

## FULLERS AND ROMAN TEXTILE PRODUCTION AS AN EXAMPLE OF ROMANIZATION IN PANNONIA\*

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*Fulling of the clothes was one of the finishing processes of textile production, but it was not a necessity. It made clothes more comfortable to wear and warmer, but more importantly it gave garments a lustre, more elegant look and so in Roman Period it had been closely related to the cultural attitudes, personal beliefs about style and good taste.*

*Fullonicae, although best known from Italian Pompeii, are also found in some of the urban centres in Roman Danubian Provinces, like for example in Aquincum, however their identification has sparked some debate. There are also other evidences of fuller's work, which will be described in text. The special emphasis is put on the reign of Trajan, which was one of the turning points in the history of the Romanization of the province.*

*In my paper I focus on the role that fashion played in the Romanization process of the Northern Provinces on the example of Roman Pannonia. I believe that since it is a common paradigm that clothing express one's identity, the choice of clothes can serve as one of the indicators of the Romanization. Since fulling of the clothes was a matter of personal interest, not necessity, the appearance of fullonicae could be the symptom of accepting the Roman style and thus the Roman culture.*

Key words: Romanization, Pannonia, Fullers, Fulling, Roman textile production

*Omnibus autem Pannoniis non disciplinae tantummodo, sed linguae quoque notitia Romanae, plerisque etiam litterarum usus et familiaris animorum erat exercitatio.* (Vel. Pat. II, 110, 5)

These words, which refer to the Pannonians of the very beginning of the 1<sup>st</sup> century AD, have caused an outbreak of a discussion on the level of Romanization level of the people inhabiting the

area of the middle Danube. Although, these lines have to be read in the whole context of the history of the Pannonian-Dalmatian uprising, the scholars tried to make them historically credible (Mócsy

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1983: 169–170, 175). Modern researchers are not that optimistic, they question not only the possibility of measuring Romanization, but also the term itself. Even though, the quotation does not refer to the clothing, it is a good starting point in discussing Romanization of the Roman Pannonia.

As a consequence of my studies on Romanization of the Danubian provinces, I have decided to present the problem on a smaller scale – the acceptance of Roman style and attitudes towards clothing by the local inhabitants of Pannonia. Since it is a common paradigm that clothing express one's identity, the choice of clothes can serve as one of the indicators of the Romanization. However, due to the limited space, this paper should be viewed as an introduction to the wider problem of provincial identity. Moreover, the special emphasis is put on the period of the beginning of the 2<sup>nd</sup> century, the reign of Trajan, which was one of the turning points in the history of the Romanization of the Province.

One of the most intriguing features of Roman costume production was fulling. "Fulling" can be employed to name two different processes: the finishing of the clothes and washing clothes (Bradley 2002: 21). Even though that there is no account in Roman literary sources of the fulling process (Bradley 2002: 24–25), we are now able to reconstruct almost all of it thanks to the archaeological and iconographical evidence. First, let us consider fulling as a finishing process. Unlike the medieval fullers, Roman *fullones* were not the last ones to deal with textiles (Flohr 2013: 79–84; 2013a: 69), since fulling was not essential stage of textile production, but rather supplementary (Wild 1970: 83; Flohr 2011: 209; 2013: 80–83). Moreover, the evidences show, that fullers were often dealing with the ready-made clothes (*vestis, vestimentum*) unlike their medieval or early-modern colleagues, who primarily dealt with cloth (Flohr 2013: 58). Furthermore, not all clothes were fulled – fulling concerned mainly woollen clothes (Flohr 2011: 209). However, it is worth noticing that fulling made clothes more comfortable to wear and warmer, a very important feature of vestments in cold, northern climate.

As already noticed, the term fulling could also be employed to washing clothes, that mean removing dirt, bleaching and degreasing. As such, it was repeatable and thus could have an abrasive effect on the clothes (Flohr 2011: 209). There are written evidences to confirm that the clothes fulled more than once were worth less (Petron., *Sat.* 30; *SHA, Heliogab.* 26; cf. Bradley 2002: 29–30). However, *fullonicae* were very popular in Roman Italy, what would suggest, that, despite the flaws of the fulling

process, there was a certain need for it. Was that the case in the Danubian provinces of Rome?

## 1. EVIDENCE FOR FULLING IN ROMAN PANNONIA.

Despite a rather large set of data to confirm that fulling was taking place in the Roman Empire (Flohr 2013: 12–35), it becomes rather limited when it is narrowed to only one of the Roman provinces. Pannonia never played an important role in Roman Empire's economy, especially in textile production, and the development of its industry was always dependent on the army. However, army was not the only recipient of Pannonian production. The Province was inhabited by locals and immigrants, who came here in search of new life and/or business opportunities. That would mean that there was a market for any kind of services Roman culture could provide. The historical and archaeological evidence show that the province flourished under first three ages of Roman rule, even though it also suffered during several conflicts (Fitz 1980: 323).

When it comes to fulling, there are three kind of evidence that could prove that it was practiced in Roman Age Pannonia: the archaeological remains of *fullonicae* (buildings, infrastructure), the epigraphical material (inscriptions mentioning fullers and their *collegia*) and the archaeological textiles (bearing the recognizable traces of fulling).

### 1.1. FULLONICAE

One of the first scholars to enumerate the characteristics of *fullonicae* was Bradley (Bradley 2002). He mentions several points that should be fulfilled to recognise, with certain accuracy, Roman *fullonicae* in ancient towns. These are: the presence of the stalls, each with the space for its own tub, but also the walls and rails, which would be a support against slipping for those treading clothes. Large rectangular tanks for soaking and rising textiles are also an important characteristic. An access to the local water-source, drainage channels or soakways, but also the evidence of use of the fullers' detergents (like fuller's earth or urine tanks) are of secondary importance. More important is epigraphic evidence (Bradley 2002: 26–27).

Bradley's opinions were widely criticised (Wilson 2003: 442–446; Flohr 2003: 447–450), since the identification of the characteristics is not as easy as it would seem. This concerns especially those sites, which were for a longer period exposed to the weather conditions (Wilson 2003: 443), but also those

sites, which were under excavation in the 19<sup>th</sup> and the beginning of the 20<sup>th</sup> centuries. Wilson mentions some less controversial characteristics of *fullonicae*, which may help in their identification. Large vats which were needed for rinsing clothes, especially when they are supplied with piped water from the urban aqueduct may serve as a diagnostic evidence themselves. The existence of treading stalls is also an important feature, but, on the other hand, in northern provinces it is more probable that they were made in wood<sup>1</sup> and thus might not have been recorded due to inadequate excavation (Wilson 2003: 444) or preservation conditions. Due to this argument, the identification of fulleries in the provinces is extremely difficult.

Most of the Pannonian cities by the beginning of the 2<sup>nd</sup> century had all the required infrastructure to assume the existence of the fullers workshops, including one of the most important factors determining the profitability of the *fullonica* – the constant access to fresh water, either by the pipe connection to the aqueduct or the channelling the overflow form public fountains or wells (Droß-Krüpe 2016: 343; Wilson 2003: 444). On the territory of the civilian city Aquincum the important role of building its water supplies should be granted to Trajan (Láng 2016: 354; Póczy 2003: 145).

Also in civilian town Aquincum, during the excavations in the 19<sup>th</sup> century, a *fullonica* was identified and the building was presented as such in tourists guides of the civil town (Póczy 1969: 4). Its recognition was based solely on the fact, that there are four basins discovered in the north-western corner of the house (Zsidi 2006: 89), which is not sufficient evidence. This means, that *fullonica* in Aquincum probably never existed (Láng 2016: 358) and today no other traces of fullers' workshops were identified anywhere in Pannonia. However, recent excavation in southern suburb of Savaria have yielded such a number of textile tools and lead tags to presume the existence of a textile workshop of some kind, dated from the end of the 1<sup>st</sup> to the beginning of the 2<sup>nd</sup> centuries, most probably a refurbishing one, established in the colony to meet the demands of maintaining Roman style of clothing among Roman citizens. The proximity of the stream (Perint), which was not only a supplier of fresh water, but also a place where wastewater could be disposed, could be an evidence that in the workshop fulling was also taking place (Kiss *et al.* 2017: 90–91; Pásztókai-Szeőke & Radman-Livaja 2013: 55).

Siscia in the 2<sup>nd</sup> century AD was a well-known provincial centre of wool processing (Lolić 2003: 144). However, as far as I am concerned, no *fullonica* was identified there, although there is another set of evidence to certify that fullers had their workshop there, which will be discussed below.

It is intriguing that even though, in Pompeii itself thirteen *fullonicae* were excavated (Flohr 2013: 62), and many more have been identified in Italy, mostly in Ostia and Rome, only two, not fully meeting all the requirements, are known from Roman Pannonia (excluding the presumed fullers' workshop that could have functioned in Siscia).

The reason why it is so difficult to identify *fullonicae* outside the Roman Italy might be that the model which is employed to recognize Italian or Mediterranean fulleries is not congruent to the provinces – the structure or the furnishing of fulleries in provinces could have been different than those of Pompeii, Ostia or Rome (Gostenčnik 2013: 78). Their furnishing might as well have been made from wood, fullers could have used wooden vessels or vats, well known before the Roman conquest (Wild 1970: 82; Gostenčnik 2013: 68; 2014: 78; cf. Esperandieu 1911: 2768).

It is also possible, that in Pannonia there were fullers who travelled from estate to estate, looking for employment for a short notice. This practice is described by Varro (Varro, *Rust.*, I, XVI, 4, cf. 1–3), who claims that it was extremely popular in the provinces which were considered dangerous or were close to the border areas. This argument implies that the need for fullers' work was met at the house of a Roman citizen and thus no external facilities were needed. However, this thesis seems correct for the villa owners, it is rather unlikely for Roman cities.

## 1.2. EPIGRAPHY

As far as the epigraphical sources are concerned, the most numerous are lead tags from Siscia (Radman-Livaja 2011: 181; 2013: 89, 94; Koščević 2013: 21–22). These rectangular plates of lead, around 30–40 mm long and 15–25 mm wide, always with at least one circular hole, which enabled fixing the tag to the object with a wire or a cord. Every tag has an inscription at least on one side (but often on two sides) and frequently they are palimpsests. One side the tags gave personal names not only the *praenomen*, but also *duo nomina*, very rarely *tria nomina*.<sup>2</sup> The contents of the inscriptions on

<sup>1</sup> Probably a wooden treading stall is depicted in the relief from Agedincum, today Sens (Espérandieu 1911: 2768).

<sup>2</sup> For the discussion whose names were those see: Radman-Livaja 2011: 191–194; 2013: 94–104; 2014: 118–121.

the other side are different, but they usually name the product (mostly in abbreviated form), give a weight, quantities, price and sometimes the task to be executed. Very often they contain personal names in different grammatical cases (nominative, genitive, dative – Radman-Livaja 2011: 181–182; 2013: 90). It is worth noticing that the names from the Siscia tags gives not only Roman names, but also those of *peregrine* (Radman-Livaja 2011: 182, 184).

It seems that the tags from Siscia have been destined to be attached to garments or textiles left at the fuller's or dyer's (Radman-Livaja 2011: 181; 2013: 98). It is the most probable explanation, since the garments' names are often found on the inscribed plombs (Radman-Livaja 2013: 98–100).

But Siscia collection of the lead tags is not the only one, although find spots of other collections are located mostly outside Pannonia (mainly Noricum and Germaniae). There are more sites in Pannonia, where the lead tags were found (Radman-Livaja 2014: 50–51), but I would like to name three, what should give the overall picture – Carnuntum (from which one tag probably name a garment – Römer-Martijnse 1987: 119–122), Savaria (Pásztókai-Szeőke 2014: 7) and Ribnica (Lovenjak 2005: 42–43).<sup>3</sup> The authors of the first publications of those tags noticed their connection to the textile industry (Mócsy 1956: 103–104).

As far as I am concerned, there are no stone inscriptions mentioning fullers or their *collegia* in Pannonia. There are three possible explanations of the fact: the first one – there were no fullers or their associations in Pannonia, second one – the fullers could not afford stone inscription and – last but not least – the inscription has not been found yet. The latest exciting finds (like the textile workshop in Savaria) make us hope that it is just a matter of time when we will be able to say more about provincial *fullones*.

### 1.3. TEXTILES

Archaeological textiles are very rare objects. They are impermanent and can survive in good shape only in extremely rare conditions like deserts or bogs (Wild 1970: 41; Schlabow 1976: 11–12; Wild 1988: 7). The climate of the Central Europe, with changing seasons, is not favourable for textile preservation (Wild 1970: 41). Most of the textiles found on this territory are found next to metal, mainly bronze, objects, whose oxides have a preservative

effect on the fibres. Predominately they are small, brownish and heavily deteriorated. Moreover, their finds are accidental, although we have a representative selection of ancient textiles (Wild 1970: 41). That is why it is extremely difficult, though not impossible, to draw any general conclusions, and every conclusion must be read with a certain dose of scepticism.

Ancient Pannonia's territory is now divided between several countries, every with its own language, research and publication traditions. Only recently did textile researchers managed to enforce methodological rules to follow when dealing with archaeological textiles, so, naturally, some of the earliest works publish textiles inadequately and have still too little of modern analyses (Bender Jørgensen 1993: 109). That makes it difficult to draw a general picture of the characteristics of Roman textiles in the Province.

From Roman Austria there are only 184 textiles found in different contexts, mostly from graves (Grömer 2014: 25). Over 150 textiles of Hungarian Roman period, which had been analyzed as a part of DressID project, have not been published yet (Grömer 2014: 35). Although there are publications of individual finds from late Roman graves (Hajnal 1965: 259–266; cf. Barkóczy 1965: 251). As far as I know none of them bear the traces of fulling.

From the Northern Roman Provinces, I know of only one textile – the Verulamium diamond twill (Wild 1970: 84) – which had a definite nap, which obscured the weave and thus is a probable example of fulled textile.

The rather small number of textile finds from the provinces makes it difficult to claim if it is a matter of coincidence (the preservation conditions etc.) or if fulling in Pannonia was not a common practice.

### 2. TRAJAN

Trajan's reign was the first important turning point in the history of the Danubian provinces from the time of Augustus. For Pannonia it meant not only the deployment of army, but also settling the directions of main lines of communication (Mócsy 1974: 98). Moreover, the correspondence between Trajan and Pliny the Younger brings us rather abundant set of evidence of the Emperor's views about *collegia*.

<sup>3</sup> Unfortunately, none of Ribnica tags allow to precisely determine an activity to which they were used (Lovenjak 2005: 43).

## 2.1. COLLEGIA, FULLERS AND LAW

It is well established, that Romans were reluctant when it came to the organisations. The history has thought them, that such corporations can cause troubles and may lead to uproars (Cotter 1996: 75–76; Liu 2005: 281–282). The Emperor was no different in the matter. From the letters between him and Pliny the Younger (Plin., *Ep.* 10.33, 34; 10.92, 93.), one can learn what was acceptable: when it comes to collegia strictly controlled membership, professional knowledge and skills and also small numbers of both collegia and their members, especially in a troublesome provinces (Cotter 1996: 82, Liu 2005: 298, *cf.* ref. 94). Belonging to the guilds of course ensured certain privileges, that is why it was rather desired form of organisation by the society. It is also certain, that professional corporations could be useful for local communities (Liu 2005: 298). Whatever were the reasons of forming a collegium, Pliny's and Trajan's letters show clearly that the fear of disturbances predominated any reason (Cotter 1996: 82).

Amazing though that, despite Trajan's beliefs that the organizations may pose a threat to the established order, it is that from the beginning of the 2<sup>nd</sup> century AD many *collegia* were formed in Pannonia. It may be that the popularity of the collegia should be granted to Hadrian, who seemed more likely to accept associations in the provinces (Cotter 1996: 84–86). The members of those associations were immigrants, the native population did not take part in corporate life, at least not in Aquincum, from where many gravestones erected by *collegia* members survived, including *collegium centonariorum* (Liu 2009: 45; Fitz 1980: 148; Mócsy 1974: 125).

It seems that the Roman traders and craftsmen settled only there, where there was a need for their wares. The reason why the immigrants were so keen to associate was probably that they were aliens on the strange territory – they had to find balance between credibility to the locals and the loyalty to their place of origin (Liu 2016: 215–216; Woolf 1996: 22). However, it seems that there is no link between the level of urbanization and the number of *collegia*. The lesser urbanized Pannonia has yielded more epigraphical evidences of the existence of associations than Spain (Liu 2005: 303).

At least one *collegium* of fullers existed in the Northern Roman Provinces as evidenced by inscription from Köln (CIL XIII, 8345; *cf.* Wild 1970: 82), but so far there are no traces of those *collegia* in Pannonia.

## 3. ROMANIZATION?

Dress can be considered as an expression of humans' identity. It is a socially meaningful manifestation within which ethnicity, religion, gender and culture, hence making the visual information for the other can be expressed. It should also be read in specific context of culture and time (Sommer 2012: 257). The clothes demonstrate not only the existence of specific group but also commit the individual to the group and thus the dress code consolidates the collective identity of the group and social identity of the individual (Sommer 2012: 258–259). People with similar living conditions, values, information sources develop and express similar styles and aesthetic, including clothing (Sommer 2012: 259). That means the refusal to wear certain clothes not necessarily means ignorance – it could be a conscious choice.

There are two somehow contradictory evidences of possible Romanization in costume. First one is that however it seems that the 'globalization' that followed the Roman conquest to large extend did not concerned textiles. The items of clothing listed the Diocletian's Price Edict show that the same cloth, for example *byrros*, bear the name of different geographical regions (Nervii, Noricum, Britain and so on – *Ed. Dioclet.* 19.1.44–55), which suggests, that regional costume, despite the standardization of consumption, endured even to the beginnings of the 4<sup>th</sup> century AD. However, their listing in the Edict implies that they, or at least the clothes similar to them, were available in the large area where the Edict was obligatory (Flohr 2014: 3).

Another interesting point is that when it comes to Roman Pannonia, most data concerning the native population comes from the middle or even late 1<sup>st</sup> century AD. There is no evidence that the common Pannonian identity existed before Roman conquest (Džino & Domić-Kunić 2012: 100). It is even more interesting, because from this date on there are also more evidences concerning native dress. The new information derives mainly from the coach scenes of the gravestones (Grabsch 1985: 548). The Eraviscan women's fashion continued, despite changes, throughout the Roman occupation.<sup>4</sup> However the significant change must be noted in women's fashion from the beginning of the 2<sup>nd</sup> century AD – not only the number and diversity of fibulas is dropping, but also one can observe the significant change in clothes depicted on gravestones (Grabsch 1985: 558, 576). It is diffi-

<sup>4</sup> Fitz 1980a: 142; Garbsch 1985: 554–555, 574–575; Mócsy 1974: 149–150.

cult to attribute this change to Romans, but the timing of the change coincides with other significant changes described above. On the other hand, one must remember that these representations do not give us the whole picture of the Pannonian fashion, what, on what occasion or how often was wore (Pásztókai-Szeőke 2014: 6). It is a mere representation of how these people wanted to be seen after death.

On the other hand, there are proofs, like the Siscia or Savaria lead tags, that there was a certain market for the textile works provided according to Roman taste. The local names on Siscia tags imply that also Pannonians were interested in whatever services the textile workshop could provide.

The fullers were supposed to give clothes a lustre, to make them look splendid.<sup>5</sup> That means that not all members of society were interested in fulling their outfit, only those who wanted to underline their wealth, exclusivity and social superiority (Flohr 2013: 67). However, some Egyptian papyri mention individual transactions of rather small amount of money (cf. Flohr 2013: 69; Radman-Livaja 2014: 98). That implies that fulling was accessible for all members of Roman provincial society, only the rich were clients of *fullonicae* more often (Flohr 2013: 69–70). The need for fullers' work was also not equally divided geographically – it seems that in the inhabitants of Rome had more opportunities (or necessities) to show off in their clothes, that is why they needed fulling more often (Flohr 2013: 70–72).

#### 4. CONCLUSION

To conclude, it seems that in Pannonia there was a market for any kind of services Roman culture could provide, including textile production. Thanks to the Savarian excavations or lead tags from Siscia, it

is possible to clearly state the presence of a complex, client-oriented textile service in Pannonia at the turn of the 1<sup>st</sup> and the 2<sup>nd</sup> centuries AD (Pásztókai-Szeőke 2014: 9–10). Moreover, it is worth mentioning that the lead tags from both sites are in Latin and they name clothes of Italian origin (*notabene* none of them mentions toga), what could mean that the workers of the textile workshop knew at least the basics of Latin or were non-locals using *lingua franca* to communicate with clients (cf. Pásztókai-Szeőke 2014:14). The lack of written evidences (stone inscriptions, literary sources) mentioning fullers and their associations is a drawback, but the Siscia lead tags confirm that there were fullers in Pannonia (Radman-Livaja 2014: 79–80).

Paradoxically, it seems that standardization, which followed Roman conquest, helped the Pannonians to sustain their identity, which is clearly observable in their representations on the gravestones. Despite the fact that they used Roman medium (gravestone), they clearly manifest their commitment to the local tradition by wearing local costume. This is how they wanted to be remembered – as Pannonians.

Another interesting point is that none of the lead tags mention toga as a garment to be treated at textile workshop. Toga, according to Tacitus (*Agr.* 21), was one of the important traits of Romanization. Should it be a sign of the superficiality of the Romanization in Pannonia?

To consider once again Velleius' statement quoted at the beginning of my article, in the light of the arguments above, it seems that the Roman culture was truly familiar to Pannonians. However, the Pannonians remained faithful to their local identity, actively participating in only those elements of Roman culture which seemed interesting to them. This means that the Romanization in Pannonia was a process of constant negotiations between what it meant to be Local and what it meant to be Roman.

<sup>5</sup> That does not imply making clothes white – the best example is *toga candida*, which is never described as *alba* (Flohr 2013: 59–60).

## ABBREVIATIONS

CIL	<i>Corpus Inscriptionum Latinarum</i> , Berlin.
<i>Ed. Dioclet.</i>	<i>Edictum Diocletiani de pretiis rerum venalium</i> , Poznań, 2007.
Petron., <i>Sat.</i>	<i>Petronius, Satyricon</i> , London, 1914.
Plin., <i>Ep.</i>	Pliny (The Younger), <i>Epistulae</i> , London, 1940.
<i>SHA, Heliogab.</i>	<i>Scriptores Historiae Augustae, Heliogabalus</i> , Leipzig, 1955.
Tac., <i>Agr.</i>	<i>Tacitus, Agricola</i> , London, 1914.
Varro, <i>Rust.</i>	<i>Varro, De re rustica</i> , Leipzig, 1889.
Vell. Pat.	<i>Velleius Paterculus, Ad M. Vinicium consulem libri duo</i> , Hildesheim, 1997.

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