

Археологія

<https://doi.org/10.15407/ul2024.07.065>
UDC 903(474.5-25)

Rytis JONAITIS

PhD. in History, Research Fellow,
Lithuanian Institute of History (Lithuania, Vilnius)
archjonaitis@gmail.com
[https:// orcid.org/0000-0003-1079-330X](https://orcid.org/0000-0003-1079-330X)

STYLI IN VILNIUS

Stylus is a metal or bone instrument that was used for writing on a birch bark or wax-coated wooden tablets. The tool itself (Greek: stilos; Latin: stilus) originated in antiquity: styli were common in ancient Greece and Rome. In Medieval Rus', which is characterised by an abundance of archaeological finds related to writing, the first styli date back to the 10th century.

In the Middle Ages two types of styli were used – made of iron, for writing on birch, and made of animal bone, for writing on waxed tablets. This particular paper focuses on the latter. Medieval bone styli are a very rare find in Lithuanian archaeological material, especially in burial monuments. According to the data from 1998, only 15 graves out of almost 8000 contained styli. Bone styli are also rare in urban cultural layers. In addition, styli found in cities precede those found in burial grounds. Styli found in ethnic Lithuania are identical to those found in other cities of the Grand Duchy of Lithuania, therefore their origin and spread could be associated with the influence of Ruthenian cities of the duchy.

Two medieval burial grounds were found in the earliest towns of pagan Lithuania – Kernavė and Vilnius – where the dead were buried according to the Christian tradition (inhumation of the deceased, the east-west orientation (head to the west), wooden constructions, the scant presence of grave goods, and so forth). The most abundant type of grave goods included ornaments;

however no tools or weapons typical of pagan burials were found in these two burial grounds. According to archaeological and historical material, burial grounds in Kernavė and Bokšto Street are nearly contemporaneous, both dating back to 13th–14th century although, the burial ground in Bokšto Street remained in use late as the 15th century. Various arguments are provided in debates on the religious affiliation of those who buried members of their community in these burial grounds. Some researchers disagree that the Orthodox were buried in these two burial grounds in the still pagan Lithuania. The lack of evidence on writing in the layers of the town of Kernavė, that is the absence of styli (except those found on the site of the ruler's castle), birch bark or waxed tablets, is presented as one of the arguments supporting the theory of non-Orthodox burials there. It is well known, that such finds were typical of Rus' cities, especially in Great Novgorod, where 1144 items of birch bark have been found up to 2021. Notably, fewer such finds were found in other cities of the Rus'.

During the detailed archaeological investigations on the burial ground in Bokšto Street, several bone styli were found. It must be mentioned, that these artefacts were not found in the horizon of the burial ground, but in the later cultural layer, dating back to the 16th century. The material found is discussed in this paper. We also tried to answer the question of whether these styli could have originated from the horizon of the burial ground and how (or if) they could be associated with the 'Civitas Rutenica', Ruthenian city of Vilnius, which was mentioned in historical sources in 1383.

Keywords: *styli, writing, Orthodoxy, burial rites, Middle Ages.*

Ритіс ЙОНАЙТІС

доктор історії, науковий співробітник,
Інститут історії Литви (Литва, Вільнюс)
archjonaitis@gmail.com
[https:// orcid.org/0000-0003-1079-330X](https://orcid.org/0000-0003-1079-330X)

СТИЛУСИ У ВІЛЬНЮСІ

Стилус – металевий або кістяний інструмент, який використовувався для письма на бересті або покритих воском дерев'яних дощочках. Сам інструмент виник у давнину: стилуси були поширені у Стародавній Греції та Римі. У Середньовічній Русі, що характеризується великою кількістю археологічних знахідок, пов'язаних із писемністю, перші стилуси датуються X століттям.

У середні віки використовувалися два типи стилусів – залізні для листа на бересті та з кісток тварин для листа на вощених табличках. У цій статті основна увага приділяється кістяним стилусам. Середньовічні кістяні стилуси – дуже рідкісна знахідка в археологічному матеріалі Литви, особливо у похоронних пам'ятниках. За даними 1998 р., стилуси виявлено лише у 15 похованнях із майже 8000 досліджених. Кістяні стилуси також рідкісні у міських культурних прошарках. Крім того, стилуси, знайдені у міських нашаруваннях, передують знайденим

у похованнях. Стилус, знайдений на території етнічної Литви, ідентичний знайденим в інших містах Великого князівства Литовського, тому їх походження та поширення можемо пов'язати із впливом руських міст князівства.

У найдавніших містах язичницької Литви – Кернаві та Вільнюсі – було досліджено два середньовічні могильники, де померлих ховали за християнською традицією (поховання за обрядом інгумації, орієнтація схід-захід (головою на захід), дерев'яні конструкції, мізерна наявність похоронного інвентарю). Найбільш поширеним типом похоронного інвентарю були прикраси; однак жодних знарядь праці та зброї, типових для язичницьких поховань, у цих двох могильниках виявлено не було. Згідно з археологічними та історичними матеріалами, могильники в Кернаві та на вул. Бокшто у Вільнюсі, майже одночасні та датуються XIII–XIV ст., хоча могильник на вулиці Бокшто використовувався до XV ст. У дискусіях щодо релігійної належності тих громад, які ховали своїх членів на цих могильниках, наводяться різні аргументи. Деякі дослідники не згодні з тим, що у цих двох могильниках у все ще язичницькій Литві ховали православних. Як один із аргументів на користь теорії представлено відсутність свідчень про писемність у верствах міста Кярнаве, тобто відсутність стилусів (крім знайдених на місці замку правителя), берести або воцених табличок. Відомо, що подібні знахідки були типовими для міст Русі, особливо у Великому Новгороді, де до 2021 р. було знайдено 1144 екземпляри берестяних грамот. Примітно, що в інших містах Русі таких знахідок виявили менше.

У ході детальних археологічних досліджень могильника на вулиці Бокшто у Вільнюсі було виявлено кілька кістяних стилусів. Слід зазначити, що ці артефакти були виявлені не у горизонті могильника, а в пізнішому культурному шарі XVI століття. Знайдений матеріал обговорюється у цій статті. Ми також спробували відповісти на запитання, чи могли ці стилуси потрапити з горизонту могильника і як (або якщо) вони могли бути пов'язані з *Civitas Rutenica*, православним містом Вільнюса, яке згадується в історичних джерелах у 1383 р.

Ключові слова: стилуси, писемність, православ'я, похоронний обряд, середньовіччя.

Introduction

The results obtained during the archaeological research on Bokšto Street in Vilnius were presented during the Kamenets conference in 2015 and 2021 (Jonaitis, 2017). The research into this particular location is exceptional firstly because of the discovery of a previously unknown Orthodox medieval burial ground, which formed a part of the Ruthenian city or *Civitas Rutenica* of Vilnius. An intensive cultural layer was discovered extending above the burial site, reaching a thickness of up to seven meters. Finds discovered within these layers included exceptional artefacts made of glass, various metals, bone, and antler.

A new topic was created as a result of these discoveries, and in this paper, one of the more interesting groups of finds – the writing styli – will be presented.

A stylus is a slender utensil, made of metal or bone (or even precious metals), used for writing on birch bark or wax-coated wooden (or ivory) tablets. In the medieval Rus', which is characterised by an abundance of archaeological finds related to writing, the first styli date back to the 10th century (Ovchinnikova, 2000: 61). The tool itself originates from antiquity, where styli were very popular in Ancient Greece and Rome. In the Middle Ages, there were two types of styli used for writing: made either of metal, intended for writing on birch bark, or of bone, for writing on waxed tablets¹. Styli are a very rare find in Lithuanian archaeological material, especially in burial monuments. According to 1998 data, only 15 out of almost 8000 examined burials contained bone styli (Svetikas, 1998: 26). Styli do not occur very often in urban cultural layers either. Besides, styli found in cities are usually earlier than those found in burial grounds (Svetikas, 1998: 34). Styli found in the territory of ethnic Lithuania are identical to those found in other cities of the Grand Duchy of Lithuania and their origin can be associated with the Ruthenian cities of the duchy.

No information is available regarding pagan Lithuanian scripts (their existence has not been confirmed), which had resulted in a viewpoint that Lithuanians were 'illiterate'. However, it is known that since the 13th century Franciscan monks worked in the chancellery of the grand dukes of Lithuania. Both Latin and Old Slavic languages were used. In Vilnius, styli have been found in the territory of Vilnius Lower Castle, as well as in the cultural layers investigated in Bokšto Street. These finds revise the view about 'illiterate' Lithuanians as they testify directly to the presence of writing on the ruler's estate and in the Ruthenian part of the city of Vilnius. This paper is an overview of styli that have been discovered in Bokšto Street and the territory of Vilnius Lower Castle. The study also includes a discussion of the context and meaning of their presence.

State of the research

In Europe, interest in styli began during the mid-20th century. Interest in these writing implements also arose relatively early in the neighbouring countries of Lithuania. In 1951, the first examples of birch bark with inscriptions were discovered during the excavations in Novgorod. The writing was not made in ink, but by incising the letters on the inner surface of the wood. Artemy Artsikhovskiy, who lead the excavations, hypothesised that the writing was done with bone tools as ones made of metal ones would have been too sharp, while wooden ones were not sharp enough (Artsikhovskii, Tikhomirov, 1953: 8). During the same excavation, one more such tool made of bone was found in a 14th-century layer: one of

¹ The latter were mainly used in Western Europe, while those for writing on birch bark were used in the eastern neighbourhood.

its ends was pointed while the other had a hole for hanging (Artsikhovskii, Tikhomirov, 1953: 8). In 1960, a summary article by Alexander Medvedev appeared in which the author registered, classified and identified 117 styli that had been discovered thus far (Miedviediev, 1960). Interestingly, of the 50 styli found in Novgorod, four were found in specially-made cases.

In her 1973 article, F. Gurevich wrote an overview of metal styli. The author divided styli found in Novogrudok to eight types and set their chronology to the 11th–14th century (Gurevich, 1973). Bone styli with zoomorphic ends were reviewed by Albina Miedyntseva in 1983, in which she drew attention to the dating of such artefacts and attempted to determine their ethnicity (Miedyntseva, 1983).

In 2000, Bronislava Ovchinnikova considerably expanded the compendium on styli from Novgorod (Ovchinnikova 2000). The author updated Medvedev's classification of styles and clarified the chronology of the Novgorod styli. The latter classification will be used in this paper in an attempt to determine the typology and probable chronological boundaries of styli that have been found in Vilnius. The most recent work on the writing culture of Novgorod was published in 2018. In it, Oleg Oleinikov describes 23 styli from the cultural layers of the 11th–15th century that have been recovered during the 2008–2017 investigations (Oleinikov, 2018). The author classifies them on the basis of the typology proposed by A. Medvedev and B. Ovchinnikova's extended typology.

In the neighbouring Latvia, Andris Caune and Andris Celmiņš have conducted extensive studies of styli. A. Caune published an outline of the typology of Latvian styli and summary articles on Latvian and Livonian styli (Caune, 1990; Caune, 1992). A. Celmiņš studied brass styli and examples that have been discovered in the churchyard of the Riga Cathedral (Celmiņš, 1996; Celmiņš, 1997).

In Poland, the first to identify styli was J. Żak. In the middle of the 20th century, he compared styli found in Poland with examples from antiquity and determined their function². Later, the author refuted the view of some researchers who distinguished this type of finds as pins and examples bearing a triangular-shaped terminal as spoons (Żak, 1956).

In 2014, a brief article appeared in Estonia on styli found in Tartu (Haak, 2014). Based on A. Caune's typology, Haak categorised and presented 14 medieval styli that have been recovered in Tartu (Haak, 2014: 64). Curiously, the author writes that most of styli were recovered from the south-eastern suburbs rather than their primary locations. The researcher dates these styli to the 14th–16th century (Haak, 2014: 64).

In Lithuania, the only article devoted to bone styli, or styli in general, was written by Eugenijus Svetikas. In his study, the author reviews styli that have

² This publication is not available in Lithuanian libraries. The brief article is cited in many subsequent works on styli, but more as a tribute to the scholar who discovered medieval written implements, since J. Żak's later works on styli far outweigh the first article.

been discovered in the burial ground in Alytus (the end of the 14th–the beginning of the 17th centuries) and other cities of the Grand Duchy of Lithuania (Svetikas 1998). In his conclusions, the author argues that writing was introduced to Lithuania only after the baptism by Livonia in 1387, although a significant number of styli have been found in the Ruthenian towns of the GDL. In this way, Svetikas' study excludes the spread of the Ruthenian script, which undoubtedly took place before the official Catholic baptism of Lithuania in 1387.

Lithuanian historians have also discussed the spread of writing across the Grand Duchy of Lithuania and the tools employed by scribes. In the study devoted to the culture of the Grand Duchy of Lithuania, historian A. Dubonis devoted several paragraphs to the writing implements (Dubonis, 2001: 586–587). Notably, the author mainly refers to the above-mentioned study by E. Svetikas (Dubonis, 2001: 587). Lastly, A. Dubonis points out that in the Ruthenian part of the GDL, wax tablets were used for studying and drafting (Dubonis, 2001: 586).

The link between Kernavė and Vilnius

In order to understand the situation in medieval Vilnius more thoroughly, it is first necessary to discuss the discoveries that were made in another Lithuanian city, Kernavė.

In the first cities of pagan Lithuania – Kernavė and Vilnius – medieval inhumation burials were discovered, where the deceased were buried according to Christian traditions: the remains were not cremated, heads oriented to the west, inside wooden structures, with few but exceptional grave goods (mainly jewellery and elements of clothing) (Vėlius, 2005; Jonaitis, Kaplūnaitė, 2020). No work tools, weapons or horse equipment, characteristic of pagan burials, were found here. However, the question remains as to who exactly was buried here. Both burial grounds are similar, almost identical. Nevertheless, several differences have been identified of which the first is the chronological non-simultaneity of at least some of the individual phases of these funerary monuments. The Kriveikiškis burial ground started being used slightly earlier than the burial ground in Bokšto Street. However, the latter was used for a slightly longer time, to as late as the beginning of the 15th century. Although the difference in chronology is not significant, such aspects as the change in historical circumstances or new trends may have driven the appearance of certain characteristics. Consideration of the available arguments, led to the assumption that Kriveikiškis burial ground represents the middle stage in the development of the Orthodox burial tradition, being an earlier, less strongly expressed variation of the tradition. Kriveikiškis would have been the burial place of Orthodox townspeople. However, specifics such as ethnic identity cannot be determined, at least for the time being. The deceased could have been Ruthenians, Lithuanians, Yotvingians, or other ethnic groups. The somewhat looser tradition of Christian burial rites in Kriveikiškis can be attributed to the fact that Orthodox Christians did not form a large part of the population;

furthermore, they would have lived among the pagans, not forming a separate suburb as in the case of Vilnius.

Currently, the most reasonable hypothesis maintains that the burial ground in Bokšto Street housed the remains of Orthodox Christians who lived in the pagan Vilnius (including an uncertain number of baptised Lithuanians and former pagans) (Jonaitis, Kaplūnaitė, 2020). This community lived in the so-called *Civitas Rutenica*, which was mentioned in the written sources of 1383 (Marburgietis, 1999: 185). In Kernavė (Kriveikiškis), the deceased were buried in accordance to Christian burial traditions. Orthodox immigrants could have also been buried here. However, this burial ground raises more questions as there are no historical sources about Orthodoxy in Kernavė.

Previously, one of the arguments aimed at proving that non-Orthodox people were buried in Kernavė, was the fact that no evidence of writing was found in the cultural layers of the city: no styli, barks or waxed tablets (Vėlius, 2005: 23; Vėlius, 2013: 62). Here, the author is referring to writing, not at the level of princely writing (two styli were found on the Aukuras Hillfort³), but in everyday life (Vėlius, 2005: 23). Two styli were discovered in 1992⁴. One of them is definitely a metal stylus, the terminal of which ends in a triangular plate⁵ (Fig. 1). The piece measures to 12 cm in length and the triangular plate is 1.7 cm in width⁶. Even though the archaeological report indicates that this artefact is 'a special-purpose needle or awl, made of metal, with a flat triangular terminal' (Luchtanas, 1993: 32), there is no doubt that this is, in fact, a stylus.

The identification of the second item (Fig. 2) is a little more dubious. The metal object has a sharp point and is highly reminiscent of a stylus. It was initially identified by researchers as an awl or a darning needle (on the Museum's collection card). Later, in the same card it was listed as a stylus, a writing implement. The question remains as to why the identification had changed. The examination of the artefact raised doubts as to whether it was really a stylus: unlike other such objects, its working point was square in cross-section and uncomfortable to hold, let alone to write with. Moreover, its top part has not survived, so it is very difficult to identify it with certainty as a stylus. In any case, one of the two finds from Kernavė is definitely a stylus. Moreover, it was discovered in the location of the ruler's residential palace, where his chancery would have been located.

³ The medieval archaeological complex of Kernavė consists of five hillforts and the lower town in the Pajauta Valley, the upper town, burial grounds of Kriveikiškis (inhumation) and Semeniškis (cremation). Residential castle of the ruler stood on the Aukuras hillfort.

⁴ The author would like to sincerely thank Andrius Janionis, Head of the Department of the Kernavė Archaeological Site Museum, for all his help.

⁵ It is currently on display in the permanent exhibition of the Kernavė Archaeological Site Museum.

⁶ The dimensions of the artefact are not specified in the archaeological report.



Fig. 1. Iron stylus, found in Kernavė, on Aukuras hillfort in 1992. Photo by Rytis Jonaitis



Fig. 2. Iron stylus (?), found in Kernavė, on Aukuras hillfort in 1992. Photo by Rytis Jonaitis

In the discussion on the absence of writing in Kernavė, the case of Novgorod was put forward as an argument by G. Vėlius (Vėlius, 2005: 23). However, in this particular study, the opinion is maintained that writing on birch bark is unique to Novgorod, where 1154 letters written on birch bark have been found in this town⁷. It should be noted further that significantly fewer such artefacts were found in other towns of the Rus'. Thus, the claim holding that the inhabitants of Kernavė were illiterate is debatable and it remains possible that they were familiar with writing after all.

Archaeological material

Returning to the discussion in regard to the search for Orthodoxy in Kernavė, it should be noted that the situation in Vilnius is different: metal and bone styli have been found here, not only in residency of the Grand Dukes, but also in the city itself.

Several styli have been discovered during the investigations of the medieval burial ground in Bokšto Street. Notably, these artefacts were not found in the

⁷ 2022 data: <https://53news.ru/novosti/aleksej-gippius-rasskazal-o-soderzhanii-berestyanyh-gramot-arheologicheskogo-sezona-2022-goda.html>

burial ground, but in the later cultural layers extending above the burial ground, dating back to the 16th century.

Detailed archaeological excavations on Bokšto Street 6 began in November 2006 and were fully completed by December 2014. The work was carried out and supervised alternately by the author of this article and Irma Kaplūnaitė: in 2006–2007, 2009–2011 by the research supervisor R. Jonaitis, in 2012 and 2014 by the research supervisor I. Kaplūnaitė. A detailed record of all the works and information is provided in the excavation reports on Bokšto Street 6 (Jonaitis, 2009; 2018; Kaplūnaitė, 2014; 2016). During the years of investigations, an area of about 7000 m² was excavated (the whole area extends over 8000 m²). This is one of the largest archaeological sites ever investigated in the territory of Vilnius Old Town. The location and boundaries of the burial ground in Bokšto Street were determined by the natural features and the terrain of the site. As is typical of the medieval worldview, the burial ground was situated in a picturesque location, at the top of a steep slope of a river (Jonaitis, Kaplūnaitė: 105). The total area of the burial site may have amounted to about 2500 m². A high density of burials was found in the central and south-eastern parts of the burial ground, which is considered to be the earliest part of this funerary complex. The analysis of burial features showed that a uniform system was employed across the burial site with a noticeable pattern of planning (Jonaitis, Kaplūnaitė, 2020: 128). It is likely that the burial of the deceased within the site was regulated and maintained by somebody. The distinction of orderly rows of burials allowed the tracing of another feature of the burial ground that is the presence of markings on the former level of the ground (Jonaitis, Kaplūnaitė, 2020: 128).

Several styli were found in the territory of the Vilnius Lower Castle. The history of castles in Vilnius, both Lower and Upper, is an integral part of the history of Vilnius and Lithuania as a whole. The earlier Lower Castle went through a long development from the end of the 13th century, when the enclosure castle was built here, to the 16th century, with the construction of the Renaissance palace of the Lithuanian grand dukes (Valionienė, 2019: 135-145). The first masonry church in Vilnius was built within the same area, and was first mentioned in the letters of Gediminas in 1387. A great deal of information about the development of this significant location and the everyday life of the people who lived here (the nobility) is revealed by extensive archaeological research that began in 1987 and is still ongoing today. Below is the discussion of iron and bone styli that have been discovered during these investigations.

During archaeological investigations in Bokšto Street, three styli made of antler were discovered. All of them were recovered during the 2009–2011 excavations (Jonaitis, 2018b). The first stylus was found in the eastern yard, in a layer of black soil dating from the 16th century onwards (Jonaitis, 2018b: 56) (Fig. 3). This layer extended above the sterile soil. The point of the stylus is broken off, the thick end of the shaft is cone-shaped and decorated with lines and a rolled

pattern. The stylus measures to 10.5 cm in length and 0.55–0.85 cm in diameter. According to A. Medvedev and B. Ovchinnikova, this particular find can be assigned to Type 15 and dated between the end of the 14th and the 16th century (Miedvediev, 1960: 79; Ovchinnikova, 2000: 58-59). Styli of Type 15 has also been found in other Ruthenian towns (Ovchinnikova, 2000: 59).



Fig. 3. Stylus made of antler, found at Bokštas St. in 2010. Photo by Rytis Jonaitis



Fig. 4. Stylus made of antler, found at Bokštas St. in 2010. Photo by Rytis Jonaitis



Fig. 5. Stylus made of antler (?), found at Bokštas St. in 2010. Photo by Rytis Jonaitis

The second stylus (made of antler) was found in the eastern yard of Bokšto Street 6 (Jonaitis, 2018b: 80) (Fig. 4). It was discovered on the stone pavement dated back to the end of the 19th and the beginning of the 20th century. Based on

the typology established by Russian scholars, the stylus is reminiscent of Type 15 (Miedvediev, 1960: 79; Ovchinnikova, 2000: 58–59). Therefore, it must have gotten to the later layers by chance. The stylus is complete, the thick end terminates in a spherical shape, incised decoration includes rolled and cylindrical patterns. The stylus measures to 8.7 cm in length and 0.4–0.8 cm in diameter.

The third stylus was also found in the eastern yard, in a layer of grey earth, extending above the sterile soil (Jonaitis, 2018b: 83) (Fig. 5). It is of rough work. Most likely, it is not a completed stylus, but rather its workpiece. A hole drilled along the artefact was probably meant for the insertion of an iron spike. The stylus measures to 8.9 cm in length and 0.7–1.2 cm in thickness. Analogical finds are not known. A possibility remains that it is, in fact, a finished artefact, albeit poorly made.

In comparison, eight styli were found in the territory of Vilnius Lower Castle: five of them were made of metal, three: of bone/antler⁸.

The first is a complete iron stylus, with one end in the shape of a rounded triangle. The length of the artefact measures to 11.8 cm and 0.5 cm in diameter. The width of the triangular blade (the head) is 2.1 cm. The exact cultural layer from which this find was recovered is not known. It belongs to one of the most popular types of styli: Type 12, Variation B (Miedvediev, 1960: 78; Ovchinnikova, 2000: 57). In Ruthenian lands, it dates back to the end of the 12th–14th century (Fig. 6).



Fig. 6. Iron stylus, found in the territory of Vilnius Lower Castle in 1990.

Photo by Vytautas Abramauskas

⁸ All the finds are stored in the Palace of the Grand Dukes, the National Museum of Lithuania. The author would like to express his sincere gratitude to Milda Samulionytė-Zikarienė, keeper of the museum collections, for all her help.



Fig. 7. Iron stylus (?), found in the territory of Vilnius Lower Castle in 1991. Photo by Vytautas Abramauskas



Fig. 8. Iron stylus, found in the territory of Vilnius Lower Castle in 2006. Photo by Vytautas Abramauskas



Fig. 10. Iron stylus, found in the territory of Vilnius Lower Castle in 2007. Photo by Vytautas Abramauskas

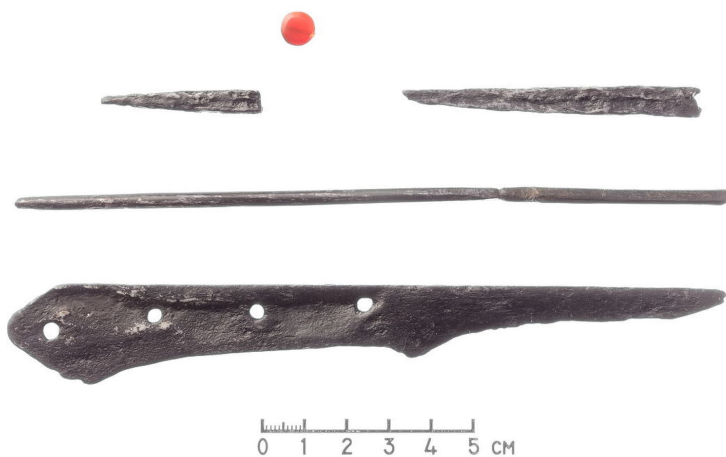


Fig. 9. A (potential) iron stylus, found in the territory of Vilnius Lower Castle in 2006. Photo by Vytautas Abramauskas



Fig. 11. Stylus made of antler, found in the territory of Vilnius Lower Castle in 2004.
Photo by Vytautas Abramauskas

Another find is that of a stylus made of iron, with a loop at the top and a round cross-section (Fig. 7). It was found broken. The terminal is spherical in shape and has a 0.3 cm hole. Measures 4.7 cm in length. It is dated to the late 14th to early 15th century. Analogies for this stylus could not be found. Most likely, this is some kind of a local version or a simple darning needle.

One more discovery includes a complete stylus made of iron, which is dated between the 14th and 15th century. It measures to 15.7 cm in length and 0.2–0.7 cm in diameter. Its terminal is widened and decorated with a circle and horizontal parallel lines. In Russia, styli of this type are dated to the end of the 14th – to the 16th century and correspond to Type 15 (Miedviediev, 1960: 79; Ovchinnikova, 2000: 58–59) (Fig. 8).

A (potential) iron stylus was found in a cultural layer dated back to the end of the 14th century (Fig. 9). A cork (0.5x0.4 cm and 5.4 cm in length) made of birch, used as a cover for the tip, accompanies this stylus. The object measures to 16.9 cm in length and 0.4 cm in diameter.

One more fully preserved metal stylus was discovered in the 16th-century cultural layer (Fig. 10). The thick end is decorated with a circle composed of six horizontal lines, with another circle situated between them. The artefact is 13.3 cm long and 0.2–0.6 cm in diameter. It is classified as Type 15 (Miedviediev, 1960: 79; Ovchinnikova, 2000: 58–59).

Another stylus, made of antler (Fig. 11), was found during the 2004 excavation. It is intact, measures to 10.7 cm in length and terminates in a triangular plate. In Ruthenian lands, styli of this type are dated from the late 12th to the mid-14th century and correspond to the third variation of Type 12 (Miedviediev, 1960: 78; Ovchinnikova, 2000: 57).

A T-shaped bone stylus was discovered in a mixed layer, dated back to the end of the 16th century–the beginning of the 17th century (Fig. 12). The length of



Fig. 12. Stylus made of antler, found in the territory of Vilnius Lower Castle in 2005. Photo by Vytautas Abramauskas.

the artefact measures to 6.8 cm, and the length of the shaft is 1.5 cm. Based on the Russian typology, this would be a distinct, highly simplified variant of Type 8 (four variations had been distinguished) (Miedvediev, 1960: 78; Ovchinnikova, 2000: 52-54). This particular type was most common during the second half of the 12th to the middle of the 13th century (Olieinikov, 2018: 179).

Another stylus is a work of art that shows a high level of skill in the production of bone artefacts (Fig. 13). It is possible that this stylus belonged to a member of the clergy, probably a monk who worked in the ruler's or bishop's chancellery. It is in the vicinity of monasteries that most styli are found in Europe. After all, monasteries were centres of literature and science during the Middle Ages. Although there are no monasteries found in the territory of the Lower Castle of Vilnius, we know from historical sources that the Franciscan monks worked in the chancellery of the ruler, starting from the reign of Grand Duke Vytenis in the end of the 13th century (Kaplūnaitė, 2015: 45). Lithuania became a Catholic state at the end of the 14th century, thus, the number of literate monks was bound to increase. This is indirectly confirmed by a large number of Christian devotees (both Catholic and Orthodox) in the territory of the Lower Castle of Vilnius (Jonaitis, 2018a). Nowhere else in Vilnius have so many artefacts related to faith been found in one place. Since the Lower castle of Vilnius was the administrative, political, spiritual, and cultural centre of the grand dukes, representatives of various religions mingled here.

Therefore, such findings in this territory should not be surprising.

Styli finds recovered from the territory of the Vilnius Lower Castle included a variety of types, which were made of bone-antler and iron. In Bokšto Street, on the other hand, all the discovered styli were made of bone and corresponded to a single type (with the exception of the alleged blank for a stylus). The Lower Castle – the residence of the rulers – was the administrative, political, economic, cultural, and religious centre of Lithuania, and the variety of the discovered styli is

reflective of this. Bokšto Street 6 is an area that was mainly inhabited by the representatives of a single denominational community, which means that the variety of styli is much more limited, as is the variety of materials used. In Kernavė, the first capital of Lithuania, only one stylus was discovered. As was described above, it is made of metal and is dated earlier than the other examples. In all these cases, the finds confirm their related historical context.



Fig. 13-13a. Stylus made of antler, found in the territory of Vilnius Lower Castle in 2003. Photo by Vytautas Abromauskas

And what is the situation with the presence of writing implements in other cities of the Grand Duchy of Lithuania? A review was compiled by E. Svetikas, though almost 25 years ago (Svetikas, 1998). Most of the various types of styli were found in the Ruthenian cities of the Grand Duchy of Lithuania: Gardin, Novogrudok, Volkovysk, the cities of Turovo land; individual examples are known from the cities of Polotsk Land. Styli were also found in the cities of present-day Latvia and Estonia (35 units according to 1998 data): most of them were made of brass. The situation is quite different in medieval burial grounds: bone artefacts are a very rare find here.

As such, it is seen that most of the styli were found in the Ruthenian cities of the Grand Duchy of Lithuania. It can be undoubtedly be connected with the spread of Orthodoxy and writing, first in the Ruthenian part of the Grand Duchy of Lithuania and then in Vilnius.



Fig. 14. View of the current old town of Vilnius from above: 1- Vilnius Lower Castle; 2- Bokšto St. 6.; ? - 'German Town'. Map from Google Earth

Returning to Vilnius, the majority of styli were found in the territory of the Lower Castle of Vilnius; further three styli were recovered from Bokšto Street (Fig. 14). Unfortunately, the situation that existed in the rest of the current old town of Vilnius remains unclear for now. No systematised data exists for other possible finds of styli from the rest of the territory of *Civitas Rutenica* (inhabited by Orthodox Christians) or in regard to the German town (inhabited by Catholic merchants and craftsmen), where more than one monastery was built after baptism.

Conclusion

Styli finds showed that the situation in regard to literacy in Vilnius did not differ much from that of Eastern and Western Europe. In Kernavė, the first capital of Lithuania, on the Aukuras hillfort (the site of the ruler's castle) a stylus and an iron object resembling a stylus were found. This indicates that the inhabitants of Kernavė may also have been familiar with writing. Possibly, Christians (both Catholics and Orthodox) who were familiar with writing may have worked in the ruler's castle, just like the later Vilnius, while the townspeople themselves were not yet familiar with writing. However, bearing in mind the limited scale of research on the lower town of Kernavė, it can be stated that styli remain undiscovered. Moreover, in some cases, styli finds may have been unidentified.

Lithuanians were not an isolated community as historical sources written by hostile countries sometimes tried to show. They did not stay 'isolated' in their swamps far from the main trade routes, but were receptive of the innovations brought by Christianity, including the spread of writing. Especially because the grand dukes of Lithuania understood economic and cultural benefits provided by Christians.

Since the territory of the Lower Castle of Vilnius was the economic, religious, cultural and administrative centre of the entire Grand Duchy of Lithuania, it is no coincidence that the earliest styli were found here. In the later cultural layers, they were also found in the eastern territory of the current Vilnius Old Town, the former '*Civitas Rutenica*'.

This paper is more of an introductory study of a broader topic (chapter of the future book), raising questions for future research and formulating the main goals. Undoubtedly, it is necessary to review the reports of the latest archaeological excavations in Vilnius, especially investigations carried out in the territory of the German Town. It is necessary to study the influence of the Ruthenian lands, as well as Livonia, on the spread of writing across the Grand Duchy of Lithuania, in particular, Vilnius.

BIBLIOGRAPHY

- Арциховский А. Тихомиров М. *Новгородские грамоты на бересте (из раскопок 1951 г.)*. Москва: издательство академии наук СССР, 1953, 61.
- Велюс Г. Могильник XIII–XIV вв. в Кярнаве (Кривейкишкис): этническая принадлежность погребённых. *Археология и история Литвы и Северо-Запада России в средневековье*, 2013, 59–79.
- Гуревич Ф. Грамотность горожан древнерусского Понемания. *Краткие сообщения института археологии*, 1973, вып. 135, 28–34.
- Йонайтис Р. Головные венчики как индикатор миграционного пути в XIII–XIV вв. через Киев в Литву. *Ukraina Lithuanica: студії з історії Великого князівства Литовського*. Т. IV: На пошану Миколи Федоровича Котляра з нагоди його 85-річчя. Київ-Кам'янець Подільський: Інститут історії України НАН України, 2017, 125–145.
- Йонайтис Р. Православные деволюции в Вильнюсе. Локация, датировка и значение древнерусских энкольпионов в культурных слоях города. *Археология и история Пскова и Псковской земли*, 2018, 63, 334–346.
- Медведев А. Древнерусские писала X–XV вв. *Советская археология*, 1960, т. 2, 63–88.
- Медынцева А. Начало письменности на Руси по археологическим данным. *История, культура, этнография и фольклор славянских народов. IX международный съезд славистов*, 1983, 86–97.
- Овчинникова Б. Писала – стилосы древнего Новгорода X–XV вв. Свод археологического источника. *Новгородская Русь: историческое пространство и культурное наследие (Проблемы истории России. Вып. 3)*, 2000, 45–105.
- Олейников О. К вопросу о письменной культуре средневекового Новгорода. *Земли родной минувшая судьба... К юбилею Е. А. Леонтьева*. Ответственный редактор А. В. Чернецов, Москва, 2018, 175–184.
- Caune A. Viduslaiku rakstāmriku – stilu atradumi Latvijā. *Zinātniskās atskaites sesijas materiāli par archeologu un etnogrāfu 1988 un 1989 gada pētījumi rezultātiem*. *Archeologija*, 1990, 61–65.
- Caune A. Viduslaiku rakstāmriku stilu atradumi Latvijā. *Latvijas vēstures institūta žurnāls*, 1992, 2, 9–27.
- Celminš A. 13–14 gs. Bronzas stilu atradumi Rīgā 1994 gada. *Archeologija un etnogrāfija*, 1996, XVIII, 72–76.
- Celminš A. Rigas Doma pagalma viduslaiku rakstāmribuļi. *Latvijas vēstures institūta žurnāls*, 1997, 2(23), 5–17.
- Dubonis A. Raštininkas. *Lietuvos didžiosios kunigaikštystės kultūra. Tyrinėjimai ir vaizdai*. Sud. V. Ališauskas, L. Jovaiša, M. Paknys, R. Petrauskas, E. Raila, Vilnius: Aidai, 2001, 574–587.
- Haak A. Tartust leitud keskaegsetest stilustest. *Ajast ja ruumist. Uurimusi Mare Auna auks. Muinasaja teadus*, 2014, 25, 51–64.
https://www.academia.edu/10351192/Tartust_leitud_keskaegsetest_stilustest_M_edieval_styli_from_Tartu_
- Jonaitis R. *Vilniaus senojo miesto vietoje su priemiesčiais (25504), Ligoninės statinių komplekso (1033) ir Vilniaus gynybinių įtvirtinimų liekanų (39) teritorijos, Vilniaus m. sav., Vilniaus m. Bokšto g. 6, 2009-2011 metų detaliųjų archeologinių tyrimų ataskaita*. Lietuvos istorijos instituto bibliotekos rankraštynas, f. 1., b. 8704.

- Jonaitis R., Kaplūnaitė I. *Senkapis Vilniuje, Bokšto gatvėje. XIII–XV a. laidosenos Lietuvoje bruožai*. Vilnius: Lietuvos istorijos institutas, 2020, 586.
- Kaplūnaitė I. *Vilniaus miesto katalikškoji dalis XIV–XVI amžiaus pradžioje* [Doctoral dissertation]. Klaipėda: Klaipėdos universitetas, 2015.
- Luchtanas A. *Aukuro kalno piliakalnio Kernavėje 1992 metų archeologinių tyrinėjimų ataskaita*. Archaeological report. Lietuvos istorijos instituto bibliotekos rankraštynas, f. 1., b. 2032, 1993.
- Marburgietis V. *Naujoji Prūsijos kronika*. Sud. R. Trimonienė, K. Gudmantas, 1999, Vilnius: Vaga, 468.
- Svetikas E. Kauliniai stiliai Lietuvos vėlyvųjų viduramžių ir naujųjų amžių kapinyuose. *Lituanistica*, 1998, Nr. 3(35), 26–42.
- Valionienė O. *Viduramžių Vilniaus erdvės evoliucija (XIII a. vidurys – XVI a. pirmas ketvirtis)*. Vilnius: Lietuvos istorijos institutas, 2019, 300.
- Vėlius G. *Kernavės miesto bendruomenė XIII–XIV a.* Vilnius: Vilnius universiteto leidykla, 2005, 112.
- Żak J. Z dziejow znajomości pisma w Polsce. *Slavia antiqua*, 1956, t. V, 377–397.

REFERENCES

- Arcikhovskij, Tixomirov, 1953 – Arcikhovskij A., Tixomirov, M. (1953). *Novgorodskie gramoty na bereste (iz rasskopok 1951 g.)*. Moskva: izdatel'stvo akademii nauk SSSR. [in Russian].
- Caune, 1990 – Caune, A. (1990). Viduslaiku rakstāmriku – stilu atradumi Latvijā. *Zinātniskās atskaites sesijas materiāli par archeologu un etnogrāfu 1988 un 1989 gada pētījumi rezultātiem. Archeologija*, 61–65. [in Latvian].
- Caune, 1992 – Caune, A. (1992). Viduslaiku rakstāmriku stilu atradumi Latvijā. *Latvijas vēstures institūta žurnāls*, 1(2), 9–27. [in Latvian].
- Celminš, 1996 – Celminš, A. (1996). 13–14 gs. Bronzas stilu atradumi Rigā 1994 gada. *Archeologija un etnogrāfija*, XVIII, 72–76. [in Latvian].
- Celminš, 1997 – Celminš, A. (1997) Rigas Doma pagalma viduslaiku rakstāmribuļi. *Latvijas vēstures institūta žurnāls*, 2(23), 5–17. [in Latvian].
- Dubonis, 2001 – Dubonis, A. (2001) Raštininkas. *Lietuvos didžiosios kunigaikštystės kultūra. Tyrinėjimai ir vaizdai*. (Ed. V. Ališauskas, L. Jovaiša, M. Paknys, R. Petrauskas, E. Raila), Vilnius: Aidai, 574–587. [in Lithuanian].
- Gurevich, 1973 – Gurevich, F. (1973). Gramotnost' gorozhan drevnerusskogo Ponemaniya. *Kratkie soobshheniya instituta arkheologii*, vyp. 135, 28–34. [in Russian].
- Haak, 2014 – Haak, A. (2014). Tartust leitud keskaegsetest stiilustest. *Ajast ja ruumist. Uurimusi Mare Auna auks. Muinasaja teadus*, 25, 51–64. https://www.academia.edu/10351192/Tartust_leitud_keskaegsetest_stiilustest_M_edieval_styli_from_Tartu_ [in Estonian]
- Jonaitis, 2017 – Jonaitis, R. (2017). Golovnye venchiki kak indikator migracionnogo puti v XIII–XIV vv. cherez Kiev v Litvu. *Ukraina Lithuanica: studii z istorii Velikogo knyazivstva Litovs'kogo*. T. IV: Na poshanu Mikoli Fedorovicha Kotlyara z nagodi jogo 85-richchya. Kiiv-Kam'yanec' Podil's'kij: Instytut istorii Ukrainy NAN Ukrainy, 125–145. [in Russian].

- Jonaitis, 2018a – Jonaitis, R. (2018) Pravoslavnye devocionalii v Vil'nyuse. Lokaciya, datirovka i znachenie drevnerusskikh e'ngol'pionov v kul'turnykh sloyakh goroda. *Arkheologiya i istoriya Pskova i Pskovskoj zemli*, 63, 334–346. [in Russian].
- Jonaitis, 2018b – Jonaitis, R. (2018). *Vilniaus senojo miesto vietoje su priemiesčiais (25504), Ligoninės statinių komplekso (1033) ir Vilniaus gynybinių įtvirtinimų liekanų (39) teritorijos, Vilniaus m. sav., Vilniaus m. Bokšto g. 6, 2009-2011 metų detaliųjų archeologinių tyrimų ataskaita*. Archaeological report. Lietuvos istorijos instituto bibliotekos rankraštynas, f. 1., b. 8704. [in Lithuanian].
- Jonaitis, Kaplūnaitė, 2020 – Jonaitis, R., Kaplūnaitė, I. (2020). *Senkapis Vilniuje, Bokšto gatvėje. XIII–XV a. laidosenos Lietuvoje bruožai*. Vilnius: Lietuvos istorijos institutas. [in Lithuanian].
- Luchtanas, 1993 – Luchtanas, A. (1993). *Aukuro kalno piliakalnio Kernavėje 1992 metų archeologinių tyrinėjimų ataskaita*. Archaeological report. Lietuvos istorijos instituto bibliotekos rankraštynas, f. 1., b. 2032. [in Lithuanian].
- Marburgietis, 1999 – Marburgietis, V. (1999). *Naujoji Prūsijos kronika*. Sud. R. Trimonienė, K. Gudmantas. Vilnius: Vaga. [in Lithuanian].
- Miedynceva, 1983 – Miedynceva, A. (1983). Nachalo pis'mennosti na Rusi po arkheologicheskim dannym. *Istoriya, kul'tura, e'tnografiya i fol'klor slavyanskix narodov. IX mezhdunarodnyj s'iezd slavistov*, 86–97. [in Russian].
- Miedvediev, 1960 – Miedvediev, A. (1960). Drevnerusskie pisala X–XV vv. *Sovetskaya arkheologiya*, (2), 63–88. [in Russian].
- Oliejnikov, 2018 – Oliejnikov, O. (2018). K voprosu o pis'mennoj kul'ture srednevekovogo Novgoroda. *Zemli rodnoj inuvshaya sud'ba... Kyubileyu E. A. Leont'eva*. Moskva, 175–184. [in Russian].
- Ovchinnikova, 2000 – Ovchinnikova, B. (2000). Pisala – stilosy drevnego Novgoroda X–XV vv. *Svod arkheologicheskogo istochnika. Novgorodskaya Rus': istoricheskoe prostranstvo i kul'turnoe nasledie. Problemy istorii Rossii*, (3), 45–105. [in Russian].
- Svetikas, 1998 – Svetikas, E. (1998). Kauliniai stiliai Lietuvos vėlyvųjų viduramžių ir naujųjų amžių kapinyuose. *Lituanistica*, Nr. 3 (35), 26–42. [in Lithuanian].
- Valionienė, 2019 – Valionienė, O. (2019). *Viduramžių Vilniaus erdvės evoliucija (XIII a. vidury – XVI a. pirmas ketvirtis)*. Vilnius: Lietuvos istorijos institutas. [in Lithuanian].
- Vėlius, 2005 – Vėlius, G. (2005). *Kernavės miesto bendruomenė XIII–XIV a.* Vilnius: Vilnius universiteto leidykla. [in Lithuanian].
- Velius, 2013 – Velius, G. (2013). Mogil'nik XIII–XIV vv. v Kyarnave (Krivejkishkis): e'tnicheskaya prinaldezhnost' pogrebyonnyx. *Arkheologiya i istoriya Litvy i Severo-Zapada Rossii v srednevekov'e*, 59–79. [in Russian].
- Żak, 1956 – Żak, J. (1956). Z dziejow znajomości pisma w Polsce. *Slavia antiqua*, (V), 377–397. [in Polish].