



Rural Habitation in the Area of the Texuandri (Southern Netherlands/Northern Belgium)

Nico Roymans, Ton Derks

► To cite this version:

Nico Roymans, Ton Derks. Rural Habitation in the Area of the Texuandri (Southern Netherlands/Northern Belgium). Michel Reddé. Gallia Rustica 1. Les campagnes du nord-est de la Gaule, de la fin de l'âge du Fer à l'Antiquité tardive, 1 (49), Ausonius éditions, pp.97-123, 2017, Mémoires, 978-2-35613-206-2. hal-03029626

HAL Id: hal-03029626

<https://hal.science/hal-03029626>

Submitted on 28 Nov 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution - ShareAlike 4.0 International License

Rural Habitation in the Area of the *Texuandri* (Southern Netherlands/Northern Belgium)

Nico Roymans and Ton Derks

*T*HE *TEXUANDRI* IN THE NORTH OF THE *CIVITAS TUNGRORUM*

This study is about Roman rural habitation in an area of some 100 by 100 km in the southern Netherlands and northern Belgium (fig. 1), a region that roughly corresponds to the sandy landscape enclosed by the rivers Meuse, Demer and Scheldt. This 'MDS area' is the southern-most representative of the series of Pleistocene sandy landscapes which are so characteristic of the Northwest European Plain. In the Roman period the MDS heartland was inhabited by the *Texuandri*, whose territory is defined on the basis of information from Pliny the Elder and several mentions of the early medieval *pagus* of *Texandria*¹. The *Texuandri* in turn were the northern-most subtribe or *pagus* of the *civitas Tungrorum*, with Tongres as its capital.

From about 1980 onwards, there has been an exceptionally high level of archaeological research in the MDS region, focusing on the period from the Bronze Age to the Late Middle Ages. It is now one of the best studied rural areas of the Roman empire. The locations of 1142 settlements and 175 cemeteries are currently known in the study region (fig. 2), and 88 rural settlements have been excavated more or less completely (fig. 3), making the MDS region invaluable for international comparative research of the Roman countryside. The aim of this study is to present a synthesis of over 40 years of Roman rural settlement research. Until a short time ago, the most recent survey was a study by Slofstra, published in 1991. In 2015 a new synthesis appeared as the final result of a regional research programme funded by the *Netherlands Organisation for Scientific Research* (Roymans *et al.* 2015). This paper summarises the outcomes of that research. After outlining the research perspective, it presents a general picture of Roman rural habitation, before looking in greater detail at the only excavated villa settlement in this region.

RESEARCH PERSPECTIVE: THE ARCHAEOLOGY OF A PERIPHERAL REGION

In the past few years our research group has studied the development of rural landscapes in the fertile east-west oriented loess belt running from the Cologne region on the Rhine, via Dutch Limburg and central Belgium into northern France.² These regions experienced a remarkable period of growth in the first two centuries AD, resulting in a dense network of small towns with market functions. These were the landscapes of agrarian success – or landscapes of opportunity, to use Mattingly's terminology (Mattingly 2006, 369, 522 ff.). These landscapes between Bavai and Cologne share several socioeconomic characteristics:

1. Plin., *Nat.*, 4.106; Theuws 1991, 318; Roymans & Derks 2015b.
2. Habermehl 2013; Jeneson 2013, and a series of papers in Roymans & Derks, ed. 2011.



Fig. 1. Location of the *pagus* of the Texuandri and the villa settlement of Hoogeloon within the *civitas Tungrorum*. After Roymans & Derks 2015a, 4, fig. 2.

high population densities, high agrarian productivity, a robust transport infrastructure, a well-developed network of central places and high consumption levels among rural populations, as reflected most notably in dense concentrations of Roman villas and a strong social hierarchy.

It is not the archaeology of these villa-dominated landscapes that is the focus of this study. Instead, we will examine the adjacent peripheral region to the north, inhabited at the time by the Texuandrian tribal group. Describing the study area as a peripheral region has an important heuristic function in that it alerts us to several key issues that determine how we organise and interpret the available data. The region is not studied in isolation, but in conjunction with and in contrast to the regions surrounding it. In the 2nd century AD our study region was characterised by:

- a limited agrarian productivity, centred on cattle husbandry;
- an underdeveloped transport infrastructure: the major communication routes all avoided the Texuandrian heartland and followed the Meuse and Scheldt rivers;
- a weak development of nucleated settlements with central place functions;
- low levels of consumption among rural populations;
- a limited social hierarchy; emphasis on communality.

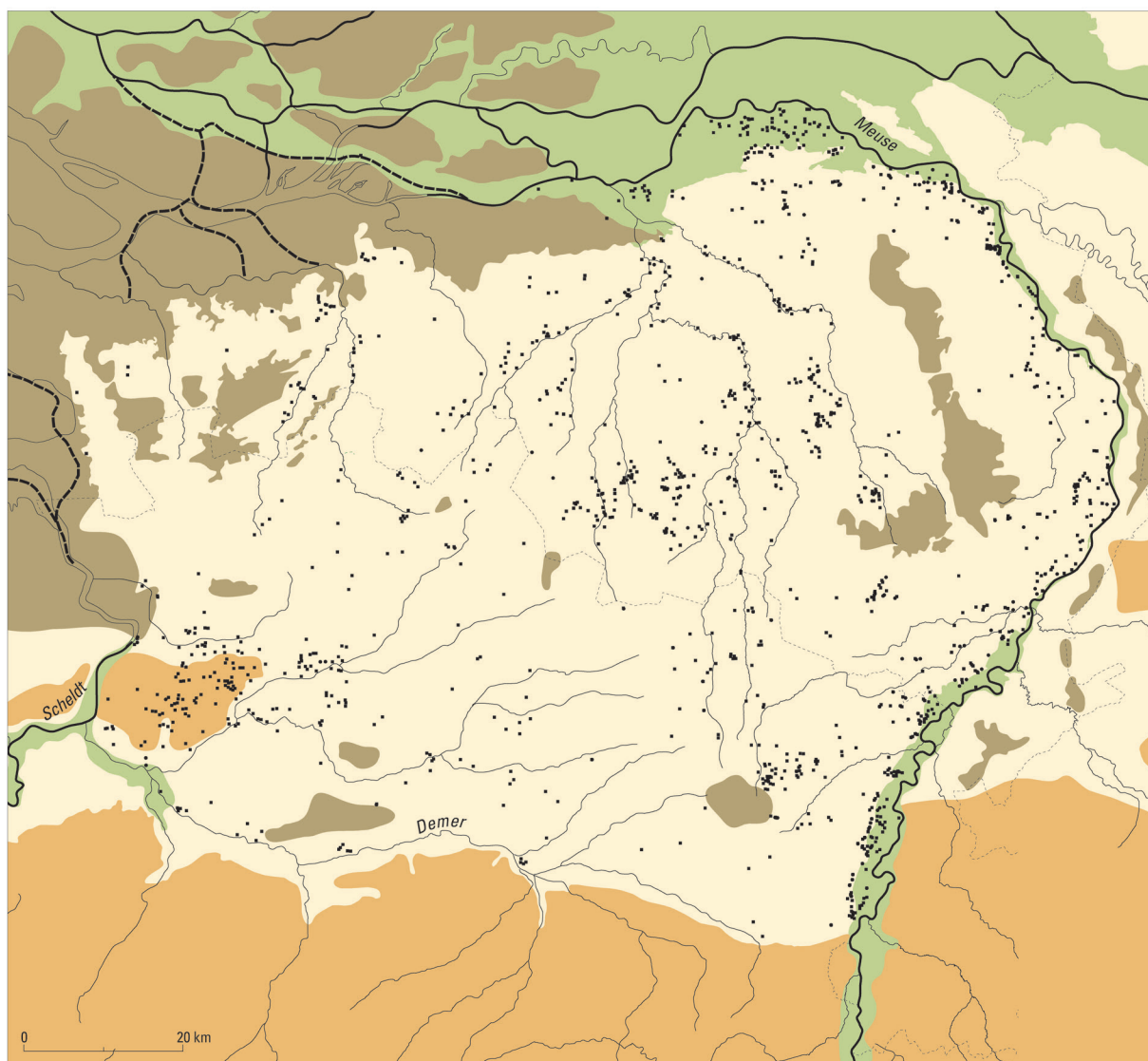


Fig. 2. Distribution of Roman sites in the Meuse-Demer-Scheldt area. After Creemers *et al.* 2015, fig. 1.
Brown: peatlands. Green: Holocene clay soils. White: Pleistocene cover sands. Reddish brown: Pleistocene loess region.

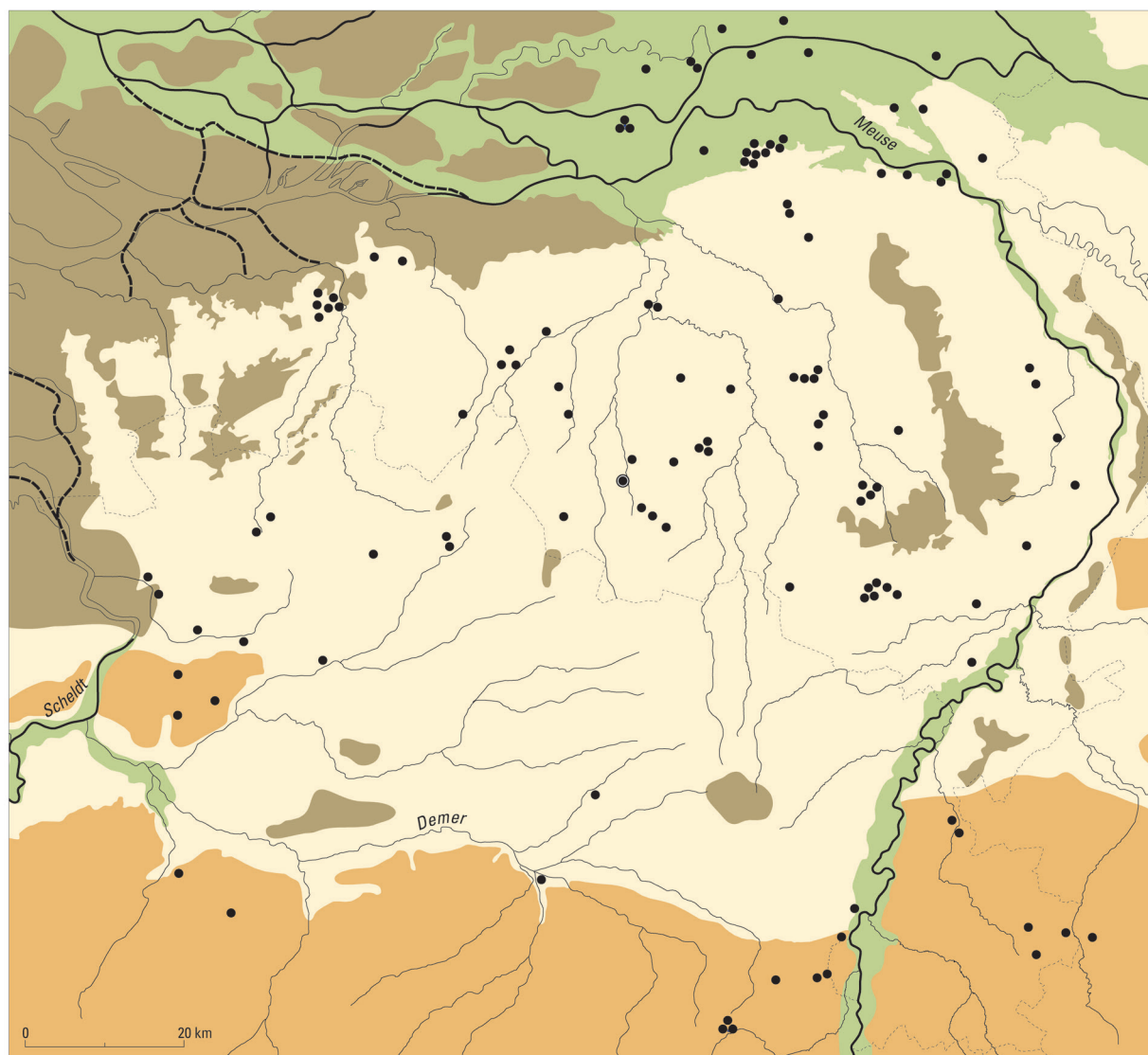


Fig. 3. Excavated rural settlements in the MDS area. Scale 1 : 900,000. After Hiddink & Roymans 2015, fig. 1.

The existence of peripheral regions is attested throughout the Roman empire, in both Italy and the provinces. They were inhabited by politically and economically weak communities and dominated by external power centres, the foremost for the Texuandrian region being the capital of the *civitas Tungrorum* at Tongres. Although generally neglected in academic studies, these peripheral Roman landscapes are coming increasingly under the spotlight. Examples of recent studies are the one by Dench on the Apennine region in Italy, by Mattingly on the Garamantes in North Africa, by Rippon on the Fenlands in Britannia, by Badan *et al.* on pastoralist groups in southern France, and by De Clercq on the territory of the Menapii in Gallia Belgica.³ Studies of this kind enable us to deepen our understanding of the process by which the territory of the Texuandri became politically and economically marginalised. By marginalisation we mean the process whereby regions or communities are relegated to an inferior position in relation to their neighbours. Marginalisation often results in a growing cultural gap between a peripheral region and its neighbours.

As peripheral regions become integrated into larger political entities, this often sparks processes of social differentiation. We then witness the emergence of elites who occupy an intermediary position in the asymmetrical relations between their own community and external power centres. It is from this perspective that we will examine the development of the peripheral villa settlement of Hoogeloon (see below).

SETTLEMENT RESEARCH IN THE TERRITORY OF THE TEXUANDRI

The many excavations of past decades have provided an impressive set of data about the material manifestation and development of rural habitation in the Roman period. The basic unit of habitation is the individual farmstead with its main element the long-rectangular byre house, containing a byre section and a living section under one and the same roof. The MDS region marks the southern boundary of this northwest European house building tradition, which can be traced from the Bronze Age. The average Roman farmhouse seems to have existed no longer than some 30 years, which means that there were many house generations within each settlement. We now have access to a fairly elaborate typochronology of farmhouses (fig. 4),

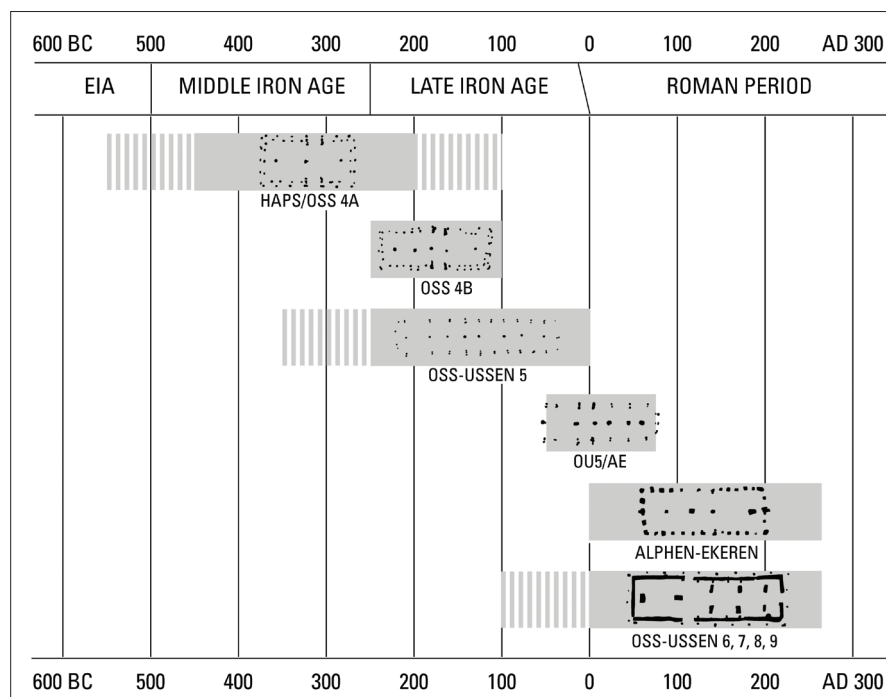


Fig. 4. The chronology of late prehistoric and Roman house types. After Hiddink & Roymans 2015, fig. 6. OU5/AE: Oss-Ussen 5 / Alphen-Ekeren.

3. Dench 1995; Mattingly *et al.* 2003; Rippon 2000; De Clercq 2011; Badan *et al.* 1995.

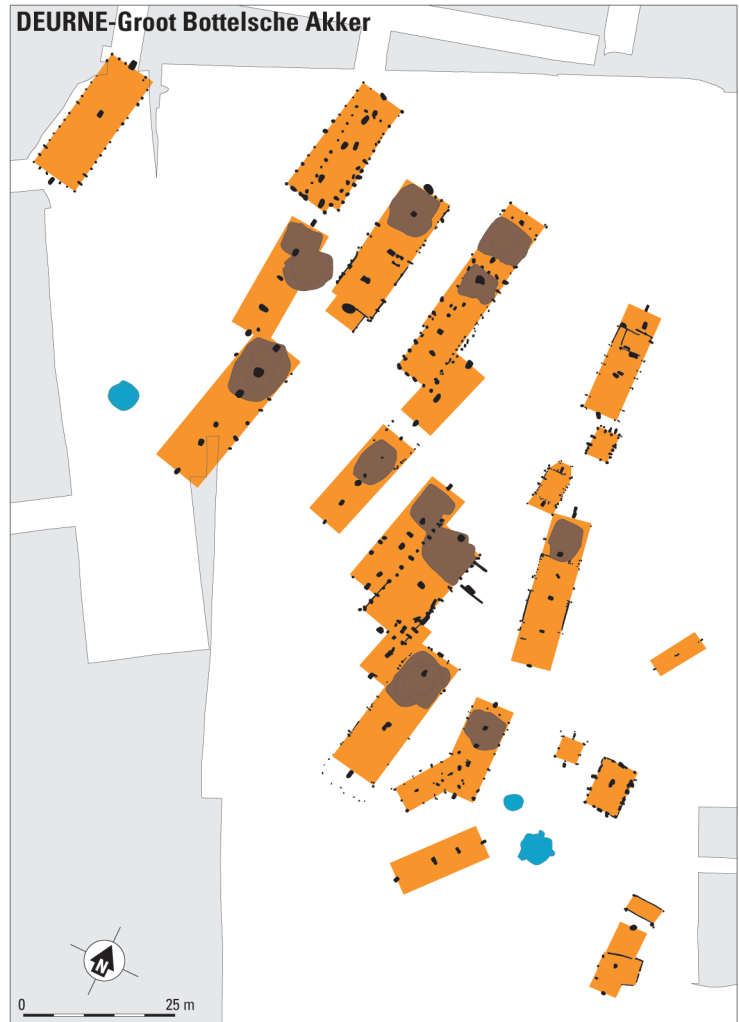
which enables us to give a first impression of the development of a settlement. Two-aisled houses of the Alphen-Ekeren type predominated during the Roman period, although other variants also occurred in the northern peripheral zone. Houses from the 2nd and especially the 3rd century often had deepened byre sections, probably related to efforts to raise manure production.

In the Roman period the average settlement consisted of a hamlet-like cluster of two to four farmsteads that often had the same east-west (or northeast-southwest) orientation. There were virtually no larger villages, and wells were often communally used by the farmhouses in a settlement. As for the classification of rural settlements, Slofstra's study from 1991 is still useful (Slofstra 1991). The vast majority of settlements belongs to the category of open settlements (fig. 5-7). Enclosed rural settlements are relatively rare, with that of Oss-Westerveld the best-known example (fig. 8). Finally, villa settlements were extremely rare. A few examples are known from the Meuse valley, but from the large interior zone of the MDS region we currently know of only the villa of Hoogeloon, which will be discussed below. Slofstra interpreted the classification of settlement types in a hierarchical sense. The question is whether that is correct. Since the publication of his study new examples of enclosed



Fig. 5. The settlement of Lieshout-Beekseweg Oost. Scale 1 : 1250. After Hiddink & Roymans 2015, fig. 14.
Blue: well. Dark brown: deepened byre section.

Fig. 6. The settlement of Deurne-Groot Bottelsche Akkers. Scale 1 : 1250. After Hiddink & Roymans 2015, fig. 13. Blue: well. Dark brown: deepened byre section.



settlements have been discovered which have no indications for the presence of local elites on the one hand,⁴ whereas the open settlement of Riethoven produced a remarkable set of early Roman imports on the other hand (Van Kerckhove 2015, 261-263). The differences between open and enclosed settlements seem to have been overrated (Hiddink & Roymans 2015, 74 ff.).

The almost total absence of villa sites can be explained by the limited opportunities offered by the sandy landscapes to generate wealth by arable farming. While the region is a landscape with limited surplus resources, this cannot be the only explanation. It may also be related to specific forms of land-holding, with a strong emphasis on communal control of the uncultivated pasture lands. Individual ownership of land was probably restricted to arable land. The strong communal forms of land-holding were probably a structural constraint on the development of private 'estates'.⁵

The general picture is one in which integration into the Roman empire did not result in very profound changes in the social hierarchy; the MDS region continued to be inhabited by communities with a weakly developed social hierarchy based on principles of kinship, clientship and co-residence. This is attested by the poorly differentiated settlement pattern and by minimal social distinctions within the settlements. Rural habitation was characterised by a totally decentralised pattern of open – and sometimes enclosed – settlements with two to four contemporary farmsteads.

4. Oerle-Zandoerleseweg; Hissel 2012; Hiddink & Roymans 2015, 77f; Van Kerckhove 2015, 263f.

5. Cf. the discussion in Roymans & Derks 2015a, 14-18. See also Mattingly 2006, 372.



Fig. 7. The settlement and adjacent cemetery of Weert-Kampershoek Noord. Scale 1 : 1250. After Hiddink & Roymans 2015, fig. 22.
Blue: well. Dark brown: deepened byre section. Green: wet soils.



Fig. 8. The enclosed settlement of Oss-Westerveld (courtesy of Faculty of Archaeology, Leiden University). Scale 1 : 2000. After Hiddink & Roymans 2015, fig. 17. Blue: well.

The past few decades have seen a focus on the more romanised elements of the rural landscape (like the villa of Hoogeloon), but these have been shown to be completely non-representative for the area's native population. Status markers such as terra sigillata with relief decoration, wine, and bronze drinking equipment only rarely found its way into the MDS region.⁶ A limited social hierarchy is also attested by the funerary evidence. Simple cremation burials characterise the rural cemeteries found here; there is almost nothing to indicate internal social differentiation. Monumental tumulus graves like those of Hoogeloon and Esch, which clearly can be ascribed to a privileged social group, remain absolute exceptions (Roymans 2015).

LANDSCAPE AND HABITATION FROM A LONG-TERM PERSPECTIVE

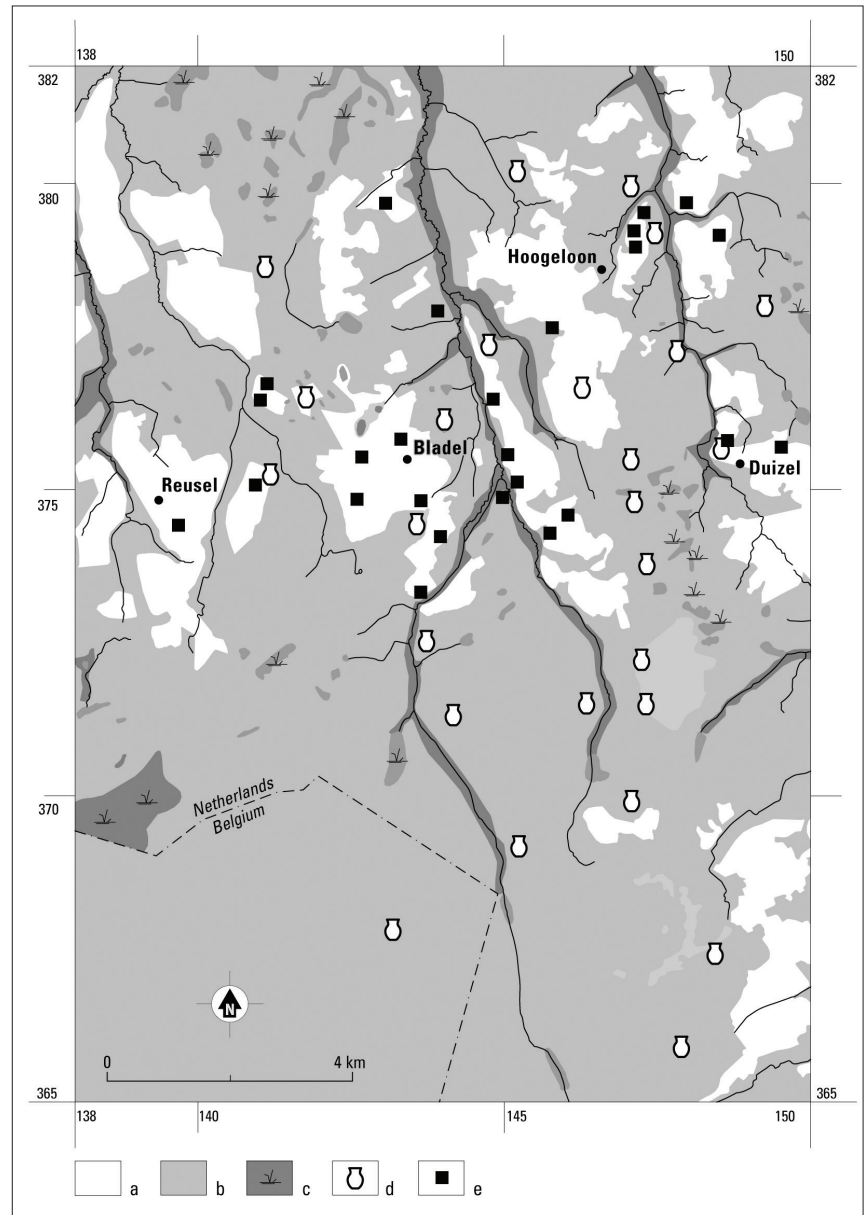
Several decades of settlement research in the MDS-region have shown that almost every native-Roman settlement lies underneath late medieval farmland that is covered by an anthropogenic *plaggen* soil which may be up to c. 1 m thick (fig. 9). This specific situation makes it almost impossible to identify Roman rural settlements by conventional survey techniques, such as field walking and air-photography. Only systematic digging of trial trenches produces an adequate picture of the settlement density of sand plateaus. The actually known habitation pattern is far from complete as many sites still lie unidentified underneath the *plaggen* soils (Creemers *et al.* 2015). Another important observation is that most pre-modern arable lands – and



Fig. 9. Traces of a Roman-period house plan excavated at Someren-Ter Hofstadlaan underneath a (post-)medieval anthropogenic *plaggen* soil. After De Boer & Hiddink 2009, plate 1D.

6. It is not at all clear that these finds functioned as prestige goods and may be associated with elites, as Slofstra proposed; bronze vessels, in particular, may have been a far more regular phenomenon than the records of settlement archaeology suggest; since they tend to be repaired rather than discarded after first breakage, they may circulate much longer than ceramic vessels and remain largely invisible for the archaeologist. For the bronze vessels from Nistelrode, see Koster 2007; for imports of Samian ware with relief decoration, see Van Kerckhove (above, note 9) and Wesselingh 2000, 129 ff. (Oss-Westerveld); for a wine barrel re-used in a well at Oss-Westerveld, see Wesselingh 2000, 155-156.

Fig. 10. The Bladel-Hoogeloon micro-region with 19th-century landscape, showing the shift in location of archaeological sites from the Early Iron Age (urnfields) to the Roman period (settlements).
 After Roymans & Gerritsen 2002, fig. 5.
 a. arable land with *plaggen* soils;
 b. heathland;
 c. wetland/peat moor;
 d. urnfield;
 e. native-Roman settlement



thus also the Roman settlements – are concentrated on sand plateaus with a somewhat higher loam content (more than 25 %), while extensive zones with loam-poor soils were uninhabited and only used as nutrient-poor grazing land for cattle and sheep.

If we now compare this Roman and post-Roman habitation pattern with that of the Bronze Age and Early Iron Age in some better investigated micro-regions (fig. 10), we observe a significant difference. Traces of habitation are not only encountered underneath *plaggen* soils, but also in zones that were uninhabited in the Roman and (post-)medieval periods. The frequent presence of barrows, urnfield cemeteries and celtic fields show that many late prehistoric settlement territories are situated here on marginal podzolised soils which no longer were used for habitation and arable farming in the Roman and (post-)medieval periods.

From a landscape-ecological perspective, this deviant, more equally spread late prehistoric habitation pattern can best be explained by a gradual degradation of sandy soils with low loam contents (Roymans & Gerritsen 2002; Hiddink & Roymans 2015, 47) (fig. 11). A structural constraint of Pleistocene sandy landscapes was the limited fertility of their soils, which prevented them from retaining mineral nutrients in the long term. Sand plateaus with lower loam contents were especially vulnerable for

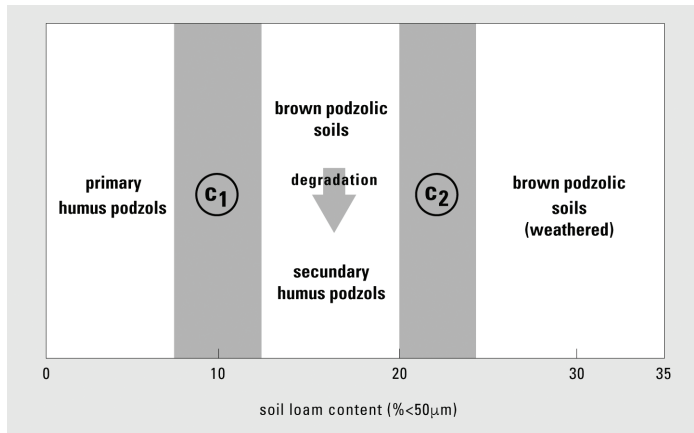


Fig. 11. Critical loam-content boundaries for the podzolisation of dry sandy soils. After Spek 1996, fig. 4.

this process. In combination with a structural shortage of manure this initiated a process of irreversible soil degradation through secondary podzolisation of these soils, finally resulting in the abandonment of many settlements in the course of the La Tène period. Already in the Roman period there was a cultural landscape dominated by extensive heathlands and relatively small inhabited and cultivated zones on the better soils, a pattern that remained largely intact until far into the 19th century. The waste lands were often exploited communally by local communities, above all for grazing cattle and sheep.

THE AGRARIAN BASIS OF THE RURAL ECONOMY

Our study area was a landscape with a relatively low agrarian productivity in the Roman period, which is partly due to the limited potential of Pleistocene sandy regions for arable farming and the absence of alternative natural resources such as salt, fish or mineral ores. The Roman period was characterised by a mixed farming regime that emphasised cattle breeding and which was based on the exploitation of large uncultivated zones of extensively used grazing lands. It was above all this pastoral sector of the rural economy that offered local groups some potential for surplus production and access to markets. Arable farming was based on the continuation of the pre-Roman crop spectrum (barley, emmer wheat and millet), and was mainly geared towards self-sufficiency. Opportunities for arable expansion were constrained by the poor fertility of sandy soils, the structural shortage of manure and the constant threat of soil degradation.⁷

The limitations of the natural landscape for intensive cereal cultivation are not enough, however, to fully explain modest wealth accumulation. After all, livestock farming regions are not by definition economically weak when integrated into state societies, as evidenced by the cattle ranches or *haciendas* of late medieval Spain or pre-modern Spanish America.⁸ The question should therefore not be addressed solely in terms of development/underdevelopment, but should include the specific social organisation of production and related cultural values and mentalities of groups. In the MDS region and elsewhere in the Northwest European Plain during late prehistoric and Roman times we need to bear in mind a form of local social organisation that was firmly founded on communal power and which hampered the formation of estates based on private land ownership.

Livestock farming was important, especially as a surplus product for external markets. Unfortunately, animal bone material is poorly preserved, or not preserved at all, in sandy soils. Nevertheless, the small amount of data available points to animal husbandry dominated by cattle (Kooistra & Groot 2015). A landscape archaeological perspective alerts us to the presence of extensive tracts of uncultivated wasteland surrounding the inhabited settlement zones of the sand plateaus. These wastelands will have been vital to the subsistence economy of local communities as natural grazing lands for cattle and sheep. This is evidenced by the wasteland vegetation in the Roman period, with the palynological data revealing an open landscape dominated by wet and dry grasslands and heathlands (Kooistra & Groot 2015). Although archaeological excavations cannot tell us about exploitation and ownership rights to the land, these are subjects we will have to address if we wish to understand social dynamics at the local level. Given the stable locations of both settlements and individual farmhouses, we assume that most of the arable land was privately owned by individual households. For the grazing lands, however, the most plausible model

7. Hiddink & Roymans 2015, 47; Kooistra & Groot 2015, 145. See also Roymans & Gerritsen 2002.

8. Relevant here are historical analogies for cattle drives to the town from peripheral regions in premodern market economies. The supply of cattle to Tongres, as well as to Tienen, for consumption and artisanal processing reached a peak in the late 1st and the 2nd century. There is evidence for cattle-bone processing in the backyards of urban *domus* at Tongres, probably on a seasonal basis. Cf. Vanderhoeven 2015, 197 ff.

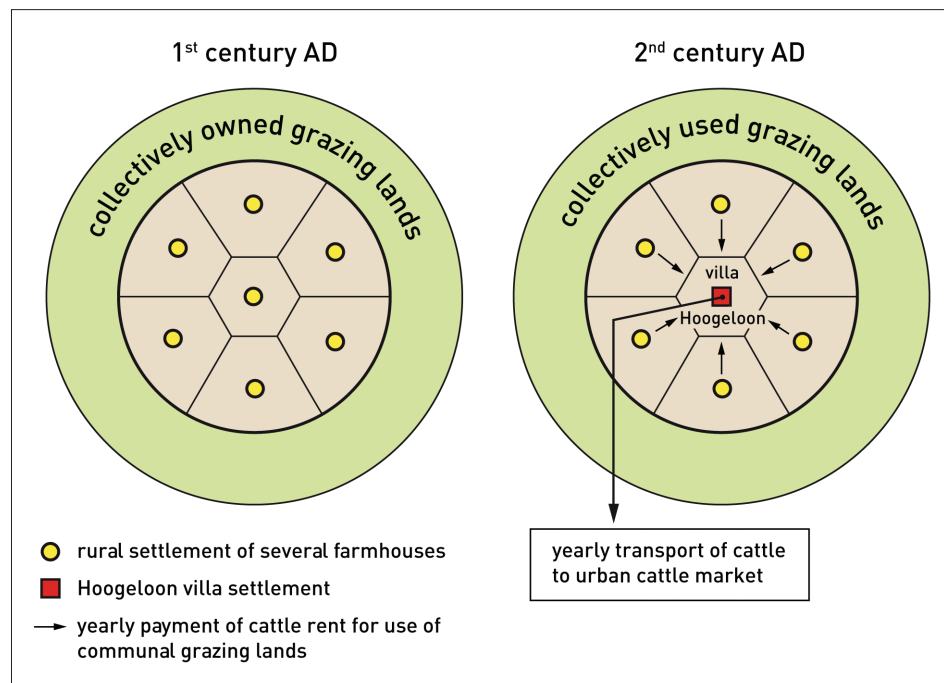


Fig. 12. Model of the agrarian base of the Hoogeloon villa estate (right) based on the control of collectively exploited grazing lands, compared to the 1st century AD situation (left) in which the grazing lands were collectively owned by the inhabitants of all surrounding settlements. After Roymans & Derks 2015a, 16, fig. 8.

seems to be one involving communal use by groups of farmers from different settlements within a microregion (fig. 12). This is also the dominant pattern we encounter in this region in the later Middle Ages (Van Asseldonk 2013).

THE VILLA SITE OF HOOGELOON AND ITS SOCIAL AND ECONOMIC INTERPRETATION

Site description

In the 1980s excavations by the Vrije Universiteit Amsterdam conducted under the direction of Jan Slofstra unearthed a fairly large villa settlement at Hoogeloon in the interior zone of the MDS region (fig. 13). The final site report recently published by Henk Hiddink gives a detailed picture of the development of the site (Hiddink 2014; id. 2015) (fig. 14). The villa was not a foundation *ex nihilo*, but instead gradually evolved from an already existing native settlement with its origins at about the beginning of the 1st century AD. In about AD 100 the first villa appeared (phase 0 or 1) on the site of a native farmyard with three successive wooden houses. In the course of the 2nd century, the villa developed into an impressive main building with an indoor bathhouse and a room with hypocaust heating. Although it appears at first glance to be an ordinary Gallo-Roman villa site, on closer inspection the settlement reveals a rather unique spatial layout that can only be understood if we allow for the reworking of local, indigenous traditions and values. These local elements are the rectangular palisade enclosure around the main residence, the native-style byre houses surrounding the villa house, the presence of a large drinking pond for cattle and a cattle corral, and finally the absence of a granary. On the basis of the chronological ordering of a number of key elements in the Hoogeloon excavations (fig. 15), we are able to present the following model of the social development of the Hoogeloon settlement.

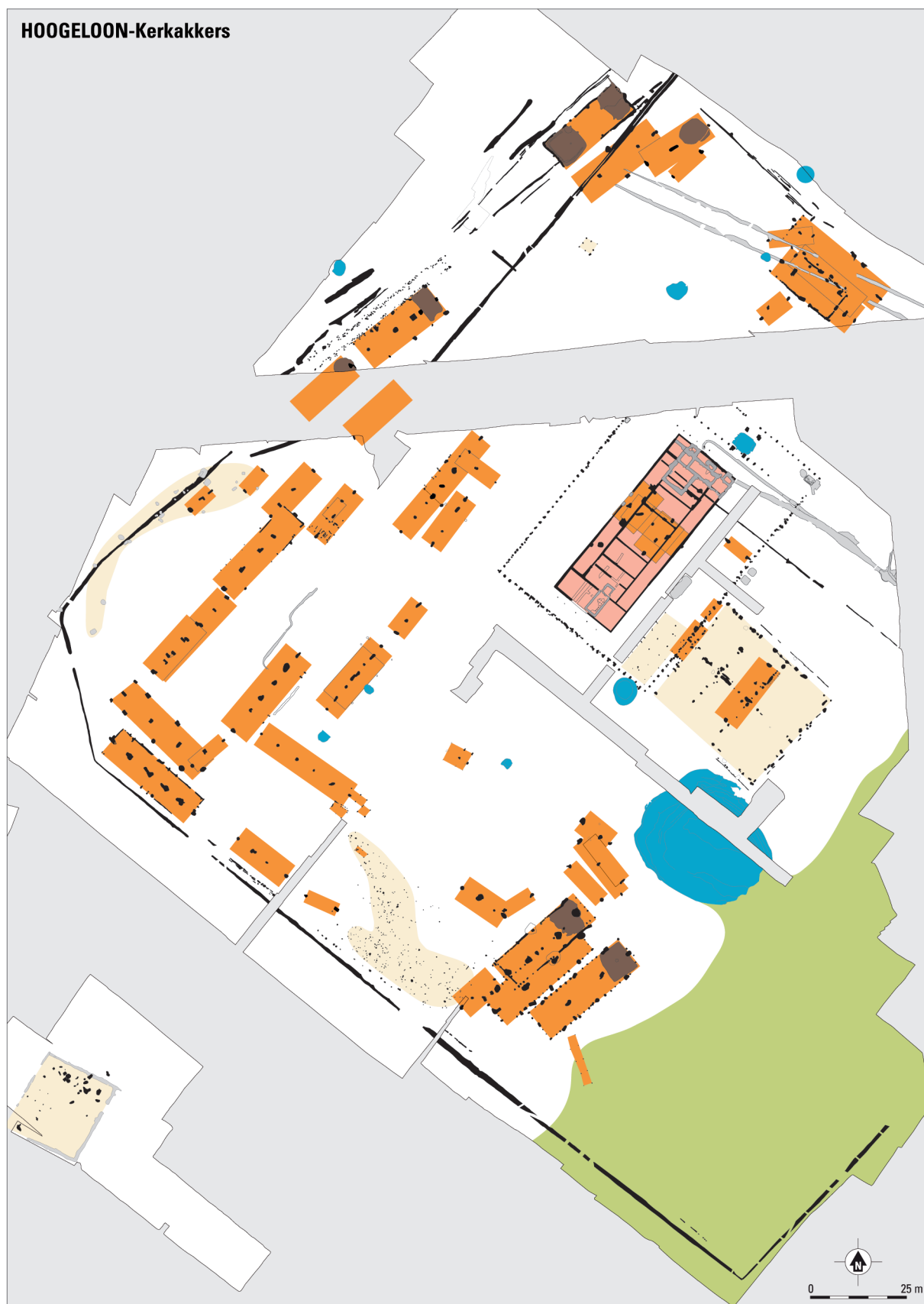


Fig. 13. General plan of the Roman villa settlement of Hoogeloon. Scale 1 : 1500. After Hiddink 2015, fig. 2.
Blue: wells and cattle pond. Dark brown: deepened byre section. Green: wet soils.

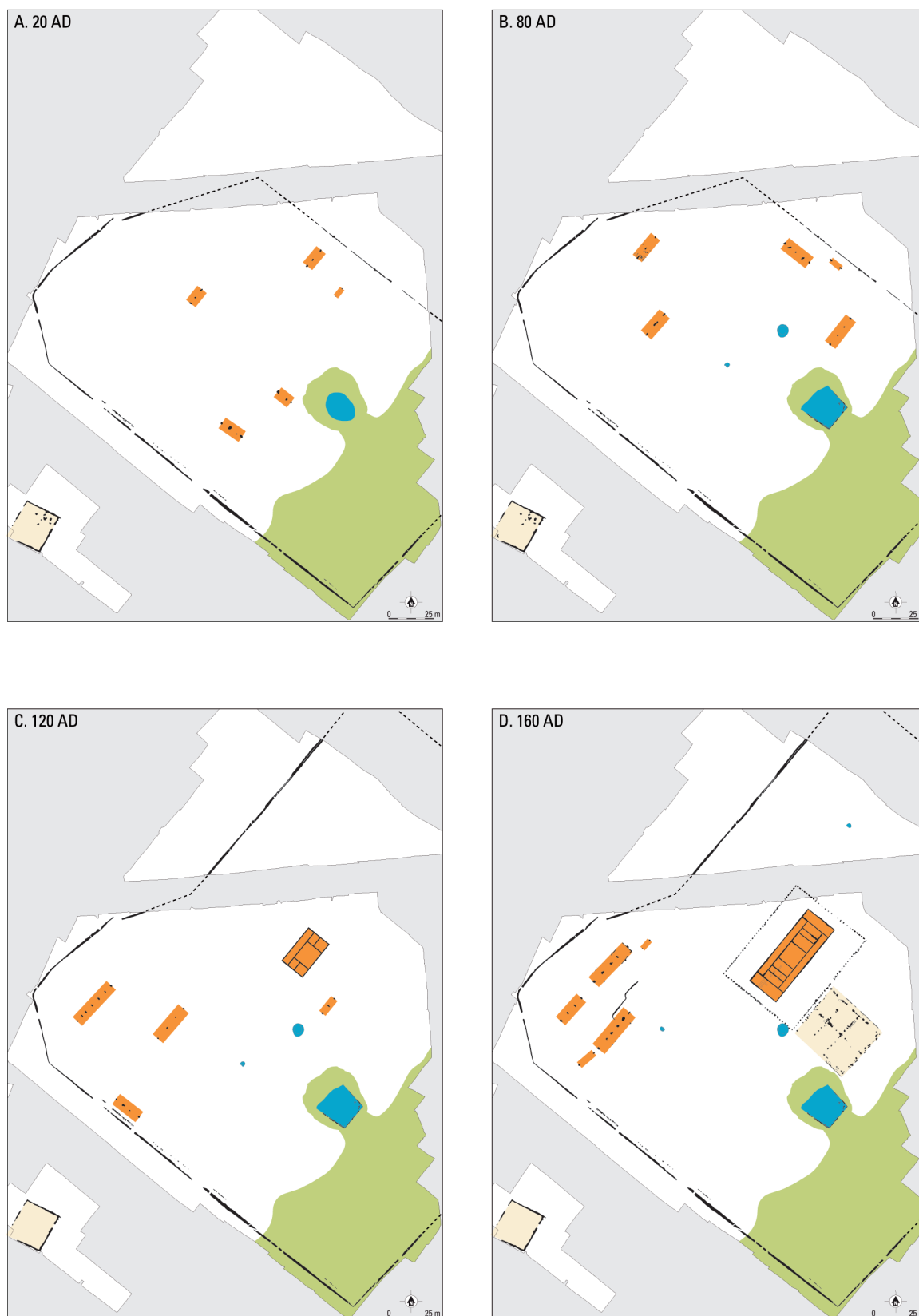


Fig. 14. The development of the Roman settlement at Hoogeloon in the 1st and 2nd century AD. After Hiddink 2015, fig. 21a.

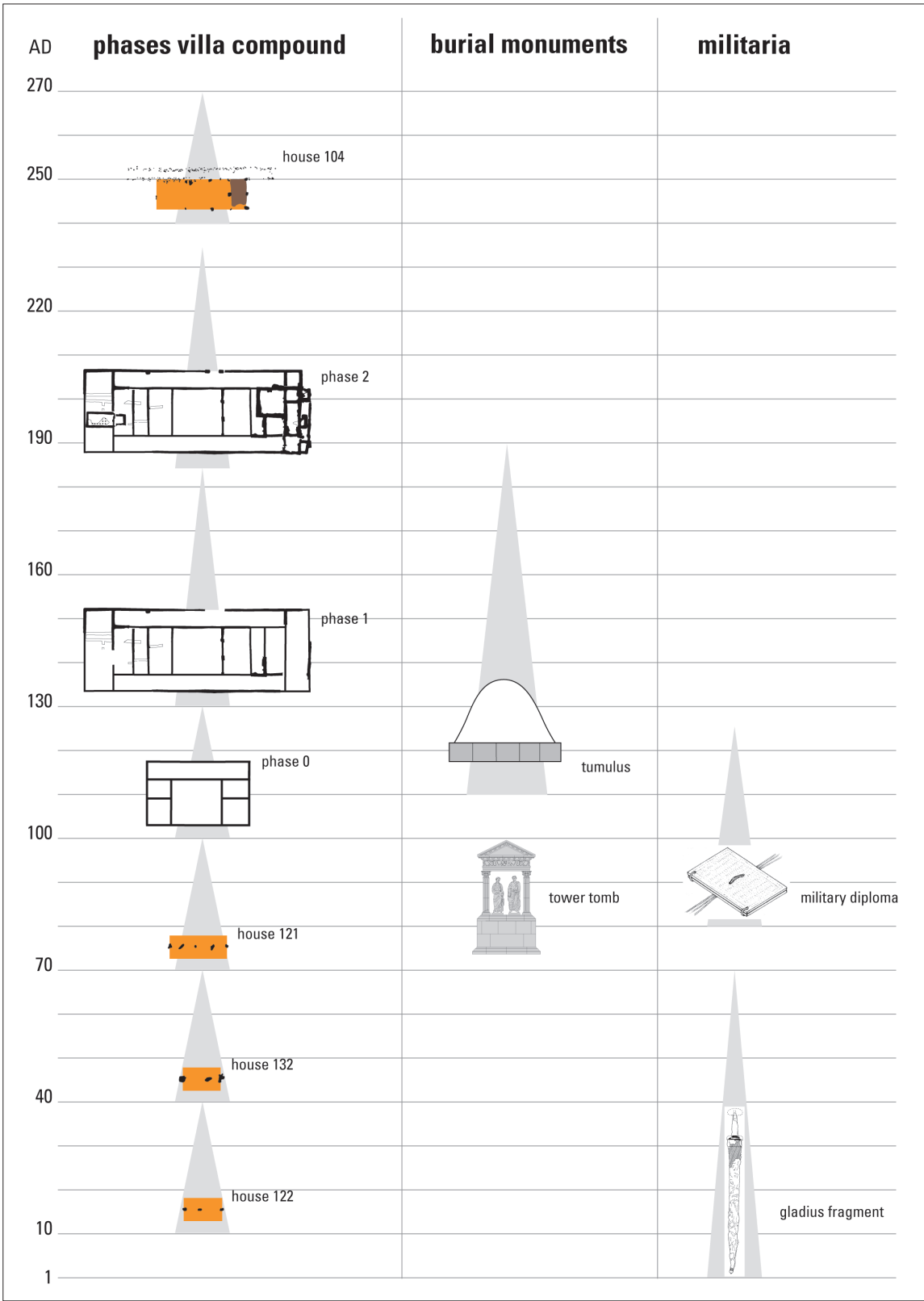


Fig. 15. Schematic chronology of a number of key elements in the history of the Hoogeloon villa settlement. After Roymans & Derks 2015d, 297, fig. 1.

The first settlers

The Hoogeloon villa complex evolved out of a pre-existing native settlement containing three to four houses. This pre-villa settlement did not have its roots in the Late Iron Age, but was newly founded in the Augustan period. At around the beginning of our era many more settlements were founded in the MDS region, often on abandoned arable land from the Late Iron Age. The Augustan period seems to have been a time of colonisation and settlement expansion. To judge by historical sources, the founders of the Hoogeloon settlement may have been settlers already living in the area who had split from a nearby settlement or perhaps Germanic immigrants from east of the Rhine (Roymans & Derks 2015b, 22 ff.). In terms of social organisation we should visualise this earliest population in the region as being fairly egalitarian, but with an internal social differentiation based on ties of kinship and clientship, resulting in the creation of a broad group of local leaders. The inhabitants of Hoogeloon were part of the newly formed ethnic group of the Texuandri. They must have felt the power of Rome from the outset as the *civitas Tungrorum*, to which the territory of the Texuandri was assigned, had already been formed under Drusus (Raepsaet 2013). There are several reasons for supposing that Hoogeloon was already home to a local leader or lineage head in the Augustan period. We cannot deduce this from the size or architecture of the earliest houses, but rather from the presence of a remarkable number of pre-Flavian imports (see below) and the settlement's location within a ditched enclosure, probably relating to cattle management.

The emergence of a military family

Although the appearance and spatial layout of the Hoogeloon settlement remained essentially the same during the first few generations, the inhabitants clearly felt the impact of the Roman empire from the beginning. First and foremost, there is the considerable number of imports of Roman pottery from the Augustan-Tiberian period. This includes fragments of Italic *terra sigillata*, Belgic beakers, amphorae and drinking beakers (Van Kerckhove 2015; idem, 2014) (fig. 16). Dating from the same period are Roman bronze coins and fibulae.⁹ What kind of mechanisms caused these imports to end up in Hoogeloon? We assume that at this stage regular town-country relations based on agrarian surplus production and a monetised economy had not yet developed and that the imports primarily reflect networks with the Roman military community. This suggests that from the late Augustan period young men from Hoogeloon served in the army as auxiliary soldiers. A direct clue is the find of a bronze terminal knob of a scabbard for a gladius-like sword (fig. 17) from the pre-Flavian period. These swords were a standard weapon for auxiliary soldiers from the Lower Germanic frontier zone.¹⁰

At this stage military service was still a predominantly part-time affair, connected with seasonal campaigns in irregular units that were highly reminiscent of indigenous war bands (Roymans & Derks 2015a, 10). Individuals serving in them were thus members of both the military and rural community. The considerable number and variety of early imports at Hoogeloon suggest that these items did not belong to an ordinary soldier, but to one or more members of a leading local family who were better paid and who could afford a wider array of commodities from the Roman military market.

We see the Hoogeloon settlement as being inhabited from the Augustan period by a 'military family' that regularly supplied a recruit to an auxiliary cohort. In about the mid-1st century people from Hoogeloon will once again have gone into the Roman army. This time, however, they would have been full-time professional soldiers who served for a period of about 25 years in a regular auxiliary unit, probably a cohort or *ala* of Tungrians. We also assume that at some time in the Flavian period a soldier from Hoogeloon was granted Roman citizenship following his honorary discharge. Two indications suggest that veterans returned to Hoogeloon, one in the Flavian period and one in the late-Flavian period or the early 2nd century.

The first is the remains of a stone tower tomb, found in the cemetery on the Kaboutersberg (Roymans 2015, 135 ff.). These paltry remains point to a monument built in the Flavian period by a sculpting workshop in Cologne or an affiliated workshop in Maastricht. We consider it unlikely that the monument was commissioned by a simple auxiliary veteran. It must have been someone who had acquired substantial external capital in the Roman army to supplement family capital that was

9. Aarts/Prins 2014 (coins); Hiddink 2014 (fibulae).

10. For similar 1st-century AD swords or sword fragments in the MDS region, see Roymans/Derks 2015a, 10, note 37. Cf. Nicolay 2007, 333, Pl. 22, for examples from the Batavian river area.

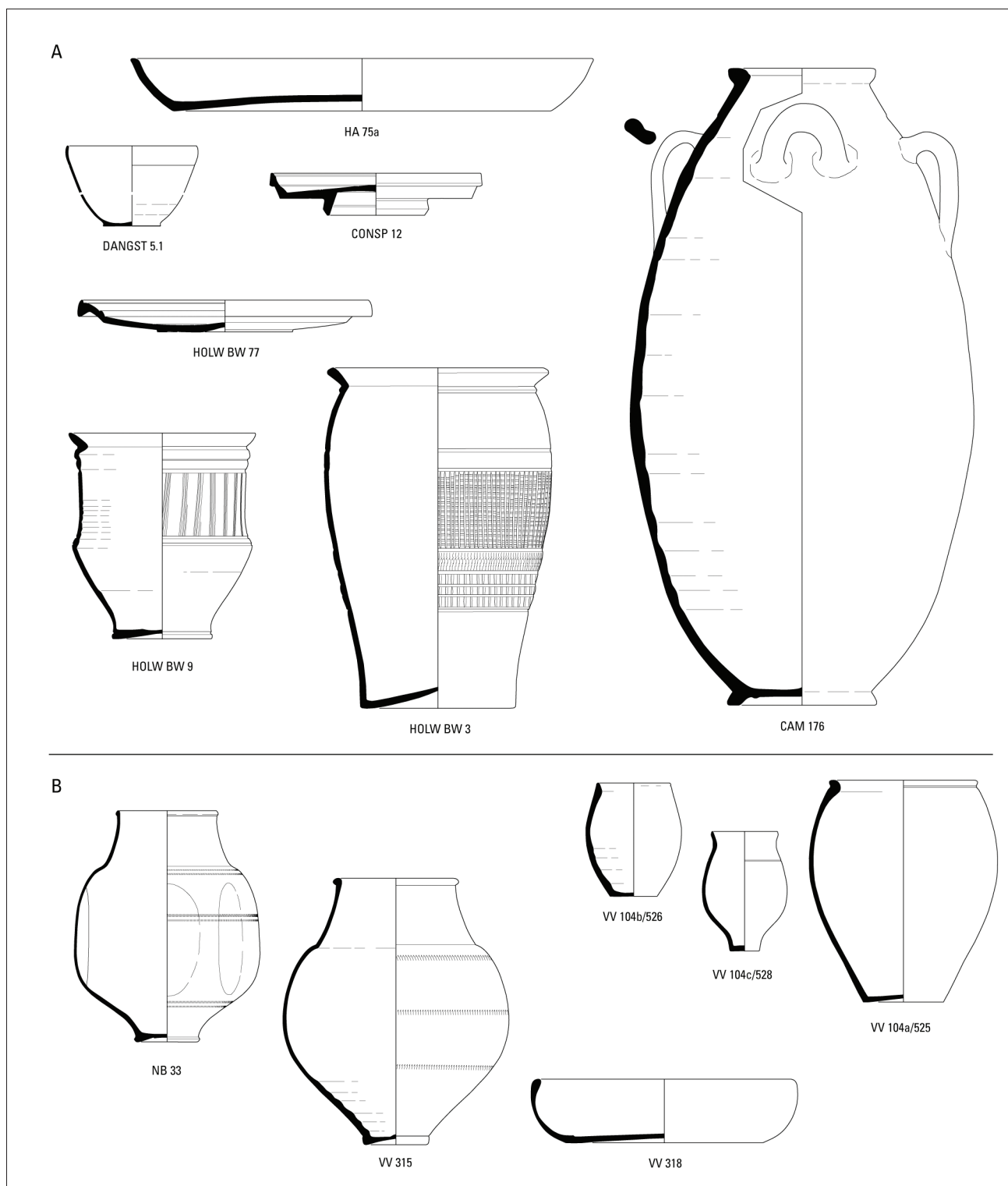


Fig. 16. Pottery types from the early (A) and late (B) phase of the Hoogeloon villa settlement. After Hiddink 2015, fig. 19.

generated locally. Significantly, however, in view of the chronology established for villa and tomb respectively, the individual who commissioned the tomb cannot have been the builder of the villa, but must still have lived in a traditional native house. He invested his wealth primarily in the grave monument and assigned high priority to this. Given that up until the early 2nd century stone tower tombs were almost exclusively erected by former soldiers, we can assume a military connection in Hoogeloon. The monument reveals something about the identity of the individual who commissioned it: it symbolises not only his status as a former soldier, but also his acquisition of Roman citizenship.

Two matching bronze fragments of a military diploma retrieved from the topsoil by a metal detectorist are the second pointer to a returning veteran (fig. 17). They belong to the second *tabella* of the diploma; on the inside are parts of the text dealing with the granting of Roman citizenship and the recognition of the relationship with a peregrine woman as a lawful marriage:

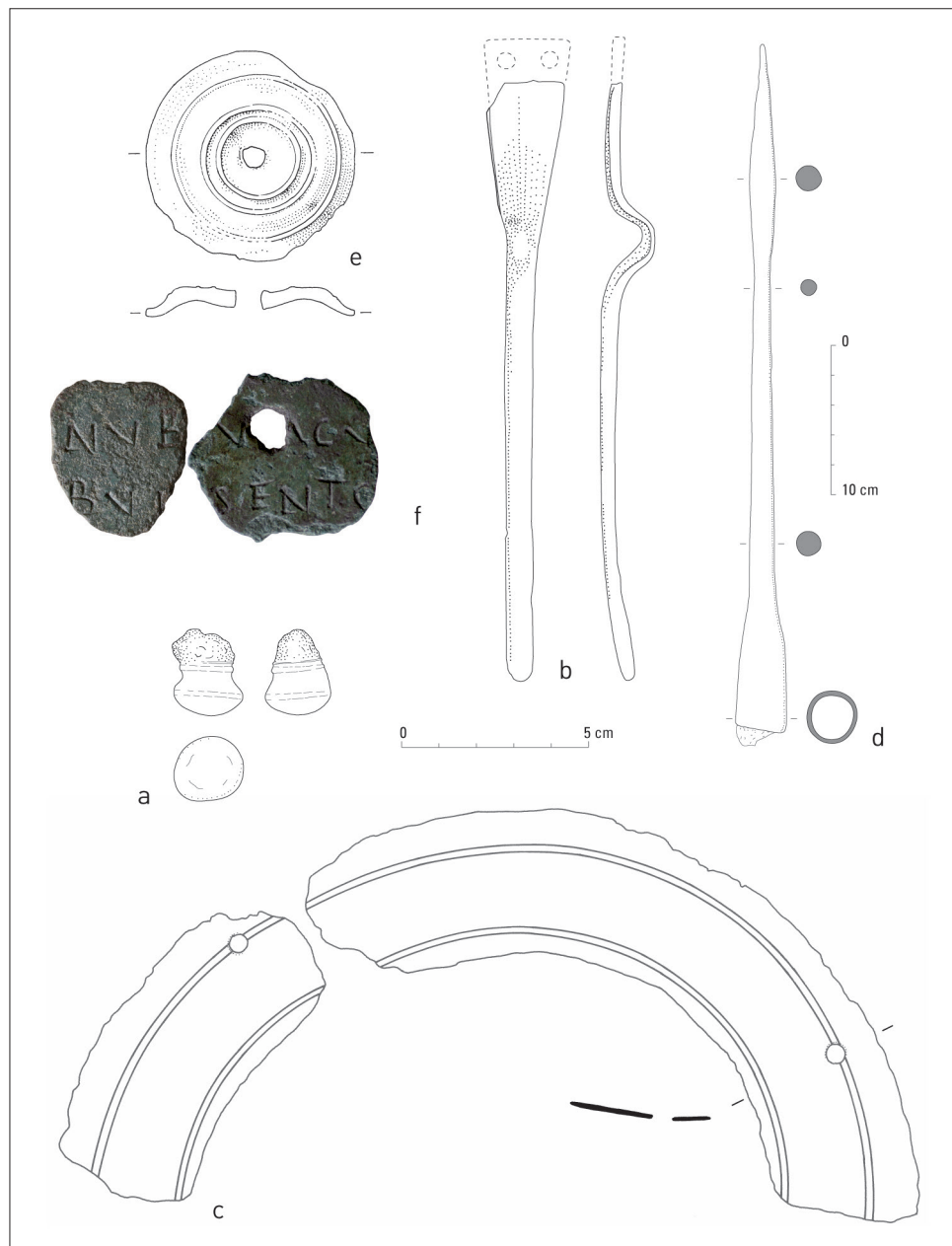


Fig. 17. Fragments of Roman militaria from the Hoogeloon villa settlement. After Roymans & Derks 2015d, 299, 301, fig. 2 and 4).
a. Bronze terminal knob from sword scabbard; **b.** Iron sheath fragment of sword; **c.** Rim of bronze umbo; **f.** Bronze horse gear fitting; **g.** Fragments of military diploma

... *civitatem dedit et co]nub[i]um cu[m] uxoribus quas tunc ha]buissent c[um] est civitas iis data*, ... The diploma was issued in the late-Flavian period or the beginning of the 2nd century.¹¹ Unfortunately, we do not know the name of the recipient, nor the unit to which he belonged. A plausible assumption is that he had served in a Tungrian cohort. Although it is theoretically possible that the builder of the tower tomb and the owner of the diploma were one and the same person, this is improbable. The tomb appears somewhat older than the diploma; also, the veteran of the tomb is likely to have been an officer, whereas the diploma is that of a common auxiliary soldier. The *auxiliarius* may very well have lived in one of the wooden farmhouses in the Hoogeloon settlement. This all means that when the first villa appeared in Hoogeloon shortly after AD 100, certainly one and possibly even two local families had Roman citizenship, which could be passed down to the children.

Military service opened up new opportunities and those who operated successfully within it were able to secure leading posts in auxiliary troop units, be paid a higher salary and therefore gain access to a wider range of Roman material culture available through the army. It also led to the rapid spread of a basic knowledge of Latin within military families and of new styles of consumption. Service in the auxiliary added momentum to the process of social hierarchisation within the broad stratum of local leaders or lineage heads in the Texuandrian community. It provided young men with opportunities to develop external networks and to use them to bolster their local status and positions of power.

Commitment to a civic life style and links with the town

The first Roman-style villa (phase 0 or 1) was built shortly after AD 100. The most plausible scenario is that the villa was commissioned by the son of the individual who erected the tower tomb. It is possible that he too had previously served in the army, but this remains speculation. In any event, he was the first to make the complete break with the native house-building tradition, opting instead for a Roman-style main building constructed partially in stone. He employed a builder, probably from Tongres, to build the villa and arrange for the supply of building materials. These included a consignment of sandstone from the Ardennes, lime for plastering the villa walls, and a large quantity of tiles that were probably made at Hoogeloon by a civilian tile works from the Limburg Meuse valley (Hiddink 2015, 98 ff., 123). The villa was built on an existing ancestral yard that was soon separated from the other byre houses by a rectangular wooden fence (fig. 13). This construction of the villa accentuated the social hierarchy, drawing attention to the social boundaries between the villa inhabitants and farmers who lived nearby and in surrounding settlements. All of this represented a break with the ancestral house-building tradition in which commonality and affinity with livestock occupied a prominent place.

The 2nd century saw a further extension to the main building, with the addition of a bath suite and a hypocausted dining room (phase 2; fig. 14). The villa's size as well as its existence as a single example of a villa in the core of the MDS region suggests a close connection with the city of Tongeren. The master of Hoogeloon probably held a position in the Tongres *ordo decurionum* and owned a house in town, where – given the distance of some 80 km between Hoogeloon and Tongres – he would have regularly stayed. The villa was a means by which he could model himself on the civic lifestyle of the Tungrian elite. He may have been driven by a continual process of competitive emulation with his peers. It is in this context that we should understand the later addition of the bathhouse and several hypocausted rooms. For the master of Hoogeloon, displaying an elite lifestyle was a way to emphasise his social distance from peasant farmers on the site and in the wider environs.

At some time in the 2nd century there appeared in the Kaboutersberg cemetery a second monumental grave, this time a tumulus probably enclosed by a stone wall. The fact that the tumulus was built just a few metres away from the older tower tomb makes it likely that members of the same family were buried there. The tumulus too reflected the villa owner's specific lifestyle and self-image; it symbolised the civilian and rural identity of the villa master as a member of the decurial elite of the *civitas Tungrorum* (Crowley in prep., ch. 7.1-2).

11. Derks 2017. The decisive criterion is that the word *habuissent* is written in full, which dates the diploma to the period before AD 133, probably even before AD 114.

The economic basis of the villa

The sandy landscape's limited opportunities for generating wealth can help explain the absence of villas in the large interior zone of the MDS region. This raises the question of what constituted the economic basis of the Hoogeloon villa. Where did the owner get the considerable resources needed to build the main residence? The ongoing investments made during the 2nd century to build and restructure the main building suggest that the Hoogeloon villa had a solid economic basis spanning several generations. We assume that the wealth during this time came almost entirely from the civilian sphere. Various sources of wealth can be identified.

The primary source of surplus money, linked to the development of a monetarised economy from the Flavian era onwards (Aarts 2015, 222 ff.) will have been the supply of slaughter cattle for the urban market. Although the agrarian economy was based on a mixed farming regime, the cultivation of crops was only intended for local consumption (Kooistra & Groot 2015, 152 ff.). Archaeological indications of the important role of animal husbandry at Hoogeloon are the cattle-dominated bone spectrum, the construction of a large drinking pond for livestock and a cattle pen directly behind the villa compound.

We have made specific suggestions for how livestock farming was organised (Kooistra/Groot 2015; Roymans & Derks 2015a, 14 ff.). At a particular time of the year the Hoogeloon settlement must have served as a collection point for cattle destined for Tongres. These cattle cannot possibly all have been bred in the small settlement itself. We have proposed (using an analogy with the late medieval situation in the same region) an alternative mode of production for the Hoogeloon cattle farm, based on the assumption that the villa master succeeded in claiming the collectively used grazing lands of peasant farmers in the wider region. Peasants from surrounding settlements had to pay an annual cattle tribute to the villa master, and in return the peasants were granted the right to use the extensive tracts of grazing lands. In that sense Hoogeloon differs from the classical cattle ranch specialising in animals for slaughter that we know from South and North America.

A second supplementary source of revenue for the villa master may derive from his role as patron of the Texuandrian region in its relations with Tongres. For a patron, the role of mediator was often accompanied by direct or indirect economic benefits. In the 2nd century the master of Hoogeloon was undoubtedly one of the key representatives of the Texuandrian region in Tongres and hence an ideal advocate or mediator for this *pagus*. For the social and political network of such patrons we may refer here to a series of patronage tablets from the villa of Valkenburg-Ravensbosch, honouring the villa owner, who was also a magistrate at Xanten, as patron of the *pagus Catualensis* and of private individuals whose affiliation is unknown to us (Derks 2011). We expect that the master of Hoogeloon also played a more formal role in the administrative integration of the Texuandrian region. He may have performed certain administrative duties in Texandria on behalf of the *civitas*, such as being responsible for tax collection, the recruitment of auxiliaries, or road maintenance. Perhaps this intermediary position as patron and official enabled him to stake a strategic private claim on grazing rights on the vast stretches of wasteland around Hoogeloon. Traditionally, this land had been collectively owned by local clans, who now had to pay an annual tribute for the right to use it.¹²

Master and peasants

How villa production was organised in social terms and the degree of control that villa owners exercised over local peasant labour continue to be topical points of discussion. The model often used for larger villas posits highly asymmetrical social relations between master and peasants. Even slave labour was not unknown (Roymans & Zandstra 2011). A highly evolved social hierarchy is mainly evident in villa complexes with an axial layout and a tight symmetrical arrangement of the buildings (Roymans & Habermehl 2011).

So what is the social interpretation of the medium-sized Hoogeloon villa complex? What strikes us first of all is that the settlement did not have a completely new, planned layout. Instead, we see a curious mix of old and new elements. For example, the villa was built on an already existing house yard, with the layout of the enclosed pre-villa settlement remaining largely intact (fig. 13 and 14). However, the area around the main residential building was bounded from then on by a rectangular wooden

12. For a similar discussion in Britain, see Mattingly 2006, 353–363.

fence. It goes without saying that the villa emphasised the vast social distance – in terms of lifestyle, status and power – between the owner's family and the three or four families who continued to live in traditional wooden byre houses. At the time, both the villa and the nearby grave monuments must have been spectacular elements that dominated the landscape, impressing the local inhabitants and those of surrounding settlements. The construction of the villa will undoubtedly have affected the

lives of the settlement's inhabitants, constraining spatial movement within the site and reordering their sense of place.

Yet we do not observe in Hoogeloon the extreme social distinctions familiar to us from the large villa sites in more southern regions. It is significant that the wooden farmhouses were no different in terms of size, byre dimensions and material culture from those in other ordinary settlements in the region. As commented above, the find of a military diploma could mean that this settlement boasted a second family with Roman citizenship. The only possible pointer to the existence of unfree labour at Hoogeloon is a set of iron shackles found in house 104, which dates, however, from the final, post-villa phase of the settlement

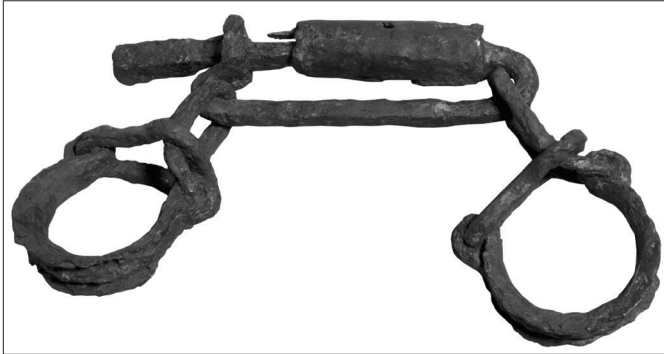


Fig. 18. Set of iron shackles found in house 104 of the Hoogeloon settlement. After Hiddink 2011, fig. 14.

(Hiddink 2015, 109, fig. 14) (fig. 18).

Lastly, we wish to point out the possibility that villas themselves, if located in peripheral regions far from market centres, could at times serve as market places for the peasant population of the surrounding area. Although the owner family will have had direct access to the urban market in Tongres, distance was a problem for the peasant population from the environs of Hoogeloon, especially when it came to acquiring simple commodities for everyday use. Under these circumstances the outlying villa could sometimes operate as a focal point for exchange and as a controlled market for peasant consumption. What then were the potential times in the annual cycle of the Hoogeloon settlement when it could function as a peasant market? An obvious time would have been when livestock was collected for the great cattle drive to the town of Tongres. Then there is Aarts' suggestion that Hoogeloon may have served as a collection point for the region's taxes. Both situations, albeit hypothetical, would have involved temporary gatherings of farmers from the area, ideal opportunities for pedlars and small merchants to offer commodities like pottery, iron tools, rotary querns and bronze ornaments to the peasant population. The large number of stray bronze coins from the villa settlement compared with ordinary sites in the vicinity could be interpreted as evidence for this.¹³

TOTAL DEPOPULATION OF THE AREA IN THE LATER 3rd CENTURY

The Hoogeloon villa building only managed to survive for about 140 years. It was destroyed somewhere in the 3rd century, after which a wooden porticoed house with a byre section seems to have taken over the function of main building (Hiddink 2015, 96-97, fig. 6) (fig. 19). Compared with the previous century, the entire 3rd-century complex conveys an impoverished impression, with the former villa surviving as a ruin. The social interpretation of the porticoed house remains unclear. Did the descendants of the 2nd-century villa owners live there? Did the owner now reside in town all year round, leaving a *vilicus* to manage the villa? Or did he sell the villa to a new owner? Two late 2nd- / 3rd-century cremation graves in the cemetery may still have belonged to the villa occupants, given the rectangular burial pits and the presence in both graves of an oil lamp and a saucepan – finds which are otherwise rare in the area (Hiddink 2011, 90ff.). We can place the definitive end of the settlement in about AD 270, which is consistent with the almost complete depopulation of the region.

Historically and archaeologically, the formative phase of the Texuandrian community can be placed in the Augustan period. This was followed by a high degree of continuity in the settlement pattern up until the later 3rd century, when the

13. Aarts 2015, 224; see also Aarts/Prins 2014 for an overview of the coins from the Hoogeloon settlement.

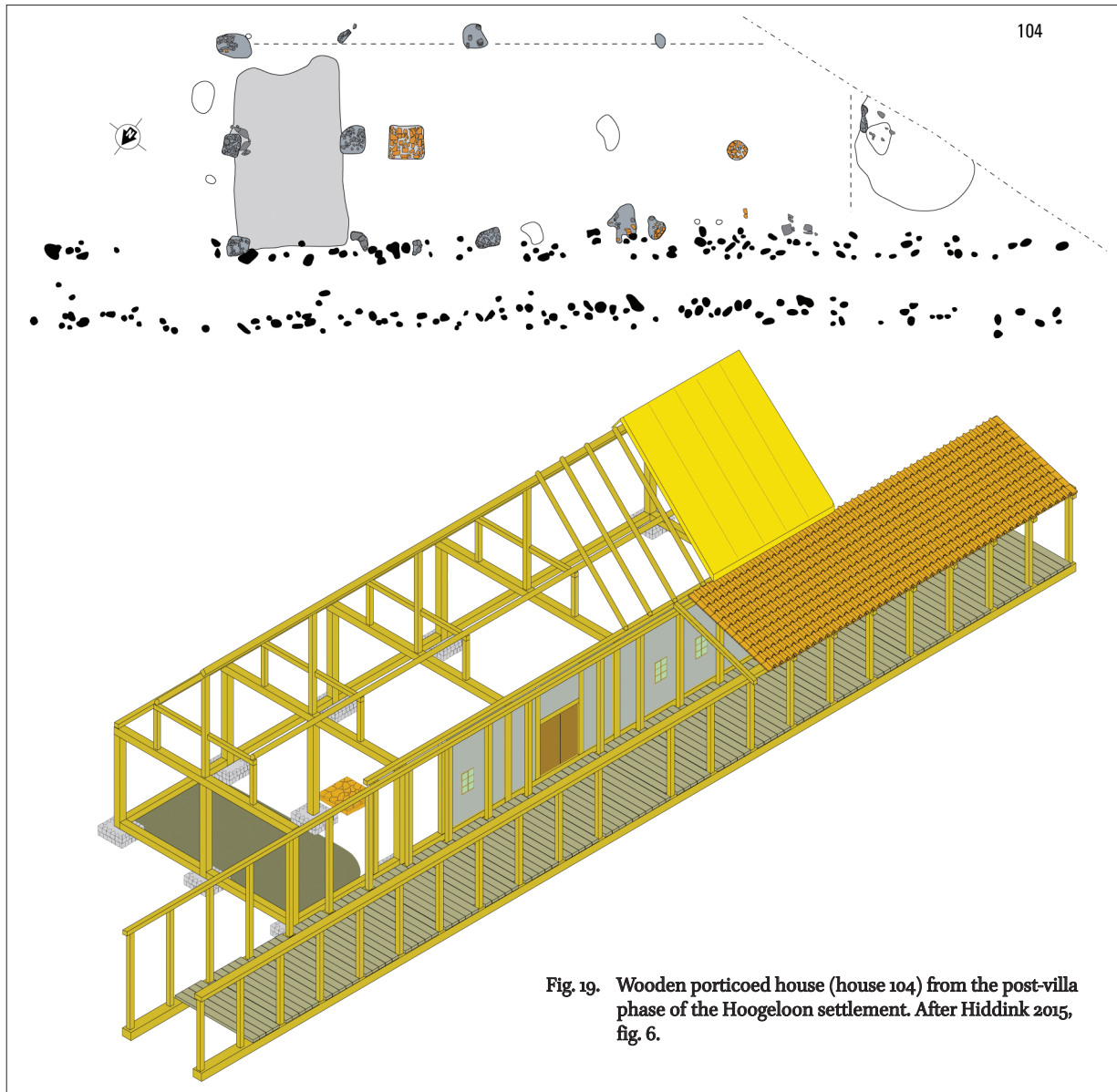


Fig. 19. Wooden porticoed house (house 104) from the post-villa phase of the Hoogeloon settlement. After Hiddink 2015, fig. 6.

region became almost completely depopulated within a short space of time. This period also saw the demise of the religious infrastructure of sanctuaries, both large and small, that bolstered the social cohesion of groups at various levels of integration (Roymans & Derks 2015c, 242-243). All this signalled the end of the Texuandri as an ethnic group, and yet their name lived on in the Late Roman period in the geographical label Toxandria or Texandria.¹⁴ Since the Texuandrian region was virtually uninhabited at that time, it is obvious that this name was bestowed by surrounding regions, in particular the Tungrian heartland.

Given the data at hand, is it possible to say something about the dramatic pace of depopulation during the 3rd century in the region regarded as the Texuandrian heartland? It is still not clear whether this was the result of a single historical event or a gradual process. The most recent tree-ring datings of wells in rural settlements are from the first half of the 3rd century, but obviously these are only *termini post quem* for the abandonment of these settlements (Hiddink & Roymans 2015; Heeren

14. The latter variant seems the most plausible in the Late Roman period, given the group name Tex(u)andri in the Early Roman period and the variant Texandria as the dominant regional name in the Early Middle Ages.



Fig. 20. Reconstruction of building phase 2 of the residential building of the Hoogeloon villa. Drawing Mikko Kriek.

2015). Also significant is the fact that to date almost no traces of burnt layers have been found anywhere in the deepened byre sections of 3rd-century farmhouses, suggesting that most settlements were not abandoned by force.

Another key question involves the causes of depopulation. In our view, there is no simple, monocausal explanation, but rather an interplay of three factors should be envisaged: 1. a weakening of the Roman Rhine *limes*, triggering an upsurge in raids by Germanic groups and growing insecurity in the countryside, 2. demographic pressure caused by an agrarian system made vulnerable by soil degradation and a systematic shortage of manure, 3. increasing tax pressure on rural groups by the authorities, which fomented social unrest (De Clercq 2009, 494).

However, these three factors do not explain the almost total exodus from Texandria. With few exceptions, a general pattern for historically documented migrations is that only part of the community left, with the remainder staying behind in their homeland.¹⁵ A partial depopulation of this kind seems to have occurred in the northern and southern neighbouring regions of Texandria, the Dutch river delta and the Tungrian villa landscape respectively (Heeren 2015). The almost total depopulation of Texandria suggests the importance of a fourth factor: direct intervention by the Roman authorities in keeping with their frontier policy. An attractive model involves the forced migration or deportation of particular groups, with the Roman authorities using the population of a peripheral region to boost numbers in a strategically more important one. Emperor Julian the Apostate's intervention in 358 in the illegal settling of Franks in Texandria illustrates that in peripheral regions too, the authorities sought to keep these matters under their control. The Franks were granted permission to settle in Texandria following a defeat (Ammianus Marcellinus 18.2). This colonisation left no tangible archaeological traces, however, and it was not until about 400 that groups settled once again in Texandria (Theuws 2011, 24; Heeren 2015). This may suggest that the Romans ordered the Franks to leave this region almost immediately again in exchange for a more strategic location along the Rhine when that area was returned to Roman control in 359.

15. Cf. the discussion in Fernández-Götz 2014, section 5.2, and note 883.

FINAL REMARKS

The Hoogeloon villa complex is in many respects an interesting case study for the current debate on the transformation of rural societies in the Roman North. This is because:

1. it illustrates the close interaction between the rural, military and urban communities.
2. it gives us an idea of the agency aspects behind the development of a larger villa in a peripheral non-villa landscape. Essentially, we see how an individual of local origin was able to secure an external power base and then exploit it to break through and remould local social structures that were firmly rooted in communal power.
3. the Hoogeloon villa complex is not a simple copy of a Roman, or Gallo-Roman, settlement type, but should instead be interpreted as a new hybrid that incorporated many elements of local native structures and forms of organisation, giving it a distinct regional character.

The Hoogeloon settlement is a key site for studying the emergence and social interpretation of the few larger villas in the Lower Germanic frontier zone between *limes* and loess. These villas were usually of native origin, constructed by veterans who also used money obtained from external sources to build them in an already existing settlement. Situated at the edge of empire' (Willis 2013), the Hoogeloon case invites us to make comparative studies with peripheral villas in other regions, such as the hinterland of Hadrian's wall in northeast England (Willis 2013; Millett 2015).

References*

- Aarts, J. (2015): "Marginal money. The circulation of Roman money in the rural world of the Meuse-Demer-Scheldt area", in: Roymans *et al.*, ed. 2015, 207-227.
- Aarts, J. G. and J. W. Prins (2014): "De munten. Romeins geld in Hoogeloon", in: Hiddink, ed. 2014, 449-461.
- Badan, O., J.-P. Brun and G. Congès (1995): "Les bergeries romaines de La Crau d'Arles", *Gallia*, 52, 263-310.
- Creemers, G. and W. De Clercq (2015): "An inventory of Roman habitation in the Meuse-Demer-Scheldt area", in: Roymans *et al.*, ed. 2015, 33-44.
- Crowley, L. (in prep.): *Dying in a material world. Symbolism, self-representation and their implications in privileged mortuary contexts in the villa landscapes between Bavay and Cologne*, PhD dissertation Vrije Universiteit, Amsterdam.
- De Boer, E. and H. A. Hiddink (2009): *Opgravingen aan de Ter Hofstadlaan te Someren. Een nederzetting en grafveld uit de Late IJzertijd en Romeinse tijd en erven uit de Volle Middeleeuwen*, Zuidnederlandse Archeologische Rapporten 37, Amsterdam.
- De Clercq, W. (2009): *Lokale gemeenschappen in het Imperium Romanum. Transformaties in rurale bewoningsstructuur en materiële cultuur in de landschappen van het noordelijk deel van de civitas Menapiorum (provincie Gallia Belgica, ca. 100 v. Chr.-400 n. Chr.)*, unpublished PhD thesis Gent University, Gent.
- De Clercq, W. (2011): "Roman rural settlements in Flanders. Perspectives on a 'non-villa' landscape in *extrema Galliarum*", in: Roymans & Derks, ed. 2011, 235-257.
- Dench, E. (1995): *From barbarians to new men. Greek, Roman, and modern perception of peoples from the central Apennines*, Oxford.
- Derks, T. (2011): "Town-country dynamics in Roman Gaul. The epigraphy of the ruling elite", in: Roymans & Derks 2011, 107-137.
- Derks, T. (2017): "Zwei Fragmente eines Militärdiploms aus Hoogeloon (NL)", *ZPE*, 201, 273-276.

* For a full bibliography including all site reports from the MDS region, see Roymans *et al.* 2015, 307-343.

- Fernández-Götz, M. (2014): *Identity and power. The transformation of Iron Age societies: in northeast Gaul*, AAS 21, Amsterdam.
- Habermehl, D. (2013): *Settling in a changing world. Villa development in the northern provinces of the Roman empire*, AAS 19, Amsterdam.
- Halkon, P., M. Millett and H. Woodhouse, ed. (2015): *Hayton, East Yorkshire. Archaeological studies of the Iron Age and Roman landscapes*, vol.2, Yorkshire Archaeological Report 7, Leeds.
- Heeren, S. (2015): "The depopulation of the Lower Rhine region in the 3rd century. An archaeological perspective", in: Roymans *et al.*, ed. 2015, 271-294.
- Hiddink, H. A., ed. (2011): *Hoogeloon-Kaboutersberg. Onderzoek naar een grafveld uit de Romeinse tijd*, ZAR 47, Amsterdam. URL : <http://dare.ubvu.vu.nl/> (keyword hoogeloon).
- (2014): *De Romeinse villa-nederzetting op de Kerkakkers bij Hoogeloon (Noord-Brabant)*, ZAR 53, VUopgravingen in de Kempen 3, Amsterdam. URL : <http://dare.ubvu.vu.nl/> (keyword hoogeloon).
- (2015): "The villa settlement of Hoogeloon-Kerkakkers", in: Roymans *et al.*, ed. 2015, 87-124.
- Hiddink, H.A. and N. Roymans (2015): "Exploring the rural landscape of a peripheral region", in: Roymans *et al.*, ed. 2015, 45-86.
- Hissel, M.E. (2012): *Een inheems-Romeinse nederzetting in Oerle-Zuid (gemeente Veldhoven)*, Diachron publicatie 50, Amsterdam.
- Jansen, R. *et al.*, ed. (2007): *Bewoningsdynamiek op de Maashorst. De bewoningsgeschiedenis van Nistelrode van Laat-Neolithicum tot en met de Volle Middeleeuwen*, Archol rapport 48, Leiden.
- Jeneson, K. (2013): *Exploring the Roman villa world between Tongres and Cologne. A landscape archaeological approach*, unpublished PhD thesis VU University, Amsterdam.
- Kooistra, L. and M. Groot (2015): "The agricultural basis of the Hoogeloon villa and the wider region", in: Roymans *et al.*, ed. 2015, 141-162.
- Koster, A. (2007): "Het bronsdepot van Nistelrode", in: Jansen *et al.*, ed. 2007, 439-486.
- Mattingly, D.J., C. M. Daniels, J. N. Dore, D. Edwards and J. Hawthorne (2003-2013): *The archaeology of Fazzān*, 4 vols, London.
- Mattingly, D. J. (2006): *An imperial possession. Britain in the Roman empire*, London.
- Millett, M. (2015): "Broader perspectives on past lives", in: Halkon *et al.*, ed. 2015, 542-565.
- Nicolay, J. (2007): *Armed Batavians. Use and significance of weaponry and horse gear from non-military contexts in the Rhine delta (50 BC-450 AD)*, AAS 11, Amsterdam.
- Raepsaet, G. (2013): "L'ethnogenèse de la civitas Tungrorum et la formation de la province de Germanie", *Antiquité Classique*, 82, 11-148.
- Rippon, S. (2000): *The transformation of coastal wetlands. Exploitation and management of marshland landscapes in North West Europe during the Roman and medieval period*, Oxford.
- Roymans, N. (2015): "Roman grave monuments at the Kaboutersberg and their relation to the Hoogeloon villa", in: Roymans *et al.*, ed. 2015, 125-139.
- Roymans, N. and T. Derks (2015a): "The archaeology of a peripheral region. Theoretical perspectives and methodology", in: Roymans *et al.*, ed. 2015, 1-18.
- (2015b): "Texuandri, Tungri, Germani. Different levels of ethnic belonging", in: Roymans *et al.*, ed. 2015, 19-32.
- (2015c): "Rural cult places and the symbolic construction of supra-local communities", in: Roymans *et al.*, ed. 2015, 229-243.
- (2015d): "Towards a narrative of the social history of the Hoogeloon villa settlement", in: Roymans *et al.*, ed. 2015, 295-306.
- Roymans N., T. Derks and H.A. Hiddink, ed. (2015): *The Roman villa of Hoogeloon and the archaeology of the periphery*, AAS 22, Amsterdam.
- Roymans N. and T. Derks, ed. (2011): *Villa landscapes in the Roman North. Economy, culture and lifestyles*, AAS 17, Amsterdam.
- Roymans, N. and D. Habermehl (2011): "On the origin and development of axial villas with double courtyards in the Latin West", in: Roymans & Derks, ed. 2011, 83-105.
- Roymans, N. and F. Gerritsen (2002): "Landscape, ecology and mentalités. A long-term perspective on developments in the Meuse-Demer-Scheldt region", *Proceedings of the Prehistoric Society*, 68, 257-287.
- Roymans, N. and F. Theuws, ed. (1991): *Images of the Past. Studies on ancient societies in Northwestern Europe*, Studies in praee- en protohistorie 7, Amsterdam.
- Roymans, N. and M. Zandstra (2011): "Indications for rural slavery in the northern provinces", in: Roymans & Derks, ed. 2011, 161-177.
- Slofstra, J. (1991): "Changing settlement systems in the Meuse-Demer-Scheldt area during the Early Roman period", in: Roymans & Theuws, ed. 1991, 131-199.
- Spek, Th. (1996): "Die bodenkundliche und landschaftliche Lage von Siedlungen, Äckern, und Gräberfeldern in Drenthe (nördliche Niederlande)", *Siedlungsforschung. Archäologie-Geschichte-Geographie*, 14, 95-193.
- Theuws, F. (1991): "Landed property and manorial organisation in Northern Austrasia. Some considerations and a case study", in: Roymans & Theuws, ed. 1991, 299-407.
- Van Asseldonk, M. (2013): "De laatmiddeleeuwse transitie en de oorsprong van gemeentes en heerlijke rechten op de wildernis in de Meierij van 's-Hertogenbosch", *Noordbrabant Historisch Jaarboek*, 30, 12-49.

- Vanderhoeven, A. (2015): “Town-country relations from an urban perspective. The Tongres evidence”, in: Roymans *et al.*, ed. 2015, 189-206.
- Van Kerckhove, J. (2014): “Het Romeinse aardewerk”, in: Hiddink, ed. 2014, 297-405.
- (2015): “Major trends in the pottery consumption in the Hoogeloon villa settlement and some contemporary rural settlements in the northern part of the *civitas Tungrorum*”, in: Roymans *et al.*, ed. 2015, 245-269.
- Wesselingh, D. (2000): *Native neighbours. Local settlement system and social structure in the Roman period at Oss (the Netherlands)*, *Analecta Praehistorica Leidensia* 32, Leiden.
- Willis, S. (2013): “The Iron Age and Roman settlement at Ingleby Barwick”, in: Willis & Carne, ed. 2013, 165-193.
- Willis, S. and P. Carne, ed. (2013): *A Roman villa at the edge of Empire*, CBA Research Report 170, York.

