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# Archaeological Textiles – Links Between Past and Present

## NESAT XIII

Milena Bravermanová – Helena Březinová – Jane Malcolm-Davies (Editors)

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Technical University of Liberec, Faculty of Textile Engineering

in cooperation with

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## **Archaeological Textiles – Links Between Past and Present. NESAT XIII.**

*Milena Bravermanová – Helena Březinová – Jane Malcolm-Davies (Editors)*

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# Creolising Textiles

## Some new light on textile production and consumption in Roman Age Free Germania

Zofia Kaczmarek

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### Abstract

Creolisation is a concept of multicultural adjustment through which new societies are born, which can be successfully applied to the romanisation of the Roman provinces. This paper shows that it is applicable to the Roman period textiles found in Free Germania, especially those found in the territory of modern Poland. Creolisation assumes that the 'barbarians' were not passive in adopting Roman influence, but blended it with their own cultures sometimes for aesthetic but often for pragmatic reasons. In Germania Libera, new textiles were produced which were an amalgamation of not only Roman and local traditions but also of those of the neighbouring barbarian cultures. A common simplification assumes that the Germanic people were only interested in accepting Roman influence. However, this assumption is questionable. Archaeological material shows that the Germanic tribes stayed in contact with each other. This means that they also influenced each other's fashion and weaving technology. That is why, when Roman influences reached Free Germania, they met an established mixture of different Germanic traditions. This suggests that new patterns of spin direction and different qualities of textiles, which can be observed in textiles of the Roman period, were not influenced by the Romans alone. The concept of creolisation helps to explain how complicated the contacts were between the Romans and Germans, and how difficult it is to determine Roman influence in textile production and consumption.

**Keywords:** Romanisation, creolisation, Free Germania, Wielbark culture, textile production, textile consumption

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### 1. INTRODUCTION

Ever since *Francis John Haverfield* used the word 'romanisation' (1905) to describe the spread of the Roman civilisation beyond its original borders, the concept became one of the most discussed in Roman history and archaeology (*Woolf 1996, 5-6*). Although the results of a more than century-long discussion have shown that romanisation is a much more complicated process than the creator of the term had imagined and, even though different meanings have been proposed, the concept of romanisation as a kind of acculturation is still being used to describe cultural change in the Roman provinces and even in Free Germania. The entire period between the first and the fifth century in central and northern Europe is referred to as the Roman period, implying that all Europe remained under domination of Rome's culture.

Acculturation is not a mutual exchange. It suggests that one group adopts the patterns of another not only by choice but also by force. The question of power is crucial for the concept of romanisation. Without the power that Romans had over their neighbours or which they could give to those who followed their rules, romanisation could not have proceeded. However, acculturation also implies that the group embracing the new model does not possess a culture of its own; in order to become 'civilised' it has to accept the culture of another community (*Webster*

2001, 210; Woolf 1996, 4-5). For this reason, Romans used the designation 'barbarians' with pejorative overtones and this Roman view of the Germanic tribes is still prevalent today.

Earlier studies had a tendency to see romanisation as a process of cultural homogenisation: Roman culture spread unchanged from the Romans to the provincial communities, or *Germani*, encompassing ever larger parts of the known world with unification under one power, language and culture. It was inevitable, since it brought values which were considered to be European in a modern sense. It was accepted passively and it was always welcome. The most interested in accepting the Roman way of life were the elites, who saw romanisation as the only way of sustaining and reinforcing their power. The lower social strata cultivated their own traditions, unless they wanted to advance to the elite or were interested in contacts with the Romans for other reasons (Webster 2001, 211-214).

Later on, scholars gradually modified this vision as they began to appreciate how much more complicated the process was (Collingwood 1932; Millett 1990a; 1990b; Reece 1988; Woolf 1996, 5, 10). In his study on the romanisation of Gaul, Greg Woolf (1996) came closest to the concept which is applied here. He observed that romanisation itself has no explanatory potential as it cannot be measured by any indices (Woolf 1996, 7) and could be viewed as a strategic choice of provincial elites and would-be elites as a status indicator (Woolf 1998, 239). However, it was still believed that Roman culture created a 'coherent pattern' (Woolf 1998, 7) and that under the superficial layer of Roman culture both the elites and the lower strata of society concealed their own, unspoiled local folklore, and pure unsullied ethnicity (Webster 2001, 215).

Romanisation understood as acculturation does not presuppose a two-way but a linear transfer of ideas from the centre (Rome) to the provinces (Webster 2001, 210) and beyond. If it is accepted that the only available mode of economic and cultural interchange between the Romans and barbarians was importing and exporting material culture, this denies those ancient societies an active role in creating their own identities. Accepting the perspective of romanisation is also the shortest route to ignoring the fact that both cultures were heterogeneous, formed not only by Roman and Germanic but also by other cultures.

When Romans embarked on their conquest of northern Europe, their culture was a conglomerate of what had originally been Roman, Etruscan, Greek, or even eastern (including Egyptian) and Celtic cultures. Therefore, there was no 'standard' Roman civilisation (Woolf 1996, 7). The same applies to Free Germania, which is best exemplified by the distinctions between so-called archaeological cultures. Even over a relatively small territory, such as that of modern Poland, one can observe different patterns of consumption of material culture (for interesting remarks in that respect see Godłowski 1976, 20-21; Okulicz 1976, 197-198, 201-202). Moreover, production and consumption of textiles also corroborates the existence of different archaeological cultures (Bender Jørgensen 1992, 121).

That is why a need for a new model for studying cultural relations between the Roman empire and the Roman provinces arose. The model in question was introduced by Jane Webster, who opted for the term creolisation. This may be applied, with some changes, in an analysis of cultural relations between Free Germania and the Roman empire.

## **2. WHAT IS CREOLISATION?**

Creolisation is a linguistic term denoting the combination of different languages which together form a new dialect. It is also used to refer to a process of multicultural adjustment through which new Creole (African-American and African Caribbean) societies emerged as a result of interaction

between Europeans, Native Americans, and displaced Africans (*Webster 2001, 217*). *J. Webster* demonstrates that it can be successfully applied to the Roman provinces (*2001*). Although her concept has sparked some debate (*Matz 2005*), there are some key points in her theory which bring a new perspective to studies of material culture and thus into ancient textiles research.

The concept of creolisation assumes that pure Roman culture can be found in the provinces only in the official context. Otherwise, the empire's products of material culture were creatively transformed into new forms or sometimes used in a different way than in the original context. Creolisation is a process of 'resistant adaptation' (*Webster 2001, 218*): not all traits of foreign culture are accepted, but mainly those which are absent in local culture (such as vocabulary concerning slave-master relations in a Creole language). Creolised culture is a part of everyday life and thus opposes the foreign culture, which was a part of public life. As a result, the process does not yield a single normative colonial culture, but mixed cultures (*Webster 2001, 218*). That means that in the territory of central and northern Europe there were no two Romanised or non-Romanised Germanic cultures but many different cultures, adopting (or not) the Roman influences to their own liking and/or need. Even when an object of material culture was emulated or imported, different practices could emerge from this process, depending on the users and their social background – especially in those territories which did not have direct contact with Rome and its provinces, such as the territory of present-day Poland.

Previous romanisation studies sought to explain why some communities remained unromanised, since anyone would have submitted to the influence when given the chance. The same rule applied to Free Germania: Roman imports were always welcome, since anyone – given the opportunity – would have chosen Roman products over local ones. It appears that there is a widely accepted tendency to call every original and fine object a 'Roman' one, denying the 'barbarian' societies the skills and knowledge to produce such an artefact on their own.

The lack or the small number of objects of certain Roman provenance in a given territory was explained differently; it was attributed to the persistence of local customs, the resistance to new traditions, the superficial impact of romanisation or the distance from the Roman empire (*Webster 2001, 216*). That led to the black and white view of romanisation, in which there were only Romans on the one hand and those romanised or unromanised natives/barbarians on the other, with no grey areas in between. Before *Greg Woolf* no one had considered the contribution of the Germanic tribes to defining what Roman products were nor the fact that accepting Roman products was not tantamount to accepting the bulk of Roman culture or admitting its superiority (*1996, 11*).

The creolisation model is worthy of consideration in textile research, given that the romanisation model in which Romans are the holders of more advanced techniques and knowledge than Germanic peoples seems to prevail in previous studies. This is splendidly exemplified by the assumption that the very fine textiles found in the territory of Free Germania could only have been imported or, at best, be emulated products from the Roman provinces without considering any other possibility. In these circumstances, one should attempt to revise notions regarding the place of the *Germani* in textile history.

### **3. CREOLISATION AS A THEORETICAL MODEL**

In view of the fact the original concept of creolisation was applied solely to the Roman provinces, this paper proposes a new theoretical model, which would reflect creolisation processes in the territories of Free Germania. Since one of the objectives of the project reported here is defining

romanisation anew, the model proposed below should be considered a preliminary framework. The model relies on five premises.

The first premise acknowledges that the Roman empire was not homogenous, but consisted of different cultures: African, Egyptian, Asian and European. That is why a definition of 'Roman' culture is never uniform and may vary depending on what part of Roman empire is under consideration. One must also remember the high mobility of the inhabitants of the Roman empire (*Kolendo 1998a*, 233), which resulted in an even more thorough intertwining of different traditions. The second recognises that Free Germania is a conglomerate of different cultures, although the Romans might have seen it differently. Consequently, these cultures might have made different allowances for Roman influence in their territories and had distinctive patterns of use for Roman material culture in their everyday lives. The third premise is that Germanic peoples were not only interested in what Roman culture had to offer, but they could have considered the contacts and cultures of their closest neighbours more important or inspiring. In the Roman period, different people with different cultures and consumption patterns lived in central Europe. Their mutual contacts lead to the establishment of a mixture of various Germanic traditions. In this light, new patterns of spin direction and more advanced techniques of textile production could not have been influenced by Romans alone.

The fourth premise is that the *Germani* were not passive in accepting Roman culture, but they picked and actively reused those elements which they considered useful. One must also remember that some novelties might have been a result of internal evolution rather than revolution, that is, through imitation of the traits of a foreign culture. The fifth premise is that the Germanic tribes dealt with an already creolised material culture, since the creolisation process started in the provinces. This is particularly important for northern Europe, as the only way a Roman product could arrive in those territories was via Roman provinces (*Wielowiejski 1965*, 17-18).

Moreover, it is equally important to consider a number of questions which have always been crucial for archaeological textile research: 1) What did the textile industry look like in a given territory in the earlier and later periods? 2) What did it look like in the neighbouring territories? 3) What changed in the Roman period; were there any new textile techniques and types? 4) If yes, did these new traditions disappear in the post-Roman period or did they persist? 5) Is it possible that these new traditions were the result of internal development?

#### **4. CREOLISATION IN PRACTICE**

Since the romanisation model has become a classic approach to the study of Roman influence, it is necessary to consider the definition of an import, which is a key to the understanding of it (*Eggers 1952; Majewski 1960*). The simplest, although also the most comprehensive, definition was advanced by *Jerzy Wielowiejski*: an import is an object of material culture produced in various centres of the Roman empire, which by means of trade or in a different manner travelled beyond the frontiers of the Roman empire (*1970*, 29). Moreover, a textile import should be characterised by foreign raw material and technology (*Maik 1988*, 168). The classical romanisation model assumes that Roman material culture could only have reached northern European territories by means of exchange between Romans and their neighbours. It does not take other possibilities into consideration, such as the agency of Germanic tribes living close to the *limes* (in which case the redistribution of spoils is one of the possibilities). Seen in this way, Roman objects could be interpreted as deprived of their original significance (*Wolf 1998*, 175, 177) and thus, at least to some extent, lose their romanisation-related impact. Roman material culture may have also

found its way to the north via Roman captives (*Kolendo 1998b*, 221, 223), although they could not have been numerous north of the Carpathian region (*Kolendo 1998a*, 231).

To present how the creolisation model could function in practice, the focus here is on the territory of present-day Poland as an example of an area inhabited by the *interiores* (*Tac. Germ.* 5), who did not have direct contact with Rome and thus their territory offers a cogent example of outside romanisation/creolisation. In that territory, only Wielbark culture has yielded a number of archaeological textiles which is sufficient to draw conclusions (*Maik 2012*, 9).

There are certain common features to Roman period textiles in Poland. The first one is that the archaeological textiles are very fine – finer than medieval examples (*Maik 2007*, 97). Secondly, the wool of the archaeological textiles of the period is of excellent quality (*Maik 2007*, 97). Thirdly, all of the textiles were woven on the warp-weighted loom (*Maik 2007*, 99). The fourth feature is that the most numerous weave is 2/2 twill (*Maik 2007*, 97). And, last but not least, none of the Roman period archaeological textiles known today were fulled (*Maik 2012*, 17), which is important because fulling seems to have been a significant stage of textile production in the Roman empire (*Flohr 2011*, 209), but also an appropriate finishing technique for the colder, northern climate.

A relatively small number of textile remains demonstrates Roman provenance: Polish finds include knotted pile rugs, silk (both found in Pielgrzymowo near Nidzica, Warmian-Masurian province, another rug was found in Zakrzów, modern Wrocław; *Fuhrmann 1939-1940*, 322-327; *Sage 1934*, 278; *Maik 2012*, 117-118) and probably textiles which *Jerzy Maik* designates as the Mogontiacum type (variants of 2/2 diamond twills, shifted along the warp and symmetrically broken along the weft, found in Lędzeczek near Piła, Greater Polish, Nowy Łowicz near Drawsko Pomorskie, West Pomeranian province, Odry near Chojnice, Pomeranian province; *Maik 2010*, 716-717; *2012*, 116-117), and possibly textiles *Lise Bender Jørgensen* defined as the Verring type (z/s spun 2/2 twill or 2/2 diamond twill, 20/18 repeat, thread count 16 per cm, found in Gronowo, near Drawsko Pomorskie, West Pomeranian province; *1986*, 346; *Maik 2012*, 24-27). Therefore it is impossible to employ J. Wielowiejski's definition of an import. J. Maik's definition is better suited to a discussion of archaeological textiles, namely that an import is characterised by foreign technology and raw material.

Identification of foreign technology in any archaeological textile is problematic. The Romans introduced few technological improvements in their provinces and in many respects, their inhabitants were permitted to continue their own traditions, especially those of minor strategic importance for the Roman economy (*Bender Jørgensen – Wild 1988*, 74). In most northern provinces, weaving was one of these such traditions.

The techniques of textile production were similar across Europe in the Roman period, irrespective of which side of the *limes* it was. Even though a tubular loom had been used in pre-Roman Iron Age Scandinavia, it was eventually replaced by warp-weighted loom after circa 200 AD (*Bender Jørgensen 1992*, 122). It is difficult to attribute this or any of the other technological changes to Romans, since some of them could have been a result of internal and independent development. The textile craft of the Wielbark culture was highly developed and kept developing throughout the Roman period, becoming increasingly standardised (*Maik 2012*, 106-110, 112). The same can be said about, for example, Scandinavian textile production (*Bender Jørgensen 1986*, 325).

The aforementioned change in Scandinavia may have also been due to interaction with their closest neighbours, who had woven on the warp-weighted loom long before Roman influences reached so far north. The best proof that such contacts existed are finds of textiles of the Huldre-

mose type (s/s spun tabbies or 2/2 twills), as reported by *L. B. Jørgensen (1986, 343)*, which were probably of Scandinavian production, in the territories of the Wielbark culture (Kowalewko near Oborniki, Greater Polish province, Nowy Łowicz near Pomorskie, West Pomeranian province; *Maik 1977, 123-132; 2012, 83, 113; Sikorski 2001, 451-466*).

Another technological aspect of textile production – spin direction – cannot be a determinant of Roman provenance of archaeological textiles either, since the weavers of the Wielbark culture used threads spun in both directions in order to obtain textiles with a shimmering texture (*Maik 2012, 72, 112*).

The principal raw material of the Roman period in northern Europe was wool (*Bender Jørgensen – Wild 1988, 75*). A relatively high proportion of Wielbark culture textiles was made of high quality wool, comparable to the product obtained from Roman sheep (*Maik 2001, 314; Maik 2007, 103-105*). Wool of the same quality can also be observed in other textiles of the Roman period found in northern Europe. It may be noted the fleece of the Roman period is finer than the material originating from earlier and later periods, as well as superior to wool known today (*Maik 2012, 66-69*).

The best method of producing high quality wool is careful and skillful sheep breeding (*Maik 2001, 313*), and Roman expertise in sheep husbandry ensured that they obtained such fleece. The breed whose fleece they valued the most was the so-called Tarentine or Greek (Attican) sheep, whose name indicates the territories from whence it came. Romans took extra care of the animal, making sure its wool would not be spoiled when the sheep was grazing, for example. The details of breeding Tarentine sheep were laid out by Collumela (*Collumela, Rust. 7, 4, 1-6*), whose treatise is the best proof of the Romans' profound knowledge of farming. Unfortunately, there are no analyses of Roman wool from Italy to compare it with Roman period wool from Free Germania (*Maik 2012, 69*). The only available information, apart from the aforesaid advice of Collumela's, can be found in the ancient literary sources, which address the provenance of the most valued fleeces (*Plin. NH 8, 73, 190; Collumela, Rust. 7, 2, 3*). Somehow, the knowledge of sheep breeding must have been transferred to the provinces, since, in the later period, Gaul became famous for its textile production and Gallic wool was imported even to Italy (*Maik 2001, 315-318*) as well as to the northern provinces (*Maik 2012, 69*).

The superb wool quality identified in the archaeological textiles discovered beyond the German *limes*, raises questions about the possible routes and means by which it reached these territories. One possibility is that it was imported as ready-made textiles, though it is rather doubtful since the wool of this quality was ascertained in various textile products (*Maik 2012, 118*). It is also likely that wool was imported as a raw material, given that wool transportation is attested in literary (*Strab. 3, 2, 6*) and iconographic sources (*Drinkwater 1982, 117*). Yet another possibility is that it was brought along with livestock from the provinces, maybe as spoils – literary sources offer accounts of Romans hijacking flocks from Germania Libera (*SHA Max. 12, 6; SHA Prob. 14, 3; Cass. Dio. 72, 11, 2*). The *Germani* probably did the same – a conjecture which can also be verified on the basis of other archaeological evidence (*Jaworski 1953*). If that was the case, the Germanic peoples would have noticed the advantages of wool from Roman sheep and learnt how to breed the animals and process the fleece, so that it did not lose its quality; they may even have been taught how to do it by Roman captives (*Sen. Ep. 47, 10; Kolendo 1998b, 221*).

The creolisation model does not provide clear answers to the crucial problem of imported textiles, but it does shed some new light on the issue of the advanced development of the textile industry in Free Germania. First, it follows from the model that the Roman empire was not homogenous – even the Romans took advantage of the knowledge of other peoples. For instance,

to improve their textile industry, the Romans probably adopted Greek sheep. They learnt how to take care of them and perfected the method of husbandry. The sheep were then transported to the provinces, from where they (or their wool) could have found its way beyond the *limes*. This is not the only evidence of heterogeneity of textile production in the Roman empire. The varied traditions of spinning and weaving in the Roman provinces are well documented in archaeological material (*Bender Jørgensen – Wild 1988, 75-76*).

Secondly, the creolisation model emphasises the fact that Free Germania was also heterogeneous; different archaeological cultures with different consumption patterns and traditions (such as the Przeworsk and Wielbark cultures in the territory of present-day Poland) allowed foreign influences to penetrate their everyday lives to various degrees (*Godłowski 1976, 20-21; Okulicz 1976, 197-198, 201-202*). Moreover, they must have in touch with their closest neighbours, since the imports found in the territory of the Wielbark culture do not originate solely from the Roman Empire. That is why it is equally probable that every technological change in Free Germania was inspired either by Romans or by another Germanic tribe.

The most important characteristic of the creolisation model is that it grants more self-determination to the Germanic peoples. There should be no doubt that they were skilful artisans. They produced rather complicated weaves such as Odry (2/2 twills, most frequent pattern unit of 4z/4s, 10 to 16 threads per cm; *Bender Jørgensen 1992, 126; Maik 2012, 114*) and perhaps the Donbæk types (spin patterned twills, a standard patterned unit of 4z, 4s/4z, 4s or the dog's tooth pattern 16 to 20 threads per cm; *Bender Jørgensen 1992, 126, 135*). Why then deny them the skill to produce more complicated twills such as Verring and Mogontiacum types? This question is all the more legitimate because of the fact that research into textile industry demonstrates its continual evolution throughout the Roman period (*Maik 2012, 105-112; Bender Jørgensen 1986, 325*). Therefore, the emergence of new textile types and techniques accompanied by the decline of others may be a result of internal processes which took place regardless of all the influences. Another piece of evidence which undermines the notion that the *Germani* imported woollen textiles from the Roman empire is the lack of fulled fabrics in the territory of northern Europe, including the territories of the Wielbark culture. If fulled clothes were an important part of the Roman dress code, the absence of such garments among the imports is surprising.

Finally, creolisation highlights the human factor: contacts between different peoples and tribes was the main reason why certain ideas, techniques and objects were accepted, rejected, emulated or changed in different cultures. People's beliefs and tastes which influenced their subsequent choices are difficult to reconstruct, which is why a full understanding will always prove problematic. A number of these questions are unlikely to be resolved.

The work on the creolisation model has only just begun. Therefore, textiles which underwent creolisation cannot be named with any substantial degree of certainty at this point. However, two textile types may be presumed to have been creolised, namely the Odry and the Verring type. Both are woven with wool of a very high quality, which could be through Roman influence. Both are new types in the north during the Roman period, but have predecessors in the earlier period (*Bender Jørgensen 1992, 124-125, 133-136*). The forerunners of those types are not found in Italy, the original Roman territory, but in central Europe, which might suggest a Germanic influence. Moreover, the technology of production of those textiles was not strange to the *Germani*. They were demonstrably capable of weaving these products. However, the matter requires further in-depth studies.

Application of the creolisation model does not mean that one has to reject the potential importation of textiles by the *Germani*, as silk and tapestry certainly reached northern Europe

via the Romans. The crucial difference is that creolisation makes one consider other possibilities before naming every fine textile or other object a Roman import.

## 5. PROBLEMS

Although creolisation seems to be a promising framework of inquiry into relations between the Romans and the Germanic tribes, it does create some problems. The most important one is that little, if anything, is known about the actual function of the imported/creolised objects; Roman textiles tend to be discovered in a passive context, therefore envisaging their active use is virtually impossible. Function is particularly relevant in textile research, since clothing is an important component of one's cultural, ethnic or gender identity (*Sommer 2012, 257-259*). Creolisation enables us to allow for the viable alternative that Roman material culture, which naturally comprised Roman textiles as well, could have been integrated into the German context and thus used, which effectively nullified its original Roman essence and connotation.

Another problem is the fairly limited number of textiles dated to the pre-Roman period and to the Migration period (*Bender Jørgensen 1986, 294; 1992, 120*), which – for the time being – makes it very difficult to apply the creolisation model as suggested above.

The concept of creolisation is still being developed in its application to Free Germania; further work is required with respect to archaeological material, especially the characteristics of textile types, their chronology and distribution. However, as a theoretical model, it captures the complexity of interactions between the Romans and the Germans and demonstrates how difficult it is to determine Roman influence on textile production and consumption.

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## References

- Bender Jørgensen, L. 1986: Forhistoriske tekstiler i Skandinavien (Prehistoric Scandinavian Textiles). Copenhagen.*
- Bender Jørgensen, L. 1992: North European Textiles until AD 1000. Aarhus.*
- Bender Jørgensen, L. – Wild, J. P. 1988: Clothes from the Roman Empire. Barbarians and Romans. In: Bender Jørgensen, L. – Mangnus, B. – Munksgaard, E. (eds.), Archaeological Textiles. Report from the 2nd NESAT Symposium. Copenhagen, 65-98.*
- Collingwood, R. G. 1932: Roman Britain. Oxford.*
- Drinkwater, J. F. 1982: The Wool Textile Industry of Gallia Belgica and the Secundinii of Igel: Questions and Hypotheses. Textile History 13/1, 111-128.*
- Eggers, H. J. 1951: Der römische Import in freien Germanien. Hamburg.*
- Flohr, M. 2011: Consumption Not Production. Understanding the Fullonicae of Pompeii. In: Alfaro, C. et al., Pururae Vestes. III Symposium Internacional sobre Textiles y Tintes del Mediterráneo en el mundo antiguo. Naples, 209-215.*
- Fuhrmann, I. 1939-1940: Der Gewebefund von Pilgramsdorf. Unter Berücksichtigung der Gewebe von Sacrau und Anduln. Praehistorische Zeitschrift 30-31/1939-1940, 308-329.*

- Godłowski, K. 1976: Strefy kulturowe w okresie rzymskim w Europie Środkowej, In: Godłowski, K. (ed.), Kultury archeologiczne i strefy kulturowe w Europie Środkowej w okresie wpływów rzymskich. Kraków, 13-38.
- Haverfield, J. F. 1905: The Romanization of Roman Britain. *Proceedings of the British Academy* II, 185-217.
- Jaworski, Z. 1953: Czaszki bydła rogatego i świnii domowej z wykopalisk w Igołomi i Tropiszowie, pow. Miechów, z okresu rzymskiego. *Sprawozdania Państwowego Muzeum Archeologicznego w Warszawie* 5/3-4, 21-35.
- Kolendo, J. 1998a: Jeńcy rzymscy w Barbaricum i ich wykupywanie, In: Kolendo, J., Świat antyczny i barbarzyńcy. Teksty, zabytki, refleksja nad przeszłością. Warszawa, 221-229.
- Kolendo, J. 1998b: Rzymianie przebywający na terenie północnego Barbaricum. Sallustius Fortunatianus Costobius wychowany w Kraju Kostoboków. In: Kolendo, J., Świat antyczny i barbarzyńcy. Teksty, zabytki, refleksja nad przeszłością. Warszawa, 231-236.
- Maik, J. 1977: Tkaniny z okresu rzymskiego z terenu Polski. *Pomorania Antiqua* 7/1977, 77-145.
- Maik, J. 1988: Wyroby włókiennicze na Pomorzu z okresu rzymskiego i ze średniowiecza. Łódź.
- Maik, J. 2001: Wełna tkanin wykopaliskowych jako źródło do badań ras owiec. *Kwartalnik Historii Kultury Materialnej* 4/2001, 311-326.
- Maik, J. 2007: Tkaniny z pomorskich cmentarzysk kultury wielbarskiej w świetle najnowszych badań. In: Fudziński, M. – Paner, H. (eds.), Nowe materiały i interpretacje. Stan dyskusji na temat kultury wielbarskiej. Gdańsk, 97-108.
- Maik, J. 2010: Tkaniny importowane z Imperium w kulturze wielbarskiej. In: Urbaniak, A. et al., Terra Barbarica. Studia ofiarowane Magdalenie Mączyńskiej w 65. rocznicę urodzin. Łódź-Warszawa.
- Maik, J. 2012: Włókiennictwo kultury wielbarskiej. Łódź.
- Majewski, K. 1960: Importy rzymskie w Polsce. Wrocław.
- Matz, S. 2005: Creolization – ein Modell der Romanization? In: Schörner, G. (ed.), Romanisierung – Romanisation. Theoretische Modelle und praktische Fallbeispiele. Oxford, 65-72.
- Millett, M. 1990a: The Romanization of Britain. Cambridge.
- Millett, M. 1990b: Romanization: Historical Issues and Archaeological Interpretations. In: Blagg, T. – Millett, M. (eds.), The Early Empire in the West. Oxford, 35-41.
- Okulicz, J. 1976: Powiązania północnego Bałtyku i centrum sambijskiego z południem w podokresie wczesnorzymskim. In: Godłowski, K. (ed.), Kultury archeologiczne i strefy kulturowe w Europie Środkowej w okresie wpływów rzymskich. Kraków, 181-213.
- Reece, R. 1988: My Roman Britain. Cirencester: Cotswold Studies.
- Sage, G. 1934: Die Geweberste aus Fürstengräben von Sakrau unter besonderer Berücksichtigung der Bretchenweberei. *Altschlesien* 5/1934, 272-284.
- Sikorski, A. 2001: Tkaniny z cmentarzyska Ludności kultury wielbarskiej w Kowalewku. In: Skorupka, T. (ed.), Kowalewko 12. Cmentarzysko brytualne ludności kultury wielbarskiej od poł. I w. n. e. do początku III w. Archeologiczne badania ratownicze wzdłuż trasy gazociągu tranzytowego, vol. 2, Wielkopolska, cz. 3. Poznań, 451-466.
- Sommer, C. M. 2012: Dress and Identity – A Social Psychologist's Perspective. In: Wiegand, H. – Wieczorek, A. (eds.), Kleidung und Identität in religiösen Kontexten der römischen Kaiserzeit. Regensburg, 257-263.
- Webster, J. 2001: Creolizing the Roman Provinces. *American Journal of Archaeology* 105, 209-225.
- Wielowiejski, J. 1965: Intensywność oddziaływań rzymskich na północ od środkowego Dunaju. *Archeologia* 16, 10-25.
- Wielowiejski, J. 1970: Kontakty Noricum i Pannonii z ludami północnymi. Wrocław.
- Woolf, G. 1996: Becoming Roman. The Origins of Provincial Civilization in Gaul. Cambridge.

## Historical sources

- Cass. Dio: *Cassius Dio Cocceianus*, *Historia Romana* – Dio's Roman History with an English translation in nine volumes, volume IX, translated by H. B. Foster (the Loeb Classical Library). London 1955.
- Collumela, Rust.: *Junius Lucius Moderatus Columella*, *Rei rusticate* – On Agriculture with a recension of text and an English translation, translated by E. S. Forster, E. H. Heffner (the Loeb Classical Library). London 1954.
- Plin. NH: *Plinius Caius Secundus (Maior)*, *Naturalis historiae* – Natural History, with an English translation in

ten volumes, volume III, translated by H. Rackham (The Loeb Classical Library). London 1956.  
*Sen. Ep.: Annaeus Lucius Seneca (Minor), Ad Lucilium Epistulae Morales*, ed. O. Hense. Leipzig 1914.  
*Strab.: Strabo, Geographica – The Geography of Strabo with an English translation in eight volumes, volume III*, translated by H. L. Jones (The Loeb Classical Library). London 1924.  
*SHA Max., Maximinus. Scriptores Historiae Augustae*, ed. E. Hohl. Leipzig 1971.  
*SHA Prob., Probus. Scriptores Historiae Augustae*, ed. E. Hohl. Leipzig 1971.  
*Tac. Germ.: Publii Cornelii Taciti, Germania, Agricola, Dialogus de Oratoribus*. E. Koestermann. Leipzig 1962.

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