The principal objective of my research was to demonstrate that textiles may depict and do depict certain aspects of cultural exchange between the Roman Empire and the Barbaricum. I sought to demonstrate that fabrics were subject to similar, albeit not always the same, laws of exchange as other products of material culture. Furthermore, my research aimed to highlight the fact that studies of textiles explore ancient technology and the changes it underwent, thus indirectly delving into the history of ancient economy, social 

* Author’s summary of the doctoral dissertation defended at the Institute of History, Adam Mickiewicz University in Poznań, on October 7th, 2013. The dissertation was supervised by Prof. Leszek Mrozewicz.
relationships or material culture. They enable one to add to the store of knowledge about the degree of specialisation, the conditions and organisation of labour. They also offer an insight into trade, provide information about the social and economic standing of the users of fabrics as well as their aesthetic preferences, thus supplementing the knowledge derived from other sources.

The broad chronological (spanning three centuries) and chorological (northern part of the European Barbaricum) scope results from the specificity of textile technology. The technology not only changed seldom but it was also widespread: the same weaving tools are used regardless of latitude, often for a long period of time. Therefore I found it would be correct to presume that in order to capture the diversity and changes in textile production, one should consider the broadest possible area and time bracket.

My deliberations begin from a symbolic starting point, i.e. the beginning of our era. This is the time of the reign of Augustus, when most provinces on the Danube and Rhine (apart from Gaul and Dacia) took their shape. Consolidation of the Roman rule on the right side of the Danube marks the beginning of extensive contact with peoples inhabiting northern Europe, at the time called Germania Libera. Although the areas of Central, Eastern and Northern Europe, lying beyond the territories of the Roman Empire, given the name of Barbaricum only in the 3rd century, given a certain convention existing in the literature of the subject, I will employ the name Barbaricum to denote that part of Europe which lies outside Roman rule, throughout the entire period of its existence. The beginning of the 1st century AD is also the beginning of Roman influence (in other words the Roman period) in Northern Europe.

It seems sensible that studies of contacts between Roman and Barbarians should distinguish two periods, the first from the 1st to the mid-3rd century and the second from the mid-3rd century to the 5th century, i.e. to the onset of the migration period. In the former, the Roman world held decisive ascendency over the barbarian world, therefore importation reflected chiefly diplomatic and economic relations between them. In the latter period, Barbarians

gain the advantage while objects of Roman provenance found across Barbaricum were most probably a result of warfare. For this reason I conclude my studies on the period that literature calls the "crisis of the 3rd century", which not only transformed the shape of the Empire but also affected the relationships with the Barbarians. Diocletian’s coming to power in 284 put a symbolic end to the crisis, but most of all it changed the previous system of exercising power in the Empire. Accordingly, the policy towards the Barbarians changed as well – the Barbarians would settle more often on Roman territories, eventually taking over the defence of their limes. In that time, Barbaricum underwent a change too – one can observe a substantial decrease in Roman imports, including coin, while the traditional trading routes lost their significance.

The territorial frontiers I had adopted for the purpose of my work are based on the definition of Tacitus’, who described the territory of Germania as separated from other peoples by the Rhine and the Danube, as well as mountain ranges (south-east Carpathians). The rest is surrounded by the Ocean, i.e. the North and the Baltic Sea. I focus mostly on the lands on the south-east coast of the Baltic, on the territory of the present-day Germany (northern part), Poland (northern part), Denmark, Sweden and Norway.

Few literary sources address the issues of barbarian culture and economy. However, thanks to Greek and Latin compilers we are capable of capturing fragments of history and culture of the Barbarians, who most likely did not always come into contact with the Romans as the victorious and the vanquished side. Although we approach Barbarians from the Roman perspective, we may assume that the depictions of ancient authors do contain a grain of truth. Another difficulty which should be noted here is the briefness of information found in those sources, most often in the shape of digressions accompanying deliberations on major political and historical issues.

Likewise, the written sources concerned with textile production are scarce, though even those offer a range of significant information. The sources...
include literature as well as inscriptions and Egyptian papyri. The information about the craft which originates from outside the Egyptian and Italian part of the Empire encompasses isolated mentions in sources and several inscriptions. Even if any handbooks of weaving had existed, they have not survived to the present day. Still, the sources provide information about the production of textiles, its organisation and enable one to determine the place the craft occupied in the social structure. Even approached with the greatest scepticism, the sources reveal a vivid picture of textile production in private households and workshops of craftsmen. The most serious obstacle that the textile researcher has to face is Latin terminology, which today very often proves incomprehensible. The examples include fabrics mentioned in Diocletian's edict, whose equivalents cannot be found in archaeological material.

The fabrics which I utilised as the main source of knowledge about textiles in cultural relationships between the Roman Empire and Barbaricum are typified by the material from which they were made, the method of its processing (chiefly the spin+direction), the pattern unit (or the repeat of warp and weft), the weave (the manner in which warp and weft intertwine), and the thread-count (the number of threads per cm²) or the finishing. Based on those factors, one can distinguish three types of fabric that were characteristic for the lands of northern Barbaricum in the Roman times. The most important include Huldremose, Haralsdkjær, Odry, Virring, Mogontiacum. Their distribution is highly diversified: some are found only across Barbaricum, while others are encountered in the Roman Empire.

The thesis that textiles had their significance in cultural relationships between the Roman Empire and Barbaricum is supported by the presence of the so-called imported fabrics in those areas. They are distinctive due to material and/or production method which were alien to the given territory.

---

10 J.P. Wild, Textile Production, p. 209.
11 L. Bender Jørgensen, Forhistoriske textiler i Skandinavien (Prehistoric Scandinavian Textiles), Copenhagen 1986; eadem, North European Textiles until AD 1000, Aarhus 1992; J. Maik, Wyroby włókiennicze na Pomorzu z okresu rzymskiego i ze średniowiecza, Łódź 1988; idem, Włókiennictwo.
12 J. Maik, Wyroby włókiennicze, p. 168.
Of the above fabrics, *Virring* and *Mogontiacum* types seem to meet those conditions. The *Virring* type are high quality fabrics with 2/2 broken twill or diamond twill with the thread-count of 16 threads per 1 cm and the pattern unit of 18/18 or 20/18 and ZS or SZ spin-direction, made on a warp-weighted loom, as demonstrated by starting borders which have been preserved on some of the fragments. The *Mogontiacum* type also includes high quality fabrics characterised by 2/2 diamond twill, shifted along the warp and symmetrically broken along the weft. They are also characterised by high quality of the wool.

As regards those two types, *Virring* fabrics have aroused the greatest controversy. Researchers questioned the theses concerning their diffusion in the Roman period, the disparities of quality between *Virring* and barbarian products or the impossibility of their being made in Northern Europe\(^\text{13}\). It should also be noted that so far no traces of fulling have been determined in fabrics from the area of *Barbaricum* dating to the Roman period\(^\text{14}\), a process which was a common finishing practice in the Roman Empire, as iconographic sources suggest. The fact is a hindrance to positing a thesis stating that woollen textiles were imported to the areas of northern Europe from the Empire.

In turn, silks and knotted pille rugs are certain to have been among imported merchandise. Silks are very rarely found in the north, also on the territories of the former Roman provinces, although they had long been traded (the oldest silk found in northern Europe is dated to 5\(^{th}\) century BC). However, the earliest silk relics from the Roman period in the north of Europe date back only to the 2\(^{nd}\) century, though most often silks are found at sites dated to Late Empire\(^\text{15}\). It seems that silks had been objects of trade in earlier times, while Romans only expanded the trade to the more remote regions of their Empire, as well as beyond it\(^\text{16}\). Knotted pille rugs, appear between the 5\(^{th}\) century BC and the 3\(^{rd}\) century AD on the area stretching from China to eastern Turkestan, Persia and Mediterranean countries. Both the context of the discoveries (rich princely burials with a substantial amount of imported


\(^{14}\) J. Maik, Włókiennictwo, p. 87.


Roman wares) as well as the location of origin of the rugs indicates the possibility of their being imported to the barbarian areas, probably through Roman merchants\textsuperscript{17}.

In order for the sale of textiles and their export to be possible, a very well organized production is needed to turn out surplus. Roman textile industry, especially in the Gaul provinces, is remarkable in the degree of its organisation. This is attested to by the flourishing businesses of families such as Secundinii, or emergence of grassroots initiatives of craftsmen and merchants, such as the collegia centonariorum. However, such a highly developed production and long-range trade could not thrive without the peace ensured by the Roman in the first two centuries AD.

The level of advancement of the textile industry in the barbarian lands is also surprisingly high. Not only the organisation of production but also the high quality of the raw material, i.e. wool, draws attention. Thin-fleece sheep, called by Romans oves pellitae or Tarentine sheep (Greek, Attic) whose husbandry had existed in the northern provinces already in the 1\textsuperscript{st} century, could have spread to the barbarian side of the limes as well. The Barbarians might have tried to cross the local breeds with the Roman sheep, or else knew how to feed the animals to obtain the best fleece possible\textsuperscript{18}. In this respect, contacts with the Roman Empire were not without a significance\textsuperscript{19}.

Both Roman and barbarian craft had to adapt to the needs of the numerous soldiery\textsuperscript{20} who were stationed in one location and who possessed a real buying power in view of the stable income\textsuperscript{21}. Based on the few mentions in written sources which concern the amount of pay\textsuperscript{22}, we may surmise that a soldier of the rank and file, deployed far from home, would look for economies. Therefore I am of the opinion that soldiers did not have their

\textsuperscript{17} J. Maik, Tkaniny z okresu rzymskiego z terenu Polski, Pomorania Antiqua 7, 1977, pp. 87-89, 117.

\textsuperscript{18} J. Maik, Wyroby włókiennicze, pp. 110, 114-115; idem, Welna tkanin wykopaliskowych jako źródło do badań ras owiec, Kwartalnik Historii Kultury Materialnej 4, 2001, pp. 314-315; see also K. Schlabow, Textilfunde der Eisenzeit in Norddeutschland, Neumünster 1976, p. 34.


clothing brought from afar but supplied themselves from the local weavers, be it of Roman or Barbarian origin, stimulating local production. Thus the Roman influence on the production of fabrics is particularly evident in the vicinity of army encampments.

On the other hand, it seems that Romans introduced few technological improvements, instead intensifying their exploration of the provinces. In many areas, the local population was permitted to continue their own traditions. Those were chiefly areas of minor strategic importance for Roman economy, and weaving was one of such traditions. Still, this does not mean that Barbarians under Roman rule did not try to take advantage of the existing situation and find their place in the new circumstances, modifying production to cater for the new type of customer. Besides, they were drawn within the sphere of Roman trade, and we may suppose that exchange of technology followed in the wake of trade\textsuperscript{23}. Until the latter half of the 2\textsuperscript{nd} century, Roman imports are goods from the zone of the “minor frontier trade”. Production of fabrics remained local, just as the production of other necessities. Those were luxury fabrics that people traded, though sale of lesser quality textiles cannot be ruled out\textsuperscript{24}.

Textile finds in Barbaricum should not be described according to principles applied in the case of other imports, i.e. objects characterised by high quality of technological properties. Barbarians were also capable of producing high quality fabrics, with the Prachtmantel cloaks as an excellent example. Therefore not every “Roman” textile discovered attests to commercial exchange.

For the Barbarians, the contacts with the Romans were certainly important, while for the Romans their nature was marginal, despite having an impact on the life of the provinces, especially on their economic functioning. However, when analysing Roman influence on the culture of the inhabitants of Barbaricum it should be remembered that not all the changes that took place in the period had to result from the contacts with the Empire. A number was most probably the effect of “natural” processes or internal needs.


What is more, Romans were not the only people with whom the northern tribes remained in contact, as they maintained relations with one another. Obviously, a long-term, intensive contact with the Romans must have left its mark on the barbarian culture, but one should be cautious so as not to associate them with each and every change that took place. Also, it should be noted that a number of tools which previous studies claimed was result of Roman influence in, had in fact been known in the La Tène period. Furthermore, the presence of artefacts originating from the Roman Empire does not have to mean direct Roman influence. Merchants are certain to have reached places beyond the frontiers of the Empire, but some of their merchandise might have arrived in Barbaricum in the course of independent processes.

Cultural contacts were reciprocal. The Romans, being continually in touch with the barbarian armies, most probably noticed that the barbarian attire, mainly the breeches and the sagum cloaks, were more suited to the climate in which they were stationed; consequently they adopted those. One may therefore assume that Romans took advantage of the barbarian knowledge of the conditions and their adaptation skills, and borrowed the attire as well as the method of producing the fabric of which it was made.

Thanks to constant contact between Romans and Barbarians, textiles of barbarian origin, such as the Virring, which had been known in Gaul before the Roman conquest, found recognition across the Roman world and may now be found at such remote sites as e.g. Mons Claudianus in Egypt. The profound knowledge of weaving techniques on both sides of the limes demonstrates that both worlds remained in continual contact which fostered the development of skills.

I conclude my studies with the observation that at present there is no fully credible method of determining whether a given type of fabrics was imported or not. However, innovative research continues and methods are being improved, in particular those which rely on the methodology of exact sciences, thus promising answers to the crucial questions. Nevertheless, the weaving industry of the Roman times appears to be highly developed, while contacts, especially cultural ones, between Romans and Barbarians prove relatively complex when approached from the perspective of the textile industry. New

---

tradition may have penetrated through the *limes* not only as a result of military or trade contacts but also in a manner which history does not mention, e.g. by means of mutual exchange of knowledge. After all, there is no doubt that both worlds were firmly interwoven, changing and creating new realities which eventually engendered the culture which brought forth the present-day Europe.