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Worlds on a string: on beads and exchange in Merovingian Northern Gaul

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Chapter Three

Beads in the seventh century

*Merovingian Beads from settlement burials in the Kempen in a wider context*²⁹⁵

1. Introduction: Merovingian beads

Hundreds of thousands of beads are known from numerous rural cemeteries dating to approximately 450 and 750 in Northwestern Europe (fig. 3.1). Usually, they are found as necklaces or bracelets. Occasionally beads are found at hip height, as a collection in a purse or suspended from a belt. Most beads are found in graves of women and children, although the occasional sword or belt bead is found in graves of men²⁹⁶. In the past, beads have been dismissed as meaningless trinkets, and were often deemed too insignificant to even depict in many site publications. Until recently, apart from the mainly German typological studies of beads as a means of dating Merovingian graves, very little research has focused on them.²⁹⁷ In the last decade or so it has become clear that bead research has much more to offer and as a result more and more research of Merovingian beads is being conducted.²⁹⁸

Beads are durable, portable, ubiquitous, and highly variable objects. They are also a means to gain a better understanding of mercantile and other networks that facilitated long-distance trade. For example, archaeometric analysis of Merovingian glass beads has demonstrated that in the fifth and sixth centuries, many monochrome glass beads were imported into Europe from the Near East, and even from as far away as India and Sri Lanka.²⁹⁹ In Merovingian graves dating to the fifth or sixth century, it is not uncommon to find beads with provenances as varied and far apart as India, Mesopotamia, the Near East, the Mediterranean, the Baltic and Europe itself, often strung together on a single string of beads (fig. 3.2).³⁰⁰

²⁹⁵ This chapter has already been published as: Langbroek, M.B. 2023: Merovingian Beads from settlement burials in the Kempen in a wider context. In: F. Theuws (ed.), *Distributing the dead. Settlement burials in the pagus Texandrië and the transformation of Merovingian society c. 700 CE (Geldrop, Dommelen, Veldhoven, Mierlo) (Southern Netherlands)*, Bonn, 132-166. I only changed the lay-out and renumbered the figures so as to be in accordance to chapter 3 of this dissertation. The text and images are the same as in the published article.

²⁹⁶ Gender: usually no bones are preserved. There is the danger of circle reasoning on the basis of beads. However, when bones are preserved, those interred with beads are indeed mostly biological women. See also Perez 2020.

²⁹⁷ Koch 1977; Sasse/Theune 1997; Siegmund 1998; Von Freeden/Wieczorec 1997.

²⁹⁸ Brugmann 2004; Peake 2013; Pion 2014; Mannion 2015; Langbroek 2016; Langbroek 2018.

²⁹⁹ Pion/Gratuze 2016; Pion/Gratuze/Périn/Calligaro 2020;.

³⁰⁰ Pion 2014; Langbroek in prep.

One of the most astonishing aspects of Merovingian beads is that the same types of beads were interred across Europe. For example, *millefiori* or mosaic beads that were probably made in Egypt³⁰¹ can be found in cemeteries as far removed from one another as Szólád in Hungary and Buckland in England.³⁰² It is not just beads from far away that can be found in cemeteries across Europe. Many monochrome and polychrome wound bead types are just as, or even more ubiquitous than imported beads. Perhaps even more striking, besides identical individual bead types occurring across the continent, identical bead *combinations* can be discerned as well.³⁰³ The ubiquity of identical beads and bead-combinations in cemeteries throughout Europe demonstrates the strong networks that must have been sustained in the sixth century.³⁰⁴

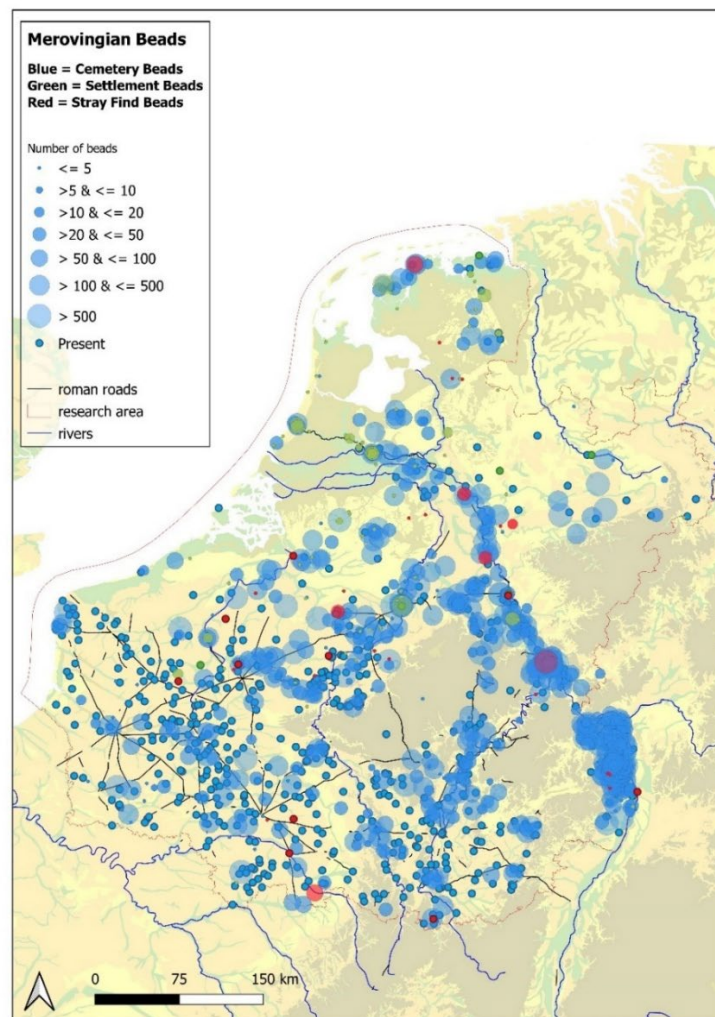


Fig. 3.1 Find locations of beads dating to the Merovingian period in northern Gaul. Source: www.earlymedievaleurope.org (Online Database ERC Rural Riches).

³⁰¹ Pion 2014.

³⁰² Szolad: Brogiolo/Marazzi/Giostra 2017, 208; Buckland: Brugmann 2004, fig. 145 -146.

³⁰³ For specific regions, this has been recognised before: it is for instance reflected in the *Perlenkombinationsgruppen* developed by Frank Siegmund for the German Rhineland (Siegmund 1998).

³⁰⁴ Langbroek in prep.

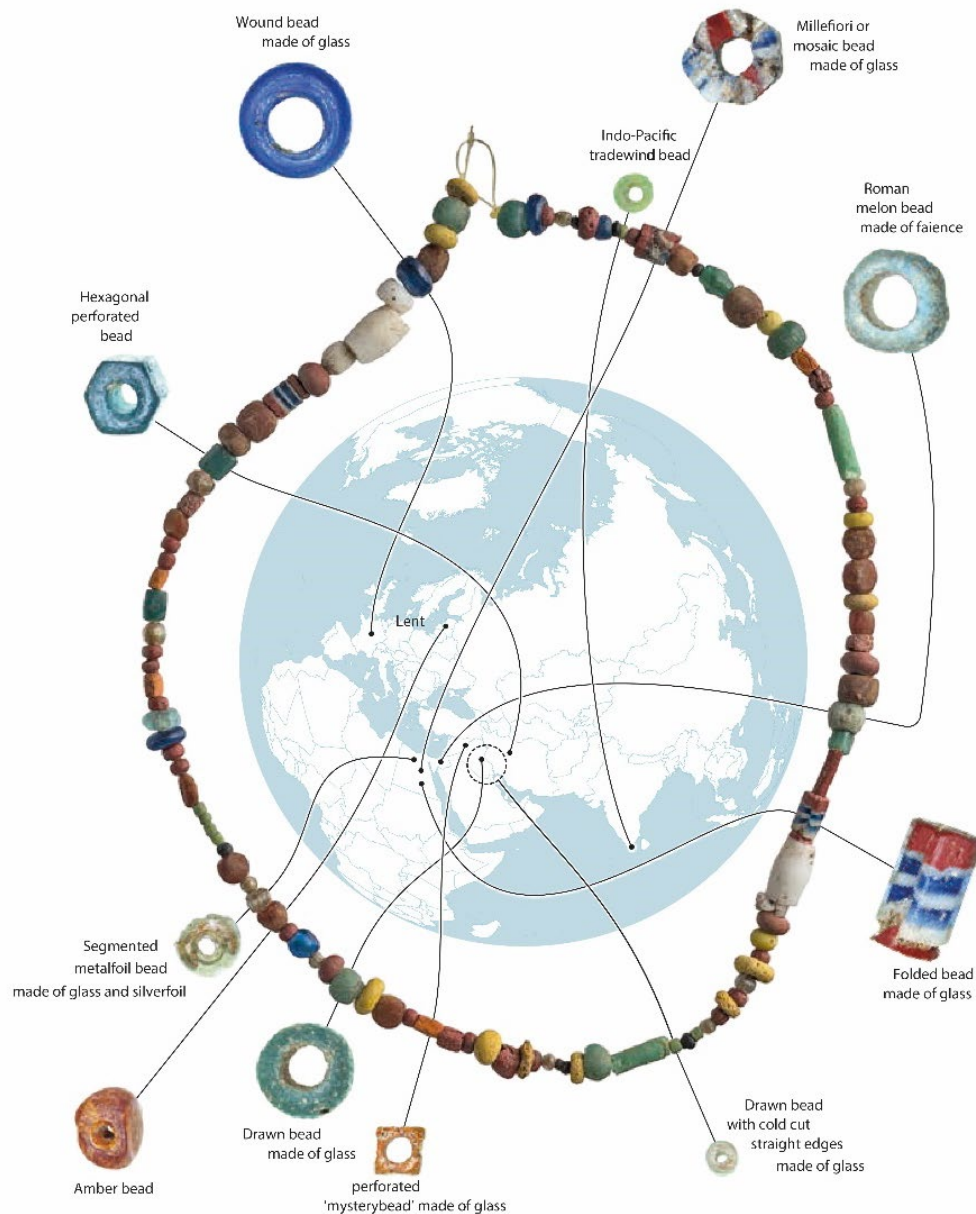


Fig. 3.2 This string of 121 beads of glass, amber and faience was found around the neck of a girl of 5 or 6 years old in grave 40 from the sixth century cemetery of Lent-Lentseveld. The beads in this string were made with varying techniques and have origins in Europe, the Baltic, the Near East, Egypt, the Middle East and India. Photos by: A. Dekker and M. Langbroek. Design by: F. Ruys, Vizualism, in cooperation with J. Hendriks, Gemeente Nijmegen, and Provincie Gelderland.

Do bead assemblages from the seventh century display the same connectivity? Chemical analyses of glass vessels and garnets suggest that exchange over long distances became much more uncommon from the late sixth century onwards.³⁰⁵ Constantin Pion has noticed a similar development in bead collections from Belgian cemeteries that date to the first half of the seventh century.³⁰⁶ In this chapter, beads from the settlement burials in Dommelen-Kerkakkers, Geldrop-Zesgehuchten and Veldhoven-Site K

³⁰⁵ Calligaro *et al.* 2008; Calligaro/Périn 2013; Van Wersch 2011.

³⁰⁶ Pion 2014, 144-145, 154-157, 230-235.

will be studied and compared to beads from other Merovingian cemeteries in Noord-Brabant (Bergeijk-Fazantlaan, Veldhoven-Oeienbosdijk, Veldhoven-Meerveldhoven and Uden-Schepersweg) (fig 3.3). As these sites date mostly to the seventh century, this dataset provides the opportunity to assess whether beads with an exotic provenance were available in Noord-Brabant during this period.³⁰⁷ In contrast to most other regions of northern Gaul, in the Kempen the practice of interring the dead with grave goods including beads continued into the second half of the seventh century. The study of beads from these graves can therefore provide new insights into the development of bead types and bead exchange in the Late Merovingian period.



Fig. 3.3 The locations of the sites in this study. 1. Geldrop-Zesgehuchten; 2. Dommelen-Kerkakkers; 3. Veldhoven-Site K 4. Bergeijk-Fazantlaan; 5. Veldhoven-Oeienbosdijk; 6. Veldhoven-Meerveldhoven; 7. Uden-Schepersweg.

2. Method

The beads found in the Kempen have been categorised using the typology that was developed by Constantin Pion in 2014. Besides identifying and dating each bead according to Pion's typology, their material, condition, production technique, size, colour, decoration and provenance³⁰⁸ were documented.

³⁰⁷ At the site Alphen-Molenakkers in Noord-Brabant a Merovingian cemetery containing beads was also excavated (Verhoeven/Janssen 2019). It dates to the sixth century mostly, and the 457 beads found have provenances in Europe, the Mediterranean, Egypt and the Near East (Nederstigt 2019). As it dates to the sixth century, it will not be considered further in this chapter. At the time of writing a newly discovered cemetery located in Hilvarenbeek, dating to the sixth and seventh centuries, was excavated. The beads found in it are not considered in this chapter either.

³⁰⁸ Based on the production methods used to produce each bead.

With the help of a stereomicroscope several visual observations were documented per bead as well. Finally, when available, the beads were photographed. Pion's typology is based on the seriation of over 21.000 beads found in six Merovingian cemeteries from Belgium. It was later adjusted and improved by Vrielynck, Mathis and Pion in 2018.³⁰⁹ As bead collections from sites across Europe show remarkable similarities,³¹⁰ a typology based on early medieval bead collections from Belgium can be applied to early medieval bead sets found in the Netherlands without difficulty. The similarity of beads across Merovingian Europe is also shown by other typologies made for Merovingian beads from the German Rhineland, Southern Germany and England: these feature identical bead types as are described by Pion and generally class these types in the same relative chronological order (fig. 3.4).³¹¹

What sets Pion's typology part from the others is that it was built taking the techniques used to manufacture Merovingian beads as a starting point. Merovingian beads were produced using a variety of techniques; most glass beads were either drawn or wound, but folded, perforated and mosaic beads occur regularly as well. Beads of other materials than glass, such as amber, amethyst or rock crystal were shaped by cutting or knapping techniques before being polished (fig. 3.5). Winding beads seems to have been a European phenomenon, whereas other forming techniques were used in the Mediterranean, Egypt, the Near East, the Middle East and India (table 3.1).³¹² In Pion's typology, each bead type is dated to one or multiple periods (P1, P2, P3, P4 or P5) within the Merovingian era, roughly corresponding to the period 480-670 (table 3.2), and becomes very uncertain for the period after 650 CE.³¹³ As several of the bead-sets in this study were excavated from cemeteries that date to the late seventh century, not all beads could be typed with Pion. Fortunately, these type do appear in the latest bead phases or *Perlenkombinationsgruppen* formulated in several of the typologies for Germany and England mentioned above. It is therefore very likely that these are in fact later seventh century bead types that could be assigned to the period 660-710 CE, hereafter referred to as 'P6' (fig. 3.4).

All beads from Dommelen-Kerkakkers and Veldhoven-Site K were available for study. The beads from Geldrop-Zesgehuchten were studied from a photograph, as were those from Bergeijk-Fazantlaan (photographs) and Veldhoven-Oeienbosdijk (drawings). With the exception of 65 beads that remained unavailable during the period of loan, most beads from Uden-Schepersweg were available for study. 291 Out of the 604 beads found at Veldhoven-Meerveldhoven were examined at the Noord-Brabants Museum. As the photographs of the other beads in the publication of Meerveldhoven are of bad quality³¹⁴ they were not studied. In table 3.3 an overview of the studied material is provided. In total 1135 beads from Merovingian cemeteries in Noord-Brabant were studied.³¹⁵

³⁰⁹ Vrielynck/Mathis/Pion 2018

³¹⁰ Langbroek in prep.

³¹¹ Koch 1977; Sasse/Theune 1997; Siegmund 1998; Müssemeier *et al.* 2003; Koch 2001; Stauch 2004; Brugmann 2004; Hines/Bayliss 2013.

³¹² For a detailed discussion on bead techniques and their provenances, see Pion 2014, 178-229 and references therein.

³¹³ Pion 2014, 33

³¹⁴ Verwers 1978.

³¹⁵ Here Floor Teunissen van Manen should be mentioned, who has helped to determine a significant part of the Merovingian beads from Noord-Brabant as part of her BA-thesis at Saxion Hogeschool Deventer (Teunissen van Manen 2021).

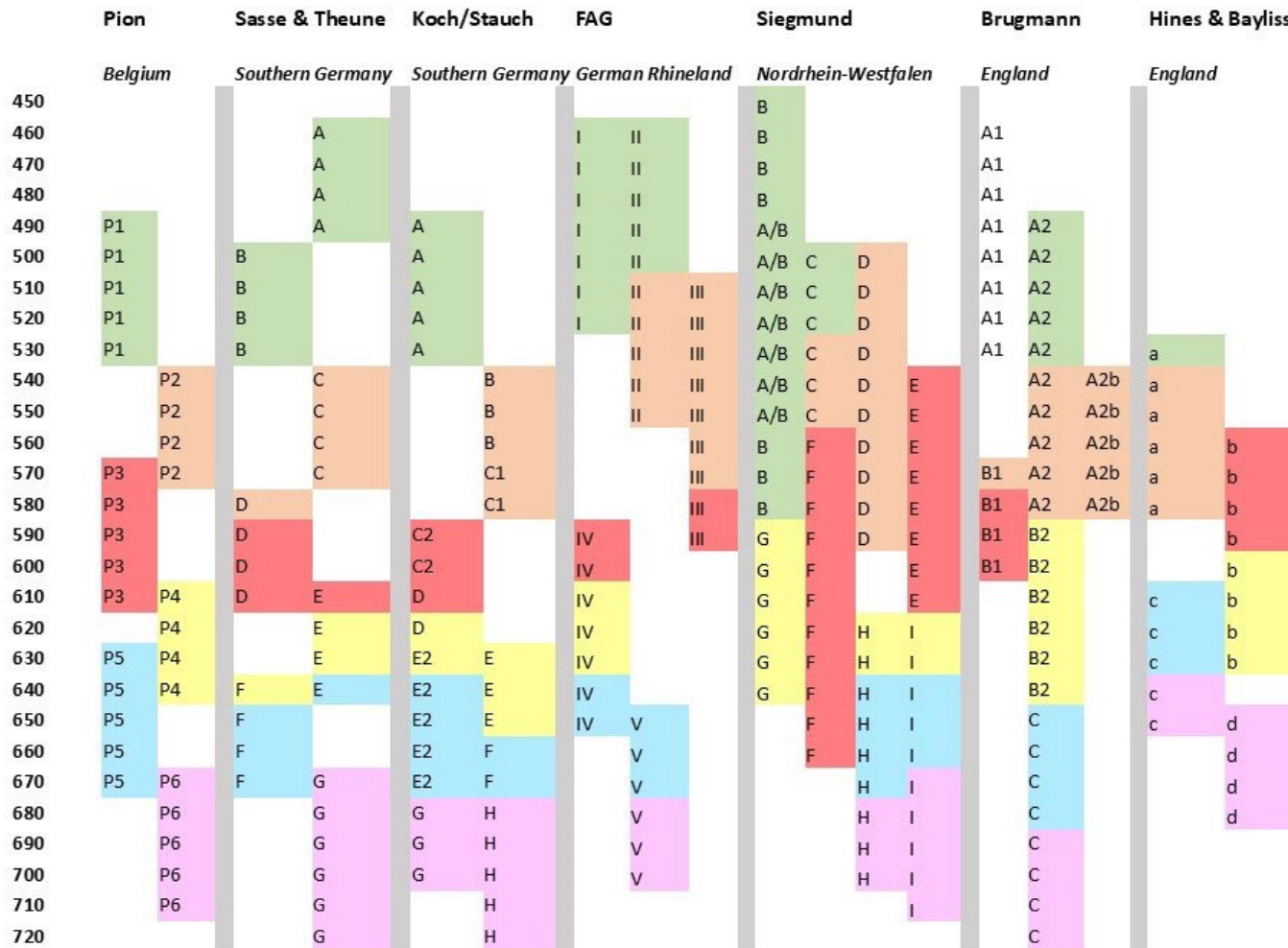


Fig. 3.4 Bead phases from Merovingian bead typologies from Germany and England compared to Pion's bead phases from Belgium. Green: beads from Pion's phase P1. Orange: beads from Pion's phase P2. Red: beads from Pion's phase P3. Yellow: beads from Pion's phase P4. Blue: beads from Pion's phase P5. Pink: beads that do not occur in Pion's typology, but do occur in the latest phases of other typologies, referred to as 'P6'. No colour: no parallels found in Pion's typology. Some phases have multiple colours, and contain beads from two or more of Pion's bead phases. Based on Pion 2014; Koch 1977; Sasse & Theune 1997; Siegmund 1998; Müssemeier et al. 2003; Koch 2001; Stauch 2004; Brugmann 2004; Hines & Bayliss 2013.



Fig. 3.5 Examples of beads from the cemetery Lent-Lentseveld made with various production techniques. A: drawn bead with lines parallel to the perforation; B: wound bead with concentric lines around the perforation; C: folded bead with visible seam; D: perforated bead with one irregular side; E: mosaic bead formed by various slices of mosaic glass; F: amber bead with cut and polished faces. Photo's: M.B. Langbroek.

Table 3.1 Bead making techniques and their provenances (based on Pion 2014).

Technique	Type group	Provenance
Drawn Beads	A	India/Mesopotamia/Egypt/Syro-Palestinian coast
Wound Beads	B	Europe (mostly)
Folded Beads	C	Egypt/Syro-Palestinian coast
Perforated Beads	D	Mesopotamia/Egypt/Syro-Palestinian coast
Mosaic Beads	E	Egypt
Beads from other materials	F	Various Provenances
Prehistoric or Roman beads	G	Various Provenances

Table 3.2 Overview of the bead periods by Pion 2014, with LPV phases and date-approximation.

Period	Legoux et al. 2004	Date (approximation)
P1	MA1	470/480-520/530
P2	MA2	520/530-560/570
P3	MA3	560/570-600/610
P4	MR1	600/610-630/640
P5	MR1/MR2	630/640-660/670

Table 3.3 Overview of beads studied in this chapter.

Site	Date cemetery	nr. of graves	amount of graves with beads	Percentage of graves with beads	beads examined	beads examined from photograph	total beads studied	total beads found
Dommelen-Kerkackers	675-725	24	5	20,8%	152	2	154	154
Geldrop-Zesgehuchten	675-725	22	1	4,5%	0	27	27	27
Veldhoven-Huysackers	675-725	23	3	13,0%	59	1	60	60
Bergeijk Fazantlaan	590-740	135	35	25,9%	0	262	262	366
Veldhoven-Meerveldhoven	580-700	63	24	38,1%	291	0	291	604
Veldhoven-Oeienbosdijk	550-700	27	9	33,3%	0	44	44	44
Uden-Schepersweg	550-725	43	10	23,3%	210	65	275	275
total beads	x	x	x	x	712	399	1113	1530

3. Beads from settlement burials in the Kempen

In this paragraph the beads from the settlement burial grounds excavated in Dommelen, Geldrop and Veldhoven will be described. As these were never published before, the beads will be discussed per grave. The complete determination tables per grave are incorporated in appendix 3.

3.1 Geldrop-Zesgehuchten

The string of beads from grave 6B was found at what can be considered the neck of the deceased (see chapter 11, plan of grave 6B). It consists of 26 beads made of glass and one amber bead (fig. 3.6, table 3.4, appendix 3.1). It was clearly assembled with care, as it consists of pairs of beads of the same shape and colour, accompanied by one large central bead, forming a symmetrical string. Five of the beads are polychrome wound beads and twenty-one are monochrome wound beads: nine yellow, five red, four white, two blue-green and one green.

The large central bead has a red base and is decorated with white interlacing and yellow and white stratified eyes surrounded by four yellow dots. It is a unique piece without parallels known to the author. Both green-blue translucent biconical beads with respectively white and yellow combed spiral decoration are reminiscent of the large spindle whorl beads with similar decoration that are regularly found in sixth century graves, and for which production evidence was found in Cologne.³¹⁶ The examples from Geldrop are smaller and do not occur in Pion's typology, but are much like Koch's bead types 50,22 and 50,23 from the cemeteries of Heilbronn-Neckargartach and Erpfingen.³¹⁷ The last two polychrome beads are two cylindrical white beads decorated with a pattern of blue-green translucent interlacing. These beads are a common occurrence in graves dating to the first half of the seventh century³¹⁸ that have been referred to as cheap, mass-produced commodities.³¹⁹ However, they are not an uncommon find in strings of beads that date to P5, or the period between 550 and 670 CE.



Fig. 3.6 String of beads from Geldrop-Zesgehuchten grave 6B. Photo: A. Dekker.

³¹⁶ Dodt 2016.

³¹⁷ Koch 2001, 617 and Farbtafel 7.

³¹⁸ Pion type B3.3-03a.

³¹⁹ Koch 1977, 207.

Table 3.4 Overview bead-graves, bead-dates, bead-techniques and bead-provenances from Geldrop-Zesgehuchten.

Grave nr	Gender	Age	Position beads	Nr. of Bead sets	Materials	Date beads	Pion Period	techniques	Europe (wound beads)	%	Baltic (Amber beads)	%	total number of beads
6B	f	adult	neck	1	glass, amber	620-670	P5	B, F	26	96	1	4	27

Most monochrome beads are (flat) biconical or barrel-shaped. Some are cylindrical, one is long, oval and flat and another is lobed like a melon bead. The long oval blue-green bead, the barrel-shaped green bead next to it, the blue-green biconical bead and the lobed red melon bead are all typical mid-seventh century types. Parallels are known from several cemeteries in Belgium, with many examples found in Broechem.³²⁰ According to Pion, yellow, white and red biconical beads should be dated to P3, the period around 600 CE. However, in several Merovingian cemeteries from the Netherlands they are found in graves dating throughout the seventh century.³²¹ Possibly, they were continued to be manufactured, or kept in circulation well into the seventh century. One of the yellow biconical beads is flat rather than round and does not occur in Pion's typology. As a near-identical bead has been excavated from a grave in Veldhoven-Site K (see below), this uncommon shape may well be specific to the region and date to either P5 or P6, or the second half of the seventh century.

Three of the beads in this string could be dated to P3, three to P4 and three to P5. The remainder could not be assigned to a specific bead period, some of which may be of a later date. As the beads dating to P3 suggest, it is likely that several of the beads in this string were worn for an extended period of time before being interred. Taking all this into consideration, this string of beads may have been interred in the second half of the seventh century.

The glass beads found in Geldrop were all made with the so-called winding technique, a technique in which molten glass is wound into a bead around a heated iron rod. Evidence for the production of wound beads has been excavated at several locations in Europe.³²² The raw material for the amber bead most likely originated from the Baltic, and was probably worked into a bead at one of the amber bead production sites that have been excavated in the Netherlands.³²³

3.2 Dommelen-Kerkakkers

In Dommelen a total of 154 beads were excavated from three graves with four burials: graves 2, 3A, 3B and 4 (table 3.5, appendix 3.2). They all date to late seventh century, or P6. The vast majority are glass beads: only two are made of amber. Each string of beads was clearly assembled with symmetry in mind, as they all consist of pairs of beads of the same shape and colour, occasionally accompanied by one large central bead.

Both amber beads were found in grave 2, as part of a string of 50 beads at neck-height (fig. 3.7 and fig. 3.8). Besides the two large amber beads, it consists of 13 polychrome and 35 monochrome glass beads. Six of the polychrome beads are so-called 'confetti beads' with a wound monochrome base decorated by irregular dots of different colours (fig. 3.9). Although these do not occur in Pion's typology, nearly identical

³²⁰ Pion 2014, types B1.7-04, B1.3-09d, B1.3-06, B1.5-06; Annaert 2018.

³²¹ See for example Langbroek 2022 on beads found in Apeldoorn 't Loo.

³²² Pion 2014, 180-188.

³²³ Langbroek 2018, 106.

confetti beads sporting the same colour combinations have been excavated in Berghausen and Pleidelsheim in Southern Germany³²⁴, in Norfolk, England³²⁵ and during the recent excavation of a settlement in Utrecht-Oudwijkerdwaarsstraat, the Netherlands.³²⁶ Also, they feature in *Perlenkombinationsgruppe* G for the cemeteries of Eichstetten and Weingarten³²⁷ and in Stauch's *Perlenkombinationsgruppen* G and H for the cemetery of Wenigumstadt. Both seriations date them to the late seventh and early eighth century (SD phases 11 and 12 and JM III).³²⁸ In Dommelen identical confettibeads with a dark brown/black base-bead and a decoration of yellow, red, green and white dots were found in graves 3B and 4.

The most notable polychrome bead in this string is the mosaic or *millefiori* bead with the typical red borders and alternating mosaic inlays of white and yellow flowers. In seventh-century bead sets mosaic beads are a very rare occurrence: this particular bead must have been at least a century old before it was deposited in this grave. The amount of wear on its surface definitely supports this theory (fig. 3.10). Its counterpart is not another mosaic bead, but an improvised wound bead made to resemble it in both shape and colour: it is no wonder it does not occur in Pion's typology as it appears to have been made for this string of beads specifically. Perhaps even older is the black annular bead with a white wave decoration, as this bead type generally dates to the late fifth and first decades of the sixth century. Like the mosaic bead, it shows signs of heavy wear. The remaining four polychrome beads, sporting interlacing and combed spiral decorations, may have circulated for quite some time before their deposition as well, as these can be dated from the second half of the sixth century onwards.

Amongst the monochrome beads one 'older' bead can be discerned as well: it is a perforated blue bead from the Near or Middle East³²⁹ with a square section that can be dated to the sixth century. The other monochrome beads are much newer in comparison: they are all typical P5 beads, such as the two flat red biconical beads and the barrel-shaped or biconical red, green and orange beads in this string. Similar barrel-shaped beads with the same size and colours have been excavated in cemeteries across Europe: examples can be found in England (where they are called *wound spiral beads*), Sweden, Germany and on Gotland.³³⁰ In England they are typical for bead combination group C, which dates from the middle of the seventh century onwards.³³¹ Noteworthy are two annular translucent blue perforated beads with one smooth round side and one irregular flat side (fig. 3.11). Clearly, these were made by perforating glass that was placed on a flat irregular surface. In contrast to perforated beads from the sixth century that were produced in the Near East or even further afield, these are likely to have been made in Europe:³³² similar beads were found in graves 3A and 3B in Dommelen, in grave 25 of Veldhoven - Site K and in two later seventh century graves of Bergeijk-Fazantlaan. They have also been excavated from cemeteries in England (where they are called 'doughnut beads'), Southern Germany and Switzerland: they are typical for Stauch's

³²⁴ Koch 2001, 599 and Farbtafel 2.

³²⁵ Guido 1999, Plate 2.

³²⁶ Tolboom in prep. and personally examined by the author.

³²⁷ Sasse/Theune 1996.

³²⁸ Stauch 2004, 85-88.

³²⁹ Pion 2014, 219-222.

³³⁰ Brugmann 2004, figs. 93-96, 99.

³³¹ Brugmann 2004, 41, table 3, figure 173.

³³² Brugmann suggests these perforated *Doughnut beads* might have been produced in England (Brugmann 2004, 41).

Perlenkombinationsgruppe H and Brugmann's bead combination group C, which date to the late seventh and early eighth century.³³³

In grave 3A a set of beads was found consisting of three wound polychrome confetti beads, 15 wound monochrome biconical or barrel-shaped beads in yellow, red, green, brown, blue and blue-green, one dark blue wound monochrome annular bead and five perforated monochrome annular beads made of translucent yellow, blue and brown glass (fig. 3.12). The beads were found scattered across the grave: it had been re-opened. Two out of three confetti beads look very much like each other: a blue-green biconical base bead with a decoration of irregular green, red and orange dots. The exact shade of green, red and orange can be observed in the many biconical or barrel-shaped monochrome beads that were found in Dommelen (fig. 3.13). Identical confettibeads with biconical beads in matching colours were found in grave 3B, but also in the cemetery Apeldoorn-'t Loo. The other confetti bead sports a blue-green base and yellow, white, green and red dots. Again, identical beads were found in grave 3B and also in the cemeteries Apeldoorn-'t Loo³³⁴ and Elversele in Belgium.³³⁵ In contrast to the string from grave two, no older 'heirloom beads' were incorporated into these strings. The confetti beads, biconical beads and perforated beads are all without clear parallels in Pion's typology: they probably date to P6, the late seventh century.

The string from grave 3B was found at neck-height and contains 62 beads: 13 polychrome and 59 monochrome glass beads (fig. 3.14 and fig. 3.15). Two of these could not be studied as they are missing. The monochrome beads are like those found in graves 2 and 3A: most are either barrel-shaped or biconical wound beads or perforated annular beads with a smooth round side and an irregular side. The wound orange biconical beads are a typical seventh-century phenomenon. The sides of these orange beads are much smoother than their main body (fig. 3.16).³³⁶ Next, the large flat blue trapezium-shaped bead with a very smooth surface has no known parallels in other cemeteries. It was not wound or perforated, but instead the perforation seems to have been drilled through the glass, leaving white drilling marks. The shape itself is very symmetrical and was most likely shaped with the use of a mould. Possibly, before it became a bead, it may have functioned as a sort of decorative glass inlay. Nine of the 13 polychrome beads are confetti beads of the three different types already encountered in graves 2 and 3A. The other polychrome beads are a red rectangular bead with a decoration of yellow dots that is typical for P5, a red annular bead decorated with yellow interlacing, and a large round blue-green bead with a decoration of stratified eyes in white and red glass with one parallel in the cemetery of Broechem. Like the former strings, the confetti beads, biconical beads and perforated beads all point towards a date in the late seventh century.

Four beads could not be assigned to either grave 3A or 3B, as they were found in the re-opening pit dug through both graves. The smallest consists of three biconical wound beads and one perforated blue annular bead with one smooth round side and one irregular flat side (fig. 3.17).

The string from grave four consists of 12 monochrome beads that are all biconical or barrel-shaped, a confetti bead with a black base and a millefiori bead with clear signs of heavy wear (fig. 3.18). As was already observed in the description of the string from grave 2, this bead must have circulated since the middle of the sixth century before it was deposited in this grave. Alternatively, it may have been taken from

³³³ Brugmann 2004, 41 and figs. 97-98; Stauch 2004, 87 and note 192.

³³⁴ Langbroek 2022.

³³⁵ Personal communication Bert Mestdagh.

³³⁶ Pion 2014; Vrielynck/Mathis/Pion 2018, bead-type B1.3-09.

a sixth century grave as part of seventh-century grave-reopening practices.³³⁷ As this set of beads is so similar in composition to the other bead sets found in Dommelen, it probably dates to the late seventh century as well.

The beads from Dommelen were made with a variety of techniques and have very varying provenances (table 3.5). The large amber beads from grave 2 were cut and polished into shape using raw material that was most likely imported from the Baltic (Langbroek 2018). All other beads from Dommelen are made of glass. In every string of beads wound beads are present: the majority consists of barrel-shaped and/or biconical wound glass beads and confetti beads. These have a European provenance. Most strings of beads from Dommelen also sport annular beads with one smooth round side and an irregular side, that were made by perforating small blobs of hot molten glass. Perforated beads from sixth century contexts of Near Eastern or Middle Eastern origin look nothing like these.³³⁸ Most likely, they were made locally or regionally. In Dommelen, only one perforated bead of Near Eastern origin was recognised. It dates to the sixth century, as do both mosaic beads and the black annular bead that is decorated with a waving pattern of white glass (fig. 3.19). These also have a foreign provenance: they were probably made in Egypt.³³⁹

³³⁷ Van Haperen 2017.

³³⁸ For an overview of perforated beads with an of Near Eastern or Middle Eastern origin, see the D-type beads in Pion 2014.

³³⁹ Pion 2014, 192.

Table 3.5 Overview bead-graves, bead-dates, bead-techniques and bead-provenances from Dommelen-Kerkakkers.

Grave nr	Gender	Age	Position beads	Nr. of Bead sets	Materials	Date beads	Pion Period	techniques	Europe (wound, perforated beads)	%	Baltic (Amber beads)	%	Egypt (mosaic beads)	%	Near East (drawn, folded or perforated beads)	%	Unknown (missing)	%	total number of beads
2	f	adult	neck	1	glass, amber	650-700	P6	B, E & F	45	90	2	4	1	2	2	4	0	0	50
3A	f	adult	re-opened	1	glass	650-700	P6	B, D	24	100	0	0	0	0	0	0	0	0	24
3A or B	f	adult	?	x	glass	650-700	P6	B, D	4	100	0	0	0	0	0	0	0	0	4
3B	f	adult	neck	1	glass	650-700	P6	B, D	60	97	0	0	0	0	0	0	2	3	62
4	f	adult	re-opened	1	glass	650-700	P6	B, E	13	93	0	0	1	7	0	0	0	0	14



Fig. 3.7 The string of beads excavated from Dommelen-Kerkakkers grave 2. Photo: A. Dekker.

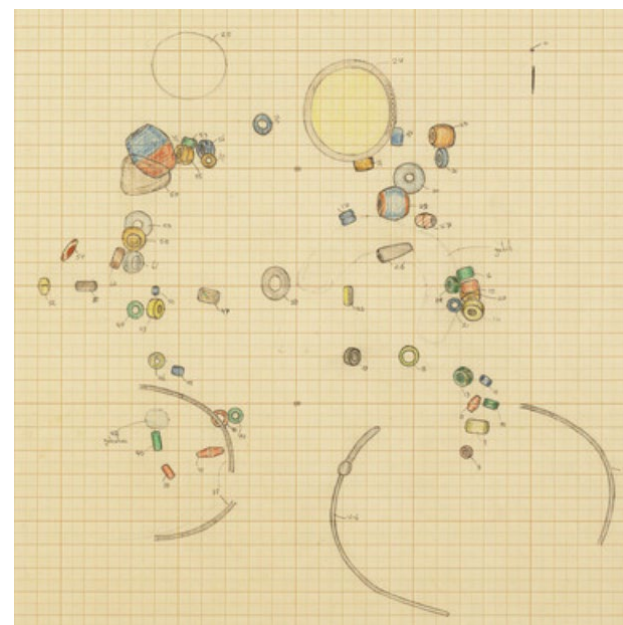


Fig. 3.8 Field drawing of the beads in situ in Dommelen-Kerkakkers grave 2.

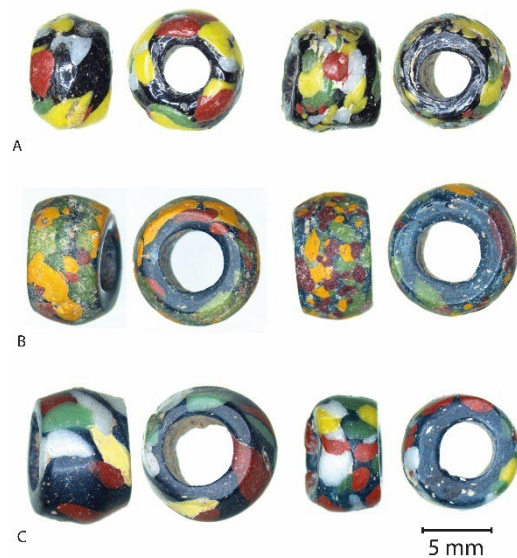


Fig. 3.9 Three different types of confetti beads from Dommelen-Kerkakkers dating to the late seventh century. Photo's: M. Langbroek.



Fig. 3.10 Mosaic beads from a late seventh century grave from Dommelen-Kerkakkers (left) and a mid-sixth century grave from Lent-Lentseveld (right). Photo's: M. Langbroek.

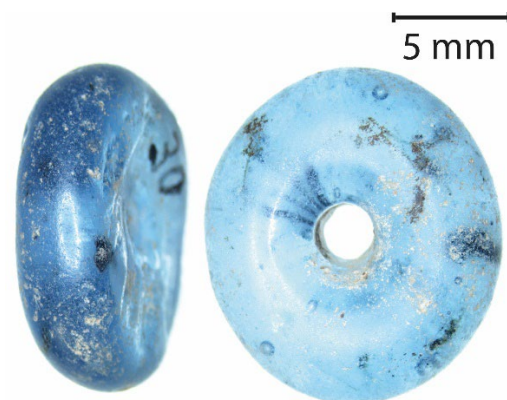


Fig. 3.11 Perforated bead from grave 2, Dommelen-Kerkakkers. Photo's: M. Langbroek.



Fig. 3.12 The beads excavated from Dommelen-Kerkakkers grave 3A. Photo: A. Dekker.



Fig. 3.13 Confetti beads from Dommelen-Kerkackers with barrel-shaped or biconical beads in the same colours from the same grave. A: grave 2; B: grave 3B; C: grave 3B. Photo's: M. Langbroek.

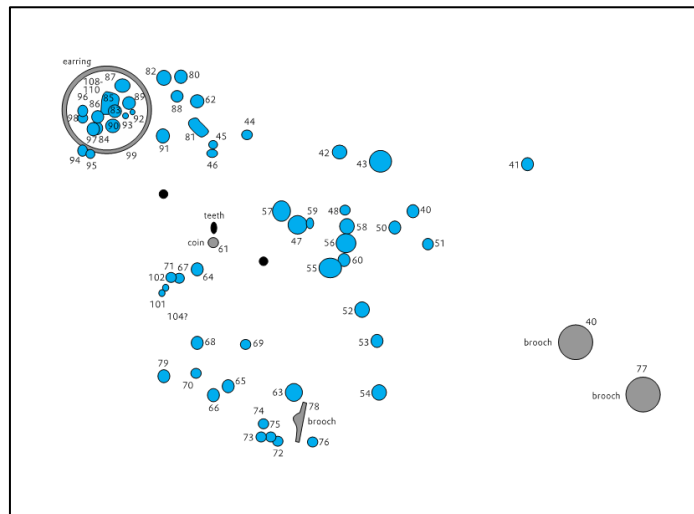


Fig. 3.15 Digitised field drawing of the beads in situ in Dommelen-Kerkackers grave 3B. Drawing: F. Theuvs.



Fig. 3.14 The string of beads excavated from Dommelen-Kerkackers grave 3B. Photo: A. Dekker.



Fig. 3.16 Orange barrel-shaped bead from Dommelen-Kerkakkers grave 3B with smooth perforation sides and a rough surface. Photo: M. Langbroek.



Fig. 3.17 The four beads excavated from Dommelen-Kerkakkers grave 3A or 3B. Photo: A. Dekker.



Fig. 3.18 The beads excavated from Dommelen-Kerkakkers grave 4. Photo: A. Dekker.



Fig. 3.19 Beads from the sixth century excavated from late seventh century graves in Dommelen-Kerkakkers. Photo's: M. Langbroek.

3.3 Veldhoven-Site K and Site G

In Veldhoven a total of 60 beads were excavated from three graves: Site K graves 13 and 25 both contained a string of beads and a single bead was found in Site G grave 1 (table 3.6, appendix 6.3). The 38 glass beads from grave 13 in zone Ka were found at chest and neck height. They were lifted from the grave *en bloc* and further excavated in the office (fig. 3.20). Due to careful excavation the original order of the beads could be (mostly) reconstructed. The complementary colours of the beads suggest that it is a composite set: often strings of beads from the Merovingian period are symmetrical and constructed in complementary colours (fig. 3.21).³⁴⁰ The string consists of two polychrome wound beads and 36 monochrome wound beads: seven yellow, one red, five blue, four green and 19 blue-green beads. The two polychrome beads have an annular shape, one is white with a translucent blue zigzag or wave decoration, the other is yellow with an opaque red band of interlacing. Both polychrome beads are common types in Merovingian bead sets. Most monochrome beads are lobed melon beads, some of which are multi-segmented. Others have an annular or (flat) biconical shape. One blue bead has a flat almond shape that has notched sides, giving the bead a leaf-shaped appearance. A large melon bead of translucent light blue glass for which no parallels are known sits in the centre of the string. The bead with sub-number 24 is not depicted in the reconstruction, because it has been completely pulverized: it is a typical 'yellow powder bead' of a lesser quality glass than the other yellow beads in this string (fig. 3.22). One of these yellow biconical beads is flat rather than round and does not occur in Pion's typology. As a near-identical bead has been excavated from a grave in Geldrop (see above), this uncommon shape may well be specific to the region or date to P5, the middle of the seventh century. The many melon-shaped green and blue-green beads in this string are particularly striking: they are typical occurrences in the mid-seventh century. Identical blue-green specimens have been found in Merovingian burial fields in Broechem, Bossut-Gottechain and Beerlegem.³⁴¹ According to Olivier Vrielynck, these beads are also available in other colours in England and Germany. This is also the case in Veldhoven-Site K, with four opaque green specimens.³⁴² Twenty-four of the beads from feature grave 13 could be dated to Pion's phase P5. The entire set probably dates to the decades just after the middle of the seventh century.

Table 3.6 Overview bead-graves, bead-dates, bead-techniques and bead-provenances from Veldhoven-Site K and Site G.

Grave nr	Gender	Age	Position beads	Nr. of Bead sets	Materials	Date beads	Pion Period	techniques	Europe (wound beads)	%	Baltic (Amber beads)	%	total number of beads
Site K grave 13	f	?	neck	1	glass	620-670	P5	B	38	100	0	0	38
Site K grave 25	f	?	head/neck	1	glass, amber	650-700	P6	B, F	20	95	1	5	21
Site G grave 1	?	?	re-opened	1	glass	600-640	P4	B	1	100	0	0	1

Twenty-one beads were found at head/neck level in grave 25, the single inhumation grave located in Veldhoven-Site Kb. It was probably a necklace. As these beads were collected in the field, and not carefully excavated in the office, the original order of the beads could not be established with absolute

³⁴⁰ Theuws/Van Haperen 2012, 87.

³⁴¹ Vrielynck/Mathis/Pion 2018, type B1.5-07; Pion 2014.

³⁴² Vrielynck/Mathis/Pion 2018, 9.

certainty. However, it was clearly assembled with clear symmetry in mind, as the beads from this grave do appear in pairs of the same shape and/or colour. In fig. 3.23 a possible reconstruction based on the field drawings of this string is shown. It consists of one large square amber bead and 20 glass beads, of which 5 are polychrome and 15 are monochrome. Two of the polychrome beads are confetti beads similar to those found in Dommelen. The remaining three polychrome beads are decorated with interlacing, in different colour combinations. As was mentioned above for Geldrop, beads with interlacing decoration are a common occurrence in graves dating to the first half of the seventh century.³⁴³ Seven of the monochrome beads are barrel-shaped or biconical beads in orange, yellow and green that were also found in Dommelen. Besides these, the string consists of a blue-green lobed melon bead a lot like those found in grave 13, a blue cylindrical bead, a segmented yellow bead, a perforated doughnut bead, a large blue biconical bead and two (one red, one green-blue) pentagonal beads. These last three beads are types that date to the second half of the sixth century, and indeed show many wear marks: they circulated for quite some time before being deposited in Veldhoven. Lastly, an orange annular bead that sports irregular lines stands out from the other three orange beads in this string. It has a lot in common with 'mystery beads' from Dorestad, several of which were excavated from the cemetery 'Op de Heul'.³⁴⁴ Sode, Gratuze and Lankton have described similar red and orange beads from Scandinavia, that date to the seventh and eighth century.³⁴⁵ Stauch also describes similar beads that occur in the cemetery of Wenigumstadt and date to *Perlenkombinationsgruppe G*, or the late seventh century.³⁴⁶ They were also found in Buckland, England and in Stånga, Gotland.³⁴⁷ Taking into consideration the many similarities with the strings of beads from Dommelen, this bead set most likely dates to the second half of the seventh century, or P6, as well.

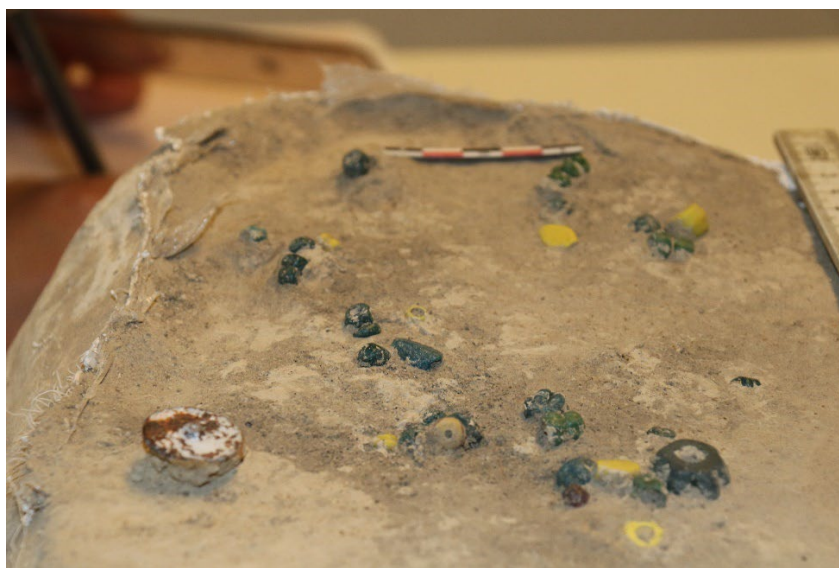


Fig. 3.20 Beads in situ in the part of the grave that was lifted en bloc. Photo: M.B. Langbroek.

³⁴³ Pion type B3.3-03a.

³⁴⁴ Langbroek 2021b, 60.

³⁴⁵ Sode/Gratuze/Lankton 2017.

³⁴⁶ Stauch 2004, 85.

³⁴⁷ Brugmann 2004, figs. 90-92.

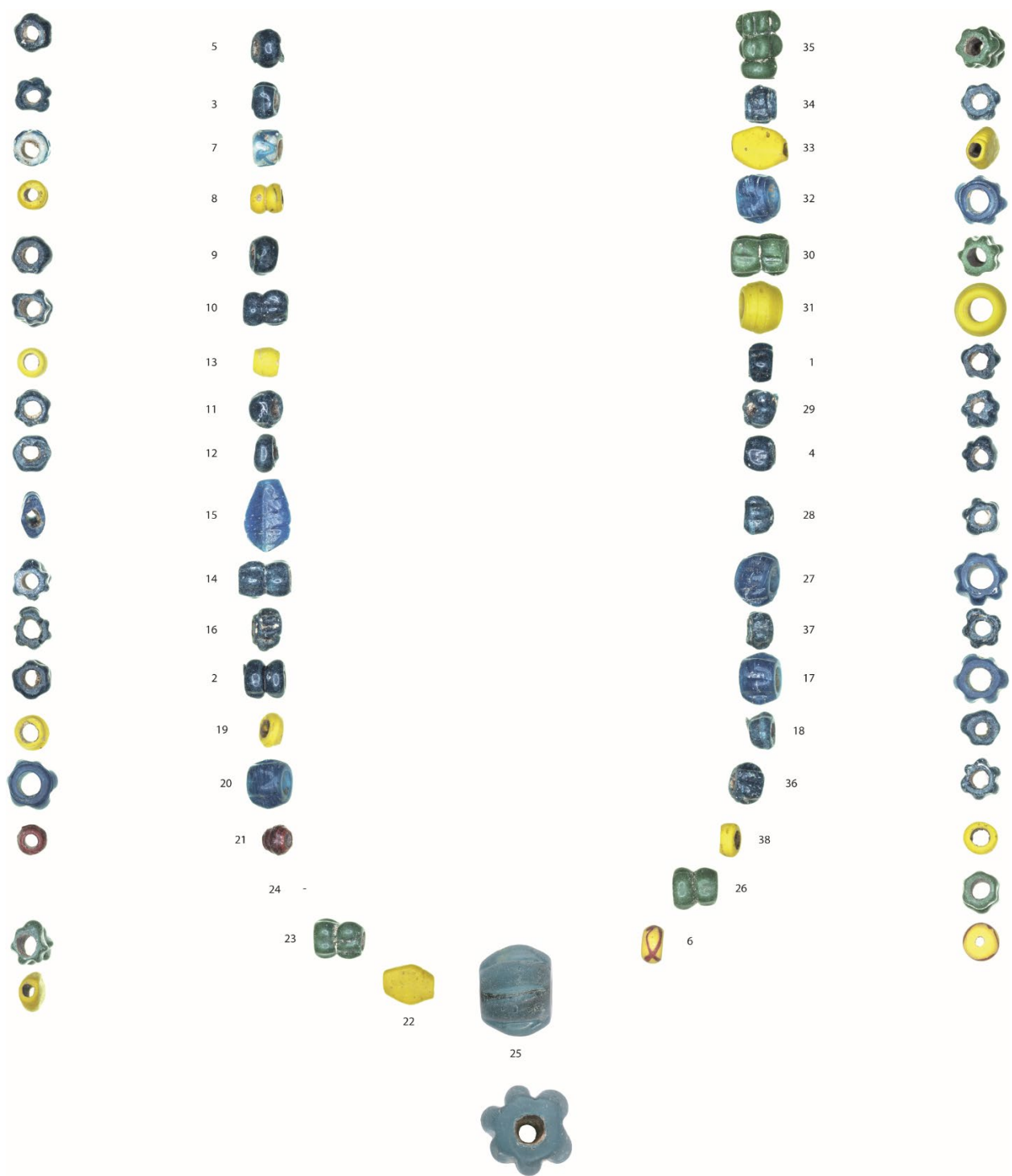


Fig. 3.21 Reconstruction of the string of beads excavated from Veldhoven-Site K grave 13. Photo's: M. Langbroek. Image: F. Theuws.



Fig. 3.22 Pulverised bead 24 excavated from Veldhoven-Site K grave 13. Photo: M.B. Langbroek.

A segmented bead of yellow glass was found in inhumation grave 1 (S9285) of Veldhoven Site G (fig. 3.24). This type of yellow bead is a common occurrence in Merovingian cemeteries dating to the seventh century: similar specimens have been found in the cemeteries of Echt, Bergeijk and Meerveldhoven in the Netherlands, but also in Merovingian cemeteries in Belgium and Germany. It is a wound bead of type B1.2-01 that dates to the first half of the seventh century (P4), but can still be found buried in graves that date to the ongoing seventh century (P5). It is likely that segmented yellow beads of this kind were produced in several locations in Europe.

Most beads found in Veldhoven were made in Europe with the winding technique. The circumferential winding lines can be clearly seen on the surface of these beads (fig. 3.25). A black deposit can often be seen in the perforations: these are iron scale particles that came off the iron rod and stuck to the glass of the bead due to the high temperature needed to wind the beads.³⁴⁸ In Veldhoven, this is particularly evident in bead 25 from grave 13 (fig. 3.26). One orange ‘mystery bead’ from grave 25 was not wound, but crudely formed around a mandrel, which results in poorly fused seams and irregular lines in the beads: a method in between winding and perforating. Similar beads from Scandinavia were made out of different kinds of glass, amongst which high-alumina glass from Northern India, a region where similar beads have been found. The consensus so far is that these orange ‘mystery beads’ were made in Europe with any sort of raw glass that was available to the bead maker.³⁴⁹

³⁴⁸ Greiff/Nallbani 2008, note 66.

³⁴⁹ Sode/Gratuze/Lankton 2017, 331.



Fig. 3.23 Reconstruction of the string of beads excavated from Veldhoven-Site K grave 25. Photo's: M. Langbroek.



Fig. 3.24 Bead excavated from Veldhoven-Site G grave 1. Photo: ADC Archeoprojecten.



Fig. 3.25 Visible winding lines in bead 32 from Veldhoven-Site K grave 13. Photo: M. Langbroek.



Fig. 3.26 Black iron scale in the perforation of bead 25 from from Veldhoven-Site K grave 13. Photo: M. Langbroek.

3.4 Discussion

Above, beads found in three different settlement burial grounds located in the Kempen were described, dated and provenanced. The strings of beads dating to P5 from Geldrop and Veldhoven feature mostly monochrome wound glass beads with a European provenance. Both strings have a symmetrical build-up and feature flat biconical yellow beads and white beads with a decoration of blue-green interlacing. Otherwise, they have not much in common: the string from Geldrop contains mostly biconical red and yellow beads and three large polychrome beads dating to P3, P4 and P5, whereas the string from Veldhoven features a majority of similarly sized monochrome blue and green melon-shaped lobed beads that date to P5 exclusively. Much like these P5 beads, the P6 strings of beads found in Veldhoven and Dommelen are wound and have a European provenance. As in Geldrop, most wound beads are monochrome with a biconical or barrel shape. Furthermore, every string contains wound confetti beads, decorated with dots in the same colours as the many biconical or barrel-shaped beads. However, beads made with other techniques do occur. Whereas the few mosaic and drawn beads from Dommelen are older or 'heirloom' beads that were made in the Near East or Egypt during the sixth century, the many perforated beads are contemporary with the burials: the late seventh century. As the confetti beads and perforated beads from Dommelen and Veldhoven have no parallels in Pion's typology, but do occur in the latest phases of early medieval bead typologies made for Germany and England, they are probably typical for the late seventh century. How do the beads from these settlement burials relate to beads found in cemeteries in the region? Below, bead sets from contemporary cemeteries in Noord-Brabant will be described and compared to those from Dommelen, Geldrop and Veldhoven.

4. Beads from other seventh century cemeteries in Noord-Brabant

In this section the beads from the cemeteries Bergeijk-Fazantlaan, Veldhoven-Oeienbosdijk, Meerveldhoven and Uden-Schepersweg will be described. As these were already published elsewhere³⁵⁰ the beads will be discussed per P-period, and not per grave. Still, as the beads from these cemeteries were re-determined with Pion's typology for this study, the complete determination tables per grave are incorporated in the appendix.

4.1 Bergeijk-Fazantlaan

The cemetery Bergeijk-Fazantlaan was excavated in 1957 and 1959, and published much later, in 2012.³⁵¹ It was used in the period 590-740. In total, 366 beads were found in 35 of the 135 excavated graves (table 3.7). As many beads were lost after the excavation, only two hundred and 86 could be studied. A lot of evidence for the re-opening of graves was found in Bergeijk. Therefore it is likely that originally more beads were buried in the cemetery.³⁵² The stray find of a Roman faience melon bead on site might be an example of a bead taken from a re-opened grave.

³⁵⁰ Theuws/Van Haperen 2012; Verwers 1973; Verwers 1978; Theuws/Knippenberg 2019.

³⁵¹ Theuws/Van Haperen 2012.

³⁵² Theuws/Van Haperen 2012, 79.

Table 3.7 Overview bead-graves, bead-dates, bead-techniques and bead-provenances from Bergeijk-Fazantlaan.

Grave nr	Gender	Age	Position beads	Nr. of Bead sets	Materials	Date Beads	Pion Period	Date in publication	Techniques	Europe (wound, perforated, mystery beads)	%	Baltic (Amber beads)	%	Mediterranean (shell disc)	%	Near East (drawn, folded or perforated beads)	%	Unknown (missing)	%	total number of beads
0	f/?	a/c	neck/chest	1	glass, amber	600-640	P4	600-700	B, F	4	80	2	20	0	0	0	0	0	0	6
9	f	a	neck/chest	1	glass, shell	650-700	P6	670-750	B, F	8	57	0	0	6	43	0	0	0	0	14
19	f?	c	head/neck/chest	3	glass, amber, ceramics, metal	620-670	P5	565-650	B, F	61	94	3	4	0	0	1	2	0	0	65
22	?	c	upper body	1	glass	620-670	P5	600-700	B	4	100	0	0	0	0	0	0	0	0	4
27	?	a	reopening pit	1	glass	620-670	P5	580-650	B	16	100	0	0	0	0	0	0	0	0	16
28	?	?	stomach	1	glass	620-670	P5	600-700	B	2	100	0	0	0	0	0	0	0	0	2
29	?	a	reopening pit	1	glass	600-640	P4	600-700	B	1	100	0	0	0	0	0	0	0	0	1
30	?	a	side (reopened grave)	1	glass	480-670	P1-P5	580-650	B	1	100	0	0	0	0	0	0	0	0	1
36	?	?	beside grave container	1	glass	600-640	P4	610-640	B	4	100	0	0	0	0	0	0	0	0	4
43	?	a	head/reopening pit	1	glass	560-610	P3	565-650	B	4	100	0	0	0	0	0	0	0	0	4
45	f?	a	scattered (reopened grave)	?	glass	620-670	P5	600-700	B	17	89	0	0	0	0	0	0	2	11	19
53	f/?	a/c	scattered (reopened grave)	1	glass, amber	600-640	P4	580-650	B, F	20	83	2	8	0	0	0	0	2	8	24
77	?	a	reopening pit	1	amber	480-670	P4-P5	610-680	F	0	0	1	100	0	0	0	0	0	0	1
88	f?	a	neck	1	glass	620-670	P5	600-700	B	26	100	0	0	0	0	0	0	0	0	26
89	f?	a	neck	1	glass, amber	620-670	P5	670-710	B, F	22	92	2	8	0	0	0	0	0	0	24
122	f	a	neck/chest	1	glass	650-700	P6	640-750	B	51	100	0	0	0	0	0	0	0	0	51

The earliest beads from Bergeijk were found in grave 43: three wound monochrome glass beads and one polychrome wound glass bead (fig. 3.27). Typical for P3 are the cylindrical red opaque bead and the annular red bead with a decoration of white interlacing. However, these bead types are often incorporated in strings that date to P4 or P5. As only four beads were excavated from grave 43, a date in the late sixth or seventh century is by no means certain.



Fig. 3.27 Beads from Bergeijk grave 43 (P3). Photo: A. Dekker.

Beads dating to P4 were excavated from graves 7, 29, 36 and 53 (fig. 3.28). The majority of these are made of wound glass and a few of amber. Typical for P4 are the large amber beads from grave 53 and the white, yellow and blue-green beads that consist of several segments from graves 7, 29 and 53. The orange barrel-shaped beads from grave 36 first occur in P4, but can be found in graves dating throughout the seventh century. As only a few beads were found in graves 7, 29 and 36, a date in the first half of seventh century is uncertain: they may have been interred at a later date.



Fig. 3.28 Beads from Bergeijk graves 7, 29, 36 and 53 (P4). Photo's: A. Dekker.



Fig. 3.29 Beads from Bergeijk graves 19, 22, 27, 28, 45, 88 and 89 (P5). Photo's: A. Dekker.

Beads dating to P5 were found in graves 19, 22, 27, 28, 45, 88 and 89 (fig. 3.29). Most beads are made of wound glass and are monochrome, except for those found in grave 19, which features fourteen large polychrome beads that could generally not be determined using Pion's typology or are of an earlier date than P5. Especially of interest is a cubic white bead with red edges, blue crosses, red and yellow dots that dates to P3: identically decorated cubic or 'dice' beads were excavated in the cemeteries Bossut-Gottechain in Belgium³⁵³ and in Hailfingen³⁵⁴ (fig. 3.30). Otherwise, the monochrome beads from grave 19 have many similarities with the other P5 bead sets from Bergeijk: long twisted beads, segmented beads, flat almond-shaped beads and biconical or barrel-shaped beads in various colours can be found in each of these. Large amber beads, red rectangular beads decorated with yellow dots and white disc-shaped glass beads, all typical for P5, are a regular occurrence in Bergeijk as well. Lastly, a rare biconical bead made out of a metal wire was found in grave 19. The only parallels known to the author are the BE2-a metal biconical beads from Anglo-Saxon England, that are dated to third quarter of the seventh century.³⁵⁵

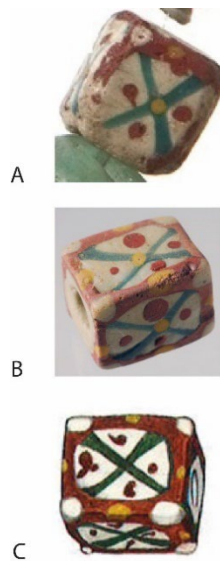


Fig. 3.30 A Bergeijk grave 19 (Photo: A. Dekker), B Bossut-Gottechain grave 365 (Pion 2014), C Hailfingen grab 356 (Koch 2001, 603 and Farbtafel 3).

The youngest beads from Bergeijk were excavated from graves 9 and 122 (fig. 3.31). They both feature perforated annular beads, barrel-shaped beads and confetti beads, all similar to those found in Dommelen. The flat almond-shaped beads found in both graves probably have an origin in P5, as do the lobed melon bead and the blue-green translucent bead with white wave decoration from grave 122. Like in Dommelen, the confetti beads from Bergeijk have the same colours as the barrel-shaped beads excavated from the same grave. Some of the orange barrel-shaped beads from grave 122 have a larger diameter than others. They look exactly like orange barrel-shaped 'mystery beads' from Dorestad, several of which were excavated from the cemetery 'Op de Heul' and parallels for which are known from

³⁵³ Pion 2014.

³⁵⁴ Koch 2001.

³⁵⁵ Hines/Bayliss 2013, 208.

Scandinavia, Germany and England.³⁵⁶ Furthermore, several shell-disc beads were found in grave 9. Shell-disc beads are typical appearances in graves dating to the later seventh century.³⁵⁷

The beads from Bergeijk have a very European profile: apart from the shell-disc beads from grave 9 and one drawn bead from grave 19, all beads have a provenance in Europe (table 3.7). Most of the glass beads were made with the winding technique, except for the perforated beads and orange 'mystery beads' from graves 9 and 122. As was mentioned above, these were crudely formed around a mandrel, which results in poorly fused seams and irregular lines in the beads. They were probably made in Europe with any sort of raw glass that was available to the bead maker.³⁵⁸ Lastly, the shell-disc beads from grave 9 likely have an origin in the eastern Mediterranean or even further away: several shell-disc beads from the German Niederrhein were shown to have been made of the shell of nonfossil *Spondylus gaederopus* L., which is an eastern Mediterranean oyster.³⁵⁹



Fig. 3.31 Beads from Bergeijk graves 9 and 122 (P6). Photo's: A. Dekker.

³⁵⁶ Langbroek 2021b, 60; Sode/Gratuze/Lankton 2017; Stauch 2004, 85; Brugmann 2004, figs. 90-92.

³⁵⁷ Siegmund/Weiss 1989; Siegmund 1998; Stauch 2004, 85-86; Drauschke 2011; Hines/Bayliss 2013.

³⁵⁸ Sode/Gratuze/Lankton 2017, 331

³⁵⁹ Jux 1998, 78-80.

4.2 Veldhoven-Oeienbosdijk

The cemetery Veldhoven-Oeienbosdijk was excavated between 1970 and 1971 and published in 1975.³⁶⁰ It was used in the period 550-700 CE. In total, 44 beads were found in nine of the 27 excavated graves (table 3.8). In six graves only one or two very generic annular or cylindrical beads were found that occur throughout the Merovingian period: they will not be discussed here. As in Bergeijk, it is likely that many of the graves were re-opened and/or disturbed at a later date. Consequently, many more beads may have been originally deposited in the graves.

Table 3.8 Overview bead-graves, bead-dates, bead-techniques and bead-provenances from Veldhoven-Oeienbosdijk.

Grave nr	Gender	Age	Position beads	Nr. of Bead sets	Materials	Date beads	Pion Period	Date in publication	techniques	Europe (wound beads)	%	Baltic (Amber beads)	%	total number of beads
6	?	c	upper body/fill	1	glass	660-710	P6	600-700	B	3	100	0	0	3
7	?	a	corner grave	1	glass	460-610	P0-P3	600-700	B	1	100	0	0	1
10	f	a	neck/chest	1	glass, amber	620-670	P5	600-650	B, F	25	93	2	7	27
11	?	?	center grave	1	glass	560-610	P3	600-700	B	1	100	0	0	1
14	f	a	neck/chest	1	glass	610-640	P4	600-700	B	7	100	0	0	7
16	?	a	neck/chest	1	glass	620-670	P5	600-700	B	1	100	0	0	1
20	?	?	floor grave	1	glass	560-610	P3	600-700	B	1	100	0	0	1
25	?	?	center grave	1	glass	?	P?	600-700	B	1	100	0	0	1
27	?	?	cremation	1	glass	?	P?	600-700	B	2	100	0	0	2

The seven beads found in grave 14 can be dated to P4, or the first half of the seventh century (fig. 3.32). Six out of seven beads are wound segmented beads, that are typical for P4. The cylindrical red bead with white spiral decoration is older: bead of this type generally date to the middle or second half of the sixth century.

The yellow and blue-green twister beads from grave 10 and the disc-shaped white bead from grave 16 date these beads to P5, or the middle of the seventh century (fig. 3.33). The string from grave 10 also features several older beads: several segmented cylindrical beads from P4 and a hexagonal bead and red beads with yellow interlacing patterns from the second half of the sixth century.

The confetti bead found in grave 6 (fig. 3.34) most likely dates this grave to the late seventh century: it is similar to confetti bead excavated from grave 3A in Dommelen-Kerkakkers. The cylindrical and polychrome red bead with a decoration of a white spiral and yellow borders that was found in the grave fill dates to P4 and may have originally been part of another grave.

All glass beads from Veldhoven-Oeienbosdijk were made with the winding technique and have a European provenance (table 3.8): all beads have clear counterparts in many other European cemeteries dating to the seventh century. Both amber beads from grave 10 were cut and polished into shape using raw material that was most likely imported from the Baltic.³⁶¹

³⁶⁰ Verwers 1973.

³⁶¹ Langbroek 2018.



Fig. 3.32 Beads from Veldhoven-Oeienbosdijk grave 14 (P4). After Verwers 1975 (I added the colours).

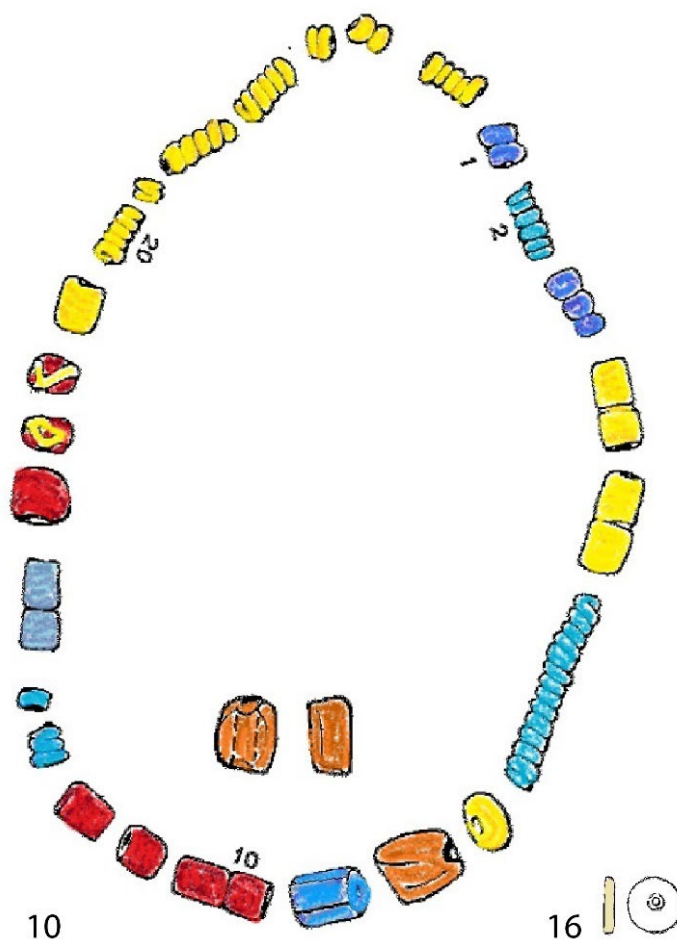


Fig. 3.33 Beads from Veldhoven-Oeienbosdijk graves 10 and 16 (P5). After Verwers 1975 (I added the colours).

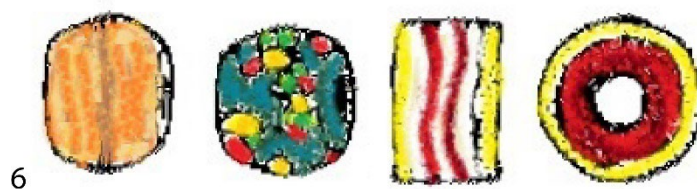


Fig. 3.34 Beads from Veldhoven-Oeienbosdijk grave 6 (P6). After Verwers 1975 (I added the colours).

4.3 Veldhoven-Meerveldhoven

The cemetery Veldhoven-Meerveldhoven was excavated in 1955 and 1975 and published in 1978 (Verwers 1978). It was used in the period 580-700 CE. In total, 604 beads were found in 24 of the 63 excavated graves. As was mentioned in the methodology above, 291 beads out of the 604 beads found at Veldhoven-Meerveldhoven were examined at the Noord-Brabants Museum. As only bad quality photographs of the other beads found at Meerveldhoven were available, these were not studied (table 3.9).

Most beads from Meerveldhoven can be assigned to P5, or the middle of the seventh century (fig. 3.35). P5 strings of beads were excavated from graves 18, 19, 28 and 46. They are characterised by long twisted cylindrical beads in yellow, white and blue-green, large amber beads, flat almond-shaped green, white or red beads and red rectangular beads with yellow dots. Similar bead-combinations also occur in Bergeijk and Uden. The large glass spindlewhorl-bead from grave 19 has a parallel that was excavated in Dorestad, confirming a date in the second half of the seventh century.³⁶²

The string of beads from grave 10 can be dated to P6, or the late seventh century (fig. 3.36). Like in other P6 strings found in Dommelen and Bergeijk, it contains barrel-shaped beads and confetti beads in similar colours. The flat almond-shaped and segmented blue-green beads and yellow twisted bead probably have an origin in P5.

Much like Veldhoven-Oeienbosdijk, the beads found in Meerveldhoven have a distinctly European profile (table 3.9). All glass beads were made with the winding technique, and for each string several clear counterparts have been excavated in other seventh century cemeteries in Noord-Brabant.

Table 3.9 Overview bead-graves, bead-dates, bead-techniques and bead-provenances from Veldhoven-Meerveldhoven.

Grave nr	Gender	Age	Position beads	Nr. of Bead sets	Materials	Date beads	Pion Period	Date in publication	techniques	Europe (wound beads)	%	Baltic (Amber beads)	%	total number of beads
10	f	a	neck/chest	1	glass	650-700	P6	600-700	B	69	100	0	0	69
18	f	a	neck/chest	1	glass, amber	620-670	P5	580-700	B, F	37	97	1	3	38
19	f	c	neck/chest	1	glass, amber	620-670	P5	580-630	B, F	91	87	14	13	105
28	f	a	neck/chest	1	glass	620-670	P5	580-700	B	45	100	0	0	45
46	f	a	neck/chest	1	glass, amber	620-670	P5	580-630	B, F	31	91	3	9	34

³⁶² Langbroek 2021b, 91.



Fig. 3.35 Beads from Veldhoven-Meerveldhoven graves 18, 19, 28 and 46 (P5). Photo's: Noord-Brabants Museum.



Fig. 3.36 Beads from Veldhoven-Meerveldhoven grave 10 (P6). Photo: Noord-Brabants Museum.

4.4 Uden-Schepersweg

The cemetery Uden-Schepersweg was excavated in 2014 and 2015 (graves 1-29), and published in 2019.³⁶³ In 2021, some more graves (nos. 30-44) were excavated in which one of them (no. 39) ten more beads were found. These are also taken into consideration here. The cemetery was used in the period 550-725. In total, 265 beads were found in ten of the 43 excavated graves. The bead sets date to P2, P3 and P5: no P4 beads are present. As was mentioned in the methodology above, with the exception of 65 beads that remained unavailable during the period of loan, all beads from Uden-Schepersweg were available for physical study. The others were determined using photographs of the beads (table 3.10).

In grave 19 a necklace and a bracelet that are typical for the mid-sixth century were found. The necklace consists of tiny black wound glass beads and averagely-sized amber beads, which is a bead-combination that can be found in mid-sixth century graves across Europe (fig. 3.37).³⁶⁴ The bracelet contains a large reticella bead with a typical polychrome herringbone decoration pattern and a bead made of *Meerschaum* or sepiolite. Both are a regular find in sixth-century bead sets. The Roman faience melon bead on the bracelet is clearly older, but is not an uncommon appearance in P2 strings either. Most beads from this grave have provenances outside of Brabant: the amber was most likely imported from the Baltic,³⁶⁵ the reticella and *Meerschaum* bead from the eastern Mediterranean.³⁶⁶

The strings from grave 15 and 29 can be dated to P3, or the late sixth century (fig. 3.38). In contrast to strings of beads dating to the first half of the sixth century, P3 strings generally contain a lot of polychrome beads. Furthermore, while the string from grave 29 still features nine folded beads³⁶⁷ and one long blue drawn bead with a provenance in the Near East, the necklace from grave 15 only contains European wound beads. Both strings still contain some typical P2 beads: the pentagonal beads from grave 29 and the red cylindrical beads with white spiral decoration from grave 15 are, according to Pion, not typical for P3. However, bead research from Germany and England suggests that these bead-types continued to be used in the later sixth century as well.³⁶⁸ The beads found in grave 15 are very common types that appear in many cemeteries dating to the second half of the sixth century across Europe (fig. 3.39, fig. 3.40, fig. 3.41).

Graves 11, 14, 21, 22, 23 and S22 all contain beads that are typical for P5, or the middle of the seventh century (fig. 3.42). In contrast to P3, strings from this period contain mostly monochrome beads such as lobed melon beads, flat almond-shaped beads, twisted cylindrical beads and barrel-shaped beads that were also found in P5 strings from Geldrop, Veldhoven, Meerveldhoven and Bergeijk. Like in Meerveldhoven and Bergeijk, these strings also feature red rectangular beads decorated with yellow dots and the occasional amber bead.

Though it is a small cemetery, the beads from Uden show a very typical development from the sixth to the seventh century that can be observed in many other Merovingian cemeteries. Strings of beads

³⁶³ Knippenberg/Theuws 2019.

³⁶⁴ This necklace is a perfect fit in Pions P2 group, Koch's *Perlenkombinationsgruppe* B, Siegmund's *Perlenkombinationsgruppe* B and Sasse/Theune's *Perlenkombinationsgruppe* B. Each of these groups is dated to the mid-sixth century (Koch 2001; Siegmund 1998; Pion 2014; Sasse/Theune 1996).

³⁶⁵ Langbroek 2018.

³⁶⁶ Pion 2014; Herdick 2000.

³⁶⁷ most of which are not depicted on the string: they are broken.

³⁶⁸ Hines/Bayliss 2013; Siegmund 1998; Koch 1977.

from the ongoing sixth century focus on 'imported' beads mostly, showing an impressive long-distance network of exchange. Then, a switch to European-made wound beads can clearly be seen from the late sixth century onwards (table 3.10). This does not necessarily mean that bead production became a local phenomenon: as identical beads were excavated in cemeteries in England, Belgium and Germany, a Europe-wide bead exchange network seems to have been in place during the late sixth and seventh centuries.



Fig. 3.37 Beads from Uden grave 19 (P2). Photo's: M. Hemminga.



Fig. 3.38 Beads from Uden graves 15 and 29 (P3). Photo's: M. Hemminga.

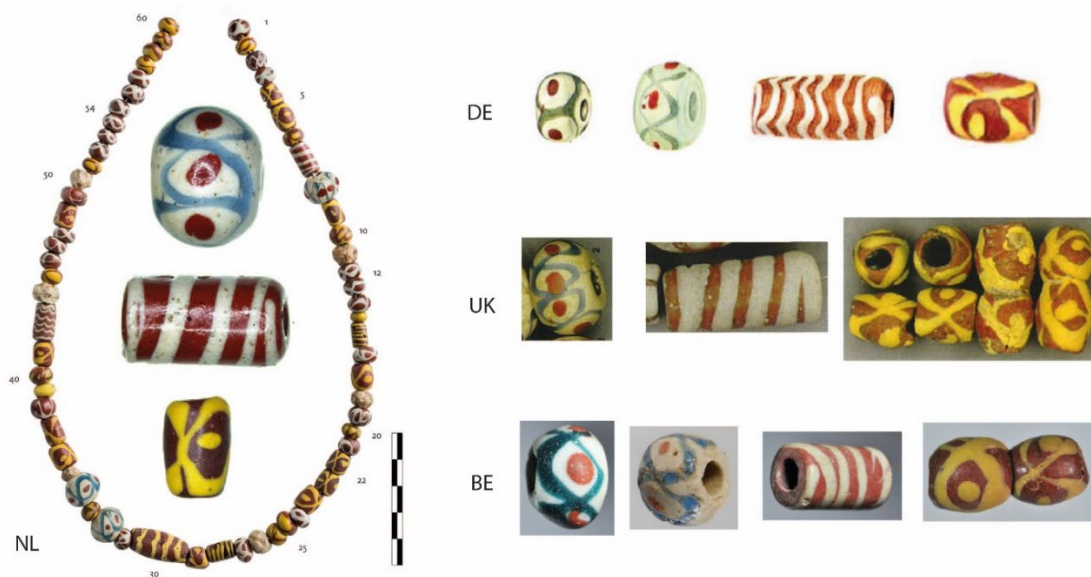
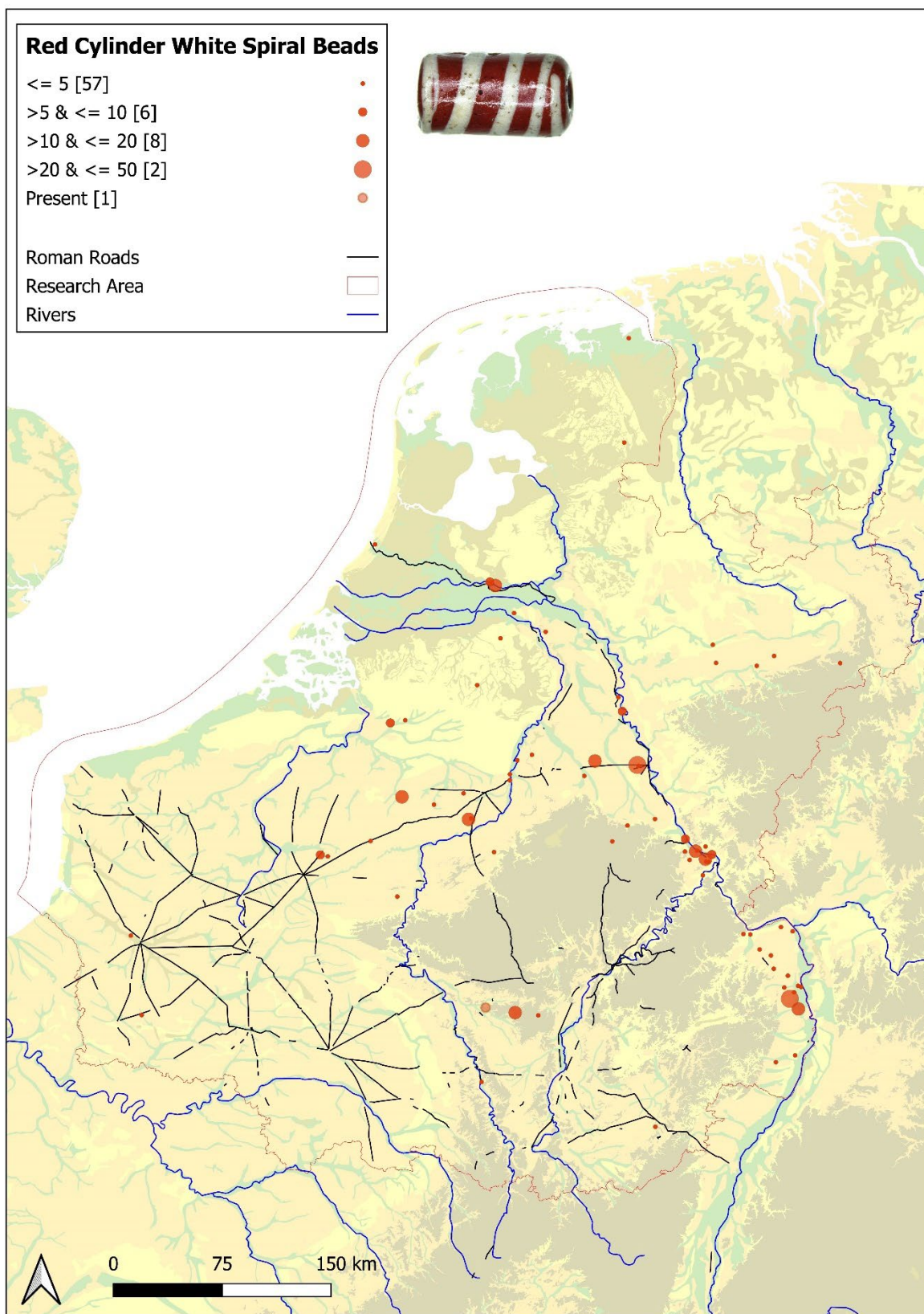


Fig. 3.39 NL: String of 60 beads found in grave 15 of the small cemetery Uden-Schepersweg, of which 3 polychrome bead types are highlighted. Photo's: M. Hemminga and M.B. Langbroek; DE: identical beads found in Schretzheim, Germany. Pictures U. Koch; UK: identical beads found in Morning Thorpe, Mill Hill and Buckland, England. Photo's: K. Parfitt and J. Hines; BE: identical beads found in Bossut-Gottechain, Broechem, Verlaine-Oudomont and Viesville, Belgium. Photos: C. Pion and O. Vrielynck.

Table 3.10 Overview bead-graves, bead-dates, bead-techniques and bead-provenances from Uden-Schepersweg.

Grave nr	Gender	Age	Position beads	Nr. of Bead sets	Materials	Date beads	Pion Period	Date in publication	techniques	Europe (wound beads)	%	Baltic (Amber beads)	%	Medi-terra-nean	%	Near East (drawn, folded or perforated beads)	%	Roman	%	total number of beads
11	f?	c	scattered upper body	1	glass, amber	620-670	P5	565-650	B, F	82	96	3	4	0	0	0	0	0	0	85
14	f	a	head/neck	1	glass	620-670	P5	565-700	B	10	100	0	0	0	0	0	0	0	0	10
15	f	a	head/neck	1	glass	560-610	P3	565-620	B	60	100	0	0	0	0	0	0	0	0	60
17	?	a	cremation	1	glass	?	P?	?	B	2	100	0	0	0	0	0	0	0	0	2
19	f	a	neck/hip/arm	3	glass, amber, meerschaum, faience	530-570	P2	550-590	B, F	35	66	15	28	2	4	0	0	1	2	53
21	f	a	head/neck	1	glass	620-670	P5	640-700	B	10	100	0	0	0	0	0	0	0	0	10
22	?	?	center grave	1	glass	620-670	P5	?	B	3	100	0	0	0	0	0	0	0	0	3
23	m	a	sieve find	1	glass	620-670	P5	610-680	B	1	100	0	0	0	0	0	0	0	0	1
29	w	a	neck	1	glass, amber	550-600	P2-P3	565-620	B,C,D & F	15	37	14	34	0	0	12	29	0	0	41
39	f	?	?	1	glass	620-670	P5	x	B	10	100	0	0	0	0	0	0	0	0	10



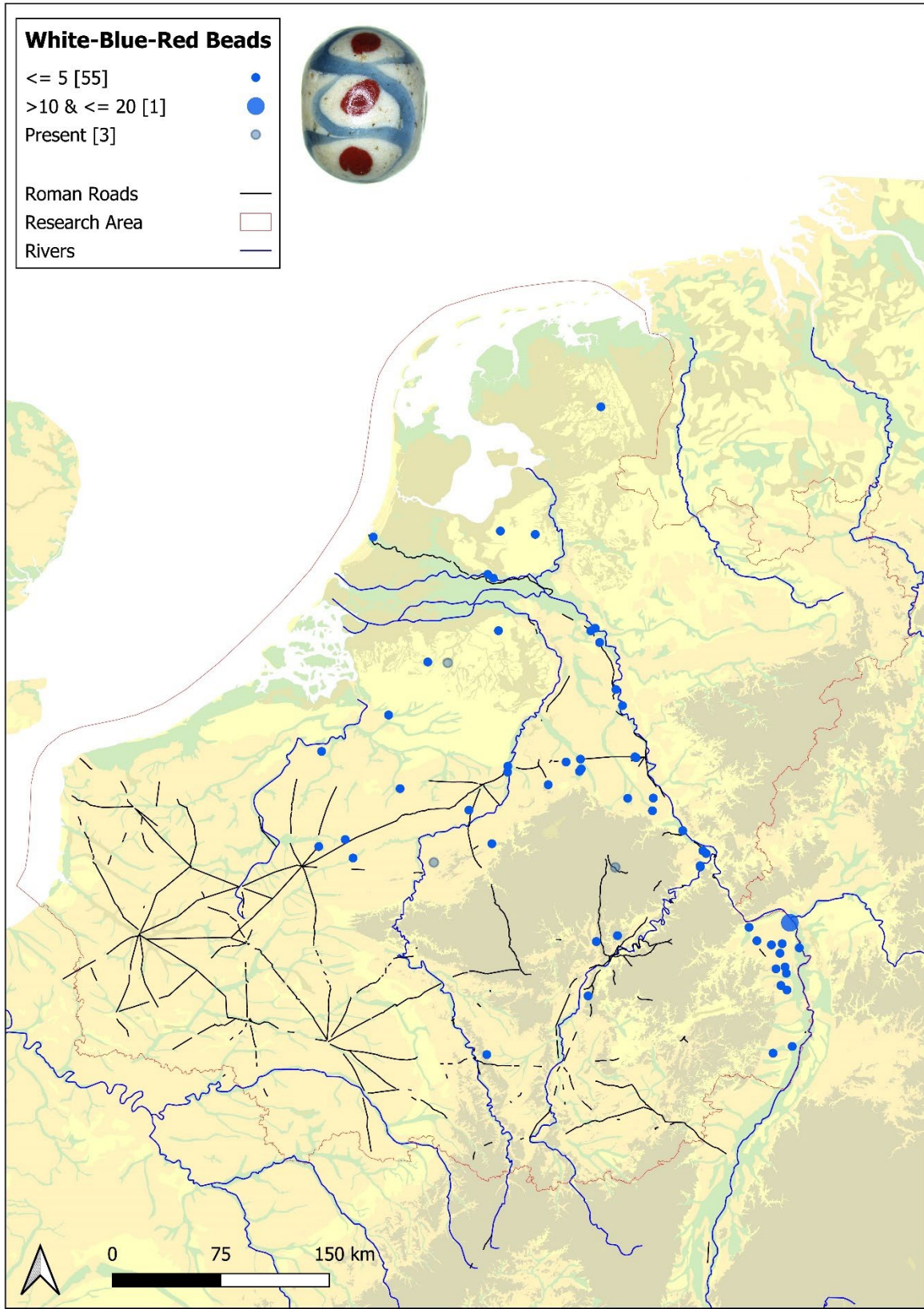


Fig. 3.41 Distribution of white beads decorated with blue interlacing and red dots in northern Gaul.



Fig. 3.42 Beads from Uden graves 11, 14, 21, 22, 23 and 39 (P5). Photo's: M. Hemminga and M. Langbroek.

4.5 Discussion

Above, the beads found in three settlement burial sites and four cemeteries from Noord-Brabant dating mainly to the later sixth and seventh century were described. There is much overlap between sites: similar bead-types were excavated in most cemeteries. The only real difference between bead deposition in settlement burial sites and cemeteries is that they were buried in a larger part of the graves than in settlement burial sites (table 3.3). This could tentatively be explained by the fact that settlement burial sites are a phenomenon of the second half of the seventh century: a period where grave gifts were deposited in fewer graves anyway. In the introduction to this chapter it was noted that the study of beads dating to the second half of the seventh century is especially underdeveloped for early medieval northern Gaul. The dataset described above has provided new insights into the types of beads that often occur in this period. These will be described below.

5. Mid-to late seventh century bead sets

By far most beads studied here can be dated to P5, or the middle and third quarter of the seventh century. In total, 590 of the 1100 studied beads belong to strings of beads dating to P5 (table 3.11): they were excavated in every cemetery in this study, except for Dommelen-Kerkakkers. The P5 strings from Brabant generally contain barrel-shaped or biconical beads in various colours, twisted or segmented beads, lobed melon beads, flat biconical beads, red rectangular beads with yellow dots and large amber beads (fig. 3.43). The combination of these specific bead-types cannot just be found in Brabant, but also occurs elsewhere in Europe. It has been documented especially well in cemeteries in Germany: they are typical for Koch's *Perlenkombinationsgruppe* F, or SD phase 10, which roughly dates to the third quarter of the seventh century³⁶⁹ and also occur in Siegmund's *Perlenkombinationsgruppe* H and FAG's *Perlenkombinationsgruppen* IV and V that both date to the ongoing seventh century.³⁷⁰

Table 3.11 Overview of bead-provenances of the beads from Noord-Brabant in this study, sorted per P-period. The strings of beads that could not be assigned to a specific period were left out.

Pion Period	Date	amount of graves	Europe (wound beads)	%	Baltic (Amber beads)	%	Near East/ eastern Mediterranean	%	Roman	%	Unknown (missing)	%	total number of beads
P2	530-570	2	50	53%	29	31%	14	15%	1	1%	0	0%	94
P3	560-610	4	66	100%	0	0%	0	0%	0	0%	0	0%	66
P4	600-640	6	37	86%	4	9%	0	0%	0	0%	2	5%	43
P5	620-670	21	558	95%	29	5%	1	0%	0	0%	2	0%	590
P6	660-710	10	297	98%	3	1%	10	3%	0	0%	2	1%	302

After P5 beads, P6 beads are the most numerous in this study: 291 beads are part of strings that can be dated to the late seventh or early eighth century (table 3.11). P6 beads were mainly excavated in Dommelen-Kerkakkers, but also occur in the cemeteries Bergeijk-Fazantlaan, Veldhoven-Oeienbosdijk and Meerveldhoven. P6 strings generally contain barrel-shaped or biconical beads, confetti beads, perforated

³⁶⁹ Koch 2001, 164, Koch 2007, 122-124; Stauch 2004, 84

³⁷⁰ Siegmund 1998; Müssemeier *et al.* 2003.

‘doughnut beads’ and/or shell-disc beads (fig. 3.44). These specific bead-types cannot just be found in Brabant, but also occur in the latest phases of both Brugmann’s and Hines & Bayliss’ works on beads from Anglo-Saxon England and they are typical for Stauch’s *Perlenkombinationsgruppen* G and H, Siegmund’s *Perlenkombinationsgruppen* H and I, and FAG’s *Perlenkombinationsgruppe* V.³⁷¹ These phases all date to the late seventh and early eighth centuries. As this bead-period has not been described for northern Gaul before, several specific P6 bead-types will be elaborated upon below.



Fig. 3.43 Typical P5 beads. Photo's: M. Langbroek.



Fig. 3.44 Typical P6 beads. Photo's: M. Langbroek.

³⁷¹ Brugmann 2004; Hines/ Bayliss 2013; Stauch 2004, 85-88; Siegmund 1998; Müssemeier *et al.* 2003.

Barrel-shaped or biconical beads can be found in Merovingian graves from the mid-sixth century onwards. However, they do show some change over time, varying in size and fluctuating between barrel-shaped and biconical (fig. 3.45). The first barrel-shaped beads to occur in Merovingian graves were drawn rather than wound, and were probably imported from the Middle East.³⁷² In the later sixth century (P3) wound biconical beads that were made in Europe first appear. Not all colours can be found throughout the Merovingian period: orange wound biconical beads can be found from P4 onwards only.³⁷³ In the middle of the seventh century smaller and shorter barrel-shaped beads with smooth edges and rough surfaces first appear, and continue to be deposited in graves until the early eighth century. According to Pion, the surface of these beads was polished or sanded down as a final step of their making process.³⁷⁴ This undoubtedly had a nice effect when the beads were new, but it has also caused the more rapid deterioration of the treated surfaces. Unpolished barrel-shaped and biconical beads in various colours and sizes continue to be deposited in later seventh century graves and, in contrast to earlier periods, often make up the majority of beads in a string. This is also the period when large red and orange barrel-shaped ‘mystery beads’, like those from grave 122 of Bergeijk-Fazantlaan, that were not wound but crudely formed around a mandrel first appear.

As was noticed above for Dommelen, Bergeijk and Meerveldhoven (but not for Veldhoven), confetti beads often sport the same colours and shape as the barrel-shaped beads in the strings they co-occur in. This suggests that they were probably made during the same bead-making events. Evidence for this practice can be found in modern-day Egypt, where confetti beads are called ‘End of the Day Beads’: at the end of a bead-making day all the glass remains and leftovers are collected and crushed. Then, freshly wound monochrome beads are rolled through the crushed glass and re-heated, creating the typical confetti decoration on the bead’s surface.³⁷⁵ Like barrel-shaped beads, earlier versions of confetti beads can be found in Merovingian graves: these date to the late fifth and early sixth century (P1). Generally, they consist of a globular cobalt blue base bead and are decorated with white, yellow, red and/or green confetti dots (fig. 3.46). It is likely that these were made in the eastern Mediterranean and/or the Near East where they, although relatively scarce, are found from Hellenistic through Islamic periods, especially in Egypt.³⁷⁶

Due to their likeness to confetti beads from the Islamic period, Panini has suggested that the P6 confetti beads found in Europe may have come from the same Eastern Mediterranean glassworks.³⁷⁷ To the author’s knowledge, no evidence of workshops that made barrel-shaped and confetti beads is known from northern Gaul, but a workshop in which very similar barrel-shaped beads were produced has been excavated on Helgö in Sweden³⁷⁸: their production in Europe should not be ruled-out. Chemical analyses can establish whether confetti beads were in fact made during the same bead-making events as the barrel-shaped beads on the strings they were part of and whether they were in fact made in Europe or elsewhere.

³⁷² Cf. Pion 2014, 219-222; Langbroek *et al.* 2022, also printed as chapter four, this volume.

³⁷³ cf. Pion 2014, 142.

³⁷⁴ Pion 2014, type 1.3-09.

³⁷⁵ Bos 2016, 134. I would like to thank Annely Arends for the reference.

³⁷⁶ Pion 2014, 191-192; see also Panini 2007, 42-44 who calls them *Middle Eastern lamp beads with multiple spots*.

³⁷⁷ Panini 2007, 42-44.

³⁷⁸ Lundström 1981 in Brugmann 2004, 40-41.



Fig. 3.45 Development of barrel-shaped or biconical beads from the mid-sixth century onwards. Beads depicted were excavated from the following cemeteries: Lent-Lentseveld, Elst-'t Woud, Wijchen-Centrum, Dommelen-Kerkakkers, Bergeijk-Fazantlaan and Dorestad-De Heul. Photo's: M. Langbroek.



Fig. 3.46 P1 confetti beads from lent-Lentseveld vs P6 confetti beads from Dommelen-Kerkakkers. Photo's: M. Langbroek.

Perforated doughnut beads had not yet been documented for the region of northern Gaul: hitherto most were known from England and some from Germany.³⁷⁹ Indeed these translucent beads with one rounded side and one flat irregular side were considered to be a typical English phenomenon.³⁸⁰ As these were excavated from three sites in the Kempen (fig. 3.47), usually accompanying confetti beads, they are clearly more common in continental Europe than was noted before. Clearly, they were made by perforating small blobs of molten glass that was placed on a flat irregular surface. Chemical analyses on these doughnut beads from England has demonstrated that they were made with soda-lime glass,³⁸¹ like most Merovingian beads.³⁸² Perforating or piercing a piece of molten glass to make a bead has to be the simplest manner of beadmaking: it does not require specialist skills.³⁸³ Most likely they were made at various locations in Europe, using scraps of vessel glass³⁸⁴ or remains of broken beads at hand.



Fig. 3.47 Perforated doughnut beads from Dommelen-Kerkakkers. Photo's: M. Langbroek.

5.1 Provenance and techniques

At the beginning of this chapter it was questioned whether bead assemblages from the seventh century displayed the same connectivity as bead sets from the sixth century. For beads buried in Noord-Brabant in the seventh century the answer to this question is a resounding 'no'. In fact, the dataset presented in this chapter has confirmed Pion's observation that bead-imports from the eastern Mediterranean and beyond became uncommon from the late sixth century onwards: very few beads with a such a provenance, other than several heirloom beads from Dommelen-Kerkakkers, have been observed in seventh century graves from Brabant (table 3.11)³⁸⁵. Beads made of wound glass with a European provenance make up the vast majority of the collection, followed at great distance by the occasional amber

³⁷⁹ Brugmann 2004, 41 and figs. 97-98; Stauch 2004, 87 and note 192.

³⁸⁰ Brugmann 2004, 41; Peake 2013, 297.

³⁸¹ 'Roman' or 'HIMT glass': Peake 2013, 297.

³⁸² Gratuze 2013.

³⁸³ Peake 2013, 297.

³⁸⁴ Hence the translucent quality of most doughnut beads.

³⁸⁵ In a BA-thesis by Annely Arends at Leiden University a similar study for sixth and seventh century beads from cemeteries in Limburg has been conducted. She observed the same stop in imports from the Mediterranean and beyond in the seventh century (Arends 2022; Arends 2024).

bead. It is only towards the late seventh century, or P6, that some Eastern Mediterranean influxes with shell disc beads can be observed again (fig. 3.48).

As mentioned above, remnants of ovens containing semi-finished products and waste from the production of wound beads have been excavated in several places in Northwestern Europe.³⁸⁶ The raw material for the production of these beads often consisted of a mix of new glass from the Eastern Mediterranean, recycled Roman glass and glass tesserae from Roman mosaics.³⁸⁷ Dutch examples of bead production ovens are those from Maastricht and Rijnsburg.³⁸⁸ It is possible that beads were made in several places in each region. In her work on beads from Anglo-Saxon England, Brugmann has argued for a combination of local production of very simple beads by the inhabitants, bead production by itinerant craftsmen and centralised production by specialists.³⁸⁹ It is curious that, despite existing evidence for local and regional production, many Merovingian beads from the Netherlands are very similar to beads found elsewhere in Europe, as has become clear from the compatibility of bead-typologies for different European regions. One possible explanation is that the same beads were made in different places by itinerant artisans; if this was the case there must have been a clear consensus on what beads were meant to look like throughout Europe.³⁹⁰ Perhaps it is more conceivable that certain common bead types were produced *en masse* and distributed throughout Europe via exchange networks.³⁹¹ After all, the presence of similar bead-combinations in graves across Europe does suggest that complete bead strings may have been exchanged, instead of individual beads.³⁹² In any case, the similarity of bead-sets buried in graves throughout seventh century Europe implies that a pan-European network in which beads circulated was operative. Future comparative research of chemical analyses of seventh century bead-sets from cemeteries across Europe can establish whether seventh century Europe was connected by traveling beads or merely by 'bead-ideas'.

6. Interpreting seventh century bead sets

Why were strings of beads interred in seventh century Noord-Brabant? Were they simply owned by the person they were interred with? Were they composed especially for the burial? Were they interred for the same reasons they were interred in the sixth century? It is hard to tell. The strings of beads that were excavated throughout Europe may very well have had very different meanings and values, and the

³⁸⁶ Pion 2014, 180-188.

³⁸⁷ Freestone 2006; Van Wersch *et al.* 2019. Despite the lack of imported beads from the region, the raw glass used to produce beads in Europe was still mostly imported from the Eastern Mediterranean: evidence for large scale recycling of glass only occurs from the eighth century onwards (Freestone 2015).

³⁸⁸ Sablerolles *et al.* 1997; Dijkstra *et al.* 2010.

³⁸⁹ Brugmann 2004, 17-18.

³⁹⁰ Brugmann has argued that superficial similarities between beads from very different contexts, even different continents and millennia are in fact quite common (Brugmann 2004, 27).

³⁹¹ Centralised bead making is rather efficient because beads are easy to transport in comparison to glass vessels and ceramic wares (Brugmann 2004, 17).

³⁹² Chemical analyses of beads from the sixth century cemetery of Lent-Lentseveld has confirmed that identical beads on a single string were most likely made together, exchanged together and buried together: strings of beads may have been more 'integer' than was thought before (Langbroek *et al.* 2023, printed as chapter four, this volume.).

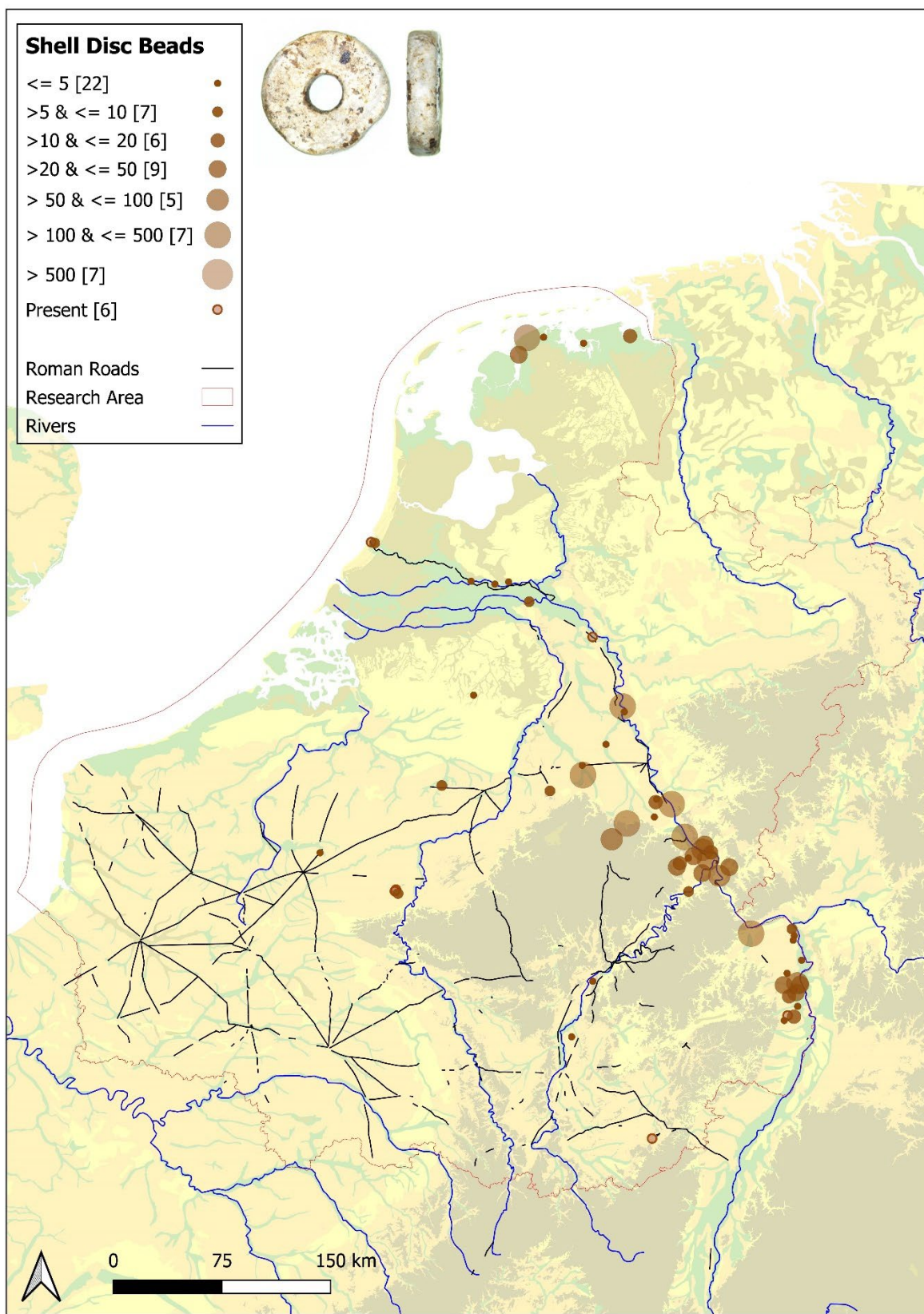


Fig. 3.48 Distribution of shell-disc beads in northern Gaul.

reasons for their interment may have been as variable. They will have taken on different roles depending on the 'imagined worlds'³⁹³ they were circulating in.³⁹⁴ Brugmann has similarly argued that the Anglo-Saxon understanding of a 'glass bead' may have been polythetic, so that an object could be a glass fragment, a bead and an amulet all at the same time.³⁹⁵ Below several interpretations of seventh century strings of beads will be explored based on some of the observations made above.

6.1 Commodities

As demonstrated above, the same beads and similar strings of beads were available through large parts of seventh century Europe. Recognising this, Ursula Koch has referred to certain types of Merovingian beads as '*billige Massenware*': or cheap, mass-produced commodities that anyone could access.³⁹⁶ The homogeneity of beads and strings of beads across Europe supports this perspective. Accordingly, several bead production sites that have been excavated in Europe do seem to have had the capacity to produce beads on a large scale.³⁹⁷ From this perspective, beads may have been considered commodities.

6.2 Time-travel

In many of the strings of beads described in this chapter, beads that are much older than the grave they were excavated from can be found. In fact, such heirloom beads were excavated from every cemetery in this study, with the exception of Meerveldhoven. For example, in grave 19 from the cemetery found in Bergeijk, a string of beads was found that features a polychrome cubic bead that was most likely made in the late sixth century, at least half a century before it was deposited in this grave (fig. 3.29). Likewise, a red pentagonal bead that dates to the second half of the sixth century was excavated from the late seventh century grave 25 in Veldhoven-Site K (fig. 3.23). Many other examples have been given above. As there are many ethnographic examples of beads featuring in intergenerational exchange,³⁹⁸ it is not unthinkable that the seventh century population of Noord-Brabant was involved in similar practices;³⁹⁹ specific beads may have circulated in generational or intergenerational networks, being passed on between siblings, to daughters or sons, or to granddaughters or grandsons during rites of passage such as coming-of-age or marriage before leaving the parental house or settlement. In that way, a bead could become a gift, part of an inheritance, and return into networks of exchange or be taken out of circulation through deposition in a burial. A lot of time may pass between acquisition and deposition of beads, as is clearly the case in Noord-Brabant. The older the bead, the more often it changed hands, and the more valuable it may have become.⁴⁰⁰

³⁹³ Cf. Theuvs 2004, see also Moreland 2004.

³⁹⁴ Langbroek in prep.

³⁹⁵ Brugmann 2004, 17.

³⁹⁶ Koch 1977, 202.

³⁹⁷ For an overview of early medieval bead production sites, see Pion 2014, 180-188.

³⁹⁸ See for example Janowski 1998, 219.

³⁹⁹ cf. Kars 2011.

⁴⁰⁰ cf. Mauss 1967 [1925].

6.3 Into the next world and back again

The rather large amount of beads present in Merovingian society suggests that at the start of their 'lives', beads may have been commodities. Then, through being exchanged, the very same beads may have gained enough meaning for their wearers to motivate their role in funerary practices. Given the omnipresence of beads in Merovingian cemeteries, it can be argued that beads played a significant role in the Merovingian burial rite. Assemblages of beads in graves show a clear composite character, the accumulation of which may have taken some time and effort which may have taken place at special occasions. As is shown by the wear on many beads found in Noord-Brabant, they were worn before being interred. It is possible that beads, once deposited in a grave, took on a different meaning than they had before their burial because of the transformative rite of passage they went through, much like the person whose corpse was buried. As has been demonstrated by Martine van Haperen, the Merovingian population had a very different take on the afterlife and dealing with their dead than we have nowadays. In many cemeteries, evidence for the re-opening of Merovingian graves within a generation after the initial burial has been found. During these re-opening practices, grave gifts (including beads) and human bones were retrieved from graves.⁴⁰¹ Two possible examples of beads that crossed the threshold into the afterlife on multiple occasions are the mosaic beads, 150 years older than the graves themselves, found in Dommelen (fig. 3.19). Compared to the other beads, they have a battered and broken look. As in several earlier neighbouring cemeteries evidence for the re-opening of graves has been found,⁴⁰² it is plausible that this worn-out bead had been retrieved from an earlier grave. The bead may have been worn again for a while, before being finally deposited in Dommelen.

6.4 Sixth versus seventh century

During the seventh century, were bead-sets interred for the same reasons as during the sixth? When the provenances of sixth century beads versus seventh century beads are taken into account, there seems to have occurred a shift from a focus on beads from far away to a focus on European-made beads and heirloom beads in the late sixth century. This shift can also be discerned in most bead typologies: the common occurrence of heirloom beads has made seventh century strings of beads notoriously hard to date. Since every Merovingian bead-typology for the seventh century is based on seriations of strings of beads that include heirloom beads, the bead-phases for this period tend to overlap more significantly than the bead-phases dated to the sixth century (fig. 3.4).⁴⁰³ The shift from exotic to European is mirrored by research of other Merovingian grave goods: as was already stated in the introduction to this chapter, chemical analyses of glass vessels and garnets suggest that exchange over long distances became much more uncommon from the late sixth century onwards.⁴⁰⁴ Traditionally, the contrast between the often exotic origins of sixth century grave goods and the European profile of seventh century ones has been explained as an economic phenomenon caused by the blocking off of the Red sea by Sassanian Persians

⁴⁰¹ Van Haperen 2017.

⁴⁰² Van Haperen 2017.

⁴⁰³ Vogel 2006, 118-125; Grünewald/Koch 2009.

⁴⁰⁴ Calligaro *et al.* 2008; Van Wersch 2011; Calligaro/Périn 2013; Pion *et al.* 2020.

and disturbances in India and Sri Lanka around the year 600.⁴⁰⁵ While that may have influenced the influx of exotica, hereunder a more social explanation for the phenomenon will be explored.

Mary Helms has written extensively about the meanings associated with objects that originate in geographically or cosmographically distant worlds in 'traditional' societies.⁴⁰⁶ She differentiates between societies whose idea of cultural origins and legitimation lies on a cosmological vertical axis (cosmographically distant, a celestial world) and those whose cultural origins lie on a cosmological horizontal axis (geographically distant, a location beyond the horizon). Objects acquired from faraway places can have very similar meanings to objects associated with cosmographically distant supernatural forces. After all, the faraway is often imbued with symbolical meaning: the perception of geographical distance is as much a cultural construct as cosmographical space.⁴⁰⁷ Using ethnographic examples from across the globe, Helms demonstrates that in many societies geographically distant places are considered of 'otherworldly significance' because they are identified as the home of the gods, of the supernatural, or of good or evil spirits or powers.⁴⁰⁸ More often than not such locations are identified with temporally distant eras and ancestors.⁴⁰⁹ By extension, similar symbolical qualities are often attached to objects involved in long-distance travel and exchange. Through exchange with faraway regions, societies with cultural origins and legitimation on the horizontal axis can reassert their link with the cosmological realm.⁴¹⁰

It has already been suggested by John Moreland that both the vertical and horizontal axes were at play in early medieval Europe.⁴¹¹ Likewise, Lotte Hedeager and Nelleke IJssennagger have demonstrated the applicability of Helms' axes to the archaeology of Viking Age Scandinavia and Frisia respectively.⁴¹² As many of the populations of fifth and sixth century Europe had their roots in migration, connections with ancestral homelands were significant. Consequently, it is very likely that people sought cosmological authentication in connections with and objects from an imaginary world beyond the horizon,⁴¹³ as is perhaps demonstrated by the common occurrence of exotic beads and other objects in graves of the period. Grave re-opening practices that became increasingly widespread from the end of the sixth century⁴¹⁴ may be the first pointers of a shift in focus towards the vertical axis: objects were no longer obtained from faraway places, but directly from the 'local ancestors' themselves. This shift is mirrored by the types of beads that were deposited in seventh century cemeteries, when strings of beads consisted of European-made beads and heirloom beads. As the seventh century progressed, the vertical cosmographical axis may have become more and more emphasised.

⁴⁰⁵ Von Freeden 2000.

⁴⁰⁶ Helms 1988; 1993.

⁴⁰⁷ Helms 1988, 7-11.

⁴⁰⁸ Helms 1988, 10-19, 20-48 and 261-263.

⁴⁰⁹ Helms 1988, 43-48.

⁴¹⁰ Helms 1988, 66-130, 262-263.

⁴¹¹ Moreland 2004.

⁴¹² Hedeager 2011; IJssennagger 2017.

⁴¹³ Moreland 2004, 147.

⁴¹⁴ Van Haperen 2017.

7. Closing remarks

In this chapter, the beads excavated from seven cemeteries in Noord-Brabant dating roughly to the seventh century have been presented and discussed. It has become clear that although seventh century bead-sets do not display the same long-distance contacts as sixth century bead-sets, the region of Noord-Brabant must have been well-connected to the rest of Northwestern Europe, as near-identical (strings of) beads and have been excavated in Belgium, England and Germany. The bead-typologies that were developed for each of these regions show remarkable similarities as well: there appears to have been a common 'bead-language' in seventh century Europe. In the future, chemical analyses of bead-sets can establish whether it was the beads themselves or the idea of what beads were meant to look like that were circulating in these networks.