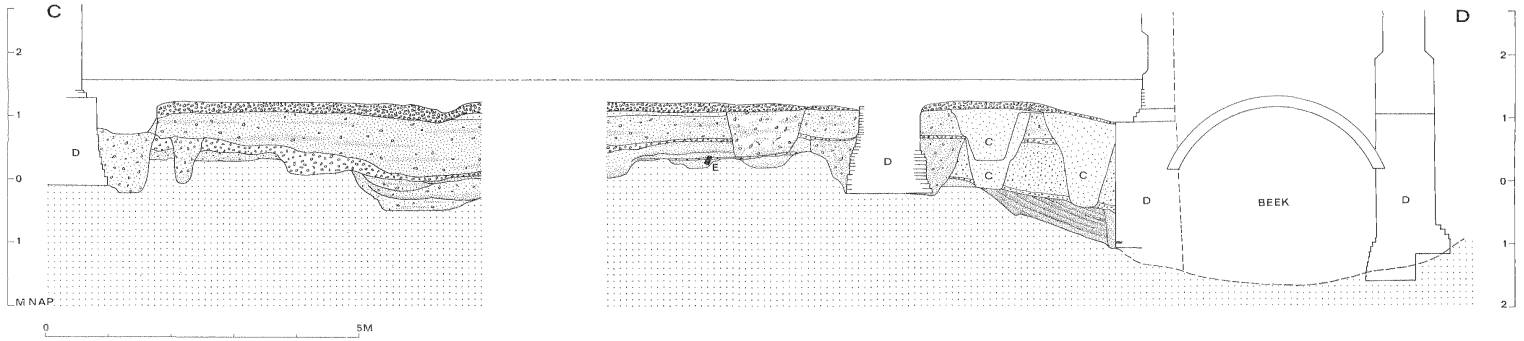


Fig. 17 Haarlem: Section A–B. 1. Brick Debris; 2. Fragments of Mortar; 3. Burnt Layer and Fragments of Charcoal; 4. Mixed Ground; 5. Dark Earth; 6. Burial-ground; 7. Occupation Layer; 8. Sand. A. Post-hole; B. Trench of the Church Wall; C. Graves; D. Wall; E. Large Brick; F. Well

Fig. 18 Haarlem: Section C–D (Same legend as Fig. 17)



$14/14^5 \times 6^5/7^5$ cm) for church and annex, prove that the latter was part of the original brick construction. The differences in building techniques present in the sparse remains indicate that the construction must have been phased. The phases could not be established because of the remote chances for investigation.

Mutatis mutandis, this is also the case with the building remains found further to the southwest, on the site of the present Pandhof (the cloister). Archaeological observations (fig. 18) revealed that the foundations of the inner square of the present arcade partly consist of brick of the above-mentioned size. The question whether perhaps (part of) the Pandhof was also part of the original brick construction must be left unanswered, again due to the limitation of the archaeological investigation. It became clear, however, that the most southerly appearance of this building material is in the foundation of the present colonnade of the refectory, which came into existence during a much later renovation. This foundation of large bricks went quite deep (to 1.12 m – NAP), and may be considered to have been the initial retaining wall along the Beek, the ditch which enclosed the whole area on the south side. A building level (0.60 m + NAP) associated with this wall was interrupted by a new wall some metres to the north. This wall and the retaining wall along the Beek together formed the southern corridor of the cloister during a second construction phase. The renovation of the monastic buildings, during which the refectory was built, was probably related to the topmost layer of debris (at 1.25 m + NAP).

The building remains suggest that the plan of the friary to the east, west, and south stayed largely unchanged since the first phase of the brick construction. The cemetery wall from the first phase lay along the northern extension of the west front of the church, and there were also numerous burials northeast of the church. This implies that there was also little change in the north.

Burials occurred in different places and in many superimposed layers. Although the main cemetery (at least the one containing the largest number of graves) was situated north of the church, the inside of the church was also, albeit infrequently, used for burials. Graves were found south of the church as well; these must be associated both with the annex from the first building period and with later constructions on the same place, namely, the sacristy and the library. The walls of the latter two newer buildings overlay the oldest graves (fig. 16). The greatest depth registered among these graves corresponded very well with the deepest (= oldest) graves north of the church, namely, 0.25 m – NAP. If an average burial depth of 0.90–1.20 m is assumed, then the floor-level of the friary belonging to the first building period may be put at 0.65–0.95 m + NAP.

Many changes and renovations took place during the centuries of the friary's existence, in the course of which the domestic buildings in particular were drastically altered. In this respect attention is drawn to the changes mentioned in the southeast annex to the church, the new layout of the Pandhof, the vaulting and enclosing of the Beek necessary for the construction of the refectory, and so on. Archaeological investigation also contributed to this complicated building history. The General Restoration Plan should be consulted for the remains of buildings of the friary still standing above ground-level.[152]

There is archaeological evidence for conclusions of some importance: (1) The area which has been investigated implies that there have been no radical changes in the size of the property from the 0.2 hectare which the first brick buildings covered. (2) The position and shape of the friary church, pulled down in 1579, are known, while some information about the appearance and shape of other monastic buildings was also gained. (3) Finally, the investigation also supplied important information for dating the Dominican friary in Haarlem. Because of the date of the non-monastic timber building which preceded it, the brick church cannot be dated earlier than the second half of the thirteenth century. The lack of early fourteenth-century finds among the friary material is remarkable. Although these were often found in disturbed contexts, the oldest finds from the upper layers appear to date from the second half of the fourteenth century. Unfortunately, the size of the bricks is hardly helpful for dating. The entire first phase of the brick building was executed in bricks measuring $28/30 \times 14/14^5 \times 6^5/7^5$ cm, a size which, with some marked exceptions, is not encountered before 1300. They were used, however, throughout the fourteenth century and also into the fifteenth century. When all the archaeological indications are put together, it may be concluded that the oldest brick phase of the monastery complex dates from shortly after 1350.

Conclusion

The investigation showed that the remains of settlement in the area of the town-hall complex in Haarlem are not earlier than *c.* 1250. One may wonder if there is any direct connection between these early remains and the granting

152 Royaards *et al.* 1961.

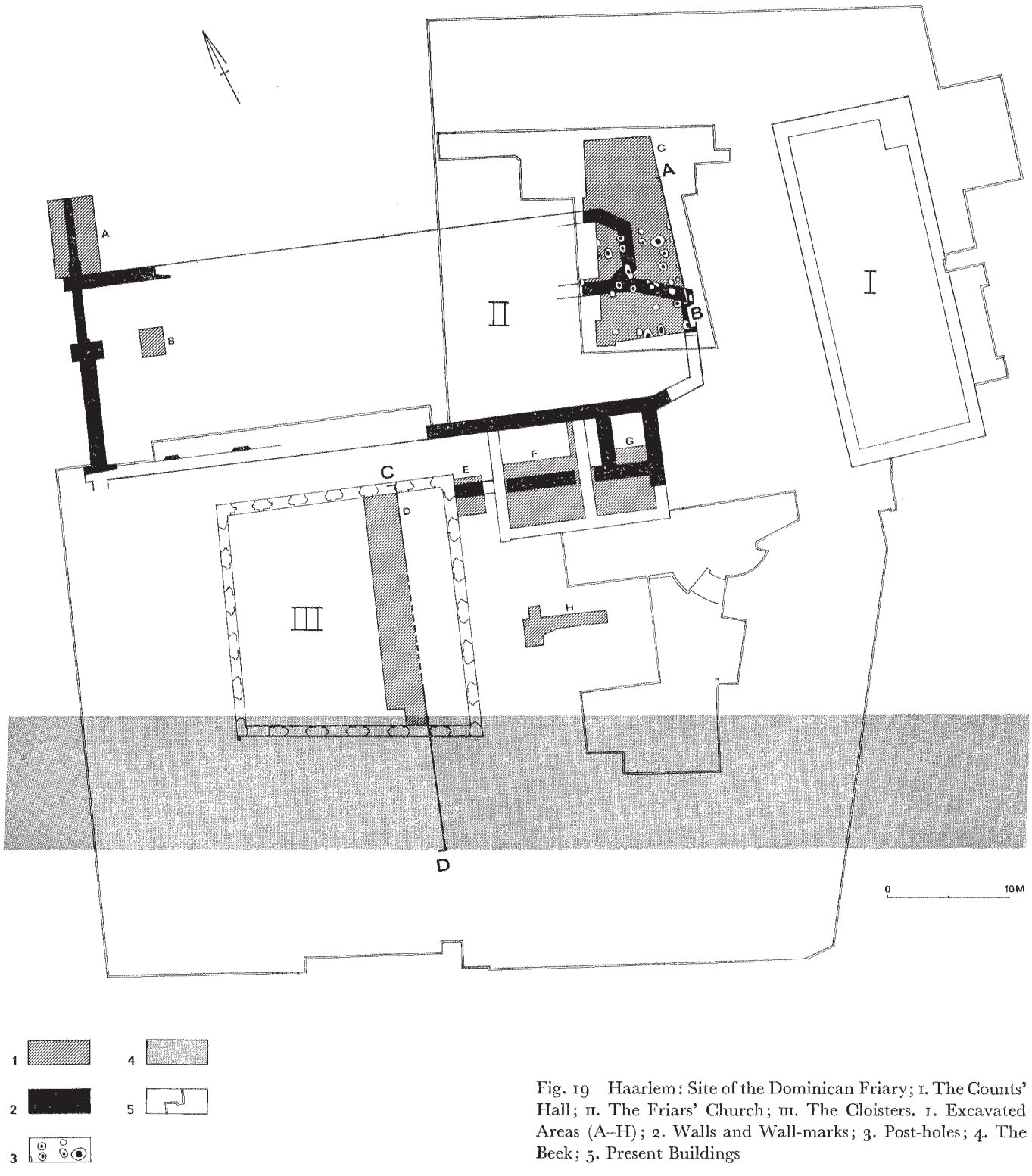


Fig. 19 Haarlem: Site of the Dominican Friary; I. The Counts' Hall; II. The Friars' Church; III. The Cloisters. 1. Excavated Areas (A–H); 2. Walls and Wall-marks; 3. Post-holes; 4. The Beek; 5. Present Buildings

of a charter in 1245. The oldest settlement was situated on top of the sand of the Old Dunes ridge upon which the centre of the old town was built. The scanty traces, some post-holes, are insufficient evidence to establish the nature of the occupation; they may indicate the first residence of the counts of Holland, who owned property there. The habitation was ended by a fire in the second half of the thirteenth century.

After the ground was raised, a new timber structure, presumably large and heavy, was erected; this was only partly examined (fig. 19). The building dates from the second half of the thirteenth century and may have been a wooden predecessor of the church or one of the domestic buildings of the Dominican friary, which was founded in Haarlem *c.* 1290 on the property of the counts of Holland. The plan of the post-holes, however, shows no similarity to the ground-plan of a church; moreover, the post-holes seem too large to have served another kind of monastic building. To this can be added that the orientation of the building, almost due north–south is identical with that of the present Gravenzaal, which is situated in front of it at a distance of *c.* 15 m. Architectural evidence suggests a date for the Gravenzaal of not before *c.* 1350.[153] Some traces of previous buildings have been detected under the Gravenzaal,[154] but it seems quite improbable that the much smaller post-holes found there belonged to a wooden predecessor of the Gravenzaal. In our opinion, such a predecessor should be looked for further west where the large post-holes of the heavy building were found. A count's hall was constructed there in the second half of the thirteenth century; this was destroyed by fire around 1350. A supporting argument is found in the remarkable position of the Gravenzaal on the Grote Markt. The Gravenzaal juts out so far that it seems to obstruct the passage of traffic along the main road leading along the dune ridge. But this could not have been the case. The archaeological evidence found underneath the Gravenzaal indicates some building in this place in a rather early phase; it must have stood right on the border of the count's land. One may suppose, however, that the count's hall would have stood originally at some distance from the street, further back in spacious grounds.

It is known that serious fires ravaged the town in 1347 and 1351, during which the timber hall, among other things, was destroyed.[155] Traces of these fires were not found during the excavation, since the relevant layers were completely disturbed during later infillings and building. After the fires there was a change in topography. The Gravenzaal was rebuilt in brick, but this time 15 m east of its predecessor, that is, just on the border of the count's land. The reason for this change is not obvious. A plausible explanation, however, would be the count's wish to create more space on his lands for the extensive building – or rebuilding? – of the Dominican friary.

Apparently, the old friary was also destroyed during the fire of 1351.[156] As no remains of the first friary were found in the excavations, we are inclined to think that it must have lain on the spot of the unexcavated middle part of the new church, which is due west of the former hall. Of course, this is mere supposition, but, again, the shift of the Gravenzaal eastwards so as to acquire more space would be explained very well by this. Moreover, at the west side the area for the new construction of the church was bounded by a ditch. In any case, the area was raised considerably before rebuilding took place. In view of a number of observations made further east at the Grote Markt, where similar raising of levels was discovered, it could be concluded that during the fourteenth century this and other sections of the town were raised as part of a specific plan.[157]

The new church had two aisles. There is some pictorial evidence which supplements the information obtained from the excavations. A panel painting by the Meester of Bellaert, dated *c.* 1460, shows the chancel with the two aisles of the church, while a bird's-eye view by Thomas Thomaszoon from 1578 shows the church in its entirety just before it was demolished.[158] The excavation supplied only a few features of the ground-plan. With measurements of *c.* 51 × 17 m the Haarlem church is one of the smaller churches of the Mendicant Friars.[159] The main

153 Royaards *et al.* 1961, 11.

154 *Verslag*... 1971.

155 Therefore not *c.* 1100, as reported by Phaff, and consequently also Royaards (Royaards *et al.* 1961, 126 and 11 respectively), and Temminck (1969, 117). The first excavation report (*NKNOB* 1956, col. 195) gave the correct, thirteenth-century dating of the find material.

156 Although only through a very apocryphal source (De Jonghe 1717, 59).

157 De Jong 1973, 245–246.

158 Royaards *et al.* 1961, 19–27.

159 The average measurements of friars' churches are *c.* 60 × 20 m; there are, however, some much larger ones and also some much smaller than the church in Haarlem (*Cf.* Oberst 1927, 29 (Tafel II)).

outlines agree very well with the ground-plans of many other friary churches, especially those which were built north of the Alps during the thirteenth and fourteenth centuries.[160] The characteristics of Haarlem, such as the two aisles, the hall church, the 5/8 apses of presbytery and aisle, the lack of transept and tower are very often encountered in the group of churches of the mendicant orders. The hall church appears to be the most common type of friary church in the northern half of Germany, the region that more or less coincides with the Dominican province of Saxonia.[161] The greatest part of the present territory of the Netherlands also belonged to this province, that is the part north of the Rhine and the area of the islands in the southwest.

Two other Dominican hall churches with two aisles are known in the Netherlands. The Dominican church in Leeuwarden (Province of Friesland) probably dates to the thirteenth century. It also has one aisle to the north; the chancel, however, ends in a 7/12 apse, while the form of the original end of the aisle is (still?) unknown.[162] The Dominican church in Nijmegen (Province of Gelderland), especially in its second phase of building, shows a remarkable similarity to the Haarlem church. This was also a hall church with a narrow aisle to the north; here again a 5/8 apse in the presbytery and a square-ended aisle. The external dimensions of *c.* 47 × 17 m are also similar; the nave was divided into eight bays.[163] The date of this period is not known exactly, but there are indications of great building activity which resulted in the construction of a new church during the last decades of the fourteenth century.[164] The size of brick used in Nijmegen does not provide evidence for an exact date either, but again the resemblance with Haarlem is remarkable. Both churches may well have been built after 1350. The other monastic buildings in Haarlem lie as usual south of the church, and will be discussed briefly. An annex was built against the southern side of the church, either at the same time as the church or shortly after. Its purpose is not easy to define. Presumably this annex passed westward into the northern cloister-walk, which was also built against the church. Some archaeological evidence suggests that the first building period of the cloister coincided with the construction of the church. The south wing of the cloister, along the canalized Beek, was initially also the southern boundary of the monastic precinct. There was no archaeological information about the other monastic buildings belonging to this phase of construction of the Dominican friary.

Finally, our investigations have shown that in the thirteenth century the town of Haarlem developed out of the original ninth-century *villa* situated on the ridge of the Old Dunes close to and along the Spaarne. The town expanded in westerly direction until it covered the entire sand ridge. The granting of a municipal charter in 1245 was the official recognition of the completion of this development. A large area of the new western part of the town belonged to the counts of Holland; remains of settlement from the middle of the thirteenth century were found in these areas. At the end of this century, *c.* 1290, some of this land was put at the disposal of the Dominicans for building a friary. No traces were found of this first friary, but there was some evidence of a timber building dating from the same period, which may have been the first residence of the counts of Holland. Both the secular and the religious buildings must have been destroyed by fire around 1350, after which both were rebuilt in brick. The counts' hall was shifted to the east to provide more room for the new friary. This new residence was the present Gravenzaal. The new Dominican friary was provided with a two-aisled hall church, which was demolished in 1579, after the Reformation. The monastic buildings have been frequently rebuilt since the thirteenth century; many of these structures, the Gravenzaal included, are now part of the town hall complex. This piece of land – owned by the counts of Holland, dismembered to accommodate a Dominican friary, and then handed over its entirety to the civic authorities – is still, as in medieval times, the heart of Haarlem.

160 Krautheimer 1925; Donin 1935; Oberst 1927; Scheerer 1910; Konow 1954.

161 Krautheimer 1925, 130.

162 Halbertsma 1972, and through personal contacts; neither architectural nor archaeological investigations connected with the restoration have yet been finished.

163 Brunsting 1957.

164 Verkerk 1973, 22 ff. There was also an aisleless, undated, church before this one: it was largely absorbed into the north aisle of the new hall-church during the second building-period. The aisleless church, however, was a new construction on top of an older chapel, which was granted to the Black Friars, presumably in 1293, when the Dominican friary at Nijmegen was founded (Brunsting 1957, 145; Verkerk 1973, 12 ff).

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8 ABBREVIATIONS

BAI	Biologisch-Archaeologisch Instituut, Groningen
BKNOB	*Bulletin van de Koninklijke Nederlandse Oudheidkundige Bond*
BROB	*Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek*
NAP	Nieuw Amsterdams Peil (Dutch Datum Level)
NDV	*Nieuwe Drents(ch)e Volksalmanak*
NKNOB	*Nieuwsbulletin van de Koninklijke Nederlandse Oudheidkundige Bond*
OBO	G.J. ter Kuile, *Oorkondenboek van Overijssel; regesten 797–1350*, Zwolle, 1963–69, 6 Vols.
OBU	*Oorkondenboek van het Sticht Utrecht tot 1301*, 's-Gravenhage, 1920–59, 5 Vols.
ROB	Rijksdienst voor het Oudheidkundig Bodemonderzoek (State Service for Archaeological Investigations), Amersfoort

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