Since the late 16th – early 17th century, tobacco smoking habit in Europe spread widely, which led to a new business branch – the production and sale of pipes. Due to the lack of historical data about when the habit of smoking tobacco emerged in eastern Baltic, it is imperative to pay attention to clay pipes that are considered to be a particularly suitable group of findings to specify the chronological limits. The article analyses in detail the chronologically earliest clay pipes found during archaeological research in Vilnius. Based on the typology of findings and known analogues, the author singles out the oldest pipes, names the possible places of their production, provides an interpretation of the appearance of pipes in the city. The article provides an overview of the development of smoking in Vilnius in the first half of the 17th century, as the text focuses not only on the analysis of findings, but also briefly introduces the historical, social and cultural contexts that led to the smoking of one or another type of tobacco pipe in Vilnius.

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**Introduction**

Looking for information about the first cases of tobacco smoking on the European continent we have to deal with various legends. However, on one issue, many sources do not contradict each other. Christopher Columbus and his sailors were the first Europeans to start smoking during the first expedition. The record of his ship’s diary on November 6, 1492 states that on the shore (present-day Cuba) two sailors were sent to investigate. After disembarking, they for the first time encountered smoking Indians (Brongers 1964, 16). This date can be

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considered to be the first proved contact with tobacco smoking habit among Europeans.

Despite that, the 16th century pipes are hardly found on the continent. This can be explained by the fact that throughout the 16th century tobacco was more valued as a medicinal herb and only towards the end, thanks to Walter Raleigh, who was the English political figure and initiator of expeditions to the American continent, tobacco smoking became a popular phenomenon in England and later spread throughout Europe (Levárdy 1994, 25 ff.; Milton 2005, 174 ff.). Another important fact that should not be ignored is that at the beginning of the smoking habit, clay tobacco pipes were not the only choice for smokers. There is also a known archival reference from the year 1591 about French and English students smoking tobacco only with rolled leaves (Oostveen & Stam 2011, 9).

In the late 16th century production of clay tobacco pipes started in London, Bristol and other English cities. At the beginning of the 17th century this craftsmanship was introduced in the Netherlands via English soldiers, and later spread from Western to Central Europe (Oostveen & Stam 2011, 8 f.). In the first half of the 17th century already we have enough rich historical, archaeological, and iconographic data, which testify about pipe smoking fashion spread throughout the European continent. The new habit reached all parts of the continent from the coasts of the Atlantic Ocean to Siberia (Romaniello 2009, 9). At the beginning of the 17th century the tobacco in the eastern Baltic region was relatively expensive and rare in comparison to Western Europe, especially England and the Netherlands. But the Thirty Years War (1618–1648) and Northern Wars played a crucial role in the consumption of tobacco, because soldiers rapidly accepted and spread the new culture of smoking across the Baltics.

In Vilnius, clay pipes of the 17th–19th centuries constitute a relatively small but fairly common group of findings that can be found by exploring cultural layers of the city. Although exact statistics have not been prepared yet, while collecting empirical data, the author of the article noticed that during excavations they rarely exceed 1% of the all archaeological finds, and in total more than 1500 fragments were found in Vilnius. So far, pipes found in Vilnius have not been studied in detail. One of the two articles on this topic was dedicated to the clay pipe workshop found in the historic suburb of Šnipiškės in Vilnius, where composite pipes were manufactured at the end of the 17th century – typical pipes for Eastern and South-Eastern Europe from local clay materials. The article analyses the workshop chronology, sociotopography, tools of production and abandoned production (Čivilytė et al. 2005). Another small article has been published by the author of this work, which analyses the 17th century pipes found in the territory of Vilnius Lower Castle with the image of the Prophet Jonah (Žvirblys 2018). Knowing that the usage time of pipes was short due to their fragility, typological differences are clear and secondary use is not typical, research on clay pipes is a promising area in historical archaeology that can help determine the chronology of objects under study. It is also one of the rare groups of artefacts that can reveal the prevalence of exotic goods from distant continents in Vilnius and the entire Baltic Sea region in the 17th–18th centuries.
The aim of the article is to determine on the basis of archaeological data when tobacco pipe smoking started in Vilnius, to single out the essential social and cultural contexts of this phenomenon. This is a rather relevant task in Vilnius archaeology, as the archaeological and historical data available so far have allowed only a rough grasp of the processes that took place here in connection with pipe smoking. To achieve this goal, pipes found during archaeological research in the cultural layers of Vilnius were analysed. Based on the typological differences of the pipes and the well-known marks of the masters who made them, the chronologically earliest artefacts and their origins were identified, and the topography and archaeological context of found pipes were reviewed.

During the research, the pipes stored in the National Museum of Lithuania and the National Museum – Palace of the Grand Dukes of Lithuania – were analysed. A total of 1665 pipe fragments were examined. Of these, 94 are bowls of one-piece white clay pipes and 796 are pipe bowls or shanks fragments of composite or porcelain pipes. The remaining are 765 stem fragments which belongs to one-piece white clay pipes. All the pipes can be dated to about 17th–19th centuries.

After identification of the earliest artefacts, it was decided to analyse in more detail only those pipes that are dated not later than 1660–1665. This chronological limit was chosen according to the historical context and typological changes of clay pipes. Historically, that period was important for the history of Vilnius, because in 1661 the army of the Grand Duchy of Lithuania recaptured the city and castle from the Muscovite army, which had occupied Vilnius for about 6 years during the Poland–Lithuania and Muscovy war (1654–1667) (Frost 2000, 164–187; Meilus 2007). As the city was burned and destroyed during the occupation, intensive work began after the expulsion of the Muscovites, which is often clearly reflected in the city’s cultural layer – archaeological excavations in many places record intensive ruins with the first half – middle of the 17th century deposit. So, the year 1665 or more like a decade 1660–1670 is important period of major changes in the history of Vilnius.

In the sense of pipe typology, the years 1660–1665 are also relatively possible as a threshold indicating the period. First of all, it should be mentioned that in Vilnius, the earliest smoked pipes were made in the Netherlands, where white clay pipes with a long mouthpiece made around 1610–1690 were named biconical (dubelconische) pipes by the Dutch researcher D. H. Duco. Around 1675, they were gradually replaced by a new model, the funnel shape (trechter) pipes, which remained in production until 1740 (Duco 1987, 26). The evolution of the shapes and decoration of biconical pipes themselves is also noticeable – around 1650–1670 certain differences in shapes and simplification of decorative elements appeared, which did not exist before. This makes it possible to distinguish earlier models of biconical pipes, made up to about 1650–1665, from later ones. It is important to observe the fact that none of the excavated pipes are British origin in contrast to Riga or Tallinn. Completely different situation is on the coastline of Lithuania. In Klaipėda there are significant numbers of pipes from Britain, but this data has still not been properly studied in the last thirty years.
It is also important to note that in the third quarter of the 17th century, composite pipes from South-Eastern Europe – mostly from frontiers of the Ottoman Empire and Polish Ukraine undoubtedly appeared in Vilnius, which became more widespread in the last quarter of the century. It can be proved by archaeological data from cultural layers of Vilnius. Preliminary research results clearly show that in about 1665–1685 composite pipes outnumbered the Dutch pipes. There are still questions about when this process started exactly, because the classification of composite pipes in the middle of the 17th century is still problematic: even the earliest pipes found in Vilnius are dated quite broadly – the second half of the 17th century – the beginning of the 18th century.

The earliest historical evidences of tobacco pipes usage in Vilnius

In the first half of the 17th century, tobacco and pipes could enter Vilnius from the Baltic Sea ports together with other colonial goods. Considering river and land routes in Lithuania at that time, as well as the political situation, it can be stated that the most convenient and safest way was through Gdańsk (German: Danzig) and Königsberg (now Kaliningrad). Merchants from Kaunas and Vilnius maintained close trade relations with the latter, as they had faster service by river routes (Bucevičiūtė 2005, 55, 70; Žiemelis 2011, 366; Sliesoriūnas 2015, 236). During the period in question, Königsberg was dominated by the Dutch merchant shipping, which in addition to manufactured products was also trading in colonial goods. It is important to mention that in 1625 4/5 of all ships arriving to the port belonged to the Netherlands, and in 1636, 162 of the 492 ships leaving the port were destined for Amsterdam (Gause 1994, 52). Part of the tobacco and pipes could also be imported to Vilnius from the port of Riga, which belonged to the Polish–Lithuanian Commonwealth since the end of the 16th century. However, this direction of trade was disrupted by the wars with Sweden in the first half of the 17th century. When the Swedes occupied Riga in 1621, it obviously affected Lithuania’s international trade and the routes of Vilnius merchants (Bucevičiūtė 2005, 71; Žiemelis 2011, 371, 375; Sliesoriūnas 2015, 237).

Thus, although there were conditions for exotic and colonial goods to enter Vilnius from the beginning of the century until the middle of the 17th century, there are no published historical data on pipe smoking in the city. However, the undoubted prevalence of this phenomenon is shown by indirect references elsewhere: in 1638 an attempt was made to lease a monopoly on the tobacco trade in Polotsk. However, it is noted that the city did not agree with this and set conditions for the introduction of the same procedure in Vilnius (Matusas 1960, 268 f.). This message indicates that by the fourth decade of the 17th century tobacco had already become the subject of tax collection, so its smoking was widespread already and visible to the public. Another indirect testimony would be the ban on smoking in Muscovy, for the first time introduced in 1627, and related additional Law Code of 1649, contained yet more restrictions on tobacco sales (Romaniello 2009, 9, 15). Twelve articles detail
the prohibitions and various punishments, as well as the main source of tobacco smuggled to the state of Moscow was also indicated and repeated several times that it “was bought from the arriving Lithuanians...” (купили у литовъских приезжих людей на продажу) (Chistyakov 1984, 178 f.). All this shows that the scale of tobacco trade and probably pipes in Vilnius grew significantly around 1630–1650.

From about 1655 to 1660, various mentions related to tobacco consumption in Vilnius increased, and it appears in the inventories of the city’s shops and personal property. In Vilnius, in the book of the city council of 1657–1662, in 484 cases, which contained the property, civil and notarial documents of the townspeople during the occupation of Muscovites, tobacco was mentioned 11 times and pipes 2 times. Tobacco is written in the wills of the citizens, in complaints to the city authorities, in descriptions of losses during the war, in the inventories of shops. As a durable and non-perishable article, tobacco could also be used by Vilnius residents during the war as a unit of account: in one case, it is mentioned that the deceased asked to be buried in the Orthodox Church of the Holy Spirit, it was noted that he had no money, but had tobacco and pepper. Among other mentioned items were pipes, which cost up to 9 grosz per dozen, so they were quite cheap compared to tobacco (Meilus 2011).

The earliest tobacco pipes found in Vilnius

Pipes from the Netherlands

After the analysis of the finds stored in Vilnius museums, 63 clay pipe bowls were singled out, which according to the manufacturer’s initials and typological features can certainly be attributed to the period 1620–1690, all of which are produced in the Netherlands. Although part of the pipes remained only in fragments (fragments with manufacturers’ marks, etc. did not survive), it can be said with some certainty that at least 34 pipes were made before 1665. Of the 63 pieces, 34 pipes were marked on the base of the heel, and the chronology of 25 marks was identified and established by examining them. The remaining 9 marks were poorly preserved or nearly faded, making them illegible. Another 6 pipes had other individual features / ornaments that were used for a defined chronological period. Of the remaining 23 pipes, 16 were completely unmarked and 7 remained too fragmental, thus too unclear whether they were marked at all. However, this group of 23 pipes was studied typologically, as biconical pipe shapes developed at certain stages and new features appeared or disappeared every 20–40 years.

Based on the shapes and markings of the studied pipes, it was possible to determine that 10 pipes can be attributed to the period of 1620–1650. Another 24 pipes were made around 1635–1660, some of which could be made a little later, until about 1665–1670. Another group – 18 pipes were popular forms in the years 1650–1690, it is likely that most of them came to Vilnius after the turmoil of 1655–1661, therefore they will not be analysed further here. It can be noted that the
chronological classification of some of them is determined not only by the shapes of their bowls, but also by the individual marks embossed on the side of the bowl or on the base of the heel. And the last group of the last remaining pipes (11 fragments) due to their fragmentation can be dated quite extensively – 1620–1690. In general, it should be noted that these statistics have some conditionality, so in order to make a more realistic assessment of them, as well as to provide a broader context for these findings, pipes need to be discussed individually, which I will do now.

Five pipes found in Vilnius are marked with a Tudor rose at the base of the heel, or simply the so-called rose mark (Fig. 1: a–b). Three of the five pipes were found in the territory of Vilnius Castles, the remaining two in Bokšto Street. The rose marking is one of the oldest pipe markings, used in the Netherlands since 1600, and gained popularity since 1620. It is associated with English pipe manufacturers who moved to the Netherlands in the early 17th century and were said to be the first to start the production of pipes in the country. The rose marking was used by Amsterdam, Gorinchem, Gouda and possible other pipe manufacturers in the Netherlands (Brongers 1964, 33; Duco 1982, 7; 1987, 143; Haan & Krook 1988, 27 ff.; Meulen et al. 1992, 96 ff.). The bowls of the two pipes found in Vilnius have not remained, but the three remaining pipe fragments were in better shape and could be dated to the years 1640–1650 according to the shape of the bowls. The height of the two pipes found on Bokšto Street varies by about 39–41 mm, the width at the widest point – 21 mm, the heel of both pipes is low and wide – 2 and 9 mm. More detailed data from archaeological research are only from Bokšto Street research, but they provide an overly broad chronology – 17th century, which in this case does not specify the already existing knowledge about these pipes (Kaplūnaitė 2016, 99). In the second half of the 17th century rose marking were pressed on the sides of pipes; so labelled are four pipes found in Vilnius, which can be dated to about 1650–1675. However, unlike the earlier markings, these are already primitive – a blossom with leaves is depicted by adding dots. All of these pipes do not have any additional markings indicating the manufacturer, and the absence of individual production features confirms their inferior quality (Duco 1987, 36, 75).

Another pipe found in the territory of Vilnius Castles has the mark HW (Fig. 1: c). The pipe is quite stocky – at its widest point – 19 mm, but closer to the heel is only 14 mm in diameter. According to all indications, the pipe can be dated to 1640–1650. The monogram HW refers to the Amsterdam pipe manufacturer Henry Wilkin, who, like many of the most famous Dutch masters of the first half of the 17th century, came from England, where he was born in 1614. Since 1640, various facts about his life in Amsterdam have been recorded (Haan & Krook 1988, 21).

Another pipe found on Pranciškonų Street has the heel mark WO and two stars above and below the letters (Fig. 1: d). Unfortunately, the owner of this mark is unclear, all that is known is that it was also undoubtedly made in Amsterdam (Duco 1987, 286; Haan & Krook 1988, 85). This pipe is slightly more fully preserved, its height is 34 mm, its diameter at the middle is 18 mm, and closer to the heel and at
the opening – 12 and 15 mm. According to the form, it could be dated to about 1625–1645. Unfortunately, the archaeological context is again not very informative – the pipe was found in the cultural layer dated to the 16th–17th centuries (Veževičienė 2016, 76).

Two pipes were found in Vilnius, in the castle territory, marked with a crowned IP at the end of the heel (Fig. 2: a–b). Both pipes have a milled rim. This mark was
probably used by master Jakob Pietersen from Hoorn or Enkhuizen in the West Friesland. Both pipes are quite similar in size and shape. Their height is 41–42 mm, width at the heel, middle and rim – 13–14, 20 and 15–17 mm, respectively. The crown above letters IP looks slightly different. According to the available data, they could have been manufactured in 1635–1660 (Oostveen 2019, 16–18, 32, 33, 39, 50, 51, 54). Pipes with such markings are the most common among marked pipes in the city of Riga (Reinfelde 2005, 53). The geography of distribution of these pipes is truly impressive. These pipes have been found in different parts of the

Fig. 2. Fragments of Dutch pipes. a, b – biconical bowl, heel mark crowned IP, 1640–1660 (a), 1635–1660 (b), found in the castle complex, c – biconical bowl, heel mark EB, 1645–1665, found in Didžioji St. 7, d – biconical bowl, heel mark star, stem with fleur-de-lis, 1645–1665, found in the castle complex. Makers marks are twice life size.
Netherlands, Germany, Czech Republic, Latvia, Sweden, Japan, North America and north-eastern Brazil. Such a different location can be explained by the fact that Jakob Pietersen probably sold his pipes to ships departing from Hoorn and Enkhuizen (Stam 2019, 382).

The other two pipe bowls are decorated with the image of the prophet Jonah, otherwise known as the Jonah or Jonas pipe (Fig. 1: e). Based on analogues, it can be said that both pipes depict a scene from the Old Testament in which the Prophet Jonah is swallowed by the Big fish. Since in both cases only the pipe bowls remain, nothing but the face of the bearded man is visible – Jonah’s head. The pipes decorated in this way were made in the Netherlands around 1620–1690 and were a favourite of travellers, sailors or trade people. Earlier models, made before 1650, had a higher level of detail and more realistic facial features. Since 1650, pipe decoration has become more primitive (Duco 1987, 91; Stam 2019, 236 ff.). Pipes found in Vilnius were made around 1630–1660. One of the two fragments (found in Klaipėdos St.) is better preserved and can therefore be dated even more precisely – about 1630–1640 (Żvirblys 2018, fig. 6). It is a typical Jonah pipe manufactured in Amsterdam (Fig. 1: e) (Stam 2019, 237). Prophet Jonah pipes are also found throughout the eastern Baltic region: ten such pipe bowls and three stem fragments have been found in Riga (Reinfelde 2003, 58). One especially informative fragment of Jonah pipe was found in 2008 while investigating the Radvilas Palace in Dubingiai, Lithuania. It is decorated with the inscription “IONAS”, the date of 1633 and an embossed pomegranate (?) fruit ornament (Żvirblys 2018, fig. 5). According to Jan van Oostveen’s research this is typical stem manufactured in West Friesland (Oostveen 2014, 57).

Another pipe, which is also one of the earliest finds, was found in St. Ignoto Street in 1983 and unfortunately it has no master mark. Its rim is broken, the pipe is 19 mm in diameter at its widest point, other relevant dimensions remain unclear. However, the shape shows that it is the biconical pipe, quite round in shape, so it can certainly be dated to about 1630–1650 years, not later. Like other pipes, it is also most likely made in the Netherlands.

The largest group of pipes is marked with the initials EB (Fig. 2: c). In total, twelve of them were found in various places in Vilnius. As many as eight such pipes were found in the territory of the Vilnius castle complex. Not all pipes have fully survived, but the height of the intact ones varies about 36–43 mm, the width at the heel – 13–15 mm, at the widest point – 18–20 mm, and at the rim – 14–16 mm. The shape of the better-preserved pipes, and the embossed mark EB on their heels, refers to the master Edward Bird, who worked in Amsterdam around 1640–1665 (Stam 2019, 84). Like many of the pipe manufacturers mentioned above, Edward was also born in England and only later moved to the Netherlands. In 1638 it is mentioned that he had already become a citizen of Amsterdam, so from about that time onwards he probably developed his pipe-making business. It can be said that he became the most famous, and probably one of the most successful pipe manufacturers of that time. He mainly sold his pipes to America (New Amsterdam and the Chesapeake area) and Sweden. His pipes have also been found in small numbers in Mauritius,
Port Royal Jamaica and Brazil, probably taken there by sailors (Stam 2019, 84, 381). Pipes marked with initials EB are also found in Tallinn, which during this period was controlled by the Swedish (Russow 2005, fig. 1). After Edward Bird died, his son Evert Bird continued to manufacture pipes in 1665–1672, and from 1672 the rights to the EB mark were acquired by the pipe merchant Adriaen van der Cruis, who hired a master to make these pipes in Gouda (Duco 2002; Stam 2019, 86, 119). The shape of the pipes has also changed – it has become the so-called funnel shape (trechter) model, but this type of pipe marked with the initials EB has not been found in Vilnius.

The best preserved of all the pipes found in Vilnius (intact bowl with 85 mm stem) is the pipe marked with octagonal star on the base of the heel (Fig. 2: d). This is how Gouda pipe master Jarne Starre marked his manufactured pipes in 1640–1670 (Oostveen 2004, 103). The height of the pipe is 34 mm, the width at the heel, middle and rim is 13, 18 and 15 mm, respectively. The pipe stem is decorated with fleur-de-lis, arranged in four diamonds next to each other; pipes decorated in this way were produced in 1625–1675. The shape of the bowl is typical for the period 1645–1665. Pipe with the same mark was found in the city of Riga (Reinfelde 2005, 54).

Pipe stems should be distinguished as a completely separate group (Fig. 3). From historical and archaeological sources, we know that the stems of Dutch pipes at the beginning of 17th century have a length of approximately 15 cm. In the second and third quarters stems of the better quality pipes reached up to 40–60 cm (Oostveen & Stam 2011, 18). During archaeological excavations in Vilnius, usually only fragments up to about 10 cm long were discovered, so the number cannot be compared objectively with the number of bowls. Furthermore, stems can be reliably dated only by the different ornaments, inscriptions, and other features. Depending on the stem ornaments it was possible to identify fragments of 64 pipes in Vilnius, which undoubtedly date back to about 1620–1675, and their place of production is the Netherlands.

An interesting and exclusive find is the pipe stem with the depicted couple – a man with a pipe in his hand and a woman, analogues for which have not yet been found in Lithuania (Fig. 3: a). It is the fragment of the so-called “fiancé’s pipe” made in the Netherlands around 1630–1660. The exact place of production for these pipes is still unclear. There are some suggestions based on archaeological evidence that these pipes were possibly made in Harlingen, Friesland. Harlingen was not a famous pipe-manufacturing centre and can be described more as a local centre with small production. Other possible manufacturing places based on the same archaeological sources are Amsterdam and Leeuwarden (Oostveen & Stam 2011, 97 f.; Stam 2019, 142; Amsterdam Pipe Museum APM 19.014).

The largest group of 39 fragments consists of stems decorated with heraldic lilies. In most of them, the lilies are depicted in diamonds and arranged one after the other (Fig. 3: c). Five fragments are ornamented with four connected diamonds, in which four lilies are depicted (Fig. 3: b). The pipes decorated in this way date back to 1625–1675, but most of them were made around 1630–1650. This ornament marked the so-called better middle-class products (Duco 1987, 81).
Seven stems are decorated with the motif of the Prophet Jonah and the Whale, already described above (Fig. 3: d). If the bowl depicted the head of the prophet, then the stem would act as the whale. The fragments found are quite small, in some cases only fish scales are visible, and fish jaws can be seen in some of the stems.

Five stem fragments are decorated with an embossed plant ornament, which can be called baroque (Fig. 3: e). Further twelve stems have better or less surviving embossed or incised circular ornaments (Fig. 3: f). Pipes decorated in this way were manufactured around 1620–1660 m (Duco 1987, 89), and some of them are typical products for the Amsterdam pipe makers (Fig. 3: e, f) (Haan & Krook 1988, 34, 35, 37). Unfortunately, all of these stems are fragmentary, making a broader interpretation of their ornaments in some cases quite difficult. However, the better-preserved analogues in the Netherlands suggest that these are undoubtedly one of the earliest findings testifying to the development of smoking culture in Vilnius. Pipes decorated in this way often had the afore-mentioned Tudor rose marking (Duco 1987, 88 ff.).
The military conflicts between Poland–Lithuania, Muscovy, and the Ottoman Empire in the 17th century undoubtedly also influenced the culture of pipe smoking throughout Eastern Europe. In the Ottoman Empire, the production of distinctive composite pipes dates back to the early 17th century, and the first mention of smoking in the Balkan region is often associated with Ottoman soldiers (Gruia 2013, 20 ff.). Could composite pipes have arrived in Vilnius before 1665? There is no doubt. However, is it possible to provide specific examples of pipes with the clear chronology? The answer to this question would be negative, for even with the exception of certain typological features characteristic of mid-17th century pipes, it cannot yet be denied that pipes could have been manufactured in similar matrices in the early 18th century. There are even cases where researchers have established an even broader chronology: for example, late 17th century – 20th century (Robinson 1985, 172, plate 47: C3). Thus, to single out the composite pipes from the first half of the 17th century – mid-17th century is possible only on the basis of deductive research methods, critically evaluating the available data.

Based on the typology of composite pipes and the stratigraphy of cultural layers, three composite pipes have so far been distinguished, which could probably have been manufactured around 1650–1665 (Fig. 4). They were chosen from the selected 42 pipe fragments found in Vilnius. The remaining 39 pipes (critically evaluated from the collected data) did not pass the selection: part of the pipes were found in the cultural layers of the 16th–17th centuries, but according to the typology and analogues abroad are not earlier than the end of the 17th century, or, conversely, pipes appear to have the characteristics of early pipes, but were found in the cultural layer of the 18th–19th centuries.

The bowl of the first pipe found in the territory of Vilnius castles is spherical, the pipe is made of white clay mass, covered with green and yellow glaze, the sides are decorated with flowers, the rim had not survived, 29 mm wide at its widest point (Fig. 4: a). It was found in the archaeological layer dating to the middle of the 17th century. At the same time, the stem of Jonah pipe was found, and another stem decorated with lilies (Montvilaitė & Ožalas 2008). Evaluating the collected information, it can be stated that this pipe was made not later than in 1650–1665. The second pipe was found in Daukantas Square by examining the wooden well deposit (Fig. 4: b). According to the archaeologists who investigated the site, the well was constructed at the end of the 16th century, and stopped functioning in the middle of the 17th century, so the pipe could get there at that time (Luchtanienė 1999, 16). It remains fragmentary, but it can be seen that it was made from light red clay mass, covered with green glaze, the side of the bowl is decorated with the flower. The third pipe was found on Odminių Street (Fig. 4: c). The 44 mm long fragment is a shell-shaped bowl, the rim had not survived, the clay mass is light red. The pipe was found in the layer that, according to researchers, was formed during the cleaning of territory after the wars of the middle of the 17th century –
probably around 1661–1665 (Stankevičius 1992, 23). The bottom of all pipe bowls was without a keel, which can be seen as the common feature of earlier composite pipes.

**Social and cultural contexts**

When analysing the 17th century pipes found in Vilnius, it should be borne in mind that this was, first of all, a personal thing, which objectively had no tangible utilitarian benefit. It is also important to note that the decoration of pipes often contained elements that could express the owner’s artistic taste, political or religious views and social status. All this allows pipes found in Vilnius to be interpreted from a social and cultural perspective, and in some cases beyond the artefact to see a hidden person with his unique view of the world.

What social background could be the first to start smoking pipes in Vilnius? Many 17th-century sources mention that tobacco was a fairly expensive commodity, but the pipes were clay, thus made of inexpensive material, and increased over time, as the price of tobacco decreased. In other words, the production of inexpensive pipes was adapted to the changing market for expensive tobacco. Considering this, it can be hypothetically stated that in the first half of the 17th century, a rich Vilnius citizen should not have had a problem buying a more expensive pipe. Analysing the quality of pipes found in Vilnius, it becomes obvious that most of them are still coarse or ordinary better quality. Such pipes were unpolished, often had a rougher surface, and bowls were often not marked at all or marked with signs that did not
clearly identify the manufacturer. We also notice this among the pipes found in Vilnius: out of the 32 earliest Dutch pipe bowls with remaining heels, which date back to 1620–1665, 22% (68%) were marked at the base of the heel. However, even marked pipes did not guarantee high quality and did not even necessarily indicate the craftsman who manufactured the pipe. For example, the crowned Tudor rose or simply the rose mark was used as a collective mark in the Netherlands around 1625 (Duco 2003, 253). In Vilnius, five pipes were found with such markings, and in all cases the mark is without a crown, which looks different. Thus, perhaps this also points to the more modest quality of such pipes. On the other hand, such an observation about coarse quality cannot be interpreted without putting it in a broader context: Tobacco pipe makers and merchants like Edward Bird from Amsterdam and possibly Jakob Pietersen from West Friesland were highly specialized in such a massive production. Pipes with the same marks were also found in Riga and all over the Baltics as it was mentioned above. This means that Vilnius was not an exception but part of the bigger market.

Trying to guess who were the first smokers in Vilnius, it can be hypothesized that it could be either soldiers (possibly mercenaries) or arriving individuals – traders, returning students or travellers from Western Europe. This would be a rather traditional guess in the European context, as we know from historical sources that in many parts of the continent, the first mention of smoking is associated with military conflicts or returning soldiers. This was particularly true during the Thirty Years’ War, when smoking was thought to have spread throughout Europe (Bonds 1980, 274; Stam 2016, 2). Analysing pipes themselves, we can also see some signs and references to it. For example, of the 34 pipe bowls dating from 1620–1665, 31 pipes were smoked (91%), some of them had intense black colour on the rim and char remaining inside the bowl so these ones possible were heavily used. Only one was not smoked at all and two more where it could not be detected. If most of the pipes found in Vilnius were not smoked and, say, thrown in one place, we could then hypothesize that these might have been products brought in for sale, but in this case it is clear that almost all found pipes were intensively used and apparently thrown away after they broke.

The meanings and political implications of the elements and signs of pipe decoration should also be mentioned. It is known that pipes with scenes from the Old Testament (Prophet Jonah), the Tudor rose, and exotic fruits from other continents may have been favourite among soldiers during Thirty Years’ War and other military conflicts in Western Europe. Pipes decorated in this way are common findings in some archaeological excavations with clear military context (Oostveen 2015, 7 ff.). Furthermore, these soldiers as foreign mercenaries frequently participated in the military campaigns in the Baltic and Russian theatre of Northern Wars (Frost 2000, 48, 68, 109). With such a “military exchange programs” the cultural meanings of pipes could also be adopted in Vilnius. It is worth mentioning young Lithuanian noblemen such as Janusz Radziwiłł (Lithuanian: Jonušas Radvila) who in 1631–1632 participated in the Dutch Revolt against the Spanish Empire. But in 1633, he was ordered to hire more than 1000 infantry, engineers and
artillerists and return to Lithuania to take part in the Smolensk War (1632–1634). Due to this fact, the Jonah pipe with the inscriptions “IONAS” and “1633”, found in Radvilas Palace in Dubingiai does not look so accidental (Kotlubajus 1995, 112).

Another aspect is the topography of the found pipes. Putting the places where pipes were found to the map from 1737 showing the location of the old town and its boundaries, which have remained unchanged since the 17th century, we see a high concentration of pipes in the territory of Vilnius castles, where Muscovy’s army had been established since 1655, and even after the liberation of the city in 1660, they resisted for another year by occupying positions in Vilnius castles (Meilus 2007, 80 ff.) (Fig. 5). Looking at the city plan, a slightly higher number of pipes is also visible closer to the city’s defensive fortifications, but this tendency is not so obvious. Furthermore, they could be taken there along with other rubbish when city was cleaned after war.

The question remains open. When did the first composite, Turkish-style tobacco pipes come to Vilnius? Archaeological data show that around 1675–1700 there should have been more of them than Dutch pipes, the typology of the finds shows some connections with the Black Sea region, and the means of production of such pipes were found in Vilnius itself (Čivilytė et al. 2005). However, the first products began to spread around 1650–1665, as shown by the examples of pipes in the article. It is difficult to answer whether people of Vilnius chose them deliberately – under the influence of the Oriental, buying cheaper (?) tobacco from Turkey? Whether only a few reached Vilnius, let us call them war trophies brought from such battles as Berestechko in 1651, where large number of Turkish-style pipes belonging to Ukrainian Cossacks were found during the investigation of the battle site (Biliaieva 2012, 351). It may also be that such pipes came to Vilnius in abundance during the war with Muscovy in 1655, when the city was devastated by units of Ukrainian Cossacks (Frost 2000, 164–187; Meilus 2007).

Conclusions

The collection of clay pipes found in Vilnius from the first half of the 17th century – the middle of the 17th century is rich in its style diversity, and also provides a lot of new information about the spread of the smoking habit in the city. The analysis of collected data showed that smoking had spread in Vilnius no later than 1630–1635. The chronological limits of some pipes may be slightly wider, so some of the analysed pipes could theoretically have been manufactured a little earlier, around 1620–1630.

All 1630–1650 pipes discovered in Vilnius were brought from the Netherlands (Figs 1–3). The craftsmen’s marks and various decor elements show that they were made in Amsterdam, Gouda, Harlingen, Hoorn/Enkhuizen craftsmen’s workshops. Analogues for these pipes are found not only in the Netherlands, but also in the entire Baltic Sea region, and pipes made by such famous masters as Edward Bird (Fig. 2: c) are found even in North and South America, Japan. It was also noticed
that some of the pipes found in Vilnius were made in the regional pipe production centres of the Netherlands, where only few craftsmen worked. It is possible that they sold their production directly to the departing ships.

Archaeological data show that the number of Dutch pipes did not decrease in 1650–1665, but during this period composite pipes made in the territory of the Ottoman Empire or on the border with it undoubtedly appeared in Vilnius (Fig. 4).

Fig. 5. Plan of Vilnius (Tamošiūnienė et al. 2017, 39), ca 1737. a – Dutch pipes, 1620–1650, b – Dutch pipes, 1635–1665, c – stem fragments of Dutch pipes with relief stamps, 1625–1675, d – composite pipes, 1650–1665.
The oldest clay tobacco pipes from Vilnius, Lithuania

The earliest pipes found in Vilnius, dating to 1630–1650, were not of exceptional quality. Most of the pipes can be classified as cheaper or medium class products. Analysing the chronologically later pipes, manufactured in 1640–1665, no significant changes were found. The fact that these pipes are found in relatively small quantities and that almost all of them show smoking signs suggests that these were more personal belongings – soldiers or travellers. These statements are supported by the distribution of places where pipes were found in the city (Fig. 5), their decorative elements, historical context and analogues in other European countries.

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Atas Žvirblys

VANIMAD SAVIST TUBAKAPIIBUD VILNIUSES: PÄRITOLU, KRONOLOGIA JA SOTSIAALSE KONTEKSTI TÕLGENDAMINE

Resümee

16. sajandi lõpul ja 17. sajandil levis tubakasuitsetamine üle kogu Euroopa. Balti aladel kiirenes see protsess kolmekümneaastase sõja ajal (1618–1648). Sellest ajast pärineb suitsetamise esimene mainimine seoses tagasipöörduvate sõdurite, palgasõdurite ja teistega. Need protsessid ei läinud mööda Vilniusest, kus aastail 1655–1660 mainiti tubakat tihti poodide kaubanimekirjades ja isiklikus omandis. Ajalooolised allikad ei nimeta, millal esimesed piibud Vilniusesse jõudsid, kust need tulid ja missugusesse ühiskondlikku kihistusse esimesed suitsetajad kuulusid. Artikli üheks eesmärgiks on arheoloogiliste andmete alusel määrata, millal piibusuitsetamine Vilniuses algas.

Töö käigus uuriti piipe erinevates Vilniuse muuseumides, vaadeldi 1665 piibusfragmenti. Pärast kõige varajasemate esemete väljavalimist otsustati põhjalikumalt analüüsida ainult neid piipe, mida sai teoreetiliselt teha mitte hiljem kui
aastail 1660–1665. Määratleti 34 piibu kaha ja 64 vart. Need on kaksikkooniilised piibud, valmistatud ilmselt Madalmaades.

Leidude analüüs näitas, et varaseimad piibud Vilniuses tehti Madalmaades umbes aastail 1620–1630. Hollandi piipude kuju ja vorme uurides selgus, et kümme piipu olid pärast aastat 1620–1650. Teised 24 tehti aastail 1635–1665. Viie piibu tagaküljel leiti Tudori roosi märk, mida on Madalmaades kasutatud alates 1620. aastast ja mida peetakse üheks vanemaks märgistuseks. 14 piipu kannavad märke EB, HW ja WO, mis viitavad Amsterdami piibutootjatele, kes töötasid ajahahemikul 1625–1665. Ülejäänud piipude märgistused ja mitmesugused kaunistuselemendid näitavad, et need valmistati Harlingeni, Hoorni, Enkhuizeni ning Gouda töökodade meistrite poolt. Samasuguseid piipe on leitud kogu Läänemere maade aladelt ja mõned koguni Põhja- ja Lõuna-Ameerikast ning Jaapanist. Erinevatest materjalidest piibud hakkasid Vilniuses levima 17. sajandi keskel. Siiani on leitud kolm piibukaha, mis tüpoloogia ja stratigraafia alusel pärinevad aastaist 1650–1665. Kõik need on tüpoloogiliselt erinevad ja ilma meistri märgita.

Vilniusest leitud aastaist 1620–1665 pärinevad Hollandi piibud ei ole eriti kõrge kvaliteediga, enamik on odavad või keskmise väärtusega. Iseloomulikke tunnuseid on rohkesti: märgistamata piibud või n-ö kollektiivse märgiga tähistatud piibud, millel on rohmakam pealispind. Vilniuse esimesed suitsetajad võisid olla sõdurid või Lääne-Euroopast saabunud. Sel juhul tuleks tähelepanu pöörata kohtade jaotusele, kus piibud liinas leiti. Enamik saadi kindluste aladelt, kus aastail 1655–1661 valitsesid moskoviidid.