Państwowe Muzeum Archeologiczne
w Warszawie

WIADOMOŚCI ARCHEOLOGICZNE LXXII

Bulettin
Archéologique
Polonais

Varsovie 2021

Warszawa 2021

WIADOMOŚCI ARCHEOLOGICZNE LXXII

Państwowe Muzeum Archeologiczne jest instytucją finansowaną ze środków Samorządu Województwa Mazowieckiego

Adres redakcji
Editorial office
Państwowe Muzeum Archeologiczne, ul. Długa 52 (Arsenał), 00-241 Warszawa
tel.: +48 (22) 5044 841, +48 (22) 5044 813; fax: +48 (22) 831 51 95
e-mail: j.andrzejowski@wiadomosci-archeologiczne.pl

Strona www
Home Page
http://www.wiadomosci-archeologiczne.pl
http://www.wiadomosci-archeologiczne.pl/en

Tomy archiwalne
Archival issues
http://www.wiadomosci-archeologiczne.pl/Archiwum
http://www.wiadomosci-archeologiczne.pl/Archive

ISSN
0043-5082

WIADOMOŚCI ARCHEOLOGICZNE LXXII (2021)

SPIS TREŚCI
CONTENTS

Wiadomości Archeologiczne LXXII, 2021: 3–91
https://doi.org/10.36154/wa.72.2021.01

MARZENA J. PRZYBYŁA

LORDS OF THE RINGS: SOME CONSIDERATIONS ABOUT THE CLASSIFICATION OF GOLD SCANDINAVIAN SNAKE RINGS FROM THE LATE ROMAN PERIOD AND ITS INTERPRETATIONAL IMPLICATIONS*

WŁADCY PIERŚCIENI: UWAGI O KLASYFIKACJI SKANDYNAWSKICH ZŁOTYCH OZDÓB OBRĘCZOWYCH Z PÓŹNEGO OKRESU WPŁYWÓW RZYMSKICH I ICH IMPLIKACJE INTERPRETACYJNE

Abstract: *The article discusses the differentiation of Scandinavian gold ring ornaments with serpentine endings from the 3rd and 4th centuries CE. The results of the phylogenetic and CAPCA analysis were used here to re-examine the previous interpretation of political ties between the various regions of Scandinavia, within the "center-periphery" and gift-giving models. The special position of the power center in Zealand was also discussed. All the large ornaments of this type in the graves of the Zealand elites are characteristic of the western part of the Central Baltic zone. Therefore, a hypothesis was put forward that the Zealand elite belonged to the network of connections created by the elites from Gotland, Öland, and the eastern part of mainland Sweden. In this context, the subject of the causes of the crystallization of the Zealand power center was once again taken up.*

Słowa kluczowe: *późny okres wpływów rzymskich, Skandynawia, Zelandia, Gotlandia, Olandia, skandynawskie obręcze wężowate, elity, model „centrum-peryferia", wymiana darów*

Keywords: *Late Roman Period, Scandinavia, Zealand, Gotland, Öland, Scandinavian snake rings, elites, "centre-periphery" model, gift-giving*

I have never found a man so generous
And so liberal in feeding his guests
That 'to receive would not be received',
Nor a man so … [the adjective is missing]
Of his goods
That to receive in return was disagreeable to him.
[...]
With weapons and clothes
Friends must give pleasure to one another;
Everyone knows that for himself [through his own experience].
Those who exchange presents with one another
Remain friends the longest
If things turn out successfully.
(Hávamál, 39, 41)

1. INTRODUCTION – OUTLINE OF THE TOPIC

In the Scandinavian literary tradition, whose roots can be traced back to the second half of the 1st millennium BCE, gold rings are among most often invoked objects. A measure of this popularity can be the fact that gold finger rings and bracelets are mentioned no less than 45 times in the Poetic Edda alone, always as important elements of the plot. They appear there in the context of the person of a ruler – a generous giver and breaker of gold rings – as a medium through which his wealth, prestige, and generosity towards his subjects are manifested. A connection between gold rings and gift-giving behaviours and the immense role (repeatedly emphasised in these texts) of such behaviours in building social

* This project was realised thanks to financial support from the Kazimierz Salewicz and Marit Jensen Foundation, and Alexander von Humboldt-Foundation.

and political relationships raises absolutely no doubts[1]. Public distribution and exchange of gifts fit into general mechanisms governing the functioning of human societies so perfectly that Marcel Mauss chose a fragment from *Hávamál* as a motto for his now classic anthropological study *The Gift*[2]. Gold rings also appear in Scandinavian texts as trophies taken from enemies, as objects which are desired and stolen away, and as symbolic artefacts on which heroes make their oaths. Literary evidence for the importance of gold ring ornaments is corroborated by

[1] A. Hofmann 2019.

[2] M. Mauss 2002, 1–3 (first published in 1925); see above.

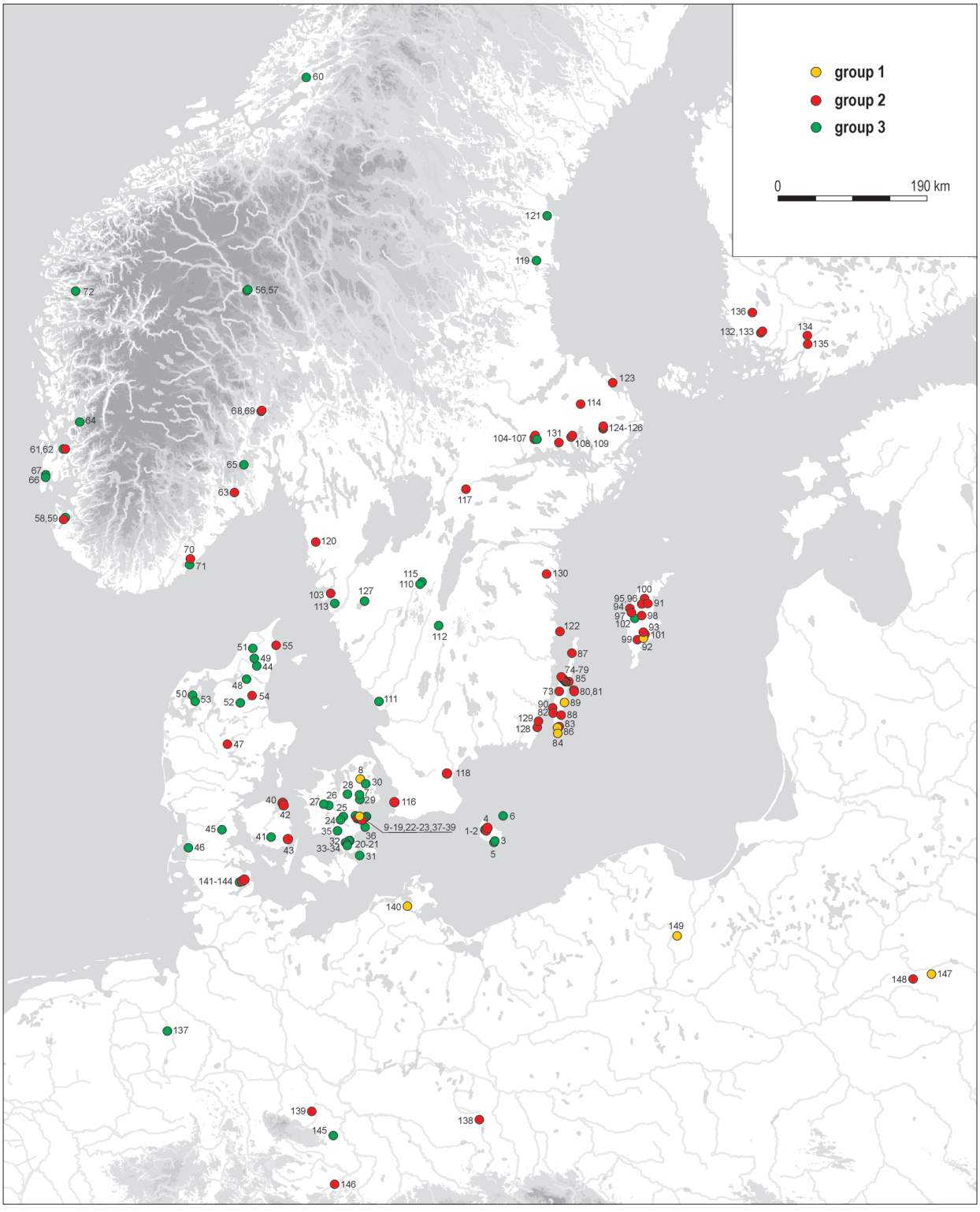
Fig. 1. Fragment of the picture stone from Tängelgårda, Gotland. Photo: Statens Historiska Museum, Stockholm (hereafter: SHM).
Ryc. 1. Fragment steli z Tängelgårda na Gotlandii. Fot.: Statens Historiska Museum, Stockholm (dalej: SHM).

Fig. 2. Distribution of the rings analysed in this study (based on K. Andersson 1993a).
Ryc. 2. Rozprzestrzenienie znalezisk obręczy analizowanych w artykule (na podstawie K. Anderssona 1993a).
1 – Bækkegård; 2 – Bækkegård; 3 – Pedersker (Smålyngen); 4 – Selvejergård (Højlyngen); 5 – Baunegård, grave/grób 11; 6 – Christiansø; 7 – Brøndsager, grave/grób 2000; 8 – Kirkebakkegård; 9 – Magleby; 10–13 – Himlingøje, grave/grób 2/1949; 14 – Himlingøje, grave/grób 3/1977; 15 – Himlingøje, grave/grób 1/1978; 16 – Himlingøje, grave/grób 1/1949; 17 – Himlingøje, grave/grób 1/1894; 18 – Himlingøje, grave/grób 1/1878; 19 – Himlingøje, 1828; 20 – Skibbinge, grave/grób; 21 – Skibbinge, stray find/znal. luźne; 22 – Gunnerupgård; grave/grób 1; 23 – Vedskølle; 24 – Horsetofte; 25 – Nordrup, grave/grób A; 26 – Stenlille; 27 – Kongsted; 28 – Herslev; 29 – Greve; 30 – Værløse (*kirke*); 31 – Marienborg; 32 – Grumløse; 33 – Skovgårde, grave/grób 400; 34 – Skovgårde, grave/grób 209; 35 – Kalby; 36 – Rødvig; 37 – Valløby; 38 – Varpelev, grave/grób α; 39 – Varpelev, grave/grób a; 40 – Fyns Hoved; 41 – Lydinge; 42 – Sappesborg; 43 – Møllegårdsmarken; 44 – Ørum; 45 – Stokkerhoved; 46 – Oxvang; 47 – Hingeballe; 48 – Hasseris; 49 – Klæstrup, bog/bagno; 50 – Galtrupgård; 51 – Rønnovsholm, bog/bagno; 52 – Ravnkilde (*Præstegårdsmark*); 53 – Fredsø; 54 – Liene Skov; 55 – Donbæk, grave/grób 60; 56, 57 – Søndre Kjørstad; 58, 59 – Hove; 60 – Homnes; 61, 62 – Indbjoa; 63 – Lagmandsgården; 64 – Nes; 65 – Efteløt (*kyrkan*); 66 – Kolstø; 67 – Avaldsnes; 68, 69 – Veien; 70 – Løddesøl; 71 – Bringsvær, grave/grób 2; 72 – Naustdal; 73 – Ryd, grave/grób 73; 74–79 – Skedemosse; 80, 81 – Öland; 82 – Bredinge; 83 – Kvinnsgröta; 84 – Näsby; 85 – Skedstad; 86 – Ösby; 87 – Kristinelund; 88 – Hulterstad; 89 – Norra Näsby; 90 – Kleva; 91 – Gute; 92 – Burs; 93 – Vestringe; 94 – Värnhem; 95, 96 – Lilla Ryftes, Vätåker; 97 – Troma; 98 – Dalbo, Ängsåkern; 99 – Asarve; 100 – Rings; 101 – Mannegårda; 102 – Isums; 103 – Höviksnäs; 104–107 – Tuna, grave/grób; 108, 109 – Tuna, deposit/depozyt; 110 – Ramsgården; 111 – Harplinge parish/par.; 112 – Ekeryd; 113 – Stora Brattön; 114 – Gödåker, grave/grób VIII; 115 – Hångsdala; 116 – Naffentorp; 117 – Luggavi; 118 – Eskilstorp; 119 – Glimsta, Västigården; 120 – Solhems Mellan; 121 – Häljom; 122 – Kråkelund; 123 – Långalma; 124–126 – Västra Rickeby; 127 – Alingsås; 128 – Grisbäck; 129 – Ragnabo; 130 – Stockebäck; 131 – Långtora parish/par.; 132 – Nousiainen, ring/obręcz 1; 133 – Nousiainen, ring/obręcz 2; 134 – Isokylä-Ketohaka, grave/grób 2; 135 – Isokylä-Katajamäki, grave/grób I; 136 – fmr./dawn. *Åbo län*; 137 – Thölstedt; 138 – Cottbus; 139 – Emersleben, grave/grób 2; 140 – Altefär-Grahlhof; 141–144 – Thorsberg bog/bagno; 145 – Helmsdorf; 146 – Flurstedt, grave/grób 2; 147 – Pilipki; 148 – Szpaki; 149 – Komorowo.

iconographic sources and by the archaeological record from both the period in question and the Viking era, with representations featuring on the Tängelgårda stone in Gotland among the most interesting examples[3] (Fig. 1).

[3] J.P. Lamm 2005, 36–38.

However, the symbolic importance of ring ornaments in the Scandinavian cultural milieu seems to have much deeper roots, reaching back to the Late Roman Period (ca 160/180–375 CE). This was a time when large ring ornaments made of gold first started to feature more regularly in the archaeological record. One should mention here bracelets with thickened ends (known as Kolben



bracelets), snake finger rings, bracelets and neck-rings, and neck-rings with pear-shaped clasps. Despite all of them repeating a certain general pattern, their scattered distribution throughout much of northern Europe (and incidentally Central Europe as well) means they can hardly be seen as just an element of rich regional costumes. Moreover, from precisely that period on, ring ornaments ceased to be exclusively connected with female costume and started to appear in – typically less decorative – male attire. Where found in the context of male graves, gold rings usually accompany burials of people of apparently higher social position.

It is worth noting that the bracelets, finger rings, and neck-rings found in male graves were almost always made of gold. This is in some contrast to analogical ornaments occurring as elements of female costume, which could be made from silver and bronze as well (e.g. neck-rings with pear-shaped clasps[4]). This suggests that, at least with respect to male attire, gold bracelets and neck-rings were not only ornaments but also symbols of social status and prestige markers[5]. Assuming that it is justified to refer here to the concept of long duration of behavioural patterns and ideological traditions[6], some light on the role of the objects in question can, at least in general terms, be shed by the written and iconographic sources mentioned above. Rings were tokens of friendship, but also symbols of political dependence and subordination. Therefore, their presence in grave inventories can be read in two ways: gold rings symbolised the power of the bearers, but in some cases probably also their subordination to the ring-givers. Those ring-givers, or we might say "Lords of the rings" (to refer to the motif of subordination through a gift, paraphrased by J.R.R. Tolkien), may evade direct archaeological identification, but they can be traced by following very closely the origins and stylistic connections among ornaments scattered among various places in Scandinavia.

This paper deals with one group of Scandinavian gold ornaments from the Late Roman Period, one most often referred to as snake rings: bracelets, neck-rings, and finger rings (*ormhuvudringar*)[7]. This is by no means a new topic and quite copious literature on the issue exists, representing two levels of analysis. The first encompasses studies on classification and chronology, and the other is of those trying to interpret the role of the ornaments in question. Classification studies published have – and the same holds true with respect to some of the typological studies – thus far been focused on selected attributes of the ornaments, most frequently the shape of the terminals and the number of ribbons[8].

Readers interested in the state of research on the issue may refer to a review in Eva Verma's study devoted to Roman Period and Migration Period ring ornaments in *Barbaricum*[9]. This can be supplemented with a more recent study by Lisbeth Kibenich on the classification of rings having zoomorphic terminals, and Kent Andersson's works in which snake rings have been listed and discussed in light of their previous classifications[10].

Among the classification studies cited most often, one should mention two, one referring to large rings (bracelets, neck-rings) and the other to finger rings. The first one is by Hans Hildebrand, who introduced a division of gold snake bracelets and neck-rings based on the differences in their terminals, a system still in use today. He distinguished three types of rings: type A, with ribbons terminating in animal heads; type B, in which the animal heads have an additional conical element decorated with transversal ribs and crowned with a knob; and rings of type C, in which ribbons terminate only in the conical, transversally ribbed part crowned with a knob[11]. This classification was later slightly expanded by Alfred Hackman who, based on bronze rings known from Finland, distinguished another type, type D, which he interpreted as a late, degenerated form of ring of type C[12]. The second study worthy of note is Christamaria Beckmann's paper on finger rings from the area of *Barbaricum*, the classification of gold snake finger rings introduced there being the one most widely used today[13]. The ornaments in question were classed by Beckmann within her types 39 and 40. The former is distinguished by terminals in the form of animal heads, and the latter by schematised conical terminals with knobs, corresponding to those known from bracelets and neck-rings of type Hildebrand C. Type 39 is sub-divided into three variants, of which 39a is spiral and has two ribbons, 39b is spiral with three ribbons, and 39c has three ribbons merged into a single plate. These general divisions proposed by Hildebrand and Beckmann will also be referred to in this study.

Classification studies, which also include studies on the distribution of the rings in question, resulted in the

[4] C. von Carnap-Bornheim, J. Ilkjær 1996a, 353–357; M.J. Przybyła 2010, 587–598; J. Andrzejowski 2014.

[5] M. Hardt 2004, 70–71.

[6] Longue durée; F. Braudel 1994, 21–23.

[7] Appendix 1 contains a full list of sites cited in the text and captions.

[8] H. Hildebrand 1873, 137–139; A. Hackman 1905, 214; K. Stjerna 1908, 94–95; E. Blume 1912, 75; G. Kossinna 1922, 134–138; W. Schulz 1952, 120–133; K. Raddatz 1957, 121–133; U.E. Hagberg 1967, 9–21; Ch. Beckmann 1969, 47–49; E.M. Verma 1989, 32–37.

[9] E.M. Verma 1989, 6–12.

[10] L. Kibenich 1995, 108–120; K. Andersson 1993a; 1993b, 82–86; 1995, 69–80.

[11] H. Hildebrand 1873, 137–139.

[12] A. Hackman 1905, 214.

[13] Ch. Beckmann 1969, 47–49.

emergence of two main hypotheses concerning their origins. The first was championed, among others, by Walter Schulz and Klaus Raddatz, who linked the discussed ornaments with workshops operating in Zealand[14]. The second hypothesis was put forward by Kent Andersson. Based on the analysis of both the form of the artefacts and the stamped decoration featuring on them, he argued that they were products of various workshops operating either in what today is Denmark or in present-day eastern mainland Sweden and the islands of Gotland and Öland[15].

As mentioned, the second large group of publications concerning gold snake rings deals with interpretations of these ornaments and their potential for reconstructions of geopolitical processes. One should mention here above all a study by Joachim Werner[16], who was the first to notice the symbolic meaning of some ring ornaments. He linked larger specimens with male attire, interpreting them as indicators of belonging to a retinue of the ruler (Germ. *Gefolgschaft*). He also pointed out how the rings were distributed by the ruler (as a gift forming a bond with the ruler)[17]. Werner's hypotheses with regard to the significance of gold ring ornaments inspired a discussion in later literature. While their interpretation as markers of social position has been generally accepted, their role as indicators of a subordinate status of their wearers in relation to people wearing Kolben bracelets has been questioned[18].

The idea of a hierarchical bond between people wearing these two types of rings was further developed by Ulla Lund Hansen[19]. Proceeding from studies on distribution of these artefacts, the contexts in which they were found, and a sweeping analysis of the distribution of Roman imports, she identified the Stevns region in Zealand as a centre of power. Accepting Werner's view of gold snake rings as reflecting one's status as a supporter of the ruler (the latter identified by another category of massive rings, namely Kolben bracelets), Lund Hansen draws a picture of a network of political alliances created by representatives of the Zealand power centre. The reconstruction is based on the assumption that the majority of gold snake rings of the Scandinavian type originated precisely from Zealand[20]. Ulla Lund Hansen's reconstruction of the connection network of the Late Roman Period power centre in the Stevns region was accepted and developed further by Per Ethelberg[21]. Drawing from Kent Andersson's ideas on the differentiation of gold ring ornaments[22], Ethelberg nevertheless distinguishes between Zealand snake ornaments – which he believes correspond to rings B.39[23] and bracelets of type Hildebrand B – and bracelets of type Hildebrand C, which he identifies as being of eastern Sweden origin[24]. However, except for noting the eastern Sweden origin of the ring from Varpelev, Præstø amt, grave A, he apparently does not explore the implications of this distinction in more detail, given the assumptions he makes with respect to the patterns of distribution of the ornaments in question[25]. Further discussion provided in a study by Helge J. Kudahl, who also employs Ethelberg's distinction concerning the provenance of particular types of Scandinavian snake rings[26], seems to lead in the same direction.

The mentioned authors – Ulla Lund Hansen, Per Ethelberg, and Helge J. Kudahl – try to highlight a special position of Zealand in the Late Roman Period as a dominant centre of power in Northern Europe, one that shaped the balance of political forces by forming alliances with elites from other regions. Among the means exploited for building these alliances, the authors in question mention redistribution of prestige objects (placing particular emphasis on the subordination of the gifted by the giver), as well as exchange of gifts and exogamy. As objects given

[14] W. Schulz 1952, 126; K. Raddatz 1957, 132.

[15] K. Andersson 1991, 222–231.

[16] J. Werner 1980.

[17] J. Werner 1980, 24–41.

[18] H. Steuer 1982, 249; L. Holten 1989, 96–103; C. von Carnap-Bornheim, J. Ilkjær 1996a, 356.

[19] U. Lund Hansen *et alii* 1995, 206–207, 374–382; U. Lund Hansen 1998, 348–357; 2001, 163–175; 2002, 29–42.

[20] U. Lund Hansen *et alii* 1995, 383; U. Lund Hansen 1998, 355; 2002, 41.

[21] P. Ethelberg *et alii* 2000, 68–72, 150–166.

[22] K. Andersson 1991; 1993b; 1995.

[23] Abbreviations referring to particular classification systems used in this study: Shield bosses, spear and javelin heads – J. Ilkjær (1990; abbr. I) or J. Bemmann & G. Hahne (1995; abbr. B/H); round scabbard chapes – J. Ilkjær & J. Lønstrup (1974); scabbard slides – C. von Carnap-Bornheim (1991); antler combs – P. Ethelberg (2009; abbr. PE; first position is for construction type and handle form; second position – form of side teeth; third position: proportion of the handle); finger rings – Ch. Beckmann (1969; abbr. B); metal pins – B. Beckmann (1966; abbr. B); horn fittings – J. Andrzejowski (1991; abbr. AN); brooches – O. Almgren (1923; abbr. A), B. Nerman (1935; abbr. N), and A. Bitner-Wróblewska (2001); simple forms of MII–MIII brooches and some A.VI,2 – M.J. Przybyła (2018a; abbr. P); rosette & swastika brooches – M.J. Przybyła (2018b; abbr. MP); disc brooches – S. Thomas (1966); mountings of wooden buckets – K. Raddatz (1962; abbr. R), chronology of particular mountings types – M.J. Przybyła (2016); Roman imports – H.J. Eggers (1951; abbr. E) and U. Lund Hansen (1987; abbr. LH); buckles – R. Madyda-Legutko (1987; abbr. M-L), J. Bemmann & G. Hahne (1995; abbr. B/H), and V.J. Malašev (2000); strap ends – K. Raddatz (1957) and A. Rau (2010); spurs – J. Ginalski (1991; abbr. JG) and U. Giesler (1978; abbr. UG); beaded necklaces – M.J. Przybyła (2018a; abbr. P); S-shaped clasps – J. Kmieciński (1962); snake-rings of Wielbark Culture type – E. Blume (1912); ÄEG – abbr. for types taken from O. Almgren & B. Nerman (1923); RH – abbr. for types taken from O. Rygh (1885).

[24] P. Ethelberg *et alii* 2000, 71.

[25] P. Ethelberg *et alii* 2000, 157.

[26] H.J. Kudahl 2007.

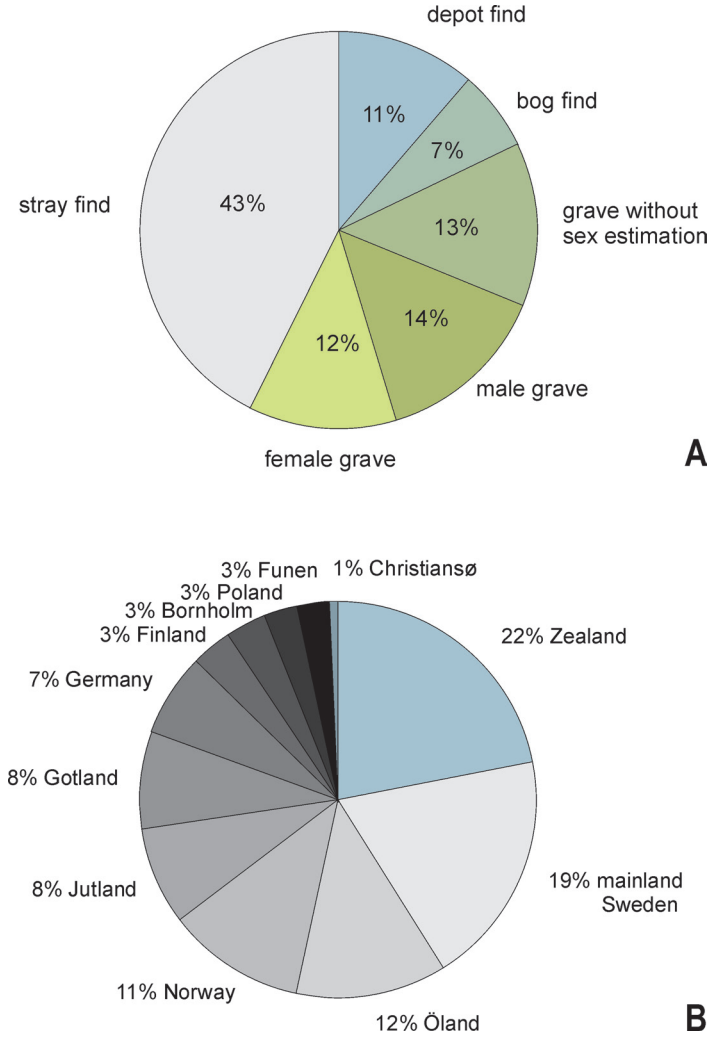


Fig. 3. A – Context of the analysed gold rings; B – Number of rings per region (total: 150 spec.).
Ryc. 3. A – Kontekst analizowanych obręczy złotych; B – Liczba obręczy w poszczególnych regionach (łącznie 150 egz.).

by a ruler to his supporters, ring ornaments would in this approach be "markers" of subordinate elites. Yet, comparing this view with the source basis one cannot overlook the fact that some proportion of spectacular ring ornaments discovered in burials of Zealand elites are of foreign rather than local provenance. If we follow these authors in their assumptions concerning the mechanisms of distribution of luxury items and objects as status markers, this must inevitably be understood as a trace of Zealand's political dependence on another centre of power. In other words, one could ask whether gold snake rings typical of mainland Sweden, Öland, and Gotland, which often belong among most massive ornaments, should not be seen as material evidence of alliance networks created by elites from these regions (in which Zealand would only be one participant) rather than of a scenario with Zealand elites as the prime mover? Exploring this issue will be the subject of this study. Towards this end, it is necessary to re-analyse the ornaments in question. Admittedly, in formal terms all these rings fit into one general pattern, but they are highly individualised with respect to the details of their manufacture. By analysing the degree of affinity at the level of individual specimens rather than general types, one can attempt to reconstruct their hypothetical genealogy and thus – based on the "principle of gifts" – reconstruct the chronology, directions, and intensity of the assumed political connections among particular regions with a resolution slightly greater than that previously allowed by simplified classifications. What makes this "genealogical" approach especially important is the fact that a significant number of the rings do not occur in contexts allowing their chronology to be precisely determined.

2. SOURCES AND METHODS

In this chapter, I would like to address once again and in more detail the classification and chronology of gold snake rings, as well as the patterns of their distribution. Since finger rings of the B.40 type are actually miniaturised versions of some bracelets and neck-rings belong-

ing to types Hildebrand B and C, and some B.39 finger rings seem clearly related to certain specimens of type Hildebrand B bracelets, all these artefacts are analysed here jointly as one group. Thus, aspects such as size and weight will be omitted at this stage of the analysis, with the main focus on determining the degree of stylistic affinity among particular specimens. In total, 129 rings representing the above-mentioned types have been included. Since certain traits characteristic of B.39 finger rings can also be found in rings of the B.18 type, the latter have been included in the analysis as well (21 pieces) (Fig. 2).

The analysed artefacts originate from various contexts: 39% were found in graves, with 14% recorded in the context of male burials and 12% in the context of female burials; 18% come from deposits, with 7% representing bog finds containing elements of weaponry; and as much as 43% of the artefacts are uncontexted finds (Fig. 3:A).

The largest numbers of rings in question are known from Zealand (22%) and mainland Sweden (19%), with relatively large groups also recorded in Öland (12%), Gotland (8%), Norway (11%), Jutland (8%), and Germany (7% – in what today is Niedersachsen, Sachsen-Anhalt, Thüringen, and Sachsen). They also occur in Funen, Bornholm, Christiansø, south-western Finland, and in northern and eastern Poland (Fig. 3:B).

Gold snake rings are objects of high artisanship, most likely created on commission and therefore unique in details of manufacture. Basically, there are no two identical ornaments in this group, even when some of them were created as pairs. This means that any classification system operating on arbitrary units (types) will inevitably highlight only one or a few attributes, completely disregarding other traits, perhaps equally important for identifying two objects as originating from the same workshop or determining their possible chronological affinity. Although strictly interrelated, the analysed group of artefacts is undoubtedly a polythetic set, with individual specimens sharing only some attributes (which may occur in a variety of combinations) and with boundaries between particular types blurred.

Any attempt at classification that would take into account the polythetic nature of the source basis requires the application of multivariate analysis. Since the aim of this study goes beyond classification and also encompasses identification of typological connections among particular artefacts, the analysis will make use of the phylogenetic method. The method has been borrowed by archaeological research from biological systematics, where cladistics is widely applied for reconstructing genetic relationships between compared sequences of attributes. In archaeology, phylogenetic studies are often applied to examine a collection of artefacts assumed to represent branches of one manufacturing tradition, i.e. to have had a "common ancestor"[27]. It seems that this assumption is also justified with respect to the collection analysed here, as it is characterised by a significant degree of stylistic affinity.

The method chosen here is the Neighbour-Joining analysis with pairwise deletion, and it was performed using MEGA 4 software[28]. This method calculates a statistical distance between the closest taxa (here: artefacts) (number of changes per number of attributes in the sequence), and their affinity is determined using the minimal change method. The result is just one phylogenetic tree, that identified by the algorithm as the most likely.

The matrix takes into account the variability of 58 attributes, encompassing such aspects as the number of ribbons, shape and details of the terminals, position of the decoration, types of stamps used, and types of filigree and granulation ornamentation. The differentiation of these attributes is presented in Fig. 4. The classification of punched decoration follows Andersson[29], with some supplementations. Some of the damaged artefacts have been included in the matrix as well, since the software used allows for their analysis. Some others, however, have been excluded, where the number of non-extant elements was too high or when the terminal has not survived.

3. RESULTS OF THE ANALYSIS

The result of the analysis is a rooted phylogenetic tree which separates the examined artefacts into two "traditions". The root of the tree has been generated statistically. The tree has been compared with relative datings of grave assemblages and hoards containing rings of the discussed types, presented in Fig. 5. The datings are based on chronological observations concerning dress items, in particular brooches M.II–III[30] and, with respect to some male burials, on A. Rau's findings concerning chronology of graves with weapons[31]. In light of these datings, the chronological frameworks of the ornaments in question span phases C1b–C3b.

The earliest grave assemblages, attributable to phase C1b, can be found in the initial sections of both main branches. In one branch these are the assemblages from Kirkebakkegård and Valløby (Zealand), Komorowo

[27] M.J. O'Brien, J. Darwent, R.L. Lyman 2001; M.J. O'Brien, R.L. Lyman 2005; I. Tëmkin, N. Eldredge 2007; F. Curta 2009; M.S. Przybyła 2014; J. d'Huy 2015; M.J. O'Brien *et alii* 2015.
[28] K. Tamura *et alii* 2007.
[29] K. Andersson 1991, 223.
[30] M.J. Przybyła 2018a.
[31] A. Rau 2010.

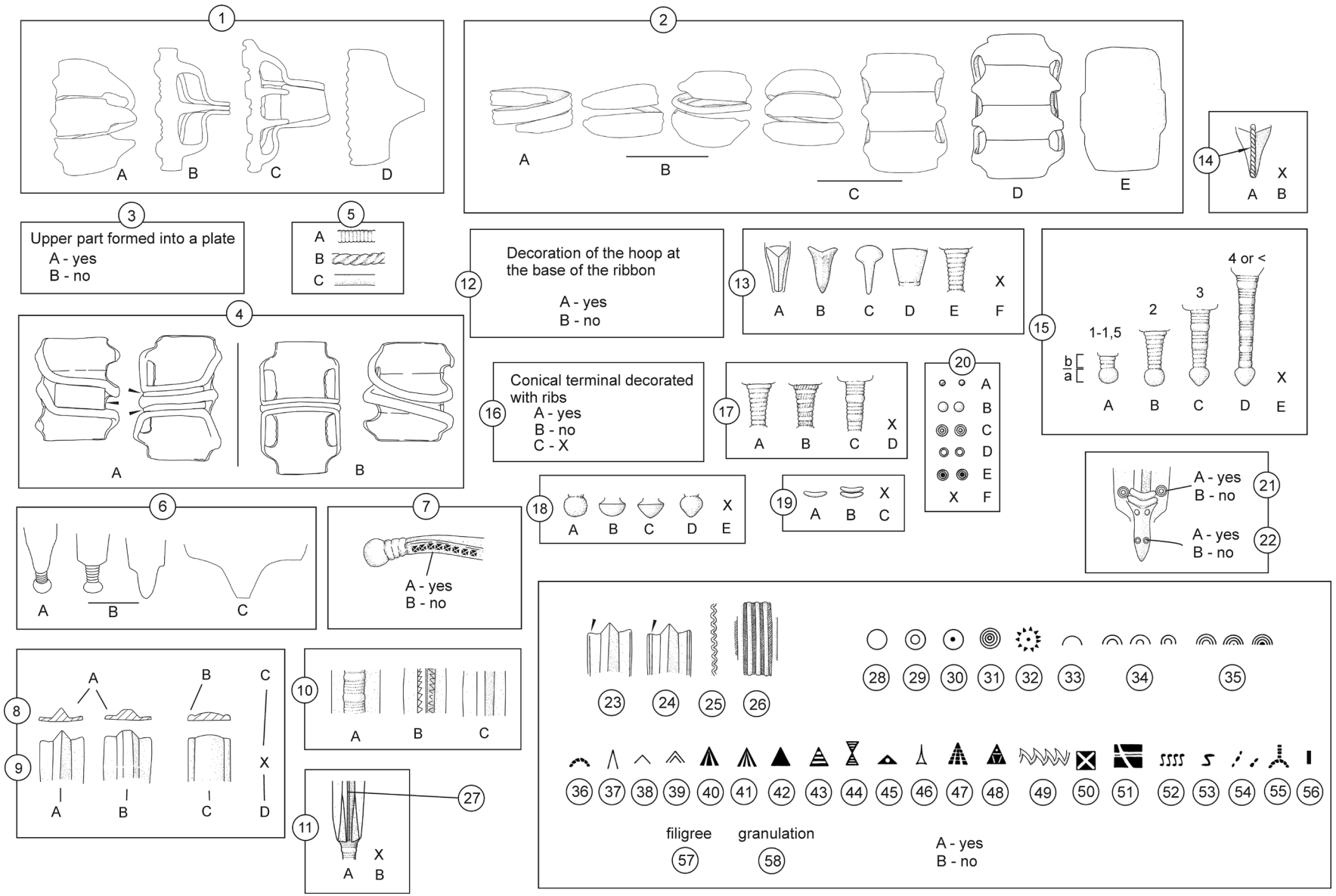


Fig. 4. Classification of particular elements of gold rings of types B.18, B.39–40, and Hildebrand A–C (for description see Appendix 2 at the end of the text).

Ryc. 4. Klasyfikacja elementów obręczy typów B.18, B.39–40 oraz Hildebrand A–C (opis w Aneksie 2 na końcu artykułu).

(eastern Pomerania), and Pilipki (north-eastern Poland), and in the other branch those from Ryd (Öland), grave 73 and Gunnerupgård (Zealand), grave 1. Since these earliest assemblages from the first branch stand out in the diagram as a separate branch and form a numerically superior group, the tree has been rooted precisely in the place where this branch separates. The rooted tree is shown in Fig. 6.

The rooting allowed three main branches to be distinguished, referred to later in the text as groups. It is worth noting that due to the polythetic nature of the branches the distinguished classification units do not fully overlap with the types traditionally distinguished for these artefacts. Group 1, which marks the root of the tree, is the earliest. It is comprised of some bracelets and neck-rings of types Hildebrand A and B, and some finger rings akin to type B.40. Group 1 splits into two other groups: group 2 comprising B.40 finger rings, bracelets and neck-rings of type Hildebrand C and some of those belonging to type B, and group 3 comprising B.39 finger rings, some of type Hildebrand A bracelets, and B.18 finger rings.

The groups divide further into smaller branches. For the sake of simplicity of description, they have been mechanically distinguished as sub-groups designed with letters. They have been used as modules in the simplified scheme of the rooted tree shown in Fig. 7. The moments when subsequent "generations" of rings appear are marked on the illustrations showing the tree and on the model of evolution of the rings in question created on the basis of this tree. However, it needs to be emphasised that the pace at which modifications emerged was certainly not consistent in all the branches and may have also differed at different stages within a branch. Nevertheless, comparing the relative chronology of assemblages containing the discussed ornaments with the relative chronology of the ornaments emerging from the development of the tree, one can note that these two sequences are generally consistent. In other words, assemblages from phase C1b are situated in the initial sections of the development of particular branches (in the lower part of the phylogenetic tree), while those from phase C3 can be found in the closing sections. One should not forget, however, that these sequences represent two different categories. The sequence shown as the phylogenetic tree relates to the moments when particular ornaments were created, while the one based on relative chronology of grave assemblages relates to the moments when these ornaments were removed from circulation. Below, major characteristics of particular branches are discussed. The diversity of attributes in the context of particular subgroups is shown in correspondence analysis diagrams (Fig. 12, 20).

Fig. 5. Chronology of inventories with gold rings with zoomorphic or schematized zoomorphic terminals (for the classification systems used – cf. Footnote 24).
Ryc. 5. Chronologia zespołów zawierających obręcze o zoomorficznych lub stylizowanych zoomorficznych zakończeniach (źródła wykorzystanych klasyfikacji – zob. przyp. 24).

Site	Ring type	Sub-group	Feature	Dating	Dating elements	References
Gunnerupgård, Zealand, grave 1	40	2A	grave, F	C1b	E51; E161; 2× brooch P.IIA; brooch A.193; fragments of two antler combs PE.IIIB1	K. Andersson 1993a, cat. 91
Värnhem, Gotland, grave 10	40	2B	grave	C1 (C1b?)	fragments of bronze mountings of a drinking horn (rim mounting of type AN K.6, fragments of profiled chain links; rivets); glass fragment	K. Andersson 1993a, cat. 1230
Nordrup, Zealand, grave A	39a	3A	grave, M	C1b	E58; E161; denarius of Antoninus Pius (159–160); 2× E209; brooch A.193	K. Andersson 1993a, cat. 70
Kirkebakkegård, Zealand	40 var.	1A	grave, M	C1b	E161; E24–29; 3× E190; 2× spur type *Leuna*, var. UG A; balteus elements; buckle M-L. D.17; 2× decorative brooch IIA (rosette brooches of group H/P.4A and H/P.4C)	K. Andersson 1993a, cat. 7
Pilipki, Poland	A–B	1B	grave, M	C1b	gold lunula, fragments of bracelet II–III after E. Blume (1912); S-shaped clasp von Müller B; E48	V.V. Kropotkin 1973, 331–336
Komorowo, Poland	C	1B	grave, M	C1b	2× spur JG F.4; 2× gold ring B.10; brooch A.150, var. with two springs and semi-circular head plate; buckle M-L. D.17; E160–161	G. Kossinna 1922, 131–132, fig. 28

Site	Ring type	Sub-group	Feature	Dating	Dating elements	References
Valløby, Zealand	A–B	1B	grave, M	C1b	brooch P.IIC; brooch P.IIA; 2× E48; 2× E77; E189; E190; 2× E161; 2× E29; balteus elements; 2× E177	K. Andersson 1993a, cat. 107a
Hällkista Ryd, Öland, grave 73	40	2A	grave, M	C1b	2× spur type *Leuna*, var. UG A; spear head I 14; javelin head I 6	M. Rasch 1991, 30
Himlingøje, Zealand, grave 1/1894	40	2F	grave, M	C1b–C2a	gold "Kolben" bracelet; 2× antler arrow head; antler comb PE.IA; brooch A.209; buckle, probably with long omega-shaped frame; E161; 2× E209; E82	K. Andersson 1993a, cat. 99b
Dalbo, Ängsåkern, Gotland	C	2G	deposit	C1–C2	fragments of gold neck ring with twisted ring and fastening type A after M.J. Przybyła (2007)	K. Andersson 1993a, cat. 1160a
Fredsø, Jutland	18	3M	grave, M	C1b–C2	sword scabbard with round chape type C after J. Ilkjær & J. Løstrup (1974) and slide of type IIID3 after C. von Carnap-Bornheim (1995); round bronze balteus fastening	K. Andersson 1993a, cat. 473a
Thölstedt, Niedersachsen	18	3M	grave	C1b–C2	bucket type *Hemmoor*	G. Wegner 1990, 27–32
Gödåker, Uppland, grave VIII	40	2H	grave, M	C1b–C2	javelin head I 6; spear head I 26	K. Andersson 1993a, cat. 1336
Burs, Gotland	A–B	1B	deposit	C1b–C2	2× gold arm ring ÄEG 375, var.; gold neck ring with loop-like fastening	K. Andersson 1993a, cat. 1185c
Oxvang, Jutland	18	3M	grave	C1b–C2	E56–58	K. Andersson 1993a, cat. 663
Näsby, Öland	A–B	1C	deposit	C1b–C2	gold neck ring with loop-like fastening	K. Andersson 1993a, cat. 1093a, fig. 79
Veien, Buskerud	40	2H	grave	C1b–C2	E37–43	K. Andersson 1993a, cat. 741
Stadheim, Sogn og Fjordane	40 var.	X	grave, M	C1b–C2	2× silver arm ring with gilded sheet (form similar to the finger ring type B.40 var. from the same grave); fragment of javelin head, probably B/H *Simris*; sword B/H *Røllang*	K. Andersson 1993a, cat. 886
Indbjoa, Hordaland	18, C?	3O	grave	C2	brooch P.IIIA.2	K. Andersson 1993a, cat. 866
Tuna, Västmanland	2× C, 39a	2L, 2M	grave, M?	C2	2× E58; E81–82; E189; 2× silver spoon; 2× gold pin B.124; 2× glass bead; gilded circular applique	K. Andersson 1993a, 233, cat. 1311
Avaldsnes, Rogaland	18	3N	grave, M	C2	sword scabbard with round chape type C after J. Ilkjær & J. Lønstrup (1974); gold neck ring with "Kolben"-like terminals; gold pin B.124; bronze silver-plated mirror; shield boss similar to I 3c; horn fitting AN K.7	L. Kibenich 1995, cat. 73
Stenlille, Zealand	39b	3B	grave	C2a	E209 (fragments); cauldron type *Westland* (E14)	K. Andersson 1993a, cat. 52

Site	Ring type	Sub-group	Feature	Dating	Dating elements	References
Hasseris, Jutland	18	3O	grave, F	C2 (C2a?)	wooden stave bucket with bronze fittings R.IIIa; rosette brooch P.1; pin B.115/119; beaded necklace P.2	K. Andersson 1993a, cat. 497
Bringsvær, Aust-Agder, grave 2	39c	3L	graves, M	C2	spear head type *Svennum*, spear head var. *Nydam* (?), javelin head type *Lundskin*, and shield boss type IVc (all acc. to B/H); round scabbard chape type A after J. Ilkjær & J. Lønstrup (1974)	K. Andersson 1993a, cat. 781
Himlingøje, Zealand, grave 1/1949	39b	3A	grave, M	C2 (C2a?)	E108; E83; E161; E58; 3× E216	K. Andersson 1993a, cat. 100
Himlingøje, Zealand, grave 2/1949	39a, 39b, 2× A/B	3B	grave, F	C2a	rosette brooch H/P.3A; rosette brooch H/P.4B; 2× brooch P.IIB; brooch P.IIC; brooch P.IIIA.2; pin B.110; denarius of Titus (79–81); bulla; beaded necklace P.2; spiral beads made of wire; antler comb PE.III?1; E189; E209; E80; E161; E161	K. Andersson 1993a, cat. 101
Skovgårde, Zealand, grave 209	39a	3B	grave, F	C2a	rosette brooch H/P.3A; S-shaped clasp with rolled up ends; tube-shaped bronze beads; spiral beads made of wire; pendant made of denarius of Hadrian (117–138); 2× brooch P.IIIA.2; 2× brooch P.IIA; antler comb PE.IIIA2; pin B.111; beaded necklace P.2	L. Kibenich 1995, cat. 27
Skovgårde, Zealand, grave 400	39b	3B	grave, F	C2a	2 or 3× brooch P.IIIB.5 with disc-shaped head; brooch P.IIB, spiral beads made of wire; beaded necklace P.2; disc brooch Thomas D, var. *Grumløse*; pin B.110; wooden bucket with bronze mountings R.Ia; antler comb PE.IIIA2; E212; Isings 30; E209 (fragment)	L. Kibenich 1995, cat. 26
Emersleben, Sachsen-Anhalt, grave 2	C	2C	grave, M	C2	2× silver spoon; antler comb PE.III–IV; E120; E161; E82; aureus of Postumus (259); brooch A.VI, series 2 with distinguished catch-plate and tongue-like foot; finger ring B.37	W. Schulz 1952, 110, pl. 22
Himlingøje, Zealand, grave 1/1978	39c	3F	grave, M	C2	antler comb PE.IIIA.2; E203	K. Andersson 1993a, 33, cat. 103a
Brøndsager, Zealand, grave 2000	39c	3G	grave, M	C2	golden pendant (imitation of Antoninus Pius coin); antler comb PE.IIIA2; E200; E199; wooden bucket with bronze mountings R.IIIa	L. Boye 2009, 267–271
Efteløt (*kyrkan*), Buskerud	39c	3H	grave, M	C2	javelin head type B/H *Lundskin*; wooden bucket with bronze mountings tye R. IIIb	K. Andersson 1993a, cat. 739
Cottbus, Brandenburg	C	2K	deposit	C2	3× gold "Kolben" bracelet; gold neck ring with smooth band and fastening type A after M.J. Przybyła (2007)	W. Schulz 1952, 122–123, pl. 32:2
Donbæk, Jutland, grave 60	C	2H	grave	C2	E78; wooden bucket with bronze mountings R.II	K. Andersson 1993a, cat. 434
Greve, Zealand	39c	3G	grave, M	C2	E203; antler comb type III?2 after P. Ethelberg (2009); wooden bucket with bronze mountings R.IIIb	K. Andersson 1993a, cat. 37
Himlingøje, Zealand, grave 3/1977	C	2J	grave, M	C2	glass horn Evison I; E161; E118; E55–66; glass vessel LH, pl. 18:10; antler comb PE.IIIA1 (?)	K. Andersson 1993a, 33, cat. 102

Site	Ring type	Sub-group	Feature	Dating	Dating elements	References
Horsetofte, Zealand	18/39c	3L	grave, F	C2	pin type B.116; fragments of rosette brooch (?)	K. Andersson 1993a, cat. 75
Hove, Rogaland	18, C	2L	grave	C2	E58	K. Andersson 1993a, cat. 806
Gullhögen, Uppland, grave B	39c	X	grave	C2	fragment of glass vessel(s) with wavy glass threads; E209 (fragment); glass and amber beads; fragments of three-layer comb; knife with cylindrical bronze fittings	B. Arrhenius, G. Eriksson 2006, 10–11
Skibbinge, Zealand	39c	3E	grave, F	C2	swastika brooch P.2	K. Andersson 1993a, cat. 116
Szpaki, Poland	40	2I	grave	C2	buckle type *Vøien*, var. B/H 2; clay knobs; fragments of three-layer comb; 2× gem; fragment of brooch A.VI	K. Rusin 2008, 295–308
Ravnkilde (*Præstegardsmark*), Jutland	39a	3B	grave	C2b	finger ring 17b; E112; E58	K. Andersson 1993a, cat. 511b
Søndre Kjørstad, Oppland	18, 39c var.	3L, 3M	grave, F	C2b	finger ring B.17b; brooch P.IIA, brooch P.IIIB.3; pin B.123; needle-case; 2× weaving sword; E106; E203/204; wooden bucket with bronze mountings R.IIIa; clay bucket-like pot	K. Andersson 1993a, cat. 724
Himlingøje, Zealand, grave 1/1878	18	3O	grave, F	C2 (C2b?)	E249; swastika brooch P.2	K. Andersson 1993a, cat. 98
Varpelev, Zealand, grave α	39c	3G	grave, F	C3a	E230; finger ring B.17b; pin B.114–115; swastika brooch of main group; wooden bucket with mountings R.Ia	K. Andersson 1993a, cat. 165a
Varpelev, Zealand, grave A	C	2L	grave, M	C3b	E172; E229; E231; E250; E105; pendant of Probus solidus (276–282); buckle similar to P.10 after V.J. Malašev (2000); horn mountings AN K.7 and AN F.1; wooden bucket with bronze mountings R.II; pin B.131; antler comb PE.IIIA.2	K. Andersson 1993a, cat. 166a
Isokylä, Ketohaka 2, Finland	40	2H	graves	C2–D	a few graves from phases C2, C3 and D (acc. to M. Schauman-Lönnqvist 1988, 46)	K. Andersson 1993a, cat. 1369
Isokylä, Katajamäki, Finland, grave I	C	2L	grave	C3	brooch A.168, late variant; fragments of silver neck ring with loop-shaped fastening; bronze armlet of plano-convex cross-section; bronze armlet of square cross-section; openwork semi-circular plate	K. Andersson 1993a, cat. 1370
Baunegård, Bornholm, grave 11	39c	3K	grave, M	C2b	weapon elements of group Ilkjær 8, i.a. javelin I 3, spear head I 26 and shield boss I 6; strap end J.III.2, var. *Ejsbøl* after A. Rau (2010); type *Vøien* buckle, B/H var. 1	K. Andersson 1993a, cat. 209
Bækkegård, Bornholm	39c, C?	3K	deposit (?)	C3	armlet RH300; 2× gold armlet terminating in acorn-like knobs; elements of Sösdala ornamentation on ring B.39c	K. Andersson 1993a, cat. 175d.h

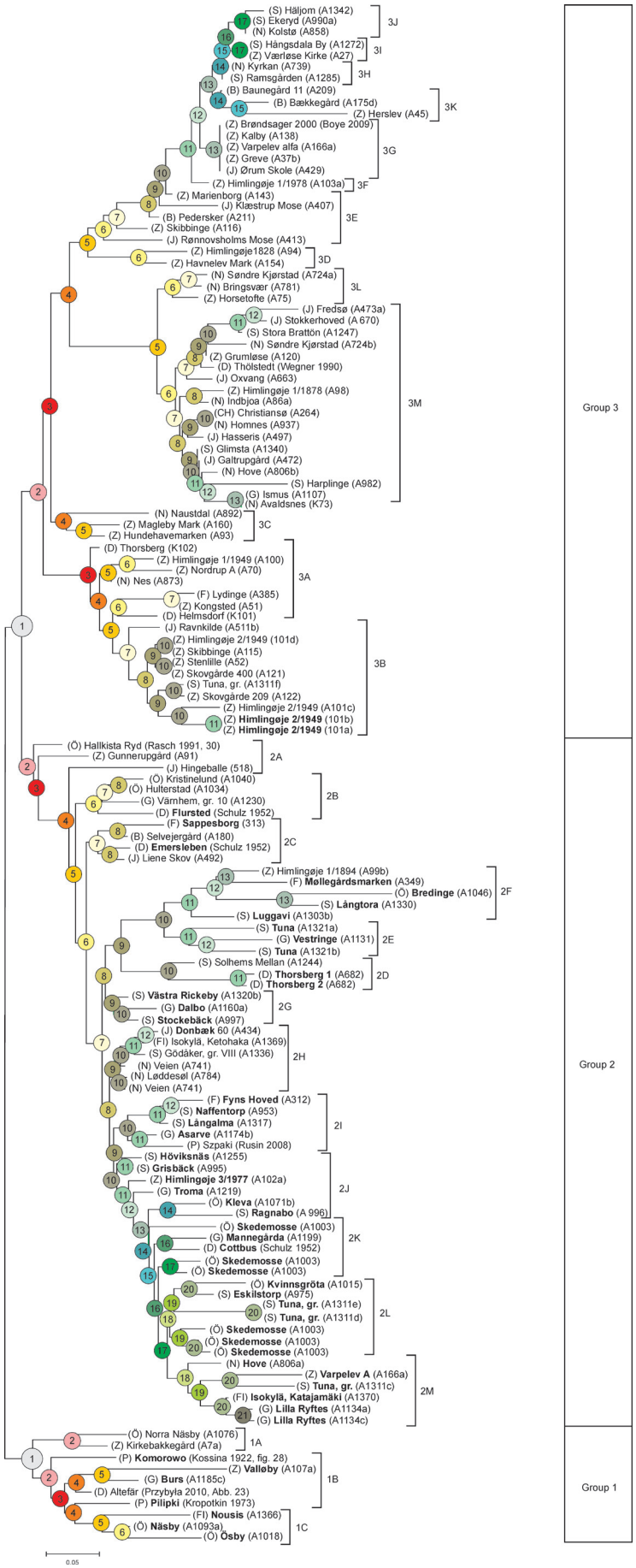


Fig. 6. Phylogenetic development of gold rings with zoomorphic or schematized zoomorphic terminals, with division into groups and subgroups. The capital letter in parentheses before the site name stands for main regions taken as units of analysis (Z – Zealand; F – Funen; B – Bornholm; J – Jutland; G – Gotland; Ö – Öland; S – continental Sweden; N – Norway; D – Germany; P – Poland).
The site name is followed by bibliographical references, mostly referring to the works of Kent Andersson (1993a; abbr. A) or Lisbeth Kibenich (1995; abbr. K), where further bibliographical references and basic information concerning the contexts of finds can be found. The bibliographical information is supplemented with the works of Marianne Schauman-Lönnqvist (1988), Katarzyna Rusin (2008), Walther Schulz (1952), Monika Rasch (1991), Günter Wegner (1990), Vladislav V. Kropotkin (1973), and Gustaf Kossinna (1922).

Ryc. 6. Rozwój filogenetyczny złotych obręczy o zoomorficznych lub stylizowanych zoomorficznych zakończeniach, z podziałem na grupy i podgrupy. Wielka litera w nawiasie przed nazwą stanowiska oznacza główne regiony przyjęte za jednostki analizy (Z – Zelandia; F – Fionia; B – Bornholm; J – Jutlandia; G – Gotlandia; Ö – Olandia; S – Szwecja kontynentalna; N – Norwegia; D – Niemcy; P – Polska). Po nazwie stanowiska następują odniesienia bibliograficzne, najczęściej do prac Kenta Anderssona (1993a; skrót A) lub Lisbeth Kibenich (1995; skrót K), gdzie można znaleźć dalsze odniesienia bibliograficzne i podstawowe informacje dotyczące kontekstów znalezisk. Uzupełnieniem informacji bibliograficznych są odsyłacze do prac Marianne Schauman-Lönnqvist (1988), Katarzyny Rusin (2008), Walthera Schulza (1952), Moniki Rasch (1991), Güntera Wegnera (1990), Vladislava V. Kropotkina (1973) i Gustafa Kossinny (1922).

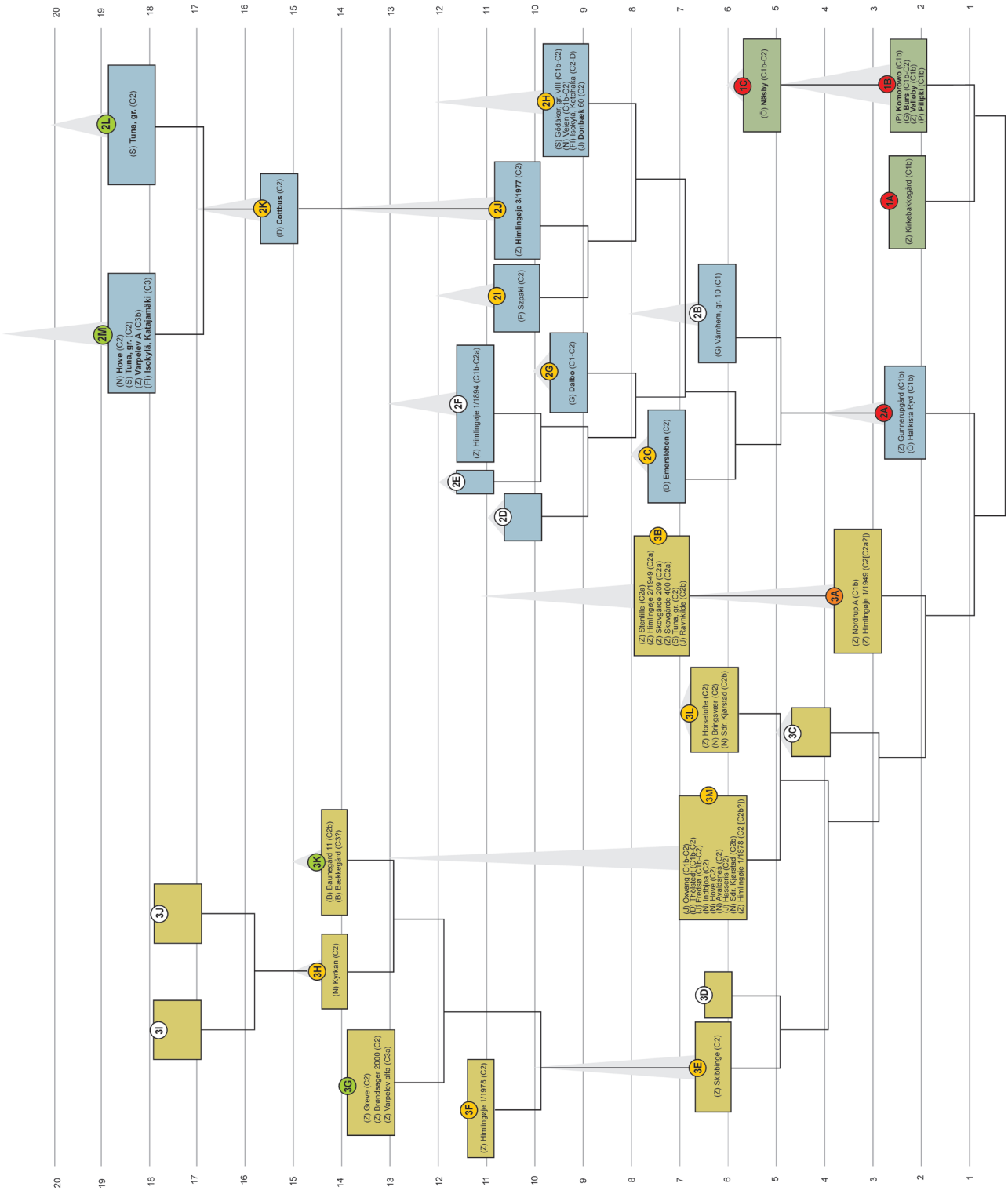


Fig. 7. The development of gold rings with zoomorphic or schematized zoomorphic terminals and the dating of particular inventories with such artefacts.

Ryc. 7. Rozwój złotych obręczy o zoomorficznych lub stylizowanych zoomorficznych zakończeniach i datowanie wybranych zespołów z takimi przedmiotami.

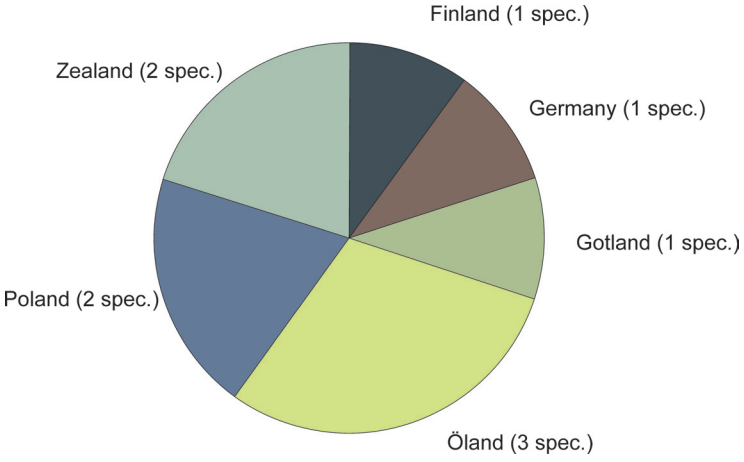


Fig. 8. Rings of group 1 in particular regions.
Ryc. 8. Obręcze grupy 1 w poszczególnych regionach.

Fig. 9. Finger rings from Møllegårdsmarken (Funen), grave 525 (1), and from the grave from Kirkebakkegård (Zealand) (2).
After: M.B. Henriksen 2009 (1). Photo: Nationalmuseet, København (hereafter: NMK) (2).
Ryc. 9. Pierścienie z grobu 1 z Møllegårdsmarken na Fionii (1) i z grobu z Kirkebakkegård na Zelandii (2). Wg: M.B. Henriksen 2009 (1). Fot.: Nationalmuseet, København (dalej: NMK) (2).

3.1. Group 1

This is the smallest and most diversified group. It comprises ten rings known from Öland, Gotland, Zealand, south-western Finland, Rugia, and the central parts of northern and north-eastern Poland (Fig. 8). The group divides into subgroups 1A, 1B, and 1C (Fig. 10), the first two of which contain the above-mentioned grave assemblages from phase C1b (cf. Fig. 5). Their development spans generations 2–4. Here belong rings with one, and more often two ribbons, with a broad, plano-convex ridge (type 9C) and a narrow, thickened edge (type 8B). Only in one case (Komorowo – Fig. 10:5) is the latter element absent.

Most of the rings from this group have triangular animal heads cut flat at the top (type 13D), with only one specimen having the upper part of the head shaped like the letter V (Pilipki – Fig. 10:8) (type 13A). The majority of the ornaments in question have the eyes marked as well, although the manner in which they are rendered differs. In subgroup 1A they are punched using a round-tipped stamp (type 20D) (Fig. 10:1.2), and in subgroup 1B they take the form of large knobs (type 20B) (Fig. 10:3–6), and in one case, small knobs (type 20A) (Fig. 10:8). In two 1B specimens a round-tipped stamp was used for marking "nostrils" as well (type 22A; Fig. 10:4.6). In the same two rings, the animal heads crowning the ribbons terminate in oval knobs (type 18A). However, the bulk of the bracelets from group 1 are lacking this additional element.

Subgroup 1C derives from subgroup 1B (Fig. 10:7.9–11). Only one dated assemblage can be assigned here, namely the deposit from Näsby (Öland), which can only broadly be placed within phases C1b and C2 (cf. Fig. 5). Therefore, it is difficult to determine whether this subgroup falls within the same chronological frameworks as subgroups 1A and 1C, or extends at least partially into phase C2. Subgroup 1C develops from generations 5–6. As in subgroups 1A and 1B, bracelets have two ribbons, each with a broad, plano-convex ridge. However, unlike in the first two subgroups, 1C bracelets have flat edges (type 8A). They terminate in animal heads with a V-shaped upper part and with a vertical rib (type 13A), but without the knob at the top. Nostrils are marked here as well, and they belong to type 20B or 20C, also represented in group 2 and in later subgroups of group 3.

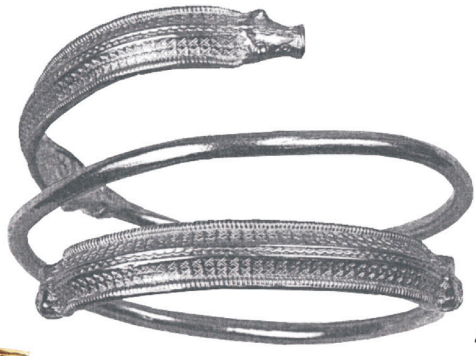
In terms of the shape of the ribbons, rings belonging to group 1 find analogies both in some earlier silver and bronze bracelets from phase B2 known from female burials in the Elbe basin[32], and in single specimens of B.41 finger rings occurring in Jutland (and incidentally in

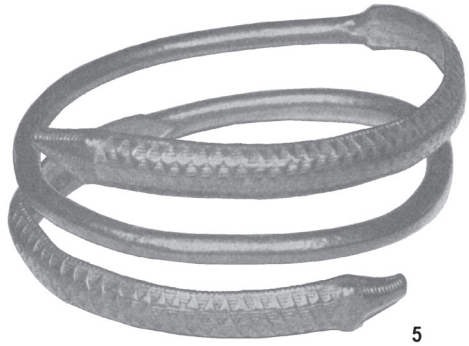
[32] W. Schulz 1952, 124; E.M. Verma 1989, 14.

Fig. 10. Gold rings of group 1: 1 – Kirkebakkegård (Zealand); 2 – Norra Näsby (Öland); 3 – Altefär-Grahlhof (Rügen); 4 – Burs (Gotland); 5 – Komorowo (eastern Pomerania); 6 – Valløby (Zealand); 7 – Nousiainen (Finland); 8 – Pilipki (NE Poland); 9 – Näsby (Öland); 10, 11 – Ösby (Öland). Photo: NMK (1), SHM (2, 7, 9–11), M.J. Przybyła (6; NMK coll.).
After: M.J. Przybyła 2010 (3); G. Arwidsson 1984 (4), G. Kossinna 1922 (5); Z. L'vovna & M. Shchukin 1994 (8).
Ryc. 10. Złote obręcze grupy 1: 1 – Kirkebakkegård (Zelandia); 2 – Norra Näsby (Olandia); 3 – Altefär-Grahlhof (Rugia); 4 – Burs (Gotlandia); 5 – Komorowo (Pomorze Wschodnie); 6 – Valløby (Zelandia); 7 – Nousiainen (Finlandia); 8 – Pilipki (NE Polska); 9 – Näsby (Olandia); 10, 11 – Ösby (Olandia). Fot.: NMK (1), SHM (2, 7, 9–11), M.J. Przybyła (6; zbiory NMK).
Wg: M.J. Przybyła 2010 (3); G. Arwidsson 1984 (4), G. Kossinna 1922 (5); Z. L'vovna i M. Shchukin 1994 (8).


1


2


4


5


3


8


6


7


11


10


9

0 3 cm
1–3

0 6 cm
4–11

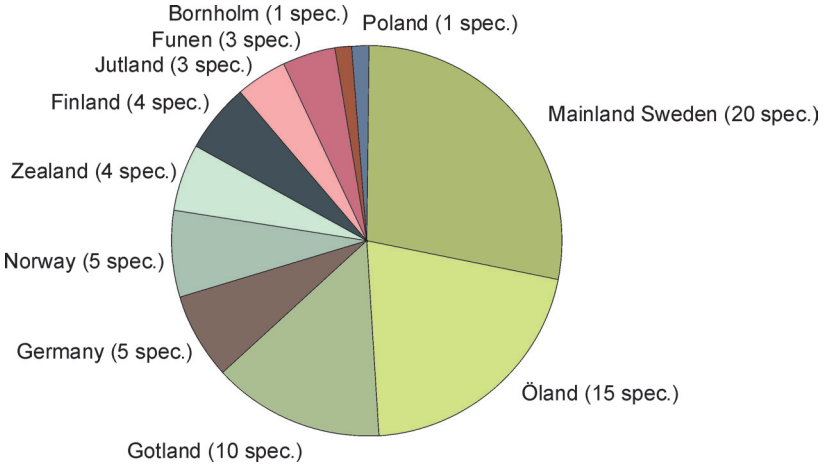


Fig. 11. Rings of group 2 in particular regions (total: 71 spec.).
Ryc. 11. Obręcze grupy 2 w poszczególnych regionach (łącznie 71 egz.).

neighbouring regions as well, e.g. Funen)[33]. A good example is a gold B.41 finger ring dated to phase C1a recovered from grave 525 at Møllegårdsmarken (Funen)[34], whose plate is shaped analogically to rings from Kirkebakkegård (Zealand) and Norra Näsby (Öland) (Fig. 9). With respect to the form of the zoomorphic terminal, analogies can again be found in the mentioned bracelets from the Elbe Germanic cultural circle, a fact noted in the literature[35]. These similarities are most distinct in the case of a pair of silver bracelets from grave 2 at Fohrde, Gallberg III (north-eastern Germany)[36] and the bracelets described here as subgroup 1C.

3.2. Group 2

Group 2 comprises 71 rings. The majority comes from mainland Sweden, Öland, and Gotland (45 pieces in total), with smaller numbers (maximum 3–5 pieces) known from Zealand, Funen, Jutland, Norway, Schleswig (the Thorsberg bog deposit), central and eastern Germany (Sachsen-Anhalt, Sachsen and Thüringen), and south-western Finland. Single finds come from north-eastern Poland and Bornholm (Fig. 11).

Twelve subgroups were distinguished within this branch, designated with capital letters from A to M. The lifespan of this group covers phases C1b, C2, and C3. As compared with group 1, group 2 is relatively homogenous. In all these rings the ribbons typically have triangle-sectioned ridges and flat edges, and most often they terminate in a conical, ribbed element with a knob at the end. The rings differ among themselves mainly in decoration and proportions of the elements crowning the ribbons, decoration of the ribbons, and the number of ribbons. The diversity of attributes in the context of particular subgroups is shown on the correspondence analysis diagram in Fig. 12.

3.1.1. Subgroup 2A

Subgroup 2A is the earliest (Fig. 13:1–3) and, analogically to subgroups 1A and 1B, it appears in generation 2 and develops until generation 4. The subgroup includes two assemblages containing chronological indicators, which allows it to be placed within phase C1b (cf. Fig. 5). Thus, both the chronology of the tree and the conventional dating indicate that subgroup 2A is contemporary to subgroups 1A and 1B. All three rings included into subgroup 2A have two ribbons, which in one case terminate with knobs and in the other two cases taper sharply without any additional crowning.

3.1.2. Subgroups 2B–2F

Subgroup 2B becomes distinct in generation 6, which means parallel with the appearance of subgroup 1C, and it develops until generation 8. Here belong rings with two and less often three ribbons, which typically pass smoothly in ribbed ends. Except for grave 10 from Värnhem (Gotland)[37], no other dated grave assemblages belong to this subgroup. The mentioned assemblage can be dated to phase C1, probably C1b, based on a drinking horn rim fitting of Andrzejowski type K.6[38].

Another offshoot starting in generation 6 has two branches: one in which subgroup 2C appears in generation 7, with grave 2 from Emersleben (central Germany), dated to phase C2 (cf. Fig. 5), and the other, larger branch, which in generation 8 splits into two separate lines. The first line, shorter, forks in generation 9 into subgroup 2G (which continues to develop in generation 10 as well, see

[33] L. Kibenich 1995, 116.
[34] E. Albrectsen 1971, 65.
[35] E. Blume 1912, 76; G. Kossinna 1922, 133–134; W. Schulz 1952, 124; K. Raddatz 1957, 127; E.M. Verma 1989, 37.
[36] A. Voss, G. Stimming 1887, 5.
[37] K. Andersson 1993a, 221, cat. 1230.
[38] J. Andrzejowski 1991, 50.

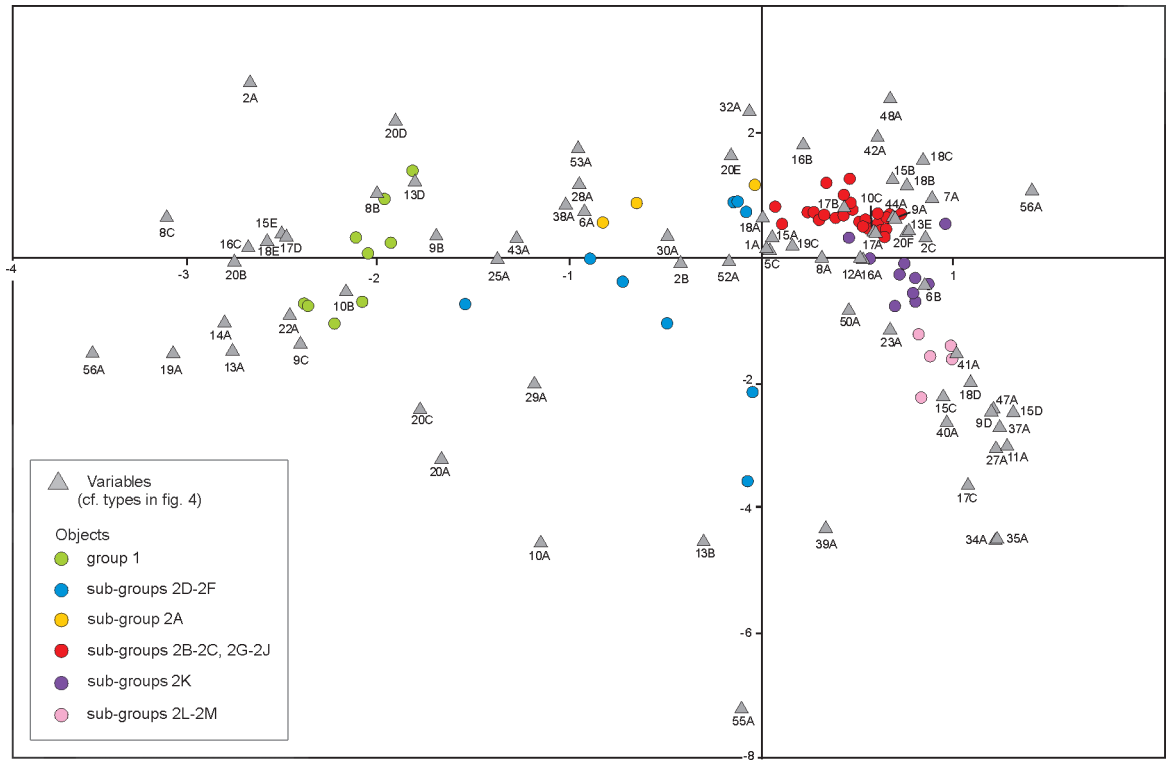


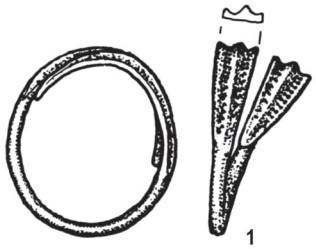
Fig. 12. Correspondence analysis for rings of groups 1 and 2 (objects and variables on 1. and 2. principal axes).
Ryc. 12. Analiza odpowiedniości obręczy grup 1 i 2 (obiekty i zmienne na 1. i 2. osi głównej).

Fig. 15:1–3) and another branch, which in generation 11 splits into subgroups 2E and 2F (subgroup 2E – Fig. 14:9–10; subgroup 2F – Fig. 14:3–8).

Rings of subgroup 2G have two ribbons with plain, triangle-sectioned ridges and flat edges decorated with bands of punched motifs rendered with a type 52 stamp. The rings terminate in short, ribbed conical elements (type 15A) crowned with oval or hemispherical knobs (types 18A or 18B). In two cases some of the ribs on the conical ends are additionally notched (type 17B). The ribbons pass smoothly into conical ends or – in one case – are distinctly separated from them (types 6A or 6B). Only one relatively well-dated ring was assigned to subgroup 2G. It originates from the Dalbo deposit (Gotland), which can be placed within phases C1–C2 (cf. Fig. 5). The fact that the Dalbo ring appears two generations later than the phase C2 ring from Emersleben grave 2 (subgroup 2C) might argue for narrowing the chronology of subgroup 2G to phase C2. However, as mentioned, the pace at which changes appeared could differ in particular branches of the tree, hence it cannot be ruled out that branch 2C, which separates earlier, is actually at least partly later than branch 2G.

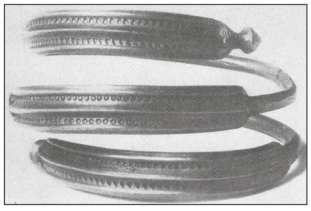
The main characteristic of subgroups 2D, 2E, and 2F is the presence of zoomorphic heads at the ends of the ribbons, which pass into conical, most often ribbed, elements crowned with knobs. Subgroup 2D lacks well-dated assemblages. Here belong two rings from the bog deposit at Thorsberg and one from Solhems Mellan, Bohuslän (Fig. 14:1.2). The rings have two ribbons with

Fig. 13. Gold rings of sub-groups 2A (1–3), 2B (4–7), and 2C (8–11): 1 – Ryd (Öland); 2 – Gunnerupgård (Zealand), grave 1; 3 – Hingeballe (Jutland); 4 – Flurstedt (central Germany); 5 – Värnhem (Gotland); 6 – Kristinelund (Öland); 7 – Hulterstad (Öland); 8 – Sappesborg (Funen); 9 – Selvejergård (Bornholm); 10 – Liene Skov (Jutland); 11 – Emersleben (central Germany), grave 2. Photo: SHM (6, 7), M.J. Przybyła (2, 3, 8–10; NMK coll.). After: M. Rasch 1991 (1), W. Schulz 1952 (4, 11), O. Almgren & B. Nerman 1923 (5).
Ryc. 13. Złote obręcze podgrup 2A (1–3), 2B (4–7) i 2C (8–11): 1 – Ryd (Olandia); 2 – Gunnerupgård (Zelandia), grób 1; 3 – Hingeballe (Jutlandia); 4 – Flurstedt (środkowe Niemcy); 5 – Värnhem (Gotlandia); 6 – Kristinelund (Olandia); 7 – Hulterstad (Olandia); 8 – Sappesborg (Fionia); 9 – Selvejergård (Bornholm); 10 – Liene Skov (Jutlandia); 11 – Emersleben (środkowe Niemcy), grób 2. Fot.: SHM (6, 7), M.J. Przybyła (2, 3, 8–10; zbiory NMK). Wg: M. Rasch 1991 (1), W. Schulz 1952 (4, 11), O. Almgren i B. Nerman 1923 (5).


1


2

3


4


5

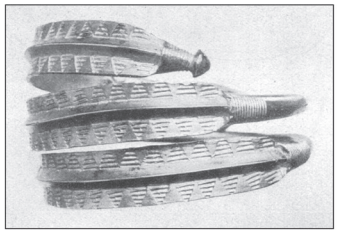

6


7


9

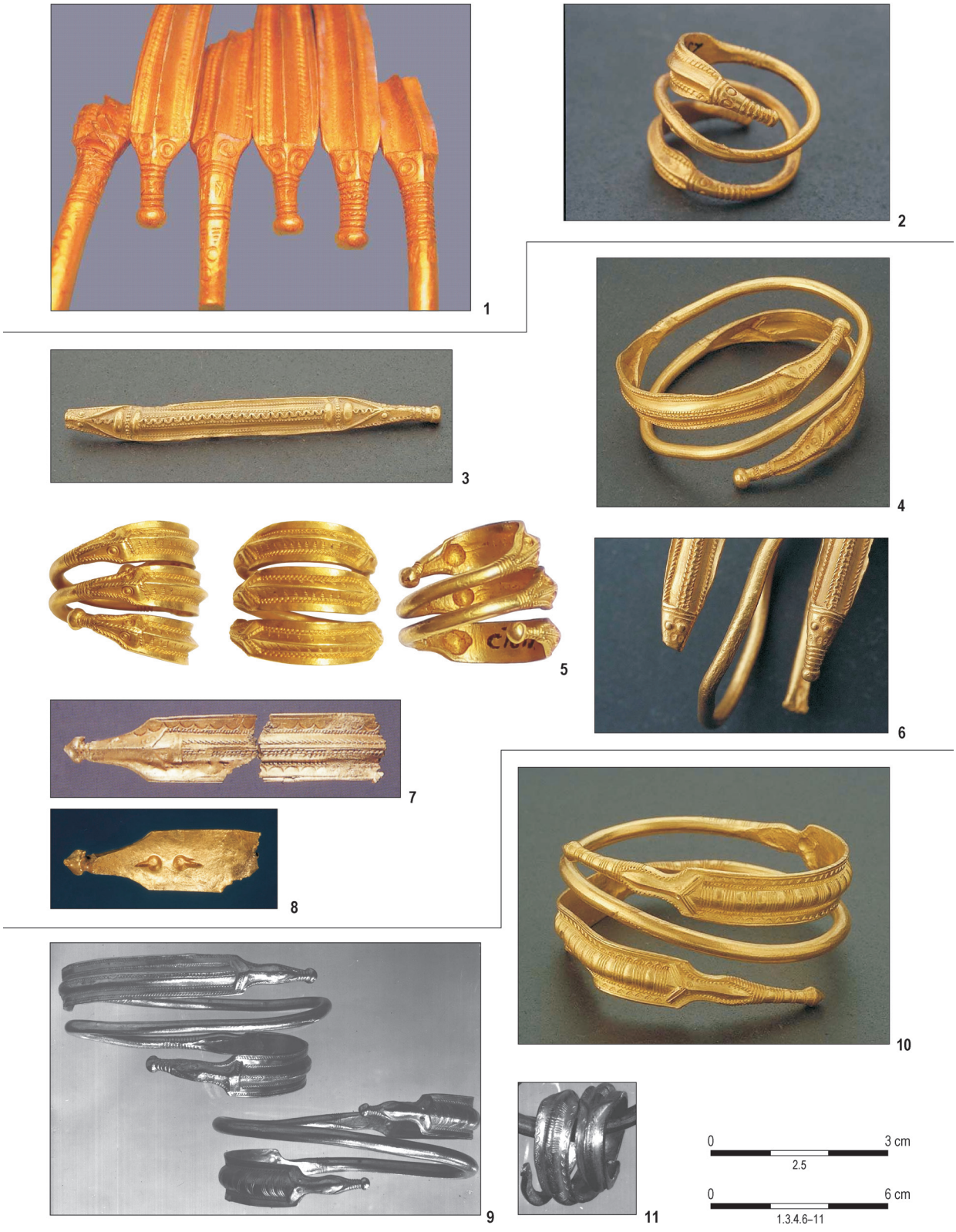

10


8


11

0 3 cm
1–3.5–7.9.10

0 6 cm
4.8.11



plain, triangle-sectioned ridges and flat edges decorated using a stamp of type 53. Each ribbon passes smoothly into a triangular animal head that is flat on the top and has punched eyes, and terminates with a conical, ribbed element crowned with an oval knob (elements of types 15B and 18A). On the Thorsberg bracelets the ribs on the conical elements are additionally notched (type 17B), as was the case with some 2G bracelets discussed above.

Subgroup 2E comprises three rings having two ribbons, which end in profiled animal heads with V-shaped

Fig. 14. Gold rings of sub-groups 2D (1, 2), 2E (9–11), and 2F (3–8): 1 – Thorsberg bog (Schleswig); 2 – Solhems Mellan (Bohuslän); 3 – Långtora parish (Uppland); 4 – Bredinge (Öland); 5 – Himlingøje, grave 1/1894 (Zealand); 6 – Luggavi (Närke); 7, 8 – Møllegårdsmarken (Funen); 9 – Tuna, deposit (Uppland); 10 – Vestringe (Gotland); 11 – Gute (Gotland).
Photo: SHM (2–4, 7, 9–11), M.J. Przybyła (5; zbiory NMK). After: R. Blankenfeldt 2007 (1), L. Jørgensen & P. Vang Petersen 1998 (7, 8).
Ryc. 14. Złote obręcze podgrup 2D (1, 2), 2E (9–11) i 2F (3–8): 1 – bagno Thorsberg (Szlezwik); 2 – Solhems Mellan (Bohuslän); 3 – par. Långtora (Uplandia); 4 – Bredinge (Olandia); 5 – Himlingøje, grób 1/1894 (Zelandia); 6 – Luggavi (Närke); 7, 8 – Møllegårdsmarken (Fionia); 9 – Tuna, depozyt (Uplandia); 10 – Vestringe (Gotlandia); 11 – Gute (Gotlandia).
Fot.: SHM (2–4, 7, 9–11), M.J. Przybyła (5; zbiory NMK). Wg: R. Blankenfeldt 2007 (1), L. Jørgensen i P. Vang Petersen 1998 (7, 8).

upper parts (type 13B) and eyes marked by small knobs or circular punch marks (type 20A or 20C) (Fig. 14:9.10). The heads terminate in conical ribbed elements crowned with knobs. In two cases the terminal combines elements of types 15A and 18A, and in one case, of types 15C and 18D. Bracelets of subgroup 2E have broad, plano-convex or trapezium-sectioned ridges (type 9C or 9B), and flat edges. It is worth noting that in the rings with plano-convex ridges the decoration of the ridges is oriented transversally (type 10A). This finds analogy in the ring from Pilipki (Fig. 10:8), which belongs to subgroup 1B and is dated to phase C1b. This similarity might in theory argue for an early chronological position of 2E bracelets. However, this trait seems to be a longer-lasting one, as evidenced by its appearance in the context of clearly later traits within group 2. Among the bracelets included here into subgroup 2E, a relatively late chronology might be assigned to the artefact from Vestringe (Gotland), due to the proportions and decoration of its conical terminals, and the shape of the knobs crowning them (Fig. 14:10). Such long conical terminals, representing type 15C, do not appear earlier than in the context of grave assemblages from phase C2. The same holds true with respect to acorn-shaped knobs (type 18D) and the decoration featuring on the conical elements, with bands of narrow ribs alternating with single broad ribs (type 17C). Both these elements first appear in the context of phase C2 assemblages and continue in the context of phase C3. Therefore, at least with respect to the Vestringe bracelet, one should accept the dating within phases C2–C3. It cannot be ruled out that similar chronological frameworks should also be applied to a ring fragment from Gute (Gotland)[39] which, due to its highly fragmentary state, has not been included in the analysis (Fig. 14:11). In terms of the head form and punched decoration, this fragment closely resembles the bracelet from Vestringe (Fig. 14:10).

A noteworthy issue in the context of 2E rings is the formal similarity of animal heads adorning them to those typical of the majority of finger rings – and single bracelets – of subgroups 3A and 3B, dated broadly to phases C1b–C2 (see below).

Zoomorphic terminals also occur in rings classed as subgroup 2F. Here belong five specimens, of which four have triangular animal heads with V-shaped upper sides (type 13A) (Fig. 14:3–5.7–8), while one has a triangular head with the straight upper side (type 13D) (Fig. 14:6). Type 13A finds parallels among zoomorphic heads adorning rings of subgroup 1C, while type 13B also occurs in rings representing subgroups 1A–1B and 2D. Rings classed as subgroup 2F can have two or three ribbons, with flat edges (type 8A). Ridges occur in two variants only: a broad, plano-convex ridge (type 9C) or a triangle-sectioned ridge (type 9A). The ridges are always decorated lengthwise (type 10B). In this subgroup, one or two transversal ribs appear above the animal head (types 19A and 19B), an element with numerous analogies in rings of subgroups 3A–3K (Fig. 14:3.4.7.8). All 2F rings terminate in short, conical elements (type 15A), which can be crowned with oval or biconical knob (types 18A and 18C). Conical elements are either plain or ribbed, with the ribs notched in single cases.

Only one dated assemblage belongs to subgroup 2F – grave 1/1894 from Himlingøje (Zealand), which can be dated within phases C1b–C2a (cf. Fig. 5).

3.2.3. Subgroups 2H–2J

As mentioned, in generation 7 group 2 forks into two large branches, one of which has been presented above. The second branch splits in generation 8, into subgroup 2H (which starts in generation 9) and another branch, where subgroups 2I and 2J appear in generation 10. Subgroups 2H and 2I develop until generation 12, while subgroup 2J continues up to generation 14. These three subgroups have much in common with subgroup 2G. None of them feature zoomorphic elements. All include rings with two or three ribbons. The ridges are plain, triangle-sectioned, and framed with bands of punched decoration executed with a stamp of type 52. Only the last two rings from subgroup 2J, which appear in generation 14, feature a different decoration. One is decorated with a band of type 50 motifs, an element commonplace in subgroups 2L and 2M discussed below.

All the rings belonging to subgroups 2H, 2I, and 2J end in a conical element crowned with a knob. In rings 2H the terminals are separated and consist of a conical

[39] K. Andersson 1993a, 206, cat. 1117, fig. 85.

Fig. 15. Gold rings of sub-groups 2G (1–3) and 2H (4–8): 1 – Västra Rickeby (Uppland); 2 – Stockebäck (Småland); 3 – Dalbo, Ängsåkern (Gotland); 4 – Donbæk, grave 60 (Jutland); 5 – Gödåker, grave VIII (Uppland); 6 – Isokylä-Ketohaka, grave 2 (Finland); 7, 8 – Veien (Buskerud). Photo: SHM (1–3, 5), M.J. Przybyła (4; NMK coll.), Kulturhistorisk museum, Oslo (7). After: E. Kivikoski 1973 (6); L. Gustafson 2004 (8).

Ryc. 15. Złote obręcze podgrup 2G (1–3) i 2H (4–8): 1 – Västra Rickeby (Uplandia); 2 – Stockebäck (Smalandia); 3 – Dalbo, Ängsåkern (Gotlandia); 4 – Donbæk, grób 60 (Jutlandia); 5 – Gödåker, grób VIII (Uplandia); 6 – Isokylä-Ketohaka, grób 2 (Finlandia); 7, 8 – Veien (Buskerud). Fot.: SHM (1–3, 5), M.J. Przybyła (4; zbiory NMK), Kulturhistorisk museum, Oslo (7). Wg: E. Kivikoski 1973 (6); L. Gustafson 2004 (8).

element adorned with transversal ribs (type 13E, decoration of type 17A), crowned with an oval or biconical knob (types 18A and 18C) (Fig. 15:4–8). The proportions between the length of the knob and the length of the conical element are usually 1:2, and only in one case is it 1:3 (types 15B and 15C).

Rings classed as 2I also have separated ends, consisting of a short conical element (type 15A) crowned with

an oval knob (type 18A). The conical element can be ribbed, with some of the ribs diagonally notched (type 17B), or plain. An additional element recorded in three out of five rings assigned to this subgroup is the decoration of the sides of ribbon edges with punched motifs (type 7A, stamp type 50).

In subgroup 2J one can find both specimens with separated ends, and those in which the ends are not separated from the ribbons (Fig. 16:6–10). The ends typically consist of an oval knob of type 18A or a hemispherical knob of type 18B and a conical, ribbed element of type 15B. In four cases, some of the ribs on the conical parts are additionally covered with diagonal notches.

Subgroups 2H, 2I, and 2J should probably be placed within phase C2. Subgroup 2H includes four dated grave assemblages. One of them, the grave 60 from Donbæk (Jutland), belongs to phase C2, while the remaining three have broader dating. Grave VIII from Gödåker (Uppland) and the grave from Veien (Buskerud) fall within C1b–C2, while one assemblage – the grave from Isokylä-Ketohaka 2, (south-western Finland) – is within C2–D (cf. Fig. 5). Only one dated assemblage was assigned to subgroup 2I – the grave from Szpaki (north-eastern Poland), which belongs to phase C2. The same chronological position can be assigned to grave 3/1977 from Himlingøje, in which a bracelet of subgroup 2J was found.

3.2.4. Subgroups 2K–2M

Subgroup 2K, which derives from subgroup 2J, appears in generation 13 and develops until generation 17 (Fig. 17:1–5). It is a starting point for a larger branch which in generation 18 forks into subgroups 2L and 2M (Fig. 17:6–12, 18). In subgroup 2K one can still find single rings revealing some of the traits common in subgroups 2G, 2H, 2I, and 2J, i.e. specimens with conical terminals of type 2B crowned with knobs of type 18A (Fig. 17:1.4.5). Also, subgroup 2K is the last branch in which conical terminals are decorated with evenly spaced, diagonally notched ribs. On the other hand, subgroup 2K shows traits which later become typical in subgroups 2L and 2M: acorn-shaped knobs (type 18D), and long conical terminals three to four times as long as the knobs (types 15C and 15D) (Fig. 17:2.3).

As mentioned, these elements also occur in the Vestringe ring, classed as subgroup 2E, which has been considered as an argument for dating this artefact later than other rings from that branch (Fig. 14:10). Such dating is additionally corroborated by the decoration of the conical terminal of the Vestringe artefact, with groups of densely packed ribs alternating with broad ribs (type 17C) (Fig. 17:7.8, 18).

In some 2K rings, the triangle-sectioned ridge is additionally decorated lengthwise with a groove along the crest (type 27A) (Fig. 17:4), which finds analogy in some specimens belonging to subgroup 2M (Fig. 18:1.2). In subgroups 2L and 2M, bands of decoration running along the ribbon's ridge are often executed with a stamp of type 50, with those of types 39, 40, and 41 being quite common as well. Outside these two subgroups, in group 2 they only occur in the 2E branch mentioned above. Another trait characteristic of subgroup 2M is the presence of triangular facets at the ends of the ribbon, on both sides of the ridge (type 11A). Single examples of this late trait can also be found in subgroup 2L (Fig. 17:12, 18). All rings included in subgroups 2K, 2M, and 2L have a longitudinal incised line running along the edges of the ribbons. Although less frequently, this element also occurs among other bracelets from group 2.

The earliest confidently dated assemblages in subgroups 2K, 2M, and 2L belong to phase C2. In subgroup 2K this is the deposit from Cottbus (eastern Germany) (cf. Fig. 5), and in subgroup 2L the grave from Tuna (Västmanland). The latter assemblage included a ring of subgroup 2M as well. A 2M ring was also found in the grave from Hove, Rogaland, dated to phase C2. Subgroup 2M comprises some later inventories as well: from grave A in Varpelev in Zealand (dated to phase C3b), and from grave I in Isokylä-Katajamäki in south-western Finland (dated to phase C3) (see cf. Fig. 5).

3.3. Group 3

This group comprises 66 rings, mainly finger rings. Nearly half of them originate from Zealand, with smaller numbers known from Norway, mainland Sweden, Jutland, and Bornholm. In addition, single finds were recorded in North and Central Germany, in Christiansø, Gotland, and Funen (Fig. 19A). Artefacts classed as group 3 include predominantly B.39 finger rings and single bracelets referring to them, which are discussed below within subgroups 3A–3K. This collection numbers 45 rings, with the main focus of distribution being Zealand (25 pcs). In much smaller numbers they are represented in mainland Sweden, Norway, Jutland, and Bornholm, with only single finds known from Schleswig (Thorsberg bog), Central Germany, and Funen (Fig. 19C).

Another element of group 3 are finger rings B.18 and their variants, here classed within subgroups 3L–3M. The main focus of their distribution is Norway and Jutland. They also occur in mainland Sweden, Zealand, Bornholm, Christiansø, and north-west Germany (Fig. 19B). The diversity of attributes in the context of particular subgroups is shown on the correspondence analysis diagram (Fig. 20).

3.3.1. Subgroups 3A and 3B

These two subgroups form one, clearly distinct branch


1


2


3


4


5


6


7


8


9

0 3 cm
5

0 6 cm
1–4.6–11


10


11

Fig. 16. Gold rings of sub-groups 2I (1–5) and 2J (6–10): 1 – Fyns Hoved (Funen); 2 – Asarve (Gotland); 3 – Naffentorp (Skåne); 4 – Långalma (Uppland); 5 – Szpaki (north-eastern Poland); 6 – Troma (Gotland); 7 – Himlingøje, grave 3/1977 (Zealand); 8–11 – Grisbäck (Småland); 9 – Höviksnäs (Bohuslän); 10 – Ragnabo (Småland); 11 – Kleva (Öland).
Photo: M.J. Przybyła (1, 7; NMK coll.), SHM (2–4, 6, 8–11). After: K. Rusin 2008 (5, left) and J. Jaskanis 2012 (5, right).
Ryc. 16. Złote obręcze podgrup 2I (1–5) i 2J (6–10): 1 – Fyns Hoved (Fionia); 2 – Asarve (Gotlandia); 3 – Naffentorp (Skania); 4 – Långalma (Uplandia); 5 – Szpaki (płn.-wsch. Polska); 6 – Troma (Gotlandia); 7 – Himlingøje, grób 3/1977 (Zelandia); 8–11 – Grisbäck (Smalandia); 9 – Höviksnäs (Bohuslän); 10 – Ragnabo (Smalandia); 11 – Kleva (Olandia).
Fot.: M.J. Przybyła (1, 7; zbiory NMK), SHM (2–4, 6, 8–11). Wg: K. Rusin 2008 (5, lewa) i J. Jaskanis 2012 (5, prawa).

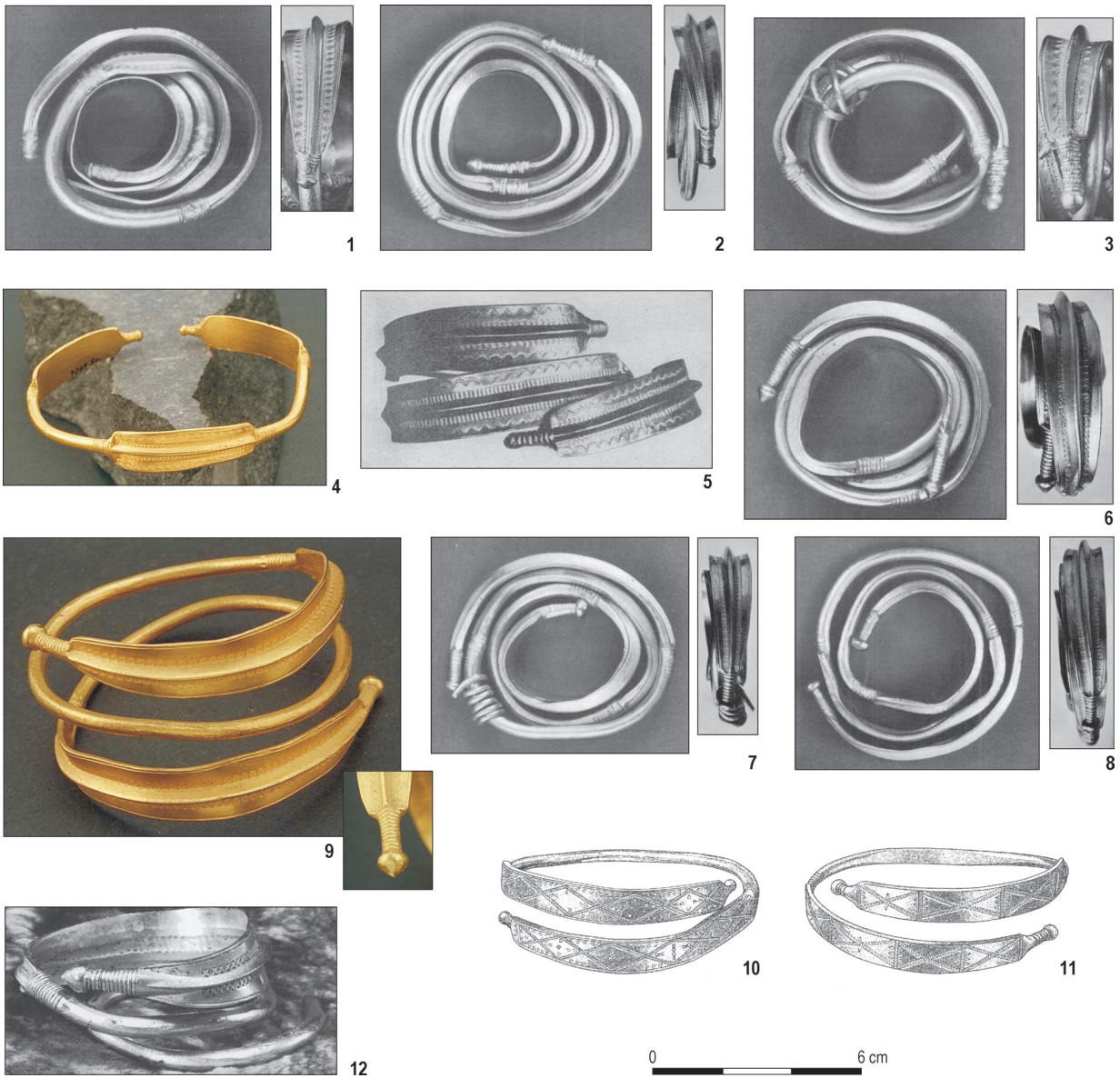


Fig. 17. Gold rings of sub-groups 2K (1–5) and 2L (6–11): 1–3, 6–8 – Skedemosse (Öland); 4 – Mannegårda (Gotland); 5 – Cottbus (eastern Germany); 9 – Eskilstorp (Skåne); 10, 11 – Tuna, grave (Västmanland); 12 – Kvinnsgröta (Öland).
Photo: SHM (4, 9). After: U.E. Hagberg 1967 (1–3, 6–8), W. Schulz 1952 (5), E. Nylén & B. Schönbäck 1994a (10, 11), U.E. Hagberg 1979 (12).
Ryc. 17. Złote obręcze podgrup 2K (1–5) i 2L (6–11): 1–3, 6–8 – Skedemosse (Olandia); 4 – Mannegårda (Gotlandia); 5 – Cottbus (wschodnie Niemcy); 9 – Eskilstorp (Skania); 10, 11 – Tuna, grób (Västmanland); 12 – Kvinnsgröta (Olandia).
Fot.: SHM (4, 9). Wg: U.E. Hagberg 1967 (1–3, 6–8), W. Schulz 1952 (5), E. Nylén i B. Schönbäck 1994a (10, 11), U.E. Hagberg 1979 (12).

Fig. 18. Gold rings of sub-group 2M: 1 – Varpelev, grave A (Zealand); 2 – Tuna, grave (Västmanland); 3, 4 – Lilla Ryftes, Vätåker (Gotland); 5 – Hove (Rogaland); 6 – Isokylä-Katajamäki, grave I (Finland). Photo: M.J. Przybyła (1; NMK coll.), SHM (3, 4), Kulturhistorisk museum, Oslo (5). After: E. Nylén & B. Schönbäck 1994b (2), E. Kivikoski 1973 (6).

Ryc. 18. Złote obręcze podgrupy 2M: 1 – Varpelev, grób A (Zelandia); 2 – Tuna, grób (Västmanland); 3, 4 – Lilla Ryftes, Vätåker (Gotlandia); 5 – Hove (Rogaland); 6 – Isokylä-Katajamäki, grób I (Finlandia). Fot.: M.J. Przybyła (1; zbiory NMK), SHM (3, 4), Kulturhistorisk museum, Oslo (5). Wg: E. Nylén i B. Schönbäck 1994b (2), E. Kivikoski 1973 (6).

within group 3. Subgroup 3A appears in generation 3 and develops until generation 7 (Fig. 21:1–8). These are typologically the earliest rings in group 3 (cf. Fig. 6, 7). In generation 5, subgroup 3B branches out from subgroup 3A, and it continues to develop until generation 11 (Fig. 21:9–16).

Both subgroups share a number of traits. Both comprise spiral rings having two or three ribbons terminating in profiled, zoomorphic heads with V-shaped upper parts (type 13B) which in most cases have eyes rendered with small knobs (type 20; this element is absent from only one artefact). In the context of group 2 discussed above, such a form of the zoomorphic head was recorded in merely three bracelets assigned to subgroup 2E. These three artefacts were not included into group 3 because they reveal other traits strongly associated with group 2, in particular transversal ribs on the ribbons and conical terminals crowned with knobs.

At the base of the zoomorphic heads, rings of subgroups 3A and 3B have one or two transversal ribs (types 19A and 19B). Within subgroup 3A specimens with two ribs do not appear before generation 6.

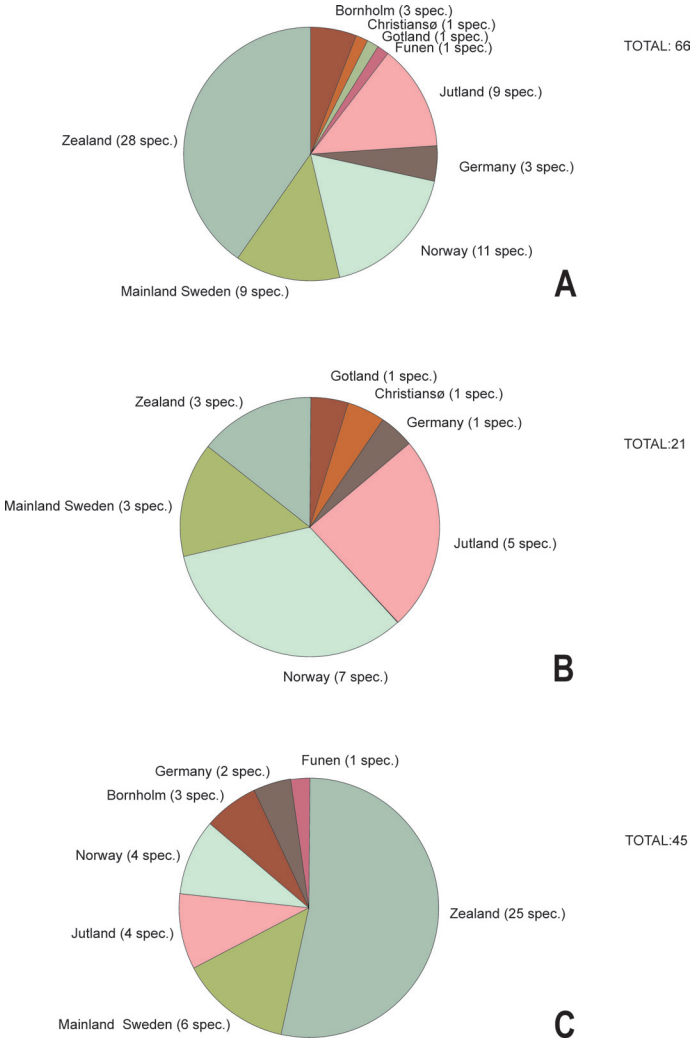


Fig. 19. A – Rings of group 3 in particular regions (total: 67 spec.); B – Rings of subgroups 3L–3M in particular regions; C – rings of subgroups 3A–3K in particular regions.
Ryc. 19. A – Obręcze grupy 3 w poszczególnych regionach (łącznie 67 egz.); B – Obręcze podgrup 3L–3M w poszczególnych regionach; C – Obręcze podgrup 3A–3K w poszczególnych regionach.

The ribbons of rings belonging to subgroups 3A and 3B have triangle-sectioned ridges and flat edges adorned with a single incised line (elements of types 8A, 9A, and 23A) and a band of type 54 motif[40]. Specimens with ridges covered with stamped decoration (stamp of type 37 or 40, decorative pattern 10B) occur in both subgroups, as also do rings with plain ridges (type 10C) and rings with two ribbons, in which the hoop features beaded decoration (type 5A). Examples of rings having three ribbons soldered together are known from both subgroups as well (Fig. 21:3.6.14).

The element that most clearly distinguishes subgroup 3B from 3A is a circular stamp impression placed at the end of the ribbon, on both sides of the zoomorphic head (type 21A) (cf. Fig. 4). In subgroup 3A such decoration occurs only in one case (Helmsdorf, central Germany) and it has been executed with a stamp of type 28, while in subgroup 3B it can be found on every ring and has been executed with a stamp of type 29.

Only two confidently dated grave assemblages can be demonstrated in subgroup 3A. These are grave A from Nordrup (Zealand), dated to phase C1b, and grave 1/1949 from Himlingøje (Zealand), which links with phase C2, most likely with its earlier section (cf. Fig. 5, 7).

Among rings classed as subgroup 3B, no fewer than six originate from well-dated grave assemblages: grave from Stenlille, grave 2/1949 from Himlingøje, graves 209 and 400 from Skovgårde (all in Zealand), grave from Tuna in Västmanland, and grave from Ravnkilde (*Præstegårdsmark*) in northern Jutland (cf. Fig. 5). They all belong to phase C2. The grave from Stenlille seems to have the earliest chronological position (C2a), and the grave from Ravnkilde seems to be the latest (C2b).

3.3.2. Subgroups 3C–3K

Rings included into these subgroups all have their ribbons

[40] The only exception seems to be the finger ring from Thorsberg bog, which is decorated with a stamp of type 52. However, the original artefact has been lost and it is only known in a copy, and it is not sure whether minor details of decoration were precisely reproduced. In the phylogenetic analysis this trait of the Thorsberg ring has not been taken into account.

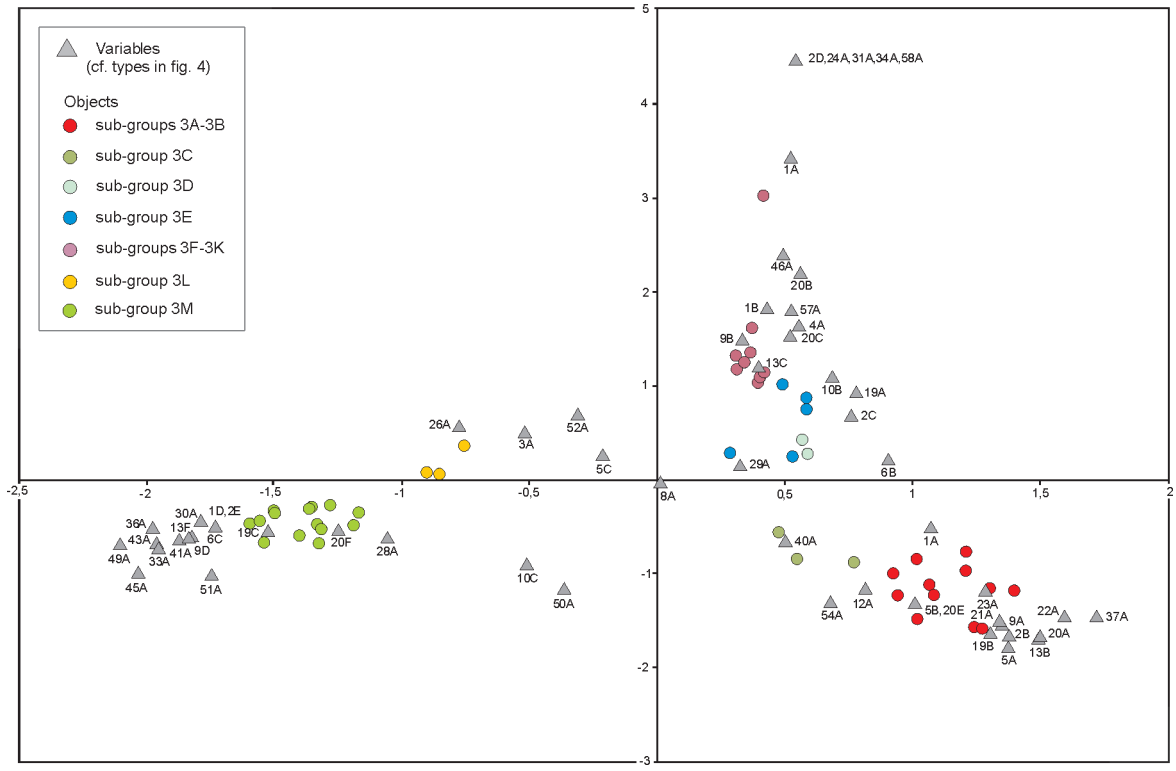


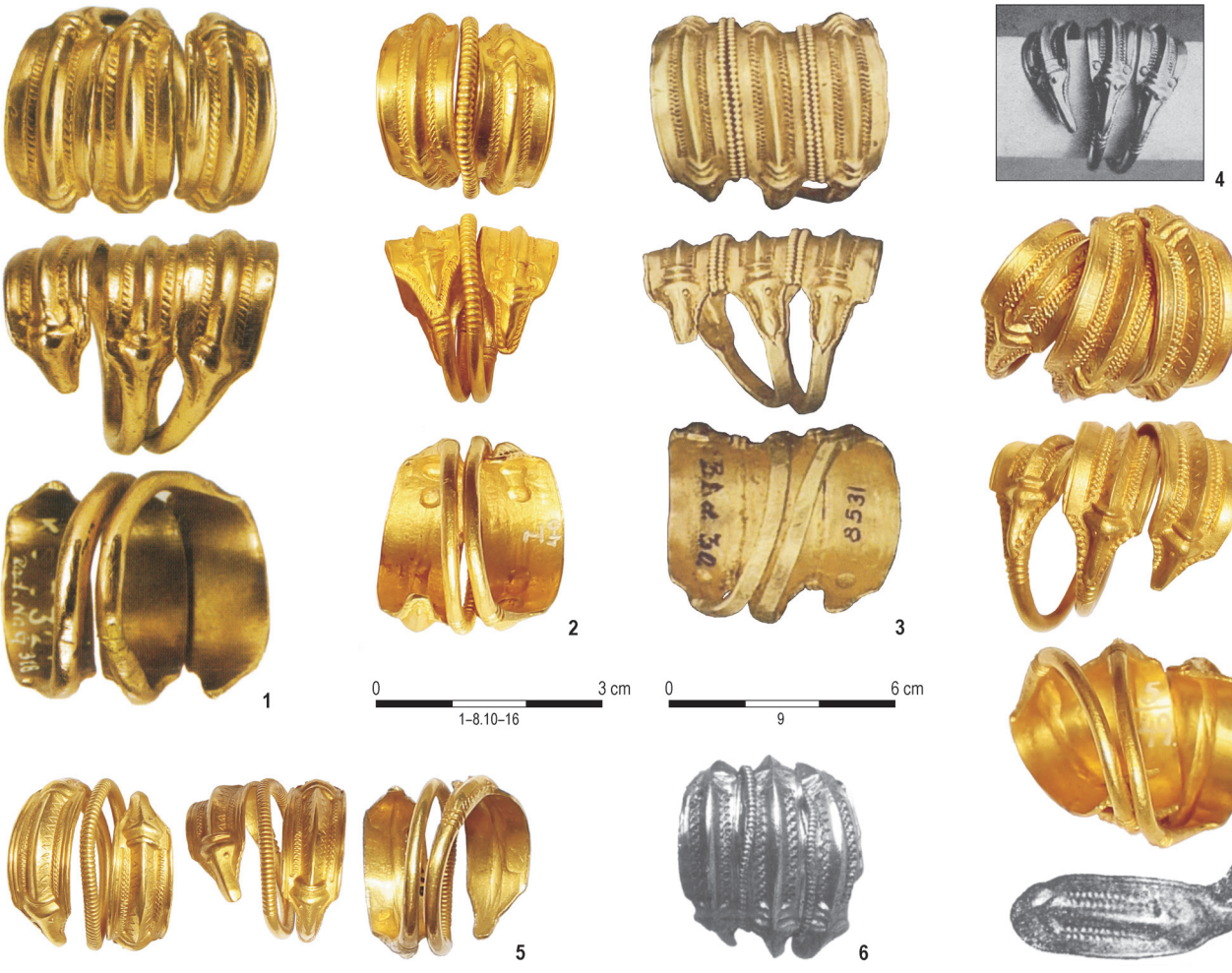
Fig. 20. Correspondence analysis for rings of group 3 (objects and variables on 1. and 2. principal axes).
Ryc. 20. Analiza odpowiedniości obręczy grupy 3 (obiekty i zmienne na 1. i 2. osi głównej).

terminating in zoomorphic heads of type 13C. This large branch becomes distinct in generation 3, parallel with the branch formed by subgroups 3A and 3B discussed above. At this stage it forks into the small subgroup 3C, appearing in generation 4, and another large branch, which in generation 4 divides into two lines. One of these lines includes rings classed as subgroups 3L and 3M, which will be discussed in the next chapter. The second line forks in generation 5 into subgroup 3D and another branch, in which subgroup 3E appears in generation 6. The latter branch divides in generation 11 (the same generation when the last changes within subgroup 3B occur) into subgroup 3F and another large branch. This large branch splits in generation 12 into subgroup 3G (appearing in generation 13) and subgroups 3H and 3K (appearing in generation 14). In generation 16, subgroup 3H splits further into two subgroups: 3I and 3J, with the first specimens appearing in generation 17.

Subgroups 3C, 3D, and 3E combine traits of subgroups 3A and 3B with those characteristic of subgroups 3G, 3H, 3I, 3J, and 3K. Subgroup 3C comprises three finger rings with two ribbons, in which hoops are either beaded or

Fig. 21. Gold rings of sub-groups 3A (1–8) and 3B (9–16): 1 – Thorsberg bog (Schleswig); 2 – Ravnkilde (*Præstegårdsmark*) (Jutland); 3 – Kongsted (Zealand); 4 – Helmsdorf (central Germany); 5 – Nordrup, grave A (Zealand); 6 – Lydinge (Zealand); 7 – Himlingøje, grave 1/1949 (Zealand); 8 – Nes (Hordaland); 9, 10, 13 – Himlingøje, grave 2/1949 (Zealand); 11 – Skovgårde, grave 209 (Zealand); 12 – Tuna, grave (Västmanland); 14 – Skibbinge (Zealand); 15 – Skovgårde, grave 400 (Zealand); 16 – Stenlille (Zealand). Photo: M.J. Przybyła (2, 3, 5, 7, 14, 16; NMK coll.), NMK (9, 10, 13). After: R. Blankenfeldt 2015 (1), W. Schulz 1933 (4), M.B. Henriksen 2009 (6), H. Schetelig 1912 (8), U. Lund Hansen *et alii* 1995 (9, 10, 13), P. Ethelberg *et alii* 2000 (11, 15), E. Nylén & B. Schönbäck 1994a (12).

Ryc. 21. Złote obręcze podgrup 3A (1–8) i 3B (9–16): 1 – bagno Thorsberg (Szlezwik); 2 – Ravnkilde (*Præstegårdsmark*) (Jutlandia); 3 – Kongsted (Zelandia); 4 – Helmsdorf (środkowe Niemcy); 5 – Nordrup, grób A (Zelandia); 6 – Lydinge (Zelandia); 7 – Himlingøje, grób 1/1949 (Zelandia); 8 – Nes (Hordaland); 9, 10, 13 – Himlingøje, grób 2/1949 (Zelandia); 11 – Skovgårde, grób 209 (Zelandia); 12 – Tuna, grób (Västmanland); 14 – Skibbinge (Zelandia); 15 – Skovgårde, grób 400 (Zelandia); 16 – Stenlille (Zelandia). Fot.: M.J. Przybyła (2, 3, 5, 7, 14, 16; zbiory NMK), NMK (9, 10, 13). Wg: R. Blankenfeldt 2015 (1), W. Schulz 1933 (4), M.B. Henriksen 2009 (6), H. Schetelig 1912 (8), U. Lund Hansen *et alii* 1995 (9, 10, 13), P. Ethelberg *et alii* 2000 (11, 15), E. Nylén i B. Schönbäck 1994a (12).


1
2
3
4
0 3 cm
1–8.10–16
0 6 cm
9
5
6
7
8


9
10
11
12
13
14
15
16

twisted (5A or 5B) (Fig. 22:1–3). Ridges are always plain and triangular in section, and the ribbons have flat edges decorated with single incised lines, an ornamentation finding analogies among rings of subgroups 3A and 3B. A decoration of type 22A (marked nostrils), recorded on one ring, also finds analogies in subgroup 3B (Fig. 22:2). However, unlike in subgroups 3A and 3B, in all three artefacts from subgroup 3C the decoration featuring along the ridge uses the motif of type 52 (Fig. 22:1.2), in one case accompanied by a band of type 50 motif (Fig. 22:3). The latter artefact additionally has two transversal ribs above the head. This trait is absent in the remaining two artefacts, in which zoomorphic heads do not have eyes marked either. In the third ring the eyes are marked using stamp 20E (Fig. 22:3).

Only two rings having three ribbons were included into subgroup 3D (Fig. 22:4.5). The new element appearing in this subgroup is the ridge, which is of trapezium section (type 9B) and is decorated lengthwise along the crest. The ribbon edges are flat (type 8A) and decorated with bands of type 54 motif. One of the rings has the edges additionally decorated with an incised line (type 23A – a standard element among rings from subgroups 3A–3C) (Fig. 22:5). Both rings classed as 3D have a single transversal rib above the zoomorphic head (type 19A). The combination of attributes recorded in these rings: a head of type 13C, a trapezium-sectioned ridge adorned lengthwise, and a single transversal rib above the head, is also characteristic of typologically later rings assigned to subgroups 3E–3K. In one of the 3D rings, the animal heads terminating the ribbons have the eyes marked using a type 29 stamp (cf. Fig. 4). This element also occurs in typologically later rings from subgroups 3G–3J, and incidentally in subgroup 3E. The second of the discussed artefacts features decoration of type 21A (single circular motifs on both sides of the head, in its upper part) typical of subgroup 3B and also known from subgroup 3C.

Subgroup 3E comprises spiral finger rings with three ribbons soldered together, which in most cases have ridges of trapezium section (type 9B), flat edges, and terminals in the form of zoomorphic heads of type 13C. Additionally, the ribbons have a single transversal rib above the head (type 19A) (Fig. 22:6–10). The only exception in this respect is the finger ring from Rønnovsholms Mose (northern Jutland), distinguished by a triangle-sectioned ridge and two transversal ribs above the head. With these elements this ring refers to rings classed within subgroups 3A and 3B (Fig. 22:6). The ring in question and another one from subgroup 3E have additional small plates soldered between the hoops, which finds analogies in evolutionarily later subgroups 3H–3K (Fig. 22:6.9).

Rings of subgroup 3E differ among themselves in the manner in which the eyes are marked on the zoomorphic terminals. There are examples with eyes of type 20C, and eyes of type 20B appear for the first time in this subgroup, while some rings do not have the eyes marked at all. The ribbons have edges decorated either with an incised line or with a stamped imitation of filigree. Some ribbons are decorated along the ridge with a single narrow band of type 52 motif. This element finds analogies in subgroup 3C and, except for but one case, it does not appear in later subgroups. Decoration of type 21A, typical of subgroup 3B and also represented in subgroups 3C and 3D, does not appear in subgroup 3E nor in later subgroups 3F–3K.

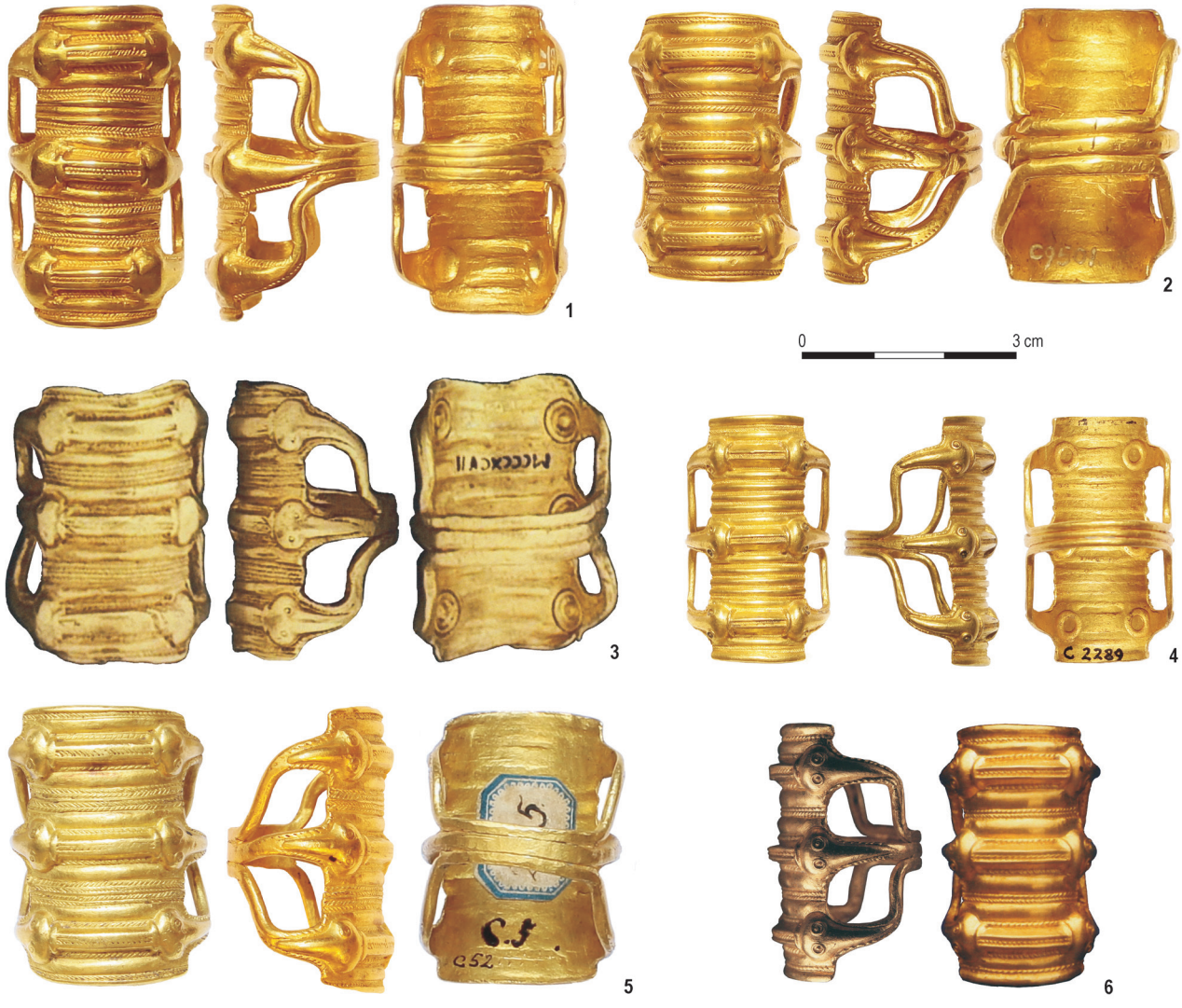
The appearance of subgroups 3F and 3G marks a significant innovation in the manner of manufacture of finger rings: they are no longer spiral, instead being made from three separate rings soldered together (Fig. 23:1–6). Their front parts are shaped the same as ribbons in spiral rings, while the back parts are made from wire and converge to form one hoop (type 1B). The flat edges of the ribbons are adorned with convex plain bands alternating with diagonally notched bands, sometimes composed in motifs resembling a braided wire (type 26A). Nearly all rings belonging to subgroup 3G have zoomorphic heads with eyes of type 20C. Only the ring from grave 1/1978 from Himlingøje (Zealand), has zoomorphic heads with eyes of type 20B (Fig. 23:1).

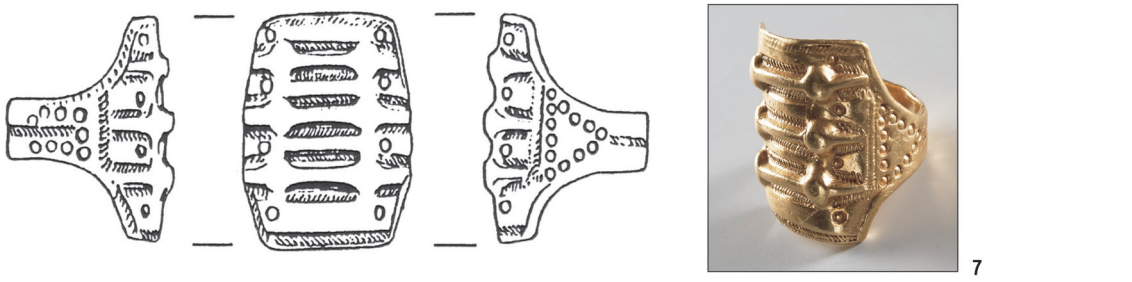
Subsequent subgroups include both spiral rings and those made from three rings soldered together. Apart from common elements in decoration of ribbons and a similar form of zoomorphic heads, they all have quadrangular plates placed between the hoops (Fig. 24). Subgroup 3H comprises spiral rings with zoomorphic heads having eyes of type 20C (Fig. 24:4.5); subgroup 3I comprises finger rings made from three soldered rings, whose zoomorphic terminals have eyes of type 20B (Fig. 24:6.7); subgroup 3J comprises both spiral and soldered finger rings, in which zoomorphic terminals have eyes of type 20C and the flat plates are decorated with bands of filigree (Fig. 24:1–3); and subgroup 3K comprises spiral and soldered finger rings whose heads have eyes of type 20B (Fig. 24:8–10). In this last subgroup, finger rings made from three rings soldered together feature some new elements: only the outer two segments are full hoops and they are merged at the back with a quadrangular plate, while the central segment is reduced to a ribbon terminating in zoomorphic heads whose ends are soldered to the quadrangular plate. This solution is further developed in a ring from Herslev (Zealand), where two such reduced elements occur between full hoops.

In light of the dating of closed assemblages, the chronological frameworks of subgroups with zoomorphic heads of type 13C span phases C2 and C3. However, it needs to be emphasised that this kind of data is unavailable for

Fig. 22. Gold rings of sub-groups 3C (1–3), 3D (4, 5), and 3E (6–10): 1 – Vedskølle (Zealand); 2 – Magleby (Zealand); 3 – Naustdal (Sogn og Fjordane); 4 – Himlingøje, 1828 (Zealand); 5 – Rødvig (Zealand); 6 – Rønnovsholm, bog (Jutland); 7 – Skibbinge (Zealand); 8 – Pedersker (Smålyngen) (Bornholm); 9 – Klæstrup, bog (Jutland); 10 – Marienborg (Zealand). Photo: M.J. Przybyła (1, 4–10; NMK coll.), Universitetetsmuseet i Bergen (3). After: S. Müller 1880 (2), B. Magnus 2002 (3).

Ryc. 22. Złote obręcze podgrup 3C (1–3), 3D (4, 5) i 3E (6–10): 1 – Vedskølle (Zelandia); 2 – Magleby (Zelandia); 3 – Naustdal (Sogn og Fjordane); 4 – Himlingøje, 1828 (Zelandia); 5 – Rødvig (Zelandia); 6 – Rønnovsholm, bagno (Jutlandia); 7 – Skibbinge (Zelandia); 8 – Pedersker (Smålyngen) (Bornholm); 9 – Klæstrup, bagno (Jutlandia); 10 – Marienborg (Zelandia). Fot.: M.J. Przybyła (1, 4–10; zbiory NMK), Universitetetsmuseet i Bergen (3). Wg: S. Müller 1880 (2), B. Magnus 2002 (3).


1
2
0
3 cm
3
4
C 2289
5
6


7


8
9

both the earliest subgroups 3C (appearing in generation 4) and 3D (appearing in generation 6) and typologically the latest subgroups 3I and 3J (cf. Fig. 5, 7). Nevertheless, subgroup 3E, which appears parallel with 3D, includes one confidently dated grave assemblage, which links with phase C2 (cf. Fig. 5). The same dating can be applied to grave 1/1978 from Himlingøje (Zealand), which contained a ring of subgroup 3F. Subgroup 3G includes specimens dated to phase C2 (Greve and Brøndsager, grave 2000, both Zealand), as well as some belonging to stage C3a (Varpelev, grave α, Zealand). As for subgroup 3H, which later develops into subgroups 3I and 3J, only one dated grave assemblage can be mentioned, namely a burial from Efteløt (*kyrkan*), Buskerud, belonging to phase C2. Subgroup 3K seems to have a late chronological position, the earliest example being the finger ring from grave 1 at Baunegård on Bornholm, attributable to stage C2b. The finger ring from Bækkegård, also on Bornholm, can probably be linked with phase C3. It may have been part of a deposit, along with a bracelet of type RH300[41]. The decoration covering the plate joining the bottom parts of hoops in the finger ring from Bækkegård, also recorded on the analogically built finger ring from Herslev (Zealand) raises associations with a developed form of stamped decoration, sometimes described as the *Sösdala* style (Fig. 24:9.10). This element may additionally corroborate the late chronological position of these two artefacts.

3.3.3. Subgroups 3L and 3M

As mentioned, subgroups 3L and 3M belong to a large branch which branches out in generation 4 (parallel with the branch where subgroups 3D–3K belong). Finger rings classed within these two subgroups represent type B.18 or can be seen as its variants. In generation 5, the branch in question splits into subgroup 3L, which develops until generation 7, and subgroup 3M, which develops until generation 13 (cf. Fig. 6, 7).

All 3L and 3M finger rings consist of a flat, ribbon-like hoop which in the front part broadens into a large quadrilateral plate. The plate is decorated with plain, convex ridges separated with equally wide bands of stamped ornamentation. In two cases the hoop is not soldered permanently in the bottom part and is adjustable (a 3L finger ring from Horsetofte, Zealand and a 3M finger ring from Oxvang By in southern Jutland – Fig. 23:9, 25:15).

Subgroup 3L comprises three finger rings whose decoration refers to that known from ribbons of finger rings belonging to subgroups 3C–3K (Fig. 23:7–9). This similarity lies in the zoomorphic heads of type 13C crowning the ribbons, and in the absence (as was also the case with some 3C specimens) of any transversal ribs above the head (type 19C). All three rings additionally feature groups of stamped motifs at the bases of the ribbons. Both the placing of this ornamentation and the motifs used find analogies in subgroup 3M as well.

Subgroup 3M is internally diversified above all in terms of proportions of the plate, a factor not included in the presented analysis. Differences can also be observed with respect to the stamps used for adorning the space between the ribs and the plate bases (Fig. 25). A few exceptions aside, the set of motifs occurring in this subgroup is relatively homogenous, although the motifs can occur in different combinations (cf. Appendix 2).

All three specimens assigned to subgroup 3L come from grave assemblages, of which two – the grave from Horsetofte (Zealand) and grave 2 from Bringsvær, Aust-Agder – can be dated to phase C2, and the third one, the

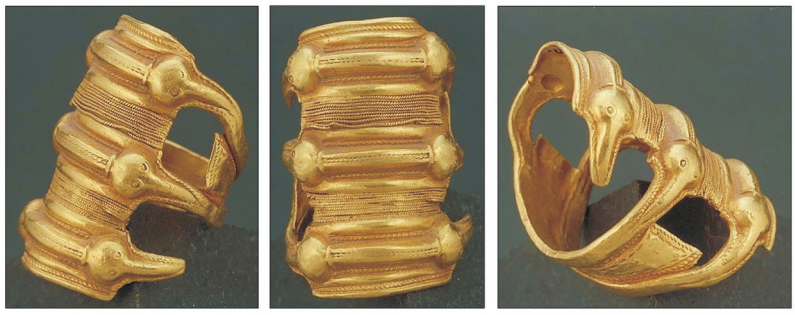
[41] O. Klindt-Jensen 1957, 156, 161, fig. 137.

Fig. 23. Gold rings of sub-groups 3F (1), 3G (2–6), and 3L (7–9): 1 – Himlingøje, grave 1/1978 (Zealand); 2 – Greve (Zealand); 3 – Ørum (Jutland); 4 – Varpelev, grave α (Zealand); 5 – Kalby (Zealand); 6 – Brøndsager, grave 2000 (Zealand); 7 – Søndre Kjørstad (Oppland); 8 – Bringsvær, grave 2 (Aust-Agder); 9 – Horsetofte (Zealand). Photo: M.J. Przybyła (1–5, 9; NMK coll.), Universitetetsmuseet i Bergen (7, 8). After: D.L. Mahler 2005 (6), E. Straume 1998 (7), G. Aamundsen 1876 (8).

Ryc. 23. Złote obręcze podgrup 3F (1), 3G (2–6) i 3L (7–9): 1 – Himlingøje, grób 1/1978 (Zelandia); 2 – Greve (Zelandia); 3 – Ørum (Jutlandia); 4 – Varpelev, grób α (Zelandia); 5 – Kalby (Zelandia); 6 – Brøndsager, grób 2000 (Zelandia); 7 – Søndre Kjørstad (Oplandia); 8 – Bringsvær, grób 2 (Aust-Agder); 9 – Horsetofte (Zelandia). Fot.: M.J. Przybyła (1–5, 9; zbiory NMK), Universitetetsmuseet i Bergen (7, 8). Wg: D.L. Mahler 2005 (6), E. Straume 1998 (7), G. Aamundsen 1876 (8).

Fig. 24. Gold rings of sub-groups 3H (4, 5), 3I (6, 7), 3J (1–3), and 3K (8–10): 1 – Ekeryd (Småland); 2 – Kolstø (Rogaland); 3 – Häljom (Medelpad); 4 – Ramsgården (Västergötland); 5 – Efteløt (*kyrkan*) (Buskerud); 6 – Værløse (*kirke*) (Zealand); 7 – Hångsdala (Västergötland); 8 – Baunegård, grave 11 (Bornholm); 9 – Bækkegård (Bornholm); 10 – Herslev (Zealand). Photo: SHM (1, 3, 4, 7), M.J. Przybyła (6, 8–10; NMK coll.), Universitetetsmuseet i Bergen (2), Kulturhistorisk museum, Oslo (5). After: O. Rygh 1885 (5).

Ryc. 24. Złote obręcze podgrup 3H (4, 5), 3I (6, 7), 3J (1–3) i 3K (8–10): 1 – Ekeryd (Smalandia); 2 – Kolstø (Rogaland); 3 – Häljom (Medelpad); 4 – Ramsgården (Västergötland); 5 – Efteløt (*kyrkan*) (Buskerud); 6 – Værløse (*kirke*) (Zelandia); 7 – Hångsdala (Västergötland); 8 – Baunegård, grób 11 (Bornholm); 9 – Bækkegård (Bornholm); 10 – Herslev (Zelandia). Fot.: SHM (1, 3, 4, 7), M.J. Przybyła (6, 8–10; zbiory NMK), Universitetetsmuseet i Bergen (2), Kulturhistorisk museum, Oslo (5). Wg: O. Rygh 1885 (5).

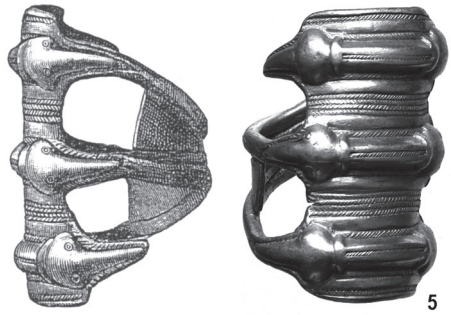

1


2

0 3 cm


3


4


5


6


7

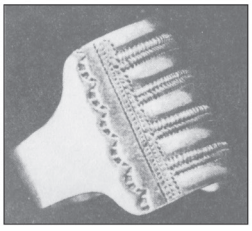

8


9


10

1


2


3


4

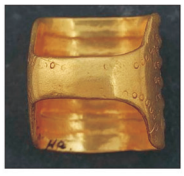

5


6


7

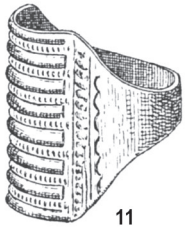

8

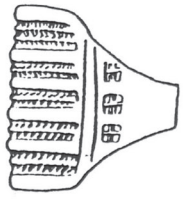

9




10


13


11




12


14


15


16


17


18

grave from Søndre Kjørstad, Oppland, to stage C2b (cf. Fig. 5, 7).

Some finger rings of subgroup 3M originate from grave assemblages that can only broadly be dated within phases C1b–C2 (cf. Fig. 5, 7). These are graves from Oxvang By in southern Jutland, Thölsted in north-western Germany, and Fredsø in northern Jutland. Another group are finger rings found in grave assemblages dated to phase C2. These include graves from Avaldsnes in Rogaland, Hove in Rogaland, Indbjoa in Hordaland, Hasseris in northern Jutland, grave 1, and Himlingøje in Zealand, grave 1/1878. The finger ring from the mentioned grave from Søndre Kjørstad, found alongside a 3L finger ring, can be assigned to phase C2.

3.4. Distribution of rings of groups 1, 2, and 3 in *Barbaricum*

Plotting the results of the above interpretation of the phylogenetic analysis on a map reveals regional differentiation of the rings under discussion. This has already been suggested in general terms by earlier studies. However, thanks to the approach used in this study (with snake ornaments analysed jointly irrespective of their identification as finger rings, bracelets, or neck-rings) and the application of the phylogenetic method, the maps presented here highlight some new aspects in this respect. One could say that subsequent maps present the distribution of rings classed as types Hildebrand A and B along with that of finger rings traditionally defined as type B.39a (Fig. 28), rings of types B/C and C along with finger rings of type B.40 and some specimens of B.39a (Fig. 29), finger rings of types B.39a–c along with bracelets defined as types Hildebrand B or C (Fig. 30), and finger rings B.18 along with those representing mixed forms of B.18 and B.39c (Fig. 31). In this context it is worth emphasising once again the arbitrary nature of boundaries between particular types as defined in previous classifications, and the resulting problems with attribution of less standard specimens. In this respect, an approach recognising the polythetic nature of the set of attributes describing individual rings seems more open and makes it possible to avoid setting strict boundaries at the stage of the data ordering, which would pre-determine the direction of further interpretations.

The maps presented here illustrate the interpretation of the phylogenetic diagram adopted in this study, which means they show the division of the analysed collection of artefacts into three groups and further subgroups within them. As regards groups 2 and 3, the picture has been generalised to some extent based on the sequence of appearance and disappearance of certain more distinctive traits (Fig. 26, 27). At the same time, the statistically closest distances between particular specimens (as emerging from the diagram) are marked with lines. The sizes of the points on the maps reflect differences in artefact sizes (large point – bracelet/neck-ring, small point – finger ring).

Rings of group 1 are few and dispersed (Fig. 28). Statistical distances between the closest specimens are relatively large, especially when compared to analogical data for groups 2 and 3. The smallest distances fluctuate around 0.07–0.08, with the rest falling between 0.10 and 0.17. Rings from subgroup 1A, which include finger rings having many traits in common with slightly earlier finger rings of B.41 type characteristic of Jutland, are known from north-eastern Zealand and Öland. Those of subgroup 1B, which include both larger rings and finger rings, occur in Zealand, Gotland, and in areas close to the southern Baltic coast: in Rugia, the lower Vistula basin, and the Podlasie region. Rings of subgroup 1C, exclusively bracelets and neck-rings, are known from Öland and south-western Finland. As mentioned, the chronology of group 1 rings in grave assemblages spans stage C1b, while those known from deposits can only more broadly be dated within phases C1b–C2.

With respect to group 2, orange signs mark rings from subgroups 2A–2C and red signs mark those belonging to subgroups 2G–2J. The former are rings developing from generation 2 to generation 8, and the later are rings developing in generations 9–14 (Fig. 29). Rings classed as 2A–2C occur in stage C1b and phase C2. As

Fig. 25. Gold rings of sub-group 3M: 1 – Christiansø; 2 – Glimsta, Västigården (Hälsingland); 3 – Homnes (Nord-Trøndelag); 4 – Hove (Rogaland); 5 – Galtrupgård (Jutland); 6 – Avaldsnes (Rogaland); 7 – Ismus (Gotland); 8 – Hasseris, grave 1 (Jutland); 9 – Himlingøje, grave 1/1878 (Zealand); 10 – Harplinge parish (Halland); 11 – Indbjoa (Hordaland); 12 – Søndre Kjørstad (Oppland); 13 – Thölstedt (north-western Germany); 14 – Grumløse (Zealand); 15 – Oxvang (Jutland); 16 – Stora Brattön (Bohuslän); 17 – Stokkerhoved (Jutland); 18 – Fredsø (Jutland). Photo: M.J. Przybyła (1, 5, 9, 14, 15, 17, 18; NMK coll.), SHM (2, 7, 10, 16), Kulturhistorisk museum, Oslo (4, 12), Universitetetsmuseet i Bergen (6), M.J. Przybyła (8; Nordjyske Museer – Aalborg Historiske Museum coll.). After: L. Marstrander 1983 (3), H. Schetelig 1912 (11), E. Straume 1998 (12), G. Wegner 1990 (13).

Ryc. 25. Złote obręcze podgrupy 3M: 1 – Christiansø; 2 – Glimsta, Västigården (Hälsingland); 3 – Homnes (Nord-Trøndelag); 4 – Hove (Rogaland); 5 – Galtrupgård (Jutlandia); 6 – Avaldsnes (Rogaland); 7 – Ismus (Gotlandia); 8 – Hasseris, grób 1 (Jutlandia); 9 – Himlingøje, grób 1/1878 (Zelandia); 10 – par. Harplinge (Halland); 11 – Indbjoa (Hordaland); 12 – Søndre Kjørstad (Oplandia); 13 – Thölstedt (płn.-zach. Niemcy); 14 – Grumløse (Zelandia); 15 – Oxvang (Jutlandia); 16 – Stora Brattön (Bohuslän); 17 – Stokkerhoved (Jutlandia); 18 – Fredsø (Jutlandia). Fot.: M.J. Przybyła (1, 5, 9, 14, 15, 17, 18; zbiory NMK), SHM (2, 7, 10, 16), Kulturhistorisk museum, Oslo (4, 12), Universitetetsmuseet i Bergen (6), M.J. Przybyła (8; zbiory Nordjyske Museer – Aalborg Historiske Museum). Wg: L. Marstrander 1983 (3), H. Schetelig 1912 (11), E. Straume 1998 (12), G. Wegner 1990 (13).

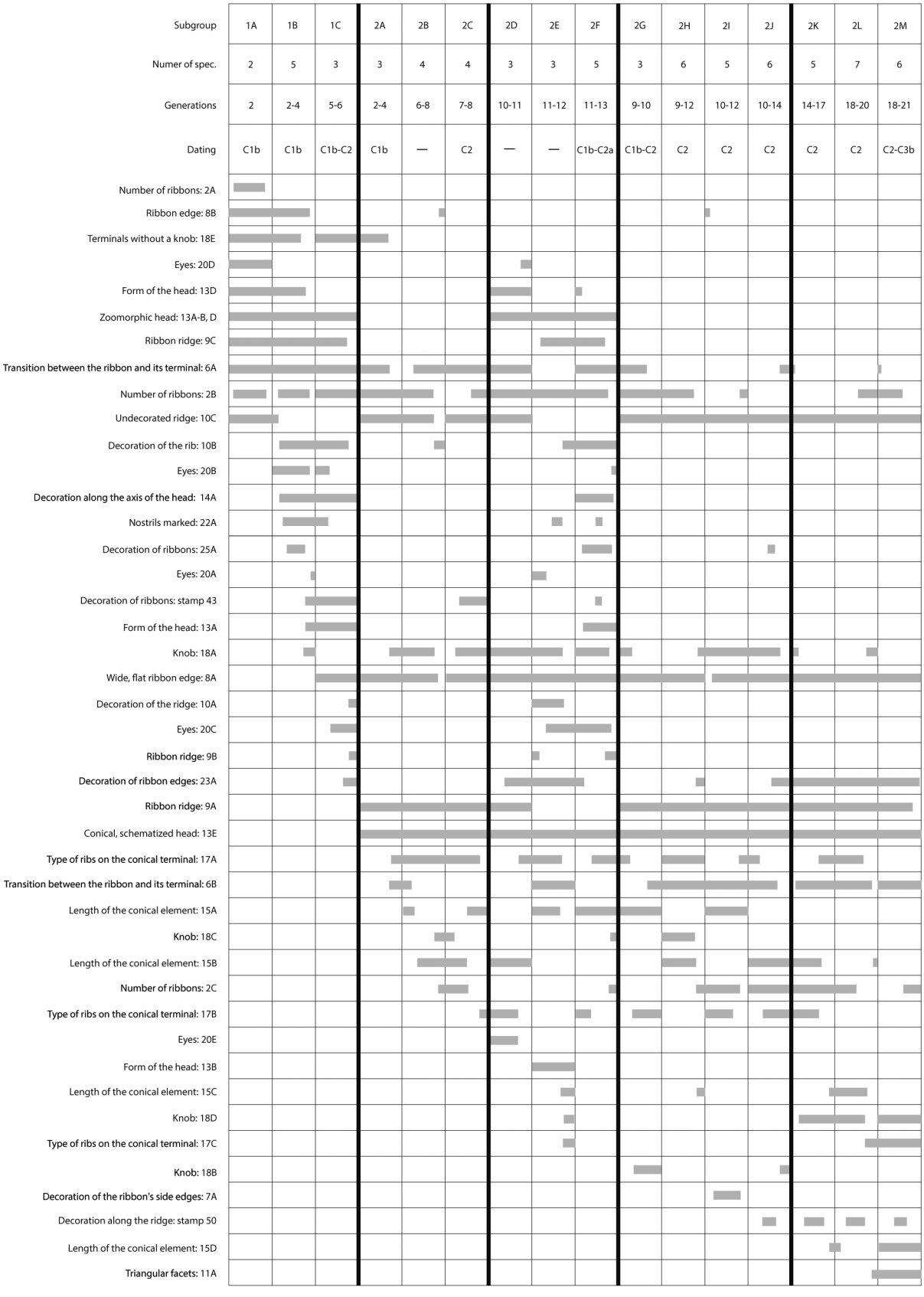


Fig. 26. Main traits recorded in gold rings of groups 1 and 2.

Ryc. 26. Podstawowe cechy złotych obręczy grup 1 i 2.

for rings 2G–2J, the better-dated grave assemblages allow them to be placed in phase C2, although some of the rings have broader chronological frameworks spanning phases C1b–C2, meaning their occurrence in stage C1b cannot be ruled out.

Green signs mark rings from subgroups 2D–2F, i.e. rings with zoomorphic terminals which start to develop in generation 10 and disappear in generation 13 at the latest. Their occurrence can be placed within phases C1b–C2 and perhaps phase C3 as well. Yellow signs mark rings belonging to subgroups 2K–2M, developing from generations 15 to 21. Their chronology can be closed within phases C2–C3.

The distances between the closest specimens in subgroups 2A–2C and 2G–2J are relatively small, on average between 0.01–0.05 and less often 0.06–0.08. Only incidentally do the values reach 0.12–0.13. Rings from these subgroups are most common in Gotland, Öland and the coast of nearby Småland, and in Uppland. The remaining examples are single finds from south-western Finland, Bornholm, south-western Scania, eastern Zealand, Bohuslän, Buskerud, Aust-Agder, northern and central Jutland, north-eastern Funen, Central Germany, and Podlasie.

Among rings from subgroups 2D–2F, the distances between the closest specimens are much larger than in subgroups 2A–2C and 2G–2J, and range from 0.09 to 0.14. The rings from Thorsberg bog are an exception here, with a distance of only 0.01. Rings 2D–2F are known from Uppland and Närke, Gotland, Öland, eastern Zea-

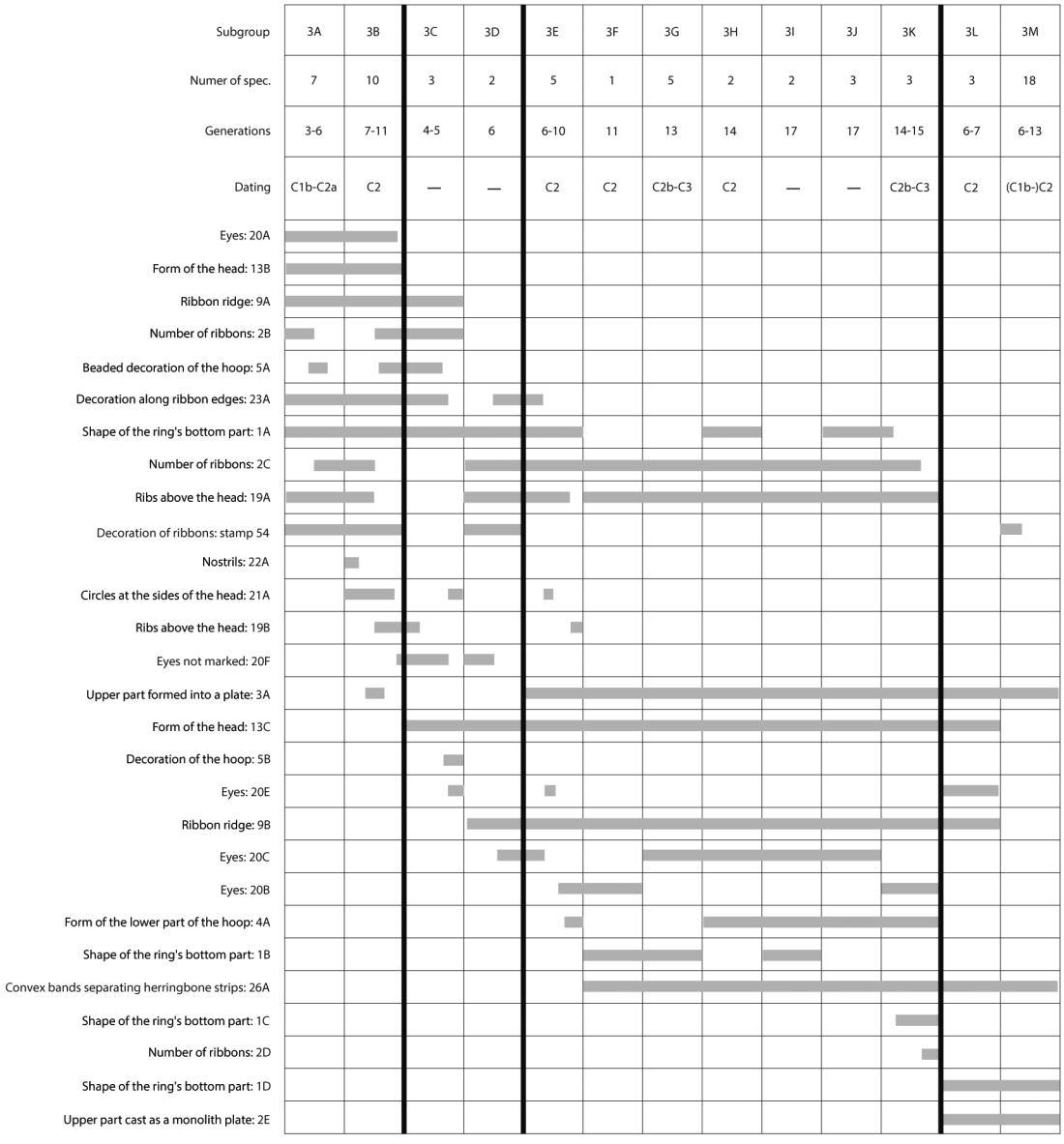


Fig. 27. Main traits recorded in rings of group 3.

Ryc. 27. Podstawowe cechy złotych obręczy grupy 3.

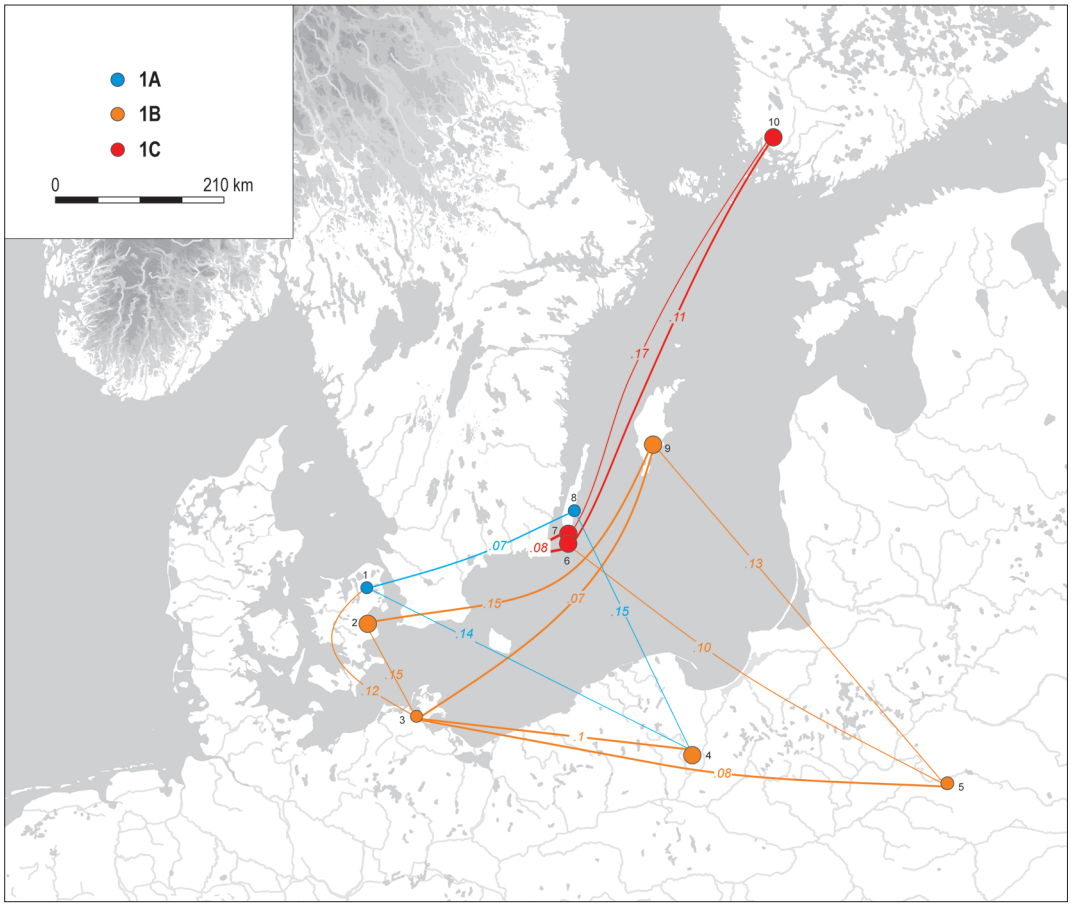


Fig. 28. Distribution of rings of group 1 (lines show the connection of each specimen to its statistically most similar counterparts; numbers displayed on the lines mark statistical distance).

Ryc. 28. Rozprzestrzenienie obręczy grupy 1 (linie pokazują związki poszczególnych egzemplarzy z ich statystycznie najbliższymi odpowiednikami; liczby na liniach odpowiadają statystycznej odległości pomiędzy tymi egzemplarzami).

1 – Kirkebakkegård; 2 – Valløby; 3 – Altefär-Grahlhof; 4 – Komorowo; 5 – Pilipki; 6 – Näsby; 7 – Ösby; 8 – Norra Näsby; 9 – Burs; 10 – Nousiainen.

land, south-eastern Funen, the Thorsberg bog deposit, and Bohuslän.

The distances between the closest specimens in subgroups 2K–2M average between 0.05 and 0.07, although values like 0.02 or within the range of 0.9–0.11 have also been recorded. These rings are relatively common in Gotland and Öland, being also represented in Västmanland, south-western Finland, eastern Scania, eastern Zealand, Rogaland, and Lower Lusatia.

The distribution of rings assigned to group 3 is shown in Fig. 30 using five different signs, representing subgroups 3A–3B, 3C–3D, 3E–3K, 3L, and 3M, respectively (cf. Fig. 27). The map only shows the links between the closest specimens for subgroups 3A–3B, 3C–3D, and 3E–3K, while for subgroups 3L and 3M this aspect is illustrated separately in Fig. 31. Rings of group 3 are primarily finger rings, the only larger artefacts being a pair of bracelets from grave 2/1949 in Himlingøje in Zealand, assigned to subgroup 3B.

The distances are very small in subgroups 3A–3B, usually within 0–0.02 and less often 0.04–0.07. These rings are widespread in central and south-eastern Zealand, with single finds known from northern Jutland, southern Funen, Västmanland, Hordaland, the Thorsberg bog deposit, and Central Germany. Their development spans generations 3–11, and in grave assemblages they occur in stage C1b and in particular phase C2.

The same chronological frameworks can probably be applied to rings from subgroups 3C–3D, although this conclusion is only based on the phylogenetic sequence in which their development falls within generations 4–6. The distances between the closest specimens in subgroups 3C and 3D are much larger than in subgroups 3A and 3B, with the lowest values of 0.06–0.07 and the highest of 0.11–0.13. The majority of the finds come from eastern Zealand, from the Stevns Peninsula near the Bay of Køge, with only one specimen known from Sogn og Fjordane.

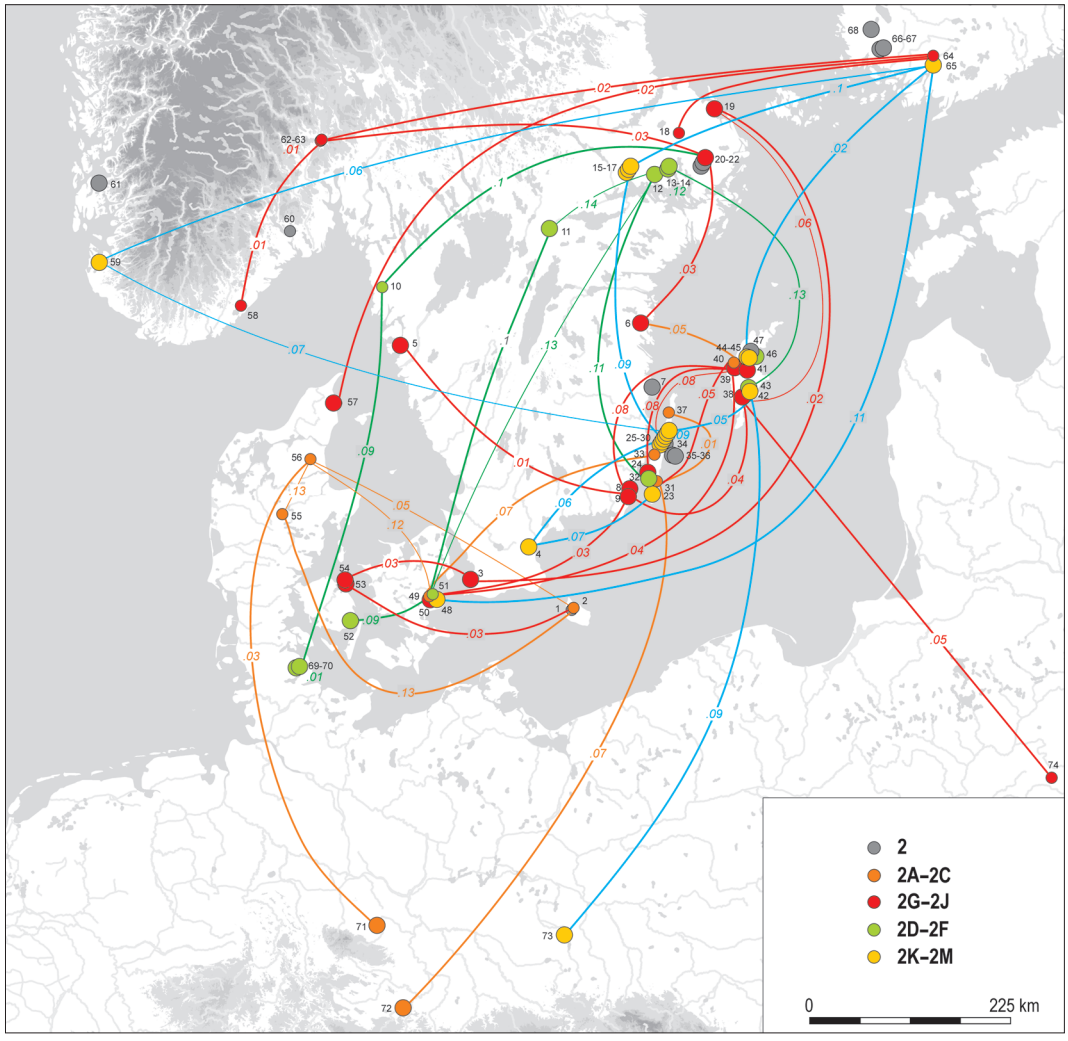


Fig. 29. Distribution of rings of group 2. Lines show the connection of each specimen to its statistically most similar (thick line) or second most similar (thin line; only selected items are marked) counterparts; numbers displayed on the lines mark statistical distance.

Ryc. 29. Rozprzestrzenienie obręczy grupy 2. Linie pokazują związki poszczególnych egzemplarzy z ich statystycznie najbliższymi (grubsza) lub drugimi najbliższymi (cienka; zaznaczone wybrane egz.) odpowiednikami; liczby na liniach odpowiadają statystycznej odległości pomiędzy tymi egzemplarzami.

1 – Bækkegård; 2 – Selvejergård (Højlyngen); 3 – Naffentorp; 4 – Eskilstorp; 5 – Höviksnäs; 6 – Stockebäck; 7 – Kråkelund; 8 – Ragnabo; 9 – Grisbäck; 10 – Solhems Mellan; 11 – Luggavi; 12 – Långtora parish/par.; 13, 14 – Tuna, deposit/depozyt; 15 –17 – Tuna, grave/grób; 18 – Gödåker, grave/grób VIII; 19 – Långalma; 20–22 – Västra Rickeby; 23 – Kvinnsgröta; 24 – Kleva; 25–30 – Skedemosse; 31 – Hulterstad; 32 – Bredinge; 33 – Ryd, grave/grób 73; 34 – Skedstad; 35, 36 – Öland; 37 – Kristinelund; 38 – Asarve; 39 – Troma; 40 – Värnhem; 41 – Dalbo, Ängsåkern; 42 – Mannegårda; 43 – Vestringe; 44, 45 – Lilla Ryftes, Vätåker; 46 – Gute; 47 – Rings; 48 – Varpelev, grave/grób A; 49 – Gunnerupgård, grave/grób 1; 50 – Himlingøje, grave/grób 3/1977; 51 – Himlingøje, grave/grób 1/1894; 52 – Møllegårdsmarken; 53 – Sappesborg; 54 – Fyns Hoved; 55 – Hingeballe; 56 – Liene Skov; 57 – Donbæk, grave/grób 60; 58 – Løddesøl; 59 – Hove; 60 – Lagmandsgården; 61 – Indbjoa; 62, 63 – Veien; 64 – Isokylä-Ketohaka, grave/grób 2; 65 – Isokylä-Katajamäki, grave/grób I; 66, 67 – Nousiainen (parish/par.); 68 – fmr./dawn. *Åbo län*; 69, 70 – Thorsberg bog/bagno; 71 – Emersleben, grave/grób 2; 72 – Flurstedt; 73 – Cottbus; 74 – Szpaki.

With respect to rings included in subgroups 3E–3K, the distances between the closest specimens are very small and usually fall within the range of 0–0.03. Higher values, like 0.06 or 0.13, have only been recorded in single cases. Rings of these subgroups are known from eastern Zealand, Bornholm, and northern Jutland. They also occur in Västergötland and Småland, with single examples represented in Medelpad, Buskerud, and Rogaland as well. They develop in generations 6–17, and occur in the context of grave assemblages from phases C2 and C3.

The distances among the three finger rings classed as subgroup 3L range from 0.03 to 0.05 (Fig. 31). These ornaments come from central Zealand, Aust-Agder, and

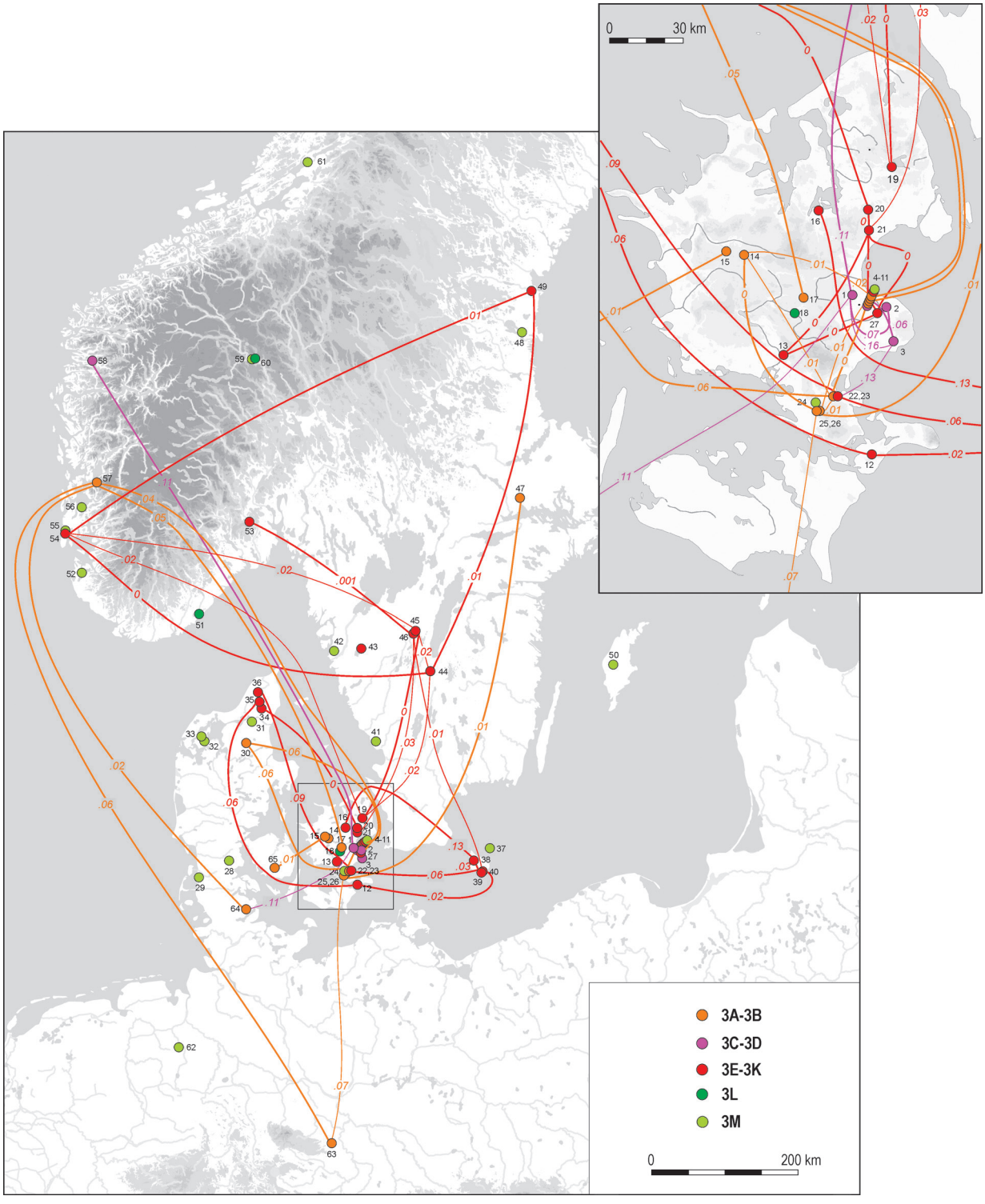


Fig. 30. Distribution of rings of subgroups 3A–3K (lines show the connection of each specimen to its statistically most similar counterparts; numbers displayed on the lines mark statistical distance); (site list see Fig. 31).

Ryc. 30. Rozprzestrzenienie obręczy podgrup 3A–3K (linie pokazują związki poszczególnych egzemplarzy z ich statystycznie najbliższymi odpowiednikami; liczby na liniach odpowiadają statystycznej odległości pomiędzy tymi egzemplarzami); (lista stan. – zob. Ryc. 31).

Oppland. They appear in generation 6 and occur in grave assemblages dated to phase C2.

The distances between the closest specimens in subgroup 3M fluctuate from 0 to 0.03, with larger values of 0.05 and 0.11 recorded in single cases. Finger rings classed as 3M occur in larger numbers in Jutland, Rogaland, and Hordaland, with dispersed finds also known from eastern and southern Zealand, Oppland, Nord-

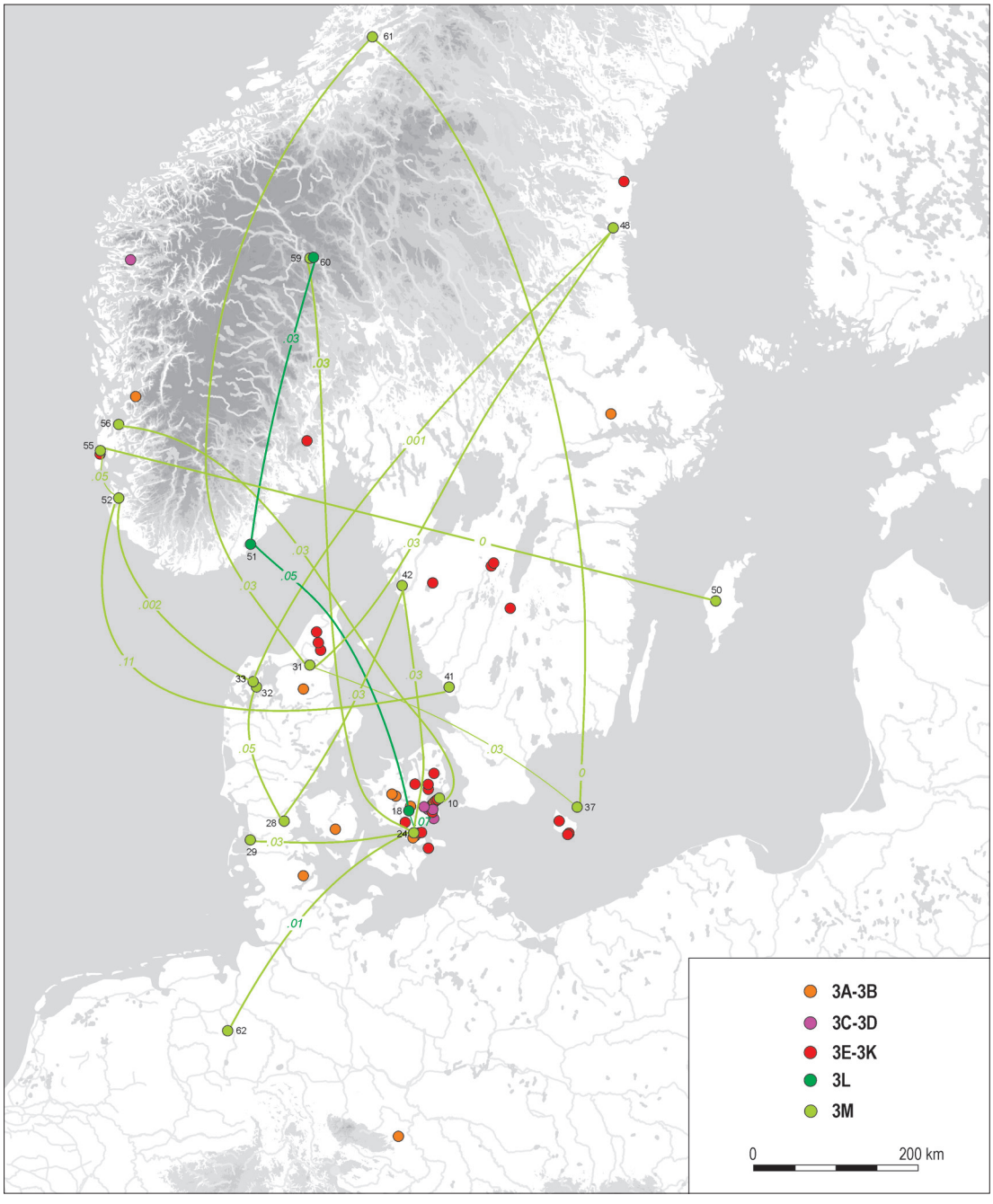


Fig. 31. Distribution of rings of subgroups 3L and 3M (lines show the connection of each specimen to its statistically most similar counterparts; numbers displayed on the lines mark statistical distance).

Ryc. 31. Rozprzestrzenienie obręczy podgrup 3L i 3M (linie pokazują związki poszczególnych egzemplarzy z ich statystycznie najbliższymi odpowiednikami; liczby na liniach odpowiadają statystycznej odległości pomiędzy tymi egzemplarzami).

1 – Vedskølle; 2 – Magleby; 3 – Rødvig; 4–7 – Himlingøje, grave/grób 2/1949; 8 – Himlingøje, grave/grób 1/1949; 9 – Himlingøje, 1828; 10 – Himlingøje, grave/grób 1/1878; 11 – Himlingøje, grave/grób 1/1978; 12 – Marienborg; 13 – Kalby; 14 – Stenlille; 15 – Kongsted; 16 – Herslev; 17 – Nordrup, grave/grób A; 18 – Horsetofte; 19 – Værløse (*kirke*); 20 – Brøndsager, grave/grób 2000; 21 – Greve; 22, 23 – Skibbinge; 24 – Grumløse; 25 – Skovgårde, grave/grób 209; 26 – Skovgårde, grave/grób 400; 27 – Varpelev, grave/grób α; 28 – Stokkerhoved; 29 – Oxvang; 30 – Ravnkilde (*Præstegårdsmark*); 31 – Hasseris, grave/grób 1; 32 – Fredsø; 33 – Galtrupgård; 34 – Ørum; 35 – Klæstrup, bog/bagno; 36 – Rønnovsholms, bog/bagno; 37 – Christiansø; 38 – Bækkegård; 39 – Baunegård, grave/grób 11; 40 – Pedersker (Smålyngen); 41 – Harplinge parish/par.; 42 – Stora Brattön; 43 – Alingsås; 44 – Ekeryd; 45 – Hångsdala; 46 – Ramsgården; 47 – Tuna, grave/grób; 48 – Glimsta (Västigården); 49 – Häljom; 50 – Ismus; 51 – Bringsvær, grave/grób 2; 52 – Hove; 53 – Efteløt (*kyrkan*); 54 – Kolstø; 55 – Avaldsnes; 56 – Indbjoa; 57 – Nes; 58 – Naustdal; 59, 60 – Søndre Kjørstad; 61 – Homnes; 62 – Thölstedt; 63 – Helmsdorf; 64 – Thorsberg bog/bagno; 65 – Lydinge.

Trøndelag, Bohuslän, Halland, Christiansø, Gotland, Hälsingland, and Lower Saxony. They commonly occur in the context of assemblages having broader chronological frameworks, spanning phases C1b–C2, although examples from assemblages more narrowly dated to phase C2 and – in one case – to phases C2b–C3a, are also known. Thus, the finger rings in question should perhaps be placed in phase C2 and maybe C3a as well.

The closest links between particular rings cannot be given any unambiguous interpretation. The phylogenetic analysis as it is used in biology assumes the existence of a common "ancestor". In the world of ideas which translate into objects of material culture this assumption can to certain degree be adopted as well. However, a single idea can be borrowed by several different people and expressed in objects created by different producers representing different cultural milieus. In the tree analysed here, this could perhaps be reflected by situations when distances between the closest specimens within groups and subgroups are relatively large, as among the rings of group 1 or subgroups 2D–2F. However, these situations can possibly be given a different interpretation as well, namely that the specimens included into these subgroups were created ad hoc, relatively long one after another, but by a single craftsman. The relatively large diversity of group 1 may also be explained in terms of an initial phase of a certain idea, before it found more formalised, standardised expression in the context of gold snake ornaments. In situations where the statistical affinity between the rings is large, one might assume that they were created by a single craftsman as a series. It is worth noting here that despite a relatively large overall similarity within particular groups, the statistical result of the phylogenetic analysis may be affected by the occurrence of additional decorative elements (more lavish decoration) on a given specimen, placing it at a slightly greater distance from other, at first glance similar, artefacts.

The bulk of the rings classed as group 1 are known from Scandinavia, with only three examples south of the Baltic coast, originating from different cultural milieus (Elbe Germanic cultural circle, Wielbark Culture). Therefore, the genesis of these rings should likely be sought in southern Scandinavia, probably on the large islands of the Central Baltic zone, Gotland and Öland. Such an assumption is supported by the central position of these islands in the network of contacts that emerges from the closest distance analysis within group 1.

Distances between the closest specimens are miniscule in many subgroups of groups 2 and 3. In subgroups 2A–2C, 2G–2J, 3A–3B, 3E–3K, 3L, and 3M, where the values range between 0 and 0.05, one can with some likelihood assume that the rings were produced by one craftsman and over a relatively short time. Artefacts separated by distances ranging from 0.06 to 0.08 can perhaps also be interpreted as created by the same craftsmen, some time after making previous objects of that type, or as created by a craftsman from a new generation, who had contact with the products of his predecessor (one might possibly consider knowhow transfer of a master-apprentice kind).

Of course, the time of an artefact's production as suggested by the succession of branches in the phylogenetic tree needs not be tantamount to the time when the rings in question were used for gift-giving and forging of political alliances. This is affected by the moment when a given artefact was first included in such a cultural circulation and by the time for which it remained in use (lifetime of an individual; transfer to an heir). The time when the rings were buried, either as elements of grave assemblages or deposits (be it in dry or wet environment), is rarely identical with the time of their production and perhaps also rarely approaches the time of their introduction into circulation. For rings known from grave assemblages, which are relatively the easiest for us to date, we should therefore consider the age at which the deceased received the ring, and the duration of their life afterwards. This is information that cannot be precisely calculated. As a result, all attempts at reconstruction of such political connections are by their nature very general and operate on data which are chronologically flattened.

3.5. Bronze and silver rings referring to type Hildebrand C and type B.40

Apart from gold snake rings of the Scandinavian type, simpler forms of such artefacts were made from bronze and silver as well. This applies to bracelets, neck-rings, and finger rings alike. They are known on one hand from Öland and Gotland and, as single finds, from Funen and Hälsingland, and on the other hand from south-western Finland, Estonia, Latvia, western Lithuania, the Sambia Peninsula, and Masuria (Fig. 32–34). Fig. 35 presents information concerning the context and chronology of silver and bronze rings from Gotland, Öland, northern Sweden, and Funen. Rings discovered in grave assemblages make it possible to conclude that the period of occurrence of the discussed category of ornaments occurs in phases C1b–D (as understood in Scandinavia). The chronological position of rings from Estonia and Finland is much more difficult to determine, since those known from sepulchral contexts usually originate from multiple burials of the *tarand* type. This issue was addressed by Dieter Quast who, based on Scandinavian analogies, dated Estonian silver and bronze rings of type Hildebrand C to phases C1b–C2, and bronze finger rings of type B.40 to the Migration Period[42]. The chronology

[42] D. Quast 2005, 256–257.

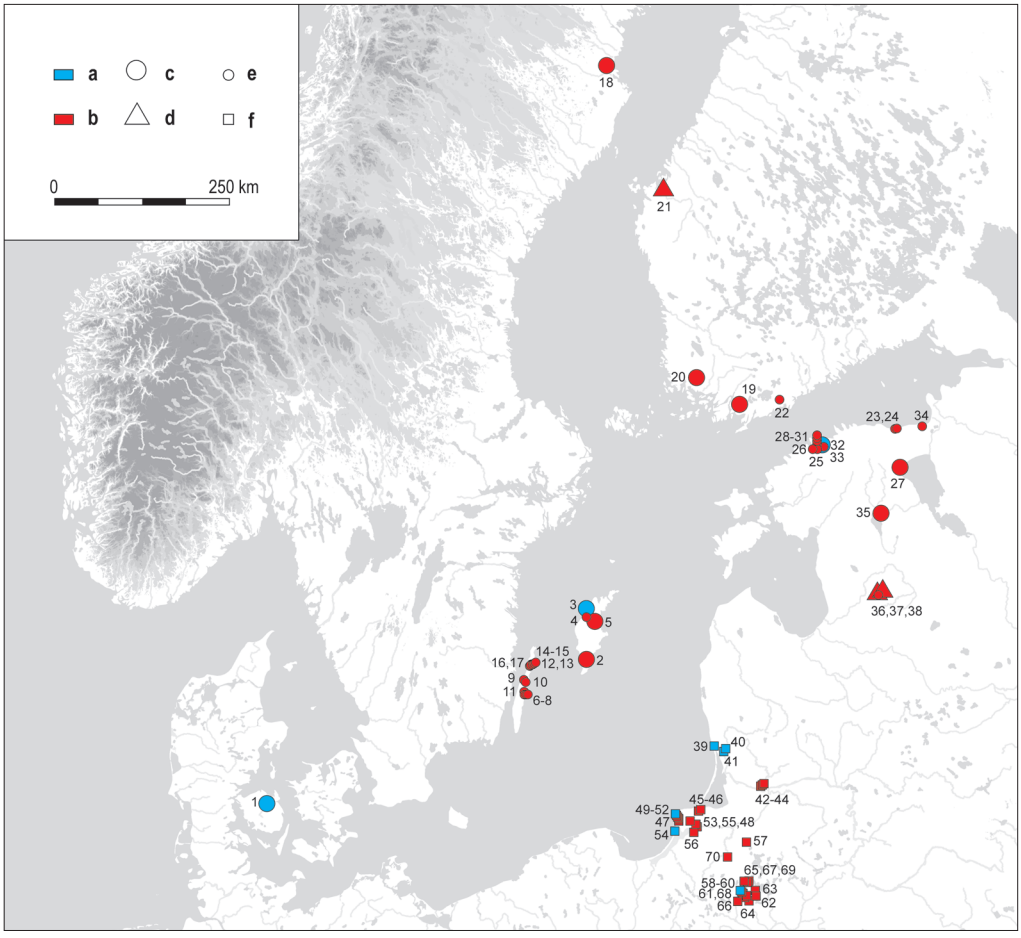


Fig. 32. Distribution of silver (a) and bronze (b) bracelets and necklaces of type Hildebrand C and type Hackman D (c), bracelets and necklaces of type Hackman C/D (d), and of finger rings of type B.40 (e) and their derivates (f).

Ryc. 32. Rozprzestrzenienie srebrnych (a) i brązowych (b) bransolet i naszyjników typów Hildebrand C i Hackman D (c), bransolet i naszyjników typu Hackman C/D (d) oraz pierścieni typu B.40 (e) i ich pochodnych (f).

Funen/Fionia: 1 – Odense, Seden Syd (M.B. Henriksen 2000, 32);
Gotland/Gotlandia: 2 – Uddvide (Barshaldershed) (K. Äijä 1979); 3 – Burge (O. Almgren, B. Nerman 1923, 74); 4 – Knuts, grave/grób 9 (O. Almgren, B. Nerman 1923, 94); 5 – Vallstenarum, grave/grób 8 (G. Gustafson 1905, 18–20; O. Almgren, B. Nerman 1923, 98–99); Öland/Olandia: 6 – Folkeslunda 51, grave/grób 10 (K. Lundh, M. Rasch 1991, 300); 7 – Folkeslunda 51, grave/grób 20 (K. Lundh, M. Rasch 1991, 303); 8 – Folkeslunda 14, grave/grób 2 (M. Lundh, K. Rasch 1991, 331–333); 9 – Övra Vannborga (W. Schulze 1987, 132–133); 10 – Kalleguta ås, grave/grób 1 (W. Schulze 1987, 120); 11 – Tjetthög, Runsberga, grave/grób 180 (M. Beskow Sjöberg 1987, 379); 12 – Röråsen, grave/grób 12 (K. Holgersson, H. Schulze 2001, 116–117); 13 – Röråsen, grave/grób 23 (K. Holgersson, H. Schulze 2001, 119); 14 – Nyby, grave/grób 14 (K. Holgersson, H. Schulze 2001, 125); 15 – Nyby, grave/grób 15 (K. Holgersson, H. Schulze 2001, 126); 16 – Vi alvar, grave/grób 89 (K. Holgersson, H. Schulze 2001, 129); 17 – Vi alvar, grave/grób 127 (K. Holgersson, H. Schulze 2001, 130); Mainland Sweden/Szwecja kontynentalna: 18 – Storkåge, Västerbotten (E. Hjärne 1917a, 147);
Finland/Finlandia: 19 – Lupaja (A. Hackman 1905, 30–31, fig. 24–26); 20 – Palokylä (A. Hackman 1905, 42); 21 – Perkiö, grave/grób 151 (A. Hackman 1905, 83); 22 – Ekeberga (D. Quast 2004, 257);
Estonia/Estonia (after/wg D. Quast 2004, 257): 23, 24 – Jäbara, graves/groby E, C; 25 – Lagedi; 26 – Mõigu-Peetri; 27 – Piilsi, Ida-Viruma; 28–31 – Proosa; 32, 33 – Saha, grave/grób D; 34 – Türsamäe; 35 – Verevi-Sandimärdi;
Latvia/Łotwa: 36 – Rauna (E. Hjärne 1917b, 209); 37 – Rauna (D. Quast 2004, 254); 38 – Rauna (D. Quast 2004, 254);
Lithuania/Litwa (after/wg R. Banytė-Rowell 2007, 18; 2013, 170): 39 – Bandužiai, grave/grób 74; 40 – Baitai, grave/grób 31; 41 – Šernai, grave/grób 67; 42–44 – Lumpėnai, graves/groby 2, 9, 14;
Russia/Rosja (after/wg R. Banytė-Rowell 2007, 18; 2013, 170; 2015): 45, 46 – Bezymânka, graves/groby 31, 41; 47 – Putilovo, grave/grób 267; 48 – fmr./dawn. *Rosenau*; 49–52 – Okunevo, graves/groby 16, 28, 85, 180; 53 – fmr./dawn. *Greibau*, grave/grób 180a; 54 – Lëtnoe, grave/grób 156; 55 – Bolšoe Isakovo, grave/grób 44; 56 – Šossejnoe; 57 – Zarečenskoe;
Poland/Polska (after/wg R. Banytė-Rowell 2007, 18; 2013, 170): 58–60 – Machary, graves/groby 15, 148, 223; 61 – Babięta; 62 – Wólka; 63 – Gąsior, grave/grób 109; 64 – Spychówko, grave/grób 126; 65 – Kosewo; 66 – Miętkie, grave/grób 307; 67 – Jakubowo, grave/grób 24; 68 – Dłużec, grave/grób 36 or/lub 96; 69 – Nikutowo, grave/grób 95; 70 – Smolanka, grave/grób 43.

of the latter category was based on analogies from Öland, some of which, as shown in Fig. 35, can be dated broader than to the Migration Period alone. This means that in the case of B.40 rings from Estonia as well, one should consider timeframes spanning from phase C1b until the Migration Period. Comparing the two groups of rings, from Öland and from Estonia, it is difficult to determine on the basis of their simple form and decoration alone whether the latter are imports from Swedish islands or local imitations of rings from that area, as assumed by Quast[43].

The phylogenetic analysis of gold rings classed as Hildebrand type C and finger rings of the B.40 type presented above makes it possible to better place some of the silver and bronze specimens within the frameworks of the relative chronology. This applies to fragments of neck-rings/bracelets from grave D in Saha and from the grave from Verevi-Sandimärdi in Estonia[44] (Fig. 33:27.28). Both these objects are decorated along the ridge with a band of impressions made using a stamp of type 50, in the case of the Saha artefact additionally accompanied by a stamp of type 36 (cf. Fig. 4). The former type of decoration appears in subgroups 2J–2M, while the latter is known from a bracelet from Cottbus belonging to subgroup 2K. As

[43] D. Quast 2005, 256–257.

[44] For references to particular silver and bronze finds see the caption under Fig. 32.

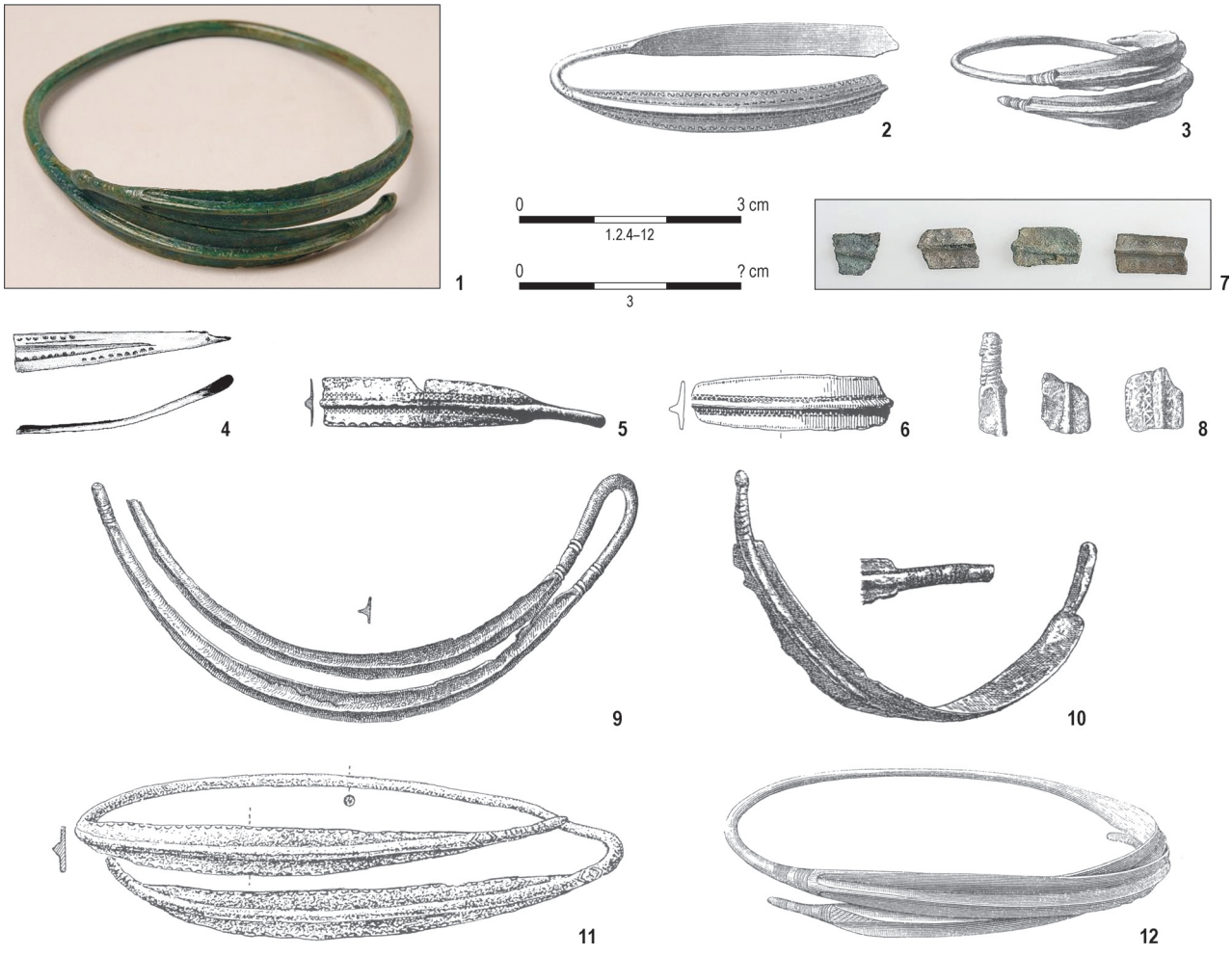


Fig. 33. Bracelets and necklaces of type Hildebrand C and type Hackman D made of silver and bronze: 1 – Uddvide, Barshaldershed (Gotland); 2 – Burge (Gotland); 3 – Storkåge, Västerbotten (Hälsingland); 4 – Odense, Seden Syd (Funen); 5 – Saha, grave/gród D (Estonia); 6 – Verevi-Sandimärdi (Estonia); 7 – Vallstenarum, grave/gród 8 (Gotland); 8 – Lupaja (Finland); 9 – Perkiö, grave/gród 151 (Finland); 10 – Palokylä (Finland); 11, 12 – Rauna (Latvia). Photo: SHM (1, 7). After: O. Almgren & B. Nerman 1923 (2), E. Hjärne 1917a (3), M.B. Henriksen 2000 (4), D. Quast 2004 (5, 6, 11, 12), A. Hackman 1905 (8–10).

Ryc. 33. Srebrne i brązowe bransolety i naszyjniki typów Hildebrand C i Hackman D: 1 – Uddvide, Barshaldershed (Gotlandia); 2 – Burge (Gotlandia); 3 – Storkåge, Västerbotten (Hälsingland); 4 – Odense, Seden Syd (Fionia); 5 – Saha, grave/gród D (Estonia); 6 – Verevi-Sandimärdi (Estonia); 7 – Vallstenarum, grave/gród 8 (Gotlandia); 8 – Bjerno-Lupaja (Finlandia); 9 – Perkiö, grave/gród 151 (Finlandia); 10 – Palokylä (Finland); 11, 12 – Rauna (Łotwa). Fot.: SHM (1, 7). Wg: O. Almgren i B. Nerman 1923 (2), E. Hjärne 1917a (3), M.B. Henriksen 2000 (4), D. Quast 2004 (5, 6, 11, 12), A. Hackman 1905 (8–10).

mentioned, subgroups 2J, 2M, and 2K can be dated to phase C2, while subgroup 2L links with phases C2–C3b (cf. Fig. 5, 7). The mentioned finds from Estonia should probably also be placed within phases C2–C3b. Similar ornamental traits are also revealed by bronze rings from grave 8 from Vallstenarum, Gotland, from Lupaja (Finland) (grave of *tarand* type), and from Storkåge (Västerbotten) in Hälsingland (Sweden), which allows them to be dated similarly (Fig. 33:25.29). As regards the first of these three inventories, its chronology can be narrowed down to phase C2, as it also contained a *Baltischen Dreisprossenfibel* brooch of Hauptmann's series 6 (cf. Fig. 35)[45].

The specimen originating from the grave in Uddvide, Gotland (Fig. 33:31), in which no other artefacts were found, can be dated to phases C2–C3b based on the following: the shape of the knob (acorn-shaped), the length of the knob in relation to the conical terminal (type 3C), and the decoration featuring on the conical terminal (type 17C).

Other artefacts which in terms of proportions and decoration of terminals refer to subgroups 2K, 2L, and 2M are a bronze neck-ring from Palokylä (Finland), and neck-rings of types C/D from Perkiö, grave 151 (Finland) and Rauna (*Ronneburg*) (Estonia) (Fig. 33:30.32.33). These neck-rings should be placed in phase D, although the one from the barrow grave in Perkiö more likely belongs to the later stage within this phase or to early phase E (as indicated, among others, by a spade-footed brooch of type VII in Anna Bitner-Wróblewska's classification[46], a wrist-clasp of type B.1 according to John Hines[47], and a pyramid sword pommel).

A group of finger rings referring to types B.39 and B.40 is known from the complex of Baltic cultures as well (cf. Fig. 32, 34). These artefacts were studied by Rasa Banytė-Rowell[48]. Like the specimens from Öland, Gotland, and Estonia, these rings have two ribbons. What makes them different from their counterparts known from Sweden and Estonia is the fact that the finger rings are of 2.5 coil rather than 1.5, so that one coil of wire passes between the two ribbons. This trait occurs in gold finger rings of subgroups 3A, 3B, and 3C, which belong to phases C1b–C2, and in single finger rings from subgroups 1A and 2A, datable to phase C1b (Norra Näsby, Öland and Gunnerupgård, Præstø amt, grave 1). It is also represented among bracelets of group 1 and rings from subgroups 2D, 2E, 2F, and 2L. Based on the analysis of grave assemblages, Rasa Banytė-Rowell dates the mentioned Baltic finger rings referring to types B.39 and B.40 to phases C1–C3, with the main focus on phases C1b–C2[49].

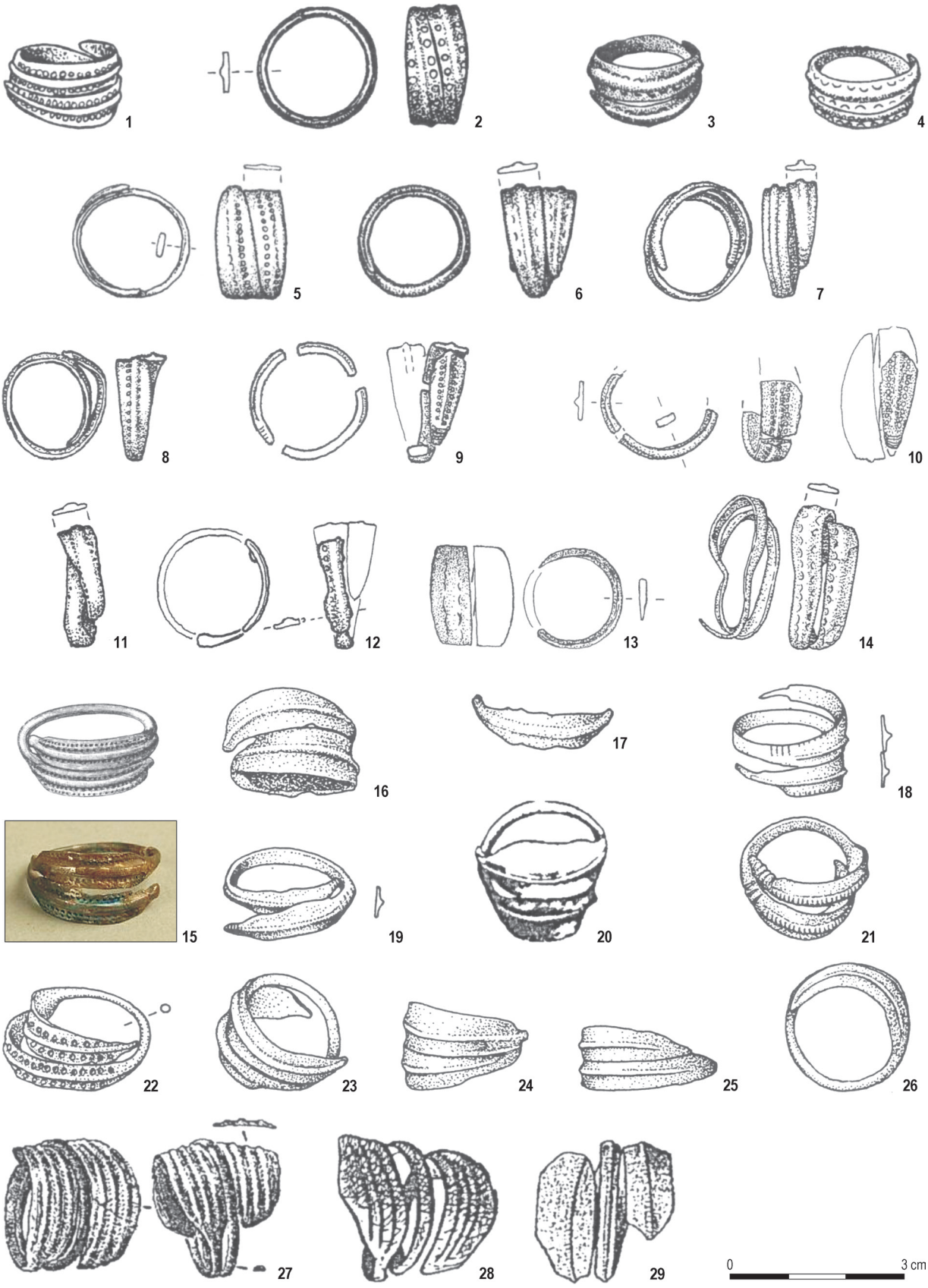
3.6. Social context of rings from groups 1, 2, and 3, and the question of local or foreign provenance of certain specimens

As mentioned earlier in the text, gold snake rings occur in various archaeological contexts, being elements of grave assemblages, deposits buried in dry environments, and bog deposits. Many of them, however, are stray finds (cf. Chapter 2, Fig. 3). From the perspective of the analysis of social context, finds from grave assemblages are the most informative, although they account for only 39% of the analysed rings. They are known primarily from the western range of distribution of snake rings, with the relevant data available primarily for Norway, Jutland, and

[45] G. Gustafson 1905, 18; cf. T. Hauptmann 1998.
[46] A. Bitner-Wróblewska 2001.
[47] J. Hines 1993.
[48] R. Banytė-Rowell 2007; 2013; 2015.
[49] R. Banytė-Rowell 2013, 172.

Fig. 34. Finger rings of type B.40 and their derivates made of bronze: 1 – Folkeslunda 51, grave 10 (Öland); 2 – Folkeslunda 51, grave 20 (Öland); 3 – Folkeslunda 14, grave 2 (Öland); 4 – Tjetthög, Runsberga, grave 180 (Öland); 5 – Övra Vannborga (Öland); 6 – Kalleguta ås, grave 1 (Öland); 7 – Nyby, grave 14 (Öland); 8 – Nyby, grave 15 (Öland); 9, 10 – Röråsen, grave 12 (Öland); 11, 12 – Röråsen, grave 23 (Öland); 13 – Vi alvar, grave 127 (Öland); 14 – Vi alvar, grave 89 (Öland); 15 – Knuts, grave 9 (Gotland); 16 – Ekeberga (Finland); 17 – Jäbara, grave E (Estonia); 18 – Jäbara, grave C (Estonia); 19 – Mõigu-Peetri (Estonia); 20–23 – Proosa (Estonia); 24 – Türsamäe (Estonia); 25 – Saha, grave D (Estonia); 26 – Lagedi (Estonia); 27 – Baitai, grave 31 (Lithuania); 28 – Bandužiai (Lithuania); 29 – Babięta (north-east Poland). Photo: SHM (15). After: K. Lundh & M. Rasch 1991 (1–3), M. Beskow Sjöberg 1987 (4), H. Schulze 1987 (5, 6), K. Holgersson & H. Schulze 2001 (7–14), O. Almgren & B. Nerman 1923 (15), D. Quast 2004 (16–27), R. Banytė-Rowell 2007 (28, 29).

Ryc. 34. Brązowe pierścienie typu B.40 i ich pochodne: 1 – Folkeslunda 51, grób 10 (Olandia); 2 – Folkeslunda 51, grób 20 (Olandia); 3 – Folkeslunda 14, grób 2 (Olandia); 4 – Tjetthög, Runsberga, grób 180 (Olandia); 5 – Övra Vannborga (Olandia); 6 – Kalleguta ås, grób 1 (Olandia); 7 – Nyby, grób 14 (Olandia); 8 – Nyby, grób 15 (Olandia); 9, 10 – Röråsen, grób 12 (Olandia); 11, 12 – Röråsen, grób 23 (Olandia); 13 – Vi alvar, grób 127 (Olandia); 14 – Vi alvar, grób 89 (Olandia); 15 – Knuts, grób 9 (Gotlandia); 16 – Ekeberga (Finlandia); 17 – Jäbara, grób E (Estonia); 18 – Jäbara, grób C (Estonia); 19 – Mõigu-Peetri (Estonia); 20–23 – Proosa (Estonia); 24 – Türsamäe (Estonia); 25 – Saha, grób D (Estonia); 26 – Lagedi (Estonia); 27 – Baitai, grób 31 (Litwa); 28 – Bandužiai (Litwa); 29 – Babięta (płn.-wsch. Polska). Fot.: SHM (15). Wg: K. Lundh i M. Rasch 1991 (1–3), M. Beskow Sjöberg 1987 (4), H. Schulze 1987 (5, 6), K. Holgersson i H. Schulze 2001 (7–14), O. Almgren i B. Nerman 1923 (15), D. Quast 2004 (16–27), R. Banytė-Rowell 2007 (28, 29).


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
0
3 cm

Zealand, and with single finds known from Bornholm, Öland, Västmanland and Uppland, south-western Finland, Central Germany, Lower Saxony, the lower Vistula basin, and the Podlasie region (cf. Fig. 5).

3.6.1. Zealand

The largest number of grave assemblages with gold snake rings is known from Zealand (Fig. 36, 37:A). Nothing is known about their deposition there in other contexts. Their occurrence in graves creates an impression that these artefacts were perceived as valuable and desirable markers of attribution to a certain elite circle, considerably narrower than just the group of people who could afford a gold finger ring (for example, finger rings B.30, which were simple coils of gold wire[50]). On the other hand, it is worth emphasising that among 16 grave assemblages known from this island only four contained large rings like bracelets or neck-rings, while the remaining snake ornaments were finger rings. Both large and small specimens occur in male and female burials alike (Fig. 36), although the large ones prevail in male graves (three cases). Male graves with large rings belong to phases C1b (Valløby), C2 (Himlingøje, grave 3/1977) and C3b (Varpelev, grave A). The one female grave – Himlingøje, grave 2/1949 – belongs to phase C2a[51]. As it has been mentioned many times in the literature, all these burials come from the Stevns Peninsula in eastern Zealand[52].

Using the grading scale of grave inventory wealth developed for Late Roman Period grave assemblages from Zealand based on the scarcity index[53], one can demonstrate that the male burials from Valløby and Varpelev (grave A) and the female burial 2/1949 from Himlingøje represent the highest classes of grave inventory wealth (classes 1–2) (Fig. 37:A). Grave 3/1977 from Himlingøje ranks slightly lower, within class 6.

In the context of larger, better investigated cemeteries which can be quite reliably interpreted as family necropolises, burials with gold snake rings – be they large rings or finger rings – place among the richest-furnished graves in a given necropolis (Fig. 38:A–C.E.F). They can therefore be assumed to have been markers of individuals enjoying the highest status in the population using the cemetery. Finger rings do not occur in graves of adults only. As evidenced by the burial of a boy aged *infans* II/*iuvenis* from Brøndsager (Zealand), grave 2000, they could have been worn by adolescents whose status was probably guaranteed by the status of their family.

In the context of wealth differentiation among grave inventories, interesting observations can be made with respect to local/foreign provenance of particular ornaments. Nearly all the large rings known from Zealand, and single finger rings as well, seem to be of foreign provenance. This applies to the group 1 bracelet from the male burial from Valløby, analogies for which can be found in the western part of the central Baltic area (cf. Fig. 13:6, 28), and to two ornaments of group 2: the bracelet from male burial 3/1977 from Himlingøje and the neck-ring from male burial A from Varpelev, which also find analogies in that region (cf. Fig. 18:1, 29). Apart from these rings, analogies in that region can be demonstrated for the finger ring of subgroup 2F originating from male burial 1/1984 from Himlingøje, dated to phases C1b–C2a (Fig. 14:5). This grave, like grave 3/1977 from the same cemetery, belongs to class 6 of grave inventory wealth. Also worthy of note is the discovery of two other artefacts in this grave. The first one is a gold Kolben bracelet – an ornament often regarded in the literature as an insignia of the highest rank[54]. The other is a silver decorative brooch of the Almgren 209 type – an ornament of foreign provenance (known from territories between the Rhine, Maine, and lower Elbe, and from Schleswig-Holstein[55]), which additionally emphasises the inter-regional connections of this grave assemblage. In terms of wealth differentiation among graves in the Himlingøje cemetery, burial 1/1984 ranks second, after female grave 2/1949 and virtually on par with the inventory of male grave 3/1977. These three assemblages are followed by that of female grave 1/1878 (Fig. 38), dated to phase C2 (probably C2b), which contains, among other objects, a finger ring of subgroup 3M (type B.18). This ornament is foreign to Zealand as well, being characteristic of Jutland and western Norway (cf. Fig. 25:9, 31).

Discussing the question of local/foreign provenance of the ornaments analysed here, the abovementioned female grave 2/1949 from Himlingøje[56] is worthy of particular note, as it is the richest Late Roman Period grave inventory in Zealand, and naturally the richest burial in the cemetery as well. The pair of gold bracelets from this grave are the only two large rings in group 3. This group comprises primarily finger rings previously described in the literature as type B.39 characteristic of Zealand, finger rings B.18 characteristic of Jutland and western Norway, and finger rings being transitional forms between these

[50] L. Holten 1989, 39–103.

[51] For references to particular burials see Fig. 5.

[52] U. Lund Hansen *et alii* 1995, 206–207, 374–382; U. Lund Hansen 1998, 348–357; 2001, 163–165; P. Ethelberg *et alii* 2000, 68–72, 150–156.

[53] Cf. M.J. Przybyła 2012; 2015.

[54] Cf. J. Werner 1980; L. Hedeager 1990, 130; 1992, 87–179; U. Lund Hansen *et alii* 1995, 203–212, 374–384; U. Lund Hansen 2001; P. Ethelberg *et alii* 2000, 145–169; B. Storgaard 2001, 96; 2003, 114, 116.

[55] M.J. Przybyła 2018a, 48–51, 193, fig. 29A.B.

[56] U. Lund Hansen *et alii* 1995, 105–106, 152–158, fig. 3:48–3:51, 4:25–4:32, pl. 21–25.

Site	Ring function	Inventory	Material	Context	Dating	Literature
Knuts, Gotland, grave 9	finger ring	3× bronze brooch P.178a	bronze	grave, F	C1b1	O. Almgren & B. Nerman 1923, 94–95, pl. 23:366
Övra Vannborga, Öland	finger ring	2× iron spur like JG F1–F3; spear head I 15; 2× bronze ring; 26 rivets and one bronze fitting	bronze	grave, M	C1b	H. Schulze 1987, 132–133
Vallstenarum, Gotland, grave 8	neck & arm ring	ladder brooch, series 6 acc. to Th. Hauptmann (1998)	bronze	grave	C2	O. Almgren & B. Nerman 1923, 98–99
Uddvide (Barshaldershed), Gotland	neck ring	–	bronze	grave	C2–C3b (dated by stylistic features)	K. Äijä 1979, 108–109
Storkåge, Västerbotten	neck ring	–	bronze	–	C2–C3b (dated by stylistic features)	E. Hjärne 1917a, 147, fig. 1:c
Röråsen, Öland, grave 23	finger ring (2×)	2× pin B.137; fragments of disc brooch Thomas D, var. *Dybäck*; fragments of three-layer antler comb	bronze	grave	C3	K. Holgersson & H. Schulze 2001, 119
Folkeslunda, Öland, grave 10	finger ring	brooch N.62–63; 2× finger ring; fragments of glass vessel; small bronze pin; fragments of two clay vessels	bronze	grave	D1	K. Lundh & M. Rasch 1991, 300
Röråsen, Öland, grave 12	finger ring (2×)	brooch N.59–61; fragments of bronze fittings; antler comb N.219; three-layer antler comb N.223–224; fragments of clay vessel	bronze	grave	D1	K. Holgersson & H. Schulze 2001, 116–117
Folkeslunda, Öland, grave 20	finger ring	brooch type *Skowarcz* acc. to A. Bitner-Wróblewska (2001); pin B.137; needle; fragments of three-layer antler comb; fragments of bronze ring; clay pot; fragments of clay vessel	bronze	grave	D	K. Lundh & M. Rasch 1991, 303
Folkeslunda 14, Öland, grave 2	finger ring	clay cup with stamped ornamentation; small profiled pin with polyhedral head	bronze	grave	D	K. Lundh & Rasch 1991, 331–332
Nyby, Öland, grave 15	finger ring	fragments of antler comb N.219; brooch fragments N.55–61	bronze	grave	D	K. Holgersson & H. Schulze 2001, 126
Tjetthög, Runsberga, Öland, grave 180	finger ring	fragments of brooch spring; amber bead; fragments of three-layer comb; fragments of clay vessels	bronze	grave	C–D	M. Beskow Sjöberg 1987, 379
Vi alvar, Öland, grave 127	finger ring	2 fragments of bronze ring; fragments of clay cup with stamped decoration	bronze	grave	C–D	K. Holgersson & H. Schulze 2001, 130
Nyby, Öland, grave 14	finger ring	fragment of clay vessel(s)	bronze	grave	C–D	K. Holgersson & H. Schulze 2001, 125
Vi alvar, Öland, grave 89	finger ring	fragments of clay vessel	bronze	grave	C–D	K. Holgersson & H. Schulze 2001, 129
Kalleguta ås, Öland, grave 1	finger ring	clay vessel	bronze	grave	C–D	H. Schulze 1987, 120
Odense, Seden Syd, Funen	neck ring	–	silver	settlement	C–D	M.B. Henriksen 2000, 32–33, fig. 11:a
Burge, Gotland	neck ring	–	silver	stray find	–	O. Almgren & B. Nerman 1923, 74, pl. 24:371

Fig. 35. Chronology of rings of type B.40 and type Hildebrand C from Gotland and Öland.
Ryc. 35. Chronologia obręczy typów B.40 i Hildebrand C z Gotlandii and Olandii.

Site	Type	Weight (g)	Diam. (cm)	Context	Sex	Age	Wear traces	Dating
Hångsdala, Västergötland	39c	27.85	2.6	–	–	–	yes	–
Kalby, Zealand	39c	23.7	2.6	–	–	–	yes	–
Klæstrup (bog), Jutland	39c	35.4	2.5	–	–	–	yes	–
Ørum (*skole*), Jutland	39c	32.2	2.5	–	–	–	yes	–
Marienborg, Zealand	39c	30.2	2.5	–	–	–	yes	–
Lydinge, Funen	39c	19.45	2.5	–	–	–	no	–
Skibbinge, Zealand	39b	19	2.5	–	–	–	no	C2
Himlingøje, Zealand, grave from 1828	39b	37.88	2.4–2.8	–	–	–	yes	–
Baunegård, Bornholm, grave 11	39c	24.6	2.4	grave	M	–	yes	C2
Kongsted, Zealand	39c	23.7	2.4	–	–	–	no	–
Stenlille, Zealand	39b	18.2	2.4	grave	–	–	no	C2a
Pedersker (Smålyngen), Bornholm	39c	33	ca. 2.4	–	–	–	yes	–
Efteløt (*kyrkan*), Buskerud	39c	40.37	2.3	grave	M	–	yes	C2
Häljom, Madelpad	39c	36.34	2.3	–	–	–	no	–
Værløse (*kirke*), Zealand	39c	36	2.3	–	–	–	yes	–
Ekeryd, Småland	39c	34.96	2.3	–	–	–	yes	–
Rønnovsholm (bog), Jutland	39c	30.4	2.3	–	–	–	no	–
Havnelev, Zealand	39b	24.64	2.3	–	–	–	no	–
Ravnkilde (*Præstegardsmark*), Jutland	39a	18.56	2.3	grave	–	–	no	C2
Himlingøje, Zealand, grave 1/1949	39b	19.8	2.2–2.6	grave	M?	–	no	C2a
Greve, Zealand	39c	37.9	2.1	grave	M	*adultus*	yes	C2
Herslev, Zealand	39c	16,6	2.1	–	–	–	yes	–
Vedskølle (*Hundehavemarken*), Zealand	39a	12.8	2.1	–	–	–	no	–
Himlingøje, Zealand, grave 2/1949	39a	12.4	2	grave	F	*maturus*	no	C2a
Ramsgården, Västergötland	39c	28.1	2	grave	–	–	no	–
Kolstø, Rogaland	39c	42.89	2	–	–	–	yes	
Himlingøje, Zealand, grave 1/1978	39c	26.2	2	grave	M	*adultus*	yes	C2
Nordrup, Zealand, grave A	39a	12.4	2	grave	M	–	no	C1b
Magleby, Møn	39a	12.4	2	–	–	–	no	–
Bækkegård, Bornholm	39c	27.86	1.9	deposit (?)	–	–	yes	C3
Tuna, Västmanland	39a	13	1,9	grave	F?	–	no	C2
Skovgårde, Zealand, grave 400	39b	17.26	1.9	grave	F	*adultus*	no	C2
Himlingøje, Zealand, grave 2/1949	39b	11.9	1.8	grave	F	*maturus*	no	C2a
Varpelev, Zealand, grave α	39c	14.7	1.8	grave	F	–	no	C3a
Naustdal, Sogn og Fjordane	39a	16.77	1.7	–	–	–	no	–

Fig. 36. Finger rings of type B.39: weight, diameter and use-wear traces.
Ryc. 36. Pierścienie typu B.39: waga, średnica i ślady użytkowe.

Site	Type	Weight (g)	Diam. (cm)	Context	Sex	Age	Wear traces	Dating
Skibbinge, Zealand	39c	13.5	1.7	grave	F	–	yes	C2
Brøndsager, Zealand, grave 2000	39c	16	1.62	grave	–	*infans* II/ *iuvenis*	no	C2
Skovgårde, Zealand, grave 209	39a	10.9	1.61	grave	F	*adultus*	no	C2
Alingsås, Västergötland	39c	52	–	–	–	–	–	–
Nes, Hordaland	39a	4.5 (fragm.)	–	grave	F	–	no	C1b–C2
Thorsberg bog, Schleswig-Holstein	39b	–	–	bog deposit	–	–	no	–
Helmsdorf, Sachsen-Anhalt	39b	–	–	–	–	–	no	–

Fig. 36. Finger rings of type B.39: weight, diameter and use-wear traces.
Ryc. 36. Pierścienie typu B.39: waga, średnica i ślady użytkowe.

two types, known from Norway and (only one artefact) Zealand. The two bracelets from grave 2/1949 have triangular, V-shaped, gently profiled heads (type 13B), which are characteristic of finger rings classed within subgroups 3A and 3B. Most of the confidently dated specimens from these subgroups originate from phase C2a, with single examples dated to phases C1b and C2b. It is worth noting that the two bracelets from grave 2/1949, found in an assemblage dated to phase C2a, are not the earliest examples of such rings. What is particularly interesting here is that the shape of the head and other decorative elements known from rings of subgroups 3A and 3B also find analogies in some of the large rings representing group 2, which means again among ornaments characteristic of the western part of the central Baltic area.[57] These analogies include two gold bracelets from the deposit at Tuna, Uppland[58], a stray find of a gold bracelet from Vestringe, Gotland[59], and a fragment of a gold ring from the deposit from Gute, Gotland[60](Fig. 14:9–11, 40). The Vestringe bracelet can be stylistically dated within phases C2–C3 (cf. Chapter 3.2.2), and the same chronology can probably be applied to the specimen from Gute, whose stamped ornamentation makes it very similar to that from Vestringe. The dating of the Tuna bracelets is problematic, as they lacked any context of other, confidently datable artefacts. Nevertheless, the style of manufacture of their conical terminals suggests placing them within phases C1b–C2. The examples from Sweden presented above belong to group 2 bracelets with marked zoomorphic traits (subgroups 2D–2F). They continue traditions of rings from subgroup 1C, in which the heads are triangular, known from Öland and south-western Finland. Therefore, it seems that even this "typically Zealandic" symbol of status can actually have roots in ring ornaments from the central part of the Baltic Sea basin.

3.6.2. Jutland

Gold snake rings appear in the context of single Late Roman Period sepulchral finds in Jutland as well. One can mention five such burials, unfortunately none of them with fully complete inventory. This is due to either the accidental nature of discovery or, in one case, the cremation burial rite. All four inhumation burials belong to accidental discoveries: grave 60 from Donbæk[61], grave 1 from Hasseris[62], grave from Ravnkilde (*Præstegårdsmark*)[63], and the grave from Fredsø[64]. The grave from Oxvang is a cremation burial, and it was discovered accidentally as well. In this situation, inventory wealth values calculated for these burials must be regarded as minimal values (Fig. 37:B). The grave from Donbæk, which included a gold bracelet of subgroup 2H, belongs in the highest, first class, while the female burial from Hasseris, with a finger ring of subgroup 3M, belongs in the fourth class. The male burial from Fredsø, in which a finger ring of subgroup 3M was found, and the grave from Ravnkilde with its 3B finger ring (probably also a male burial, as suggested by the diameters of finger rings) both fall in the ninth class on a scale from one to ten. The grave inventory from Oxvang places in the eighth class or at the boundary between the eighth and ninth classes, depending on whether we regard it as a male or female burial.

[57] Their similarity to rings known from eastern Sweden was also noted by K. Andersson (1991, 227), who analysed stamp impressions.
[58] H. Hildebrand 1891, 139, fig. 25, 26.
[59] O. Almgren, B. Nerman 1923, pl. 24:368.
[60] K. Andersson 1993a, 206, cat. 1117, fig. 85.
[61] C. Neergaard 1892, 306; S. Müller 1912, 92–93, fig. 9, 10; U. Lund Hansen 1987, 427.
[62] O. Marseen 1963, 35, fig. 3; J. Ringtved 1986, 146, 147, fig. 39; M.J. Przybyła 2018b, 694–695.
[63] U. Lund Hansen 1987, 428.
[64] M.B. Mackeprang 1943, 94, cat. 29; M.J. Przybyła 2018b, 693.

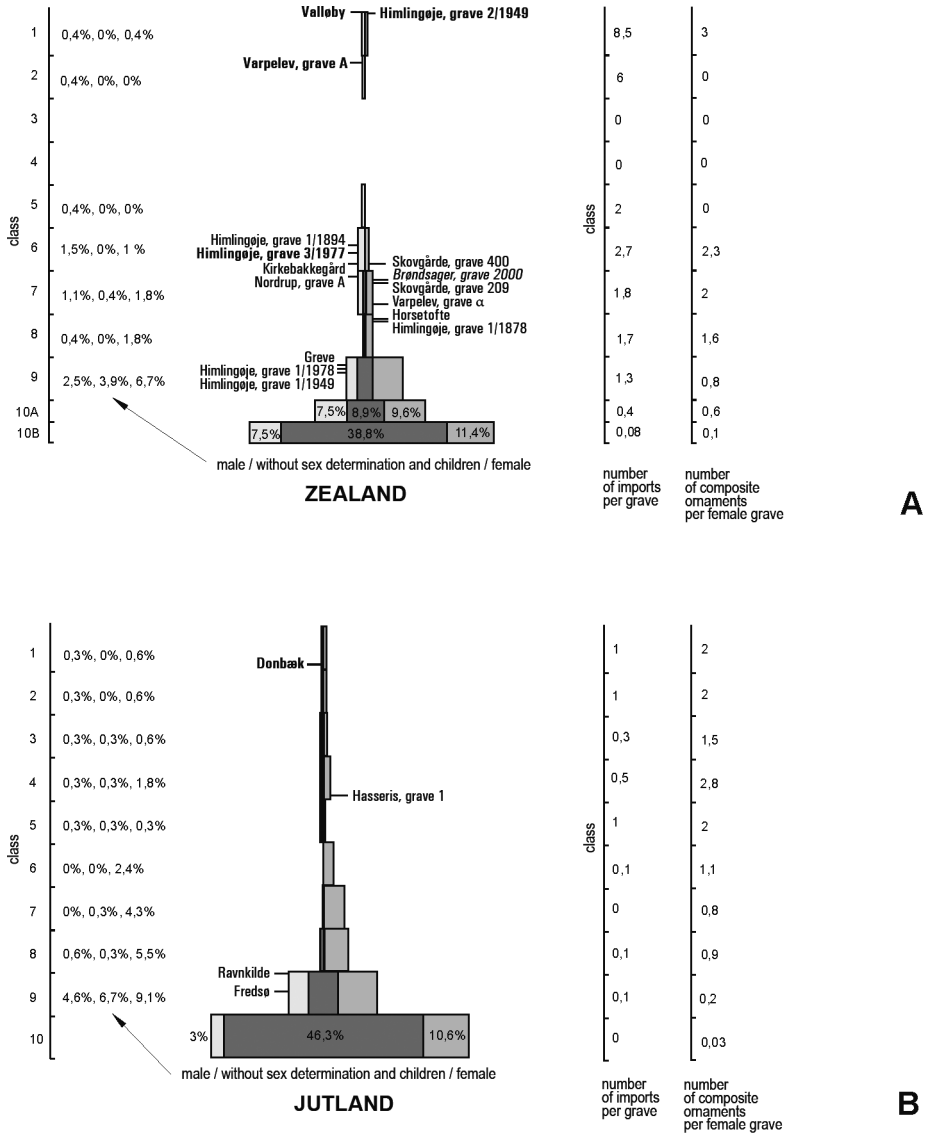


Fig. 37. Distribution of grave inventories with gold snake rings within wealth classes: A – Zealand; B – Jutland; C – Bornholm (A, B – ranking scale according to M.J. Przybyła 2011; 2012; 2015; C – ranking scale according to L. Jørgensen 1988). Bold – inventories containing large snake rings; italics – child burial.

Ryc. 37. Częstość występowania zespołów grobowych ze złotymi obręczami wężowatymi w obrębie klas zamożności: A – Zelandia; B – Jutlandia; C – Bornholm (A, B – skala bogactwa wg M.J. Przybyły 2011; 2012; 2015; C – skala bogactwa wg L. Jørgensena 1988). Pogrubienie – inwentarze z dużymi obręczami wężowatymi; kursywa – pochówek dziecka.

GRAVE	SEX	AGE	SCORE	CLASS	DATING
Himlingøje, grave 2/1949	F	*maturus*	151.2	1	C2a
Himlingøje, grave 1/1894	M	*adultus*	58.5	6	C1b-C2a
Himlingøje, grave 3/1977	M	*adultus*	55.6	6	C2
Himlingøje, grave 1/1878	F	–	42.7	8	C2 (C2b?)
Himlingøje, grave 1/1978	M	*adultus*	21	9	C2
Himlingøje, grave 1/1949	M	–	20.4	9	C2a
Himlingøje, grave 2/1978	–	*iuvenis*	11.7	10A	C2
Himlingøje, grave 3/1949	F	*adultus/ senilis*	0.8	10B	C
Himlingøje, grave 2/1878	–	–	0.8	10B	C
Himlingøje, grave 7/1828	–	–	0	10B	C

A

GRAVE	SEX	AGE	SCORE	CLASS	DATING
Nordrup, grave I	M	–	56	6	C2a
Nordrup, grave A	M	–	47.7	7	C1b
Nordrup, grave (1873)	F	*maturus*	17.5	9	C2 (C2a?)
Nordrup, grave H	–	–	17.3	9	C1b-C2a
Nordrup, grave D	F	–	8.1	10A	C
Nordrup, grave E	F	*adultus*	8.1	10A	C2a
Nordrup, grave G	–	–	6.2	10B	C1b-C2a
Nordrup, grave C	–	–	1.6	10B	C
Nordrup, grave B	–	–	0.8	10B	C
Nordrup, grave F	–	–	0	10B	C

B

GRAVE	SEX	AGE	SCORE	CLASS	DATING
Brøndsager, grave 2000	CH	*infans II/ iuvenis*	54.8	7	C2
Brøndsager, grave 900	M	*maturus*	20.4	9	C2
Brøndsager, grave 2769	CH	*infans I*	9.6	10A	C1b

C

GRAVE	SEX	AGE	SCORE	DATING
Baunegård, grave 11	M	–	163.5	C2
Baunegård, grave 8	–	–	36.2	C1b-C3
Baunegård, grave 12b	–	–	27.1	C2
Baunegård, grave 1	F	–	19.7	C1
Baunegård, grave 2	–	–	6.2	C1b-C3
Baunegård, grave 9	–	–	2.2	C1b-C3
Baunegård, grave 6	–	–	1.1	C1b-C3
Baunegård, grave 19	–	–	1.1	C1b-C3
Baunegård, grave 5	–	–	1.1	C1-D
Baunegård, grave 13	–	–	1.1	C1-D
Baunegård, grave 15	–	–	1.1	C1-D
Baunegård, grave 16	–	–	1.1	C1-D
Baunegård, grave 10	–	–	0	C1-D
Baunegård, grave 3	–	–	0	C1-D
Baunegård, grave 14	–	–	0	C1-D
Baunegård, grave 4	–	–	0	C1-D
Baunegård, grave 7	–	–	0	C1-D
Baunegård, grave 17	–	–	0	C1-D
Baunegård, grave 18	–	–	0	C1-D
Baunegård, grave 20	–	–	0	C1-D

D

GRAVE	SEX	AGE	SCORE	CLASS	DATING
Varpelev, grave A	M	*adultus/ maturus*	108.8	2	C3b
Varpelev, grave α	F	–	49.3	7	C3a
Varpelev, grave Z	F	–	5.3	10B	C1b2-C2
Varpelev, grave Y	–	–	2.7	10B	C
Varpelev, grave S	F	*maturus*	0.8	10B	C
Varpelev, grave V	–	–	0.8	10B	C
Varpelev, grave ζ	–	–	0.8	10B	C
Varpelev, grave E	M	*maturus*	0	10B	C
Varpelev, grave H	F	*maturus*	0	10B	C
Varpelev, grave N	M	*maturus*	0	10B	C
Varpelev, grave P	M	*maturus*	0	10B	C
Varpelev, grave R	M	*adultus*	0	10B	C
Varpelev, grave B	–	–	0	10B	C
Varpelev, grave C	–	–	0	10B	C
Varpelev, grave D	–	–	0	10B	C
Varpelev, grave F	–	–	0	10B	C
Varpelev, grave G	–	–	0	10B	C
Varpelev, grave I	–	–	0	10B	C
Varpelev, grave K	–	–	0	10B	C
Varpelev, grave L	–	–	0	10B	C
Varpelev, grave M	–	–	0	10B	C
Varpelev, grave O	–	–	0	10B	C
Varpelev, grave Q	–	–	0	10B	C
Varpelev, grave T	–	–	0	10B	C
Varpelev, grave U	–	–	0	10B	C
Varpelev, grave X	–	–	0	10B	C
Varpelev, grave U	–	–	0	10B	C
Varpelev, grave Ø	–	–	0	10B	C
Varpelev, grave β	–	–	0	10B	C
Varpelev, grave γ	–	–	0	10B	C
Varpelev, grave δ	–	–	0	10B	C
Varpelev, grave ε	–	–	0	10B	C
Varpelev, grave Æ	–	–	0	10B	C

E

GRAVE	SEX	AGE	SCORE	CLASS	DATING
Skovgårde, grave 400	F	*adultus*	64.8	6	C2a
Skovgårde, grave 209	F	*adultus*	54	7	C2a
Skovgårde, grave 8	F	*adultus*	27.5	9	C2a
Skovgårde, grave 7	F	*maturus*	20.1	9	C2
Skovgårde, grave 207	F	*iuvenis*	18.7	9	C1b2-C2a
Skovgårde, grave 208	F	*iuvenis*	17.5	9	C2a
Skovgårde, grave 1	CH	*infans I*	14.3	10A	C2
Skovgårde, grave 202	F	*iuvenis*	12.8	10A	C2
Skovgårde, grave 4	F	*maturus/ senilis*	12.8	10A	C1b2-C2
Skovgårde, grave 9	F	*maturus/ senilis*	12.8	10A	C2
Skovgårde, grave 3	CH	*infans II*	12	10A	C1b2-C2a
Skovgårde, grave 205	F	*adultus*	11.5	10A	C3
Skovgårde, grave 206	F	*senilis*	7.2	10B	C
Skovgårde, grave 201	F	*maturus*	4.5	10B	C2b-C3
Skovgårde, grave 204	F	*maturus/ senilis*	3.5	10B	C3
Skovgårde, grave 401	CH	*infans I*	3.1	10B	C2
Skovgårde, grave 203	CH	*infans I*	2.9	10B	C
Skovgårde, grave 5	M	*maturus/ senilis*	0	10B	C

F

Fig. 38. Ranking of grave inventories with gold snake rings at cemeteries from Zealand (A–C, E, F) and Bornholm (D) (ranking scale according to M.J. Przybyła 2011; 2012; 2015). Underline – inventories containing snake rings; bold – inventories containing large snake rings.

Ryc. 38. Zróżnicowanie bogactwa zespołów grobowych ze złotymi obręczami wężowatymi na cmentarzyskach z Zelandii (A–C, E, F) i Bornholmu (D) (skala bogactwa wg M.J. Przybyły 2011; 2012; 2015). Podkreślenie – zespoły z obręczami wężowatymi; pogrubienie – zespoły z dużymi obręczami wężowatymi.

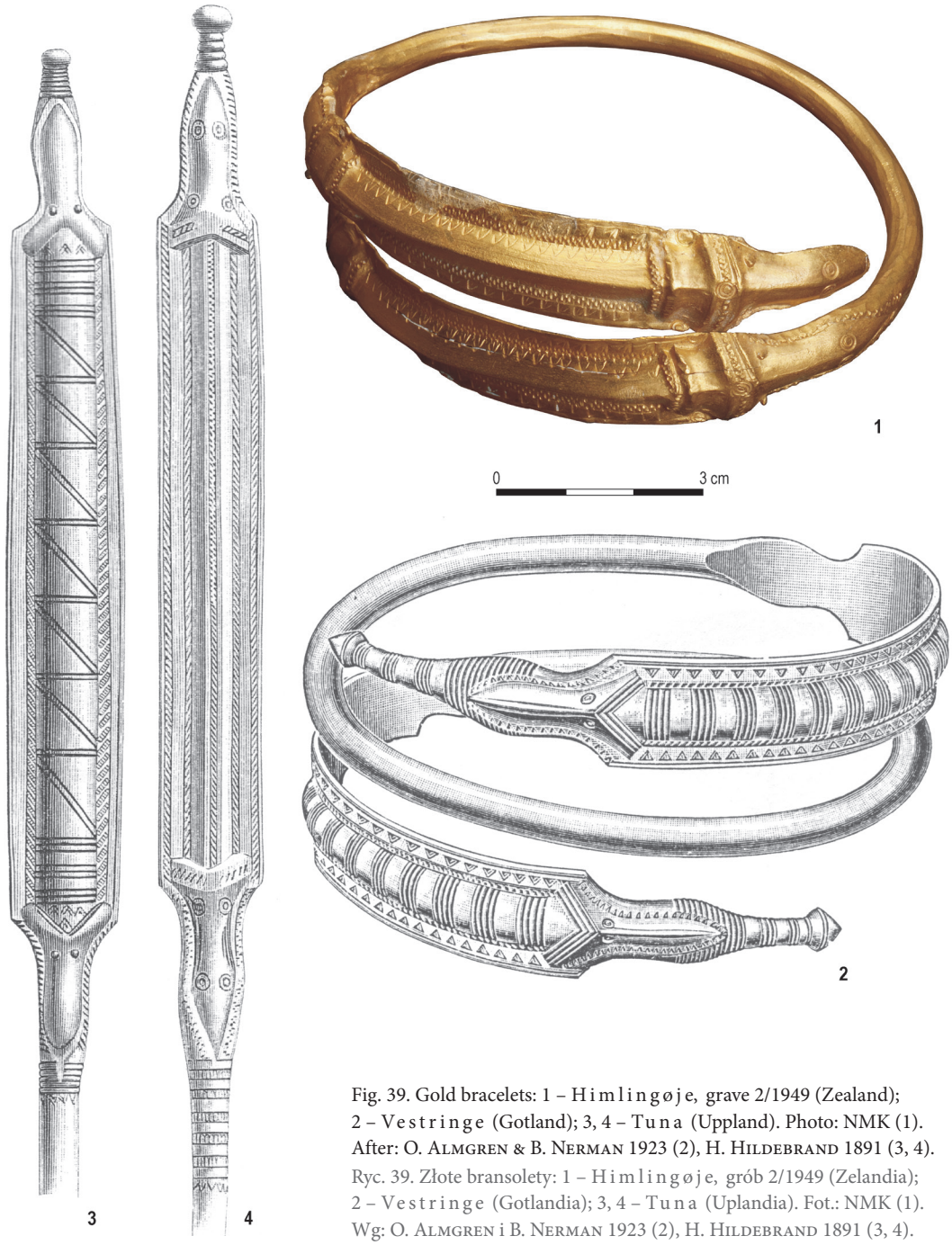


Fig. 39. Gold bracelets: 1 – Himlingøje, grave 2/1949 (Zealand); 2 – Vestringe (Gotland); 3, 4 – Tuna (Uppland). Photo: NMK (1). After: O. Almgren & B. Nerman 1923 (2), H. Hildebrand 1891 (3, 4).
Ryc. 39. Złote bransolety: 1 – Himlingøje, grób 2/1949 (Zelandia); 2 – Vestringe (Gotlandia); 3, 4 – Tuna (Uplandia). Fot.: NMK (1). Wg: O. Almgren i B. Nerman 1923 (2), H. Hildebrand 1891 (3, 4).

The finger ring of subgroup 3M discovered in this grave has a diameter of 2 cm. Rings of such diameters can be found in both male and female burials, which is why it is impossible to determine the sex of the owner based on the ornament's size. It is worth noting that despite belonging to the inventory of a cremation burial, the finger ring does not bear traces of exposure to fire. This means it was added to the inventory after the cremation. Such a treatment of a ring in the context of a cremation burial finds analogies in some cremation burials from Norway, discussed below. The discussed inhumation burials with snake rings from Jutland can be dated to phase C2, while the cremation burial from Oxvang places within broader frameworks of phases C1b–C2 (cf. Fig. 5).

As in Zealand, some of the rings found in Jutland can also be identified as artefacts of foreign provenance. This applies to the finger ring found in the grave from Ravnkilde (*Præstegårdsmark*) which, as noted in the literature[65], represents a form typical of Zealand. By the same token, three other rings of subgroups 3E and 3G found in

[65] U. Lund Hansen *et alii* 1995, 383.

northern Jutland should also be seen as associated with Zealand. The first one, discovered during extraction of sand in Ørum (*skole*) in northern Jutland (Prot. NM MCCCXCVII) may have originally belonged to a grave inventory. The remaining two, from bogs at Klæstrup and Rønnovsholm, both also in northern Jutland, were probably deposits in wet environments. The former was found in a bog, at a depth of approx. 0.6 m (Prot. NM C8779), and the latter was found in peat, approx. 0.3 m beneath the surface, by a large stone (Prot. NM C9162). Judging from their diameters, all three finger rings were most likely worn by males (cf. Fig. 36).

The bracelet recovered from grave 60 in Donbæk is also a foreign artefact. However, unlike as suggested in the literature[66], it should be connected with the western part of the central Baltic area rather than with Zealand (cf. Chapter 3.4). The same provenance should be considered with regard to two stray finds: a 2A finger ring from Hingeballe in central Jutland (Prot. NM 14000)[67], whose diameter (1.8 cm) suggests it was a female ornament, and a 2C finger ring from Liene Skov in northern Jutland (Prot. NM C85), with a diameter (2.5 cm) suggesting its association with male costume.

The only forms of local provenance in Jutland are probably the finger rings from grave inventories from Fredsø and Hasseris, grave 1, and another two finger rings of subgroup 3M (B.18): from Galtrupgård (northern Jutland; diam. 2.2 cm) and Stokkerhoved (southern Jutland; diam. 1.9 cm) (cf. Chapter 3.4).

3.6.3. Norway

Grave assemblages containing ring ornaments discussed in this study are known from some parts of Norway as well. In total, there are twelve such assemblages, among which five can be identified as female burials and four as male burials based on the artefacts they contained. The former group comprises the graves from Hove in Rogaland, Indbjoa in Hordaland, Nes in Hordaland, and Søndre Kjørstad in Oppland, while the latter are the graves from Avaldsnes in Rogaland, Efteløt (*kyrkan*) in Buskerud, and Lagmandsgaarden in Telemark (Fig. 40)[68]. Apart from the above, two other grave inventories can be mentioned here. The grave from Veien, Buskerud, contained two finger rings of group 2, of which one is well-preserved and has a diameter of 2 cm[69]. As for the standards recorded among finger rings of subgroups 3A–3K (cf. Fig. 36), such dimensions can occur in the context of both female and male burials. The second assemblage, originating from barrow 2 in Bringsvær, Aust-Agder, is probably a mixed inventory of at least two male burials[70], and the ring found there (diam. 2.2 cm) most likely originally belonged to one of them. The male burials and two of the female burials date to phase C2 (Fig. 40), one female burial belongs to phase C2b, and another two assemblages can only be dated within broader chronological frameworks of C1b–C2 (Fig. 40). Against other grave assemblages of that period known from Norway, these burials are richly furnished and have therefore been interpreted as burials of chieftains and their sword-bearing retinues[71].

As in the regions discussed above, in Norway as well not all the rings in question represent local forms. Finger rings of subgroup 3M (B.18), whose provenance can be linked with south-western Norway and northern Jutland, are represented in one very lavishly furnished male burial from Avaldsnes (together with a massive gold neck-ring with thickened ends) and in three female burials (Fig. 39). In each of these female burials a 3M finger ring was accompanied by another ring ornament, although representing another subgroup. In the inhumation grave from Søndre Kjørstad it is a finger ring of subgroup 3L; in the cremation burial from Indbjoa there are burned fragments of a group 2 bracelet[72]; and in the cremation burials from Hove there are burned fragments of a bracelet classed as subgroup 2M. In the last two cases these are forms typical of the western part of the central Baltic area, which means artefacts foreign to Norway. Moreover, these rings were deliberately cut in pieces and burned, i.e. intentionally damaged, which contrasts with the undamaged preservation of the finger rings found in these graves. The finger rings have relatively large diameters: 2.4 cm in Hove and around 2.2 cm in Indbjoa, characteristic of ornaments created for men (cf. Fig. 36). As noted by H. Reiersen, in both cases these were grave goods rather than elements of costume of the women buried there[73]. Thus, one cannot rule out that these rings of foreign provenance actually indicate that the females buried in these graves came from high-ranking families originating from somewhere within the western central Baltic, and their presence in Norway can be explained by exogamy[74]. Since marriages among elite families often sealed political alliances, the destruction of the rings after the death of the women who

[66] U. Lund Hansen *et alii* 1995, 383.

[67] This specimen was incorrectly classed as type 39a (K. Andersson 1993a, 105; U. Lund Hansen *et alii* 1995, 211).

[68] For references see K. Andersson 1993a (cf. Fig. 40).

[69] K. Andersson 1993a, 141, cat. 741; L. Gustafson 2004, 131, fig. 3:a.

[70] N. Nicolaysen 1875, 206–207; J. Bemmann, G. Hahne 1995, 522–523, cat. 189.

[71] F.-A. Stylegar 2011, 227–228; H. Reiersen 2017, 88–149; 2018; F.-A. Stylegar, H. Reiersen 2017, 551–638.

[72] H. Schetelig 1912, 60, fig. 137, 138; E. Straume 1998, 450, fig. 7A, 7B; H. Reiersen 2017, 97, 258, 262, fig. 5.1, 5.14, 7.22, 7.27; H. Reiersen 2018, 39–43, fig. 10, 13; F.-A. Stylegar, H. Reiersen 2017, 579–581, fig. 22.9.

[73] H. Reiersen 2018, 41–42.

[74] H. Reiersen 2018, 47–54.

Site	Group	Context	Weight (g)	Diameter (cm)	Wear traces	Inventory	Dating	Literature
Veien, Buskerud	2H	cremation grave	7.21	2	no	E37–43	C1b–C2	cat. 741
	2H		4.79	–	no, fragmentary			
Søndre Kjørstad, Oppland	3M	inhumation grave, F	8.77	1.8	no	finger ring B.17b; brooch P.IIA; brooch P.IIIB.3; pincers; finger ring resembling B.30; pin B.123; bronze needle case; 2× weaving batten; E106; E203/204; wooden bucket with appliques of type IIIa; clay bucket-shaped vessel; brooch M.IX, var. *Store Darum*	C2b	cat. 724
	3L		7.6	1.7	no			
Hove, Rogaland	3M	cremation grave, F	20.66	2.4	no	E58	C2	cat. 806
	2M		151.35	–	no, fragmentary			
Indbjoa, Hordaland	3M	cremation grave, F	14.94	2.2	no	silver brooch P.IIIA.2; bronze spindle whorl; silver spindle whorl; fragments of two clay vessels	C2	cat. 866a
	2		2.025	–	fragmentary			
Nes, Hordaland	3A	cremation grave, F	4.5	1.8	no, fragmentary	bone pin with triangular head; bronze vessel; three-layer antler comb with semi-circular handle, fragmentarily preserved	C1b–C2	cat. 873
Bringsvær, Aust-Agder, grave 2	3L	from barrow, probably from at least two male graves	12.89	2.2	no	spear head B/H *Svennum*; spear head B/H *Nydam* (?); javelin head B/H *Lundskin*; javelin head; shield boss B/H IVc; 2× sword; box-like chape from sword scabbard	C2	cat. 781
Avaldsnes, Rogaland	3M	inhumation grave, M	24.075	2	no	sword in scabbard with box-like chape; gold "Kolben" neck ring; 3× gold finger ring; gold pin; bronze silver-plated mirror; fragments of bronze shield boss resembling type I 3c; fittings of drinking horn of Nydam type; spear and javelin heads; E59; E86; E161; 32 glass gaming pieces	C2	cat. 856
Efteløt (*kyrkan*), Buskerud	3H	in barrow, cremation grave, M	40.37	2	yes	double edged sword; javelin head B/H *Lundskin*; badly damaged spear head; bronze ear spoon; wooden bucket with appliques of type IIIb	C2	cat. 739
Lagmandsgården, Telemark	2	in barrow, grave, M	3.74	(available as copy)	–	bronze brooch resembling H. Shetelig's (1910), fig. 42 & 43; bronze pincers; fragments of double edged sword; 2× javelin head; 2× iron knive; iron fittings of wooden vessel	Scandi-navian D2	cat. 772
Kolstø, Rogaland	3J	stray find	42.89	2	yes	–	–	cat. 858
Homnes, Nord-Trøndelag	3M	stray find	–	–	no	–	–	cat. 937
Løddesøl, Aust-Agder	2H	stray find	9.87	–	no	–	–	cat. 784
Naustdal, Sogn og Fjordane	3C	stray find	16.77	1.7	no	–	–	cat. 892

Fig. 40. Grave inventories from Norway containing gold rings of groups 2 and 3 (Literature: after K. Andersson 1993a).

Ryc. 40. Zespoły grobowe z Norwegii ze złotymi obręczami grup 2 i 3 (Literatura: wg K. Andersson 1993a).

wore them may be interpreted as marking the dissolution of such a political commitment in a manner understandable for those attending the ceremony.

The finger ring of subgroup 3L from the female burial from Søndre Kjørstad represents a mixed form, from the transition between 3M finger rings local to Norway and finger rings of subgroups 3C–3K characteristic of Zealand. Finger rings of that type were also found in the inventory of the abovementioned barrow 2 from Bringsvær (in the context of male furnishings) and in the accidentally discovered (and therefore incomplete) inventory of the female grave from Horsetofte in Zealand. Both can be dated to phase C2 (cf. Fig. 5). The above circumstances in which the few 3L finger rings known from Norway have been discovered do not allow for concluding whether they were produced by workshops operating in Norway or Zealand, as they only point to certain connections between families from south-eastern Norway and Zealand.

A 3A finger ring of Zealandic origin was found in the female cremation burial from Nes. Analogically to the rings from Hove and Indbjoa, it was cut into pieces and burned in pyre, probably for similar reasons[75]. A typically Zealandic finger ring of subgroup 3H (not damaged) was found in the male burial from Efteløt (*kyrkan*). In addition, finger rings of Zealandic provenance are known as stray finds from the Sogn og Fjordane and Rogaland regions (cf. Fig. 40). Judging from its diameter (1.7 cm), the finger ring from Naustdal (subgroup 3C) can be interpreted as belonging to a woman[76], while the diameter of the ring from Kolstø (subgroup 3J; 2 cm) does not allow for such unambiguous interpretation (cf. Fig. 35).

Apart from the large rings found in the two female graves from south-western Norway mentioned above (Hove and Indbjoa), group 2 rings characteristic of the western part of the central Baltic area are known from three sites in south-eastern Norway. All of them are finger rings, of which three were found in graves (two in Veien and one in Lagmandsgården) and one is a stray find (Løddesøl, Aust-Agder – Fig. 40). The finger ring from the cremation burial under a barrow in Lagmandsgården (Lille Gjerpen), Telemark, belongs to an assemblage which, based on a brooch of the Schetelig type Fig. 42–43[77], can be placed in Scandinavian phase D2. However, given the accidental nature of the discovery the connection of the finger ring with the rest of the assemblage is sometimes questioned[78]. The finger ring was not found with other artefacts and bones, but was instead discovered along with the mandible under the central part of the barrow. This does not rule out its connection with the assemblage, but does not determine it beyond doubt either[79].

3.6.4. Funen

The finds known from Funen comprise three large rings of group 2, typical of the western central Baltic, and a finger ring of subgroup 3A, typical of Zealand. None of these artefacts has a fully credible context. As for two cut and burned fragments of a 2F bracelet discovered in the Møllegårdsmarken cemetery in the south-east of the island using a metal detector, one can assume their connection with a grave inventory[80]. Since the bracelet bears traces of a treatment similar to that recorded on the rings from female graves in south-western Norway, the interpretation applied to those burials can very likely be applied here as well[81] (see above). The diameter of the bracelet from Møllegårdsmarken cannot be reconstructed, hence it is impossible to determine whether it belonged to a female or male costume.

Two large rings were found on two sites situated on the northern tip of the Hindsholm Peninsula in the north-eastern part of Funen, near the sea coast[82]. Although the context of their discovery has not been sufficiently documented, there are convincing grounds to regard them as dry deposits buried in a so-called marginal landscape[83]. From this perspective, the rings from Fyns Hoved and Sappenborg would be subjected to the same treatment as some analogical rings known from Gotland, Öland, Närke, and Uppland[84] (see below). In this approach, their connection with the central Baltic area would be noticeable not only in the form but also in the similarity of treatment.

Apart from the abovementioned three rings typical of the western part of the central Baltic area, it is worth noting a 3A finger ring being an uncontexted find from Lydinge (southern Funen) (Fig. 21:6). Its diameter of 2.5 cm suggests it belonged to a male. It was found in the same field as the fragmentarily preserved inventory of a damaged grave from Brahetrolleborg, dated to phases C1b–C2 (fittings of a wooden bucket, fragments of a *Hemmoor*-type bucket), which means it likely belonged to this or another damaged burial from this necropolis[85].

[75] H. Reiersen 2017, 238–239, fig. 7.9, 7.10; 2018, 36–39, fig. 11.
[76] B. Magnus 2002, 255, fig. 1:a.b.
[77] H. Schetelig 1910, 74, fig. 46; J.S. Munch 1965, 59.
[78] J.S. Munch 1965, 59.
[79] J.S. Munch 1965, 59.
[80] L. Jørgensen. P. Vang Petersen 1998, 161, fig. 122; M.B. Henriksen 2001, 78–79, fig. 8.
[81] H. Reiersen 2018, 46.
[82] M.B. Mackeprang 1945, 29–31, fig. 12.
[83] M.B. Henriksen 2009, 329, 335–336, fig. 310; 2010, 413–414.
[84] K. Andersson 1995, 76; U. Lund Hansen 2001, 164; F. Herschend 1980.
[85] E. Albrectsen 1968, 122, cat. 60, pl. 99c; M.B. Henriksen 2009, 330, fig. 311.

3.6.5. Bornholm and Christiansø

Five gold rings of the type under discussion are known from Bornholm, of which one was discovered in a grave, two in hoards, and two as stray finds. A finger ring of subgroup 3K, which means an artefact characteristic of Zealand, was discovered in grave 11 in the Baunegård cemetery, in the southern part of the island[86]. This was a male burial containing weapons and dress items datable to phase C2b. In the ranking of Late Roman Period grave assemblages from Bornholm[87], this burial places among the richest inventories (cf. Fig. 37:C). At the same time, it is one of the richest burials in the cemetery (cf. Fig. 38:D).

Another finger ring of subgroup 3K, badly damaged and with traces indicative of prolonged use, was found with other artefacts near Bækkegård, perhaps as elements of a single hoard[88]. Its diameter of 1.9 cm indicates it belonged to a woman (cf. Fig. 36). If the finger ring indeed belonged to the same deposit as three massive gold rings (including one of R300 type) and a few fragmented gold ornaments of the same type (perhaps including a group 2 bracelet) then – given the fragmentation of some of the ornaments – it only had the value of scrap gold at the time it was buried. The presence of the R300 bracelet suggests that the artefacts could not have been buried earlier than during phase C3.

One more finger ring of group 3 typical of Zealand is known from another site in Bornholm – from Pedersker (Smålyngen) (subgroup 3E). The find, however, lacks any context[89]. Judging from the diameter (2.4 cm), we can only conclude that – analogically to the finger ring from grave 11 in Baungegård – it was a male ornament.

The next two gold rings of the discussed type known from Bornholm represent group 2, which means they are connected with the western part of the central Baltic area. One, preserved in a small fragment (scrap gold) belongs to the abovementioned deposit from Bækkegård, while another – a finger ring of subgroup 2C from Selvejergård (Højlyngen) – is a stray find[90] (cf. Fig. 13:9). Its diameter of 1.6 cm suggests a female ornament.

A finger ring of subgroup 3M (B.18), a stray find from Christiansø Island less than 20 km north of Bornholm, is also typical of the Jutland-west Norway area. Its diameter of 2.3 cm indicates it was a male ornament[91].

3.6.6. Sweden

A total of 59 rings of the discussed type are known from mainland Sweden and its large islands: Gotland and Öland. Analysing their distribution, we can distinguish two main areas, differing in nature. The first one, described here as the western part of the central Baltic area, is understood as the eastern part of mainland Sweden along with the islands of Öland and Gotland. It is distinguished by a very large number of the rings in question (46 pieces in total), most of which represent groups 1 and 2. They can be assumed to have been manufactured somewhere within this area. The larger number of finds are known from Gotland, Öland, and the territories to the north of Lake Mälaren and west of Lake Hjälmaren. Since the bulk of the rings reveal some specific features, and those decorated in a similar manner are known from all three regions mentioned above, it is difficult to indicate forms characteristically unique to one of them. In all three regions both large and small rings are known. A characteristic trait of this area is the occurrence of the analysed rings in deposits, be it in dry or wet environments (Fig. 41). Such contexts can be determined for 21 large rings (from 12 sites), some of which were accompanied by gold artefacts interpreted in the literature as insignia of status and power, i.e. Kolben bracelets and neck-rings with pear-shaped clasps (Fig. 41). Only four of the rings come from sepulchral contexts, and more than 20 are stray finds.

Other than the mentioned rings of groups 1 and 2, rings of foreign provenance only exceptionally occur in the western part of the central Baltic area, and all of them are small artefacts. Two finger rings representing subgroup 3M (B.18) typical of Jutland – west Norway are stray finds from Gotland (Ismus)[92] and Hälsingland (Glimsta, Västigården)[93]. Another two are finger rings of group 3 typical of Zealand: one, belonging to subgroup 3J, is a stray find from Medelpad (Häljom)[94], and the other, of subgroup 3B, was part of a rich inventory of chamber grave X in Tuna, Västmanland, dated to phase C2, where it was found along with three large rigs of group 2 (a pair of bracelets and a neck-ring or armlet)[95]. Based on its similarity to the inventory of female burial 2/1949 from Himlingøje, the grave was interpreted as a female burial. However, due to the absence of bone materials in the Tuna grave, and the absence of distinct archaeological markers of sex, this issue remains open. The inner diameter of the 3B finger ring from that grave

[86] P. Foss 1989, 135–140, fig. 1:8–11, 2–4.
[87] Based on scarcity index – L. Jørgensen (1988).
[88] O. Klindt-Jensen 1957, 161, fig. 137:10.
[89] O. Klindt-Jensen 1957, 136, fig. 128:1; K. Andersson 1993a, 54, cat. 211.
[90] K. Andersson 1993a, 49, cat. 180.
[91] K. Andersson 1993a, 61, cat. 264.
[92] K. Andersson 1993a, 205, cat. 1107.
[93] K. Andersson 1993a, 240, cat. 1340.
[94] K. Andersson 1993a, 240, cat. 1342, fig. 108.
[95] M. Stenberger 1956, 3–14, fig. 3–5; E. Nylén, B. Schönbäck 1994a, 24–27, fig. 21; 1994b, 157–167, fig. 179.

Site	Group	Context	Dating	Other elements of inventory	Weight (g)	Literature (K. Andersson 1993a)
Luggavi, Närke	bracelet, 2	deposit		gold "Kolben" bracelet	181.8	cat. 1303b
Tuna, Uppland	bracelet, 2	deposit		–	199.5	cat. 1321a
	bracelet, 2				178.1	cat. 1321b
Näsby, Öland	bracelet, 1	deposit	C1b–C2	gold neck ring with loop-shaped terminal	191.72	cat. 1093a, fig. 79
Burs, Gotland	bracelet, 1	deposit	C1b–C2	2× gold arm ring ÄEG 375, var.; gold neck ring with loop-shaped terminal	181.69	cat. 1185c
Västra Rickeby, Uppland	bracelet/neck ring, 2	deposit	C	–	191.3	cat. 1320c
	bracelet/neck ring, 2				191.3	cat. 1320b
	neck ring, 2				177.2	cat. 1320a
Kleva, Öland	bracelet, 2	deposit	C	gold "Kolben" bracelet	191.58	cat. 1071b
Skedstad, Öland	bracelet, 2	deposit	C	fragments of gold "Kolben" bracelet(s)	2.85	cat. 1004a
Asarve, Gotland	bracelet, 2	deposit	C	–	120.16	cat. 1174b
Dalbo, Ängsåkern, Gotland	bracelet, 2	deposit	C1–C2	fragments of twisted gold neck ring with fastening of type A after M.J. Przybyła (2007)	149.6	cat. 1160a
Skedstad, Öland	bracelet, 2 (in pieces)	deposit	C	fragments of gold "Kolben" bracelet; gold wires; gold finger ring; fragments of scrap gold	2.85 / 1.554	cat. 1004
Lilla Ryftes, Vätåker, Gotland	neck ring, 2	deposit	C2–C3	gold "Kolben" bracelet	185.9	cat. 1134c, fig. 87
	bracelet, 2				183.4	cat. 1134a, fig. 87
Skedemosse, Öland	bracelet, 2	bog deposit	C2–C3	–	174.8	cat. 1003g
	bracelet, 2				204.5	cat. 1003f
	bracelet, 2				181.95	cat. 1003d
	bracelet, 2				187.6	cat. 1003b
	bracelet, 2				182.5	cat. 1003e
	bracelet, 2				184.6	cat. 1003c
Ramsgården, Västergötland	finger ring, 3	grave	C2	–	28.1	cat. 1285
Värnhem, Gotland, grave 10	finger ring, 2	cremation grave	C1 (C1b?)	fragments of bronze fittings of drinking horn (rim fitting of type AN K.6, fragments of profiled chain links, rivets); glass fragment	5.85	cat. 1230
Tuna, Västmanland	finger ring, 3	inhumation grave, F (?)	C2	2× E58; E81–82; E189; 2× silver spoon; 2× gold pin B.124; 2× glass bead; gilded circular applique	13	cat. 1311f
	neck ring, 2				145.5	cat. 1311c
	bracelet, 2				87	cat. 1311d
	bracelet, 2				78.85	cat. 1311e
Gödåker, Uppland, grave VIII	finger ring, 2	inhumation grave, M	C1b–C2	javelin head I 6; spear head I 26	9.7	cat. 1336
Hällkista Ryd 28:1, Öland, grave 73	finger ring, 2	inhumation grave, M	C1b	2× spur type *Leuna*, var. UG A; spear head I 14; javelin head I 6; iron fittings of shield edges; knife; clay cup	–	M. Rasch 1991, 60–61, 99–102

Fig. 41. Hoards and grave inventories containing rings of groups 1–3 in Gotland, Öland, and mainland Sweden.
Ryc. 41. Skarby i zespoły grobowe ze złotymi obręczami grup 1–3 z Gotlandii, Olandii i Szwecji kontynentalnej.

is 1.9 cm[96], which might suggest a female ornament, but the diameter of the second finger ring – 2.2 cm – corresponds better with dimensions of finger rings worn by men (cf. Fig. 36).

It needs to be emphasised once again that in the western part of the central Baltic area gold rings of the discussed type rarely occur in sepulchral contexts. Apart from the grave from Tuna mentioned above, these are three grave assemblages originating from Gotland, Öland, and Uppland, respectively, in which finger rings of group 2, typical of these areas, occurred. Dated to phase C1, grave 10 from Värnhem in Gotland is a cremation burial, which means that the extant inventory should be seen as most likely incomplete. Along with the finger ring of subgroup 2B burned in pyre, there were bronze drinking horn fittings, including pieces decorated with embossed geometric patterns, and a glass fragment, possibly from an imported vessel[97]. Grave 73 from Ryd in Öland is a male inhumation burial in a stone cist, with elements of weaponry belonging to J. Ilkjær's group 7 (spearhead and javelin head, shield rim fittings) and with a pair of three-armed stirrups of U. Giesler's variant A[98]. The relatively small diameter of the finger ring (1.8 cm) might in this case suggest a juvenile individual (cf. finger ring diameters in Fig. 36). Another male inhumation furnished with weapons of J. Ilkjær's group 7 (a spearhead and a javelin head) was chamber grave VIII under stone pavement from Gödåker in Uppland[99]. All these burials should likely be linked with representatives of broadly understood upper strata of local societies.

The second area distinguished here covers the western part of mainland Sweden, understood as the territories of Bohuslän, Västergötland, Närke, the western part of Småland, and Scania. Gold rings discovered in this area include rings of group 2, typical of the western central Baltic area, as well as those of group 3, both in variants typical of Zealand and in variants typical of Jutland and western Norway. In the discussed area, rings of group 2 occur singly along the coasts of Scania (2 pcs) and Bohuslän (2 pcs), and unfortunately these are uncontexted finds. Except for one artefact from Bohuslän, all the others are large rings. The finger ring from Bohuslän (Solhems Mellan) has a diameter of 1.6 cm, which argues for its attribution to female costume.

Also from the western coast of mainland Sweden – from Bohuslän and Halland – single finger rings of subgroup 3M are known, typical of Jutland and western Norway. They are all stray finds. In terms of diameters, one of them – the finger ring from Stora Brattön (1.9 cm) – can probably be linked with female costume[100], while the diameter of the finger ring from Harplinge (2 cm) allows linking it either with male or female costume[101].

Zealandic variants of finger rings of group 3 are known from Västergötland and the adjacent western Småland. Among four such specimens discovered there, only one was found in a grave, while the rest are stray finds. This grave did not contain any other elements indicative of the high social position of the deceased (Ramsgården, burial in a stone cist[102]). However, it is worth noting that in phases C1b–C3 the richest burials in Västergötland contained only single items of dress or Roman imports associated in the archaeological literature with high status. These burials cannot compare with lavish furnishings known from elite burials in some other regions of northern European Barbaricum, but they nevertheless stand out among other Västergötland graves. The diameter does not allow us to unambiguously interpret the finger ring as a male or female ornament (2.0 cm)[103]. As for the finger rings found as strays, their diameters suggest they were worn by men (Hångsdala and Erkeryd – cf. Fig. 36). It is worth adding here that a female burial from phase C2 containing a rosette brooch of group 3A typical of Zealand is also known from Västergötland, which further emphasises the connections among elites from the two regions during the Late Roman Period (Rumpegården[104]).

3.6.7. Finland

Five gold rings are known from Finland, of which one belongs to group 1 and the rest belong to group 2. In terms of style, these artefacts reveal clear connections with similar objects known from the western part of the central Baltic area (of which as many as four are large rings). Two rings from Finland were found in graves, and the others are stray finds. A bracelet from cremation grave I from Isokylä-Katajamäki had been broken before it was put into pyre[105] (Fig. 42:5). This means it was subjected to a similar treatment as some gold rings from graves in south-western Norway[106]. It is worth adding that also in this case we are dealing with a female grave inventory ranking relatively high on the local

[96] Although in the photo published by M. Stenberger (1956, fig. 5) this finger ring is deformed, so it is not easy to say whether the reconstructed diameter matches the real one.
[97] K. Andersson 1993a, 221, cat. 1230.
[98] M. Rasch 1991, 60–61, 99–102; cf. U. Giesler 1978.
[99] G. Ekholm 1925, 332–334, fig. 166–171; 1927, 123–126, fig. 4–7; K. Andersson 2016, 55–65, 82–85, fig. 37–39.
[100] K. Andersson 1993a, 224, cat. 1247.
[101] K. Andersson 1993a, 184, cat. 982.
[102] K.E. Sahlström 1932, 88, fig. 105.
[103] K. Andersson 1993a, 228, cat. 1285.
[104] K.E. Sahlström 1932, 84–85, 186, cat. 31, fig. 100, 101; M.J. Przybyła 2018b, 838–839, cat. 413, fig. 3/31.
[105] M. Schauman-Lönnqvist 1988, 33–37, fig. 31; H. Reiersen 2018.
[106] H. Reiersen 2018, 44.

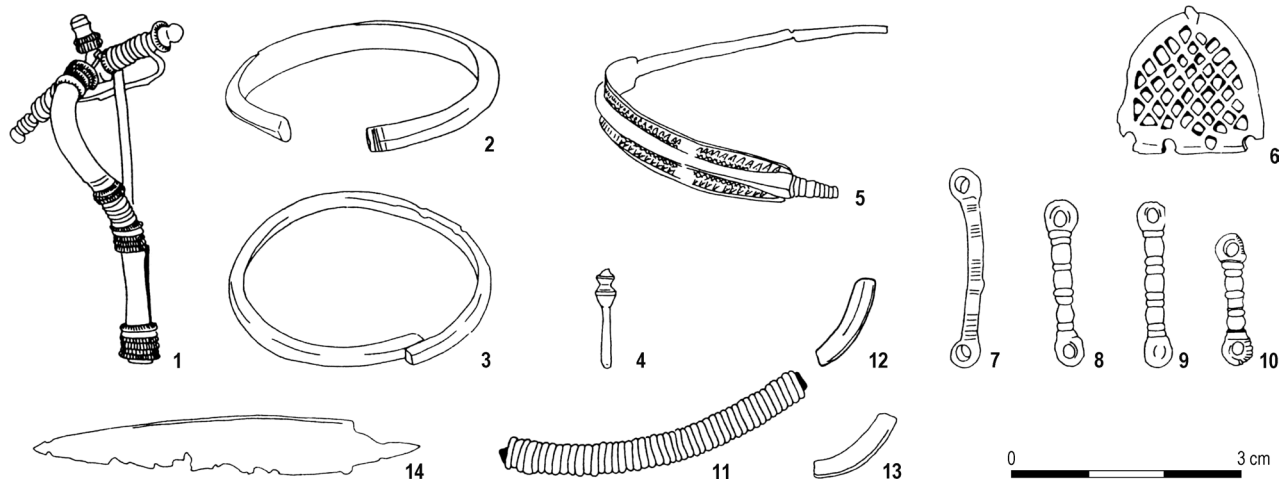


Fig. 42. Inventory of grave I from Isokylä-Katajamäki (Finland). 1–4, 6–10 – bronze, 5 – gold, 11–13 – silver, 14 – iron. After: M. Schauman-Lönnqvist 1988.

Ryc. 42. Inwentarz grobu I z Isokylä-Katajamäki (Finlandia). 1–4, 6–10 – brąz, 5 – złoto, 11–13 – srebro, 14 – żelazo. Wg: M. Schauman-Lönnqvist 1988.

scale of grave wealth. Given these two circumstances, the deliberate destruction of the artefact from Isokylä-Katajamäki can be given the same interpretation as in other such cases[107].

The second ring comes from the site of Isokylä-Ketohaka 2. It is a group 2 finger ring originating from a poorly documented grave, or rather a few cremations, from phases C2–C3. The inventory retrieved from that place includes artefacts typical of both female and male models of grave furnishing[108]. The finger ring has a diameter of 1.4×1.6 cm, which allows us to link it with female attire[109]. However, unlike the bracelet from grave I at Isokylä-Katajamäki, this artefact had not been damaged before placing it into a funeral pyre.

3.6.8. Southern periphery of the snake rings' range

The gold ring ornaments discussed in this study incidentally occur in Central Europe in areas representing various cultural traditions: in the lower Weser basin, in the Harz foothills, in Thuringia, in Lower Lusatia and Rugia, in the lower Vistula basin, and in the Podlasie region. In all these areas they are culturally foreign elements.

Among the finds from Germany, three or four rings come from graves, one comes from a deposit in a dry environment, three come from one bog deposit, and the rest are stray finds. All three rings known from Central Germany come from sepulchral contexts, although only one of them was part of a well-documented grave inventory: a bracelet of subgroup 2C, retrieved from grave 2 at Emersleben, dated to phase C2[110]. Grave 2 is the burial of a man aged 20–30 years, and it ranks among the richest Late Roman Period burials in Central Germany[111]. It represents group 2b, which means the upper range within the six-point wealth scale developed by J. Bemmann for male burials of that period known from Central Germany[112]. Apart from the presence of the bracelet in question, the grave stands out from other inhumation burials in the region, typically oriented N-S, by its orientation along the W-E axis and by the presence of a timber setting of the grave chamber[113].

Another bracelet of subgroup 2B is known from Flursted, and it probably originates from a damaged grave (grave 2)[114], which is also the case with a finger ring of group 3A found in Helmsdorf[115]. Both these artefacts have been lost. We can therefore conclude that the gold rings of Scandinavian type known from Central Germany represent artefacts typical on one hand of the

[107] H. Reiersen 2018, 44.

[108] M. Schauman-Lönnqvist 1988, 44–47, fig. 44.

[109] E.M. Kivikoski 1973, 26, pl. 17:125; M. Schauman-Lönnqvist 1988, 44–47, fig. 44; K. Andersson 1993a, 245, cat. 1369.

[110] The inner diameter of the ring from grave 2 is 6.54×6.05 cm (B. Schmidt, J. Bemmann 2008, 25). For comparison, the pair of bracelets from the burial of a female aged 40–50 years at Himlingøje, Præstø amt, grave 2/1949, have diameters of 5.3×6.5 and 5.8×7.0 cm (U. Lund Hansen *et alii* 1995, 155–156).

[111] W. Schulz 1952, 109–114, fig. 14–25, pl. 22; B. Schmidt 1982, 6/1–4; B. Schmidt, J. Bemmann 2008, 24–26, pl. 12–15.

[112] J. Bemmann 2001, 67, 69.

[113] J. Bemmann 2001, 60–61; J. Bemmann, H.-U. Voss 2007, 159, 166.

[114] A. Götze, P. Höfer, P. Zschiesche 1909, 296, pl. 20:302; W. Schulz 1933, 49, pl. 22:6; 1952, 122, pl. 32:1; B. Schmidt, J. Bemmann 2008, 151, pl. 206/148:2.

[115] W. Schulz 1933, 49, pl. 22:5; 1952, pl. 31:2; B. Schmidt, J. Bemmann 2008, 58–59, pl. 55/56:5.

western part of the central Baltic area, and on the other of Zealand.

A stray find of a subgroup 3M finger ring from Tölstedt in north-western Germany, an artefact typical of Jutland and western Norway, was probably also an element of grave furnishing. However, there are no precise data available concerning the chronology of sepulchral finds recorded in its vicinity. The diameter of 1.7–1.85 cm suggests interpreting the finger ring as a female ornament[116] (cf. Fig. 36). Such finger rings belong to one of several categories of artefacts known from female burials in the lower Elbe and Weser basins that point to connections of these areas with Jutland during the Late Roman Period[117].

As mentioned, gold snake rings also occur in the context of weapon deposits and deposits in dry environments. To the first category belong a 3A finger ring (typical of Zealand) and two bracelets of subgroup 2D (probably connected with the western part of the central Baltic area) found in the deposit at Thorsberg bog. These artefacts should most likely be associated with male attire and therefore counted among other spectacular objects discovered in this site, linked with elite members of a defeated group of warriors. Like many other objects in this site, the bracelets were ritually damaged. As for the gold finger ring, which has been lost, no relevant information is available[118].

The hoard from Cottbus in eastern Germany, was discovered in a dry environment. It is a quite an unusual find as compared with other Late Roman Period deposits known from Central Europe. Apart from a bracelet of subgroup 2K typical of the western part of the central Baltic area, the hoard contained three gold Kolben bracelets and a rolled-up gold neck-ring with a plain hoop and pear shaped clasp – a form typical of the middle Elbe and Oder basins[119]. All these objects represent artefact categories interpreted as insignia (cf. Chapter 1). In Central Europe such artefacts typically occur among grave furnishings. This along with the presence of the 2K bracelet and other artefacts interpretable as insignia (like the Kolben bracelets and the neck-ring with a pear-shaped clasp) and the treatment of the neck-ring, strengthen the impression of the Cottbus hoard's similarity to deposits from that period known from Gotland and Öland (cf. Fig. 41).

As mentioned, single ring ornaments of the discussed type also occur in sepulchral contexts in the lower Vistula basin and in Podlasie, part of territories occupied at that time by the Wielbark Culture. All these rings are forms showing strong connections with the western part of the central Baltic area[120].

They are a bracelet of subgroup 1B from an inhumation grave from Komorowo (eastern Pomerania)[121], dated to phase C1b; fragments of a bracelet or finger ring of subgroup 1B from a female cremation burial dated to phase C1b from Pilipki (north-eastern Poland)[122], and a finger ring of subgroup 2I[123] from a female cremation burial dated to phase C2, under barrow 1 at Szpaki (north-eastern Poland)[124]. All these three burials represent high standards of furnishings in the Wielbark Culture. Apart from the bracelet, the grave from Komorowo also contained two gold finger rings, a pair of bronze stirrups adorned with beaded wire, bronze belt fittings and a brooch, drinking horn fittings, fragments of a provincial Roman set consisting of a scoop and a strainer, and a set of ceramic vessels[125]. The grave from Pilipki contained fragments of a gold bracelet of the Pomeranian type, an obliquely grooved cauldron, a gold lunula and S-clasp, two gold settings for stone or glass inlays, and a lignite ring[126]. The grave from Szpaki contained, among other objects, fragments of a large gold ring, a bronze omega-shaped buckle, two gems from Roman finger rings, glass and amber beads, fragments of a comb, and fragments of four ceramic vessels[127]. The burials from Komorowo and Szpaki, whose contexts are well-documented, are distinguished by splendid grave constructions. The former was found in a large pit within a massive stone setting (4.8×1.5 m)[128], and the latter was found in a pit which was large for a cremation burial (1.7×1.5 m) and was covered by an earthen mound with a stone core[129].

With respect to the finger ring from Pilipki, it is worth noting that it had been intentionally damaged by bending and cutting prior to being placed in the funeral pyre (which was also the case with the gold bracelet of the Pomeranian type), which resembles the situations re-

[116] G. Wegner 1990, 27–28, fig. 1, 2.

[117] M.J. Przybyła 2018b, 306; M.J. Przybyła, E. Rydzewska 2019.

[118] R. Blankenfeldt 2013a, 59, fig. 8; 2013b, 34–35, fig. 5; 2015, 191–200.

[119] A. Leube 1975, 112, fig. 12; W. Menghin 2007, 277–278, cat. 0.4.

[120] Fragments of a gold bracelet from grave 373 at Czarnówko in Pomerania interpreted in the literature as Scandinavian (M. Mączyńska, D. Rudnicka 2004, 421–422), have not been included here, because their more detailed analysis reveals that they are parts of a gold bracelet of the Pomeranian type also belonging to this inventory (V. Beliavets, M.J. Przybyła, S. Voroniatov 2018, 165).

[121] H. Günther 1922, 100–109, pl. 4:1; G. Kossinna 1922, 110–138, fig. 28.

[122] J. Okulicz 1970, 468–477, fig. 5; V.V. Kropotkin 1973, 331–336, fig. 2; Z. L'vovna, M. Shchukin 1994, 64–65, fig. I.71:g; V. Beliavets, M.J. Przybyła, S. Voroniatov 2018, 158–162, 168–173, fig. 2:2.3, 6:4.

[123] Inner diameter of 1.95 cm.

[124] K. Rusin 2008, 297, fig. 4:1, 7; J. Jaskanis 2012, 234, fig. 29.

[125] G. Kossinna 1922.

[126] V.V. Kropotkin 1973.

[127] K. Rusin 2008.

[128] H. Günther 1922, 104–106, fig. 3–5.

[129] K. Rusin 2008, 295–296, fig. 2, 3.

corded by Håkon Reiersen in some burials with ring ornaments in Norway, and also in Funen and southern Finland[130] (cf. above).

4. DISCUSSION

The results of the above analysis of Scandinavian gold snake rings provide grounds for re-addressing the concept briefly presented in the introduction. According to this concept, during the Late Roman Period Zealand was the predominant political centre in southern Scandinavia, exerting some form of supremacy over territories on the southern coast of the Baltic as well[131] and even – according to some researchers – over such distant areas as nowadays western Ukraine and eastern Romania[132]. This relationship is sometimes described using a general "centre-periphery" model, also applied to relationships between the Roman Empire and Zealand[133]. From this perspective, the dominant position of Zealand manifested itself through the distribution of prestige goods, including Provincial Roman imports and splendid ornaments. Among the latter are gold snake rings, interpreted as markers of social position or even of a political rank within a system of personal hierarchical bonds[134]. One example of such interpretation of gold snake rings is Ulla Lund Hansen's classification of status indicators among the highest Zealand elites of the Late Roman Period, developed based on sepulchral materials from that island[135]. According this approach, people enjoying the highest status were those whose burials were furnished with a Kolben bracelet (thus far recorded only in single male burials in Zealand). People of a slightly lower, dependent status, are represented by burials with gold snake bracelets, often accompanied by gold snake finger rings. A still lower rank among elite burials is represented by assemblages containing a gold snake finger ring and five Roman imports (with some modifications, this model was also adopted by Per Ethelberg[136]).

Gold snake rings occur outside Zealand as well. In such cases they are regarded as gifts for elites from other regions, and are interpreted as reflections of alliances constructed by Zealand elites[137]. However, analysis of the phylogenetic tree presented in this study demonstrates that all five large gold rings discovered in the Stevns Peninsula find their closest analogies in ring ornaments from Gotland, Öland, and the south-eastern part of the Scandinavian Peninsula. It is worth emphasising here that among the 66 known snake bracelets of the Scandinavian type, as many as 41 come from the abovementioned territories. In the cartographic analysis of distribution of archaeological finds it is assumed that a concentration of objects of a certain type in a certain territory very likely indicates their provenance from that area. This line of interpretation can also be accepted for the snake bracelets in question, which means they should be seen as objects typical of Gotland, Öland, and the south-eastern part of the Scandinavian Peninsula. Referring this observation to the model of interpretation of socio-political relationships presented above, rather than those from Zealand, these bracelets should therefore be seen as reflecting the political activity of higher social classes from the western part of the central Baltic area. Examples of similar rings made of bronze are also known from this area[138], which strengthens the argument for their local, central Baltic provenance (cf. Chapter 3.5).

And so, the gold bracelet from the phase C1b grave under barrow in Valløby – the richest Late Roman Period male burial in Zealand – finds the best analogies in Öland and Gotland, and among other rings related to specimens from these two islands (cf. Fig. 6, 10:6, 28, 43). Similarly, the finger ring from male grave 1/1984 from Himlingøje dated to phases C1b–C2a finds no analogy in Zealand, but a few in central Sweden (cf. Fig. 6, 14:5, 29). The finger ring from grave 1 (dated to phase C1b) at Gunnerupgård, the bracelet from grave 3/1977 (dated to phase C2) at Himlingøje, and the neck-ring from male grave A (dated to phase C3b) from Varpelev, also belong to a branch of the tree that can be linked with the western part of the central Baltic area (cf. Fig. 6, 13:2, 16:7, 18:1). The same applies to the finger ring from the rich male burial (dated to phase C1b) from Kirkebakkegård in north-eastern Zealand, which finds the best parallel in Öland (cf. Fig. 6, 11:1, 29, 43). Thus, all the large gold snake rings known from graves in eastern Zealand, and the three finger rings mentioned above, seem to be foreign artefacts. They occur in Zealand over the entire period spanning phases C1b–C3b.

The only gold ring ornaments manufactured in Zealand are snake finger rings of Beckmann types 39a–c[139]

[130] H. Reiersen 2018.

[131] L. Hedeager 1990, 130; 1992, 87–179; U. Lund Hansen *et alii* 1995, 203–212, 374–384; P. Ethelberg *et alii* 2000, 145–169; B. Storgaard 2001, 96; 2003, 114.

[132] B. Storgaard 2001, 96; 2003, 114; U. Lund Hansen 2003, 357.

[133] For variants of this model see C. Kümmel 2001.

[134] L. Hedeager 1990, 130; 1992, 87–179; U. Lund Hansen *et alii* 1995, 203–212, 374–384; P. Ethelberg *et alii* 2000, 203–212, 374–384; B. Storgaard 2001; 2003.

[135] U. Lund Hansen *et alii* 1995, 374–384.

[136] P. Ethelberg *et alii* 2000, 151.

[137] L. Hedeager 1990, 130, 374–384; U. Lund Hansen *et alii* 1995, 203–212, 374–384; U. Lund Hansen 2001; 2002, 41; P. Ethelberg *et alii* 2000, 145–169; B. Storgaard 2001, 96; 2003, 114.

[138] I.e. K. Äijä 1979.

[139] P. Ethelberg *et alii* 2000, 71.

Site	Sub-group	Dating	Sex	Wealth classes
Kirkebakkegård, grave	finger ring 1A	C1b	M	6
Valløby, grave	bracelet 1B	C1b	M	1
Gunnerupgård, grave 1	finger ring 2A	C1b	F?	>9
Himlingøje, grave 1/1894	finger ring 2F	C1b–C2a	M	6
Himlingøje, grave 3/1977	bracelet 2J	C2	M	6
Varpelev, grave A	neck ring 2M	C3b	M	2

Fig. 43. Graves with bracelets and finger rings of groups 1 and 2 in Zealand, from phases C1b–C3.
Ryc. 43. Groby z bransoletami i pierścieniami grup 1 i 2 z Zelandii, z faz C1b–C3.

(here: subgroups 3A–3K) (Fig. 6). They are the only artefacts with a demonstrable concentration in Zealand. The formally earliest examples (subgroup 3A and 3B) show a close connection with two gold snake bracelets from the richest Late Roman Period female grave in Zealand, i.e. grave 2/1949 from Himlingøje, dated to phase C2a[140]. These bracelets, in turn, reveal close stylistic similarity to bracelets known from the deposits at Tuna in Uppland[141] and Vestringe in Gotland[142], which belong to group 2 (cf. Fig. 39). This means that even this local Zealand symbol of status can have its roots traced back to ring ornaments from the western part of the central Baltic area.

It should be emphasised once again that if we assume that finger rings of subgroups 3A–3K were produced in Zealand and were insignia of political power, and that their distribution reflects building a network of social hierarchies by Zealand elites, then, by the same token, we have to accept that large rings discovered in graves of Zealand elites of the Late Roman Period are material evidence of their dependence on elites from the western part of the central Baltic area.

In the perspective still prevailing in the literature and positing the leading position of Zealand elites from the Stevns region in Northern Europe, significant importance is attached to gold Kolben bracelets, interpreted as an inter-regional marker of the highest status in Germanic societies of the Late Roman and Migration Periods[143]. Towards the end of the Pre-Roman Period and in the Early Roman Period such artefacts occurred as status markers in Sarmatian graves from the North Pontic zone. The earliest example outside the nomadic milieu was believed to be the mentioned male burial 1/1894 from Himlingøje dated to phases C1b–C2a (which also contained a finger ring of subgroup 2F typical of the western part of the central Baltic area)[144]. As a consequence, it was accepted that it was precisely eastern Zealand where this symbol originating from the Sarmatian milieu was first adopted in Northern and Central Europe[145]. However, the deposit from Bolarve in Gotland points to another possibility. Apart from a gold Kolben bracelet, the deposit also contained a gold snake ring of the Pomeranian type typical of phases B2b-C1a (type Wójcik III)[146]. Such a composition of the deposit indicates that it is Gotland rather than Zealand that should be seen as the area where gold Kolben bracelets appeared the earliest within North European Barbaricum. The distribution of other gold bracelets of the Pomeranian type, whose role as status markers was most likely similar to that later played by gold snake rings, is also highly interesting. As many as five of the nine known examples come from Scandinavia, including four from Sweden, but none from Zealand[147]. This pattern of distribution emphasises the significant role that the territory of present-day Sweden played in the interregional elite network from the very beginnings of the Late Roman Period.

It is also worth emphasising that apart from snake rings of group 2, another artefact type dated to phases C1b and C2 and regarded as status symbol – gold neck-rings with twisted hoops and pear-shaped clasps – are also known in relatively large numbers from the central Baltic area. Like the earlier gold snake rings of the Pomeranian type, these artefacts also reveal a clear link between the territory of present-day Sweden (although with a different

[140] U. Lund Hansen *et alii* 1995, 156, fig. 4:28.
[141] H. Hildebrand 1891, 139, fig. 25, 26.
[142] O. Almgren, B. Nerman 1923, 74, 149, pl. 24:368.
[143] L. Hedeager 1990, 130; 1992, 87–179; U. Lund Hansen *et alii* 1995, 203–212; C. von Carnap-Bornheim, J. Ilkjær 1996a, 359–367; U. Lund Hansen 2001; P. Ethelberg *et alii* 2000, 145–169; B. Storgaard 2001, 96; 2003, 114, 116; N. Lau 2012, 55–60.
[144] U. Lund Hansen *et alii* 1995, 99–103, 149–150, fig. 4:17, 4:18, pl. 13, 14.
[145] C. von Carnap-Bornheim, J. Ilkjær 1996a, 364; U. Lund Hansen 2001, 158–159; B. Storgaard 2001, 103; N. Lau 2012, 55.
[146] Tillväxten. Statens Historiska Museum... 1920, 2, fig. 3, 4; K. Andersson 1993a, 209, fig. 209.
[147] M.J. Przybyła 2018b, 643–646, fig. 17/28A; V. Beliavets, M.J. Przybyła, S. Voroniatov 2018, 166–167, table 2, fig. 4:A, 8.

focus of distribution) and the northern range of the Wielbark Culture in its Cecele phase[148]. Again, these artefacts do not occur in Zealand.

The special position of Gotland, Öland and eastern part of mainland Sweden is also reflected by the amount of gold in the Late Roman Period, and by the patterns of its distribution within these regions. The largest amount of gold that, given the forms of artefacts made from this raw material, can be linked with the period in question comes from Gotland and Öland, followed by the eastern part of mainland Sweden, and Zealand and Funen (Fig. 44:A). However, it needs to be emphasised that a significant number of the distinctive forms known from Funen cannot be dated before phase C3.

Moreover, there are observable differences between present-day Denmark and the western part of the central Baltic area in terms of patterns of distribution of gold and manners of its deposition. While the amount of gold known from Zealand is comparable to that known, for example, from Öland, gold artefacts known from Zealand are typically small objects, while those known from Öland, Gotland, and the eastern part of mainland Sweden are large (Fig. 44:B.C). Finger rings are much more common in Zealand, and they can be found even in less lavishly furnished graves, while in the western part of the central Baltic area these are much more often bracelets and neck-rings, and they are known from deposits and stray finds, and only exceptionally from grave assemblages (cf. Fig. 41). In other words, the fragmentation and dispersion of gold is much greater than in the western part of the central Baltic area. Referring to the model of prestige goods distribution, it can be assumed that Zealand elites invested heavily in maintaining a strong, consistent local system of hierarchical bonds by distributing gifts far down the social ladder on the island itself. The distribution patterns recorded in the western part of the central Baltic area suggest a much greater accumulation of such goods in the hands of the highest elites, who actively sought to build an extensive network of interregional alliances.

Nevertheless, Zealand still stands out among other regions in phases C1b–C2 with its very large number of Provincial Roman imports (Fig. 44:D). These objects played an immense role there in the manifestation of prestige through burial rite. The richest graves of that period in Zealand typically contain six to nine Provincial Roman vessels, compared to one vessel on average in Jutland and 0.3–1 in neighbouring Scania (cf. Fig. 37). It is also worth noting that Zealandic graves representing low standards of furnishing also contain 1–2 imported vessels, which indicates their relative "cheapness" on that island. According to the concept proposed by Ulla Lund Hansen, Roman imports were redistributed from the power centre in the Stevns Peninsula not only down the social ladder within Zealand, but also among elites from other regions[149].

The unique position of Zealand manifesting itself in the availability of prestige resources is also clearly visible in the metals used for manufacture of both large decorative brooches and their smaller, more common forms. Interestingly, constructional elements of Zealandic rosette brooches from phases C1b–C2 are made of silver, which makes them different from variants typical of Jutland, where both the bow and the discs are made of cheaper materials, i.e. copper alloys[150]. The same applies to early examples (dated to phase C2) of swastika brooches in Zealand, whose base plates and other constructional elements are made of silver. The "cheapness" of silver in Zealand during phases C1b and C2 is also confirmed by the analysis of raw material used for making simple brooch forms commonplace on that island. Among the brooches of groups MP.II–III predominant in Zealand during that period, 54% are made of silver and the rest of bronze (Fig. 45:A). For brooches MP.IIA characteristic of phases C1b and C2a, as many as 83% are silver pieces, and the rest are made of copper alloys[151] (Fig. 45:B). This is in striking contrast to analogical proportions recorded for Jutland, where silver brooches MP.II-III make up only 21% of the total (Fig. 45:C). The same share was recorded for the most typical brooch type in Jutland in phases C1b–C2, namely brooches MP.IIIB[152] (Fig. 45:D).

Although more recent studies on metal elements of rich female attire in Scandinavia show that many elements previously linked with Zealand should actually be associated with other regions, it is still very likely that the decorative items of typically Zealandic attire, like rosette brooches, provided inspiration for analogical brooches in other regions of Scandinavia (Jutland and Bornholm in particular)[153]. This would point to a significant position of Zealand elites, reflected by the adoption of their manners of self-presentation by elites from other regions of Northern Europe. This can be explained in terms of prestige-driven imitation[154].

In the context of rich female attire from phases C1b and C2, it is worth noting that the majority of brooches with runic inscriptions from that period have been found

[148] J. Andrzejowski 2014, 99, fig. 6.

[149] U. Lund Hansen 1987, 222–224, fig. 143; 1988, 158–161, fig. 1, 2; 1989, 178–185, fig. 14, 15.

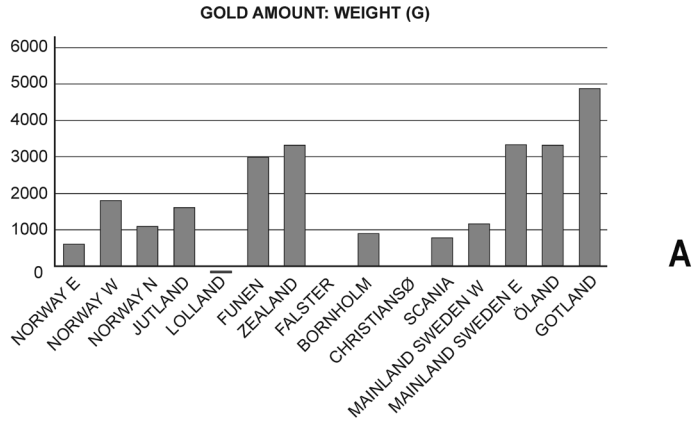
[150] U. Lund Hansen, M.J. Przybyła 2010, 249–259; M.J. Przybyła 2018b, 30–90.

[151] M.J. Przybyła 2018a, 140–142, 189–191, fig. 95.

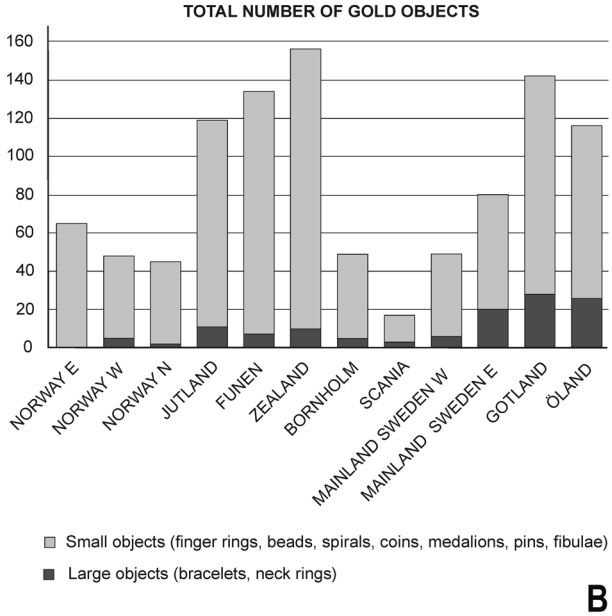
[152] M.J. Przybyła 2018a, 140–142, fig. 95.

[153] M.J. Przybyła 2018b, 592, 595.

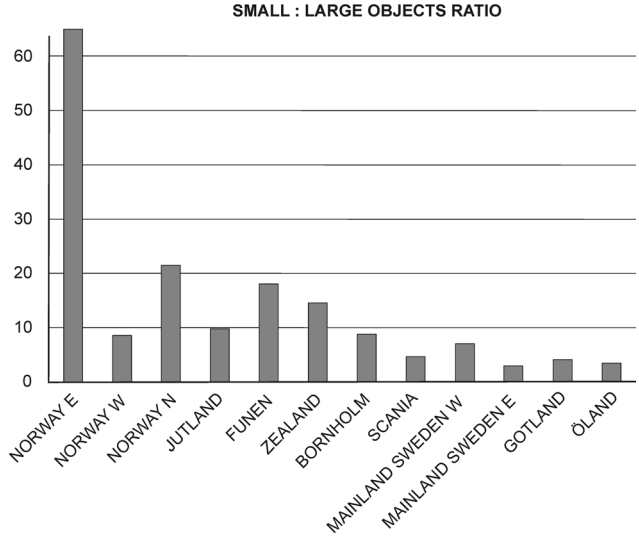
[154] M.J. Przybyła 2018b, 587.


GOLD AMOUNT: WEIGHT (G)
6000
5000
4000
3000
2000
1000
0
NORWAY E
NORWAY W
NORWAY N
JUTLAND
LOLLAND
FUNEN
ZEALAND
FALSTER
BORNHOLM
CHRISTIANSØ
SCANIA
MAINLAND SWEDEN W
MAINLAND SWEDEN E
ÖLAND
GOTLAND

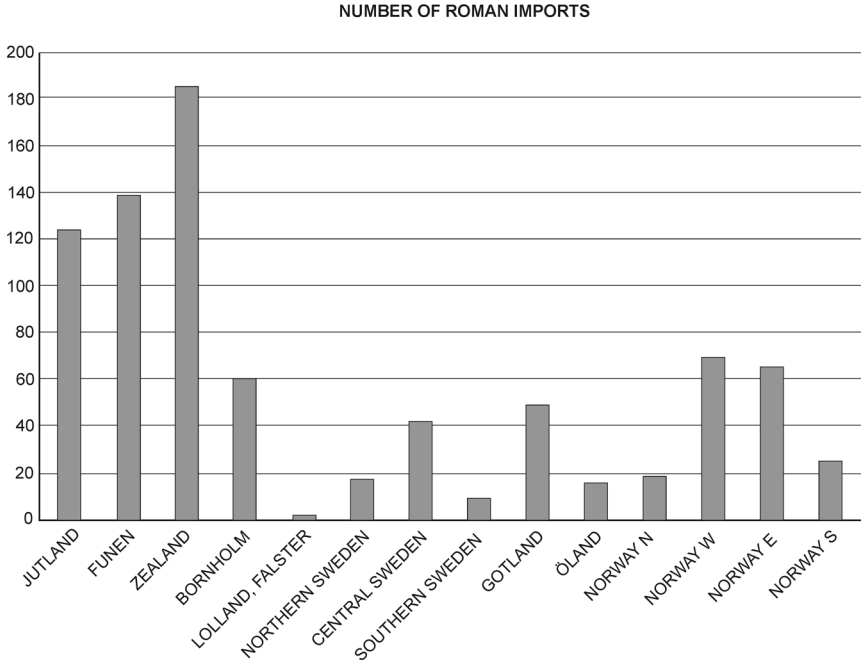
A


TOTAL NUMBER OF GOLD OBJECTS
160
140
120
100
80
60
40
20
0
NORWAY E
NORWAY W
NORWAY N
JUTLAND
FUNEN
ZEALAND
BORNHOLM
SCANIA
MAINLAND SWEDEN W
MAINLAND SWEDEN E
GOTLAND
ÖLAND
Small objects (finger rings, beads, spirals, coins, medalions, pins, fibulae)
Large objects (bracelets, neck rings)

B


SMALL : LARGE OBJECTS RATIO
60
50
40
30
20
10
0
NORWAY E
NORWAY W
NORWAY N
JUTLAND
FUNEN
ZEALAND
BORNHOLM
SCANIA
MAINLAND SWEDEN W
MAINLAND SWEDEN E
GOTLAND
ÖLAND

C


NUMBER OF ROMAN IMPORTS
200
180
160
140
120
100
80
60
40
20
0
JUTLAND
FUNEN
ZEALAND
BORNHOLM
LOLLAND, FALSTER
NORTHERN SWEDEN
CENTRAL SWEDEN
SOUTHERN SWEDEN
GOTLAND
ÖLAND
NORWAY N
NORWAY W
NORWAY E
NORWAY S

D

in Zealand. Those found outside Zealand are most often forms typical of that island[155]. The function of these inscriptions remains under discussion, but the fact that the writing appears here in connection with objects belonging to the female world is highly interesting in itself, given that most of the other known examples are connected with the male world.

If we assume that gold bracelets, neck rings, and finger rings form the axis guiding our reconstruction of political networks in Northern Europe, we may ask why exactly

[155] M.J. Przybyła 2015.

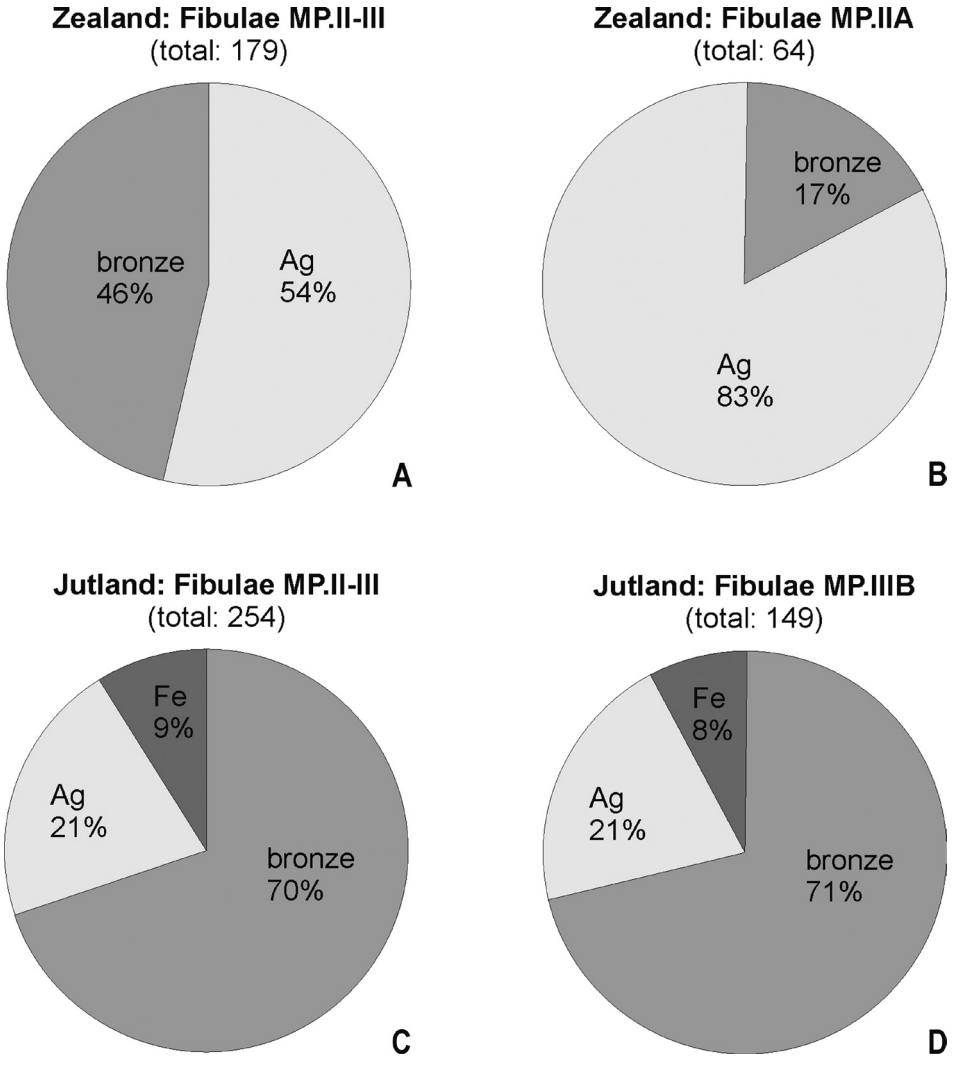


Fig. 45. Proportions of brooches of groups MP.II and III made of silver, bronze, and iron in Zealand and Jutland (based on: M.J. Przybyła 2018a).

Ryc. 45. Proporcje srebrnych, brązowych i żelaznych zapinek grup MP.II i III z Zelandii i Jutlandii (na podstawie: M.J. Przybyła 2018a).

Fig. 44. Northern Europe in the Late Roman Period (160–375 CE): A – amount of gold found in particular regions (based on: K. Andersson 1993a); B – number of large gold objects in proportion to small gold objects in particular regions (based on: K. Andersson 1993a); C – coefficient of gold division in particular regions: number of small objects divided by number of large objects (the smaller the score, the smaller the dispersion of gold into small objects); D – number of imported Provincial Roman vessels in particular regions (based on: U. Lund Hansen 1987).

Ryc. 44. Północna Europa w późnym okresie wpływów rzymskich (160–375 n.e.): A – ilość złota znalezionego w poszczególnych regionach (na podstawie: K. Andersson 1993a); B – liczba dużych przedmiotów złotych w stosunku do liczby małych przedmiotów złotych w poszczególnych regionach (na podstawie: K. Andersson 1993a); C – proporcje złota w poszczególnych regionach: liczba przedmiotów małych w stosunku do liczby przedmiotów dużych (im niższy współczynnik, tym mniejsze rozproszenie złota na przedmioty małe); D – liczba importowanych naczyń rzymskich w poszczególnych regionach (na podstawie: U. Lund Hansen 1987).

Zealand seems to have had the strongest contacts with the Roman Empire, and not for example Gotland or Öland. The simplest explanation may be distance. If, however, this is indeed so, then there are also other, less distant candidates for such a position, and the question of why remains. Another two explanations offered in the literature are trade with the Roman Provinces and diplomatic contacts. The first explanation assumes that the people of Zealand had something attractive to offer to Roman partners in exchange. This may have been amber, furs, honey, meat, or grain[156], but this argument is not particularly strong, since amber does not occur profusely in Zealand[157] and the other goods mentioned in this context could be accessed even more easily closer to the borders. The alternative explanation explores a possibility that the abundance of Roman imports in Zealand stems from its cliental dependence on the Roman Empire[158]. One may point here to a similar kind of relationship binding elites of barbarian tribes living beyond the limes with the Roman administration. The question arises, however: what kind of benefits might an alliance with such a distant and weak political entity provide for the Romans? After all, Rome did not choose the strongest partner in the region. One could even risk saying that it was only the stronger ties with the Roman Empire that actually created the importance of Zealand, an area which in the Early Roman period remained rather on the periphery of the distribution of Provincial Roman imports in Northern Europe[159].

Trying to answer this question one could point towards a hypothetical alteration of Roman perception of the political situation after the Marcomannic Wars – which is the time when the East Zealandic centre of power seems to have come into existence. Since we know that the Romans sought to figure out the ultimate causes of the conflict, which were identified by their historians as the migration of the Langobards and Obii southwards[160], we may suppose that in the aftermath they could have sought to control the balance of power among the North European tribes to avoid further escalations of local wars in future. It is worth mentioning here that some archaeological evidence exists to suggest that the Marcomannic conflict at the Roman borders was part of broader – and probably sometimes violent – processes involving population movements, initiated somewhere within the western and central Baltic area and the Jutland Peninsula[161].

One archaeological example could be the displacement of the Wielbark Culture, initially towards the west and south and later towards eastern Poland and western Ukraine[162]. There are grounds to suppose that people from Västergötland, Östergötland, Uppland, eastern Scania, and Gotland played some role in this process. This is suggested by single finds of snake bracelets of the Pomeranian type (including gold specimens) in these territories, which are also known from sites situated close to the Middle Danubian limes[163]. In the context of a south-eastern direction of connections, one could consider the role of elites from the western part of the central Baltic area in settlement transformations (involving migrations) affecting the Wielbark Culture.

Connections between the western part of the central Baltic area and the Wielbark milieu, and among other cultural areas as well, remain evident in phases C1b and C2, manifesting themselves through the distribution of some types of gold ring ornaments. With respect to the Wielbark Culture, one can recall here the presence of single burials with gold snake bracelets or finger rings representing group 2 (cf. Chapter 3.6.8), or with twisted gold neck-rings with pear-shaped clasps.[164] These finds come from the territory east of the lower course of the Vistula, from the Chełmno and Iława Lake Districts, from Podlasie, and from the Lubusz Land region (cf. Fig. 30, 46). It is impossible to determine whether they indicate a physical presence in these areas of representatives of elites from Gotland, Öland, or south-eastern mainland Sweden, or they rather reflect prestige exchange or distribution of gifts. Given the migratory nature of transformations taking place within the Wielbark Culture at the turn of the Early and Late Roman Periods and in the Late Roman Period, one should perhaps consider this first possibility.[165] While noting the presence in the Wiel-

[156] B. Storgaard 2001, 100–102.
[157] M.J. Przybyła, E. Rydzewska 2019.
[158] B. Storgaard 2001, 100–104; 2003, 118; T. Grane 2007; 2011.
[159] D. Liversage 1980; B. Storgaard 2001, 96.
[160] B. Storgaard 2001, 102–104.
[161] K. Godłowski 1982; 1984; 1994, 65; E. Weber 1994; P. Kehne 1994; G. Dobesch 1994.
[162] H. Machajewski 1980; J. Schuster 1996; 2005, 100–119; K. Godłowski, J. Okulicz 1981, 50–52; K. Godłowski 1984, 329–331; 1993, 66; T. Dąbrowska 1981; J. Andrzejowski 1989; 2004; V. Bierbrauer 1992, 17–18; 1994, 67–70; A. Cieśliński, W. Nowakowski 2005, 257.
[163] Cf. above; V. Beliavets, M.J. Przybyła, S. Voroniatov 2018, 173–176, fig. 8.
[164] The grave from Dobrocin/*Gross Bestendorf* (W. Gaerte 1926, 310–315, pl. 2), the damaged grave from Szlemno/*Garnseedorf* (E. Blume 1912, 88) and probably grave R433 from Czarnówko (J. Andrzejowski 2014, 112–113, fig. 12). To these finds one should probably add a neck-ring from the grave from Gęstowice/*Tammendorf*. This artefact has been linked with the Luboszyce Culture (J. Andrzejowski 2014, 105–107, fig. 4:d). However, using a more dynamic model of cultural transformations on the middle Oder River proposed by Jan Schuster (which in my opinion is convincing: J. Schuster 2005, 100–125), this neck-ring can be linked with the episode of Wielbark Culture occupation recorded in that area.
[165] Another two twisted neck-rings with pear-shaped clasps come from graves dated to phase C1 discovered in sites linked with the Przeworsk Culture (J. Andrzejowski 2014, 96–99, 112–114, fig. 1).

bark milieu of gold rings typical of the western part of the central Baltic area, it is also worth emphasising the absence of rings linkable with Zealand (finger rings B.39) or with the Jutland-Norway area (finger rings B.18). They are rare in the central Baltic area as well.

In conclusion, it can be assumed that while Zealand was probably not the strongest political power in the Baltic Sea region in the middle of the second century, this may have been precisely the reason why the island, or rather its elites, were the exact target of the Roman foreign policy. Following this line of reasoning, we can assume that the Roman Empire was the source of Zealand's special position at the turn of the second and third centuries, and that the Romans made Zealand important in order to create a counterweight to the old "big fishes" of local, circum-Baltic politics. The distribution of some of the golden objects listed above suggests that at least some of these major actors should be sought among populations of Öland, Gotland, and eastern mainland Sweden.

The occurrence of gold rings of groups 1 and 2 in Late Roman Period grave assemblages connected with the east Zealandic centre of power reveals another, western direction of influences exerted by elites from the western central Baltic area. These influences are evident even further to the west, in the Jutland Peninsula. In northern Jutland they are evidenced by a gold snake bracelet of group 2 found in one of the richly furnished graves from the Vendsyssel region (cf. Chapter 3.6.2; Fig. 15:4). Single finger rings of the same group are also known from Himmerland and Søhøjlandet (Fig. 13:3.10, 29). The presence of these artefacts may reflect the efforts of west central Baltic elites to establish diplomatic contacts with the local elites. The reason for establishing such contacts may have been an interest (perhaps episodic) in temporary or more prolonged usage of Limfjord as a route leading to the west. Single finds of ring ornaments typical of the western part of the central Baltic known from south-eastern and south-western Scania, Bornholm, and north-eastern Funen can perhaps be linked with another, more easterly section of the same route (Fig. 46).

Gold snake rings of group 2 connected with the western part of the central Baltic area, as well as gold twisted neck-rings with pear-shaped clasps, also occur singly in deposits of weapons and equestrian equipment in the east of the Jutland Peninsula (Thorsberg, Illerup *Platz A*, Porskjær)[166]. Their presence in that region may indicate (although not necessarily – for a different interpretation see below) that the interest in the Jutland Peninsula shown by elites from the west central Baltic area might have taken forms other than peaceful. Dress items occurring in these deposits indicate that invading armies, whose belongings were buried as deposits, were not monolithic groups originating from one specific area within Barbaricum. They were rather bands of warriors bound by alliances, originating from different places (including from Jutland itself)[167]. Therefore, the mentioned bracelets and neck-rings found in bog deposits in Jutland may just reflect participation of elites from the west-central Baltic area in these failed military enterprises, not necessarily their leading role. The territory of Jutland may have been the ultimate target of this military activity, or just a stage on the route taken by such mixed contingents. From such a perspective, these events may be seen as elements of a broader phenomenon, one that resulted, among other things, in the consolidation of large tribal unions in the 3rd century CE and their devastating raids on Roman provinces, recorded by ancient written sources[168].

On the other hand, the presence of artefacts originating from various parts of Scandinavia in the deposits in question may stem from a local, Jutlandic conflict over power in the region, in which allies from neighbouring regions were involved. This could explain the discovery – in some of the deposits – of richly decorated weapons and personal equipment of warriors, which in terms of decoration find good analogies among brooches known from female graves in Jutland and among belts from rich burials discovered in the eastern part of Schleswig-Holstein, near the Bay of Kiel[169].

Discussing the connections between the west central Baltic area and this part of Northern Europe it is also worth mentioning a cemetery from Neudorf-Bornstein near the Bay of Kiel, where rich grave assemblages dated to phases C1b–C3 were found[170]. The site lies within the area encompassing Angeln and territories adjoining it from the south and the west, occupied by a local cultural group revealing traits characteristic of the northern Elbe Germanic cultural circle, with certain elements indicative of contacts with Funen and with the South Jutland group[171]. Two burials from Neudorf-Bornstein contained gold neck-rings interpretable as markers of high social position. One of the neck-rings, from grave 7 dated to

[166] K. Raddatz 1957, 120, pl. 19:1.2.7; C. von Carnap-Bornheim, J. Ilkjær 1996a, 160, 172, fig. 138; A. Nørgård Jørgensen 2008, 63, 181, fig. C115.

[167] G. Bemmann, J. Bemmann 1998, 310–311; P. Ethelberg *et alii* 2000, 109–111, 160–161; M.J. Przybyła 2018b, 614–615, 619; this has recently been also noted by Xenia Pauli Jensen (2011, 41–44) in the context of the bog site at Vimose.

[168] R. Wenskus 1961, 494–551; A. Genrich 1970; G. Alföldi 1978.

[169] M.J. Przybyła 2018b, 263–265, 284–286, 479–483, 485–486, 614–615, 619, fig. 9/4:2, 10/13, 15/46.

[170] H. Steinert 1968; G. Schäfer 1968; 1975a; 1975b; C. von Carnap-Bornheim 2002, 15–16, 23; 2003, 240–242; A. Abegg-Wigg 2008.

[171] A. Genrich 1970, 108–109; J. Bemmann 1999, 23.

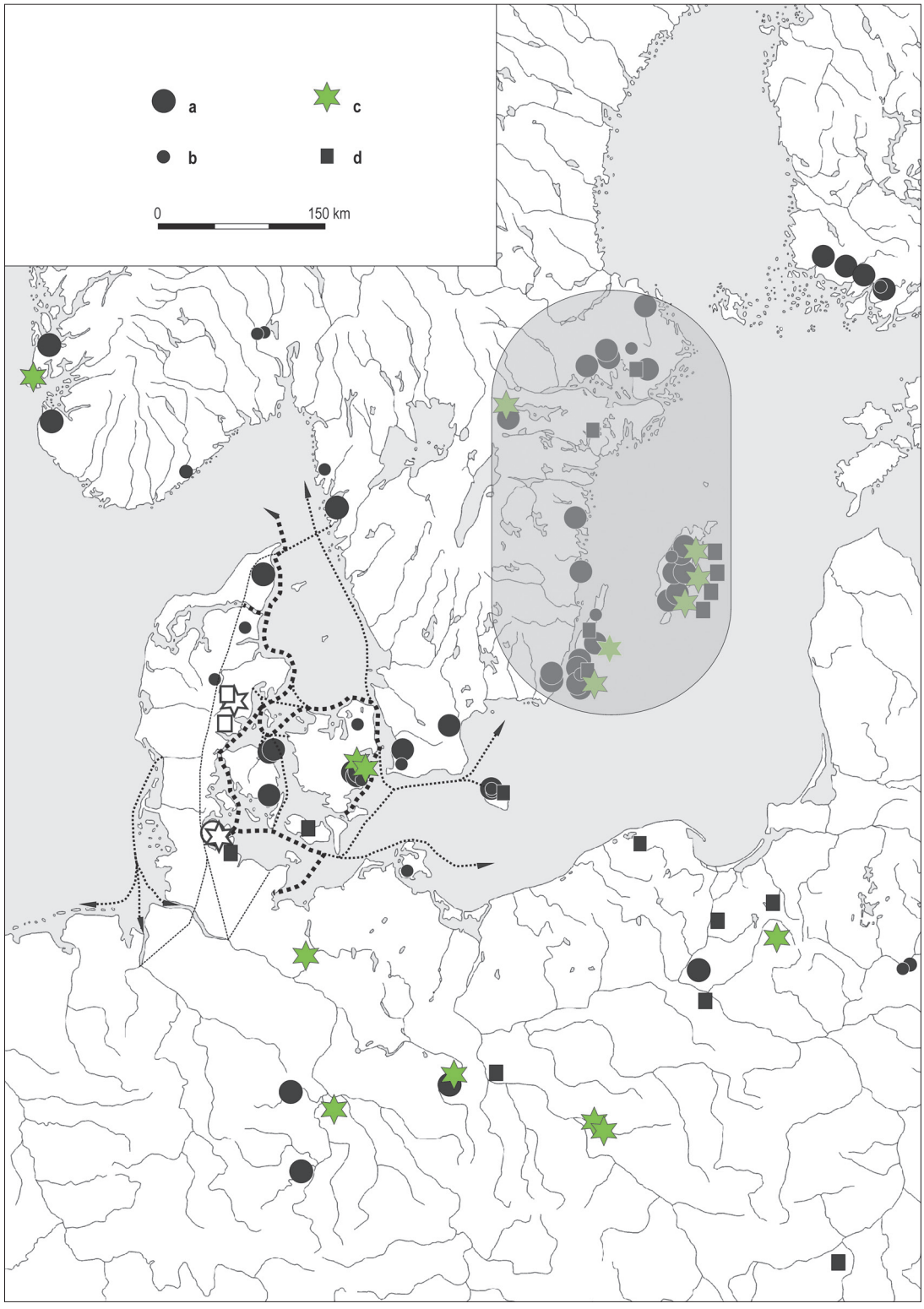


Fig. 46. Sea routes in the western part of the Baltic Sea basin (after A. Jørgensen & T. Nyberg 1992), plotted against distribution of large (a) and small (b) gold rings of groups 1 and 2, gold Kolben rings (c), and twisted gold neck rings with pear-shaped clasp (d). White marks – bog deposits; shadow – western part of the Central Baltic zone.

Ryc. 46. Szlaki morskie w zachodniej części basenu Morza Bałtyckiego (wg A. Jørgensena i T. Nyberga 1992), na tle rozprzestrzenienia dużych (a) i małych (b) złotych obręczy grup 1 i 2, złotych obręczy kolbowatych (c) oraz złotych tordowanych naszyjników z gruszkowatymi zapięciami (d). Symbole otwarte – znal. bagienne; zacieniono zacodnią część strefy środkowobałtyckiej.

phase C2, is twisted and has a pear-shaped clasp, representing a type characteristic of centres of power situated in the western part of the central Baltic area[172]. The neck-ring may have found its way to the shores of the Bay of Kiel due to distribution or exchange of prestige objects, for example as a gift to a local nobleman connected with maintaining diplomatic contacts. This territory may have been part of a route important for elites from the western part of the central Baltic area. This hypothesis is potentially supported by other ring ornaments associated with west central Baltic centres of power discovered along this hypothetical route: in Bornholm,[173] the Stevns region in Zealand,[174] Lolland,[175] and south-eastern Funen.[176] Such a course of the route seems to be also corroborated by later data concerning the network of medieval sea routes in the western Baltic Sea[177]. The south-western direction of interests shown by west-central Baltic elites is evidenced by single examples of gold snake bracelets of group 2 known from Saxony-Anhalt, Thuringia, and Lower Lusatia (cf. Fig. 29, 46).

This picture of contacts maintained by elites from the western part of the central Baltic area naturally provokes questions about the cause or causes of establishing such long-distance connections. Some part of the answer may be the attractive force of the main cultural and economic centre of Europe at the time, meaning the Roman Empire. In the 3rd and 4th century CE, ancient written sources report increased frequency of barbarian raids on provinces of the Roman Empire, and consolidation of large tribal unions like the Alemmani, Francs, and Saxons[178]. Roman authors are very vague as to the genesis of these tribal unions. As a result, they are often regarded in the subject literature as amalgams of different populations previously mentioned by ancient authors in the areas where such unions formed. This interpretation also draws on archaeological data concerning the cultural character and stability (or instability) of settlement structures in these areas. In the light of archaeological evidence, it can be assumed that the processes leading to the formation of these tribal unions could also involve people coming from the north.

Particularly interesting evidence of this phenomenon is provided by one of rich male burials known from central Germany: grave 2 from Emersleben dated to phase C2. Apart from a group 2 bracelet typical of the west-central Baltic area, the assemblage also included an aureus of Postumus, one of the so-called Gallic emperors[179]. This places this burial in a group of richly furnished graves from central Germany containing coins issued by the short-lived Gallic Empire (260–273). It is worth recalling here that such graves are often connected with the account from *Historia Augusta* (*Tyranni triginta* 6,3)[180], concerning *auxilia Germanorum* – mercenary Germanic troops reportedly used by Emperor Postumus in his fight against the legal Emperor Gallienus[181]. Thus, the grave inventory in question combines the Scandinavian thread with that of military activity of some unspecified Germanic mercenaries operating within the borders of the Roman Empire[182]. At the same time, this inventory may be used to illustrate another possible explanation of the dispersed occurrence of gold rings. As gold rings are most often interpreted as elements involved in the system of distribution and exchange of gifts, the man buried in grave 2 in Emersleben might have been either a representative of higher social classes in the region where the ring was manufactured, or their ally or client, the recipient of the precious gift. In the case of grave 2 from Emersleben, this second possibility is suggested by the orientation of the burial. The grave was oriented along the W-E axis, which diverged from the norms observed at that time both in central Germany and in the west central Baltic area (in both these areas the prevailing orientation was along the N-S axis[183]). The closest region where graves were typically oriented along the W-E axis is Jutland[184] where, as mentioned, gold rings typical of the west-central Baltic area appear as well. This direction of contacts is evidenced in central Germany also by the presence of single items of rich Jutlandic female dress, possibly a trace of exogamic relationships among the elites of these two regions (brooch of group 1 from Haßleben cemetery[185]).

This more detailed interpretation of the context in which gold rings typical of the west central Baltic area

[172] G. Schäfer 1968, 57; 1975b, 111, fig. 3; A. Abegg-Wigg 2008, 282.
[173] Neck-ring from Sorte Muld – C. von Carnap-Bornheim, J. Ilkjær 1996a, 356, fig. 229; 1996b, 267.
[174] Snake bracelets of groups 1 and 2: Valløby, Himlingøje, grave 3/1977, Varpelev, grave A. Finger rings of group 2: Himlingøje, grave 1/1984, Gunnerupgård, grave 1 – cf. Fig. 6, with references.
[175] Neck-ring from Erikstrup – K. Andersson 1993a, cat. 287; C. von Carnap-Bornheim, J. Ilkjær 1996a, 354, fig. 229; 1996b, 267.
[176] Bracelet from Møllegårdsmarken cemetery – L. Jørgensen, P. Vang Petersen 1998, 161, fig. 121, 122.
[177] O. Crumlin-Pedersen 1987, 112–116, fig. 8; 1998, 27, fig. 14; 2010, 105, fig. 4:24; A. Nørgård Jørgensen 2003, 194–195.
[178] H. Steuer 1998, 274–278; H.H. Anton *et alii* 1995.
[179] B. Schmidt, J. Bemmann 2008, 24–26, pl. 12:1.3.
[180] *Historiae Augustae* III, Loeb Classical Library 293, Cambridge (MA) 1932.
[181] J. Werner 1973; 1989; J. Bemmann 2014.
[182] On the possibility of drawing more detailed conclusions see J. Bemmann 2014, 179–184, fig. 2.
[183] J. Bemmann, H.-U. Voss 2007, 7; O. Almgren, B. Nerman 1923, 94–99, 109–110, 116, 125–126; B. Stjernquist 1955, 46, 51; M. Stenberger 1977, 260–261.
[184] E. Albrectsen 1968, 198–200; P. Ethelberg 1990, 23–24.
[185] W. Schulz 1933, 18, pl. 11:14.

occurred in distant regions does not diminish the impression of the great extent and multi-directionality of contacts maintained by the elites from that area, indicative of their inter-regional activity. The analysis of the geographically closest connections among rings characteristic of the west-central Baltic area allows for drawing more detailed conclusions concerning the connections among particular regions. However, when looking from a more general perspective, two directions become particularly evident: a south-eastern, very early one, dating back at least to the beginning of the Late Roman Period and reaching to the Wielbark Culture area, and a western/south-western one, connected with important routes leading through the Jutland Peninsula. Applying the same perspective to the island of Zealand, we arrive at a different picture. Zealand's contacts seem more oriented towards the neighbouring regions of Scandinavia, which may indirectly corroborate the hypothesis positing the role of Zealand as a political actor created by the Romans to counterbalance other political forces in North Europe.

Translation: Piotr Godlewski

Ass. Prof. Marzena Przybyła
Instytut Archeologii Uniwersytetu Jagiellońskiego
Gołębia St. 11
PL 31-007 Kraków
marzenaprzybyla77@gmail.com
https://orcid.org/0000-0001-5877-3055

Received: 16.07.2020 / Revised: 1.03.2021 / Accepted: 23.06.2021

APPENDIX 1: LOCALITIES MENTIONED IN THE TEXT

Alingsås, Västergötland (S)
Altefär-Grahlhof, Lkr. Vorpommern-Rügen, Mecklenburg-Vorpommern (D)
Asarve, Gotland (S)
Avaldsnes, Rogaland (N)
Babięta (fmr. *Babienten*), woj. warmińsko-mazurskie (PL)
Baitai, Klaipėdos apskritis (LT)
Bandužiai, Klaipėdos apskritis (LT)
Baunegård, Bornholms amt (DK)
Bezymânka/Безымянка (fmr. *Nuskern*), obl. Kaliningrad (RUS)
Lupaja, Varsinais-Suomi (FIN)
Bolšoe Isakovo/Болшое Исаково (fmr. *Lauth*), obl. Kaliningrad (RUS)
Brahetrolleborg, Svendborg amt (DK)
Bredinge, Öland (S)
Bringsvær, Aust-Agder (N)
Brøndsager, Københavns amt (DK)
Burge, Gotland (S)
Burs, Gotland (S)
Bækkegård, Bornholms amt (DK)
Christiansø, Bronholms amt (DK)
Cottbus, Kreisfreie Stadt, Brandenburg (D)
Czarnówko, woj. pomorskie (PL)
Dalbo, Ängsåkern, Gotland (S)
Dobrocin (fmr. *Gross Bestendorf*), woj. warmińsko-mazurskie (PL)
Donbæk, Hjørring amt (DK)
Dłużec (fmr. *Langendorf*), woj. warmińsko-mazurskie (PL)
Ekeryd, Småland (S)
Efteløt (*kyrkan*), Buskerud (N)
Emersleben (Halberstadt-E.), Lkr. Halberstadt, Sachsen-Anhalt (D)
Ekeberga, Uusimaa (FIN)
Eskilstorp, Skåne (S)
Flurstedt, Kr. Weimarer Land, Thüringen (D)
Fohrde, Gallberg III, Lkr. Potsdam-Mittelmark, Brandenburg (D)
Folkeslunda, Öland (S)
Fredsø, Thisted amt (DK)
Fyns Hoved, Odense amt (DK)
Galtrupgård, Thisted amt (DK)
Gęstowice (fmr. *Tammendorf*), woj. lubuskie (PL)
Glimsta, Västigården, Hälsingland (S)
fmr. *Greibau*, obl. Kaliningrad (RUS)
Greve, Københavns amt (DK)
Grisbäck, Småland (S)
Grumløse, Præstø amt (DK)
Gunnerupgård, Præstø amt (DK)
Gute, Gotland (S)
Gąsior (fmr. *Gonschor* vel *Jaskowska-See*), woj. warmińsko-mazurskie (PL)
Gödåker, Uppland (S)
Harplinge sn., Halland (S)
Hasseris, Ålborg amt (DK)
Haßleben, Lkr. Sömmerda, Thuringia (D)
Havnelev mark – see: Rødvig, Præstø amt (DK)
Helmsdorf, Lkr. Mansfelder Land, Sachsen-Anhalt (D)
Herslev, Holbæk amt (DK)
Himlingøje, Præstø amt (DK)
Hingeballe, Viborg amt (DK)
Homnes, Nord-Trøndelag (N)
Horsetofte, Sorø amt (DK)
Hove, Rogaland (N)
Höviksnäs, Bohuslän (S)
Hulterstad, Öland (S)
Hundehavemarken – see: Vedskølle
Häljom, Medelpad (S)
Hångsdala, Västergötland (S)
Illerup, Skandeborg amt (DK)
Indbjoa, Hordaland (N)

Isums, Gotland (S)
Isokylä (I.-Katajamäki, I.-Ketohaka), Varsinais-Suomi (FIN)
Jäbara, Ida-Virumaa (EST)
Jakubowo (fmr. *Jakobsdorf*), woj. warmińsko-mazurskie (PL)
Kalby, Præstø amt (DK)
Kalleguta ås, Öland (S)
Kirkebakkegård, Frederiksborg amt (DK)
Kleva, Öland (S)
Klæstrup (bog), Hjørring amt (DK)
Knuts, Gotland (S)
Kolstø, Rogaland (N)
Komorowo (fmr. *Kommerau*), woj. kujawsko-pomorskie (PL)
Kongsted, Holbæk amt (DK)
Kosewo (fmr. *Kossewen*), woj. warmińsko-mazurskie (PL)
Kristinelund, Öland (S)
Kråkelund, Småland (S)
Kvinnsgröta, Öland (S)
Lagedi, Harjumaa (EST)
Lagmandsgården, Telemark (N)
Liene Skov, Ålborg amt (DK)
Lilla Ryftes, Vätåker, Gotland (S)
Luggavi, Närke (S)
Lumpėnai, Tauragės apskritis (LT)
Lydinge, Svendborg amt (DK)
Lëtnoe/Лётное (fmr. *Tenkieten*), obl. Kaliningrad (RUS)
Långalma, Uppland (S)
Långtora sn., Uppland (S)
Løddesøl, Aust-Agder (N)
Machary (fmr. *Macharren*), woj. warmińsko-mazurskie (PL)
Magleby, Præstø amt (DK)
Mannegårda, Gotland (S)
Marienborg, Præstø amt (DK)
Miętkie (fmr. *Mingfen*), woj. warmińsko-mazurskie (PL)
Møllegårdsmarken, Svendborg amt (DK)
Mõigu-Peetri, Harjumaa (EST)
Naffentorp, Skåne (S)
Nes, Hordaland (N)
Naustdal (Sogn og Fjordane) (N)
Nikutowo (fmr. *Nikutowen*), woj. warmińsko-mazurskie (PL)
Nordrup, Sorø amt (DK)
Norra Näsby, Öland (S)
Nousiainen (Nousis), Varsinais Suomi (FIN)
Nyby, Öland (S)
Näsby, Öland (S)
Odense, Seden Syd, Odense amt (DK)
Okunevo/Окунево (fmr. *Grebieten*), obl. Kaliningrad (RUS)
Oxvang (Oksvang), Ribe amt (DK)
Palokylä, Varsinais-Suomi (FIN)
Pedersker (Smålyngen), Bornholms amt (DK)
Perkiö, Pohjanmaa (FIN)
Piilsi, Ida-Viruma (EST)
Pilipki, woj. podlaskie (PL)
Porskjær, Skandeborg amt (DK)
Proosa, Harjumaa (EST)
Putilovo/Путилово (fmr. *Corjeiten*), obl. Kaliningrad (RUS)
Ragnabo, Småland (S)
Ramsgården, Västergötland (S)
Rauna (fmr. *Ronneburg*), Cēsu rajons (LV)
Ravnkilde (*Præstegårdsmark*), Ålborg amt (DK)
Rings, Gotland (S)
Rødvig (*Havnelev mark*), Præstø amt (DK)
Röråsen, Öland (S)
Ryd, Öland (S)
Rønnovsholm (bog), Hjørring amt (DK)
fmr. *Rosenau*, obl. Kaliningrad (RUS)
Saha, Harjumaa (EST)
Sappesborg, Odense amt (DK)
Selvejergård (Højlyngen), Bornholms amt (DK)
Skedemosse, Öland (S)
Skedstad, Öland (S)
Skibbinge, Præstø amt (DK)
Skovgårde, Præstø amt (DK)
Smolanka (fmr. *Landskron*), woj. warmińsko-mazurskie (PL)
Solhems Mellan, Bohuslän (S)
Sorte Muld, Bornholms amt (DK)
Spychówko (fmr. *Klein Puppen*), woj. warmińsko-mazurskie (PL)
Stenlille, Holbæk amt (DK)
Stockebäck, Småland (S)
Stokkerhoved, Haderslev amt (DK)
Storkåge (Västerbotten), Hälsingland (S)
Stora Brattön, Bohuslän (S)
Szlemno (fmr. *Garnseedorf*), woj. pomorskie (PL)
Szpaki, woj. podlaskie (PL)
Søndre Kjørstad, Oppland (N)
Šernai, Klaipėdos apskritis (LT)
Šossejnoe/Шоссейное, obl. Kaliningrad (RUS)
Thorsberg bog, Süderbrarup, Kr. Schleswig-Flensburg, Schleswig-Holstein (D)
Thölstedt, Lkr. Oldenburg, Niedersachsen (D)
Tjetthög, Runsberga, Öland (S)
Troma, Gotland (S)
Tuna, Uppland (S)
Tuna, Västmanland (S)
Tängelgårda, Gotland (S)
Türsamäe, Ida-Virumaa (EST)
Uddvide (Barshaldershed), Gotland (S)
Vallstenarum, Gotland (S)
Valløby, Præstø amt (DK)
Varpelev, Præstø amt (DK)
Vedskølle (*Hundehavemarken*), Præstø amt (DK)
Veien, Buskerud (N)
Verevi-Sandimärdi, Tartumaa (EST)
Vestringe, Gotland (S)
Vi alvar, Öland (S)
Värnhem, Gotland (S)
Västra Rickeby, Uppland (S)
Værløse (*kirke*), Københavns amt (DK)
Wólka (fmr. *Dietrichswalde*), woj. warmińsko-mazurskie (PL)
Zarečenskoe/Зареченское (fmr. *Gross Sobrost*), obl. Kaliningad (RUS)

fmr. *Åbo län* (FIN)
Ösby, Öland (S)
Övra Vannborga, Öland (S)
Ørum (*skole*), Hjørring amt (DK)

APPENDIX 2: DESCRIPTION OF TRAITS PRESENTED IN FIG. 4

1 – Shape of the ring's bottom part:
A – spiral ring with 2 or 3 ribbons
B – three convergent hoops soldered into one
C – two hoops with a plate soldered between them
D – one ribbon-like hoop widening into a ribbon

2 – Number of ribbons:
A – one ribbon
B – two ribbons
C – three ribbons
D – four ribbons
E – upper part cast as a monolith plate

3 – Upper part formed into a plate:
A – yes
B – no

4 – Plates present in the lower part of the hoop:
A – yes
B – no

5 – Decoration of the hoop:
A – beaded decoration
B – twisted
C – plain

6 – Transition between the ribbon and its terminal:
A – gradual
B – with a distinct step
C – rectangular plate passing into a hoop

7 – Decoration of the ribbon's side edges:
A – yes
B – no

8 – Ribbon edge:
A – flat
B – thickened
C – none

9 – Ribbon ridge:
A – high, triangle-sectioned
B – high, trapezium-sectioned
C – flat, broad, semi-circular or trapezium-sectioned
D – none

10 – Direction of ornamental pattern on the ridge:
A – transversal
B – longitudinal
C – undecorated

11 – Triangular facets at the end of the ribbon:
A – yes
B – no

12 – Decoration of the hoop at the base of the ribbon:
A – yes
B – no

13 – Form of the head:
A – zoomorphic, triangular, V-shaped
B – zoomorphic, profiled, V-shaped
C – pear-shaped
D – triangular, zoomorphic, flat top
E – conical, schematized
F – none

14 – Longitudinal decoration along the axis of the head:
A – yes
B – no

15 – Length proportions between conical terminal of the ribbon and knob crowning it:
A – 1–1.5 knob's length
B – 2 knob's length
C – 3 knob's length
D – 4 and more knob's length
E – none

16 – Conical terminal decorated with ribs:
A – yes
B – no
C – no conical terminal

17 – Type of ribs on the conical terminal:
A – evenly spaced ribs with no additional decoration
B – evenly spaced ribs with some ribs decorated with oblique notches
C – densely ribbed spaces interspersed with plain spaces
D – no conical terminal

18 – Knob crowning ribbon terminals:
A – oval
B – hemispherical
C – conical
D – acorn-shaped
E – none

19 – Ribs above the head:
A – one
B – two
C – none

20 – Eyes:
A – small hemispherical knobs
B – large hemispherical knobs
C – small knob within a convex circle
D – convex circle
E – round hollow within a concave circle
F – none

21 – Stamped circles at the sides of the head:
A – yes
B – no

22 – Nostrils marked:
A – yes
B – no

23 – Single longitudinal line incised along ribbon edges:
A – yes
B – no

24 – Two longitudinal lines incised along ribbon edges:
A – yes
B – no

25 – Ribbons decorated with longitudinal, convex zigzag:
A – yes
B – no

26 – Convex plain bands separating bands of filigree or bands of oblique notches, featuring as ornamentation of ribbons/plates:
A – yes
B – no

27 – Longitudinal line incised along the crest of the ridge:
A – yes
B – no

28–56 – Various types of stamp imprints

57 – Filigree:
A – yes
B – no

58 – Granulation:
A – yes
B – no

LITERATURE

Aamundsen G. 1876: *I. Bringsver*, "Foreningen til Norske Fortidsmindesmerkers Bevaring" 1875, 205–207.

Abegg-Wigg A. 2008: *Zu den Grabinventaren aus den "Fürstengräbern" von Neudorf-Bornstein*, [in:] A. Abegg-Wigg, A. Rau (eds.), *Aktuelle Forschungen zu Kriegsbeuteopfern und Fürstengräbern im Barbaricum. Internationales Kolloquium, Schleswig 15.–18. Juni 2006*, Schriften des Archäologischen Landesmuseums. Ergänzungsreihe 4, Neumünster, 279–297.

Albrectsen E. 1968: *Fynske Jernaldergrave III. Yngre romersk jernalder*, Fynske Studier VII, Odense.

Albrectsen E. 1971: *Fynske Jernaldergrave IV. Gravpladsen på Møllegårdsmarken ved Broholm. 1. Tekst, 2. Tavler*, Fynske Studier IX, Odense.

Alföldi G. 1978: *Die Alamannen in der Historia Augusta*, JRGZM 25, 196–207.

Almgren O. 1923: *Studien über nordeuropäische Fibelformen der ersten nachchristlischen Jahrhunderte mit Berücksichtigung der provinzialrömischen und südrussischen Formen*, Mannus-Bibliothek 32, Leipzig^2.

Almgren O., Nerman B. 1923: *Die ältere Eisenzeit Gotlands 2*, Stockholm.

Andersson K. 1991: *Skandinaviens guldfynd från romersk tid som indikatorer på politiska och/eller ekonomiska centra*, [in:] C. Fabech, J. Ringtved (eds.), *Samfundsorganisation og Regional Variation. Norden i romersk jernalder og folkevandringstid*, Jysk Arkæologisk Selskabs skrifter XXVII, Århus, 213–231.

Andersson K. 1993a*: Romartida guldsmide i Norden. I. Katalog*, AUN 17, Uppsala.

Andersson K. 1993b: *Romartida guldsmide i Norden. II. Fingerringar*, Occasional Papers in Archaeology 6, Uppsala.

Andersson K. 1995: *Romartida guldsmide i Norden. III. Övriga smycken, teknisk analys och verkstadsgrupper*, AUN 21, Uppsala.

Andersson K. 2016: *Gödåker. Ett romartida centrum i Uppland*, The Swedish History Museum. Studies 27, Stockholm.

Andrzejowski J. 1989: *Zagadnienie kontynuacji cmentarzysk we wschodniej strefie kultury przeworskiej*, [in:] J. Gurba, A. Kokowski (eds.), *Kultura wielbarska w młodszym okresie rzymskim (materiały z konferencji)*, tom II, Lublin, 103–125.

Andrzejowski J. 1991: *Okucia rogów do picia z młodszego okresu przedrzymskiego i okresu wpływów rzymskich w Europie Środkowej i Północnej (Próba klasyfikacji i analizy chronologiczno-terytorialnej)*, MSiW VI, 7–120.

Andrzejowski J. 2004: *Kultura przeworska i wielbarska na prawobrzeżnym Mazowszu i Podlasiu*, [in:] M. Dulinicz (ed.), *Problemy przeszłości Mazowsza i Podlasia*, Archeologia Mazowsza i Podlasia. Studia i Materiały III, Warszawa, 109–128.

Andrzejowski J. 2014: *Zapomniane złoto – nieznane cmentarzysko kultury przeworskiej z Plebanki na Kujawach*, WA LXV, 96–124.

Anton H.H. *et alii* 1995: H.H. Anton, D. Strauch, K. Schäferdiek, F. Rexroth, H. Steuer, s.v. *Franken. III. Historisches*, [in:] *Reallexikon der Germanischen Altertumskunde*^{2} IX, 414–435.

Arrhenius B., Eriksson G. 2006: *Gulldens hög i Husby-Långhundra*, Rapporter från Arkeologiska forskningslaboratoriet 6, Stockholm.

Arwidsson G. 1984: *Guldskatten från Burs i Källunge*, "Gotländskt arkiv" 56, 89–98.

Banytė-Rowell R. 2007: *Vėlyvojo romėniškojo laikotarpio žiedas iš Baitų kapinyno. Pavidalo kilmė Baltijos regiono kultūrinių ryšių plotmėje*, "Lietuvos Archeologija" 30, 9–38.

Banytė-Rowell R. 2013: *Baitai Cemetery Grave 37 – an inspiration to return to the question of contacts between Western Balt Areas in Late Roman Period*, "Archaeologia Lituana" 14, 157–180.

Banytė-Rowell R. 2015: *Connections Between the Memelkultur Area and Dollkeim-Kovrovo culture according to Data from Archaeological Archives*, "Archaeologia Baltica" 21–22, 40–57.

Beckmann B. 1966: *Studien über die Metallnadeln der römischen Kaiserzeit im freien Germanien*, SJahr. XXIII, 1–100.

Beckmann Ch. 1969: *Metallfingerringe der römischen Kaiserzeit im freien Germanien*, SJahr. XXVI, 5–106.

Beliavets V., Przybyła M.J., Voroniatov S. 2018: *Gold rings from Pilipki in Podlasie: some remarks on connections between the Wielbark culture and Scandinavia at the close of the Early and in the beginnings of the Late Roman Period*, [in:] B. Niezabitowska *et alii* (eds.), *Studia Barbarica. Profesorowi Andrzejowi Kokowskiemu w 65. rocznicę urodzin*, tom I, Lublin, 158–187.

Bemmann J. 1999: *Körpergräber der jüngeren Römischen Keiserzeit und Völkerwanderungszeit aus Schleswig-Holstein. Zum Aufkommen einer neuen Bestattungssitte im überregionalen Vergleich*, H.-J. Häßler (ed.), *Gedenkschrift für Albert Genrich*, "Studien zur Sachsenforschung" 13, 5–45.

Bemmann J. 2001: *Zum Totenritual im 3. Jahrhundert n. Chr.*, [in:] S. Fröhlich (ed.), *Gold für die Ewigkeit – Das germanische Fürstengrab von Gommern. Begleitband zur Sonderausstellung im Landesmuseum für Vorgeschichte Halle (Saale), 18.10.2000 bis 28.02.2001*, Halle (Saale), 58–73.

Bemmann J. 2014: *Mitteldeutschland und das gallische Sonderreich 260–274: eine liebgewonnene These auf dem Prüfstand*, "Kölner Jahrbuch" 47, 179–213.

Bemmann G., Bemmann J. 1998: (eds.) *Der Opferplatz von Nydam. Die Funde aus den älteren Grabungen: Nydam-I und Nydam-II. 1. Text*, Neumünster.

Bemmann J., Hahne G. 1995: *Waffenführende Grabinventare der jüngeren römischen Kaiserzeit und Völkerwanderungszeit in Skandinavien. Studie zur zeitlichen Ordnung anhand der norwegischen Funde*, BerRGK 75 (1994), 283–640.

Bemmann J., Voss H.-U. 2007: *Anmerkungen zur Körpergrabsitte in den Regionen zwischen Rhein und Oder vom 1. bis zur Mitte des 5. Jahrhunderts n. Chr.*, [in:] A. Faber, P. Fasold (eds.), *Körpergräber des 1.–3. Jahrhunderts in der römischen Welt. Internationales Kolloquium Frankfurt am Main, 19.–20 November 2004*, Schriften des Archäologischen Museums Frankfurt 21, Frankfurt am Main, 153–183.

Beskow Sjöberg M. 1987: *Gärdslösa socken*, [in:] M. Beskow Sjöberg (ed.), *Ölands järnåldersgravfält I*, Stockholm, 289–385.

Bierbrauer V. 1992: *Die Goten vom 1.–7. Jahrhundert n. Chr.: Siedelgebiete und Wanderbewegungen aufgrund archäologischer Quellen*, [in:] E. Straume, E. Skar (eds.), *Peregrinatio Gothica III. Fredrikstad, Norway, 1991*, Universitetets Oldsaksamlings Skrifter, Nye rekke 14, Oslo, 9–43.

Bierbrauer V. 1994: *Archäologie und Geschichte der Goten vom 1.–7. Jahrhundert. Versuch einer Bilanz*, "Frühmittelalterliche Studien" 28, 51–171.

Bitner-Wróblewska A. 2001: *From Samland to Rogaland. East-West connections in the Baltic basin during the Early Migration Period*, Warszawa.

Blankenfeldt R. 2007: *Der bildfeindliche Germane?*, [in:] C. Grünewald, T. Capelle (eds.), *Innere Strukturen von Siedlungen und Gräberfeldern als Spiegel gesellschaftlicher Wirklichkeit? Akten des 57. Internationalen Sachsensymposions vom 26. bis 30. August 2006 in Münster*, Veröffentlichungen der Altertumskommission für Westfalen 17, Münster, 99–107.

Blankenfeldt R. 2013a: *Überlegungen zu Hinweisen auf Individualität in Deponierungen von Heeresausrüstungen*, [in:] B. Ludowici (ed.), *Individual and Individuality? Approaches towards an Archaeology of Personhood in the First Millennium AD*, Neue Studien zur Sachsenforschung 4, Hannover, 55–77.

Blankenfeldt R. 2013b: *Weapon deposits in the "Thorsberger Moor" – 150 years of research and new perspectives*, [in:] I. Khrapunov, F.-A. Stylegar (eds.), *Inter Ambo Maria. Northern Barbarians from Scandinavia to the Black Sea*, Kulturhistoriske rapporter 15, Kristiansand-Simferopol, 26–39.

Blankenfeldt R. 2015: *Die persönlichen Ausrüstungen*, Das Thorsberger Moor 2, Schleswig.

Blume E. 1912: *Die germanischen Stämme und die Kulturen zwischen Oder und Passarge zur römischen Kaiserzeit, I Teil: Text*. Mannus-Bibliothek 8, Würzburg.

Braudel F. 1994: *A History of Civilizations*, New York.

von Carnap-Bornheim C. 1991: *Die Schwertriemenbügel aus dem Vimose (Fünen). Zur Typologie der Schwertriemenbügel der römischen Kaiserzeit im Barbarikum und in den römischen Provinzen*, Kleine Schriften aus dem Vorgeschichtlichen Seminar Marburg 38, Marburg.

von Carnap-Bornheim C. 2002: *Zu den Prachtgürteln aus Neudorf-Bornstein (Kr. Rendsburg-Eckernförde) Grab 3 und Grab 7*, [in:] J. Pind *et alii* (eds.), *Drik – og du vil leve skønt. Festskrift til Ulla Lund Hansen på 60-årsdagen 18. august 2002*, Publications from the National Museum. Studies in Archaeology & History 7, Copenhagen, 15–25.

von Carnap-Bornheim C. 2003: *Zu den Prachtgürteln aus Ejsbøl und Neudorf-Bornstein*, [in:] L. Jørgensen, B. Stor-

gaard, L. Gebauer Thomsen (eds.), *Sieg und Triumpf. Der Norden im Schatten des Römischen Reiches*, Kopenhagen, 240–245.

von Carnap-Bornheim C., Ilkjær J. 1996a: *Illerup Ådal 5. Die Prachtausrüstungen. Textband*, Jutland Archaeological Society Publications XXV/5, Højbjerg.

von Carnap-Bornheim C., Ilkjær J. 1996b: *Illerup Ådal 6. Die Prachtausrüstungen. Katalog*, Jutland Archaeological Society Publications XXV/6, Højbjerg.

Cieśliński A., Nowakowski W. 2005: *Die Passarge – ein barbarischer Rubikon. Entwurf einer Forschungsproblematik*, [in:] C. von Carnap-Bornheim, F. Friesinger (eds.), *Wasserwege: Lebensadern – Trennungslinien. 15. Internationales Symposium Grundprobleme der frühgeschichtlichen Entwicklung im mittleren Donauraum*, Schriften des Archäologischen Landesmuseums, Ergänzungsreihe 3, Neumünster, 253–268.

Crumlin-Pedersen O. 1987: *Häfen und Schiffahrt in der Römischen Kaiserzeit sowie in der Völkerwanderungs- und Merowingerzeit Dänemarks*, "Frühmittelalterliche Studien" 21, 101–123.

Crumlin-Pedersen O. 1998: *Archaeology and the Sea*, Achttiende Kroon-voordracht, Amsterdam.

Crumlin-Pedersen O. 2010: *Archaeology and the Sea in Scandinavia and Britain*, Maritime Culture of the North 3, Roskilde.

Curta F. 2009: *Neither Gothic, nor Slavic: Bow Fibulae of Werner's Class IIB*, "Archaeologia Austriaca" 93, 45–77.

Dąbrowska T. 1981: *Zmiany kulturowe prawobrzeżnego Mazowsza i Podlasia w okresie wpływów rzymskich*, WA LIV/1 (1980), 45–58.

d'Huy J. 2015: *Polyphemus: A Palaeolithic Tale?*, "The Retrospective Methods Network Newsletter" 9, 43–64.

Dobesch G. 1994: *Zur Vorgeschichte der Markomannenkriege*, [in:] F. Friesinger, J. Tejral, A. Stupner (eds.), *Markomannenkriege – Ursachen und Wirkungen. VI. Internationales Symposium "Grundprobleme der frühgeschichtlichen Entwicklung im nördlichen Mitteldonaugebiet", Wien 23.–26. November 1993*, Spisy Archeologického ústavu AV ČR Brno 1, Brno, 17–21.

Eggers H.J. 1951: *Der römische Import im freien Germanien*, Atlas der Urgeschichte 1, Hamburg.

Ekholm G. 1925: *Gravfältet vid Gödåker. En preliminär redogörelse*, "Fornvännen" 20, 326–346.

Ekholm G. 1927: *Gödåker. De senaste bidragen till Upplands fornhistoria*, "Upplands fornminnesförenings tidskrift" XLI, 120–130.

Ethelberg P. 1990: *Hjemsted 2 – tre gravpladser fra 3. og 4. årh. e. Kr.*, Skrifter fra Museumsrådet for Sønderjyllands Amt 3, Haderslev.

Ethelberg P. 2009: *Die Kämme*, [in:] L. Boye, U. Lund Hansen (eds.), *Wealth and Prestige – An Analysis of Rich Graves from Late Roman Iron Age on Eastern Zealand, Denmark*, Kroppedal. Studier i Astronomi – Nyere Tid – Arkæologi II, Taastrup, 153–165.

Ethelberg P. *et alii* 2000: *Skovgårde. Ein Bestattungsplatz mit reichen Frauengräbern des 3. Jhs. n. Chr. auf Seeland*, Nordiske fortidsminder B/19, København.

Foss P. 1989: *Baunegård – grave fra yngre romersk og ældre germansk jernalder*, [in:] L. Jørgensen (ed.), *Simblegård – Trelleborg. Danske gravfund fra førromersk jernalder tilvikingetid*, Arkæologiske Skrifter 3, København, 131–155.

Gaerte W. 1926: *Das germanische Reitergrab von Gr. Bestendorf, Kr. Mohrungen*, Prussia 26 (1922/23–1925), 310–315.

Genrich A. 1970: *Der Ursprung der Sachsen*, "Die Kunde" NF 21, 66–112.

Giesler U. 1978: *Jüngerkaiserzeitliche Nietknopfsporen mit Dreipunkthalterung vom Typ Leuna*, SJahr. XXXV, 5–56.

Ginalski J. 1991: *Ostrogi kabłąkowe kultury przeworskiej: klasyfikacja typologiczna*, PArch. 38, 53–84.

Godłowski K. 1982: *Północni barbarzyńcy i wojny markomańskie w świetle archeologii*, [in:] J. Wielowiejski (ed.), *Znaczenie wojen markomańskich dla państwa rzymskiego i północnego Barbaricum*, Scripta Archaeologica II, Warszawa, 48–80.

Godłowski K. 1984: *„Superiores Barbari" und die Markomannenkriege im Lichte archäologischer Quellen*, SlA XXXII/2, 327–350.

Godłowski K. 1994: *Die Barbaren nördlich der Westkarpaten und das Karpatenbecken – Einwanderungen, politische und militärische Kontakte*, "Specimina Nova. Dissertationes ex Instituto Historico Universitatis Quinqueecclesiensis de Iano Pannonio Nominatae" IX (1993), 65– 89.

Godłowski K., Okulicz J. 1981: *Prowincje kulturowe strefy środkowoeuropejskiej w młodszym okresie przedrzymskim i w okresie wpływów rzymskich*, [in:] T. Malinowski (ed.), *Problemy kultury wielbarskiej*, Słupsk, 27–64.

Götze A., Höfer P., Zschiesche P. 1909: *Die vor- und frühgeschichtlichen Altertümer Thüringens*, Würzburg.

Grane T. 2007: *Did the Romans Really Know (or Care) about Southern Scandinavia? An Archaeological Perspective*, [in:] T. Grane (ed.), *Beyond the Roman Frontier. Roman influences on the Northern Barbaricum*, Analecta Romana Instituti Danici, Suppl. XXXIX, Roma, 7–29.

Grane T. 2011: *Zealand and the Roman Empire*, [in:] L. Boye (ed.), *The Iron Age on Zealand. Status and Perspectives*, Nordiske Fortidsminder C/8, Copenhagen, 101–111.

Günther H. 1922: *Der Goldfund von Kommerau, Kreis Schwetz, Westpreußen*, "Mannus" 14, 100–109.

Gustafson G. 1905: *Grafundersökningar på Gotland*, "Antikvarisk Tidskrift för Sverige" 9/6, 129.

Gustafson L. 2004: *Jernalderlandskapet rundt Tyrifjorden*, [in:] J. Henning Larsen, P. Rolfsen (eds.), *Halvdanshaugen – arkeologi, historie og naturvitenskap*, Universitetets kulturhistoriske museer Skrifter 3, Oslo, 127–144.

Hackman A. 1905: *Die Ältere Eisenzeit in Finnland. I. Die Funde aus den fünf ersten Jahrhunderten nach Chr.*, Helsingfors.

Hagberg U.E. 1967: *The Votive Deposits in the Skedemosse Fen and their Relation to the Iron Age Settlement on Öland, Sweden*, The Archaeology of Skedemosse II, Stockholm.

Hagberg U.E. 1979: *The Surroundings of Eketorp. Gräsgård Härad during the Iron Age and the Early Middle Ages*, [in:] U. Näsman, E. Wegraeus (eds.), *Eketorp. Fortification and Settlement on Öland/Sweden. The Setting*, Stockholm, 35–60.

Hardt M. 2004: *Gold und Herrschaft. Die Schätze europäischer Könige und Fürsten im ersten Jahrtausend*, Europa im Mittelalter 6, Berlin.

Hauptmann T. 1998: *Studien zu den Dreisprossenfibeln*, [in:] J. Kunow (ed.), *100 Jahre Fibelformen nach Oscar Almgren. Internationale Arbeitstagung 25.–28. Mai 1997, Kleinmachnow, Land Brandenburg*, Forschungen zur Archäologie im Land Brandenburg 5, Wünsdorf [2002], 159–174.

Hedeager L. 1990: *Empire, frontier and the barbarian hinterland: Rome and northern Europe from AD 1–400*, [in:] M. Rowlands, M. Larsen, K. Kristiansen (eds.), *Centre and Periphery in the Ancient World*^{2}, New Directions in Archaology, Cambridge, 125–140.

Hedeager L. 1992: *Iron-Age Societies. From Tribe to State in Northern Europe, 500 BC to AD 700*, Oxford UK & Cambridge USA.

Henriksen M.B. 2000: *Lundsgård, Seden Syd og Hjulby – tre fynske bopladsområder med detektorfund*, [in:] M.B. Henriksen (ed.), *Detektorfund – hvad skal vi med dem? Dokumentation og registrering af bopladser med detektorfund fra jernalder og middelalder. Rapport fra et bebyggelseshistorisk seminar på Hollufgård den 26. oktober 1998*, Skrifter fra Odense Bys Museer 5, Odense, 17–60.

Henriksen M.B. 2001: *Fynske jernaldergrave – en udryddelsestruet gruppe affortidsminder*, [in:] A. Nørgård Jørgensen, J. Pind (eds.), *Før landskabets erindring slukkes – Status og fremtid for dansk arkæologi*, København, 75–84.

Henriksen M.B. 2009: *Brudager Mark – en romertidsgravplads nær Gudme på Sydøstfyn. I: Tekst og bilag*, Fynske Jernaldergrave 6,1–2 = Fynske Studier 22, Odense.

Henriksen M.B. 2010: *Gold deposits in the Late Roman and Migration Period landscape – a case study from the island of Funen (Fyn), Denmark*, [in:] U. Lund Hansen, A. Bitner-Wróblewska (eds.), *Worlds Apart? Contacts across the Baltic Sea in the Iron Age. Network Denmark-Poland, 2005–2008*, Nordiske Fortidsminde C/7, København-Warszawa, 389–432.

Herschend F. 1980: *Två studier i öländska guldfynd. II. Det omyntade guldet*, "Tor" XVIII (1978–1979), 195–294.

Hildebrand H. 1873: *Ormhufvudringarne från äldre jernåldern*, "Kungliga Vitterhets Historie och Antikvitets Akademiens Månadsblad" 14, 24–30.

Hildebrand H. 1891: *Ytterligare om ormhifvudringar*, "Kungliga Vitterhets Historie och Antikvitets Akademiens Månadsblad" 20, 137–142.

Hines J. 1993: *Clasps – Hektespenner – Agraffen. Anglo-Scandinavian clasps of classes A–C of the 3rd to 6th centuries A.D. Typology, diffusion and function*, Stockholm.

Hjärne E. 1917a: *Bronsfyndet från Storkåge. Ett vittnesbörd om handelsförbindelser mellan Västerbotten och Östersjöprovinserna under äldre järnåldern*, "Fornvännen" 12, 147–172.

Hjärne E. 1917b: *Bronsfyndet från Storkåge*, "Fornvännen" 12, 203–225.

Hofmann A. 2019: *Draupnir, Andvaranaut und die freigiebigen Ringgeber. Zum Symbolgehalt von Ringen im Altnordischen*, [in:] H. Sahm, W. Heizmann, V. Millet (eds.), *Gold in der europäischen Heldensage, Reallexikon der Germanischen Altertumskunde*^{2}, Egbd. 109, Berlin-New York, 246–263.

Holgersson K., Schulze H. 2001: *Källa socken*, [in:] M. Rasch (ed.), *Ölands järnåldersgravfält IV*, Stockholm, 79–136.

Holten L. 1989: *Slangehovedringene i yngre romersk jernalder i Østdanmark – en social analyse*, [in:] L. Jørgensen (ed.), *Simblegård – Trelleborg. Danske gravfund fra førromersk jernalder til vikingetid*, Arkæologiske Skrifter 3, København, 72–130.

Ilkjær J. 1990: *Illerup Ådal 1. Die Lanzen und Speere, Textband*, Jutland Archaeological Society Publications XXV:1, Højbjerg.

Ilkjær J., Lønstrup J. 1974: *Cirkulære dupsko fra yngre romersk jernalder*, "Hikuin" 1, 39–54.

Jaskanis J. 2012: *Wodzowskie kurhany kultury wielbarskiej na Podlasiu*, Białystok.

Jørgensen L. 1988: *Family Burial Practices and Inheritance Systems. The Development of an Iron Age Society from 500 BC to AD 1000 on Bornholm, Denmark*, "Acta Archaeologica" 58, 17–53.

Jørgensen L., Vang Petersen P. 1998: *Guld, Magt og Tro. Danske guldskatte fra oldtid og middelalder / Gold, Power and Belief. Danish gold treasures from Prehistory and the Middle Ages*, København.

Jørgensen O., Nyberg T. 1992: *Sejlruter i Adam af Bremens danske øverden*, Antikvarisk arkiv 74, Stockholm.

Kehne P. 1994: *Das Instrumentarium kaiserzeitlicher Außenpolitik und die Ursachen der Markomannenkriege*, [in:] H. Friesinger, J. Tejral, A. Stuppner (eds.), *Markomannenkriege – Ursachen und Wirkungen. VI. Internationales Symposium "Grundprobleme der frühgeschichtlichen Entwicklung im nördlichen Mitteldonaugebiet", Wien 23.–26. November 1993*, Spisy Archeologického ústavu AV ČR Brno 1, Brno, 39–50.

Kibenich L. 1995: *Nordische Tierkopffingeringe und ihre Verbreitung*, SJahr. 48, 108–128.

Kivikoski E.M. 1973: *Die Eisenzeit Finnlands. Bildwerk und Text*, Helsinki.

Klindt-Jensen O. 1957: *Bornholm i folkevandringstiden og forudsætningerne i tidlig jernalder*, Nationalmuseets Skrifter, Større Beretninger 2, København.

Kmieciński J. 1962: *Zagadnienie tzw. kultury gocko-gepidzkiej na Pomorzu wschodnim w okresie wczesnorzymskim*, Acta Archaeologica Lodziensia 11, Łódź.

Kossinna G. 1922: *Das Reitergrab von Kommerau in Westpreußen und die germanischen Trinkhörner, Spielsteine und goldenen Schlangenkopfarmspiralen der Kaiserzeit*, "Mannus" 14, 110–140.

Kropotkin V.V. 1973: *Bogatoe pogrebenie u d. Pilipki (uezd Bel'sk Podlâski, voev. Bielostok, Pol'ša)*, „Archaeologia Polona" XIV, 331–336.

Kudahl H.J. 2007: *Ravnehovedringe og stormandslliancer i romersk jernalder*, Højbjerg.

Kümmel C. 2001: *Frühe Weltsysteme. Zentrum und Peripherie-Modelle in der Archäologie*, Tübinger Texte: Materialien zur Ur- und Frühgeschichtlichen Archäologie 4, Rahden/Westf.

Lamm J.P. 2005: s.v. *Stora Hammars*, [in:] *Reallexikon der Germanischen Altertumskunde*[2] 30, Berlin-New York, 36–38.

Lau N. 2012: *Pilgramsdorf/Pielgrzymowo. Ein Fundplatz der römischen Kaiserzeit in Nordmasowien. Eine Studie zu Archivalien, Grabsitten und Fundbestand*, Studien zur Siedlungsgeschichte und Archäologie der Ostseegebiete 11, Neumünster.

Leube A. 1975: *Die römische Kaiserzeit im Oder-Spree-Gebiet*, Veröffentlichungen des Museums für Ur- und Frühgeschichte Potsdam 9, Berlin.

Liversage D. 1980: *Material and Interpretation. The Archaeology of Sjælland in the Early Roman Iron Age*, Publications of the National Museum. Archaeological-Historical Series I/XX, Copenhagen.

Lund Hansen U. 1987: *Römischer Import im Norden. Warenaustausch zwischen dem Römischen Reich und dem freien Germanien während der Kaiserzeit unter besonderer Berücksichtigung Nordeuropas*, Nordiske Fortidsminder B/10, København.

Lund Hansen U. 1988: *Handelszentren der römischen Kaiserzeit und Völkerwanderungszeit in Dänemark*, [in:] B. Hårdh *et alii* (eds.), *Trade and Exchange in Prehistory. Studies in honour of Berta Stjernquist*, Acta Archaeologica Lundensia, Series in 8°/16, Lund, 155–166.

Lund Hansen U. 1989: *Römischer Glasexport in das Freie Germanien*, "Kölner Jahrbuch" 22, 177–185.

Lund Hansen U. 1998: s.v. *Goldring*, [in:] *Reallexikon der Germanischen Altertumskunde*[2] 12, Berlin-New York, 345–361.

Lund Hansen U. 2001: *Gold Rings – Symbols of Sex and Rank. Necklaces and bracelets in Scandinavia and Continental Europe from the Late Roman and Migration periods*, [in:] B. Magnus (ed.), *Roman Gold and the Development of the Early Germanic Kingdoms. Aspects of technical, socio-political, socio-economic, artistic and intellectual development, A.D. 1–550. – Symposium in Stockholm 14–16 November 1997*, KVHAA Konferenser 51, Stockholm 2001, 157–188.

Lund Hansen U. 2002: *Logistic considerations in connection with the attacts on Denmark from the sea in the Late Roman period*, [in:] A. Nørgård Jørgensen *et alii* (eds.), *Martime Warfare in Northern Europe. Technology, organization, logistic and administration 500 BC–1500 AD*, Publications from The National Museum. Studies in Archaeology & History 6, Copenhagen, 29–46.

Lund Hansen U. 2003: *Die Sarmaten aus südskandinavischer Sicht*, [in:] C. von Carnap-Bornheim (ed.), *Kontakt – Kooperation – Konflikt. Germanen und Sarmaten zwischen dem 1. und dem 4. Jahrhundert nach Christus. Internationales Kolloquium des Vorgeschichtlichen Seminars der Philipps-Universität Marburg, 12.–16. Februar 1998*, Schriften des Archäologischen Landesmuseums Erg.-Reihe 1 = Veröffentlichung des Vorgeschichtlichen Seminars Marburg Sdbd. 13, Neumünster, 345–369.

Lund Hansen U. *et alii* 1995: *Himlingøje – Seeland – Europa. Ein Gräberfeld der jüngeren römischen Kaiserzeit auf Seeland, seine Bedeutung und internationalen Beziehungen*, Nordiske Fortidsminder B/13, København.

Lund Hansen U., Przybyła M.J. 2010: *Rosettenfibeln – ein Klassifikationsversuch*, [in:] U. Lund Hansen, A. Bitner-Wróblewska (eds.), *Worlds Apart? Contacts across the Baltic Sea in the Iron Age. Network Denmark-Poland, 2005–2008*, Nordiske Fortidsminde C/7, København-Warszawa, 241–286.

Lundh K., Rasch M. 1991: *Långlöts socken*, [in:] U.E. Hagberg, B. Stjernquist, M. Rasch (eds.), *Ölands järnåldersgravfält II*, Stockholm, 263–338.

L'vovna Z., Shchukin M. 1994: *Ripostiglio (tomba?) di Pilipki, Białystok (Polonia)*, [in:] V. Bierbrauer, O. von Hessen, E.A. Arslan (eds.), *I Goti*, Milano, 64–65.

Machajewski H. 1980: *Kultura wielbarska a kultura przeworska w Wielkopolsce*, FAP XXIX (1978), 49–64.

Mackeprang M.B. 1943: *Kulturbeziehungen im nordischen Raum des 3.–5. Jahrhunderts. Keramische Studien*, Hamburger Schriften zur Vorgeschichte und Germanischen Frühgeschichte 3, Leipzig.

Mackeprang M.B. 1945: *Nyfundne guldringe fra jernalderen*, "Fra Nationalmuseets Arbejdsmark" 1945, 25–34.

Madsen T. 1988: *Multivariate statistics and archaeology*, [in:] T. Madsen (ed.), *Multivariate Archaeology. Numerical Approaches in Scandinavian Archaeology*, Jutland Archaeological Society Publications XXI, Århus, 7–27.

Madsen T. 2007: *Multivariate Data Analysis with PCA, CA and MS*, https://www.archaeoinfo.dk/PDF/2007_Multivariate_data_analysis.pdf (accessed: 02.07.2021).

Madyda-Legutko R. 1987: *Die Gürtelschnallen der römischen Kaiserzeit und der frühen Völkerwanderungszeit im mitteleuropäischen Barbaricum*, B.A.R. Int. series 360, Oxford (1986).

Magnus B. 2002: *En liten gylden ring*, [in:] J. Pind *et alii* (eds.), *Drik – og du vil leve skønt. Festskrift til Ulla Lund Hansen på 60-årsdagen 18. august 2002*, Publications from the National Museum. Studies in Archaeology & History 7, Copenhagen, 255–262.

Mahler D.L. 2005: (ed.) *Den Rige Vestegn. Historien om en udstilling: glimt af jernalderen*, Taastrup.

Malaŝev V.J. 2000: *Periodizaciâ remennyh garnitur pozdnesarmatskogo vremeni*, [in:] Û.K. Guguev (ed.), *Sarmaty i ih sosedi na Donu. Sbornik statej*, Materialy i issledovaniâ po arheologii Dona 1, Rostov-na-Donu, 194–232.

Marseen O. 1963: *Lundegaarde-gravpladsen fra yngre romersk jernalder*, "KUML" 1963, 33–36.

Marstrander L. 1983: *Inntrøndelag i Romertid. Gravfunn og bosetning*, Gunneria 43, Trondheim.

Mauss M. 2002: *The Gift. The form and reason for exchange in archaic societies*, Routledge Classics, London-New York.

Mączyńska M., Rudnicka D. 2004: *Ein Grab mit römischen Importen aus Czarnówko, Kr. Lębork (Pommern)*, "Germania" 82/2, 397–429.

Menghin W. 2007: (ed.) *Epoha Merovingov – Evropa bez granic. Arheologiâ i istoriâ V–VIII vv. / Merowingerzeit – Europa ohne Grenzen. Archäologie und Geschichte des 5. bis 8. Jahrhunderts / Merovingian Period – Europe without Borders. Archaeology and history of the 5th to 8th centuries*, Berlin.

Müller S. 1880: *Dyreornamentiken i Norden, dens Oprindelse, Udvikling og Forhold til samtidige Stilarter*, "Aarbøger for nordisk Oldkyndighed og Historie" 1880, 185–405.

Müller S. 1912: *Vendssel-Studier III. Jernalderens kulturhistorie og Fund*, "Aarbøger for nordisk Oldkyndighed og Historie" 1912, 83–142.

Munch J.S. 1965: *Borg og bygd. Studier i Telemarks eldre jernalder*, "Universitetets Oldsaksamling Årbok" 1962, 8–175.

Neergaard C. 1892: *Meddelelser fra Nationalmuseets danske Samling: Jernalderen*, "Aarbøger for nordisk Oldkyndighed og Historie" 1892, 207–341.

Nerman B. 1935: *Die Völkerwanderungszeit Gotlands*, Stockholm.

Nicolaysen N. 1875: *Udgravninger i Fjære 1975*, "Foreningen til Norske Fortidsmindesmerkers Bevaring" 1875, 203–215.

Nørgård Jørgensen A. 2003: *Befestigungsanlagen und Verkehrskontrolle auf dem Land- und Wasserweg in der vorrömischen Eisenzeit und der römischen Kaiserzeit*, [in:] L. Jørgensen, B. Storgaard, L. Gebauer Thomsen (eds.), *Sieg und Triumpf. Der Norden im Schatten des Römischen Reiches*, Kopenhagen, 194–209.

Nørgård Jørgensen A. 2008: *Jernalderen i Nordeuropa: Porskjær Mosefund*, Jysk Arkæologisk Selskabs skrifter 59, Moesgård.

Nylén E., Schönbäck B. 1994a: *Tuna i Badelunda. Guld kvinnor båtar: I*, Västerås kulturnämnds skriftserie 27, Västerås.

Nylén E., Schönbäck B. 1994b: *Tuna i Badelunda. Guld kvinnor båtar: II*, Västerås kulturnämnds skriftserie 30, Västerås.

O'Brien M.J., Darwent J., Lyman R.L. 2001: *Cladistics Is Useful for Reconstructing Archaeological Phylogenies: Paleoindian Points from the Southeastern United States*, "Journal of Archaeological Science" 28/10, 1115–1136.

O'Brien M.J., Lyman R.L. 2005: *Cultural Phylogenetic Hypotheses in Archaeology: Some Fundamental Issues*, [in:] R. Mace, C. J. Holden, S. Shennan (eds.), *The evolution of cultural diversity. A phylogenetic approach*, London, Portland, 85–108.

O'Brien M.J. *et alii* 2015: M.J. O'Brien, M.T. Boulanger, R.L. Lyman, B. Buchanan, *Phylogenetic Systematics*, [in:] J.A. Barceló, I. Bogdanovic (eds.), *Mathematics and archaeology*, Boca Raton (FL), 225–239.

Okulicz J. 1970: *Studia nad przemianami kulturowymi i osadniczymi w okresie rzymskim na Pomorzu Wschodnim, Mazowszu i Podlasiu*, APolski XV/2, 419–492.

Pauli Jensen X. 2011: *Friend or Foe. Alliances and Power Structures in Southern Scandinavia during the Roman Iron Age*, "Lund Archaeological Review" 17, 35–48.

Przybyła M.J. 2010: *The North European elements of the Dębczyno group of the later Roman empire*, "Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz" 54/2 (2007), 573–611.

Przybyła M.J. 2011: *Migration of Individuals in the Roman Period. Testimonies of Fine Female Dress in Scandinavia*, "Acta Archaeologica" 82/1, 227–251.

Przybyła M.J. 2012: *Jünger- und spätkaiserzeitliche Metallnadeln aus dem Südteil Nordeuropas: regionale Differenzierung, Verwendung und sozialer Kontext*, RArch. NS 4, 5–67.

Przybyła M.J. 2015: *Decorative fibulae with runic inscriptions in the Late Roman Period*, [in:] O. Grimm, A. Pesch (eds.), *Archäologie und Runen. Fallstudien zu Inschriften im älteren Futhark. Beiträge zum Workshop am Zentrum für Baltische und Skandinavische Archäologie (ZBSA) in Schleswig am 3./4. Februar 2011*, Schriften des Archäologischen Landesmuseums Erg.-Reihe 11, Kiel-Hamburg, 347–386.

Przybyła M.J. 2016: *Eine Insel der Pazifisten im Meer der Krieger? Anmerkungen zu einem Grabinventar von Aasø, Seeland*, PZ 91/1, 149–201.

Przybyła M.J. 2018a: *Dress diversity as a source for studies on interregional connections: regional and chronological diversity of simple variants of fibulae with a high catch-plate from Northern Europe*, Bonner Beiträge zur vor- und frühgeschichtlichen Archäologie 20, Bonn.

Przybyła M.J. 2018b: *Pressblechverzierte Trachtelemente in spätrömischzeitlichen Skandinavien*, Nordiske Fortidsminder B/28, Copenhagen.

Przybyła M.J., Rydzewska E. 2019: *Amber as passage money on the journey to the afterlife: the role of Jutland amber in the Late Roman and early Migrations periods*, [in:] R. Annaert (ed.), *Early medieval waterscapes. Risks and opportunities for (im)material cultural exchange*, Neue Studien zur Sachsenforschung 8, Braunschweig, 153–172.

Przybyła M.S. 2014: *Cladistics, Typology and the Bronze Age Pottery from Cârna*, "Apulum" LI, 287–306.

Quast D. 2005: *Ein skandinavisches Spathascheidenmundblech der Völkerwanderungszeit aus Pikkjärve (Põlvamaa, Estland)*, JRGZM 51/1 (2004), 243–279.

Raddatz K. 1957: *Der Thorsberger Moorfund. Gürtelteile und Körperschmuck*, Offa-Bücher 13, Neumünster.

Raddatz K. 1962: *Kaiserzeitliche Körpergräber von Heiligenhafen, Kreis Oldenburg*, "Offa" 19, 91–128.

Rasch M. 1991: *Glömminge sn*, [in:] U.E. Hagberg, B. Stjernquist, M. Rasch (eds.), *Ölands järnåldersgravfält II*, Stockholm, 39–152.

Rau A. 2010: *Jernalderen i Nordeuropa: Nydam Mose 2. Die personengebundenen Gegenstände: Grabungen 1989–*

1999. Text, Jysk Arkæologisk Selskabs Skrifter 72/1, Højbjerg.

Reiersen H. 2017: *Elite milieus and centres in western Norway 200–550 AD*, Bergen.

Reiersen H. 2018: *The Death of Serpent-head Rings. Ritual destruction of elite insignia from the Roman Period*, [in:] M. Vedeler *et alii* (eds.), *Charismatic Objects. From Roman Times to the Middle Ages*, Oslo, 31–55.

Ringtved J. 1986: *Jyske gravfund fra yngre romertid og ældre germanertid. Tendenser i samfundsudviklingen*, "KUML" 1986, 95–231.

Rusin K. 2008: *Grave of the Wielbark culture from the Younger Roman Period under barrow no 1 in Szpaki, Wyszki commune, Bielsk Podlaski district, Podlasie voivodship*, [in:] B. Niezabitowska-Wiśniewska *et alii* (eds.), *The Turbulent Epoch. New materials from the Late Roman Period and the Migration Period I*, Monumenta Studia Gothica V, Lublin, 295–308.

Rygh O. 1885: *Norske oldsager ordnede og forklarede*, Christiania.

Sahlström K.E. 1932: *Gudhems härads fornminnen 1931–1932*, Skövdeortens Hembygds- och Fornminnesförenings skriftserie 3, Skövde.

Schäfer G. 1968: *Bericht über die Auffindung und Untersuchung von Fürstengräbern der jüngeren römischen Kaiserzeit bei Bornstein, Kreis Eckernförde*, "Jahrbuch der Heimatgemeinschaft des Kreises Eckernförde e.V." 26, 41–59.

Schäfer G. 1975a: *Export in den hohen Norden*, "Kölner Römer Ilustrierte" 2, 201.

Schäfer G. 1975b: *Fürstengräber der jüngeren römischen Kaiserzeit bei Bornstein, Kreis Eckernförde*, "Die Heimat" 82, 110–112.

Schauman-Lönnqvist M. 1988: *Iron Age studies in Salo* III: *The development of Iron Age settlement in the Isokylä area in Salo*, Suomen Muinaismuistoyhdistyksen Aikakauskirja / Finska fornminnesföreningens tidskrift 89:2, Helsinki.

Schetelig H. 1910: *Smaa bronsespænder fra folkevandringstiden*, "Oldtiden. Tidskrift for Norsk Forhistorie" 1, 51–99.

Schetelig H. 1912: *Vestlandske Graver fra Jernalderen*, Bergens Museums Skrifter, Ny Række II/1, Bergen.

Schmidt B. 1982: *Die münzdatierten Grabfunde der spätrömischen Kaiserzeit im Mittelelbe-Saale Gebiet*, Inventaria Archaeologica. Deutsche Demokratische Republik 1, Berlin.

Schmidt B., Bemmann J. 2008: *Körperbestattungen der jüngeren Römischen Kaiserzeit und der Völkerwanderungszeit Mitteldeutschlands*, Veröffentlichungen des Landesamtes für Denkmalpflege und Archäologie Sachsen-Anhalt – Landesmuseum für Vorgeschichte 61, Halle (Saale).

Schulz W. 1933: *Das Fürstengrab und das Grabfeld von Hassleben*, [in:] [W. Schulz, R. Zahn] *Das Fürstengrab von Hassleben*, Römisch-Germanische Forschungen 7, Berlin-Leipzig, 1–52.

Schulz W. 1952: *Die Grabfunde des 4. Jahrhunderts von Emersleben bei Halberstadt*, JmV 36, 102–139.

Schulze H. 1987: *Köpings socken*, [in:] M. Beskow Sjöberg (ed.), *Ölands järnåldersgravfält I*, Stockholm, 21–138.

Schuster J. 1996: *Die Westgrenze der Wielbark-Kultur und das Problem der sog. kulturellen Einflüsse aus dem östlichen Pomorze. Kulturgeschichtliche Aspekte ausgewählter Grabkomplexe westlich der Oder*, "Ethnographisch-Archäologische Zeitschrift" 37, 399–422.

Schuster J. 2005: *Die Beziehungen der Gebiete Ostbrandenburgs zur Wielbark- und Przeworsk-Kultur im späten 2. und beginnenden 3. Jh. n. Chr. Mit einer formenkundlichen Untersuchung der späten Rollenkappenfibeln A II, 41*, "Veröffentlichungen zur brandenburgischen Landesarchäologie" 36/37 (2002/2003), 89–161.

Steinert H. 1968: *Fyrstegrav*, "Skalk" 1968/3, 4–6.

Stenberger M. 1956: *Tuna in Badelunda. A grave in Central Sweden with Roman vessels*, "Acta Archaeologica" XXVII, 1–21.

Stenberger M. 1977: *Vorgeschichte Schwedens*, Nordische Vorzeit 4, Neumünster.

Steuer H. 1982: *Frühgeschichtliche Sozialstrukturen in Mitteleuropa. Eine Analyse der Auswertungsmethoden des archäologischen Quellenmaterials*, Abhandlungen der Akademie der Wissenschaften in Göttingen. Phil.-hist. Klasse. Dritte Folge 128, Göttingen.

Steuer H. 1998: *Theorien zur Herkunft und Entstehung der Alemannen. Archäologische Forschungsansätze*, [in:] D. Geuenich (ed.), *Die Franken und die Alemannen bis zur „Schlacht bei Zülpich" (496/97)*, Berlin-New York, 270–324.

Stjerna K. 1908: *Bidrag till Bornholms befolkningshistoria under järnåldern*, "Antikvarisk Tidskrift för Sverige" 18/1, 1–296.

Stjernquist B. 1955: *Simris. On Cultural Connections of Scania in the Roman Iron Age*, Acta Archaeologica Lundensia, Series in 4°/2, Lund.

Storgaard B. 2001: *Himlingøje. Barbarian empire or Roman implantation?*, [in:] B. Storgaard (ed.), *Military Aspects of the Aristocracy in Barbaricum in the Roman and Early Migration Period. Papers from International Research Seminar at the Danish National Museum, Copenhagen, 10–11 December 1999*, Publications from The National Museum. Studies in Archaeology & History 5, Copenhagen, 95–111.

Storgaard B. 2003: *Kosmopolitische Aristokraten*, [in:] L. Jørgensen, B. Storgaard, L. Gebauer Thomsen (eds.), *Sieg und Triumpf. Der Norden im Schatten des Römischen Reiches*, Kopenhagen, 106–125.

Straume E. 1998: *Fibeln der römischen Kaiserzeit aus Norwegen, der Stand der Forschung*, [in:] J. Kunow (red.), *100 Jahre Fibelformen nach Oscar Almgren. Internationale Arbeitstagung 25.–28. Mai 1997 in Klein Machnow, Land Brandenburg*, Forschungen zur Archäologie im Land Brandenburg 5, Wünsdorf [2002], 437–451.

Stylegar F.-A. 2011: *Weapon graves in Roman and Migration Period Norway (AD 1–550)*, [in:] I. Khrapunov, F.-A.

Stylegar (red.), *Inter Ambo Maria. Contacts between Scandinavia and the Crimea in the Roman Period. Collected papers*, Kulturhistoriske rapporter 10, Kristiansand-Simferopol, 217–235.

Stylegar F.-A., Reiersen H. 2017: *The Flaghaug Burials*, [in:] D. Skre (ed.), *Avaldsnes – A Sea-Kings' Manor in First-Millennium Western Scandinavia*, RGA^2, Egbd. 104, Berlin-New York, 551–638.

Tamura K. *et alii* 2007: K. Tamura, J. Dudley, M. Nei, S. Kumar, *Molecular Evolutionary Genetics Analysis (MEGA) software version 4.0*, "Molecular Biology and Evolution" 24/8, 1596–1599.

Tëmkin I., Eldredge N. 2007: *Phylogenetics and Material Cultural Evolution*, "Current Anthropology" 48/1, 146–153.

Thomas S. 1966: *Die provinzialrömischen und germanischen Scheibenfibeln der römischen Kaiserzeit im freien Germanien*, "Berliner Jahrbuch für Vor- und Frühgeschichte" 6, 119–178.

Tillväxten. Statens Historiska Museum... 1920: *Statens Historiska Museum och k. Myntkabinettet. Tillväxten under år 1919*, "Fornvännen" 15, [1]–[24].

Verma E.M. 1989: *Ringschmuck mit Tierkopfenden in der Germania Libera*, B.A.R. Int. Series 507, Oxford.

Voss A., Stimming G. 1887: *Vorgeschichtliche Alterthümer aus der Mark Brandenburg*, Brandenburg a. d. Havel-Berlin.

Weber E. 1994: *Neue Forschungen zur Geschichte und Chronologie der Markomannenkriege*, [in:] H. Friesinger, J. Tejral, A. Stuppner (eds.), *Markomannenkriege – Ursachen und Wirkungen. VI. Internationales Symposium "Grundprobleme der frühgeschichtlichen Entwicklung im nördlichen Mitteldonaugebiet", Wien 23.–26. November 1993*, Spisy Archeologického ústavu AV ČR Brno 1, Brno, 67–72.

Wegner G. 1990: *Ein Goldfingerring der Jüngeren Römischen Kaiserzeit von Thölstedt, Ldkr. Oldenburg, Niedersachsen*, "Archäologische Mitteilungen aus Nordwestdeutschland" 13, 27–32.

Wenskus R. 1961: *Stammesbildung und Verfassung. Das der frühmittelalterlichen gentes*, Köln-Graz.

Werner J. 1973: *Bemerkungen zur mitteldeutschen Skelettgräbergruppe Hassleben-Leuna. Zur Herkunft der ingentia auxilia Germanorum des gallischen Sonderreiches in den Jahren 259–274 n. Ch.*, [in:] H. Beumann (ed.), *Festschrift für Walter Schlesinger*, Mitteldeutsche Forschungen 74/1, Köln-Wien, 1–30.

Werner J. 1980: *Der goldene Armring des Frankenkönigs Childerich und die germanischen Handgelenkringe der jüngeren Kaiserzeit*, "Frühmittelalterliche Studien" 14, 1–41.

Werner J. 1989: *Zu den römischen Mantelfibeln zweier Kriegergräber von Leuna*, JmV 72, 121–134.

Äijä K. 1979: *Gravfältet vid Uddvide i Grötlingbo*, "Gotländskt Arkiv" 51, 108–109.

WŁADCY PIERŚCIENI: UWAGI O KLASYFIKACJI SKANDYNAWSKICH ZŁOTYCH OZDÓB OBRĘCZOWYCH Z PÓŹNEGO OKRESU WPŁYWÓW RZYMSKICH I ICH IMPLIKACJE INTERPRETACYJNE

STRESZCZENIE

Jednym z przedmiotów kultury materialnej najczęściej przywoływanych w sięgającej 2. połowy I tysiąclecia n.e. skandynawskiej tradycji literackiej są złote ozdoby obręczowe. Miarą tej popularności może być fakt, że w samych tylko tekstach „Eddy Poetyckiej" złote pierścienie i bransolety wymieniane są aż 45 razy, zawsze jako istotny element fabuły. Pojawiają się one tutaj w kontekście opisu osoby władcy – hojnego rozdawcy i łamacza złotych obręczy – jako wyraz jego zamożności, prestiżu oraz szczodrości wobec poddanych. Związek złotych obręczy z zachowaniem *gift-giving* w tych tekstach, a także wyrażane w nich raz po raz ogromne znaczenie samego takiego zachowania w budowaniu relacji społecznych i politycznych również nie budzi wątpliwości. Przekazom źródeł pisanych odnośnie do znaczenia złotych ozdób obręczowych odpowiada również ewidencja źródeł ikonograficznych i archeologicznych tej epoki oraz okresu wikińskiego, których jednym z ciekawszych przykładów są przedstawienia na kamieniu z Tängelgårda na Gotlandii (Ryc. 1).

Niniejszy artykuł poświęcony jest jednej grupie skandynawskich złotych ozdób obręczowych z późnego okresu wpływów rzymskich, które najczęściej określane są jako bransolety, naszyjniki czy też pierścienie wężowate (*ormhuvudringar*). Nie jest to bynajmniej temat nowy i poświęcona jest mu dość obszerna literatura, która reprezentuje dwa poziomy analizy. Pierwszy z nich obejmuje studia klasyfikacyjne i chronologiczne, drugi – studia poświęcone interpretacji znaczenia tych ozdób. Opierając się o wyniki analiz klasyfikacyjnych, obejmujących także studia nad występowaniem omawianych obręczy, wyłonione zostały dwie dominujące obecnie hipotezy o ich pochodzeniu. Pierwsza z nich wiąże tego typu ozdoby z warsztatami działającymi na Zelandii. Druga wskazuje, że są one wytworem różnych warsztatów, bądź to z terenów dzisiejszej Danii, bądź obszarów dzisiejszej wschodniej Szwecji kontynentalnej, Gotlandii i Olandii.

Drugą grupą prac dotyczących złotych wężowatych ozdób obręczowych są studia poświęcone interpretacji znaczenia tych pierścieni, a także ich miejsca w rekonstrukcji procesów geopolitycznych. Przede wszystkim wymienić należy tutaj pracę Joachima Wernera[17], który jako pierwszy zwrócił uwagę na symboliczne znaczenie niektórych wężowatych ozdób obręczowych, wiążąc większe egzemplarze ze strojem męskim, uznając je za znak przynależności do grupy osób wspierających władcę (*Gefolgschaft*) i wskazując na sposób, w jaki dystrybuował on te obręcze (dar oznaczający związek z władcą).

Wątek zależności pomiędzy osobami noszącymi wspomniane dwie grupy ozdób obręczowych został rozwinięty w studiach Ulli Lund Hansen[19]. Wyniki analizy rozmieszczenia znalezisk tych przedmiotów i kontekstu ich występowania wraz z szeroką analizą rozprzestrzenienia importów rzymskich zostały przez nią wykorzystane jako przesłanki do identyfikacji centrum władzy w regionie Stevns na Zelandii. Przyjmując hipotezę Wernera, że złote wężowate ozdoby obręczowe

mają stanowić wyznacznik przynależności noszących je osób do stronnictwa władcy (identyfikowanego przez inną kategorię masywnych ozdób obręczowych, jakimi są złote bransolety kolbowate) autorka ta zarysowała sieć aliansów politycznych zawieranych przez przedstawicieli zelandzkiego centrum władzy. Rekonstrukcja ta oparta została też o założenie pochodzenia większości złotych wężowatych ozdób obręczowych w typie skandynawskim właśnie z Zelandii. Schemat rekonstrukcji powiązań przedstawicieli zelandzkiego centrum władzy z regionu Stevns z późnego okresu wpływów rzymskich zaproponowane przez Ullę Lund Hansen zostały przyjęte i rozwinięte przez Pera Ethelberga[21]. Autor ten wprowadza jednak rozróżnienie między zelandzkimi wężowatymi ozdobami obręczowymi, które w jego ujęciu mają odpowiadać pierścieniom B.39 oraz bransoletom typu Hildebrand B, a bransoletami typu Hildebrand C, jego zdaniem pochodzącymi ze wschodniej Szwecji. Zwrócił on uwagę na pochodzenie ze wschodniej Szwecji obręczy z grobu A z Varpelev na Zelandii, ale nie zaproponował żadnej interpretacji tego faktu w świetle przyjętych przezeń założeń o sposobie dystrybucji tych ozdób. W podobnym kierunku idą także rozważania zawarte w pracy Helge J. Kudahl[26].

Wymienieni autorzy – Ulla Lund Hansen, Per Ethelberg i Helge J. Kudahl – starają się wyeksponować specjalną pozycję Zelandii w późnym okresie wpływów rzymskich jako silnego, dominującego centrum władzy w Europie Północnej, kreującego rozkład sił politycznych poprzez zawierane z przedstawicielami elit innych regionów. Jako środek budowania tych sojuszy wymieniana jest redystrybucja przedmiotów prestiżowych, z położeniem nacisku na uzależnienie obdarowanego od osoby obdarowującej, a także wymiana darów i egzogamia. Ozdoby obręczowe jako przedmioty, które zostały darowane przez władcę osobom należącym do popierającego go stronnictwa stanowią w tym ujęciu „marker" podległych mu przedstawicieli elit. Konfrontując jednak przytoczony tutaj pogląd bezpośrednio ze źródłami trudno pominąć fakt, że pewna część efektownych ozdób obręczowych odkrytych w pochówkach zelandzkich elit jest obcego, a nie lokalnego pochodzenia. Powoduje on, że jeśli chcielibyśmy przyjąć założenia poczynione przez cytowanych wyżej autorów odnośnie mechanizmów redystrybucji przedmiotów symbolizujących status społeczny oraz dóbr luksusowych, to musielibyśmy to rozumieć jako ślad politycznego uzależnienia Zelandii od innego centrum władzy. Innymi słowy można postawić pytanie, czy złote obręcze wężowate typowe dla kontynentalnej Szwecji, Olandii i Gotlandii, często należące do kategorii ozdób najbardziej masywnych, nie powinny być raczej uznawane za świadectwo sieci aliansów kreowanych przez elity wymienionych obszarów – elity zelandzkie byłyby wprawdzie elementem tych sojuszy, ale nie ich głównym motorem. Zgłębienie tej kwestii jest celem prezentowanego tutaj studium. Niezbędne staje się zatem ponowne przeanalizowanie tych ozdób. Wprawdzie formalnie wpisują się one w jeden ogólny wzorzec, jednak pod względem szczegółów wykonania są mocno zindywidualizowane. Badając stopień ich podobieństwa na poziomie poszczególnych egzemplarzy, nie zaś ogólnych typów, można spróbować rekonstruować ich hipotetyczną „genealogię" i tym samym – na podstawie „zasady daru" – próbować rekonstruować czas, kierunki i intensywność przypuszczalnych powiązań politycznych pomiędzy poszczególnymi regionami z nieco większą dokładnością, niż było to możliwe na podstawie uproszczonych klasyfikacji. To „genealogiczne" podejście jest też o tyle istotne, że znacząca liczba tych obręczy nie występuje w kontekście pozwalającym na określenie ich dokładniejszego datowania.

Jak już wspomniałam wyżej, raz jeszcze powrócić muszę do kwestii klasyfikacji złotych wężowatych ozdób obręczowych, ich chronologii i wzorców rozprzestrzenienia. Ponieważ pierścienie B.40 są właściwie zminiaturyzowaną wersją niektórych bransolet i naszyjników typu Hildebrand B i C, a niektóre pierścienie B.39 wydają się być wyraźnie spokrewnione z niektórymi egzemplarzami bransolet typu Hildebrand B, to wszystkie te przedmioty zostały tutaj przeanalizowane łącznie. Ogółem uwzględniono tutaj 129 ozdób obręczowych należących do wymienionych typów. Ponieważ pewne cechy pierścieni typu B.39 spotykane są również na niektórych pierścieniach typu B.18, również i te zabytki (21 egzemplarzy) zostały włączone do analizy (Ryc. 2).

Złote obręcze wężowate są przedmiotami reprezentującymi wysoki poziom wytwórczości jubilerskiej, prawdopodobnie unikatami produkowanymi na zamówienie. Nie ma w zasadzie dwóch identycznych ozdób należących do tej grupy, nawet jeśli niektóre z nich wykonane zostały jako para. Z tej przyczyny każda klasyfikacja operująca arbitralnymi jednostkami (typami) musi uwypuklić tylko jedną lub kilka cech tych przedmiotów, całkowicie pomijając inne cechy, być może równie istotne z punktu widzenia rozważań na temat ich ewentualnego pochodzenia z jednego warsztatu oraz ich potencjalnej bliskości chronologicznej. Analizowana tutaj grupa zabytków, jakkolwiek ściśle ze sobą powiązana, stanowi niewątpliwie zbiór politetyczny, gdzie poszczególne egzemplarze dzielą ze sobą jedynie pewną grupę cech mogących występować w różnych kombinacjach, i gdzie trudno jest postawić ostre granice pomiędzy poszczególnymi typami.

Próba klasyfikacji uwzględniającej politetyczny charakter źródeł wymusza wykorzystanie wieloczynnikowych narzędzi analitycznych. Wybrana została tutaj analiza *neighbour joining* (z zastosowaniem usuwania parami w wypadku brakujących danych) wykonana w programie MEGA 4[28]. Jest to metoda pozwalająca obliczyć statystyczną odległość pomiędzy najbliższymi sobie obiektami (liczba zmian na liczbę cech w sekwencji), których bliskość określana jest metodą minimalnej zmiany. Wynikiem zastosowania tej metody jest tylko jedno drzewo filogenetyczne, które zgodnie z algorytmem uznane jest za najbardziej prawdopodobne.

W matrycy uwzględniono zróżnicowanie 58 cech obejmujących takie elementy, jak liczba taśm, ukształtowanie i detale wykonania zakończenia, umiejscowienie dekoracji, a także typy zastosowanych stempli oraz dekorację filigranem i granulacją. Zróżnicowanie tych cech przedstawione zostało na Ryc. 4. Analiza pozwoliła uzyskać drzewo filogenetyczne, które rozdziela badane zabytki na dwie odrębne „tradycje". Jest to drzewo ze statystycznie wygenerowanym korzeniem, zaproponowanym przez program. Drzewo to zostało skonfrontowane z datowaniem względnym zespołów grobowych i depozytów (Ryc. 5) zawierających obręcze omawianych typów. Zakres chronologiczny ich wstępowania w świetle tych datowań obejmuje fazy C_{1b}–C_{3b}.

Najwcześniej datowane zespoły grobowe, które można odnosić do fazy C_{1b} znalazły się w początkowych partiach obu głównych rozgałęzień. W wypadku jednej z nich są to inwentarze z Kirkebakkegård (Zelandia), Komorowa (północna Polska), Valløby (Zelandia) i z Pilipek (wschodnia Polska), w wypadku drugiej – inwentarze z grobu 73 z Ryd (Olandia), i z grobu 1 z Gunnerupgård (Zelandia). Ponieważ zabytki z czterech pierwszych zespołów wydzielają się na wykresie w odrębną gałąź i przeważają ilościowo, dlatego drzewo zostało ukorzenione właśnie w miejscu wyodrębnienia się tej gałęzi (Ryc. 6). W efekcie ukorzenienia uzyskano trzy główne gałęzie (grupy). Poszczególne grupy rozdzielają się na dalsze gałęzie. Dla uproszczenia opisu zostały one wydzielone mechanicznie jako jednostki dalszej analizy (podgrupy), oznaczone literami alfabetu. Posłużyły one jako moduły w uproszczonym schemacie ukorzenionego drzewa (Ryc. 7). Zarówno na rysunku drzewa jak i wykonanym na jego podstawie schemacie ewolucji omawianych obręczy zaznaczono miejsca wyodrębniania się ich kolejnych „generacji". Należy jednak podkreślić, że tempo pojawiania się modyfikacji w poszczególnych gałęziach z pewnością nie było jednakowe, mogło też być różne na poszczególnych etapach rozwoju gałęzi.

Niemniej, zestawiając informacje odnośnie do datowania względnego zespołów z ozdobami omawianego typu z chronologią względną obręczy wynikającą z rozwoju drzewa można zauważyć, że obie sekwencje są ze sobą w ogólnym zarysie zgodne, czyli innymi słowy – zespoły z fazy C_{1b} występują w początkowych etapach rozwoju poszczególnych gałęzi (w dolnej partii drzewa filogenetycznego), zaś zespoły z fazy C_3 znajdują się w końcowych ich etapach. Sekwencje te jednak – o czym należy pamiętać – reprezentują dwie różne kategorie. Ta zobrazowana przez drzewo filogenetyczne odnosi się do momentu powstania poszczególnych egzemplarzy, natomiast sekwencja oparta o relatywne datowanie poszczególnych inwentarzy grobowych – do momentu wyłączenia tych obręczy z obiegu kulturowego.

Przeniesienie powyższej interpretacji wyników analizy filogenetycznej na mapę pokazuje zróżnicowanie regionalne omawianych obręczy, na które w ogólnym zarysie wskazywały już prace wcześniejszych badaczy. Cztery prezentowane mapy (Ryc. 28–31) uwypuklają jednak kilka dodatkowych aspektów. Ilustrują one przyjętą tutaj interpretację diagramu filogenetycznego, tj. podział analizowanego zespołu zabytków na trzy grupy i w ich ramach – na podgrupy. W wypadku grup 2 i 3 dokonano też pewnej generalizacji opartej o sekwencję pojawiania się i zanikania niektórych bardziej dystynktywnych cech. Jednocześnie też liniami zaznaczone zostały wynikające z tego diagramu najbliższe odległości statystyczne pomiędzy poszczególnymi egzemplarzami. Wielkość punktów oddaje zróżnicowanie rozmiarów analizowanych obręczy (duża sygnatura – bransoleta/naszyjnik, mała – pierścień). Obręcze należące do grupy 1 są nieliczne i występują w dużym rozproszeniu (Ryc. 28). Odległość statystyczna pomiędzy najbliższymi sobie egzemplarzami jest tutaj też stosunkowo duża, zwłaszcza jeśli porównać ją z podobnymi danymi odnoszącymi się do obręczy grup 2 i 3. Najmniejsze odległości w grupie 1 oscylują w granicach 0,07–0,08, pozostałe zaś w granicach 0,10–0,17. Obręcze podgrupy 1A, obejmujące pierścienie mające wiele cech występujących na nieco wcześniejszych i charakterystycznych zwłaszcza dla Jutlandii pierścieniach B.41, znane są z północno-wschodniej Zelandii oraz z Olandii. Obręcze podgrupy 1B, obejmujące zarówno większe obręcze jak i pierścienie, spotykane są na Zelandii, Gotlandii oraz na południe od Bałtyku, tj. na Rugii, Powiślu oraz Podlasiu. Obręcze podgrupy 1C, obejmującej tylko bransolety i naszyjniki, znane są z Olandii i południowo-zachodniej Finlandii. Okres występowania obręczy grupy 1 w zespołach grobowych obejmuje fazę C_{1b}. Egzemplarze odkryte w depozytach można datować je dynie w szerszych ramach faz C_{1b}–C_2.

W wypadku obręczy grupy 2 pod pomarańczową sygnaturą zgeneralizowane zostało występowanie obręczy podgrup 2A–2C i pod czerwoną – obręczy 2G–2J. W pierwszym wypadku chodzi o obręcze rozwijające się od 2 do 8 generacji, w drugim – o obręcze, których rozwój obejmuje generacje 9–14 (Ryc. 29). Obręcze podgrup 2A–2C występują w fazach C_{1b} i C_2. Precyzyjniej datowane zespoły grobowe z obręczami podgrup 2G–2J każą umieszczać je w fazie C_2, chociaż szersze datowanie niektórych zespołów w obrębie faz C_{1b}–C_2 nie pozwala wykluczyć ich występowania także w fazie C_{1b}.

Zielona sygnatura obejmuje obręcze podgrup 2D–2F, a więc obręcze z zaznaczonymi zoomorficznymi zakończeniami, których rozwój zaczyna się w 10 generacji i kończy najpóźniej w 13 generacji. Ich występowanie odnosić można do faz C_{1b}–C_2, ewentualnie także do fazy C_3. Żółta sygnatura łączy zaś obręcze podgrup 2K–2M, których rozwój daje się prześledzić od 15 po 21 generację. Okres występowania obręczy tych podgrup zamyka się w fazach C_2–C_3.

Odległości pomiędzy najbliższymi sobie egzemplarzami w podgrupach 2A–2C i 2G–2J są stosunkowo niewielkie i wynoszą przeciętnie 0,01–0,05, rzadziej – 0,06–0,08; jedynie sporadycznie wartości te osiągają 0,12–0,13. Obręcze tych podgrup występują najliczniej na Gotlandii, Olandii i wybrzeżu sąsiedniej Smalandii oraz w Upplandii. Pozostałe egzemplarze występują pojedynczo w południowo-zachodniej Finlandii, na Bornholmie, w południowo-zachodniej Skanii, na wschodniej Zelandii, w regionach Bohuslän, Buskerud, Aust-Agder, na północnej i środkowej Jutlandii, północno-wschodniej Fionii, w środkowych Niemczech i na Podlasiu.

W wypadku obręczy podgrup 2D–2F odległości pomiędzy najbliższymi sobie egzemplarzami są znacznie większe niż w wypadku podgrup 2A–2C i 2G–2J. Oscylują one w granicach 0,09–0,14; wyjątek stanowią egzemplarze z bagna w Thorsberg, gdzie odległość ta wynosi 0,01. Obręcze te znane są z regionów Uppland, Närke i Bohuslän, Gotlandii, Olandii, wschodniej Zelandii, południowo-wschodniej Fionii i ze stanowiska bagiennego Thorsberg.

Odległości pomiędzy najbliższymi sobie egzemplarzami w podgrupach 2K–2M wynoszą przeciętnie 0,05–0,07 choć skrajne wartości wynoszą odpowiednio 0,02 oraz 0,09–0,11. Obręcze te występują stosunkowo licznie na Gotlandii i Olandii. Znane są też z Västmanlandii, południowo-zachodniej Finlandii, wschodniej Skanii, wschodniej Zelandii, Rogalandu i Dolnych Łużyc.

Występowanie obręczy grupy 3 przedstawione zostało (Ryc. 30, 31) za pomocą pięciu odrębnych sygnatur, obejmujących odpowiednio podgrupy 3A–3B, 3C–3D, 3E–3K, 3L oraz 3M. Obręcze grupy 3 to głównie pierścienie. Jedynie w podgrupie 3B znalazły się większe egzemplarze w postaci pary bransolet z grobu 2/1949 z Himlingøje na Zelandii. Odległości pomiędzy obręczami podgrup 3A–3B są bardzo małe i wynoszą zazwyczaj 0,00–0,02, rzadziej 0,04–0,07. Obręcze te występują licznie na środkowej i południowo-wschodniej Zelandii, pojedynczo zaś występują na północnej Jutlandii, południowej Fionii, w regionach Västmanland i Hordaland, na stanowisku bagiennym w Thorsberg oraz w Niemczech Środkowych. Ich rozwój obejmuje generacje 3–11. Występują one w kontekście zespołów grobowych z fazy C_{1b}, a zwłaszcza – C_2.

Prawdopodobnie w podobnych ramach można datować obręcze podgrup 3C–3D, choć przypuszczenie to opiera się tylko na sekwencji filogentetycznej umieszczającej ich rozwój w generacjach 4–6. Odległości pomiędzy najbliższymi sobie egzemplarzami podgrup 3C–3D są znacznie większe niż w wypadku podgrup 3A–3B. Najmniejsze wynoszą 0,06–0,07, największe – 0,11–0,13. Większość tych obręczy pochodzi ze stanowisk wschodniozelandzkich, z Półwyspu Stevns nad zatoką Køge. Tylko jedna znana jest z norweskiego regionu Sogn og Fjordane.

W wypadku obręczy podgrup 3E–3K odległości pomiędzy najbliższymi sobie egzemplarzami są bardzo małe i mieszczą się najczęściej w granicach 0,00–0,03, wyjątkowo wartości te wynoszą 0,06 lub 0,13. Obręcze tych podgrup znane są ze wschodniej Zelandii, Bornholmu i północnej Jutlandii, liczne są też w Västergötlandii i Smalandii, zaś pojedynczo występują w regionach Madelpad, Buskerud i Rogaland. Rozwijają się one w generacjach 6–17, występując w inwentarzach z faz C_2 i C_3.

Odległości pomiędzy trzema pierścieniami wydzielonymi w podgrupę 3L wynoszą 0,03–0,05 (Ryc. 31). Egzemplarze te pochodzą ze środkowej Zelandii, Aust-Agder oraz z Opplandii. Pojawiają się one w 6 generacji i występują w zespołach z fazy C_2.

Najbliższe odległości pomiędzy egzemplarzami podgrupy 3M oscylują pomiędzy 0 a 0,03. W pojedynczych wypadkach wartości te są większe wynosząc 0,05 i 0,11. Pierścienie podgrupy 3M znane są liczniej z Jutlandii oraz z regionów Rogaland i Hordaland. Ich znaleziska są rozproszone na wschodniej i południowej Zelandii, w Opplandii, Nord-Trøndelagu, Bohuslänie i Hallandii, na Christiansø i Gotlandii, w Hälsinglandzie i Dolnej Saksonii. Pierścienie te występują często w inwentarzach datowanych stosunkowo szeroko, mieszczących się

w ramach faz C_{1b}–C_2. Są jednak też i inwentarze datowane węziej, na fazę C_2, a w jednym wypadku – na fazy C_{2b}–C_{3a}. Niewykluczone zatem, że chronologię tych pierścieni należy raczej zamknąć w fazie C_2, a prawdopodobnie także w fazie C_{3a}.

Nie można przedstawić jednoznacznej interpretacji najbliższych związków pomiędzy poszczególnymi obręczami. Analiza filogenetyczna stosowana w naukach biologicznych zakłada istnienie wspólnego „przodka". W pewnym zakresie założenie to jest również adaptowalne do świata idei przekładających się na wyroby kultury materialnej, przy czym bardzo prawdopodobne jest zapożyczenie tej samej idei przez różnych ludzi i wyrażenie jej w przedmiotach wykonanych przez różnych wytwórców, reprezentujących odmienne środowiska kulturowe. W wypadku analizowanego tutaj drzewa może to znajdować odzwierciedlenie w takich sytuacjach, w których w obrębie grup i podgrup różnice pomiędzy najbliższymi egzemplarzami są dość duże, co dotyczy obręczy grupy 1 i podgrup 2D–2F. Wówczas jednak należy uwzględnić również i inną interpretację – wykonanie poszczególnych egzemplarzy tych podgrup doraźnie przez tego samego rzemieślnika, ale w większych interwałach czasowych. Stosunkowo duże zróżnicowanie obręczy grupy 1 można by tłumaczyć również ich związkiem z inicjalną fazą występowania określonej idei, która nie uzyskała jeszcze bardziej sformalizowanego, zestandaryzowanego wyrazu. Duże podobieństwo statystyczne pomiędzy porównywanymi obręczami pozwala sądzić, że zostały one wykonane w krótkim czasie (seryjnie?) przez jednego rzemieślnika. Warto przy tym zaznaczyć, że na wynik statystyczny analizy filogenetycznej w obrębie poszczególnych grup, pomimo dużego ogólnego podobieństwa poszczególnych egzemplarzy, mogło mieć wpływ wystąpienie dodatkowych elementów zdobniczych co w konsekwencji plasuje konkretne obręcze w nieco większej odległości od innych, na pierwszy rzut oka bardzo podobnych.

Większość obręczy zaliczonych do grupy 1 znana jest ze Skandynawii a tylko trzy egzemplarze pochodzą z obszarów położonych na południe od Bałtyku, gdzie występują w różnych środowiskach kulturowych (krąg nadłabski, kultura wielbarska). Prawdopodobnie zatem genezy tych obręczy należy poszukiwać w południowej Skandynawii, zapewne na dużych wyspach strefy środkowobałtyckiej, tj. na Olandii i Gotlandii. Na rzecz takiego przypuszczenia mogłaby przemawiać centralna pozycja tych wysp w sieci kontaktów jaka rysuje się w wyniku analizy najbliższych powiązań w obrębie grupy 1.

Powiązania pomiędzy najbliższymi sobie egzemplarzami w obrębie niektórych podgrup grupy 2 i 3 są wyjątkowo wyraźne. W wypadku podgrup 2A–2C, 2G–2J, 3A–3B, 3E–3K, 3L i 3M, gdzie wartości te oscylują w granicach 0,00–0,05 można z pewnym prawdopodobieństwem przypuszczać, że obręcze te powstały w warsztacie jednego rzemieślnika, w stosunkowo niedługim czasie. Wydaje się prawdopodobne, że obręcze, które dzieli odległość rzędu 0,06–0,08 należy interpretować jako przedmioty zrobione przez tych samych rzemieślników, po dłuższym czasie od wykonania starszych, podobnych obręczy, albo też być dziełem rąk rzemieślnika kolejnej generacji, mającego styczność z wyrobami poprzednika (np. przekazanie *know how* na drodze relacji mistrz-uczeń?).

Oczywiście czas wytworzenia przedmiotu, sugerowany przez następstwo rozgałęzień drzewa filogenetycznego, niekoniecznie musi być tożsamy z czasem wykorzystania tych obręczy w procesie dystrybucji darów i budowania aliansów politycznych. Wpływ na to ma po pierwsze czas włączenia konkretnej obręczy w taki obieg kulturowy oraz długość jego pozostawania w użytkowaniu (czas życia jednostki; przekazanie spadkobiercy). Czas zdeponowania wspomnianych obręczy w ziemi, czy to jako elementów inwentarza grobowego, czy też jako depozytów w środowisku suchym lub wodnym, rzadko jest tożsamy z czasem ich wytworzenia i zapewne także rzadko zbliżony do czasu wprowadzenia ich w obieg. W wypadku omawianych obręczy występujących w kontekście inwentarzy grobowych, które jest nam stosunkowo najłatwiej datować, należałoby zatem brać pod uwagę wiek, w jakim dana osoba otrzymała taką obręcz, oraz długość jej życia od tego czasu. Te dane są jednak niemożliwe do precyzyjnego skalkulowania. Wszelkie próby rekonstrukcji tego rodzaju powiązań z natury zatem mają bardzo hipotetyczny charakter a przy tym są zniekształcone wskutek nieuniknionego „spłaszczania" chronologii badanych wydarzeń.

Wyniki przedstawionej tutaj analizy skandynawskich złotych obręczy wężowatych stwarzają okazję, aby jeszcze raz powrócić do dyskusji nad koncepcją zreferowaną pokrótce we wstępie. Według tej koncepcji w późnym okresie wpływów rzymskich Zelandia miała stanowić dominujący w południowej Skandynawii ośrodek polityczny, w jakimś stopniu nadrzędny także wobec terenów położonych na południowych wybrzeżach Bałtyku, a nawet – według niektórych autorów – wobec odległych obszarów dzisiejszej zachodniej Ukrainy czy wschodniej Rumunii. Dla opisu tej relacji stosowany jest, podobnie jak dla opisu relacji Cesarstwo Rzymskie-Zelandia – ogólnie zarysowany model „centrum-peryferie". Jednym z przejawów tej dominacji miałaby być dystrybucja dóbr prestiżowych, wśród których wymieniane są importy prowincjonalnorzymskie i okazałe ozdoby, w tym też złote ozdoby wężowate, którym przypisuje się funkcję wyznacznika rangi społecznej, czy wręcz rangi politycznej w tak rozumianym systemie osobistej zależności. Jako przykład zastosowania takiej interpretacji wspomnianych przedmiotów można przytoczyć zaproponowaną przez Ullę Lund Hansen klasyfikację statusu przedstawicieli najwyższych elit zelandzkich w późnym okresie wpływów rzymskich opartą o analizę materiałów grobowych z tej wyspy. Według tej propozycji osoby o najwyższym statusie cechowałaby obecność w inwentarzu grobowym złotej bransolety kolbowatej (do tej pory na terenie Zelandii stwierdzono je jedynie w pojedynczych inwentarzach męskich). Nieco niższy, podległy status reprezentowałyby pochówki ze złotymi bransoletami wężowatymi i współwystępującymi z nimi często złotymi pierścieniami wężowatymi. Jeszcze niższą rangę wśród elit miałby zaś osoby, których inwentarze grobowe cechuje obecność złotego pierścienia wężowatego i pięć importów rzymskich.

Wspomniane złote ozdoby obręczowe występują również poza Zelandią. W takich wypadkach są one postrzegane jako dar dla przedstawicieli elit z innych obszarów i interpretowane jako ślad budowania przez elity zelandzkie aliansów politycznych. Przedstawiona tutaj analiza filogenetyczna tych przedmiotów wskazuje jednak, że wszystkie pięć dużych złotych ozdób obręczowych znalezionych na Półwyspie Stevns najliczniejsze analogie znajduje wśród ozdób obręczowych z Gotlandii, Olandii i południowo-wschodniej części Półwyspu Skandynawskiego. Należy przy tym podkreślić, że na 66 wszystkich egzemplarzy bransolet wężowatych typu skandynawskiego aż 41 pochodzi z tych właśnie obszarów. W kartograficznej metodzie analizy występowania zabytków archeologicznych przyjmuje się, że koncentracja artefaktów badanego typu na jakimś obszarze wskazuje z dużym prawdopodobieństwem na ich pochodzenie z tegoż regionu. Taką interpretację można by zatem przyjąć również i w wypadku wspomnianych bransolet wężowatych, uznając je tym samym za typowe dla Gotlandii, Olandii i południowo-wschodniej części Półwyspu Skandynawskiego. Odnosząc tę obserwację do przedstawionego wyżej modelu interpretacji stosunków społeczno-politycznych bransolety te należałoby postrzegać nie jako materialny ślad inicjatywy politycznej elit zelandzkich, lecz jako przejaw aktywności wyższych warstw społeczeństw zachodniej części strefy środkowobałtyckiej. Z tych obszarów znane są również podobne ozdoby obręczowe wykonane ze stopów miedzi, co tym bardziej przemawia na rzecz ich lokalności w strefie środkowobałtyckiej.

I tak, złota bransoleta z datowanego na fazę C_{1b} grobu podkurhanowego z Valløby – najbogatszego późnorzymskiego grobu męskiego na Zelandii – najlepsze analogie znajduje wśród obręczy z Olandii i Gotlandii oraz innych, nawiązujących do egzemplarzy z tych wysp. Podobnie pierścień z grobu męskiego 1/1894 z Himlingøje z faz C_{1b}–C_{2a} nie ma analogii na Zelandii, ale kilka w centralnej Szwecji. Do tej gałęzi drzewa, którą wiązać można z zachodnią częścią strefy środkowobałtyckiej należą również pierścień z grobu 1 z Gunnerupgård, bransoleta z grobu 3/1977 z Himlingøje oraz naszyjnik z grobu męskiego A z Varpelev, z Zelandii, datowanych odpowiednio na fazy C_{1b}, C_2, i C_{3a}. Podobnie najbliższą analogię na Olandii ma pierścień z bogatego grobu męskiego z fazy C_{1b} z Kirkebakkegård z północno-wschodniej Zelandii. Wszystkie duże złote obręcze z wężowatymi zakończeniami znane z grobów wschodniozelandzkich i trzy wymienione pierścienie wydają się być zatem wyrobami obcymi. Ich obecność na Zelandii obejmuje zatem cały okres od fazy C_{1b} do fazy C_{3b}.

Jedynymi złotymi ozdobami obręczowymi, które wytwarzane były na Zelandii, są pierścienie wężowate typu Beckmann 39a–c (tutaj podgrupy 3A–3K), bowiem tylko ich znaleziska tworzą na Zelandii wyraźną koncentrację. Pod względem formalnym ich najwcześniejsze egzemplarze (podgrupy 3A i 3B) wykazują ścisły związek z dwoma złotymi bransoletami wężowatymi pochodzącego z najbogaciej wyposażonego grobu kobiecego z późnego okresu wpływów rzymskich na Zelandii, tj. z datowanego na fazę C_{2a} grobu 2/1949 z Himlingøje. Te zaś znajdują bliskie analogie stylistyczne w bransoletach z depozytów w Tuna w Upplandii i Vestringe na Gotlandii, należących do grupy 2 (Ryc. 39). Wydaje się zatem, że również lokalny, zelandzki symbol statusu ma korzenie w ozdobach obręczowych z zachodniej części strefy środkowobałtyckiej.

Należy zatem jeszcze raz podkreślić, że jeśli założymy, iż pierścienie podgrup 3A–3K stanowią wyrób zelandzki, i że były one oznaką władzy politycznej, a także że ich obraz archeologiczny jest wynikiem budowania przez elity zelandzkie systemu zależności społecznych, wówczas opierając się na tym samym modelu musimy przyjąć, że duże obręcze znalezione w grobach zelandzkich z późnego okresu wpływów rzymskich stanowią ślad zależności od elit zachodniej części strefy środkowobałtyckiej.

Istotne znaczenie dla dotychczasowej argumentacji wskazującej na wiodącą rolę zelandzkich elit z regionu Stevns w Europie Północnej mają także złote bransolety kolbowate, interpretowane jako interregionalny znak najwyższej pozycji społecznej w społecznościach germańskich z późnego okresu wpływów rzymskich i okresu wędrówek ludów. Pod koniec okresu przedrzymskiego i we wczesnym okresie wpływów rzymskich występują one – jako wyznacznik statusu – w grobach sarmackich strefy północnopontyjskiej. Jako najwcześniejszy przykład takiej bransolety poza wspomnianym środowiskiem nomadzkim uważana była obręcz ze wspomnianego grobu męskiego 1/1894 z Himlingøje, datowanego na fazy C_{1b}–C_{2a} (zawierającego również typowy dla zachodniej części strefy środkowobałtyckiej pierścień podgrupy 2F). W efekcie przyjęto, że właśnie wschodnia Zelandia stanowiła pierwszy w Europie Północnej i Środkowej obszar przyswojenia tego symbolu z kręgu kultur sarmackich. Jednak depozyt z Bolarve na Gotlandii sprawia, że należałoby rozważyć tutaj inną możliwość. Zawierał on, oprócz złotej bransolety kolbowatej, także złotą bransoletę wężowatą typu pomorskiego typową dla faz B_{2b}–C_{1a} (typ Wójcik III). Taka kompozycja tego depozytu sprawia, że za najwcześniejszy obszar recepcji złotych bransolet kolbowatych w północnoeuropejskim *Barbaricum* należałoby uznać nie Zelandię, a raczej Gotlandię. W tym kontekście bardzo interesująca jest mapa występowania innych złotych bransolet typu pomorskiego, których znaczenie jako symbolu statusu może być z dużym prawdopodobieństwem postrzegane podobnie jak w wypadku późniejszych złotych wężowatych ozdób obręczowych. Na dziewięć znanych egzemplarzy żaden nie pochodzi jednak z Zelandii, natomiast wzorzec ich rozprzestrzenienia eksponuje duże znaczenie obszarów dzisiejszej Szwecji w ponadregionalnym systemie powiązań elit z tych terenów już w samych początkach późnego okresu wpływów rzymskich.

Podkreślić również należy, że oprócz złotych wężowatych ozdób obręczowych grupy 2 w strefie środkowobałtyckiej stosunkowo licznie występują złote naszyjniki o tordowanej obręczy i gruszkowatym zapięciu – innego, datowanego na fazy C_{1b} i C_2 przedmiotu interpretowanego jako symbolu statusu. Podobnie jak w odniesieniu do wcześniejszych złotych bransolet wężowatych typu pomorskiego, również i w tym wypadku widać wyraźne związki pomiędzy terenami dzisiejszej Szwecji (choć z inaczej rozłożonymi skupiskami ich znalezisk) a północną częścią kultury wielbarskiej fazy cecelskiej; przedmioty te nie występują również na Zelandii.

Specjalna pozycja Gotlandii, Olandii i wschodniej części kontynentalnej Szwecji widoczna jest także w ilości złota w późnym okresie wpływów rzymskich, a także w sposobie jego dystrybucji w tych regionach. Największa ilość złota, które dzięki formalnej analizie wykonanych z niego przedmiotów można wiązać z tym okresem, znana jest z Gotlandii i Olandii, następnie zaś ze wschodniej części kontynentalnej Szwecji oraz z Zelandii i Fionii (Ryc. 44:A). W wypadku Fionii należy jednak podkreślić, że dużą część dystynktywnych chronologicznie form znanych z tej wyspy należy datować nie wcześniej niż na fazę C_3.

Co więcej, można zaobserwować różnice pomiędzy obszarami dzisiejszej Danii a zachodnią częścią strefy środkowobałtyckiej w zakresie wzorca dystrybucji złota w obrębie tych regionów jak i sposobów jego deponowania. O ile ilość złota znana z Zelandii jest porównywalna np. z tą znaną z Olandii, o tyle wyroby ze złota to zazwyczaj małe przedmioty, podczas gdy te znane z Olandii, Gotlandii i wschodniej części kontynentalnej Szwecji – duże (Ryc. 44:B.C). Na Zelandii znacznie częściej są to pierścienie, występujące nawet w ubożej wyposażonych grobach, podczas gdy w zachodniej części strefy środkowobałtyckiej są to zazwyczaj bransolety i naszyjniki, spotykane w depozytach lub rejestrowane jako znaleziska luźne, a tylko wyjątkowo w inwentarzach grobowych (Ryc. 41). Innymi słowy – fragmentacja i rozprzestrzenienie złota na Zelandii jest znacznie większa niż w zachodniej części strefy środkowobałtyckiej. Opierając się na modelu dystrybucji dóbr prestiżowych można przypuszczać, że elity zelandzkie mocno inwestowały w utrzymanie silnego, spójnego lokalnego systemu zależności poprzez rozdział darów daleko w dół drabiny społecznej na samej wyspie. Dystrybucja takich dóbr w zachodniej części strefy środkowobałtyckiej wskazywałaby zatem na ich znacznie większą kumulację w rękach najwyższych elit, aktywnych w budowaniu rozległej sieci aliansów ponadregionalnych.

Niemniej jednak Zelandia nadal pozostaje tym obszarem, który na tle innych regionów Skandynawii wyróżnia się w fazach C_{1b}–C_2 bardzo dużą liczbą importów prowincjonalnorzymskich (Ryc. 44:D). Odgrywały one tutaj ogromną rolę w wyrażeniu prestiżu w obrządku pogrzebowym. W najbogatszych grobach na Zelandii w tym okresie występuje przeciętnie sześć do dziewięciu naczyń prowincjonalnorzymskich, zaś dla porównania – na Jutlandii jest to przeciętnie jedno naczynie, zaś w sąsiedniej Skanii współczynnik ten wynosi 0,3–1 (Ryc. 37). Warto też zaznaczyć, że na Zelandii importowane naczynia występują też w jednym lub dwóch egzemplarzach w grobach o niskim standardzie wyposażenia, co wskazuje na relatywną „taniość" tych przedmiotów na wyspie. Zgodnie z koncepcją Ulli Lund Hansen importy rzymskie miały by być redystrybuowane z ośrodka władzy na Półwyspie Stevns nie tylko w dół drabiny społecznej na Zelandii, ale też wśród elit innych obszarów.

Wyjątkowość Zelandii wyrażona w dostępności prestiżowych zasobów przejawia się wyraźnie również w rodzaju metali używanych do wykonywania nie tylko dużych, ozdobnych zapinek, ale także ich małych, powszechniej występujących form. Ciekawe jest, że elementy konstrukcyjne zelandzkich fibul rozetkowych z faz C_{1b}–C_2 wykonane są ze srebra, co odróżnia je m.in. od typowych dla Jutlandii odmian, gdzie zarówno kabłąk jak i tarczki wykonane są z tańszego materiału, czyli ze stopów miedzi. To samo dotyczy wczesnych, datowanych na fazę C_2 fibul swastykowych, których tarczki podstawowe i inne elementy konstrukcyjne zrobiono ze srebra. „Taniość" srebra na Zelandii w fazach C_{1b} i C_2 widoczna jest także w wypadku analizy surowca, z jakiego robiono „zwykłe" zapinki występujące powszechnie na tej wyspie. Dominujące tutaj w tym okresie fibule MP.II–III aż w 54% przypadków wykonane są ze srebra, pozostałe zaś ze stopów miedzi (Ryc. 45:A). Jeśli zaś spojrzeć na charakterystyczne w fazie C_{1b} i C_{2a} fibule MP.IIA, to aż 83% egzemplarzy wykonanych zostało ze srebra, reszta – ze stopów miedzi (Ryc. 45:B). Dla kontrastu można przywołać tutaj podobne obliczenia odnoszące się do fibul srebrnych MP.II–III z Jutlandii, gdzie w całym zbiorze stanowią one 21% (Ryc. 45:C). Wielkość ta jest taka sama w odniesieniu do najbardziej typowych dla Jutlandii fibul z faz C_{1b}–C_2, a mianowicie zapinek MP.IIIB (Ryc. 45:D).

Jakkolwiek nowsze studia nad metalowymi elementami bogatego stroju kobiecego w Skandynawii wskazują, że wiele jego elementów łączonych dotychczas z Zelandią w istocie wiązać należy z innymi regionami, to i tak wydaje się, że ozdobne elementy tego stroju, takie jak fibule rozetkowe, mogły stanowić inspirację dla pojawienia się podobnych zapinek w innych regionach Skandynawii (zwłaszcza na Jutlandii i na Bornholmie). Nadal wskazywałoby to na duże znaczenie elit zelandzkich, znajdujące wyraz w adaptacji sposobu ich autoprezentacji przez elity sąsiednich regionów Europy Północnej. Jako dość prawdopodobna jawi się zatem hipoteza, iż naśladownictwo to stymulowane było przez prestiż, jakim cieszyli się członkowie wyższych warstw społecznych Zelandii.

W kontekście elementów bogatego stroju kobiecego z faz C_{1b} i C_2 ciekawe jest też, że większość fibul z napisami runicznymi z tego okresu znaleziono na Zelandii. Jeśli występują one poza tą wyspą, to są to najczęściej fibule typowe dla Zelandii. Interpretacja funkcji tych napisów jest przedmiotem dyskusji, niemniej sam fakt pojawienia się pisma w połączeniu z elementami przynależnymi do świata kobiecego jest bardzo interesujący, zważywszy, że większość przykładów pisma związana jest jednak ze światem męskim.

Jeśli założymy, że złote bransolety, naszyjniki i pierścienie stanowią oś rekonstrukcji sieci powiązań politycznych w Europie Północnej, to siłą rzeczy trudno nie zastanawiać się, dlaczego właśnie Zelandia wydaje się mieć najsilniejsze powiązania z Cesarstwem Rzymskim, a nie np. Gotlandia czy Olandia? Najprostszym wyjaśnieniem mogłaby tu być odległość. W takim wypadku łatwo jednak wskazać i innych kandydatów do takiej pozycji, ciągle zresztą pozostawałoby pytanie o przyczyny wyboru. Dwa dalsze wyjaśnienia, jakie spotykamy w literaturze przedmiotu, to handel z prowincjami rzymskimi i kontakty dyplomatyczne. Pierwsze z nich zakłada, że mieszkańcy Zelandii mieli coś atrakcyjnego do zaoferowania w wymianie ze stroną rzymską. Wskazuje się tutaj na bursztyn, futra, miód, tusze zwierzęce, czy też zboże. Trudno jednak znaleźć silną argumentację dla tych propozycji, ponieważ bursztyn nie występuje obficie na Zelandii, a inne wymienione dobra były dostępne dla Rzymian w bliższych lokalizacjach. Alternatywne wyjaśnienie zwraca uwagę na możliwość, że obfitość importów rzymskich na Zelandii jest rezultatem jej klientelnej zależności od Cesarstwa Rzymskiego. Można tutaj odnieść się do przykładów podobnego rodzaju relacji wiążących elity plemion barbarzyńskich żyjących poza limesem z administracją rzymską. Pojawia się jednak pytanie, jaki rodzaj korzyści przynosiłby Rzymianom sojusz z tak odległym i słabym partnerem? Wszakże Rzym nie wybrał najsilniejszego partnera w regionie. Niewykluczone zresztą, że dopiero silniejsze powiązania z Cesarstwem wykreowały znaczenie Zelandii, która – na tle innych części Europy Północnej – we wczesnym okresie wpływów rzymskich stanowiła raczej marginalny obszar napływu importów prowincjonalnorzymskich.

Szukając odpowiedzi na to pytanie można by hipotetycznie przypuścić zmianę w rzymskiej percepcji sytuacji politycznej w *Barbaricum* po wojnach markomańskich – to znaczy mniej więcej w czasie, kiedy wykrystalizowało się wschodniozelandzkie centrum władzy. Ponieważ wiemy, że Rzymianie dociekali, jakie były przyczyny tego konfliktu militarnego (ówcześni historycy uznali, że była to migracja Longobardów i Obiów na południe), to możemy przypuszczać, że mogli też podejmować próby kontroli równowagi sił pomiędzy plemionami Europy Północnej, tak aby w przyszłości uniknąć eskalacji lokalnych wojen. Należy wspomnieć, że także wiele danych archeologicznych wskazuje, iż wojny markomańskie stanowiły część szerszych, czasami prawdopodobnie gwałtownych procesów gospodarczych, społecznych i politycznych prowadzących do migracji grup ludzkich, które zaczęły się gdzieś w zachodniej i centralnej części Basenu Morza Bałtyckiego oraz Półwyspu Jutlandzkiego.

Jednym z takich przykładów mogą być zmiany zasięgu kultury wielbarskiej, najpierw w kierunkach zachodnim i południowym, później zaś – na tereny dzisiejszej wschodniej Polski i zachodniej Ukrainy. Należy też przypuszczać, że w procesie tych zmian jakiś udział mieli także mieszkańcy Västergötlandii, Östergötlandii, Upplandii, wschodniej Skanii i Gotlandii, co sugerują spotykane tam pojedynczo wspominane już bransolety wężowate typu pomorskiego, w tym także złote, znane również ze stanowisk położonych w pobliżu limesu środkowodunajskiego. W wypadku południowo-wschodniego kierunku powiązań zachodniej części strefy środkowobałtyckiej zastanowić się należy nad znaczeniem elit tego właśnie obszaru w przemianach osadniczych o charakterze migracyjnym związanych z kulturą wielbarską.

Związki zachodniej części strefy środkowobałtyckiej ze środowiskiem kultury wielbarskiej, ale także z innymi obszarami kulturowymi, są widoczne także w fazach C_{1b} i C_2 w obrazie rozprzestrzenienia niektórych typów złotych ozdób obręczowych. W odniesieniu do kultury wielbarskiej wskazać można raz jeszcze na obecność pojedynczych pochówków ze złotymi bransoletami lub pierścieniami wężowatymi mieszczącymi się w grupie 2, czy też złotymi naszyjnikami o gruszkowatym zapięciu i tordowanej obręczy. Znaleziska te znane są z obszaru położonego na wschód od dolnego biegu Wisły, z Pojezierza Chełmińskiego, Pojezierza Iławskiego, Podlasia i Ziemi Lubuskiej. Trudno jest jednoznacznie stwierdzić, czy stanowią one ślad fizycznej obecności na tych terenach przedstawicieli elit pochodzących z Gotlandii, Olandii lub południowo-wschodniej części Półwyspu Skandynawskiego, czy też są raczej wyrazem wymiany darów prestiżowych lub też ich rozdawnictwa. Biorąc pod uwagę migracyjny charakter przemian zachodzących w kulturze wielbarskiej na przełomie wczesnego i późnego okresu wpływów rzymskich oraz w późnym okresie wpływów rzymskich, można rozważać tę pierwszą ewentualność. Zwracając uwagę na obecność w środowisku kultury wielbarskiej złotych ozdób obręczowych typowych dla zachodniej części strefy środkowobałtyckiej, podkreślić należy jednocześnie brak takich ozdób, które wiążą się z Zelandią (pierścienie B.39) czy też ze strefą jutlandzko-norweską (pierścienie B.18). Zauważyć należy, że są one rzadkie również w strefie środkowobałtyckiej.

Należy zatem przypuszczać, pomimo iż Zelandia w połowie II wieku n.e. nie stanowiła najsilniejszej siły politycznej w Basenie Morza Bałtyckiego, że właściwym celem rzymskiej polityki mogły być elity tej

wyspy. Idąc tym torem myślenia powinniśmy przyjąć, że to Cesarstwo Rzymskie było źródłem specjalnej pozycji Zelandii, i że wykreowało ją jako przeciwwagę dla dotychczasowych silnych graczy lokalnej, wokółbałtyckiej polityki. Występowanie niektórych, wspominanych wyżej złotych ozdób zdaje się sugerować, że były nimi m.in. populacje zamieszkujące Olandię, Gotlandię i wschodnią część Półwyspu Skandynawskiego.

Co więcej, występowanie złotych obręczy grupy 1 i 2 w inwentarzach grobowych wschodniozelandzkiego ośrodka władzy w późnym okresie wpływów rzymskich wskazuje na drugi, zachodni kierunek oddziaływań elit zachodniej strefy środkowobałtyckiej. Są one widoczne również dalej na zachód, na Półwyspie Jutlandzkim. W wypadku północnej Jutlandii ich śladem jest złota bransoleta wężowata grupy 2, znaleziona w wyposażeniu jednego z grobów z obszaru Vendsysselu; pojedyncze pierścienie tej grupy znane są także z Himmerlandu i Søhøjlandet. Niewykluczone, że pojawienie się tutaj takich obręczy świadczy o zainteresowaniu elit zachodniej części strefy środkowobałtyckiej kontaktami dyplomatycznymi z elitami tegoż obszaru. Przyczyną ich nawiązania mogło być (epizodyczne?) dążenie do uzyskania okazjonalnego – bądź trwalszego – dostępu do prowadzącej na zachód arterii komunikacyjnej Limfjordu. Wydaje się prawdopodobne, że z wcześniejszym odcinkiem tego szlaku komunikacyjnego łączą się pojedyncze znaleziska dalszych ozdób obręczowych typowych dla zachodniej części środkowobałtyckiej, znane z południowo-wschodniej i południowo-zachodniej Skanii, z Bornholmu i północno-wschodniej Fionii (Ryc. 46).

Związane z zachodnią częścią strefy środkowobałtyckiej złote bransolety wężowate grupy 2, a także złote naszyjniki z gruszkowatym zapięciem i tordowaną obręczą, występują pojedynczo również w depozytach uzbrojenia i oporządzenia jeździeckiego ze wschodniej części Półwyspu Jutlandzkiego (Thorsberg, Illerup A, Proskjær). Ich obecność w tychże depozytach mogłaby świadczyć (choć nie musi – na temat innej możliwości por. niżej), że zainteresowanie elit zachodniej części strefy środkowobałtyckiej obszarem Półwyspu Jutlandzkiego miało nie tylko pokojowy aspekt. Występujące na tych stanowiskach elementy stroju wskazują, że armie najeźdźców, których wyposażenie tutaj złożono, nie wywodziły się z jednego, określonego regionu *Barbaricum*, a raczej stanowiły złączone aliansami kontyngenty wojowników o różnym, w tym również jutlandzkim pochodzeniu. Stąd też wspomniane bransolety i naszyjniki z jutlandzkich stanowisk bagiennych mogą poświadczać jedynie współudział przedstawicieli elit zachodniej części strefy środkowobałtyckiej w owych zakończonych niepowodzeniem przedsięwzięciach wojennych, nie dowodzą jednak, że były one inspiratorami tych działań. Jutlandia nie musiała być zresztą docelowym terenem tych działań, a jedynie strefą przemieszczania się takich mieszanych kontyngentów. Wspomniane zdarzenia należałoby zatem postrzegać jako część szerszego zjawiska, którego owocem mogła być m.in. poświadczona w antycznych źródłach pisanych konsolidacja w III wieku n.e. dużych związków plemiennych i ich niszczycielskie najazdy na prowincje rzymskie.

Z drugiej jednak strony równie dobrym wytłumaczeniem dla obecności w tych depozytach elementów przedmiotów pochodzących z różnych części Skandynawii jest lokalny, jutlandzki konflikt o władzę, angażujący także sojuszników z sąsiednich regionów. Teza ta mogłaby wyjaśniać obecność w niektórych z tych depozytów bogato zdobionych elementów uzbrojenia i związanego z nimi oporządzenia osobistego wojowników, pod względem dekoracji znajdujących dobre odpowiedniki w zdobieniu zapinek z jutlandzkich grobów kobiecych, czy też pasów z bogato wyposażonych grobów odkrytych w sąsiedztwie Zatoki Kilońskiej, w Neudorf-Bornstein.

Ostatnio wymienione cmentarzysko, datowane na fazy C_{1b}–C_3, jest istotne dla omówienia powiązań zachodniej części strefy środkowobałtyckiej w tej części Europy Północnej. Znajduje się ono na obszarze (Angeln oraz tereny przyległe doń od zachodu i południa), na którym wyróżniana jest grupa kulturowa o cechach północnonadłabskich, charakteryzująca się pewnymi elementami wskazującymi na kontakty z Fionią i południową Jutlandią. W inwentarzach dwóch grobów z tej nekropoli wystąpiły złote naszyjniki obręczowe, które interpretować można jako wyznaczniki wysokiej pozycji społecznej. Jeden z nich, pochodzący z datowanego na fazę C_2 grobu 7, należy do typu z gruszkowatym zapięciem i tordowaną obręczą, który jest charakterystyczny dla centrów władzy zachodniej części strefy środkowobałtyckiej. Przypuszczalnie naszyjnik ten trafił tutaj właśnie z tamtego regionu, w ramach dystrybucji lub wymiany przedmiotów prestiżowych, na przykład jako dar dla przedstawiciela miejscowej arystokracji. Niewykluczone, że teren ten leżał na innym szlaku komunikacyjnym, mającym znaczenie dla realizacji interesów przedstawicieli elit zachodniej części strefy środkowobałtyckiej. Hipotezę tę wspierają inne znaleziska ozdób obręczowych związanych z centrami władzy tej strefy, rozlokowanymi wzdłuż tego domniemanego szlaku – na Bornholmie, na Zelandii w regionie Stevns, na Lolandii i na południowo-wschodniej Fionii. Domniemaną trasę tego szlaku można rekonstruować także na podstawie późniejszych, średniowiecznych informacji o przebiegu dróg morskich w zachodniej strefie Basenu Morza Bałtyckiego. Południowo-zachodni kierunek zainteresowań elit zachodniej części strefy środkowobałtyckiej poświadczają pojedyncze egzemplarze złotych bransolet wężowatych grupy 2 z Saksonii-Anhaltu, Turyngii i Dolnych Łużyc (Ryc. 46).

Zachodni i południowo-zachodni kierunek powiązań zachodniej części strefy środkowobałtyckiej oczywiście musi prowadzić do pytania, co było powodem (lub powodami) szukania tak dalekosiężnych kontaktów? Częściową odpowiedzią na to pytanie mogłaby być przyciągająca siła głównego centrum kulturowego i gospodarczego w ówczesnej Europie, czyli Cesarstwa Rzymskiego. Istotne mogą być tutaj informacje dostarczane przez antyczne źródła pisane, zgodnie z którymi w III i IV wieku zwiększyła się częstotliwość łupieżczych najazdów grup barbarzyńskich na prowincje Cesarstwa Rzymskiego. Ze źródeł tych wyłania się obraz mówiący o konsolidacji dużych „związków plemiennych" takich jak Alamanowie, Frankowie czy Sasi. Są one zazwyczaj postrzegane w literaturze przedmiotu jako amalgamaty ludów, wymienianych wcześniej przez pisarzy antycznych na terenach uformowania się tychże „związków plemiennych". Interpretację tę wspierają dostarczane przez archeologię dane odnośnie do charakteru kulturowego i stabilności lub destabilizacji struktur osadniczych na tych obszarach. W świetle danych archeologicznych nie można wykluczyć, że jakąś rolę we wspomnianych procesach konsolidacji owych „związków plemiennych" odegrali również przybysze z Północy.

Interesującym świadectwem tych procesów jest zwłaszcza bogato wyposażony męski grób 2 z fazy C_2 z Emersleben w Niemczech Środkowych, w którego inwentarzu obok typowej dla zachodniej części strefy środkowobałtyckiej bransolety grupy 2 wystąpił także aureus Postumusa, jednego z cesarzy galijskich. Pochówek ten należy zatem do grupy środkowoniemieckich bogato wyposażonych grobów z monetami władców krótkotrwałego Cesarstwa galijskiego (260–273). Przypomnieć warto, że groby te łączy się często z informacją zachowaną w żywocie Wiktorinusa (SHA, *Tyranni triginta* 6,3) o *auxilia Germanorum*: zaciężnych oddziałach germańskich, które miały być wykorzystane przez tego cesarza w walce przeciw legalnemu cesarzowi Galienowi. Inwentarz z Emersleben łączy zatem w sobie wątek skandynawski z wątkiem działań militarnych bliżej nieokreślonych zaciężnych oddziałów germańskich operujących w granicach Cesarstwa. Jednocześnie może on posłużyć jako ilustracja drugiej interpre-

tacji odosobnionego występowania złotych ozdób obręczowych. Ponieważ są one najczęściej uznawane za przedmioty będące elementem systemu wymiany i redystrybucji darów, to mężczyznę pochowanego w grobie 2 z Emersleben należałoby traktować albo jako przedstawiciela wyższych warstw społecznych regionu, gdzie ozdoba ta powstała, albo też ich sojusznika lub klienta otrzymującego kosztowny dar. Na tę drugą możliwość wskazuje orientacja jamy grobowej na osi W-E, co odbiega od normy obowiązującej w tym czasie zarówno w dzisiejszych Niemczech Środkowych jak i w zachodniej części strefy środkowobałtyckiej. Najbliższym obszarem, dla którego taka orientacja jamy grobowej jest typowa, jest Jutlandia, gdzie również – jak wspomniano wyżej – pojawiają się złote ozdoby obręczowe typowe dla zachodniej części strefy środkowobałtyckiej. Ten kierunek powiązań strefy środkowoniemieckiej widoczny jest także w obecności pojedynczych, typowych dla Jutlandii elementów bogatego stroju kobiecego, które mogą być śladem powiązań egzogamicznych pomiędzy przedstawicielami elit obu tych szeroko zakreślonych regionów.

Bardziej szczegółowa interpretacja kontekstu występowania złotych ozdób obręczowych typowych dla zachodniej części strefy środkowobałtyckiej na oddalonych od niej obszarach nie zmniejsza jednak wrażenia rozległości i wielokierunkowości powiązań elit tej strefy. Analizując statystycznie najbliższe powiązania pomiędzy obręczami charakterystycznymi dla zachodniej części strefy środkowobałtyckiej przedstawione na mapie 29 można podejmować próby uszczegóławiania wniosków odnośnie do związków pomiędzy poszczególnymi regionami. Patrząc jednak na bardziej generalny obraz trzeba stwierdzić, że wyraźnie rysują się tu dwa kierunki – jeden bardzo wczesny, sięgający przynajmniej początku późnego okresu wpływów rzymskich, południowo-wschodni, prowadzący w stronę obszarów kultury wielbarskiej, drugi zaś, zachodni i południowo-zachodni, związany ze szlakami prowadzącymi przez ważne arterie komunikacyjne na Półwyspie Jutlandzkim. Odziaływania Zelandii rekonstruowane na podstawie podobnego typu złotych ozdób obręczowych wydają się być natomiast ukierunkowane raczej na sąsiednie obszary Skandynawii, co można traktować jako pośrednią przesłankę na rzecz hipotezy widzącej w elitach tej wyspy wykreowaną przez Rzymian siłę mającą wiązać inne polityczne ugrupowania Europy Północnej, z punktu widzenia rzymskiej dyplomacji nieprzyjazne.

WYKAZ SKRÓTÓW TYTUŁÓW CZASOPISM I WYDAWNICTW WIELOTOMOWYCH

ABBREVIATIONS OF PERIODICALS' AND SERIAL PUBLICATIONS' TITLES

AAC	– „Acta Archaeologica Carpathica", Kraków
AAHung.	– „Acta Archaeologica Academiae Scientiarum Hungaricae", Budapest
AFB	– „Arbeits- und Forschungsberichte zur sächsichen Bodendenkmalpflege", Berlin (Stuttgart)
Amtl. Ber.	– „Amtlicher Bericht über die Verwaltung der naturgeschichtlichen, vorgeschichtlichen und volkskundlichen Sammlungen des Westpreußischen Provinzial-Museums für das Jahr...", (później: „Amtlicher Bericht über die Verwaltung der naturhistorischen, archaeologischen und ethnologischen Sammlungen des Westpreußischen Provinzial-Museums für das Jahr..." oraz „Amtlicher Bericht über die Verwaltung der naturgeschichtlichen, vorgeschichtlichen und volkskundlichen Sammlungen des Westpreußischen Provinzial-Museums für das Jahr..."), Danzig
APolski	– „Archeologia Polski", Warszawa
APS	– „Archeologia Polski Środkowowschodniej", Lublin (wcześniej: Lublin-Chełm-Zamość)
AR	– „Archeologické rozhledy", Praha
B.A.R. Int. Series	– British Archaeological Reports, International Series, Oxford
BerRGK	– „Bericht der Römisch-Germanischen Kommission", Frankfurt a.M.-Berlin
BJahr.	– „Bonner Jahbücher", Köln/Bonn
BMJ	– „Bodendenkmalpflege in Mecklenburg-Vorpommern", Lübstorf (wcześniej: „Bodendenkmalpflege in Mecklenburg. Jahrbuch ...", Schwerin/Rostock/Berlin)
CRFB	– Corpus der römischen Funde im europäischen Barbaricum
FAP	– „Fontes Archaeologici Posnanienses" (wcześniej: „Fontes Praehistorici"), Poznań
Inf.Arch.	– „Informator Archeologiczny. Badania rok ...", Warszawa
InvArch.	– „Inventaria Archaeologica, Pologne", Warszawa-Łódź
JmV	– „Jahresschrift für mitteldeutsche Vorgeschichte", Halle/Saale
JRGZM	– „Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz", Mainz
KHKM	– „Kwartalnik Historii Kultury Materialnej", Warszawa
KSIA	– Kratkie soobŝeniâ Instituta arheologii Akademii nauk SSSR (Краткие сообщения Института археологии Академии наук СССР), Moskva
MIA	– Materialy i issledovaniâ po arheologii SSSR (Материалы и исследования по археологии СССР), Moskva
MatArch.	– „Materiały Archeologiczne", Kraków
MS	– „Materiały Starożytne", Warszawa
MSiW	– „Materiały Starożytne i Wczesnośredniowieczne", Warszawa
MSROA	– „Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego", Rzeszów-Krosno-Sandomierz-Tarnów (-Przemyśl/Tarnobrzeg)
MZP	– „Materiały Zachodniopomorskie", Szczecin
PA	– „Památky archeologické" (wcześniej: „Památky archeologické a místopisné"), Praha
PArch.	– „Przegląd Archeologiczny", Poznań
PMMAE	– „Prace i Materiały Muzeum Archeologicznego i Etnograficznego w Łodzi. Seria Archeologiczna", Łódź
PomAnt	– „Pomorania Antiqua", Gdańsk
Prahistoria ziem polskich	– *Prahistoria ziem polskich*, tom I: *Paleolit i mezolit* (red. W. Chmielewski, W. Hensel), Wrocław-Warszawa-Kraków-Gdańsk 1975; tom II: *Neolit* (red. W. Hensel, T. Wiślański), Wrocław-Warszawa-Kraków-Gdańsk 1979; tom III: *Wczesna epoka brązu* (red. A. Gardawski, J. Kowalczyk), Wrocław-Warszawa-Kraków-Gdańsk 1978; tom IV: *Od środkowej epoki brązu do środkowego okresu lateńskiego* (red. J. Dąbrowski, Z. Rajewski), Wrocław-Warszawa-Kraków-Gdańsk 1979; tom V: *Późny okres lateński i okres rzymski* (red. J. Wielowiejski), Wrocław-Warszawa-Kraków-Gdańsk 1981
Prussia	– „Sitzungsberichte der Altertumsgesellschaft Prussia" (później: „Prussia. Zeitschrift für Heimatkunde"), Königsberg.
PZ	– „Praehistorische Zeitschrift", Berlin-New York
RArch.	– „Recherches Archéologiques", Kraków
RB	– „Rocznik Białostocki", Białystok
RGA	– Reallexikon der Germanischen Altertumskunde: 1. wyd.: J. Hoops (wyd.), tomy 1–4 (K. J. Trübner, Straßburg 1911–1919), 2. wyd.: H. Jankuhn, H. Beck i in. (wyd.), tomy 1–35 (de Gruyter, Berlin-New York 1973–2007).
RO	– „Rocznik Olsztyński", Olsztyn
RosArh.	– „Rossijskaâ arheologiâ" (Российская археология), Moskva
SJahr.	– „Saalburg Jahrbuch", Berlin-New York
SlA	– „Slovenská archeológia", Bratislava
SovArh.	– „Sovetskaâ arheologiâ" (Советская археология), Moskva
SprArch.	– „Sprawozdania Archeologiczne", Kraków
SprPMA	– „Sprawozdania P.M.A.", Warszawa
WA	– „Wiadomości Archeologiczne", Warszawa
ZfE	– „Zeitschrift für Ethnologie", Berlin
ZNUJ	– „Zeszyty Naukowe Uniwersytetu Jagiellońskiego", Kraków
ZOW	– „Z otchłani wieków", Warszawa

Sprzedaż / Retail:
Długa 52 (Arsenał), 00-241 Warszawa

Sprzedaż wysyłkowa / Mail order:
tel./phone: +48 22 5044 899
e-mail: wydawnictwapma@pma.pl

Państwowe Muzeum Archeologiczne. Warszawa 2021. Wydanie I. Nakład 350 egz.

Druk i oprawa: Drukarnia Janusz Bieszczad, ul. Moszczenicka 2, 03-660 Warszawa