

*No Jews*

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# ROVAŠI

*TALLY STICKS*



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COLLECTION OF THE SLOVAK ETHNOGRAPHIC MUSEUM

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*TALLY STICKS*

Collection of the Slovenian Ethnographic Museum

*The Collection of the Slovene Ethnographic Museum*

Ljubljana 2010



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ROVA THIS





## For introduction

This part presents and discusses the *rovaš*, kept by the Slovenian Ethnographic Museum. I am trying to show that the scribes are, so to speak, a universal tool, with which people helped themselves in recording various data, with examples from elsewhere, but only in a fragmentary way due to time, space and financial limitations.

When I mentioned to people what I was doing during research and writing, or when I asked them about things, I embarrassed many people. Some people know some of the phrases in which the word *rovaš* appears and guess what it means, but only a few know its original meaning. Where does the word actually come from and what does it mean? Even those rare individuals who know what a *rovaš* is, most often associate it with the European peasant culture of the 19th and early 20th centuries, since most of the still-preserved *rovaš* are kept in ethnographic museums today. However, *rovaš* has a much longer history both in Slovenia and elsewhere in the world. It belongs to one of the first inventions of mankind and is known in all societies or cultures; therefore, it is a widespread tool connected with the human need to write down (memorize) certain facts.

With literacy, it was replaced by other tools and ways of recording taxes, and it lasted the longest, at least in Europe, among the illiterate peasant population. The use of *rovaš* began to decline due to increasing literacy and writing down on paper. Since literacy first spread mainly among people in higher social strata, they later wrote down information on paper, and to communicate with the illiterate, they also used *rovaše* (independently or together with notes on *pa pir*). In the Slovenian ethnic territory, the *rovaši* were mostly widespread until the beginning of the 20th century, and some species, despite the literacy of the entire population, until the middle of the 20th century.

Today, the word *rovaš* appears in the Slovenian language in phrases related to various areas of life, both in everyday conversations and in various comments related to politics, the economy...; in them it most often means 'debt' or 'bill'. *Rovaš* can be found in Slovene poetry (e.g. Neže Maurer's poem "Na moj *rovaš*"), in the name of associations (e.g. *Rovaš Drašiči Cultural Association*) and business organizations (e.g. *Rovaš, podjetje za ekonomno organizatnoske storitve doo*). In Slovenian, the term *rovašenje* is derived from *rovaš*; in the past, this meant marking cattle that went to a common mountain pasture with notches. So, for example, a certain number of incisions or holes were made in the ears of sheep, and incisions were made in the horns of cattle (Božič 1956: 75). The terms *rovaš* and *rovašen* have been preserved in connection with animal breeding until today, when *rovašen* means the marking of breeding animals for breeding purposes, and *rovaš* (marks) can be in the shape of the letters V, U or in the shape of a book (Šegula 2005: 39).

## The universal need to record data

The human need to record or mark certain data is general; dates back to the long past and is known on all the continents of the earth, except that people at different times served this need with different tools and in different ways.

According to the researchers, bones and sticks with notches belong to the earliest human inventions, as they were known soon after hunting tools and even before the invention of the wheel, and they remained in use for quite a long time. According to some estimates, they appeared at least 40,000 years ago in connection with man's need for vision or calculation. Thus, we find notches on the walls next to many prehistoric paintings of animals in caves, which are probably related to counting. Despite centuries of development, historical and cultural changes, the technique itself has not changed much until today (Ifrah 2000: 64). Among the oldest and most widely used counting aids are dijo bones with markings. The oldest archaeological finds from the Paleolithic era show that even then people helped themselves by making cuts on the bones. Archaeologists are in Western Europe, e.g. in France and the Czech Republic, excavated many bones with notches. These roaches are between 20 and 35 thousand years old. They were most likely used by hunters, who marked each killed animal with a notch, and separate bones may have been used to mark different types of animals killed (bears, bison, wolves...). Among the bones is a 30,000-year-old bone with 55 notches, which was excavated in 1937 in Dolní Věstonice in Moravia; the notches are in two sets, internally divided into groups of five notches each. It is assumed that the hunter carved into the bone the number of animals killed (Ifrah 20



Incised bone from the Congo, 20-18 thousand years BC. (Institut royal des Sciences naturelles de Belgique, Bruxelles).

The Ishango bone, Congo, between 20,000 and 18,000 BC (Royal Belgian Institute of Natural Sciences, Brussels).



Horns were also used for sighting or counting, as evidenced by e.g. in France (Brassempouy) excavated reindeer horn from the period 19-12 thousand years BC. n. no.; it has a longitudinal groove that separates a set of transverse notches, divided on one side into groups of three and seven and on the other side into five and nine notches (Ifrah 2000: 62).

In 1960, a 10 cm long bone (*Ishango bone*) with clusters of notches was discovered in the then Belgian Congo ; is supposed to be from the time between 20-18 thousand years BC. n. no. Some researchers believe that it is a rovaš, while others believe that it is a kind of calendar.

In addition to bones and sticks, knotted strings were also used all over the world for counting or marking data. The Peruvian quipu (*quipu*), which in the Inca language means a knot, is very well known, sometimes im. a talking knot, made from the basics of a rope about half a meter long, to which thinner cords were tied in groups and knotted. The number of knots and types of knots could indicate liturgical, coronal and statistical data, and knots could also serve as calendars and messages.

Some colored strings also had an agreed meaning, both in relation to concrete objects and abstract concepts. In addition to color, the number of knots and their arrangement and the duty of the cords and their arrangement were important. The statue was used by the Incas mainly as a tool for marking the results of counting (from military affairs to taxes, harvest amounts, slaughtered animals, delivery records, population census, etc.) (Ifrah 2000: 68).

In the villages, towns and parts of the Inca Empire, royal officials, knot guardians (*quipuca mayocs*), were responsible for marking the knots on the strings and for reading them, who also performed regional annual censuses of the harvest and population according to



Kipu (replica), Peru, 15-16 century.

Quipu (replica), Peru, 15th–16th century  
(Science Museum, London).

social affiliation. The sums on the strings were sent to the capital, Cuzco. For centuries, kipuas have been used in Peru, Bolivia and Ecuador. In the middle of the 19th century, e.g. shepherds on the Antiplano plateau in the central Andes used strings to keep track of the number of animals in their herds; with white strings they indicated the number of sheep and goats, on green strings they counted cattle. Even today, Indians in Bolivia and Peru use a very similar fire aid, *the chimp* (Menninger 1992: 252–255; Ifrah 2000: 69–70). During the rebellion against the Spanish in 1680, the Pueblos sent knotted cords to all participating villages with information on the date of the uprising. Among the Hopi, knotted cords served as a kind of calendar that determined the sequence of rituals (Malotki

1983: 484). The number of working days was marked with rope knots by the Arakans in the area of Chile and parts of Argentina. When they went to work, they carried two cords with them: one with as many knots as the number of days they had to work, and the other tied at the end of each working day until the number of knots on both cords matched. When they planned a rebellion against the Spaniards, they sent each other arrows or the bones of a killed Spaniard with a thread that had as many knots as there were days left before the rebellion (Beniga

Otherwise, knotted cords or straws are also witnessed in other parts of the world. In Palestina, for example, Roman tax collectors used long ropes in the 2nd century. The Arabs used knotted cords not only as a counting aid, but also for the preparation of contracts, as receipts and accounting books. Divination of numbers with the help of knots was also known in China in the past. In Japan, on the Ryukyu Islands in the Pacific Ocean, knot workers had a vision of earning. In Okinawa, even in the 20th century, *warazan*, a counting adverb, was used to count quantities of grain, tofu and fish



*Warazan*, otojje Ryukyu, Okinawa, Japonska, prva polovica 20. stoletja (Museum of Ethnology, Vienna).

Warazan, Ryukyu Islands, Okinawa, Japan, 1st half 20th century (Museum of Ethnology, Vienna).

a check made of rice straw (Pallestrang 2004: 61). Workers in some of the more hilly regions used straw bales to count working days, debts, etc., and similar tools are found in the Caroline Islands, Hawaii, West Africa, and those widespread among American Indians. Moleks made of knotted cords for counting prayers are also known in many religions (Menninger 1992: 252, 255; Ifrah 2000: 70-71).

The marking of quantities on strings was also known in Europe. Until the beginning of the 20th century, remnants of knotting, which was once apparently very widespread, could still be found among German millers, who used ropes and knots to keep track of business with bakers: with different types of knots, they indicated the quantities and types of flour delivered to bakers (Menninger 1992: 255–256; Ifrah 2000: 70). In Serbia they knotted on handkerchiefs (Drob njakoviĭ 1933) and in Slovenia on cords. In Dalmatia, Croatia, the owners marked the length of the cloth with knots on the fringes, which they took to the roller (Škarpa 1933). Some craftsmen in Europe, however, used pieces of leather on which they made incisions to check debts and claims (Dolenc 1935: 166).

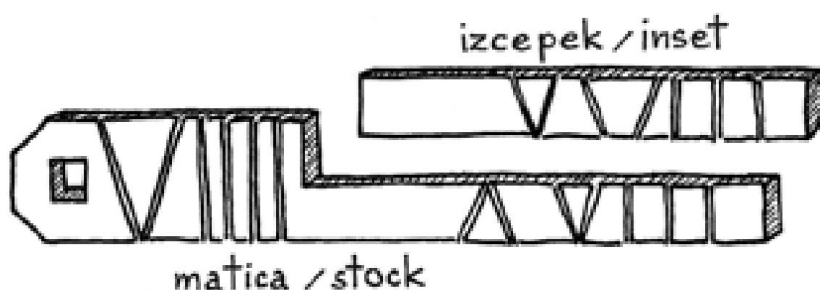
In the 9th and 10th centuries, legal documents called *charta partita* or *chirograph* were known in Europe, which, like two-part scrolls, were used to prove identity. They wrote the same texts on a sheet of paper or parchment, and then made even bigger signs or letters between the texts, folded the sheet and cut or tore it in a zigzag or wavy pattern in the middle. Each party got its part, and the authenticity of the document was proved, including in court, by the matching of signs, letters and both parts of the sheet (Mažuraniĭ 1908–1922: 1266; Bogiĭeviĭ 1953: 210; Menninger 1992: 232).

## Definitions and types of roaches

In the past, Rovaš was the most widely used tool for recording numbers, ranks and messages, it served as proof and accounting book. Rovaši in the broadest sense of the word can be made of various materials (wood, bone, horns, tusks, clay, metal...), but in the narrower sense they are wooden tools with incised (and later also written) signs.

According to the number of components, rovas are single-part and multi-part. One-piece rompers are from unpeeled or peeled branches, sticks, planks or slats, which may have a different number of edges or sides. There are notches on the sleeves. Developmentally, they are slightly younger than the multi-part rovaši, most often consisting of two, less often three parts. It is characteristic of multi-part rovaš that when the parts are assembled, the markings cut on them are also assembled. While the one-piece counters primarily helped in counting or checking data, the two-part counters were also one of the first aids to prevent fraud, as they were also considered proof - matching notches on both parts made cheating possible or valid as a certificate of business between persons.

Two-piece wallets became established in Europe in the Middle Ages in connection with the need to display exchanges and debts. Over time, simple two-part rovashes, made from a longitudinally bent branch, stick, etc., developed into two-part rovashes, consisting of a longer part - a nut, which also had a kind of handle intended for holding. The longer part of the rovaš with the handle was always kept by the person who owned the money or other goods, and the shorter part - the shank - by the person who borrowed the money or goods.



A two-part cloak (drawing after Vilfan 1944: 106).

Double tally stick (drawing after Vilfan 1944: 106).

Rovaš can also be distinguished according to their function or uses (tax, lending, voting, voting, lottery, etc.) and according to the persons who used them (miller, baker, innkeeper, trader, driver, etc.). Softer types of wood were most often used for rovaše, and agreed markings were cut into it with various tools.

An important stage in the development of Rovaš was the marking of ownership with incised marks, wax seals, burnt marks, writings with pens, etc.

Rovaši were very important documents, so people kept them carefully. There are even fewer ruffians, e.g. in Dalmatia, Croatia, they carried them in the hand, they kept them in their pockets, in their bras, behind their belts, in their bags, and they also used long ropes for support when walking (Škarpa 1933: 171). Bosnian merchants used to wrap rovas in leather (Bogijević 1953: 211).

Some researchers also include wooden calendars and message sticks as relics. Wooden calendars were widespread both in Europe and among non-European communities, and these message sticks, which served to communicate or transmit messages between individuals and communities (Bogijević 1953: 209), were used in many communities outside Europe, e.g. Australian aborigines, Indians in Inuit

## You dig your tongue

### The origin of

**the word** In addition to the term *rovaš*, other names are known in Slovenia, e.g. *rabuš* (Štrekelj 1909: 48), *roš*, and in western Slovenia, due to the proximity of the Italian language *ka*, the term *škontrin* was also used, and in the Cerkljan region, the term *zaznamvalna palca*.<sup>1</sup>

Some see the roots of the word *rovaš* in Slavic languages, but most of them believe that the word is of Hungarian origin. Menninger (1992: 225) is convinced of the origin of the Slavic word *rubatj*, Russian *rubitj* (to cut, cut), which should also be related to the Russian means of payment - the ruble. Also according to Miklošij and Mažuranič, the word is of Slavic origin (*deblo*, *ry-*, *rvati*), the same is true for Pleteršnik (1895: 439) that the root be *sede ry-* is Slavic. Among the defenders of the Hungarian origin of the word was Jagič (from Hungarian *roni*) (Dolenc 1935: 170). Štrekelj (1909: 48) also believed that the word came to the Slavs from Hungarian: *ro* belongs to the Finno-Ugric vocabulary, so the Hungarians are said to have known *Rovaše* even before the resettlement, and from them the name spread to neighboring nations as well (Ortutay 1981: 375–376). According to Bezljaj, the Slovenian *rovaš* has its origin in the Hungarian word *rovás* (which comes from the Hungarian *ró*, to cut, to cut). (Bezljaj 1995: 200). Snój (1997: 546) is also convinced that it is more likely that *rovaš* originates from the Hungarian *ró* than from the Slavic word *rovj* (trench).

### It follows in the

**language** The fact that the *rovaš* is a virtually universal tool, widespread in the past in various geographical areas, is also shown by the fact that it is known in many languages, and that it has been preserved in them until today in phrases that speak mostly about accounts and debts.

Different languages know different terms for *rovash*: in Hebrew the term *teomin* (twins), in Greek *symbolon* (an object divided in two or cut into pieces that can be assembled into a unit), in Latin the terms *tallia* and *tessera*; *tessera* (card, tile) and *taglia* (*rovaš*, measure, tax), which are still in use in the Italian language, as well as *scontrino* (from *scontrare*, to compare; in modern Italian, *scontrino*, receipt, receipt). The French and the inhabitants of the French-speaking cantons of Switzerland have the expressions (*en*)*coche* and *taille* (*ta iller*, to cut), while the Spanish have *talla*, *tarja* and *tara*. In Croatia, the most widespread terms are *raboš* and *rovaš*, in Dalmatia also *zariza*, *roska*, *rozga* (Škarpa 1933: 169–170), in Serbia and Bosnia *rovaš* and *raboš*, in Macedonia *raboš* and *rabuš*, in Montenegro *rabuš*, in Bulgaria *raboš*, *rabuš*, in Romania *ravas*, *raboj*, in the Czech Republic *rabuše*, *vrubovka*, *vrub*, i.e. notch (Burian 1959: 1), in Slovak *rováš*, in Hungarian *rovás*, the Albanian language has the term *rabush*.

In Poland they use the word *rowas*, in Ukraine *ravaš*, *revaš* and in Russian *birka* (бѣръбѣръ). The *rovaš* for marking debts was called in Russia *dolgovaya birka* (дѣльбѣръбѣръ)

<sup>1</sup> Teren 11, Cerkljansko, 1954, vol. 18, p. 58 (SEM Documentation Section).

ÿÿÿÿÿÿ), and in modern Russian *birka* is an inscription plate or label on various products.<sup>2</sup> In Sweden, rovaš is called *karvstock*, in the Netherlands *kerfstok*, in Austria the most widespread names are *Robisch* and *Spanholz*, and in Germany *Rabusch*, *Rabisch*, *Rawisch*, *Rosch*, *Rasch*, *Kerbholz* and *Kerbstock*. In the German-speaking cantons of Switzerland, the term Tessel is used. The English language knows terms such as *score* (hist. notch, rovaš, stick with notches) or *tally* (hist. rovaš, notch, account, accounting; a half that corresponds to the other half; one of two objects that make up a whole), *tally stick*, *notched stick*. *Tally* comes from the French word *taillé*. In England in the 13th century, Rovaše were also called *tallia dividenda* (halved stick) or just *dividenda* (halved piece), from which, according to some, the banking term *dividend* should also come from (Menninger 1992: 238).

Among the Arabs, the root of the verb *farada* means "to make an incision, cut" and "to separate a share" (contract or succession) to someone (Ibrah 2000: 66). And there are traces of the sword even in Chinese, where the word contract is symbolized by two characters at the top, one represents a notched stick, the other a knife, and below is a symbol for size. A contract or an agreement in Chinese is therefore "a big deal" (Menninger 1992: 233).

Some languages also have special terms for the components of a two-part rovaš. Thus, for example, in English, the longer part is *stock*, and the cut shorter part is *foil* or *inset*. The person who kept the longer part was called a *stockholder* (Menninger 1992: 239). In Germany, the term *Gegenkerb* was known for the knoll, in Vienna the terms *Weibl* for the nut and *Mannl* for the knoll. The French and French-speaking Swiss call the nut *taille*, and the hatchet *échan tillon* or *contretaille* (Žontar 1940a: 311). In German-speaking Switzerland, the terms *Krapfentessel* for nut and *Beitessel* for hollow were known (Pallestrang 2004: 59). In Dalmatia, Croatia, the longer part is *matica* or *cil rovaš*, and the shorter part is *cipak* or *pišjak*. The place where the incisions are made is called *biliga*, the handle of the nut is a *handle* or *handle* (Mažura niš 1908–1922: 1265). Often, the longer part is called *kokoš* or *kvōjka* (koklja) and the shorter part is called *pile* (pišje), which is true for Serbia and Bosnia (Deliš 1892: 89). It is similar among the Bulgarians, where the mother is *the mother* and the gut is *the saw* or *shchenè* (Žontar

In Slovenian, there are well-known phrases related to Rovaš: *they laughed at his Rovaš; playing pranks on your neighbors; he acquired his wealth at the expense of the poor; the mistake of hurrying; he still has something up his sleeve* (he owes him) (Bajec 1985: 545).

Pleteršnik (1895: 429) mentions the phrase *imava sek ek na rovaš*, but in relation to roš it is *na roš*, i.e. on the account, the phrase *zadimo roš* means "let's vote" (voting with commas). Rovaš is most often mentioned in connection with accounts and settlements, so it is not surprising that for Glonar (1936: 341) the word rovaš means an account or a settlement, with the note that it was "originally a stick made of two halves, through which notches were made, with which deliveries and payments were marked" (ibid.).

<sup>2</sup> I would like to thank the Russian translator Lijana Dejak for the information.

Similar to Slovenian, there are also similar phrases in other languages, which most often mean a debt or an account. In Croatia, for example, they know the phrases *I'll throw you on the hook; I will cut you to pieces*, which could also mean a threat or revenge (Škar 1933: 172), or phrases, e.g. *to be at the mercy of someone* (to be indebted to someone), *to be at the mercy of someone* (to hold a grudge against someone), *to be at the mercy of someone* (to be dependent on someone) (Opačič 2006). The phrase *ti brate samo raboši* is from Bosnia, which can mean that the debtor cannot or does not intend to repay the debt, and the phrase *stavio sam te u svo raboši* can also mean a threat in a figurative sense (Bogičević 1953: 208). Even the Czechs have the phrases *máš u mne vroubek; pýjíšti něco na vrub; act on one's own* (Kašlík 1943: 43; Burian 1959: 1) or e.g. *pít na cizi vrub* (drinking on someone else's account).

In the German language, the phrase *etwas auf dem Kerbholz haben*. Similar phrases with the word *rovaš* are also known in the Netherlands, which they use when the bill is getting too high (*de kerfstock loopt te hoog?*) or when they want to get rid of a person who refuses to pay the bill (*is de kerfstock ijzeren*) (Menninger 1992: 227). Many phrases related to your family are in the English language, e.g. *to keep tally with somebody* and *they were tallies for each other*, whereby the word *tally* is used in the sense of mutual agreement; so for example the phrase *the account does not tally* means that the calculation is not correct, and *the tallyman* is a trader who sells in installments. The French also know the phrase *acheter à la taille*, which means buying on credit (Menninger 1992: 227, 233–234).



## Markings on the sleeves

Some incised signs on the rovaš have a personal or even local meaning, only a certain circle of people can "read" them, as it is knowledge that has been passed down from generation to generation. Some signs, however, are, surprisingly, virtually universal; these are signs that people invented to satisfy their everyday needs (Menninger 1992: 223).

In some places, the notches on the rovaš are called *peasant numbers*, but the name is not appropriate, since the rovaš were not only used by farmers.

Soft types of wood were mostly used for rovaše, so that it was easier to carve various signs into them. In Bosnia, for example, there were rovaši is mostly made of hazel, ash, linden, pine, willow, dogwood and hornbeam (Delić 1892: 89; Bogičević 1953: 208). They carved with various tools – knives, razors, sharp metal plates, saws, etc. The incisions on the rovaši can be simple, but the rovaši can also be real carvings (e.g. Swiss imperial milkman's rovaši). There are various incisions on them, which are connected or follow each other in sequences and groups, and differ in shape, length, depth and position.

The simplest notches in the form of a line can be placed horizontally, vertically or diagonally, they are incised at different depths, the notches can be on the side of the rovaš, on the edge, run around the rovaš... In addition to the notches, there are often dots, circles, stars and similar signs on the rovaš.

Among the most widespread signs is a simple comma (I), which most often indicates the number one - it can mean, for example, one gauge, one day, one animal, etc. Sequences of shorter and longer notches can help with counting, when e.g. every tenth notch longer. The next very common sign is the V (sometimes reversed, like  $\checkmark$ ), most often associated with the number 5. And the third most common sign is the cross (X), associated with the number 10. With the signs I, V and X, we may too hastily assume that they are Roman numbers, but it is not so. There are also no other Roman numerals (L, C, M) on the sleeves. The mentioned three signs with their associated values are the most common among the signs on the rovaš (Menninger 1992: 240-242).

Shepherds in Switzerland used the signs I, V and X to indicate the amount of milk: I = 1 liter, V = 5 liters, X = 10 liters. Half a liter of milk was marked with a line cut after it (/) (Rütimayer in: Bogičević 1953: 213). Shepherds in Wallachia, Bohemia, used the following signs to indicate the number of sheep they had taken: + = 10,  $\checkmark$  = 5, I = 1, especially marking the sheep that did not give milk (Domvolv 1904: 208). Marks I, V and X were also the most common on tax rolls in Romania (Hémardinquer 1963: 146). In Transylvania, the signs I = 1,  $\checkmark$  = 5, X = 10 were used, and the signs for 50 and 100 were different (Ortutay 1981: 375–376).

In Dalmatia, Croatia, I = 1 and X = 10. Millers marked the weight of flour with these wheels:

- (hole) or \* (star) = 100, N = 50, X = 10, V, / or \ = 5, I = 1, and signs

they always wrote from right to left. If the same farmer had several sacks with the miller, e.g. three, he transferred the contents of all three rovashes to the side of the larger rovash, and on side . But if he marked the total weight of all three bags. 452 he wrote together as the other follows: IIN••• it was a unit that was slightly smaller than a hundred, e.g. 96, he could write • IIII (100–4=96) instead of IVXXXXN (50+40+5+1=96) (Škarpa 1933: 172–175, 181).

X's, V's, I's and O's, vertical, horizontal and diagonal lines and dots appear everywhere, but these characters often have different values in different environments. Thus, in Bosnia, the sign X in some places denoted 100 units, I = 10, • = 1. In Tuzla, it meant I = 1, V = 5, O = 50, X = 10 or 100. In the Zemaljska muzej in Sarajevo, there are markings on the rovas with values: X = 100, / = 50, I = 10, dot = 1, half vertical line = 5. Very similar markings were also used in Serbia: the characters are a combination of vertical and diagonal lines and the X sign, and numerical values they range from 1 to 1000 (Bo giļevij 1953: 212–13).

From the end of the 19th century, there is a record from Bosnia about how a coachman with a horse-drawn carriage saved 1,678 bricks, which he delivered to the customer. He took a stick 2 cm long, 11 mm wide and 6 mm thick and marked it as follows: he marked hundreds with crosses, so there were 16 crosses on the stick (1600). The notch meant 10, so there were seven (70) on the sheet. This would make a total of 1670. One notch was half, ie. mark for 5. With the tip of the knife, he made three more indentations, each one representing the number 1 – so a total of exactly 1678 (Delić 1892: 89).

XXXXXXXXXXXXXXXXX IIIIIII••• = 1678

In Serbia, shepherds carved the following signs: I or • = 1, / = 5, X = 10 (Drobnja ković 1933).

In some cases, it was also necessary to mark the ownership of the rovas, especially when someone kept a large number of rovas that belonged to different people. The mark of ownership created an economic tool from the rovash, whereby the sign symbolized the owner's name (Ifrah 2000: 66). Ownership was marked in various ways, in addition to the agreed incised signs, also with wax seals, burning and writing. They marked the house number or the owner's initials. Some artisans in Bosnia carved their own trademark, which resembled letters, or symbols of their activities on the rovash; for example, the baker signified the baker and the sack of the miller.

Bosnian merchants had as their customers rovas, who were designated by their owners: the hoe symbolized the buyer who was a digger, the rifle represented the hunter and the walking stick an elderly person. Ownership marks were also set on fire in some places, and they also wrote with charcoal, chalk, and pencil (Bogićević 1953: 206–207, 212). Even in the Czech Republic, the ownership of the rovaš was indicated by incised or burned signs (Kašlík 1943: 43). When the debt was repaid or the duty was fulfilled, most of the time the marks were cut out or the rovash was destroyed (often burned). Rovaše, in which the markings were cut out, could be used several times.

Forms of writing, similar to those on rovaš, were preserved for a long time. So, for example, brewers and wine merchants used to mark barrels with the sign X, which has a numerical order. The innkeepers used chalk to mark the quantities of drink that were given on credit. And during the World Wars, military pilots marked the number of enemy aircraft shot down and the number of bombing raids made by carving silhouettes of aircraft or bombs into the fuselage (Ibrah 2000: 67). Writing, similar to that on rovaši, was also preserved for a long time in card games.

At the beginning of the 20th century, butchers in Bosnia used to write down debts on beams, and coffee shops in Sarajevo on walls, doors, beams... When 10 lines were accumulated, they were erased and replaced with an X. liters of drink. At the beginning of the 20th century, a merchant in Sarajevo used a book for bookkeeping, in which he wrote down characters (lines, dots, arcs, circles, etc.), which were otherwise cut on a rovaš (Bogičević 1953: 206-207).

Also in Slovenia, units from one to four were most often marked with lines (I), the fifth unit with a hook (V) and the tenth with a cross (X). In connection with them, at the end of the 19th century in Slovenia, the phrase *Kljuka five, cross ten, and two three* were known, how many stýri? (Hudovernik 1883: 5). Otherwise, others were also in use - oblique lines, stars, holes... which had an agreed meaning in local communities. With these *farm numbers*, e.g. in the neighborhood brick house in Dragomlja village in Bela krajina, they used to mark the types of borrowed wine. A line (I) was cut for a sprinkler, a hook (V) for five sprinkles and a cross (X) for ten. For fifty firkles, a horizontal line was added to the cross, so that a kind of star was formed. House numbers 19 were written on the rovaš as IIIIVX and 26 as IVXX (Dular 1963/64: 44).



Brentar stick with incised signs I and X, Jerusalem, 1970s (SEM, see cat. no. 37).

Grape picker's tally stick with the carved symbols I and X, Jeruzalem, 1970s (SEM, see cat. no. 37).

In addition to signs resembling Roman numerals, other ways of recording data were also used: in some places, the first nine notches were shorter, and every tenth one was longer.

So, for example, in Prlekia, on the sticks of Brent, each unit was marked with a notch on the edge and a cheek, and a notch was made around the stick for every tenth (Stanek 1940: 353). On Grabovac

in Bela Krajina, a hole was drilled or hammered into the rovaš for a borrowed maseljč of wine, a horizontal notch was cut to half the width of the rovaš for half a firlje, and across the whole width for a firlje. In the drasiška, the udders were marked with a short notch across the entire width of the wine rack, and for the firkelj, another notch was made from the opposite side, so that both cuts made a little ditch. A small groove was cut on the side for five frikels, and the tenth firkel was marked with a cross (Dular 1963/64: 44).



Rovaš with notches and pencil writing, Predgrad, 1887 (SEM, see cat. no. 35).

Notched tally stick with pencil inscription, Predgrad, 1887 (SEM, see cat. no. 35).

In some places, the (at least partially) literate in the same Rovaš marked some information with a notation and wrote others with a pencil. Ownership of rovaš is e.g. marked by writing the house number on the rovaš with a wet ink pencil (incising Arabic numerals would be difficult), house names or professions (e.g. miller) (Dular 1963/64: 44).

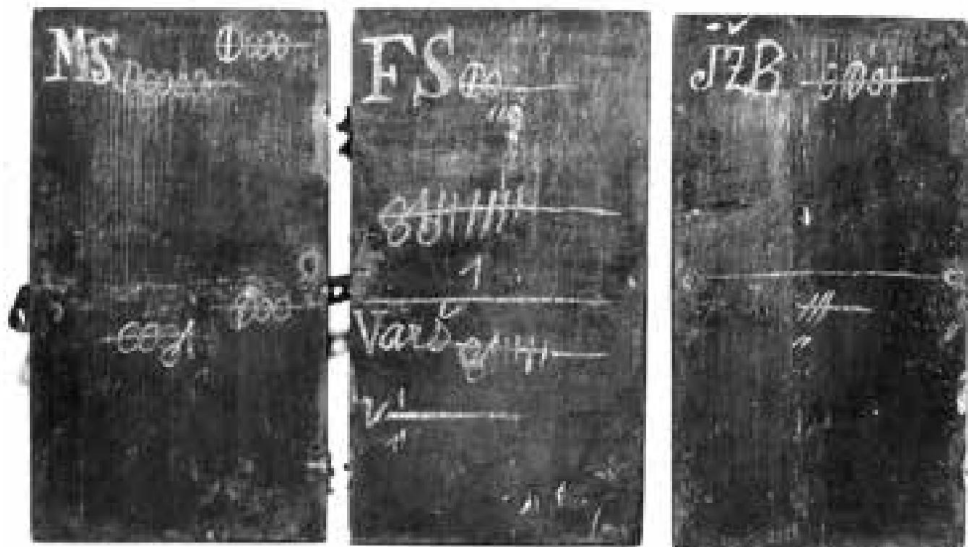
In the 40s of the 20th century, the number of journeys was engraved on driver's license plates, and the name of the driver was written in pencil. When it came to business between a literate and an illiterate person, the literate person (artisan, merchant) most often kept additional records with records in books (e.g. dyers), and the illiterate person only on the rovaš.

Some inscriptions similar to those on rovaši are also found elsewhere. For example, welders in Gorenje are used to keep track of their business with blacksmiths and charcoal burners, wooden accounting books - wooden tiles connected with leather straps. They drew a horizontal line across the black tile, and then drew the agreed-upon marks (circles and lines) below, above, or over it to indicate the amount of money. A copy of such a book is kept by the Blacksmith Museum in Kropa (Žontar 1940a: 311; Vilfan 1944a: 248; Gašperšič 1956: 62).

In Prekija, during threshing, the amount of grain obtained was marked with lines made with chalk or pencil on the threshing floor, threshing floor or door. Every tenth was different (Stanek 1940: 353). Even among merchants and innkeepers, giving food and drink "on chalk" was widespread; the quantities of borrowed goods were marked with chalk lines. In the vicinity of Cerkne, for example, an innkeeper wrote unpaid wine with chalk on the door beam: I = 1; V = 5; X = 10; Ø = 100.3 Also some other craftsmen, e.g. blacksmiths, carved the house numbers of their debtors and the work done for them on the door frames (Vilfan 1944: 110). In some places in Bizeljsk, even today, for each brought

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3 Teren 11, Cerkljansko, 1954, vol. 18, p. 44; Plot 2, Šmarje-Sap-Polica, 1949, vol. 11, p. 37 (Department for documentation of the SEM).



Wooden account book of the blacksmith Matija Šolar from Kropa, 19th century (Kovaški museum, Kropa).

Wooden accounts book from the foundry of Matija Šolar, Kropa, 19th century (Iron Forging Museum, Kropa).



Annual records of the number of brents marked with chalk on the wooden wall above the temple door, Piršenberg, 2003 (private collection of Miloš Poljanšek).

Annual records of the number of grape baskets, made with chalk on the wooden wall above the door of the store room, Piršenberg, 2003 (private collection of Miloš Poljanšek).

Brento draws a line with chalk on the wooden wall above the door of the temple to have an overview of the quantities of grapes produced in individual years. Notation with lines for outcomes in card games has been preserved for a relatively long time.

In the past, instead of notches or lines, beans and knots on a string were also used to help count. In Cerkljansko and in the vicinity of Grosuplje, there are e.g. for each measure of grain that was taken to the granary, one bean was taken, and at the end they were added up and thus had an overview of the total number of measures.<sup>4</sup> According to the knots on the string, for example in Dolenjsko knew the number of working days of hired workers.

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<sup>4</sup> Plot 2, Šmarje-Sap-Polica, 1949, vol. 11, p. 37 (SEM Documentation Section).

## Examples of the use of rovas outside Europe

The fact that awls are a universal tool is proven by the fact that they have been in use for many centuries, not only in Europe, but also in culturally diverse societies in other parts of the world. In Africa, in the mountainous north of Algeria, the Kabyles (Leqvayel or Kabyle) use a kind of lottery ticket to distribute the meat of slaughtered animals as fairly as possible among the members of the community. Each member of the community gave a rovaš with his mark to the community leader, who mixed them and gave them to an assistant, who put a piece of meat on each rovaš. Each member then looked for his own rovaš with the corresponding piece (Février 1959 in Ifrah 2000: 66).

In Africa, rovašes were also used in trade. This is evidenced by e.g. 42.5 cm long and 2 cm wide rovaš from Gambia, which was used in the 19th century to trade peanuts and is now kept in the National Museum of Scotland in Edinburgh.<sup>5</sup>



Groundnut trading post, Gambia, 19th century.

Tally stick used in the ground nut trade, Gambia, 19th century (© The trustees of the National Museums of Scotland).

Australian aborigines used sticks, called *messenger sticks* or *talking sticks*, to communicate with each other. Different groups handed each other 20 to 30 cm long sticks with incised lines and dots, which were mostly used when inviting neighboring groups to ceremonial and combat meetings and ball games. The Maori kept a list of their ancestors on wooden sticks (Feest 1999: 201), and in the Fiji Islands, they marked the number of animals and enemies they killed with it on the hands of the highlanders with notches (Menninger 1992: 39).

Rovas were used by the natives of America. Among the Arawaks in the area of Chile and parts of Argentina, there were known wooden ropes, on which agricultural workers (*peon*, *peonage*) marked their working days (Benigar 1988: 22). In Southern California, even in the recent past, Native American laborers used notches on sticks to count their working days; with a thicker or deeper notch they marked the end of each week, and with a cross every fortnight.

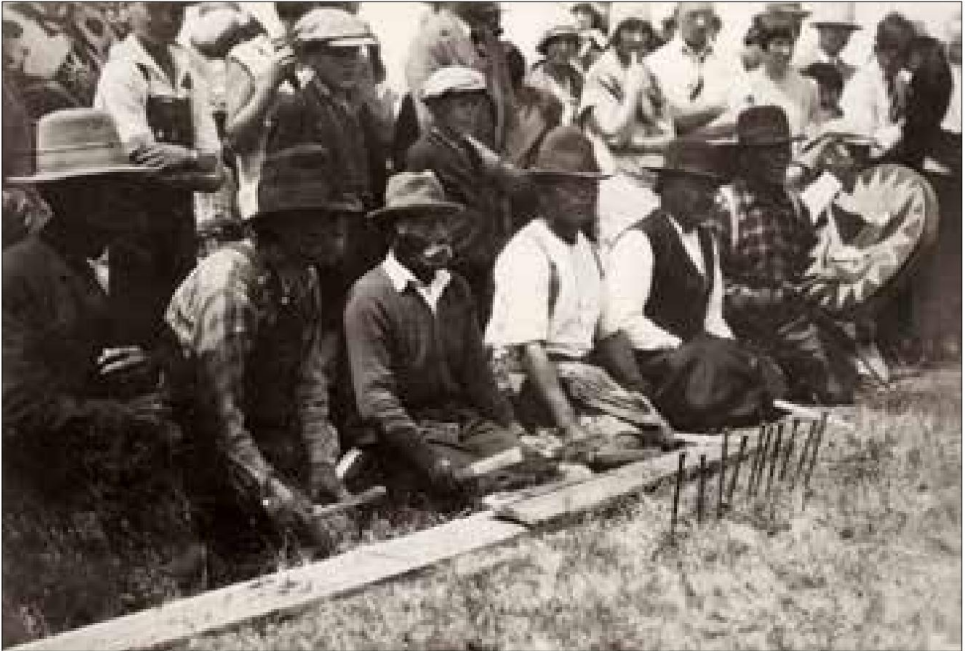
Cowboys used to mark the number of bison they had killed on the barrel of their rifle (Ifrah 2000: 64).

Among the North American Indians, the use of wooden sticks with notches to mark the outcome of various games was widespread (Culin 1975). In the National Museum of the American Indian (National Museum of the American Indian, Washington) there are several specimens of the rovaš used by the Indians in games, including

<sup>5</sup> Online resource: <http://nms.scran.ac.uk/database/record.php?usi=000-100-080-683-C> (19/05/2009).

wooden sticks called *disesdods*, from 1905, used by the Cherokee to record scores in a ball game. <sup>6</sup> Among the Indians along the coast of the Pacific Northwest, there is a well-known game of *slahal*, in which the number of points scored is also marked on wooden sticks (in the past were made of bone). The Lummi Indian group (Washington state) used them in the *slahal* game at least as far back as the 1930s.<sup>7</sup>

T. i. messenger sticks or messenger sticks were used by North American Indian ethnic groups to communicate with each other. Seneca are e.g. with them, they invited the heads of neighboring groups to the ceremonies, which took place on a certain day and at a certain time. The Onondaga had a small wooden log with 27 notches for a kind of mourning book for the 27 chiefs who had died. In the late 18th and early 19th centuries, the Suji had a thin stick with notches that were said to represent their history (Marshack 1972: 139). In some places in North America, information about war activities was recorded on scrolls (Feest 1999: 201). The Indians also used wooden calendars



Lummi Indians with drum and flute players , Bellingham, OK. I. 1930–1933.

Group of Lummi men playing the game “slahal” with drum and tally sticks, Bellingham, ca. 1930–1933 (University of Washington Libraries, Special Collections, NA1820).

<sup>6</sup> Online source: <http://americanindian.si.edu/searchcollections/item.aspx?irn=20363&objtype=Games,%20Toys,%20Gambling,%20Ball%20game%20items&objid=Tally/Scorekeeping%20sticks> (19/05/2009) ; <http://www.nmai.si.edu/subpage.cfm?subpage=search&second=results&keyword=tally+stic> (May 19, 2009).

<sup>7</sup> Online source: [http://content.lib.washington.edu/cdm4/item\\_viewer.php?CISOROOT=/social&CISOPTR=1171&CISOBX=1&REC=3](http://content.lib.washington.edu/cdm4/item_viewer.php?CISOROOT=/social&CISOPTR=1171&CISOBX=1&REC=3) (3/7/2009).





Rovaš with marked events between 1833-1921, Akimel O'odham (Pima) Indians, Arizona.

Calendar stick documenting events from 1833 to 1921, Akimel O'odham (Pima), Arizona (Courtesy, National Museum of the American Indian, Smithsonian Institution, 104878, 104878D; photo by: Ernest Amoroso).

for lists of events, so e.g. Pimi in the area of Arizona and Sonora (Mexico). The National Museum of the American Indian keeps a 92 cm long wooden stick on which events between 1833 and 1921 are marked with notches.<sup>8</sup> Wooden calendars were also used among the Indians; so, for example, The Hopi used approximately 30 to 50 cm long sticks called *koho* to mark time (Malotki 1983: 487).

Rovas were also widespread in Asia. Marco Polo (1254–1324) already reported on the use of rovas in China. Before the introduction of writing, notched sticks were known there to prove contracts, agreements and deals. The remnants of the use of wooden rovas can be seen today in an ideogram that means a contract; it consists of two characters – one meaning a notched stick and the other a knife (Ifrah 2000: 66). There are reports from Laos about the use of a stick for communication from the 19th century (Harmand in Ifrah 2000: 64), and rovas were also used in Siberia to mark various services (Feest 1999: 201).

The Kachins of Burma (now Myanmar) used two-part rovas to help each other in scoring the bands, so that each side had an identical piece of evidence (Feest 1999: 201). The inhabitants of the Ni Kobar Archipelago in the Indian Ocean used to mark the number of peeled coconuts on their rovas.



A Chinese character that means contract.

The Chinese ideogram signifying “contract”.

<sup>8</sup> Online source: [http://americanindian.si.edu/searchcollections/item.aspx?irn=113332&objtype=Indigenous%20Knowledge%20\(Map,%20Calendar,%20etc.\)](http://americanindian.si.edu/searchcollections/item.aspx?irn=113332&objtype=Indigenous%20Knowledge%20(Map,%20Calendar,%20etc.)) (20/08/2009).

As an ordinary stick would not suffice, they cut a bamboo stick about half a meter long and split it lengthwise on one side into several pieces. Notches on the split parts indicated the number of coconuts plucked (Menninger 1992: 227). Reports of the use of notches on wooden boards and sticks in Indochina date back to the 19th century, where on the Boloven Plateau the name of the seller, buyer, witnesses, date of delivery, type of goods and price were written on the boards (Harmand in Ifrah 2000: 65-66). . In Sumatra, they announced war by sending a notched stick together with feathers, pieces of cress mushroom and fish, with the fairy cut illustrating the number of invaders who will be swift as birds (feathers), will destroy everything (cress mushroom or fire) and drowned (fish) their enemies (Février in Ifrah 2000: 64).

Like the Australian Aborigines and American Indians, the Inuit used special sticks to communicate between neighboring groups. Thus, for example, the Inupiaq group in northern Alaska at least as late as the end of the 19th and the beginning of the 20th century used special sticks (*ayauppiaq*) with notches, which they used to invite neighboring groups to dance celebrations. Markings on the stick helped the courier not to forget the messages he had to deliver to the neighboring village, and objects symbolizing desired gifts were also tied to the stick.<sup>9</sup> From Nunivak Island in the Bering Sea, the leader of the group goes to the mainland every spring sent a courier who invited groups of friends or business partners to the island for a celebration. The courier carried a stick with notches marking the people invited and the desired gifts. Before the courier left on his journey, the community leader explained to him the meaning of the notches (Lowry 1994: 33).



Inuit who came to invite to a dance celebration with a notched stick invitation, Barrow, Alaska, between 1896 and 1913.

An Eskimo who has come with invitation represented by notches on the sticks to a dance feast, Barrow, Alaska, between 1896 and 1913 (Alaska State Library, Historical Collections, ASL-P320-22).

<sup>9</sup> Online source: [http://vilda.alaska.edu/cdm4/item\\_viewer.php?CISOROOT=/cdmg21&CISOPTR=848&REC=17#metainfo](http://vilda.alaska.edu/cdm4/item_viewer.php?CISOROOT=/cdmg21&CISOPTR=848&REC=17#metainfo) (14/05/2009).

## Examples of the use of rovas in Europe

In Europe, rovaši are undoubtedly among the most widespread wooden documents. Manuscripts were already used as accounts or records of obligations by the early Germans. The Franks and Alemanni marked debts and obligations on a stick called a *festuca* (Mennin ger 1992: 228). In the past, rovas were known in England, France, Italy, Germany, Austria, Switzerland, in the Scandinavian countries, in Hungary, and their long use among the Slavic nations is confirmed by the aforementioned ..., archaeological finds from Europe. Some preserved archival sources prove that they were in use at least in the Middle Ages. The written and pictorial sources are complemented by material specimens - rovaši, which were in use from the earliest times until the 20th century and are kept by many European museums. It is remarkable that in different parts of Europe there were very similar types of rovaš, which were used in similar ways and for similar purposes.

There is a widespread opinion about rovaši that they were used only by illiterate peasants and were only important in local communities as a document of folk law. However, the preserved sources show that in the European past, the rovaš played a very important role in other environments as well, e.g. in the city and state administration, where they were considered to be invalid documents. In the history of England, there were e.g. very important in the English royal treasury, where rovaš were official state documents or lists. They have been since the 12th century



Tax Collectors from the English Royal Treasury, 15th century.

English Exchequer tallies, 15th century (Science Museum, London).

namely, the treasury officials had an overview of the payment of taxes and other money to the royal treasury in the books and scrolls, and the governors of the counties used them to collect taxes and remit them to the king. Received payments were marked on two-part slips, one part was kept by the collector, the other part was kept by the payer as a receipt. In 1782, rovinces were banned in England, but they remained in use until 1826.

In 1834, the vaults from the royal treasury were destroyed, many of them were burned in front of the parliament building, and the fire engulfed the parliament itself. While renovating Westminster Abbey, they found hundreds of 13th-century rovas used in the royal British treasury, as well as documents and the remains of leather bags in which they were probably kept (Menninger 1992: 236–238). A few examples of rovaše from the royal treasury have survived to this day.

It appears that even in Ireland, the receipt of payments to the royal treasury was marked on rovas. During excavations in Waterford city center in the years 1986-1992, a 24 cm long yew wood awl was also found. It is believed that the scroll contains a record of the annual tax that the mayor of Waterford paid to the royal treasury in Dublin. Part of the rovaš was kept in Dublin and the other in Waterford. The preserved rovaš is in the collections of the Waterford Museum of Treasures. 10



Tax collector (detail), Waterford, Ireland, 13th century.

Tax tally (detail), Waterford, Ireland, 13th century (by kind permission of Waterford Museum of Treasures).

Among the oldest traces of the use of rovašes in the Czech Republic is a record of rovašes in the town book of Olomouc from 1510, which indicates that the city administration used rovašes to record the financial status of individuals, as a recognized bill of exchange or security, in connection with adjudication of debts and with land register transfers. Rovaše is also mentioned in land registers from the 17th century in the municipality of Odrlice in the district of Litovel (Burian 1959: 2–3).

<sup>10</sup> Online source: <http://askaboutireland.ie/reading-room/arts-literature/the-virtual-museum/waterford-museum-of-treas/commercial/tally-stick/> (12/03/2009).

In France, the rovaš is mentioned in the Napoleonic State Code (*Code civile* or *Code Napoléon / Code civil des Français*) from 1804. Article 1333 speaks of the rovaš as a certificate of delivery of goods to customers (Žontar 1940a: 311; Menninger 1992: 231; Ifrah 2000: 66).

Rovaš is also mentioned in Article 25 of *the Code of the Kingdom of Serbia* from 1887: *Bakers, butchers, milkmen, water deliverers, candle holders and the like must prove with a Rovaš - a matrix on which the person who received the item signed or put his seal . Rovaš is complete proof of quantity when it matches with the bust of the accused. Even without a punch, it is complete evidence when the accused refuses to show the punch or has lost it due to carelessness. However, if the defendant proves that he lost the gut by accident and through no fault of his own, then it is left to the municipal court to evaluate such evidence.* (Bogičević 1953: 205; trans. N. Ž.)

In Serbia, evidence by means of a rovaš was still valid as a legal institution in the 1930s (Dolenc 1935: 392). Even in the Imotski Krajina in Croatia, at the beginning of the 20th century, the court considered rovaše as a means of proof (Škarpa 1933: 172).

In Europe, one-part and multi-part (mostly two-part) wooden rovas were used, and their functions were numerous. Let's take a look at some of the most widespread or characteristic uses of rovas.

### Tax collectors

Rovaši played a very important role in Europe in recording various duties to the landowner, church, local and state authorities. Already the Roman writer and scholar Pliny the Elder (\*23–79) wrote about the wooden sledgemoles that the Romans used to oversee the payment of taxes (Bogičević 1953: 204). It appears that such robbers were known both locally and (in some places) nationally throughout Europe.

In the Middle Ages, rovas in connection with the collection of taxes were widespread among the Hungarians. In the 11th and 12th centuries, written lists were used to collect and confirm the payment of taxes, and at the lower levels of the public administration, also rovaše. In the 15th century, a royal order was issued, according to which the village judges from all counties had to add to the written lists every three years also the registers of rovas. The use of rovas in the collection of taxes in the Middle Ages is also indicated by the connection of rovas with taxes, as the term rovaš meant *adó* (tax), *megróvás* tax collection, and *rovó* a tax collector. In the 13th century, the ecclesiastical tithe district was called *kés* (knife), so the name comes from the knife that was used to cut the rovas. It is probably from the vocabulary of the Hungarian state and church administration that the word rovaš spread among minorities and neighboring nations (Ortutay 1981: 375-376).

Stamps were used to record taxes in France: the tax collector marked the amounts paid on a wooden stamp. As already mentioned, they are upo in England as well

used rovaše to indicate the duties paid and the list of income and expenses (Ifrah 2000: 65). Contraststicks were used in the Netherlands .

Even in Bulgaria at the end of the 19th century, every farmer had his own stick - a four-edged rovaš - kept by the mayor. On one side, it was marked how much he had to pay, and on the other, how much he had already paid. Each rod also had ownership markings. In addition to tax rolls for marking the debts of individuals, municipalities also had a collection roll - a debt stick with notches. In 1883, in the village of Pazarel near Sredca, there were about 250 short rova seva and four collection rovaše (Rutar 1891: 447). In Romania, they had a two-part rovaš for each master - the queen was with the mayor, and the cob was with the master. The tax collectors were called *рабожарии* (from *рабож*=rovaš) (Hémardinquer 1963: 146). The Mari (yeremisi) along the middle Volga in Russia also used two-piece tax robes.

The tax collector had one rovaš for each landowner, on which the identifying mark, the number of members and the amount of the tax were engraved. The tax mark was cut out after payment, and the same rovaš could be used for several years (Menninger 1992: 239–240).

Tax evaders were known in central Croatia, e.g. in Draganiji (Vilfan 1944: 110), and they collected taxes in Dalmatia with three-edged swords (Škarpa 1933: 175).

Even in Bosnia during the time of Turkish rule, four-armed tax collectors were known for recording the duties paid. The one-piece rovaš was divided by the village elders with a notch around the stick into as many parts as there were households in the village. They indicated how much tax should be on the corresponding part



Davýni rovaš, Lichtenvoorde, Nizozemska  
(Dutch Open Air Museum, Arnhem).

Tax tally, Lichtenvoorde, Netherlands  
(Netherlands Open-Air Museum, Arnhem).

would an individual homestead pay and how much it is already. Thus, according to the rovaše, they reported on the duties collected to the land lord, *the spahija*. Rovaše was also used by Turkish officials when collecting taxes (Drobnjakovič 1933; Bogičević 1953: 205).

Also from southern Serbia, there are reports of the use of long rovashes, on which the taxes of houses were marked, whereby the signs were cut from bottom to top. In Šumadija, for example, used four-edged sticks, about half a meter long. A specimen of a tax collector from around the face of Pirot, 92 cm long, is kept in the Ethnographic Museum in Belgrade (Drobnjakovič 1933). Even the Serbian term for tax, *porez*, is said to originate from (tax) rovaš or notch (Rutar 1891: 447).

### Logs for marking the work done In Europe,

the results of the work or the number of working days were marked on the logs for the overview of the work done. In Estonia, the pressure worked and the number of working days were recorded on them (Rank 1997: 118); such ruffians were also known in Finland (Menninger 1992: 231). In the 19th century, wooden rovašes were used in the Swiss canton of Wallis; there, too, they indicated the working days that the farmers had done for the local community, and based on the number of notches, payment followed (Pallestrang 2004: 59).

Until the middle of the 19th century, in the English regions of Kent, Herefordshire and East Sussex, wooden rakes were used to check the amount of hops harvested. When the hops ripened in September, they had to be harvested as quickly as possible, so in addition to local workers, seasonal workers were also hired. To record the amount of hops collected, they used two-part registers: nuts with drilled holes were strung on a string by the supervisor, and the corresponding parts were kept by the pickers. The notches indicated the number of meters of hops used, for which payment followed. Of course, the notches on both parts of the robe had to match. In addition to wooden tiles, in England from the end of the 18th to the middle of the 20th century, smaller metal tiles, usually round, were also used for the same purpose.



Hop harvester, Kent, England, acquired I. 1902.

Hop tally, Kent, England, collected in 1902 (Pitt Rivers Museum, University of Oxford).



Metal plaque with marked number of gauges of picked hops, Kent, England, circa 1830-1870.

Hops token with the number of bushels of picked hops, Kent, England, around 1830–1870 (Fitzwilliam Museum, University of Cambridge).

which were usually stamped with the initials of the issuer (owner) and the number of gauges. The Pitt Rivers Museum in Oxford has a collection of wooden hoes and metal plates related to hop harvesting.<sup>11</sup> The Fitzwilliam Museum in Cambridge also keeps a collection of metal plates for keeping records of the quantities of hops harvested.<sup>12</sup>

In Zagorje, Croatia, supervisors (*Spaniards*) made sure that the peasants worked on the property of the landowner, and they had the inspection of the work performed by the hired workers marked on a wooden board (Kotarski 1916: 55–56). In the vicinity of Zagreb, the work done was marked on two-part rovaši: the supervisor marked the working days with notches with a knife, he kept the nut alone, and the sledgehammer was given to hire more workers (Mažuranić 1908–1922: 1264). In Croatian Zagorje, in some places, the supervisor used to mark the farmers' work done with notches on the rovaš, and in the evening he gave the workers tin plates as a certificate. Every three months there was a showdown, where the pro vizor counted the tiles, and the Spaniard counted the notches on his rug. On New Year's Eve, they settled with the landowner (Kotarski 1916: 56). Even in Bosnia, notebooks were used to record the working days of hired workers. Special characters were used to record the work that was done in a whole day, half a day, a third or a quarter of a day (Bogijević 1953: 211). In Poland, a supervisor called a *karbownik* marked the tasks of the workers on a wooden log (Babnik 1883: 91).

### Cloaks as a receipt for received goods In

the Middle Ages, two-piece cloaks were used in Italian monasteries as a certificate that they received money or other goods for safekeeping. The owner had to upon departure

<sup>11</sup> Online resource: <http://england.prm.ox.ac.uk/englishness-hop-tallies.html> (19/05/2009).

<sup>12</sup> Spletni vir: [http://www.fitzmuseum.cam.ac.uk/opac/search/cataloguesummary.html?\\_searchstring=AG='cm'%20and%20\(OB='hop%20token'%20when%20OT='subseries'\)&\\_function=\\_xslt&\\_limit\\_=50&\\_resultstylesheet=\\_imagecs](http://www.fitzmuseum.cam.ac.uk/opac/search/cataloguesummary.html?_searchstring=AG='cm'%20and%20(OB='hop%20token'%20when%20OT='subseries')&_function=_xslt&_limit_=50&_resultstylesheet=_imagecs) (19. 5. 2009).



du to show his part to the thief, that he got back the things he put in safekeeping (Edler in Apostolou and Crumbley 2008: 61).

In many European countries, various craftsmen used two-part rovašas as proof or confirmation that they received material from customers for processing or processing. At the same time, the quantities of received material were marked on the sheets, and they also made it easier to identify ownership after work. Such craftsmen were the most widespread among craftsmen - rollers, dyers, tanners, millers, bakers...

Two-piece rovaches were used by **weavers, rollers and dyers**. In Serbia, dyers used to mark wool received for dyeing with rovashis by tying the nut to the yarn, and the skein was given to the owner as a certificate of the delivered material. When the owner came to collect the yarn, the notches on his part of the roving had to match the notches on the part of the roving tied to the yarn. In the same way, some cloth rollers, who had rolling mills by mountain rivers, marked the unrolled cloth, which they picked up in the surrounding villages, so that the bales would not be mixed up. In some places in the south of Serbia, rollers used rovaše until the middle of the 20th century (Drobnjakovič 1933; Filipovič 1951: 21). In the mid-50s of the 20th century, rovaše was also still used by cloth rollers and dyers in Bosnia (Bogičević 1953: 207).

Rovaše was also used by Macedonian rollers. Their ropes were mostly made of hazel branches, 3-4 cm long. On one half of the rovash, the roller carved a kind of lashing whip, with the help of which he could sew the rovash onto the cloth, and on the other half of the rovash, he cut vertical and diagonal lines, which indicated the weight of the cloth. Oblique for cuts meant 5 kg, vertical 1 kg, and thinner vertical 0.5 kg. Then he cut the stick in half and sewed one half to the cloth, and gave the other half to the owner to



Millwrights, Lika, Croatia, 1920  
(Ethnographic Museum Zagreb).

Millers' tallies, Lika, Croatia, 1920  
(Ethnographic Museum Zagreb).

there would be no errors in the return of the rolled cloth. In more recent times, some rollers began to use metal plates with numbers instead of rovas (Nedelkovski 2002: 125, 127).

The dyers in Bosnia also tied the nut to the cloth, and the owner got the core. When the cloth was dyed, the owner recognized it by matching notches on the nut and from the hip, which also indicated the amount of cloth brought (Delić 1892: 89; Bogičević 1953: 207). In Dalmatia, Croatia, cloth owners sewed a densely hemmed piece of cloth, called *biliška, to the bale*. There were various signs on the piece - a cross, a star, a dot, one or more circles... that indicated ownership. The pieces were in duplicates, so the owner kept one (Škarpa 1933: 177).

Rovaše was used by many **tanners as a certificate of receipt of leather for tanning**. In Estonia, they had two-part rovashes to mark the skins received for tanning. Part of the rovash was attached to the skin, and the other part was received by the owner as a certificate of the skin being given and to facilitate confirmation of ownership after processing (Rank 1997: 118).

**The millers** marked sacks of grain, which the owners brought to the mill, with ropes. Thus, rovaše was used in the Czech Republic at least as early as the 16th century (Burian 1959: 2). Even the village millers in Bosnia had two-part rovashes - one part was tied to the scythe, and the other was given to the owner (Bogičević 1953: 207-208); millers in Croatia did the same.

In areas where there were several mills, each miller marked his mills (Škarpa 1933: 197-180).

### **Invoices for recording debt Invoice**

invoices were mostly used by craftsmen who did not bill their services on the fly, because it was customary to bill the work after a certain period of time, usually weekly, monthly or annually.

In Alsace, rovas were used by village **blacksmiths**. Every time a farmer came to shoe a horse, the farrier cut into the two-piece hoof. The rovaš was the property of the farmer, but the farmer kept part of the rovaš at home in the stable, and the other part of the rovaš, on which the ownership was also marked (owner's initials and house number), was kept by the blacksmith on a string, in a bunch together with other farmers' rovaš. The farmer and the blacksmith settled on the New Year. Bakers also used rovas; farmers who had their own grain, but did not have a bread oven, took the bread to the village baker and brought him flour in exchange. The baker made an indentation on the rovaš for each baked loaf, and at the end of the year, the farmer and the baker, with the help of the rovaš, accounted for the flour and baking (Klein 1981: 161-162).

Back in the early 1970s, rural bakers around Dijon, France, used two-part logbooks to record the number of loaves they gave to individual customers, with the baker keeping the nut and the customer getting the core. Both pieces of rovaš were cut by the baker every time a customer took a loaf of bread. The payment followed on the specified



Baker's bag, England, 17th century.

Bakers' tallies, England, 17th century (Science Museum, London).



Baker's bag, Ballum, Netherlands, 1950s (Nederlands Openluchtmuseum, Arnhem).

Bakers' tallies, Ballum, Netherlands, 1950's (Netherlands Open-Air Museum, Arnhem).

day, e.g. once a week. At the end of the week, they folded the boards, the notches had to match, and the invoice was confirmed. Rovaše was also used by bakers in Belgium (Ifrac 2000: 65), England and the Netherlands.

Two-part rovaše with notches on both parts were used by bakers in Bosnia, under the Turkish administration, both in dealing with people and with the army, which used rovaše to settle stakes

but bought bread. At the end of the 19th century, two-part rovaše were used in Bosnia to indicate the number of Turkish bread given (*asker tain*) and the related debt (Bogijević 1953: 204, 207; Delijć 1892: 89).

In Serbia, bakers used to give bread "on the rovaš"; baker's rolls were four-sided and 20 to 30 cm long. About two-thirds of the queen was removed from the core and kept by the buyer, but the queen remained with the baker. For each loaf that the baker gave to a customer, he made an incision across the two parts of the rovaš, which he folded together. When calculating, they assembled the nut and the blank and counted the notches. When the debt was paid, the incisions were cut with a knife. In some places in the south of Serbia, bakers used rovaše until the middle of the 20th century (Drobñaković 1933; Filipović 1951: 21).

Rovaše was also used to record debts when customers **borrowed money or various goods** that they could not pay when they were taken over. On the rovaš, the Jews marked the amount of money lent with notches, and then the rovaš was cut lengthwise - part of it was kept by the owner, the other by the recipient of the loan. The London Museum (Museum of London) e.g. keeps an example of such a rovaš (made of alder or hazel, 5.3 cm long) from the 13th century.<sup>13</sup> In a similar way, sums of money lent by the church, local communities and wealthy individuals (artisans, merchants) were recorded.

In Visperterminen, Switzerland, wooden promissory notes were used to check the loaned money. The village community had a common fund from which farmers could borrow money. The loan was marked on the *Kapitaltessel*, which the farmer gave to the head of the local community. There was a farmer's mark on one side of the bag, but no debt mark on the other side. Rovaš were strung on a string through the holes at the end of the stick, they were kept until the debt was paid. The same was used for money borrowed from the church (Menninger 1992: 235; Pallestrang 2004: 59).

In the 19th century, Chuvash and Mari (Cheremis) in central Russia also had rovašes for recording borrowed money. Rovaš was cut in half lengthwise, the amount of borrowed money was marked with notches on both parts, and the *zare zala* sign is still visible across both parts. The lender and the borrower marked each part of the rovaš and exchanged them (Ifrah 2000: 66).

The wealthier farmers in Bosnia used to mark the money they lent to the poorer farmers. For each debtor, they had a rovaš with special markings, and the rovaš were carefully kept in special places (Bogijević 1953: 208).

Among the goods, a common object of loan was grain. In Estonia, they had two-part rovaš for this (Rank 1997: 118), as well as wealthier farmers in Bosnia, who lent grain to poorer farmers (Bogijević 1953: 205, 208).

The use of rovaš was very widespread among **innkeepers**, who gave guests a drink called "cho na up" or "na rovaš". Innkeepers in Bosnia used rovaš for this purpose,

<sup>13</sup> Online resource: <http://www.museumoflondon.org.uk/English/Collections/OnlineResources/RWWC/objects/record.htm?type=object&id=372215> (19/05/2009).

coffee shop owners also marked the number of cups of coffee drunk on the rovaš (Bogičević 1953: 207). In the Czech Republic, village innkeepers had an overview of the amount of beer they gave to farmers. Around St. Martin's Day, farmers paid off their debts with barley (Domolvič 1904: 206). In Dalmatia, Croatia, innkeepers also used rovaše to record the fat received and the wine sold (Škarpa 1933: 173).

Similar was the use of rovas by **merchants** who gave customers products "on demand", so e.g. in the cities of Bosnia and Herzegovina. Rovaše for trading with illiterate parties was used by merchants in Sarajevo for such sales, even when they themselves were already literate. Some had certain signs for different types of products. Each customer had his own rovaš at his merchant, and the merchants carved identification marks into it to distinguish them from each other. Some merchants carved their own sign into the rovaš so that customers who bought from several merchants could tell them apart (Bogičević 1953: 206).

### Shepherd's ruffians

In those parts of Europe where they knew common grazing, shepherds had records of the number and ownership of livestock and small animals in the herd, as well as other checks, e.g. on different categories of livestock according to age, sex, milk yield, as well as information on the methods of obtaining milk, cheese, butter, etc. Shepherd's crooks were widespread among shepherds in the Swiss Alps. The shepherds marked the number of cattle in the herd, the number of sterile animals, the number of sheep and goats on them. They also used multi-part records for various data (Ilfrah 2000: 64). They had a special one in the Lötschental area of Switzerland



Mlekarski rovaši, Graubünden canton, Švicarska, 19. stoletje (Austrian Museum of Folklore, Vienna).

Milk tallies, Canton of Graubünden, Switzerland, 19th century (Austrian Museum of Folk Life and Folk Art, Vienna).

a three-robed robe called *the Alpscheit*, a kind of certificate of the right to graze livestock on communal pastures. Along all three edges, parts of the rovash were cut at regular intervals. The peasants kept these scraps of their grazing rights in carved boxes, and the cowherd kept the herders (Menninger 1992: 234). In connection with the common pasture, the rovaš, which determined the order of protection of the cattle returning from the mountain pastures on Michaelmas, and the rovaš for the distribution or removal of cow dung to the valley, were in conflict. In Switzerland, in the 19th century, they had special housekeepers who determined the order of the houses that had to provide food and shelter for the cowherd (Pallestrang 2004: 56, 58).

The shepherds used five- to eight-bladed alder or ash milkers, 15 to 20 cm long. On the rovaš, the owners of the cows were marked with symbols, and below them the shepherd indicated the amount of milk produced by the individual farmer's cows. The milk that was milked daily had to be processed and delivered immediately. Where there were pastures near the village, a farmer came every day to the pasture and made cheese from the milk of all the cows. In order to distribute the cheese fairly, the quantities of milk from the individual owner's cows were written on the rolls. Milk churns were still used in the 20th century (Menninger 1992: 229–230).

Rovas were also used by shepherds in England. Shepherds in the Ceredigion region of Wales used four-sided sheets: the first page marked the total number of sheep, the second the number of lambs, the third the number of castrated rams, and the fourth page the owner's name. Four specimens of such rovavs, about 30 cm long and about 1.5 cm wide, hra



Dairy cow, Harris, Scotland, last in use in 1879.

Milk tally, Harris, Scotland, last used in 1879 (© The trustees of the National Museums of Scotland).



Sheep counting machines, Wales, England, first half of the 20th century.

Tally sticks for counting sheep, Wales, England, first half 20th century (Ceredigion Museum, Aberystwyth, Wales).

not the Ceredigion Museum.<sup>14</sup> In Scotland, rovas were used to record the number of dairy cows. Such a 12 cm long rovaš, which was last used in 1879, is kept by the National Museum of Scotland (National Museums of Scotland, Edinburgh).<sup>15</sup> Also in Sardinia, the owners marked the number of livestock they hoped the shepherd would have on the two-piece rovaš. . Some shepherds of sheep and goats joined together in order to organize their work (grazing, milking, milk processing, etc.) more efficiently. Shepherds who had about the same number of heads of cattle, but who nevertheless measured the amount of milk milked, usually got together. Each shepherd had his own shepherd, *the musròju*, to share the milk. Rovaš had several functions: it was a measuring unit, a device for measuring, a device for keeping records of the amount of milk expressed over several days and a kind of record book of intended and total amounts of milk (Maxia).

During communal grazing, Hungarian shepherds used rovašes to record the number of sheep per female owner and the amount of milk milked. On the four-sided rovaš, the number of milking ewes was marked on one side, the number of barren ewes on the other side, the milk yield on the third side, and the owners' property relations on the fourth side. Individual masters were distinguished by incised crosses (Ortutay 1981: 375–376).

Rovaše was also used by shepherds in the Czech Republic at least as early as the 16th century (Burian 1959: 2). Signs were cut into four sides on a four-sided or walking stick, which also served as a staff. First, the stick was divided lengthwise into fields that belonged to individual farmers, and then for each sheep owner, the total number of sheep or backs, the butter or cheese produced, and the salt that the shepherds gave to the sheep were cut. In the Wallachia region of Moravia, shepherds lived in the first half of the 19th century

<sup>14</sup> Online source: <http://pilgrim.ceredigion.gov.uk/index.cfm?articleid=1692> (19/05/2009).

<sup>15</sup> Online source: <http://nms.scran.ac.uk/database/record.php?usi=000-100-000-143-&scache=5ma8q4b033&searchdb=scan> (11/03/2009).

used rovaše, on which they marked the number of sheep owned by individual farmers, and also marked the milk yield of the sheep. The number of all the sheep they had in the pasture, the amount of cheese and butter given to the owners of the sheep, and the amount of salt given to the sheep by the shepherds were also marked on the rovaš (Domvolv 1904: 207; Kašlik 1943).

Shepherds' rovašes were used in Serbia when it came to communal grazing. Livestock (sheep) owners and shepherds had an overview of the number of animals on the rovaše. The shepherd had a book with as many pages as there were owners of sheep. There was a hole at the top of the collar so that the shepherd could tie it around his waist. Under the hole, he made notches with a razor that indicated the number of sheep of the individual owner, followed by the amount of milk and other things. In some places, 10-cm-long rovaši were used, on which the amount of milk that belonged to the individual owner was marked. In some parts of Serbia, in the 30s of the 20th century, shepherds' rovas were still in use (Drobnjakovič 1933), and in a few places in the south of Serbia shepherds used rovas until the middle of the 20th century (Filipovič 1951: 21). In Macedonia, shepherds used scales to measure milk. Two pri merks are kept in the Museum of Macedonia in Skopje.



Rovaš for measuring milk (Museum of Macedonia, Skopje; photo: Vladimir Bocev).

Milk tally (Macedonian Museum, Skopje; photo by: Vladimir Bocev).

Shepherds in Bosnia also had Rovaše. In addition to those that were similar to the rovaš used by other shepherds, they also knew a special rovaš, which somewhat resembled message sticks. When the farmer sent the boy to the mountain pasture to the shepherd, he gave him a wooden stick with notches, from which the shepherd could tell how much cheese he had to send to the master and which cows he should drive to Sarajevo early (Rütimayer in Bogičević 1953: 209).

### Driving scumbags

Three-piece shovels were used in Vienna for snow removal. The middle part was held by hand by the carrier (coachman), one side part was occupied by the supervisor who was present during the loading of snow, and the other side part by the supervisor who took care of unloading the snow. All three parts were marked with the same number. The number of runs completed was marked with notches on all three parts of the rovaš. The carrier stuck his part of the rope to his boot, and the supervisors put the side parts of the ropes of different carriers on a wire and hung them around their necks. The middle part of the rovaš, which the carrier had, was called *Weibl* (wife/grandmother), and the corresponding parts *Mannl* (man/grandfather).

In addition to the three-part ones, they also used two-part rovašes with the same name



clauses (Haberlandt 1895: 54). In Klagenfurt, rovas were used for the transport of construction materials, and in Trieste, in addition to transporters of construction materials, they were also used by cargo boatmen (Vilfan 1944: 108). The

number of journeys or the amount of material transported was also marked on the rovas by the carriers in Bosnia. In the middle of the 20th century, the rafters on the Drina counted the number of rafts they had lowered down the river with the rafters. At the end of the 19th century, a coachman in the town of ĵajniĵ in Bosnia had the number of bricks that he delivered with a horse-drawn cart written on a cloth he wore on his belt (Deliĵ 1892: 89; Bogiĵeviĵ 1953: 207-208). In Dalmatia, Croatia, sailors used rovas to mark the amount of wine they loaded onto a boat (Škarpa 1933: 176) and the number of logs of wood that merchants handed over to boatmen.

### Many ruffians

In some tasks, rakes were used, on which quantities were marked just for the sake of statistics on the annual production. These include those that were used to count the grain brought to the barn in Poland, or the Brentar sticks, on which the Brentars in Austrian Styria marked the daily quantities of picked grapes. At the end of the work, they were left in the grape pressing room (Pallestrang 2004: 60, 61). Rovaše was also used in Dalmatia, Croatia, e.g. to see the amount of picked grapes and olives (Škarpa 1933: 176).

### Other shovels

It appears that shovels were used in ore mining in Europe at least in the late Middle Ages. Thus, they were used by Saxon miners in Serbia and Bosnia to check the amount of mined ore (Bogiĵeviĵ 1953: 203), and in the 16th century they were also used by miners in the Czech Republic (Burian 1959: 2).



The use of a digger in the mining of ore (Skariĵ 1939, fig. 25).

The use of a tally stick in mining ore (Skariĵ 1939, ill. 25).

In the past, votes were counted on one-piece wooden ballot boxes. In northern Italy, they voted with notches in the ballot paper, e.g. representatives in village communities (Dolenc 1935: 170; Mažuranić 1908–1922: 1265). It was similar in Istria, Croatia. According to Val Vaso's data, in the 17th century, the mayor, representatives of the village community, the town gatekeeper, bailiff, bailiff, blacksmith, etc. were elected in this way. (Vilfan 1955: 116; 1996: 139).

In some European villages, they had rovashes, with the help of which they arranged the order and appearance of the work that all members of the village community had to do (night watch, carrying flags, forest work, ringing the bell...). Many such rovashes were in use in Switzerland in the 19th century. House signs were used to determine the sequence of tasks on the four-sided rovaš, e.g. for the night watch, guarding the cattle in the pasture and when returning from the mountains, for collecting borrowed money from the church, taking care of the village shepherd, carrying the cross and the flag in the procession, etc. The order for the right to a bull and a goat for breeding and baking bread was also determined on the Rovaši (Pallestrang 2004: 58–59). Even in Nugla pri Roj in Croatian Istria, all the villagers had to take care of ringing the bell in the church. As proof of the completed duty, a long stick was circulated, on which everyone cut their letter. The older ones incised the letters in Glagolitic, the younger ones in Latin (Vilfan 1944: 108; 1944a: 246). Polish herders in Bosnia had sticks on which they leaned when walking and marked the number of cattle that caused damage in the field, their owners and the type of damage (Bogijević 1953: 208).

In the Czech Republic, rovas were used in the brewing industry to keep track of the number of beer brews, the measured amount of malt, the amount of beer bought, the issue of deputy beer, beer sold to pubs. So, for example, in Rakovník, as early as 1550, brewer's accounts were settled with rovas, and in Jindřichov Hradec, at the end of the 16th century, rovas were used for brewing barley. Rovas were used to inspect wood processing, e.g. when sawing logs (Burian 1959: 2). Even in Croatia, sledgehammers were used for cutting firewood. 16 Sledgehammers were used in construction; in Ostrava in the Czech Republic, for example, began to be introduced at the end of the 18th century (ibid.).

In the area of the Valais region of Switzerland, there were important rovas associated with water. Namely, the water channels that flowed from the hills were important for the economy there, especially in summer, when the arable land was dried up. Therefore, special irrigation canals were arranged, through which water was diverted to the farmers' fields. Since the water flow was the property of the entire village community, they had to agree on whose fields the water would be diverted to and for how long. The inspection of the right to water (in hours) was carried out at Rovaši. The holes on the four smooth sticks indicated the number of irrigation days, and the individual hole with a string on the tied rowan indicated the number of irrigation hours (Menninger 1992: 235; Pal

<sup>16</sup> An example of such rovas is kept by the Ethnographic Museum in Zagreb.



Vodni rovaši, canton Wallis, Švica, 1705 (Austrian Museum of Folklore, Vienna).

Water tallies, Canton of Wallis, Switzerland, 1705 (Austrian Museum of Folk Life and Folk Art, Vienna).

In some places in the German-speaking part of Switzerland, boys knew about special "St. Nicholas sticks" on which they marked the "good deeds" they had done during the year. On the Eve of All Saints' Day, a staff with notches was shown to Nicholas and, depending on the number of notches, received an appropriate gift. In the southern parts of Alsace, the use of "St. Nicholas sticks" was preserved until the turn of the 19th and 20th centuries (Klein 1981: 163).

In Ireland, in the 19th century, they even had a *bata scoir* in school classrooms when they were trying to eradicate the Irish language and teach Irish children English. The children had a cord with a wooden stick hanging around their neck, and the teacher made a cut on it when the child spoke Irish. And at the end of the day there was a punishment (e.g. eardrum) depending on the number of notches (Coleman 1998: 96; Crowley 2005: 122).

In 1822, the Turkish authorities in Bosnia (according to oral tradition) were supposed to indicate on the rovaš which farmers should be killed in revenge due to the anti-Turkish activities of the Bosnian hajduks. Bosnian women marked the age of their children with notches on the top of horseradish, and farmers used notches on the walls of their houses to mark the age of their children and their growing ancestor (Bogičević 1953: 204, 210-211). In Dalmatia, Croatia, they used rovaše when giving wine and olives, and they also had *prayer rovaše* - sticks with notches and indentations, with which they counted the prayers completed (Škarpa 1933: 178, 170, 172).

Some people also used rovaš for more "private" purposes. According to contemporaries, the Flemish painter Pieter Brueghel (1520-1569) lived in Antwerp with a young girl whom he would have married if she had not had the bad habit of lying.

They agreed that Brueghel would cut a stick for every lie, and if the stick was full of notches, he would not marry her (Menninger 1992: 226).

### Wooden calendars

Some researchers also include calendars or pratikas, which were used by people in the past to mark months, weeks and holidays, among the special forms of wooden calendars. In Europe, wooden calendars were in use from the early Middle Ages and were preserved in some places until the end of the 19th century; did they know such calendars, e.g. in Germany, England, France, Austria, Scandinavia and the Balkans (Graber 1954: 372–373).

Design-wise, two types of calendars dominate in Europe: panels for individual measurements connected by string, and three-, four-, or six-sided bars or slats, often with a hole for hanging on one side. Ole Worm wrote the book *Fasti Danici* about Danish calendars with runic inscriptions already in 1643 (Gavazzi 1930: 332). Wooden calendars were used in Norway to keep track of seasons and holidays. Their use began to decline at the beginning of the 19th century, when printed ko ledars became popular (Haugen 1947: 145). Wooden calendars were also known in Sweden. Also from the area of Austrian Carinthia there are preserved calendars from the 17th century, made of pear wood in the shape of a stick with a handle (Graber 1954).

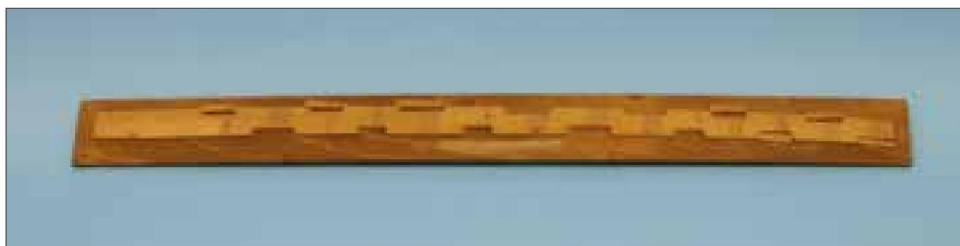
Wooden calendars were used in a vast area from Dalmatia, Bosnia, Vojvodina and Banat to Bulgaria (Gavazzi 1930). South of Tamnište in Serbia, shepherds are said to have used wooden calendars until around 1910 (Filipovič 1951: 122). Until the end of the 19th century, many houses in Bosnia had wooden calendars. They were preserved for the longest time among the shepherds who went to the mountain pastures with their livestock. They processed the hazel branch in such a way that they got a four-sided molding, and teachers, priests and other literate people who knew when the church holidays were or who already had printed calendars helped them in making calendars. The wooden calendars had markings for several months. Parts of the calendar for the past weeks were cut from the stick and thrown away (Grčič-Bjelokosič 1891: 457; Bogičević 1953: 209; Filipovič 1958: 223).

Wooden calendars were also used by shepherds in Croatia. A specimen from the island of Olib, which was used by local shepherds, is kept by the Ethnographic Museum in Zagreb. It is a 74 cm long four-sided batten with 4 cm long sides in cross-section, which has a hanging hole at one end. On each edge are notches for the days of the three months. There are additional markings on the page above the notches for holidays. Given the absence of markings for Sundays and movable church holidays, Gavazzi (1930: 332–333) concluded that it was a permanent calendar.

Somewhat different wooden calendars were known in Estonia: they were made of six (sometimes even seven) thin wooden boards, and on each side of the board there were incised markings for one month (Rank 1997: 19).

## The use of rovašev in Slovenia

The story of the rovaši in Slovenia is strongly reminiscent of those elsewhere in Europe: the rovaši were of similar species, and the methods of use and marking were also similar. Its widespread use in Slovenia is evidenced by archival, written, pictorial and oral sources, as well as preserved specimens stored in museums and with individuals. Vilfan wrote that "the rovaš was the main notebook of our farmer and craftsman" (Vilfan 1944: 106). At the end of the 19th century, rovaši were still in use in many Slovenian places (Babnik 1883: 75), but relatively few of them survived into the following century. Among the main reasons that only a few specimens have been preserved is the decline in the use of many types of rovaš at the end of the 19th and the beginning of the 20th century. The second reason is the fact that the rovašes were destroyed several times after use. But if a stick, stick or board with notches was preserved, it was completely uninteresting for collectors of "antiques". And this is also reflected in our museums. In some Slovenian museums, where they also have ethnological collections, there are no rovaševs at all, and in others only individual specimens. The number of their successors - Roš and Spans - is also modest in the museum collections. For example, they have in the Posavina Museum in Bre žija, some Brentar sticks and two bunches of wine for borrowing wine. In the Provincial Museum in Celje, they have a few roševs, and in the Provincial Museum in Maribor, there is one rovaš. In the Murska Sobota Regional Museum, some spans are kept, in the Ptuj Regional Museum some Brentar sticks and copies of spans. In the Belokranje Museum in Metlika, they have a few bunches of stoneware from the Belokranje neighborhood brickworks.<sup>17</sup>



Rovaš, Leskovec, 1901 (Provincial Museum Maribor).

Tally stick, Leskovec, 1901 (Maribor Regional Museum).

In Slovenian ethnology, the Rovaši have been studied relatively modestly, but some jurists have therefore paid more attention to them. Thus, in 1883, lawyers Janko Babnik and Aleksander Hudovernik first drew attention to the use of rovas in Slovenia and the need to investigate them, when they were dealing with folk law. Babnik wrote: "You can still find raba in many places in Slovenia today, it would be worthwhile to investigate and describe its use in detail" (Babnik 1883: 75). However, they became an object of the Rovas

<sup>17</sup> Rovaši are from Dragomlja vasi, Lokvica, Slamna vasi and Drašičev (Dular 1963/64: 44).

research only in the middle of the 20th century, when many species of roaches no longer existed. In the 40s of the 20th century, jurist Sergij Vilfan began to systematically study rovaše while researching folk law and wrote about it: "Before this interesting legal artifact disappears from our folk life, it is therefore appropriate that we try to write down as much as possible information about its essence, form and use" (Vilfan 1944: 106).

Rovaš can be a branch, a stick, a stake or a wooden plank, for which hazel, linden, spruce, local chestnut, oak, beech, dogwood and willow were most often used in Slovenia. In terms of shape, rovashi are unboned one-piece and boned (or sawn) two- or three-part. One-piece is made from one piece of wood and is mainly used for counting, while with two-part and three-part, a branch, stick or board is pierced, gouged or sawed into two or three parts so that the agreed markings (notches) are visible on all parts.

The rovaš is usually divided in such a way that the entire length is preserved only in one part, for which the term "koklja" is known in many Slavic languages, and for the shorter cut part "pišje", which is not the case in Slovenia (Vilfan 1944: 106). . So far, the research has not revealed whether we have a generally established Slovenian term for a longer part with the hand; Sergij Vilfan took the term *matica* after naming it from Dalmatia in Croatia.

For a cut part, we know the name from Bela krajina - *izolek* (because a part is cut out of a branch or a plank) or *cepek* (because a part is split). The terms *mandlc* (for a hollow) and *vajblc* (for mother) were used by Ljubljana construction material transporters (Vilfan 1944: 106), which are closely related to the names known among snow transporters in Vienna (*Weibl, Mandl*) (Haberlandt 1895 : 54). In some places in western Slovenia, the sledgehammer was called *zrane* by the lottery officials.

### Tax collectors

Most of the time, the duty label holders were one-piece. In Prekmurje, until the beginning of the 20th century, one-piece wooden registers were used to record the submitted duties. Every householder who had to pay taxes had his own ledger, on which the taxes paid were recorded. Rovaš was kept in the house of the (illiterate) mayor (Vilfan 1944: 110; 1944a: 246–247; 1996: 146).

Tax collectors were also in use in western Slovenia, they were owned by individual lords. They were made of one piece of wood, divided into several parts by notches. For you, ýrnotiýe



Tax collector, Prekmurje, beginning of the 20th century (SEM, see cat. no. 2).

Tax tally, Prekmurje, early 20th century (SEM, see cat. no. 2).

it is known for the time around 1900 that the village field guards, *the vardjans*, each had their own stick, on which they carved house numbers with the signs I, V and X, and to each of them information about the number of cattle and sheep and the amount of the debt for the communal tax, which was collected from house to house (Vilfan 1996: 220–221). A tax collector from Prekmurje (cat. no. 2) and an illustration of a tax collector from western Slovenia (cat. no. 21) are preserved in the Slovenian Ethnographic Museum.

### **Rovaši for marking the work done** In the period

of feudalism, two-part rovaši were used to count or prove the work done, and later one- or two-part rovaši were used as a certificate of the work done by hired workers. In the Dolenjska region, in the past, roughly one-meter-long *hazel sticks* were used, on which landlords cut the number of working days (*shifts*) of their tenants; on one side, they cut whole *sticks*, and on the other, *half a stick*. The farm masters kept sticks in the house behind the beam to inspect the work done for them by hired workers - *kaižarj*; they usually went to work 40 days a year. The masters and servants had an overview of the benefits that the servant had received in advance from the master during the year. For each meal that the mistress gave to the servant "on account", they each made a notch on their stick. The master made a cut every working day, and then after each cut the rovaš was wrapped with thread. 18 Everyone carefully kept their part of the rovaš. According to the markings on the sticks, they found out how much the master still has to pay the servant at the end of the contract. 19



Rovaš for counting the working days of the columns, as they used in Goriške Brdy.

Tally stick for counting the workdays of coloni, used in Goriška Brda.

Similar rovašes, *škontrins*, were also known in Primorska, where the masters used them to count the working days of the columns. An incision made horizontally meant a whole day's work, an incision made sideways meant half a day's work, and an incision around the rovaš indicated the seventh day or week. On Šentviška gora, farmers marked the number of working days of hired workers with a string. For each worker, the master had a string, *a twine*, on which they made a knot for each working day. 20

In some places in Haloze, winegrowers used to mark working days on a one-piece, approximately 30 cm long wooden rod by making a long *zare* for the whole day's work

<sup>18</sup> Teren 5, Šentvid pri Stijni, 1950, vol. 20, p. 36; Vol. 21, p. 29 (SEM Documentation Section).

<sup>19</sup> Plot 5, Šentvid pri Stijni, 1950, vol. 21, p. 29 (SEM Documentation Section).

<sup>20</sup> Teren 11, Cerkljansko, 1954, vol. 18, p. 75 (SEM Documentation Section).

zo, but shorter for part of the day. When paid, this was proof of the work done, although it did not allow for the employer's control (Vilfan 1944:109). Similar one-piece trenches for recording days were also used in the vicinity of Idrija (Vilfan 1996: 144). In Porabje (Gornji Senik) at the beginning of the 20th century, one-piece sackcloths were used: workers who helped with the harvest used them to mark the number of harvested sheaves with notches in the form of lines and crosses, and were paid based on the notches (Kozar - Mukij 1996 : 134).

In Istria, they used rovaše in the form of sticks to mark the completed duty of ringing the bell and guarding the clock in the tower. "Rovaš zvonarjev", as he was called, went to the house whose turn it was to ring the bell (Grašij 1940: 419; Vilfan 1944: 247; 1996: 146). On Ospos, rovas were also used by the village watchmen, *guards*; on a stick they wrote down the damage caused by people or domestic animals in vineyards, fields, forests.<sup>21</sup>

### ***Spans - the successors of rovashes for marking the completed***

**work.** A modern form of rovash for marking the completed work is a metal *span* (also called *spen*, *spen* or *pleh*). The term comes from the German word *Span*, ie. a plank or a cod, which confirms that it is the successor of the Rovas. The word is taken from the Hungarian *ispán* (steward), 'mayor', which is borrowed from the Slovenian word *župàn* (Bezljaj 1995: 95; Vilfan 1996: 143; Snog

The word span has several meanings in the Slovenian language: 1. it is a supervisor on the estate, chosen by the landowner from among the oppressed; 2. is the head of Srenje or the village mayor; 3. is a metal plate as a certificate of completed work (Bajec 1985: 1097). Špan is also a leather certificate that was handed over by a tanner to a client when she brought him a skin to be tanned (Kelemina 1933: 86), or rather it was used to identify the prepared skin. Spanish in the sense of a supervisor on a landowner's property are e.g. known in Dolenjsko. There was a man in every village who collected the farm tax from the landowners and made sure that the farmers went to the mill and paid the tithe. He had a *parson's field in use*, and his entire property was called *spania*.<sup>22</sup> Špan was originally a "commoner", i.e. a man free from taxes and tithes, and was at first appointed by the lord of the land, and later elected by the villagers. In connection with the expression, household names *such as Špan, Špaj, Španjček, Špank* etc. are quite common.<sup>23</sup> In Slovenia, the phrase *v spá novija (u špon / u spánovijo)* is also known, which means sharing or co-ownership. For example, farmers *in Spain* had a meadow, a well, a threshing floor, a harrow, a tractor,

Špan, as a metal plate for viewing completed work, was primarily used in Slovenske gorice and Haloze. The master gave the worker a span at the end of the working day, or as a certificate of work done and as a basis for payment.

The tile was most often made of iron sheet, which is why it was also called *tin in some places*, but it could also be made of galvanized iron, copper or brass sheet. They were different

<sup>21</sup> Field 4, Marežige, 1950, vol. 14, p. 25 (SEM Documentation Section).

<sup>22</sup> Teren 5, Šentvid pri Stijni, 1950, vol. 20, p. 42 (SEM Documentation Section).

<sup>23</sup> Plot 5, Šentvid pri Stijni, 1950, vol. 20, p. 44; Vol. 22, p. 14 (SEM Documentation Section).



facial shapes: square, rectangular, triangular, rhombic or hexagonal, while the Spanish ones are "whole", "three-quarter" and "half". Square or rectangular tiles mean a whole day's work (full span), but when a part of the tile is cut off, it means that it is work done in three quarters of the day (three-quarter span). Triangular tiles indicate work done in half a day (half span). The owner's initials and house number, as well as the consecutive number of the span, are engraved or stamped on the metal plates. Each span has a hole at the top, in the left or right corner, so that the workers could string them on a string, string or wire. Spanners were usually made by local blacksmiths and later tinsmiths (Vodan 2000: 49).

The masters gave the spans to hired workers after the work was done (*campers*, *heavy workers*, *kořarij*, *small želars*), they were widespread among winegrowers in Slovenske gorice and Haloze. They served to count working days and indirectly to pay hired workers. They were used to record the whole year's work of hired workers, specific work or work done at a certain time, additional work of winegrowers, and some owners used them only occasionally, when they had neither money nor goods to pay the workers with them (Stanek 1940 : 354). Otherwise, the owners had an overview of the work done and the delivered spans recorded in special accounting books,



A three-quarter and full span of a farmer from Slovenske gorice, first half of the 20th century (SEM, see cat. no. 176 and 177).

Three-quarter and full farmer's tokens from Slovenske gorice, first half 20th century (SEM, see cat. nos. 176 and 177).

and the workers kept at home sets of spans of individual masters. In the event that the worker lost some money, it was also when he was paid (Stanek 1940: 354; Vilfan 1944: 109; 1996: 143–144).

The hired worker received one span for each working day. In Slovenske Gorice, one day meant at least 10 hours of work. If they worked less, they got half or three-quarters of the span. For the most difficult jobs, they got a span and a half a day.

The workers also collected more than a hundred spans a year, which were accounted for on New Year's Day (on beating day). The settlement took place at the owner's home. During the inspection, he added up the work done (number of trips, hours of plowing, etc.) and the amount of goods he gave him (number of pigs, amount of potatoes, grain, etc.) in the worker's notebook, and calculated this into working days (heavy<sup>24</sup>) . . The worker put all the collected spans on the table, the farmer

<sup>24</sup> *Weight* was also a unit of measurement for the measured values of a piece of work.

but he checked that they were all his. In this way, they quickly found out whether the master's favors and goods correspond to the number of spans - that is, whether they are *equal* or *not*. If it appeared that the master still owed the worker something, he paid the difference in money or goods (pigs, corn, grain, etc.). But if the debtor was a worker (which apparently happened quite often in some places, as the masters liked to overestimate their contribution), the debt was carried over to the next year and the worker started getting new spans only when the debt was paid off. The autumn pig was e.g. worth eight, and 10 spans in the spring, transport within the municipality was one span, outside the municipality two or more; an hour of plowing was worth one span. In exchange for the Spanish, the farmers also gave leaves and firewood *to the poor*. Settlement was most often concluded with a feast (Vodan 2000: 49–50). Before the Second World War, for example, in Spodnja Volijina, 15 *tins* in winter was considered a small pig, while in summer the winegrower deducted 10 *tins* or *taverh* for it.

In Prlekia, they used spans in the wine hills on the estates of townspeople, probably also farmers. Landowners allowed small farmers to rake leaves, cut grass, etc. on their land, and in return they had to be available for work.

The master or manager gave the daykeeper one span for each working day, and two if he did not eat with him, and wrote down their numbers. At the end of the agreed work, the Dninar presented the spans as proof that he had served them (Vilfan 1944: 109).

In eastern Slovenske Gorice, they used Spanish to refer to the work of winegrowers in Gorice (spraying and digging vineyards, driving and carrying manure, etc.) and to the owners of the property (felling trees, transporting firewood, etc.). For each job done, the vintner received one span, and at the New Year he presented the collected to the owner of the vineyard and received payment in money or goods (grain, firewood, pig) (Koren 1967: 100). Some hired workers, e.g. winegrowers from the vicinity of Sveti Jurij ob Ščavnica also had an overview of their work: they wrote down the name or surname of the owner, the number of working days and the type of work performed in notebooks. Mrs. Darji also had a kind of work book in which they recorded the work they did for hired workers (e.g. plowing, transporting manure, etc.).



A notebook with a record of the work done (*a book for writing down difficulties*), which was kept by the winegrower Kristina Ÿagran from Źenik in the years 1947–1959 (Provincial Museum of Murska Sobota; photo: Marko HabiŸ).

Notebook with records of work done, kept by the wine-grower Kristina Ÿagran from Źenik in 1947–1959 (Murska Sobota Regional Museum; photo by: Marko HabiŸ).

In eastern Slovenske Gorice, the Spaniards used to denote the work of winegrowers in Gorice (sprinkling and digging). The settlement was at New Year's. If the vintner had more spans than the goods were worth, the master promised him that he would get a pig in the spring. In Grabšinci, for example, a vintner who had "in good" more than 36 spans received firewood or grain from the owner, for 12 spans 3-4 wagons of unsawn firewood, for 10 spans a pig, and for 7-8 spans 50 kg of grain. The same was true in Kutinci, where a viticulturist got firewood for 32 spans, fodder for 30 spans, and a field for rent for 20 spans.

Some winegrowers also tied and braided the vines that grew near the master's house. For the aforementioned work, they were given spans, which were settled in kind on New Year's Eve. The Spaniards were also paid for felling trees in the forest and for transporting firewood to the master's home. In some places, they confirmed the transport of manure and the fertilization of vineyards with the Spaniards (Koren 1967: 99–100).

As mentioned, a span is also a unit for work performed, or a working day that an individual had to serve for some service. In the wine hills in Prlekija, there are, for example, landowners on their property allowed small farmers to rake leaves, mow, etc., and in return the farmer had to serve a certain number of working days - *spans* (Vilfan 1944: 109). The Spaniards, in the function of a kind of means of payment<sup>25</sup>, were preserved in some places in Slovenské gorice until the 1970s (Vodan 2000: 48).

### **Ballots and ballots** It is clear

from Valvasor's records that in the 17th century in Istria, the mayor was chosen with ballots. The members of the local community first verbally agreed on which of them would mark the votes for mayor on a wooden stick. A trustworthy chosen one is a three-pronged glitter stick. He walked with her from one member of the neighborhood to another, and they whispered to him which of the twelve candidates they were voting for. He marked the votes with *zare zams* on certain parts of the stick that belonged to individual candidates. Members of the neighborhood were of course not allowed to know which candidates the individual parts of the stick belonged to. The one who received the most votes became mayor, and the second and third became deputy mayor. In the 18th century, the landowner had to confirm the results. In the past, they voted in the same way for the town gatekeeper, court servant, churchwarden and municipal blacksmith (Vilfan 1944: 107-108). With the introduction of municipal administration and municipal elections, the methods of elections also changed, so in the middle of the 19th century, the electoral rovas lost this role, and here and there they only rebelled for the elections of village elders and field guards (Vilfan 1955: 120).

In some places in Primorska, the mayor was also elected with the help of beans, e.g. in Ospso before the First World War, otherwise the elections of mayors were replaced by rovas

<sup>25</sup> A means of payment in the form of round or square tiles is also known in the welding industry. From the 16th century to the end of the 18th century, the lords of Fužinar paid the nailers with their own money. Each publisher stamped his initials on the tiles, and the nailers could buy the tiles from the shops designated by the master. Examples of "payment" tiles are kept by the Blacksmith's Museum in Kropa.

elections with ballot papers,<sup>26</sup> and in Mareziga near Koper they also voted with straws - of the three candidates, the one who drew the longest became mayor.<sup>27</sup>

In the Istrian village of Podgorje, members of the boys' community elected their mayor and two to three vice-mayors in a similar way to mayors in the past. There are voices



Trirobi rovaš for the elections of the mayor and deputy mayors, as used in Slovenian Istria (drawing after Vilfan 1996a: 163).

Three-edged tally stick used in the election of mayors and deputy mayors in Slovene Istria (drawing after Vilfan 1996a: 163).

collected by 'cutting them on a stick'. First, the boy community chose a trustworthy boy to tag votes. He prepared an approximately one-meter-long glitter stick, which had a handle on one side, and he cut the other longer part so that it was triangular in cross-section, or had three edges. To make it easier to tell them apart, he secretly marked one edge of his hand with a small cross, which he covered with his thumb during the elections. He himself had to know exactly which candidate belonged to which part of the stick, and of course the other boys were not allowed to find that out. He walked from one boy to another with his handkerchief, and each one whispered in his ear the name of the one to whom he had given his vote. He cut all the cast votes on the corresponding part of the stick. It was forbidden to vote for oneself, and voters who were too loud were punished. When the votes of all those present were collected, they were counted. The one with the most notches or votes became the mayor of the boy's community, and the second and third became the deputy mayor. This is how the mayor of the boys' community was chosen in Podgorje until the First World War (Vilfan 1944: 107–108; 1955: 116–117; 1996: 138–140).

The Rovaši also played an important role in the litigations that were heard by the people's courts (Dolenc 1924: 183); there, in addition to witnesses and local tours, witnesses could also be present as evidence. The first reports on the use of ballot boxes in Slovenia date from the 16th century. At that time, verdicts were announced with the help of rovas in Prekmurje (Dolenc 1935: 170, 480), and they were also used by people's courts in Istria, where civil cases in smaller areas were led by mayors. The mayors, representatives chosen from the local population, first led the discussion, then summarized its essential content and presented two possible solutions. *Judges* (individuals who enjoyed a special reputation among the members of the community) decided between the two proposals by secret ballot. The president of the court voted in favor of one or the other solution

<sup>26</sup> Field 8, Kobarid, 1951, vol. 2, p. 19 (SEM Documentation Section).

<sup>27</sup> Field 4, Marezige, 1950, vol. 15, p. 14 (SEM Documentation Section).

cut to certain parts of the rovaš. Of course, there could have been fraud in the marking of votes, which is why the provincial estates of Carniola (e.g. the estates of Bled) complained to the ruler about this way of functioning of the peasant judiciary in 1528 and even later. In the 17th century, Valvasor also criticized the peasant judiciary and voting records, called *wooden records* .

*No one can be expected to litigate in such irregular justice before the farmers and mayors, who pass judgments on the robasch (Robasch), because the farmers and serfs of these parts adhere to this order: when they want to judge, the mayor indicates, or whoever has judge's rod in hand, two paths to the bystanders, of which they decide on one and judge. In doing so, the one who holds the judicial rod in his hands cuts the choice and judgment of each individual to pieces. The party that has more choices or votes wins the case. From this your royal majesty may know: If the mayor or appointed judge wills, he will so fit the case of that party he favors that the bystanders will sit down and give that party their vote.* (Valvasor, cited in Vilfan 1996: 138)

Despite the complaints and the possibility of abuse, the ballot papers were still used afterwards. For example, they were among the Venetian Slovenes in the Nadiža valley, it was in use until the middle of the 19th century: when the owners or members of the neighborhood had to decide between two proposals in case of minor disputes or when voting on common matters, they made notches on the two ends of the pole (Babnik 1883: 75; Vilfan 1944: 106–107; 1996: 137–138). Rovaše is mentioned in some court records, for example records of Vinogorsk disputes and records of the Metli city court from the 18th century (Vilfan 1944: 108).

### **Rovaši as a receipt for received goods**

shorter two-part wooden rovaši, craftsmen - weavers, rollers (*valharji*), bar varjis and millers - marked the material received for work, with one part of the rovaši held by the customer, and with the corresponding part, the craftsman marked the received material (Vilfan 1996: 141). Most of the time, the nut was kept by the craftsman, and the customer got the core. The receipt was not only a receipt for the delivered material, but with its help they could also have a list of quantities for the processing of the received material, and after processing, the owners could easily identify their goods with the help of the receipt.

**Weaver's ropes** were about 5–10 cm long, wooden and two-part. The weight of balls of wool, flax, etc. brought to the weaver was marked on them. yarn. The weaver put part of the rovaš into the balls he had brought, and gave the other to the owner. When he wove the fabric, he stuck a wooden nut into it. The farmer knew which cloth was his by the corresponding hole.

Until the First World War, the woven goods were taken to cloth weavers or rollers, who in rolling mills (shoes) housed woven woolen and linen fabrics into cloth or roma fabric.<sup>28</sup> Even the rollers used two-part **rolling mills** (cat. no.

<sup>28</sup> The cloth is woven with woolen yarn, and linen is added to the rag.

18, 23, 27). The nut was attached to the received fabric, and the owner received the blank as a certificate for the delivered fabric, and with it it was easier to identify it after processing, as it shrank during rolling.

Rovaše were used **by dyers** of wool, yarn and fabrics, and some also printed fabrics. When the farmers brought wool or yarn to the dyer, the dyer would mark the amount of material delivered on a two-part sheet. The owner got the hole, and the dyer marked ownership on the nut and attached it to the delivered material with a wire. When they are the owners



Tkalski rovaš (illustration), Suhorje (SEM, see cat. no. 22).

Weaver's tally (illustration), Suhorje (SEM, see cat. no. 22).

when they came to get dyed wool or yarn, they recognized it by the associated robe (Žontar 1940a: 311). It was similar when the fabric was brought in for dyeing, except that in this case the dyer attached the nut to the fabric.

Weavers, rollers and dyers mostly used sticks sharpened on one side, on which they could also write the surname or name of the owner. They were stuck in a ball or fabric. Weaving and rolling (hitchhiker's) rugs were made in several ways. They made notches in the wooden stick and then butchered part of the stick, or they used sticks of the same length, half butchered and consistent. In western Slovenia, rolling pincers were used from a wooden board, which was cut in the middle on the side, then the two pieces were folded and notches were made across both. The same was the use of two separate sticks, on which they made the same incisions (e.g. V and X), one stick was stuck in the wool, and the other part was handed over to the owner. Markings on sticks sometimes also indicated weight



Valjarski rovaš (illustration), Barka (SEM, see cat. no. 27).

Fuller's tally (illustration), Barka (SEM, see cat. no. 28).

of material received in pounds; so, for example, weavers in some parts of Dolenjska used to mark the received wool.

After the First World War, the number of weavers, rollers, dyers and printers fell sharply in order to promote the cheap products of the textile industry (Kobe - Arzenšek 1968: 20), as itinerant peddlers even went to more remote rural areas to find factory-made and printed goods (Makarovič 1974: 60). However, for a surprisingly long time - until around 1950 - weaver's ropes were in use in some parts of north-eastern Slovenia (Vodan 2000: 48).

Similar to weavers, rollers and dyers, millers used two-part wooden rakes: one part of the rake was attached to the bag of grain received, and the other part was given to the owner so that he could determine his flour after grinding. The quantities and types of grain brought were also marked on miller's ropes.

### ***Roši - the successors of rolling and dyer's roševs*** In

in addition to the marking of goods received for work on two-part wooden roševs, the use of metal plates - roševs, which always had a duplicate, was also widespread among the rollers, dyers and printers of goods. Roš (also rož) comes from the word rovaš or is its synonym: *na roš* (on account); *I do roš* (I vote) (Bezljaj 1995: 200). Even in Glonar's *Dictionary of the Slovenian language*, roš and rovaš are synonyms (Glonar 1936: 341).

The craftsman tied or sewed one tile to the received goods or manufactured goods, and the owner received a duplicate as a confirmation that he had handed over the goods and that he could more easily recognize the goods after processing (cf. Kotnik 1949: 15; Kobe - Arzenšek 1968: 19; Makarovič 1974: 59). The dyers also had a list of the goods received in a special notebook: in it they wrote down the marks on the rovings, the names or surnames of the owners of the goods and their wishes regarding dyeing and printing. In the Pirjeva paint shop in Kranj, for example, introduced regular bookkeeping at the end of the 19th century (Kobe - Arzenšek 1968: 19). Such labeling and inspection of received goods was known in all European dyehouses (Dular 2000: 33).

The roshes were reusable. When the dyer returned the dyed fabric to the customer, he used the rosch he removed from the fabric and the corresponding rosch he received from the owner of the goods on the next customer. It is not possible to say with certainty when metal roši began to replace wooden rovas in Slovenia, but they were certainly first used by larger dyers living in cities. The oldest roš kept by the Slovenian Ethnographic Museum dates to the end of the 18th or the beginning of the 19th century and is from Pirjeva barvarna in Kranj (cat. no. 171).

The roshes were made of different materials, different shapes and with different markings. Many times they were made of brass, copper or iron sheets of various thicknesses, which were sometimes galvanized on both sides or on one side. They were the most common

round, square or rectangular, rarely rounded on one side or drop-shaped.

Square and rectangular tiles usually had cut corners. The roš had a hole or two, through which it was tied or sewn to the fabric. The holes were most often round, less often quadrangular (they can only be found on the oldest examples of roše kept by the Slovenian Ethnographic Museum). If the rosh had only one hole, it was most often at the top, less often on the side, if there were two, they were on the left and right edges or above and below.

Letters and numbers were stamped on the tile with a stamp, most often the initials of the dyer's name and surname, less often just the initials of the surname. A number was stamped below the initials. Some dyers only marked their roshes with imprinted numbers, which is why they were called *numera in Styria*.

<sup>29</sup> In addition to the initials of the first and last name of the dyer, some dyers' shirts also have the initials of the places where they went to fairs until the First World War. Such markings were useful for rollers and dyers above all in cases where goods were returned to their owners right at the fair. Thus, for example, roller Ivan Keber on St. Ahaca (on June 22) came to the fair in Šoštanj, where he handed over the rolled goods to the owners upon presentation of the roš-duplicant (Kotnik 1949: 15). The dyer Hofbauer from Vitanje also returned rolled and dyed goods to some farmers at fairs.

The roši of the farmers who received the goods at the fair in Dravograd were marked with the letter D, those from Mislinja with K and from Oplotnica with B.<sup>30</sup> Exceptionally, there were also other signs on the roši, e.g. an asterisk (\*), an equal sign (=) or a dash (–) in the middle of a row. The meaning of these signs has not yet been fully explained. The star on the dyer Hofbauer's roshes from Vitanje marked the goods which



Roš and its counterpart from Hofbauer's paint shop, Vitanje, 1st half of the 20th century (SEM, see cat. no. 51 and 52).

Token and its double from the Hofbauer brewery, Vitanje, 1st half 20th century (SEM, see cat. nos. 51 and 52).

<sup>29</sup> Teren 20, Vitanje, 1963, vol. 1, p. 16 (SEM Documentation Section).

<sup>30</sup> Teren 20, Vitanje, 1963, vol. 1, p. 1–15 (SEM Documentation Section).



it was the dyer's property.<sup>31</sup> In addition to the goods that the dyers received from the farmers for dyeing, some also bought them, painted them and sold them at fairs (cf. Ma karovič 1974: 64).

The tanners gave their customers a piece of leather for the receipt of the leather for tanning, which in some places was called *Span* (Vilfan 1944a: 247; 1944: 109).

### **Rovaši for marking debt** In the

past, rovaši for recording debts, these *calculation sticks*, in goods or money, were very widespread in Slovenia. This type of rovaš was wooden and mostly two-part. The two-part ledger allowed the creditor to review his debtors and their debts, while the debtor also had an overview of his debt. The two-part rovaš prevented fraud from both sides, both the creditor and the debtor; the nut was always kept by the creditor, and the kernel by the debtor. Rovaše were used by merchants and some craftsmen (innkeepers, bakers, butchers, millers, lime-makers) to record debts or goods given in advance or work done, which were billed at an agreed time (e.g. monthly, annually). In Bela Krajina, they used to have such roaches in neighborhood brick houses.

The first mentions of Rovaše with marked debts are from the 14th century and refer to miners and smelter workers, and they are also mentioned in mountain lawsuits and records of the Me tliška city court from the 18th century. The oldest record of rovaš as promissory notes is in the Jeseniška mining order from 1381. Among the provisions on workers, it mentions, among other things, the calculation of indebtedness (per rovaš) of workers to employers. The foundry workers also borrowed goods on the rovaš, which could be quite dangerous for them. Over-indebtedness was coming. This is how it supposedly happened in the 16th century, that the workers "on the loose" received so much living that they did not receive wages in money for fifteen years. In the event that the worker lost his part of the rovaš, the master's rovaš was valid if he swore to it (Vilfan 1996a: 191, 300).

**The innkeepers** used the innkeepers to check the debts of the drinkers who were drinking on the up. If the drinker couldn't pay, the innkeeper took a wooden stick or board and marked the amount of drink on it with notches, then broke the stick, gave half to the debtor, and kept the other half. At the time of the first debt, the innkeeper also cut the debtor's house number on a stick or board, or the rovaš indicated in some other way that he knew whose unpaid drink it was. The innkeepers usually pierced their part of the rovaš, as they kept them hanging on a string or wire in bunches. When the debtor wanted to borrow new quantities of drink, he and the innkeeper assembled the nut and the shank and relabeled both parts. But when the debtor paid his debt, the innkeeper gave him his share of the rovaš (Hudovernik 1883: 5), cut off the debt or destroyed the rovaš. Similar

<sup>31</sup> Teren 20, Vitanje, 1963, vol. 1, p. 1–15 (SEM Documentation Section).

rovaše was also used by merchants and various craftsmen when customers did not promptly pay the bill for the goods sold or delivered. Even in these cases, the nut was always kept by the creditor, i.e. the one who sold, and the gut by the debtor (Vilfan 1944: 108; 1996: 141).

Rovaša in the shape of a square stick and about one meter long used limestone  
ji to review the amount of lime delivered.<sup>32</sup>

Two-piece, sometimes also one-piece, rovaše were used to record debt in **Belo Carniola neighborhood buildings** (*churches, houses, cellars*), which usually stood near branch churches and were the property of the village community. When they were founded, the members of the village community collected stocks of wine and, in some cases, grain, and both were sold (also outside the community) or lent to members and the debt was marked on the rovaše (Žon tar 1957: 78). The members of the neighborhood borrowed wine during major agricultural tasks (mowing, harvesting, threshing), when they ran out of it at home, as well as on Sunday afternoons, when they gathered in the brick house. They borrowed grain during bad harvests (Dular 1963/64). Most of the neighborhood brickyards stopped working between 1880 and 1890 due to the vine aphid that destroyed the vineyards, only a few of them survived until the Second World War. After the war, some resumed their activities; in the 1960s there were nine of them. Instead of rovašev, debtors' books began to be used for loan records (Dular 1994: 171–172). Today, only the neighborhood in Drašiji is still functioning, which in 2008 was connected to 65 winegrowing families.



Neighborhood brick house in Drašice, 2008 (photo: Nena Židov).

Neighborhood wine cellar in Drašiji, 2008 (photo by: Nena Židov).

<sup>32</sup> Teren 12, Brkini, 1955, vol. 20, p. 18 (SEM Documentation Section).



A bunch of robbers in a neighborhood brickyard in Drašiji, 2008 (photo: Nena Židov).

Bundle of tally sticks from the neighbourhood wine cellar in Drašiji, 2008 (photo by: Nena Židov).

The neighborhood masonry was managed by two or three church key-keepers (*cekmeštris, checkers, churchmen*), who were elected by the villagers. Their tasks also included a review of the loan. Farmers who borrowed wine had to return it at a new harvest with a fifty percent markup (*return at one and a half times*). The farmer had to return a firkel and a half of must in the fall for every firkel of wine borrowed. They also sold wine to non-members, wine merchants and innkeepers. Community members also returned the grain at harvest with a fifty percent markup. Grain was borrowed in some neighborhood brick houses until the First World War. From the obtained difference, the members of the neighborhood paid the costs of maintaining the branch church, the village roads, the funeral expenses of the members of the neighborhood and helped the poor (Dular 1963/64: 41–42, 47, 50).

Church locksmiths used two-piece or one-piece keys. If they had wine and grain in the same brick house, they had special rovashes for them, and in some places (e.g. in Dragomlja vas) debts for wine were written on one side of the rovash and debts for grain on the other. Izkolek always got the debtor, and the two witches kept the key on the wall in the brick house, strung in a bunch of nuts (Žontar 1957: 79; Dular 1963/64: 44). All rovashi had a hole at one end so that they could be collected on a string, wire or willow branch (*bekev or mekev*) (Vilfan 1969: 128), tied to a bow.



A bunch of wine-borrowers, Bela krajina, end of the 19th century (SEM, see cat. no. 42).

Bundle of tally sticks used in lending wine, Bela krajina, late 19th century (SEM, see cat. no. 42).



General meeting of the neighborhood, Drašiji, 1974 (SEM documentation department; photo: L. Struna).

Neighbourhood assembly, Drašiji, 1974 (SEM Documentation Department; photo by: L. Struna).

The locksmith always had a few sticks ready in the masonry. The first time he borrowed wine, he marked the quantity (number of spritzes) on the stick and split the stick into two parts. One part was left in the masonry and the locksmith wrote the debtor's name, house number or marked it in some other way. He tied all the halves that remained in the masonry and hung them on the wall. The farmer took the other part of the wine home and brought it to the brickyard when he wanted to borrow wine again. In this case, they put the two parts together with a locksmith and made new notches. When the farmer repaid the debt, both parts were destroyed or the locksmith gave his part to the debtor (Lokar 1912: 19).

In the eastern Bela Krajina, they also used one-piece rovashes, approximately 30 cm long and four-cornered stakes made of oak, chestnut or oak, which were prepared by a locksmith or a member of the neighborhood. One-piece locksmiths demanded greater trust in the locksmith, since the debtor had no proof. The locksmiths had a hole at the top end so that the locksmith could string everything on a string, string or wire and tie them to a shiny bow (*locenj*), which he hung on the wall. He marked the ownership of the rovas by carving (with *peasant numbers*) or writing (with a pencil) the house number on the top of the rovas. Instead of numerical markings, the stakes were only cut differently at the top for recognizability.

Rovašev were used not only when borrowing wine, but also during the autumn harvest of must, when the locksmith hung a bunch of rovashevs over his shoulder and marked the amount of must received on the corresponding rovashev at each house. With the gradual and at least partial literacy of the people after the Second World War, the debtors' books were completely replaced by the debtors (Dular 1963/64: 43–44, 53). In the basement of the only still functioning neighborhood in Drašiji, there is still an arch with rovaši hanging on the wall, and visitors are also introduced to its use.

### Shepherd's ruffians

Rovas were also used by shepherds, especially during group grazing. The total number of livestock or the number of livestock owned by an individual owner was marked on a one-piece rovas, *also called a shepherd's wood*. Such rovaši were used e.g. in Podkoren, a specimen from there is kept by the Slovenian Ethnographic Museum (cat. no. 41). In the case of joint grazing, the amount of milk milked was also marked on the rova, but if they had a joint cheese-making, they used one-piece rovaš to indicate the amount of milk that the livestock gave to the female owner, and on this basis the cheese was distributed at the end of the grazing season. These data mainly apply to the end of the 19th century, but they were probably used for these purposes



Rovaš for measuring milk, as used in Slovenian Istria.

Milk tally used in Slovene Istria.



Rovaš for marking the number of livestock, Podkoren, 1880 (SEM, see cat. no. 41).

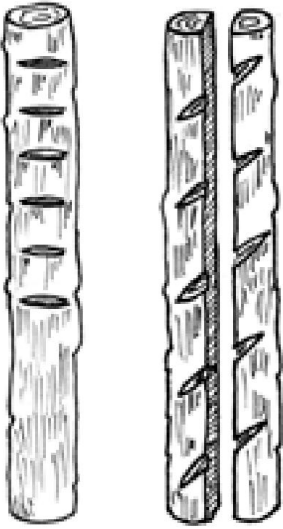
Tally stick for recording the number of cattle, Podkoren, 1880 (SEM, see cat. no. 41).

already in the Middle Ages (Vilfan 1944: 110; 1996: 146, 382–383; 1996a: 245). They also had rovaše for measuring milk in Istria, where one notch meant one *pound* (33 dkg).

### Driving scumbags

Until the middle of the 20th century, driver's registers were used to record the number of journeys and thus indirectly also the quantity of delivered goods (building materials). In rural areas, they were used to indicate the number of hauls of gravel for road repair. In Ljubljana, the driver's rovaš was called *rubežen* and *skontrino* (Italian: *scontrino*); *schontrin* was probably brought by the Friuli, who were engaged in construction. Ljubljana hauliers, who transported peat from the Ljubljana Marshes, marked the number of journeys on a rope, which the driver stuck to his boot. Around the end of the Second World War, driver counters were used in construction companies in Ljubljana to count the journeys made by hired carriers. Driver's racks were made from sawn boards of different shapes and from different wood. In order to differentiate between individual drivers, they used a chisel to separate the burr from the nut with different twists or cut it from the handle at different angles. Later, the driver's name was also written on both parts with a pencil. The nut was taken by the driver and stuck in a tin ring on the wooden rail of the wagon, for a shoe or for a horse. The second part of the rovaš was owned by a *polisher*, a representative of the company that managed the construction. Each brought wagon was marked by a company representative by folding the two parts of the wagon and making a notch with a knife or saw. At the time of payment, the representatives of the construction company counted or compared the number of runs on the nut and

In addition to one-piece and two-piece, at least in Ljubljana, there were also three-piece driver's ratchets with a nut and two studs on each side. They were used to count the amount (e.g. in a sand pit) of this yarn and of the material brought to the construction site. Even in this case, the carrier had a nut. When he took over the material, he placed it together with the excavation of the building material supplier



One-piece and two-piece driver's coat of arms, such as those used by the rebels in Goriške Brdy.

Single and double carters' tallies, used in Goriška Brda.

(e.g. to the supervisor of a sand pit or gravel pit) and made a notch over one tap and a nut, and when the material was delivered to the construction site, the site manager extended the notch to his tap. Finally, the company was able to settle costs with the supplier of construction materials and the transporter. In Ljubljana, in the 1940s, two-part driving tunnels were still used, e.g. the construction companies Leopold Bricelj and Matko Curk, and the two- and three-part construction company G. Tönnies. After the Second World War, the driving revolution began



Vozniška rovaša, Ljubljana, 1944 (SEM, see cat. no. 6 and 7).

Carters' tallies, Ljubljana, 1944 (SEM, see cat. nos. 6 and 7).

to collect certificates of journeys completed (Vilfan 1944: 108; 1944a: 246; 1996: 142–143). Three examples of driver's rovashes, which were in use in Ljubljana in the 1940s, are stored in the Slovenian Ethnographic Museum (cat. no. 5, 6, 7).

### Many rovashi

Many rovashi are mostly one-piece and were intended for counting or recording various things or activities, and their purpose was primarily of a statistical nature.

Counting tools in Slovenia include **brent counting sticks**, vineyard containers in which the grapes were transported to the wine cellar or to the cart during the harvest. Just as there are different names for brents (*brenta* - Dolenjsko, partly Štajersko; *pūta* - Pre kmurje, Slovenske gorice), the names of sticks for counting brents are also different: in Dolenjsko and parts of Štajersko they were called *brentarska palica*, in Slovenske gorice they were called *pūtarska palica*, on Bizeljska *kou* or *palca*, in the vicinity of the Krško *palca picking plant*.

At the beginning of the 20th century, in some places (e.g. in Bizeljska) brents were still counted with two-part mi rovaši or two separate sticks - with the stick of the brent carrier and with the horn, with which



Carving into a Brentar stick on the state property in Cerovac, 1972 (SEM Documentation Department; photo: Fanjši Šarf).

Carving marks on a grape picker's tally on the state-owned Cerovec estate, 1972 (SEM Documentation Department; photo by: Fanjši Šarf).



they were crushing the grapes. However, since the counting was primarily an inspection of the annual grape harvest, they mostly used only (one-piece) Brentar sticks (Vilfan 1944: 109-110), which are still used in some places today. In the past, they were supposedly used in Istria (Kuret 1989: 37), but they were most widespread in the vineyards of the Slovenian Štajerska region (Prlekija, around Slovenske Konjice, Bizeljsko), in the vicinity of Krško and somewhere in Dolenjsko and in Bela Krajina. In Dolenjska, the stick or stake was made from an unbleached branch of the native chestnut, in Styria from the spruce branch; with such they supported the vines in the vineyards. Each brenter had his own stick or stake, on which he leaned when carrying the brent and at the same time counted the brents with notches on it, which he brought to the brickyard or shook to the press. Most of the time, every brent was marked with a notch, and every tenth with a cross. In the evening, the number of brents brought was determined by notches, and in some places the total was written on the door or wall of the brick house, so that at the end of the harvest, the harvest could be compared with previous years (Vilfan 1944: 109–110; 1944a

Brentar sticks were used for a year or more. One-year use is indicated by notches in one set or only on one side of the stick, but several sets on different sides may indicate several years of use. Some winegrowers also carved *le* into the sticks



Carving in a Brentar stick, Bizeljsko, 1981 (Goriška Museum; photo: Naško Križnar).

Carving marks on a grape picker's tally, Bizeljsko, 1981 (Gorica Museum; photo by: Naško Križnar).



The local coat of arms of Podgradje with the Brentar staff (SEM documentation department; photo: Marko Habij, Nena Židov).

The coat of arms of Podgradje includes a grape picker's tally (SEM Documentation Department; photo by: Marko Habij, Nena Židov).

harvest time. Winegrowers deliberately kept Brentar sticks for several years, so that they could compare the number of unharvested grapes by years based on the notches on the sticks and the inscriptions on the doors or walls of the brick houses. Namely, the notches on the Brentar sticks mostly served to determine the annual yield (Vilfan 1996: 145; Vodan 2000: 47–48).

In some wine-growing areas, Brent sticks have been preserved to this day, in some places still in their original function, and in others more out of habit or the need to preserve the harvest "in the old way". The Brentar stick is also depicted in the village coat of arms of the village of Podgradje in Prlekija and symbolizes the wine-growing area (Serec 2001: 42), which is why it is today on the local plaque there.

Rovaše was used in Primorska in connection with land tenants - colonists. In Go riške Brdy, an inventory was taken upon the arrival of the new column: the number of vines was then marked with notches on the rovaš, so the appearance of the new column was also called *when we counted the vines*. Rovaše was kept by the master until the colonel's departure, when they made a reckoning. They also maintained an overview of the division of the crop with the Rovas, e.g. grapes, must and wines, between the owner and the colonel. The flower, as the higher quality part of the crop, belonged to the master, while the pulp and the pulp went to the colonist (Vilfan 1992: 144–145; 1996: 371).

In the Selška valley and the surroundings of Slovenske Konjice, one-pieces were used in the past rovaše for counting the baskets of manure that were spread on the field (Vilfan 1996: 145–146).

Partisan memoirs mention records of the number of killed enemies with notches in a rifle hoof.

### Lottery fools

Lotteries were used to distribute common goods as fairly as possible among members of the local community. They were wooden and two-part. They were used in western Slovenia, where they were called *špica* or *škontrin* (for playing with horses), and the drawing itself was called *ígranje* or *playing with horses* (Goriška Brda, Istria). In the past, they were used to share produce from the common farm among members of the neighborhood. They piled as many piles of hay, firewood, litter, leaves, etc. as there were farms. For each pile, a 5-15 cm long stick was prepared, marks were carved into it and it was split so that the marks were visible on both parts.

In some places in the Goriške Brdy (Biljana) they did not cut into the stick, but just split it into two parts. In both cases, part of the stick was stuck in a pile of common produce, and the corresponding part was placed in a container or a hat. Members of the village community drew lots for piles by pulling half a stick out of a bowl or a hat. Everyone got the pile in which the stick drawn matched the corresponding half stuck in the pile. On the Karst between Socerb and Mount Slavnik, litter, hay and firewood were shared with the rabble rovashi. They prepared as many piles as there were houses or communal beneficiaries, and it did not matter what the share of the work was. Firewood and litter stopped being shared in this way after 1900 (Vilfan 1996: 144–145; 1996a: 245).

In some places, the raffle was replaced by drawing with the help of tickets that were "raised" or "pulled". So, for example, in Borjana, the municipal men determined and marked with numbers the trees intended for felling in the common forest. The same numbers of forks were also written on slips of paper, which were then drawn by representatives of the agricultural holdings. They could cut down the tree with the number that was on the lottery ticket.<sup>33</sup> Similarly, in the village of Svino, they shared a common forest. First, the forest was divided into approximately equal parts and marked with numbers, and then the parts were drawn by lottery.<sup>34</sup> Also during the division



Zrebalni rovaš, ýrnotiýe (SEM, see cat. no. 11).

Tally stick for drawing lots, ýrnotiýe (SEM, see cat. no. 11).

<sup>33</sup> Site 7, Kobarid, 1951, vol. 2, p. 19 (SEM Documentation Section).

<sup>34</sup> Site 7, Kobarid, 1951, vol. 27, p. 2–3 (SEM Documentation Section).

shares from the common farm (e.g. litter cutting), the rafflers changed the numbers.

In Graz near Pivka, for example, the total harvest was divided into as many parts as there were owners, and the parts were numbered. Then they wrote the same numbers on slips of paper and put them in a hat from which the masters pulled them.<sup>35</sup>

### Wooden calendars

In the past, calendar days were marked with agreed cuts in the wood.

Wooden calendars or calendars were in use in Slovenia at least as far back as the 18th century. At the end of the 19th century, such a calendar was said to be hanging in Strmol Castle (Benkovič 1895: 56). According to the data collected so far, two examples of wooden calendars have been preserved in Slovenia. A wooden calendar for the year 1756, made from a 140 cm long and 8.5 cm wide slat with carved mi signs (men, animals and lines), is kept by the Slovenian Ethnographic Museum. The calendar is from Višnja gora and came to the museum in 1899 (Smrekar 1900; Vilfan 1944: 110; 1944a: 247; Makarovič 1995: 46). It is a special calendar in terms of design, made of a round wooden board with a diameter of 13 cm and a thickness of 1 cm, which is kept in the Franciscan monastery in Novi Mesto. On one side there is a calendar for the year 1783 and on the other for the year 1784. It has incised markings for working days and Sundays, as well as marked holidays and holy days. The faces of saints and saintly women are carved, and some of them also have their symbols. Next to the martyrs are the tools with which they were killed, even the moons are marked. Wheels



Wooden calendar from 1756 (Slovenian Ethnographic Museum; photo: Marko Habijč).

Wooden calendar from 1756 (SEM; photo by: Marko Habijč).

<sup>35</sup> Field record of Marija Makarovič, 1978 (SEM Documentation Department).

the gift is undoubtedly the product of a skilled carver's hand; perhaps such calendars were made by monks in monasteries and sent among the people. However, since the calendar is not very large, it could have been carried with them, it may even be an example of a pocket wooden calendar (Ben koviĵ 1895a: 768; Schindler 1959). With increasing literacy, wooden calendars were replaced by printed ones.



Wooden calendar for the years 1783 and 1784 (Franciscan monastery Novo mesto; photo: Nena Židov).

Wooden calendar for 1783 and 1784 (Franciscan monastery, Novo mesto; photo by: Nena Židov).

## Finally

Rovaš, until today completely forgotten aids for memorizing, writing down, marking various things, played a very important role in the past of all mankind. They were connected with the development of numbers and counting, in some periods and places they were part of the official law, from where they then moved into this folk law. They went out of use with literacy, so it is not surprising that they remained for the longest time among illiterate farmers and craftsmen. In the past, they replaced calculators, receipts, delivery notes, invoices, business books, contracts. With the introduction of the listed and some other devices, which are mostly based on letter and number symbols, they were almost completely pushed out of people's lives. They were replaced by recording data on paper, and more recently by various methods of analog and digital recording. Thus, even credit cards could be said to be heirlooms, except that the debts are recorded magnetically, whereby one paper receipt remains with the seller, and the other part is kept by the buyer for his review of expenses. In order to distinguish it from rovases, where the "issuer" was usually the lender, in the case of bank cards, a third party - the bank - is involved in the loan. And the inspection of received and delivered goods is today documented by electronic reading of barcodes, instead of using paper money. Just as in the past they used to carry and keep rovaš in safe places, today they do the same with their substitutes. And it's quite surprising when we fir



Brent and Brent bars for the years 1986–1987 and 1990–1991 in the wine cellar, Vienna pri Krškem, 2009 (photo: Nena Židov).

Grape picker's basket and tallies for 1986–1987 and 1990–1991 in a wine cellar, Dunaj near Krško, 2009 (photo by: Nena Židov).

similar types of rugs and similar methods of use have developed in different parts of the world, where (at least for the very distant past) it is difficult to talk about cross-cultural influences. It seems that the Rovaši are a tool for the universal need of man to see the amount that in different cultures or companies were saved in very similar ways.

Rovaši - these once so important and indispensable accessories in the lives of virtually all people, began to lose their importance towards the end of the 19th and the beginning of the 20th century, at least in the greater part of Europe, and today we hardly find them anymore, not even in people's memory. However, they left their mark in most European languages, which is also true in Slovenia. Today, only a few people know what the word rovaš means. Some people know it from rivers, but they don't know exactly where it originates from. Most types of rovas have long been out of use. As the last preserved form of rovašev, we can still find the Brentar stick in some places in wine-growing regions (e.g. in Slovenske gorice and Bizeljska).



Brentars, Haloze, around 1930 (Ptuj Provincial Museum).

Grape pickers, Haloze, around 1930 (Ptuj Regional Museum).

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# TALLY STICK S





## Introduction

This book presents and discusses the tally sticks in the collection of the Slovene Ethnographic Museum. Tally sticks are an almost universal device used to record a variety of data and I will undertake to illustrate this universal nature with examples from around the world; due to limitations of time, space, and financial resources, this survey will however necessarily remain fragmentary.

In the course of my research and the writing of this book I occasionally mentioned to people what I was working on or asked them about tally sticks, and many of them were uncertain about the term. Although some would know one or another of the phrases in which the word *rovaš* (tally stick) appears and guess from them what it means, few knew its original meaning. So where does the word come from and what does it mean? Even the few people who know what a tally stick is usually associate it with Europe's peasant culture of the 19th and early 20th centuries, because most of the preserved tally sticks are today in ethnographic museums. However, the tally stick has a much longer history in Slovenia as well as elsewhere around the world; it is indeed one of the earliest inventions of mankind and common in all societies and cultures; it truly is a universally common device related to man's need to record certain facts.

The spread of literacy led to tally sticks being replaced by other devices and ways of recording data, and they survived longest, at least in Europe, among the illiterate peasant population. The use of tally sticks started to decline because of increased literacy and the use of paper records. Because literacy first spread among the members of the higher classes, they recorded data on paper, but continued to use tally sticks (independently or combined with paper records) to communicate with illiterate people. Tally sticks were common in Slovene ethnic areas until the early 20th century, and despite the increased literacy of the entire population some types were used until the mid-20th century.

The word *rovaš* (tally stick) has been preserved in modern Slovene in phrases related to different areas of life, in ordinary conversation as well as in comments on politics, the economy, etc.; in these cases the word usually means "debt" or "account". It is also used in poetry (e.g. in Neža Maurer's *Na moj rovaš*), in the name of a society (Kulturno društvo *Rovaš Drašiči*), and that of a company (*Rovaš, podjetje za ekonomsko organizacijske storitve d.o.o.*).

The expression *rovašenje* ("notching"), derived from *rovaš*, used to refer to marking the animals taken together to the mountain pastures with cuts. Sheep, for instance, were marked with a certain number of cuts or holes in their ears, and cattle with notches on the horns (Božič 1956: 75). The terms *rovaš* and *rovašenje* have

been preserved in animal husbandry to the present day, but *rovašenje* now means to mark breeding animals and the *rovaši* (symbols) take the form of the letters V or U, or a tiny hole (Šegula 2005: 39).

## The universal need to record data

Man's need to record or mark certain data is universal; it goes back to ancient times and was common on all continents, but in different periods of time people met this need with different devices and in different ways. Researchers consider notched bones and sticks to be among the earliest of man's inventions, since they were common soon after the invention of hunting tools, but before the invention of the wheel, and remained in use over thousands of years. Some experts claim that they first emerged at least 40,000 years ago in connection with the need to keep evidence – to count. Notches have indeed been found on cave walls, alongside numerous prehistoric paintings of animals, and they were probably connected with counting. In spite of centuries of developmental, historical, and cultural changes, the technique itself has not changed much to the present day (Ifrah 2000: 64). The use of notched bones is one of the oldest and most common accounting techniques. The oldest archaeological finds show that people made notches on bones as early as the Palaeolithic. Archaeologists have unearthed numerous notched bones in Western Europe, e.g. in France, as well as in the Czech Republic. These tally sticks are between 20,000 and 35,000 years old. They were most probably used by hunters, who made a notch for every animal killed, and separate bones may have been used for different kinds of animals (bears, buffaloes, wolves, etc.). Among these excavated bones is an approximately 30,000 year old bone with 55 notches unearthed in Dolní Věstonice, Moravia, in 1937. The notches are arranged in two series and each series is subdivided into groups of five notches. It is assumed that the hunter thus marked the number of animals he had killed (Ifrah 2000: xix, 62).

Horns were also used for recording and accounting purposes, as is illustrated by the reindeer horn excavated in France and dating from between 19,000 and 12,000 BC (Brassempouy); it has a longitudinal groove which separates two series of transverse notches, each divided into groups of three and seven notches on one side, and into groups of five and nine notches on the other side (Ifrah 2000: 62). In 1960, a 10 cm long bone (the Ishango bone) with several groups of notches was found in the then Belgian Congo; it is dated to between 20,000 and 18,000 years BC. Some researchers assume that it is a tally, others that it is a kind of calendar.

In addition to bones and sticks, knotted strings were used around the world for accounting or recording data. The *quipu* is a famous accounting device from Peru (the word means *knot* in the Inca language, and the device is sometimes called “talking knots”); it consists of a piece of cord, around half a metre long, to which thinner strings are tied in groups and these strings were knotted. The number and types of knots marked liturgical, chronological, and statistical data, and the knots could

also be used as calendars and messages. Some coloured strings had conventional meanings, referring both to actual objects and to abstract notions. As well as the colours, the number of knots was important, their distribution, the length of the strings and their distribution. The Incas mainly used the *quipu* as an accounting device (from military matters to taxes, crops, slaughtered animals, records on deliveries, population censuses, etc.) (Ilfrah 2000: 68).

In the villages, towns, and regions of the Inca Empire the task of making knots in the *quipus* and deciphering them was the responsibility of royal officials called *quipucamayocs* ("keepers of the knots"), who also carried out the annual regional censuses of crops and the population by social classes. The results knotted on these strings were sent to the capital Cuzco. The *quipus* was in use for centuries in Peru, Bolivia and Ecuador. In the mid-19th century, shepherds and cowherds on the Antiplano in the central Andes used strings to keep tallies of their flocks; they used white strings to record the numbers of their sheep and goats, and green strings for cattle. Even today Native Americans in Bolivia and Peru use a very similar device, called a *chimpu* (Menninger 1992: 252–255; Ilfrah 2000: 69–70). During the preparations for the Pueblo revolt against the Spaniards in 1680, knotted strings with the date of the uprising were sent to all the participating villages. Knotted strings served as a kind of calendar, marking the sequences of rituals, among the Hopi (Malotki 1983: 483–487).

The Araucans in the territory of Chile and partly Argentina used knotted strings to mark the number of workdays. When they went to work they took along two strings. The number of knots on one of them told them how many days they had to work, and they made one knot on the other string at the end on every workday until the numbers of knots on both strings matched. When they planned an uprising against the Spaniards, they sent out arrows or the bones of a killed Spaniard together with a string that had as many knots as there were days left until the uprising (Benigar 1988: 22).

Knotted strings or straws are attested in other parts of the world. In Palestine, for instance, Roman tax collectors used long cords. Arabs used knotted strings not only as a counting device, but also in the preparation of contracts, as certificates, and account books.

Methods of recording numbers with knots were also known in China. On the Japanese Ryukyu island chain in the Pacific Ocean workers kept evidence of their earnings with knots (Menninger 1992: 252). Even into the 20th century the *warazan*, an accounting device made from rice straw, was used on Okinawa to count quantities of grain, tofu, and fish (Pallestrang 2004: 61). Workers in remote mountainous areas used plaited straw to count their days of work, de



etc., and similar devices can be found on the Caroline Islands, Hawaii, in West Africa, and among the Native Americans. Many religions use rosaries made of knotted strings to keep count of prayers (Ifrah 2000: 70–71; Menninger 1992: 252, 255).

Recording quantities on strings was also common in Europe. Remnants of a once apparently widespread practice of knotting survived among German millers until the early 20th century: they used knotted strings to record their dealings with bakers. Different types of knots were used to record the quantities and types of flour they delivered (Menninger 1992: 255–256; Ifrah 2000: 70). Knots were made in handkerchiefs in Serbia (Drobnjakovič 1933) and on strings in Slovenia. Dalmatian cloth owners marked the length of the cloth they took to the fuller with knots on the fringes (Škarpa 1933: 177). Some tradesmen around Europe recorded their debts and claims with incisions on a piece of leather (Dolenc 1935: 166).

In the 9th and 10th centuries, legal documents called *charta partita* or *chirographs* were used in Europe as evidence of identicalness in the same way as double tally sticks. Two identical texts were written on a sheet of paper or parchment, larger signs or letters were added in between them, the sheet was folded and then cut or torn along the middle in a zigzag or wavy line. Each party received one part and the genuineness of the document was proved, including in court, by the matching signs and letters of both parts of the sheet (Mažuranič 1908–1922: 1266; Bogičević 1953: 210; Menninger 1992: 232).

## Definitions and types of tally sticks

Tally sticks were the most common device for recording numbers, quantities, and messages in the past; they served as proof and as account books. Tallies in the wider sense of the word were made of different materials (wood, bone, horns, tusks, clay, metal, etc.), but in the narrow sense they were wooden sticks with notched (and later also written) marks.

According to the number of their parts, tally sticks are divided into single and split (double, triple) tallies. Single tallies were unbleached or bleached branches, sticks, boards, or laths, with a varying number of edges or sides, and notches were made on such tallies. In terms of development, split tally sticks are somewhat newer, and they were usually split into two or, rarely, three parts. It is typical of split tally sticks that the notches were made when the parts were held together. While single tallies mostly served as a counting device or for recording data, split tallies were one of the first devices used to prevent cheating, since they were also used as evidence – the matching notches on both parts prevented cheating and they were used as proof of business deals between two individuals.

Split tallies spread in Europe in the Middle Ages in connection with the need to record exchanges and debts. Simple split tallies, made of a branch or stick split lengthwise, gradually developed into split tallies consisting of a longer part, called a stock, which had a kind of handle, and a shorter part. The longer part was always kept by the person who loaned money or goods, while the shorter part, the foil or inset, was kept by the person who borrowed the money or goods.

Tally sticks are further divided based on their function (for taxes, loans, voting, drawing lots, etc.) and on the occupations that made use of them (millers, bakers, innkeepers, merchants, carters, etc.). Tally sticks were usually made of softwood and the conventional symbols were made on them with various tools. An important phase in the development of tally sticks was marking ownership with notched symbols, wax seals, burned symbols, records made with writing utensils, etc.

Tally sticks were very important documents and particular care was taken of them. In Dalmatia (Croatia), for instance, people carried small tally sticks in their hands, pockets, in their bosom, tucked into a belt, in a bag, etc., while long tally sticks were also used as walking sticks (Škarpa 1933: 171). Bosnian merchants used to wrap their tally sticks in leather (Bogičević 1953: 211).

Some researchers include wooden calendars and messenger sticks among tallies. Wooden calendars were common both within and outside Europe, while messenger sticks served for communication or sending messages between individuals and communities (Bogičević 1953: 209), and were used by many communities outside Europe, for instance among the Australian aborigines, Native Americans, and the Inuit.

## The tally stick in language

### The origin of the term

In addition to the term *rovaš*, other names are used in Slovenia, e.g. *rabuš* (Štrekelj 1909: 48), *roš*, *škontrin*, which derives from neighbouring Italian in western Slovenia, and *zaznamvalna palca* ("marking stick") in the Cerkljansko area.<sup>1</sup> Some authors assume a Slavic origin for the word *rovaš*, but most hold that it is of Hungarian origin. Menninger (1992: 225) believes that it stems from the Slavic word *rubatj*, Russian *rubitj* (cut, notch), which he thinks to be connected with the ruble - the Russian currency. Miklošij and Mažuranič also believe that the word is of Slavic origin (from the root *ry-*, dig), and so does Pleteršnik (1895: 439) because the word's root *ry* word is Slavic. A Hungarian origin is advanced by Jagič, who holds that *rovaš* derives from the Hungarian *roni* (Dolenc 1935: 170). Štrekelj (1909: 48) also thinks that the Slavs adopted the word from Hungarian: *ro* belongs to the Ugro-Finnish vocabulary and the Hungarians are therefore thought to have been familiar with tally sticks before their migration, and the term then spread to the neighbouring (Slavic) peoples (Ortutay 1981: 375–376). According to Bezlaj, the Slovene word *rovaš* stems from the Hungarian word *rovás*, which itself derives from the word *ró* (cut, incise) (Bezlaj 1995: 200). Snoj (1997: 546) is equally convinced that it is more likely that *rovaš* derives from the Hungarian *ró* then from the Slavic word *rovj* (tunnel).

### Traces in language

That the tally stick was a virtually universal device, common in very different geographical areas in the past, is supported by the fact that there are words for it in numerous languages, and that they have been preserved in phrases, which to the present day largely refer to accounts and debts.

Different languages use different names for the tally stick: *teomin* (twins) in Hebrew, *symbolon* (put together, assemble) in Greek, *tallia* and *tessera* in Latin; *tessera* (certificate, tag) and *taglia* (tally stick, measure, tax) are still used in Italian, as well as *scontrino* (from *scontrare* = compare; in modern Italian *scontrino* = receipt).

The French and the inhabitants of the French speaking Swiss cantons use the expressions (*en*)*coche* and *taille* (*tailler* = incise), and the words *talla*, *tarja* and *tara* are used in Spanish. The most common expressions in Croatia are *rafoš* and *rovaš*, in Dalmatia also *zariza*, *roska*, *rozga* (Škarpa 1933: 169–170), *rovaš* and *rafoš* in Serbia and Bosnia, *rafoš* and *rabuš* in Macedonia, *rabuš* in Montenegro, *rafoš*, *rabuš* in Bulgaria, *ravas*, *rafoj* in Romania, *rabuše*, *vrubovka*, *vrub* (= inci

<sup>1</sup> Field trip 11, Cerkljansko, 1954, notebook 18, p. 58 (SEM, Documentation Department).

sion, notch ) in the Czech Republic (Burian 1959: 1), *rováš* in Slovakia, *rovás* in Hungary, and *rabush* in Albanian. The Polish word is *rowas*, the Ukrainian *ravaš*, *revaš*, and the Russian *birka* (бирка). A tally stick for recording debts was called a *dolgovaja birka* (долговая бирка) in Russian, and in modern Russian a *birka* is a tag or label on various products.<sup>2</sup> A tally stick is called a *karvstock* in Sweden, *kerfstok* in the Netherlands, the most common names in Austria are *Robisch* and *Spanholz*, and *Rabusch*, *Rabisch*, *Rawisch*, *Rosch*, *Rasch*, *Kerbholz* and *Kerbstock* are used in Germany.

In the German speaking cantons of Switzerland the term *Tessel* was used. English has expressions like *score* (historically: notch, tally stick, notched stick) and *tally* (hist. tally stick, notch, bill, account; the half that matches the other half; one of two objects that make a whole), *tally stick*, *notched stick*.

*Tally* derives from the French word *taillé*. In 13th-century England tally sticks were also called *tallia dividenda* (split stick) or *dividenda* (a stick to be divided) and some theories say that the banking expression *dividenda* derives from it (Menninger 1992: 238).

The Arabic verb-root *farada* means both “to make a notch” and “to assign a share (of a contract or inheritance) to someone” (Ifrah 2000: 66). Traces of tally sticks are even found in Chinese, where the word contract is symbolised by two characters: at the top are the characters for a notched stick and knife, and the third character at the bottom stands for “large”. A contract or agreement in Chinese is thus literally a “large tally stick” (Menninger 1992: 233).

Some languages have special terms for the parts of a split or double tally stick. In English, for instance, the longer part is called the *stock*, and the split-off shorter part the *foil* or *inset*. The person (creditor) who kept the longer part was called the stockholder (Menninger 1992: 236–238). In German, the term for the foil was *Ge genkerb*, in Vienna the terms *Manderl* and *Weiberl* were used for the stock and foil respectively. The French call the stock *taille*, and the foil *échantillon* or *contretaille* (Žontar 1940a: 319). In German-speaking Switzerland the expressions *Krapfen tessel* for the stock and *Beitessel* for the foil were in use (Pallestrang 2004: 59). In Dalmatia, the longer part is called the *matica* or *cil rovaš*, and the shorter part the *cipak* or *pišćak*. The area where the notches are made is called the *biliga*, and the stock has a handle referred to as the *drška* or *držak* (Mažuranić 1908–1922: 1265). The longer part is often referred to as the *kokoš* or *kvojka* (hen) and the shorter one as the *pile* (chick) in Serbia and Bosnia (Delić 1892: 89). Similar expressions are used by the Bulgarians, where the stock is called a *majka* and the foil a *pile* (chick) or *šćenè* (Žontar 1940a: 319).

<sup>2</sup> My sincere thanks to the Russian translator Lijana Dejak for this information.

The Slovene language has several phrases containing the word *rovaš*: *smejali so se na njegov rovaš* (they had a laugh at his expense); *uganjati norjije na rovaš sosedov* (to play tricks on one's neighbours); *bogastvo si je pridobil na rovaš revežev* (he made a fortune on the back of the poor); *pomota na rovaš naglice* (an error due to haste); *pri njem ima še nekaj na rovašu* (he is indebted to him) (Bajec 1985: 545). Pleteršnik (1895: 429) mentions the phrase *imava še nekaj na rovašu* (we have something to settle), and in connection with the synonym *roš* the expression *na roš* = on account, and the phrase *naredimo roš* (literally: let's tally up) = let's vote (voting with notches). The tally stick was mostly used in connection with bills and accounts and it is therefore little surprise that to Glonar (1936: 341) the word *rovaš* directly means invoice/bill or account, and he adds that it was originally a stick with two halves across which notches were made to record deliveries and payments.

As in Slovene, other languages have comparable phrases which usually refer to a debt or account. In Croatia we come across the phrases *metnut ŷu te na raboš*; *urezat ŷu te na raboš* (I'll put / mark you on my tally stick), and this may also mean a threat or refer to vengeance (Škarpa 1933: 172), and phrases like *imati koga na rovašu* (have something on one's tally – owe someone), *biti komu na rovašu* (be on someone's tally – offend someone), *biti na ŷijem rovašu* (depend on someone) (Opačič 2006). The Bosnian phrase *ti brate samo raboš* means that the debtor cannot or does not intend to pay off his debt, and the phrase *stavio sam te u svoj raboš* figuratively means a threat (Bogičević 1953: 208). The Czechs use the phrases *you have a crush on me*; *to debit something*; *act on one's own account* (Kašlík 1943: 43; Burian 1959: 1), and *drink on someone else's tab*.

A German phrase is *etwas auf dem Kerbholz haben*. Similar phrases with the word for tally stick are used in the Netherlands, e.g. when a debt becomes too great (*der kerfstock loopt te hoog*), or when someone wants to get rid of a person who does not want to pay his share of the bill (*is de kerfstock ijzeren*) (Menninger 1992: 227). English has many phrases including the term tally: *to keep tally with somebody* and *they were tallies for each other*, in which the word tally is used for matching items; the phrase *the account does not tally* means that the calculation is wrong, and the *tallyman* is a salesman who sells goods against payment by instalments. The French phrase *acheter à la taille* means to buy on credit (Menninger 1992: 233–234).

## Tally marks

Some tally marks had a personal or local meaning and could only be “read” by a limited circle of people, because the skill was passed on from generation to generation. However, some marks are surprisingly universal; these are symbols invented to meet people’s everyday needs (Menninger 1992: 223). In some places tally marks were simply called “peasant numerals”, but this designation is not appropriate because tally sticks were not only used by peasants.

Tally sticks were usually made of softwood to make it easier to incise the various marks. In Bosnia, for instance, tally sticks were mostly made of hazel, ash, linden, pine, willow, dogwood, or Turkey oak (Delić 1892: 89; Bogičević 1953: 208). The marks were made with a variety of tools – knives, razors, sharp small metal plates, saws, and the like. The notches on tally sticks were often simple, but some were the genuine products of a woodcarver (e.g. Swiss herdmen’s tally sticks). They reveal a variety of notches which are connected or follow one another in series and groups. The notches differ in form, length, depth, and position. The simplest notches in the form of lines were horizontal, vertical, slanting; their depths differ and the marks may also extend to the side of the tally stick or the edges, run around the stick, etc. In addition to notches, tally sticks often show dots, circles, stars, and similar symbols.

One of the most common marks is a simple notch (I), which mostly stands for the number one – it meant for instance one bushel, one day, one animal, etc. To make counting easier there may be sequences of shorter and longer notches, where every tenth notch is longer. The next most common mark is V (sometimes upside down -  $\checkmark$ ), usually referring to the number 5, and the third most common mark is a cross (X), signifying the number 10. The marks I, V, and X may lead us to the mistaken assumption that they are Roman numerals, but they are not and no other Roman numerals (L, C, M) are found on tally sticks. These three symbols and their corresponding values are the most common marks on tally sticks (Menninger 1992: 240–242).

Shepherds and cowherds in Switzerland used the marks I, V, and X to denote quantities of milk: I = 1 litre, V = 5 litres, X = 10 litres; half a litre was marked by a slanting line (/) (Rütimayer in: Bogičević 1953: 213). Shepherds in the Czech region of Wallachia used the following marks for the number of sheep in their care: + = 10,  $\checkmark$  = 5, I = 1, and they had special marks for sheep that did not produce milk (Domluvil 1904: 208). The marks I, V, and X were also the most frequent ones on tax tallies in Romania (Hémardinquer 1963: 146). In Transylvania, the marks I = 1,  $\checkmark$  = 5, X = 10, were used, while the marks for 50 and 100 changed in the course of time (Ortutay 1981: 375–376).

In Dalmatia I was 1 and X was 10 (Škarpa 1933: 172, 173). Millers recorded the weight of flour like this: • (hole) or \* (star) = 100, N = 50, X = 10, V, / or \ = 5, I = 1, and the marks were always made from right to left (Škarpa 1933:174, 181). If one and the same farmer had several bags with the miller, for instance three, the miller transferred the quantities of the three tally sticks to a larger one and marked the total weight of the three bags on the other side of the stick. 452 was written like this: IIN••••.

If the total was slightly below one hundred, e.g. 96, this was either marked IXXXXN (50+40+5+1=96) or •IIII (100-4=96) (Škarpa 1933: 174, 175).

The marks X, V, I and O, vertical, horizontal and slanting lines, and dots appear everywhere, but they have different values in different environments. In Bosnia the mark X stood for 100 units in some places, I = 10, • = 1. In Tuzla, however, I = 1, V = 5, O = 50, X = 10 or 100. The tally sticks in the National Museum in Sarajevo have marks with the following values: X = 100, / = 50, I = 10, dot = 1, half a vertical line = 5. Very similar marks were used in Serbia: they include combinations of vertical and slanting lines, and the symbol X, and the values range from 1 to 1000 (Bogičević 1953: 212-13).

An account from Bosnia from the late 19th century illustrates how a carter with a horse team recorded the 1678 bricks he delivered to a customer. He took a 2 cm long, 11 mm wide and 6 mm thick stick and marked the quantity with one cross for every hundred and so there were 16 crosses on the stick (1600). A notch stood for 10, and there were 7 notches on the stick (70). This gave a total of 1670. One notch was cut only halfway, signifying the number 5. He finished by using the point of a knife to make three tiny indentures, each representing the number 1 – giving a total of exactly 1678 (Delić 1892: 89): XXXXXXXXXXXXXXXXXXXX IIIIIII••• = 1678

Shepherds and cowherds in Serbia carved the following signs: I or • = 1, / = 5, X = 10 (Drobnjaković 1933). In some cases it was necessary to mark the owners on the tally sticks, especially when someone held a large number of tally sticks belonging to different people. Marking the owner turned the tally stick into an economic tool as the mark symbolised the name of the owner (Ibrah 2000: 66). Ownership was marked in different ways: beside conventional notches, wax seals, burning, and inscriptions were used.

The mark included the house number or the owner's initials. Some Bosnian tradesmen carved into their tally sticks their trade mark, resembling letters or the symbols of their trade; a baker, for instance, would be symbolised by a baking plate, and a miller by a bag. Bosnian merchants had tally sticks for their clients and they were marked according to their owners: a hoe symbolised a client who was a digger, a gun represented a hunter, and a walking stick an older person. Ownership marks were burned in, and symbols were written on the tally sticks with charcoal, chalk,

or a pencil (Bogičević 1953: 206–207, 212). Incised or burned ownership marks were also used in Bohemia (Kašlík 1943: 43). When the debt was paid or a duty performed, the marks were usually removed or the tally stick destroyed (often burned). Tally sticks from which the marks were removed could be used several times.

Ways of recording similar to the ones on tally sticks were preserved for a long time. Brewers and wine merchants marked barrels with the sign X, which had a numeral meaning. Innkeepers marked the quantities of drinks they had served on credit with chalk, and in the two world wars fighter pilots marked the number of downed enemy planes, and bomber pilots the number raids flown by cutting the silhouettes of planes or bombs on their plane's fuselage (Ibrahim 2000: 67). Recording methods similar to the ones used on tally sticks also survived in card games for a long time.

In the early 20th century, Bosnian butchers recorded debts on a beam, coffeehouse owners in Sarajevo marked them on a wall, door, beam, etc. When the number reached ten lines, they removed them and replaced them with an X. Innkeepers marked the number of served drinks on the barrels in the cellar. In the early 20th century a merchant from Sarajevo kept his accounts in a ledger, in which he wrote the same signs (lines, dots, arches, circles) that were used on tally sticks (Bogičević 1953: 206–207).

In Slovenia, too, units from one to four were usually marked with lines (I), the fifth unit with a tick (V), and the tenth with a cross (X). A proverb from the late 19th century is related to these marks: *Kljuka pet, križ deset, dva pa tri, kol'ko to st'ri* (A tick is five, a cross ten, two and three, how much does that make) (Hudovernik 1883: 5). Other marks were also in use – slanting lines, stars, holes – which had conventional meanings in local communities. In the neighbourhood wine cellar of Dragomlja vas, Bela krajina, the quantities of loaned wine were marked by what were known as peasant numerals. A line (I) was cut for one jug of wine, a tick (V) for five jugs, and a cross (X) for ten. To record fifty jugs a horizontal line was added to the cross, turning it into a kind of star. The house number 19 was written as IIIIVX, and 26 as IVXX on tally sticks (Dular 1963/1964: 44).

In addition to these marks, which are reminiscent of Roman numerals, other ways of recording data were used: in some places the first nine notches were short and every tenth longer. In Prekija, for instance, each unit on a grape picker's tally was marked with a notch on the edge of the stick, and for every tenth unit an incision was made around the stick (Stanek 1940: 353). In Grabovec, Bela krajina, a loaned *masejca* of wine (around 3.5 dcl) was marked by boring or stabbing a hole in the tally stick, half a *firkelj* (around 2.5 dcl) was marked with a horizontal notch across half the width of the tally stick, and a whole jug with a notch across the entire



width. In the Drašiji neighbourhood, a loaned *polij* of wine (around 7.5 dcl) was marked with a short notch across the entire width of the tally stick, a *firkelj* with an additional notch from the opposite site, turning the two notches into a tiny channel. Five *firkelj* were marked with a slanting groove and the tenth *firkelj* with a cross (Dular 1964/64: 44).

Those who were (at least partly) literate marked some data on the tally sticks with notches and others with a pencil. The ownership of a tally stick was, for instance, marked by writing the house number with an ink pen (carving Arabic numerals would have been difficult), the house name or occupation (e.g. miller) (Dular 1963/64: 44). In the 1940s, a carter in Ljubljana marked the number of transports on his tally, but wrote his name on it with a pencil. When a deal involved a literate person and an illiterate one, the literate one (tradesman or merchant) usually kept additional evidence with entries in a ledger (dyers, among others) and illiterate ones only on their tally sticks.

Records similar to those on tally sticks are also found in other environments. Foundries in Gorenjska kept evidence of their dealings with blacksmiths and charcoal burners in wooden account books – wooden tablets tied together with leather straps. They drew a horizontal line across a black tablet and then made the conventional marks (circles and lines), denoting quantities of money, below, above, or across this line. A specimen of such a ledger is in the Iron Forging Museum in Kropla (Žontar 1940a: 311; Vilfan 1944a: 248; Gašperšij 1956: 62).

In Prekija, threshing was accompanied by recording the quantities of the thus obtained grain with chalk or pencil lines on the threshing machine, scoop, or door. Every tenth line was different (Stanek 1940: 353). It was also customary among merchants and innkeepers to keep evidence of served food and drinks “*na kredo*” (chalking them up); the quantities of loaned goods were marked with chalk lines. An innkeeper from the environs of Cerkljansko used to chalk up the quantity of unpaid wine on a door lintel as follows: I = 1; V = 5; X = 10; Ø = 100.<sup>3</sup> Some other tradesmen, smiths among others, carved the house numbers of their debtors and the work carried out for them on the door lintel (Vilfan 1944: 110). Even nowadays in some parts of Bizeljско every basket of grapes brought to the cellar is chalked up on the wooden wall above the cellar’s door to record the grape crops of individual years. In card games drawing lines to record results was also preserved for quite a long time.

In some places, instead of using notches or lines, counting was done with beans or knots on a string. In Cerkljansko and the environs of Grosuplje, for instance,

<sup>3</sup> Field trip 11, Cerkljansko, 1954, notebook 18, p. 44; Field trip 2, Šmarje-Sap-Polica, 1949, notebook 11, p. 37 (SEM, Documentation Department).

for every bushel of grain brought to the granary one bean was put aside; at the end of the day they were counted to establish the total number of bushels. 4 on strings were used in Knots Dolenjska to count the number of workdays performed by hired hands.

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4 Field trip 2, Šmarje-Sap-Polica, 1949, notebook 11, p. 37 (SEM, Documentation Department).

## Examples of the use of tally sticks outside Europe

That tally sticks are a universal device is substantiated by the fact that they were in use over many centuries, not only in Europe but also in societies with very different cultures around the world. In Kabyle, the mountainous north of Algeria, a kind of tally stick was used for drawing lots to divide the meat of a slaughtered animal between the members of a community as fairly as possible. Every member of the community handed over a tally stick with his symbol to the head of the community, who after shuffling them gave them to his assistant, who then attached a piece of meat to every tally stick. The members then each sought out their tally stick with the attached meat (Février 1959 in Ifrah 2000: 66). In Africa, tally sticks were also used in trade. This is among others attested by a 42.5 cm long and 2 cm wide tally stick from Gambia, which was used in the groundnut trade in the 19th century. It is now in the National Museum of Scotland in Edinburgh.<sup>5</sup>

The Australian aborigines used tally sticks, called messenger sticks, for communication purposes. Different groups exchanged 20 to 30 cm long sticks with notched lines and dots and they were mostly used when inviting neighbouring groups to ceremonial and war meetings, as well as ball games. The Maori kept a list of their ancestors on wooden sticks (Feest 1999: 201), and the Fiji islanders made notches on their clubs to mark the number of animals and enemies killed (Menninger 1992: 39).

Tally sticks were also used by Native Americans. Wooden tally sticks were in use among the Auracans in the area of Chile and Argentine, where farm hands (*peones*) marked their workdays (Benigar 1988: 22) on them. Not so long ago, Indian workers in Southern California counted their workdays with notches on sticks; a wider or deeper notch marked the end of the week, and a cross was made every fortnight. Cowboys marked the number of killed buffaloes with notches on their gunstocks (Ifrah 2000: 64).

The use of small wooden sticks with notches, marking the result of various games, was very common among North American Indians (Culin 1975). The National Museum of the American Indian (Washington) has several specimens of wooden tally sticks called *disesdodi*, from around 1905, which the Cherokee used for scorekeeping in ball games.<sup>6</sup> The Native Americans living on the shores of the north-western Pacific played the game *slahal*, in which the number of points made was marked on wooden tally sticks (earlier on bones). The Lummi

<sup>5</sup> Internet source: <http://nms.scran.ac.uk/database/record.php?usi=000-100-080-683-C> (19. 5. 2009).

<sup>6</sup> Internet source: <http://americanindian.si.edu/searchcollections/item.aspx?irn=20363&objtype=Games,%20Toys,%20Gambling,%20Ball%20game%20items&objid=Tally/Scorekeeping%20sticks> (19. 5. 2009); <http://www.nmai.si.edu/subpage.cfm?subpage=search&second=results&keyword=tally+stick> (19. 5. 2009).

Native Americans (in the state of Washington) used them in the game *slahal* until at least the 1930s.<sup>7</sup>

Messenger sticks were used by neighbouring ethnic groups of Native Americans. The Seneca, for instance, used to invite the chiefs of neighbouring groups to rituals that took place on a fixed day and at a fixed hour. The Onondaga had small wooden tally sticks with 27 notches as a kind of mourning book for 27 deceased chiefs. In the late 18th and early 19th centuries, the Sioux used a thin notched stick representing their history (Marshack 1972: 139). Elsewhere in North America data on wars were recorded on tally sticks (Feest 1999: 201). The Native Americans also used tally sticks or wooden calendars as lists of events, e.g. the Pima in the area of Arizona and Sonora (Mexico). The National Museum of the American Indian has a 92 cm long wooden stick on which the notches record the events between 1833 and 1921.<sup>8</sup> Native Americans also used wooden calendars; the Hopi used 30 to 50 cm long sticks, called *koho*, to record time (Malotki 1983: 487–491).

Tally sticks were also widely used in Asia. Marco Polo (1254–1324) mentioned the use of tally sticks in China. Before the introduction of writing, notched sticks were used there as evidence of contracts, agreements, and business deals. Traces of the use of wooden tally sticks are still evident in the ideogram signifying “contract”; it consists of two signs – one signifying a notched stick, and the other a knife (Ilfrah 2000: 66). The use of messenger sticks is reported in Laos in the 19th century (Harmand in: Ilfrah 2000: 64) and tally sticks were used to mark various services in Siberia (Feest 1999: 201).

The Kachin of Burma used split tally sticks to confirm contracts so that each party had identical proof (Feest 1999: 201). Coconut counting in the Nicobar Islands in the Indian Ocean was done by taking a bamboo rod, splitting the ends like a broom and making notches in the resulting strands. Because an ordinary stick would not suffice, they cut off a half-metre long bamboo rod and split it into several strands at one end. The notches on the split strands marked the number of collected coconuts (Menninger 1992: 227). Accounts on the use of notches on wooden tablets and sticks in Indochina date from the 19th century, where on the Boloven plateau the names of the seller, buyer, witnesses, data, kind of goods, and price were written on a wooden tablet (Harmand in Ilfrah 2000: 65–66). In Sumatra, war was declared by sending a notched stick with feathers, pieces of flint, and fishes; the number of notches indicated the number of attackers, who were as fast as birds (feathers), would destroy everything (flint = fire) and drown (fish) their enemies (Février in Ilfrah 2000: 64).

<sup>7</sup> Internet source: [http://content.lib.washington.edu/cdm4/item\\_viewer.php?CISOROOT=/social&CISOPTR=171&CISOBX=1&REC=3](http://content.lib.washington.edu/cdm4/item_viewer.php?CISOROOT=/social&CISOPTR=171&CISOBX=1&REC=3) (3. 7. 2009).

<sup>8</sup> Internet source: [http://americanindian.si.edu/searchcollections/item.aspx?irn=113332&objtype=Indigenous%20Knowledge%20\(Map,%20Calendar,%20etc.\)](http://americanindian.si.edu/searchcollections/item.aspx?irn=113332&objtype=Indigenous%20Knowledge%20(Map,%20Calendar,%20etc.)) (20. 8. 2009).

In a similar way to the Australian aborigines and Native Americans, the Inuit used special messenger sticks for communication between neighbouring groups. The Inupiaq group in the north of Alaska still used special notched sticks to invite neighbouring groups to celebrations and dances in the late 19th and early 20th centuries. The marks on a stick helped the messenger not to forget the message he had to bring to the neighbouring village, and objects were tied to the stick which symbolised desired gifts.<sup>9</sup> Every spring the elder of a group on the island of Nunivak sent a messenger to the mainland to invite befriended groups and business partners to the island to celebrate. The messenger carried a notched stick, on which the people invited and desired gifts were marked. Before he went on his way, the elder explained to him the meaning of the notches (Lowry 1994: 33).

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<sup>9</sup> Internet source: [http://vilda.alaska.edu/cdm4/item\\_viewer.php?CISOROOT=/cdmg21&CISOPTR=848&REC=17#metainfo](http://vilda.alaska.edu/cdm4/item_viewer.php?CISOROOT=/cdmg21&CISOPTR=848&REC=17#metainfo) (14. 5. 2009).

## Examples of the use of tally sticks in Europe

Tally sticks are certainly among the most common wooden documents in Europe. They were used by the Early Germans as bills or records of duties. The Franks and Alemanni recorded debts and duties on a stick called a *festuca* (Menninger 1992: 228). Tally sticks were used in the past in England, France, Italy, Germany, Austria, Switzerland, the Scandinavian countries, among the Slavic peoples, etc., and their long use has been confirmed by archaeological finds from around Europe. That they were certainly used in the Middle Ages, if not earlier, is further substantiated by archive sources. Written and pictorial sources complement the material specimens – tally sticks used from ancient times to the 20th century – which are now in numerous European museums. It is interesting to note that in different places of Europe very similar tally sticks appeared, and that they were used in similar ways and for similar purposes.

It is commonly thought that tally sticks were used only by illiterate peasants and that they were important as documents of common law only in local communities. However, sources show that tally sticks had a very important role in other environments in Europe as well in the past, e.g. in town and state administrations, where they were considered legal documents. In the history of England they were very important in the Royal Treasury, where tally sticks were considered to be official government records or lists. From the 12th century onwards the officers of the Treasury recorded paid taxes and other moneys in ledgers as well as on tally sticks; the sheriffs of the counties used them to collect taxes and sent them to the monarch. Double tallies were used to record payments received: one part was kept by the collector, and the other part represented the payer's receipt. Tally sticks were banned in England in 1782, but they nevertheless remained in use until 1826. In 1834, the tally sticks from the Royal Treasury were to be destroyed and when a huge amount of them was burned in the furnaces beneath Parliament, the building caught fire. When Westminster Abbey was renovated, several hundred tally sticks from the 13th century were discovered, which had been used in the Royal Treasury, as well as documents and remnants of leather bags in which the sticks were probably kept (Menninger 1992: 236–238). Some specimens from the Royal Treasury have been preserved to the present day.

Records of payments made to the Royal Treasury on notched tally sticks seemed to have been practised in Ireland too. A 24 cm long yew tally stick was found during excavations in the town centre of Waterford in 1986–1992. It is thought to contain a record of the annual taxes the mayor of Waterford paid to the Royal Treasury in Dublin. One part of the tally stick was kept in Dublin and the other part in Waterford. The tally stick is today in the collections of the Waterford Museum of Treasures.<sup>10</sup>

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<sup>10</sup> Internet source: <http://askaboutireland.ie/reading-room/arts-literature/the-virtual-museum/waterford-museum-of-treas/commercial/tally-stick/> (12. 3. 2009).

One of the oldest traces of the use of tally sticks in Bohemia is an entry in the municipal register (*Stadtbuch*) of Olomouc from 1510; it indicates that the town administration used tally sticks to record the financial condition of individual citizens, and as valid receipts or securities in connection with judgements about debts and transfers in the land register. Tally sticks are also mentioned in the land registers of the municipality of Odrlice in the Litovel district from the 17th century (Burian 1959: 2–3).

The tally stick is mentioned in the French Napoleonic Code (*Code civile / Code Napoléon / Code civil des Français*) from 1804. Article 1333 refers to the tally stick as a receipt for the delivery of goods to customers (Menninger 1992: 231; Ifrah 2000: 66; Žontar 1940a: 311).

The tally stick is also mentioned in article 25 of the Code of the Kingdom of Serbia from 1887:

*Bakers, butchers, milkmen, water deliverers, candle makers and the like must prove their claims with a tally stick – a stick on which the person who received the goods has put his signature or seal. The tally stick is conclusive evidence of the quantity if it matches the foil the accused has. Even without the foil, it is conclusive evidence if the accused refuses to show the foil or has lost it due to negligence. But if the accused can prove that he lost the foil by accident and without blame, it is left to the municipal court to judge this kind of evidence.* (Bogijević 1953: 205)

Providing evidence with tally sticks as a legal institution was preserved in Serbia until the 1930s (Dolenc 1935: 392). In Imotska Krajina, Croatia, tally sticks were reportedly considered as evidence in the early 20th century (Škarpa 1933: 172).

Single and split (mostly double) tally sticks were in use for a great variety of purposes in Europe. Let us now look into some of the most common or typical uses of tally sticks.

### **Tax tallies**

Tally sticks played a very important role in Europe in recording the various duties due to landlords, the church, and local and state authorities. The Roman writer and scholar Pliny the Elder (\*23–79) wrote about the wooden tallies which the Romans used to record taxes paid (Bogijević 1953: 204). It seems that tax tallies were common all over Europe at the local level and, in some countries, also at the national level.

Tally sticks were very common for the purpose of collecting taxes among the Hungarians in the Middle Ages. In the 11th and 12th centuries, written lists were used for collecting taxes and confirming payments, but at the lower levels of the public administration tally sticks were also used. A 15th century royal decree ordered the village judges of all the municipalities to add the stocks of tally sticks to the

tri-annual written records. The use of tally sticks in collecting taxes in the Middle Ages is further indicated by the association of the word (*rovaš*) with taxes: it indeed meant *adó* (tax), *megróvás* meant tax collection, and *rovó* tax collector. A church tithing district was called a *kés* (knife) in the 13th century, a name deriving from the knife used to notch tally sticks. The word *rovás* probably spread from the use in the Hungarian state and church administration to the ethnic minorities and neighbouring nations (Ortutay 1981: 375–376).

Tally sticks recording taxes were used in France: the tax collector marked the sums paid on a wooden tally stick. As mentioned above, tally sticks were used in England to record duties paid and lists of revenues and expenses (Ifrah 2000: 65). Tax tallies (*contrastock*) were further in use in the Netherlands.

In late 19th century Bulgaria, every peasant had a four-sided tally stick that was kept by the mayor. One side recorded what he had to pay, and another side how much he had paid already. Every stick carried the symbol of its owner. Beside tax tallies recording the debts of individuals, the municipalities also kept a joint tally – a long notched pole. The village of Pazarel near Sredca had around 250 short tallies and four joint tallies in 1883 (Rutar 1891: 447). Tax tallies were in use in Romania, where every farmer had a split tally stick: the stock was with the mayor and the foil with the farmer, the tax collectors were called *rabojarii* (from *raboj*=tally) (Hémar dinqer 1963: 146). The Mari (Cheremis) on the middle Volga in Russia used split tax tally sticks. The tax collector had a tally stick for every household; carved on every stick were an identifying symbol, the number of household members and the amount of tax due. After the tax was paid, the mark cut off and the same tally stick was sometimes used for several years (Menninger 1992: 239–240).

Tax tallies were used in central Croatia (e.g. in Draganići) (Vilfan 1944: 110), and three-sided tax tallies in Dalmatia (Škarpa 1933: 175). Four-sided tally sticks were used to record duties paid in Bosnia under Turkish rule. The village elders divided a single tally stick with incisions into as many parts as there were homesteads in the village. On each part they marked how much tax an individual homestead had to pay and how much it had paid already. The tally sticks were used to report the collected taxes to the landlord – the *spahija*. Turkish officials also used tallies to collect taxes (Drobnjakovič 1933; Bogičević 1953: 205).

The use of long tally sticks has also been reported in southern Serbia, where the duties of individual houses were marked on them, with the marks cut from bottom to top. In Šumadija, a four-sided stick, around half a meter long, was used. The Ethnographic Museum in Belgrade has a specimen of a tax tally from the environs of Pirot that is 92 cm long (Drobnjakovič 1933). The Serbian expression for tax, *porez*, is assumed to derive from the (tax) tally and its *zareze* (cuts, notches) (Rutar 1891: 447).



### Tally sticks recording work done

Around Europe tally sticks were also used for recording work done, units of work done, and the number of workdays. Performed corvée and the number of workdays were marked on a tally stick in Estonia (Rank 1997: 18); such tally sticks were also known in Finland (Menninger 1992: 231). Wooden tally sticks were used in the Swiss canton of Wallis in the 19th century; here too, they recorded the number of workdays which the peasants performed for the local community, and payment followed based on the number of notches (Pallestrang 2004: 56).

In the English counties of Kent, Herefordshire, and Eastern Sussex, until the mid 19th century, wooden tally sticks were used to record the quantity of hop harvested. When the hop ripened in September, it had to be picked as quickly as possible, and the farmers therefore hired seasonal workers in addition to their domestic hands.

To record the quantity of picked hop they used double tally sticks: the stocks with holes drilled in them were kept by the “tally man” (overseer, measurer) on a string, and the matching parts by the pickers. The notches recorded the number of picked hop bushels for which payment was due. The notches on both parts of the tally stick had to match of course. Besides wooden tally sticks, small metal tokens, usually round ones, were used for the same purpose in England from the late 18th to the mid 20th centuries; the initials of the issuer (the hop farmer) were usually imprinted on them, as well as the number of bushels. The Pitt Rivers Museum in Oxford has a collection of wooden tally sticks and metal tokens related to hop picking.<sup>11</sup> Another collection of metal tokens for recording the quantities of picked hop is in the Fitzwilliam Museum in Cambridge.<sup>12</sup> In

Zagorje (Croatia) overseers (*špani*) were responsible for the work the peasants had to carry out on the estates of the landlords, and they recorded the work done by hired hands with marks on wooden tally sticks (Kotarski 1916: 55–56). In the environs of Zagreb work done was marked on double tally sticks: the overseer marked the workdays with notches using a knife, kept the stock and gave the foil to the hired hand (Mažuraniy 1908–1922: 1264). In Zagorje, some overseers marked the work done by peasants with notches on a tally stick, and gave the workers sheet metal tokens in confirmation in the evening. Accounts were settled every three months: the steward counted the tokens and the overseer the notches on his tally stick. The final account with the landlord was settled at New Year (Kotarski 1916: 56). In Bosnia, too, tally sticks were used to record the workdays of hired workers. Special marks recorded whole, half, and quarter workdays (Bogijević 1953: 211).

<sup>11</sup> Internet source: <http://england.prm.ox.ac.uk/englishness-hop-tallies.html> (19. 5. 2009).

<sup>12</sup> Internet source: [http://www.fitzmuseum.cam.ac.uk/opac/search/cataloguesummary.html?\\_searchstring=AG='cm'%20and%20\(OB='hop%20token'%20when%20OT='subseries'\)&\\_function=\\_xslt&\\_limit=50&\\_resultstylesheet=\\_imagecs](http://www.fitzmuseum.cam.ac.uk/opac/search/cataloguesummary.html?_searchstring=AG='cm'%20and%20(OB='hop%20token'%20when%20OT='subseries')&_function=_xslt&_limit=50&_resultstylesheet=_imagecs) (19. 5. 2009).

A supervisor, called a *karbownik*, marked the work done by labourers on a wooden tally stick in Poland (Babnik 1883: 91).

### Tally sticks as receipts for goods

**received** Medieval Italian monasteries used double tally sticks as receipts for money or other goods given to them in storage. When leaving the monastery, their owner had to show his part of the tally stick to receive back the things he had put in storage (Edler in Apostolou and Crumbley 2008: 61). Various tradesmen in many European countries used double tally sticks as evidence or receipts that they had accepted material to be processed from their customers. They also marked on them the quantities of material received and after finishing the material the tally sticks were used to identify the owners. Such tally sticks were most common among fullers, dyers, tanners, millers, bakers, etc.

Double tally sticks were used by **weavers, fullers, and dyers**. Serbian dyers marked the yarn received for dyeing with a tally stick by attaching the stock to the yarn and giving the customer the foil as a receipt for delivered material. When the customer collected the yarn the notches on his part of the tally stick had to match the notches on the part of the tally stick that was attached to the yarn. In the same way some fullers, who had a mill on a mountain river, marked the raw cloth they collected in the neighbouring villages in order not to get it mixed up. In some places in southern Serbia fullers used tally sticks until the mid-20th century (Drobnjakovič 1933; Filipovič 1951: 21). Tally sticks were still in use among Bosnian fullers and dyers in the mid 1950s (Bogičević 1953: 207).

Tally sticks, usually made of a 3 to 4 cm long hazel branch, were also used by Macedonian fullers. The fuller carved a narrow hole through one half of the tally stick and used it to sew the stick to the cloth; vertical and slanting notches marking the cloth's weight were cut on the other half of the stick. A slanting notch meant 5 kg, a vertical one 1 kg, and a thin, vertical notch 0.5 kg. He then cut the stick into halves, sewed one half to the cloth and gave the other half to the cloth's owner to avoid errors when he returned the full cloth. More recently, some fullers used metal tokens with numbers instead of tally sticks (Nedelkovski 2002: 125, 127).

Bosnian dyers also tied the stock to the cloth, giving the foil to the owner. When the cloth was dyed, the owner could identify it by the matching notches on the stock and foil, which also marked the quantity of cloth delivered for dyeing (Delič 1892: 89; Bogičević 1953: 207). In Dalmatia, cloth owners sewed a densely trimmed piece of cloth, called a *biliška* (note) to a cloth bale. The note contained various symbols – a cross, star, dot, one or more circles, etc., identifying the owner. Twin notes were made and the owner kept one of them (Škarpa 1933: 177).

Many **tanners** similarly used tally sticks as receipts for delivered leather. Double tally sticks were used to mark hides brought for tanning in Estonia. One part of the tally stick was attached to the hide, and its owner received the other half as a receipt for the delivered hide and easier confirmation of ownership after treatment (Rank 1997: 18).

**Millers** marked the grain bags farmers brought to the mill with tally sticks. Tally sticks were used for this purpose in Bohemia in the 16th century, if not earlier (Burián 1959: 2). Village millers in Bosnia also used double tally sticks – one part was tied to the bag, and the other one given to the farmer (Bogijević 1953: 207–208); millers in Croatia operated in the same way. In areas with several mills, every miller marked his personal tally sticks (Škarpa 1933: 197–180).

### **Tally sticks for recording debts**

Accounting tally sticks were mostly used by tradesmen who were not paid for their services on the spot, because it was customary to settle accounts by periods, mostly weekly, monthly or yearly.

Tally sticks were used by village **farriers** in Alsatia. Every time a farmer had a horse shod, the farrier made a notch on a double tally stick. The tally stick was the farmer's, but he kept one part of it at home in the stables, and the other part on which his ownership was marked (his initials and house number) was kept by the farrier on a string, together with the tally sticks of other farmers. The farmer and farrier settled their accounts around New Year.

**Bakers** also used tally sticks; farmers who had their own grain, but no bread oven, took their loaves to the village baker and gave him flour to pay for the service: for every loaf he baked, the baker made a notch on the tally stick, and at the end of the year the baker and farmer settled the quantities of flour and loaves based on the notches on the tally stick (Klein 1981: 161–162). In the early 1970s, countryside bakers from the environs of Dijon still used double tally sticks to record the number of loaves given to individual customers; the baker kept the stock and the customer was given the foil. The baker made a notch on both parts of the tally stick every time the customer took a loaf of bread. The accounts were settled on a fixed day, e.g. once a week. At the end of the week the two parts were put together, and if the notches matched, the bill was confirmed. Tally sticks were also used by bakers in Belgium (Ifrah 2000: 65), England, and the Netherlands.

Double tally sticks, notched on both parts, were used by bakers in Bosnia under Turkish rule, both in dealing with ordinary people and the army, which used tally sticks to account for the quantity of bread it purchased. In late 19th-century Bosnia double tally sticks were used to mark the number of delivered Turkish bre

ad (*asker tain*) and the related debt (Bogičević 1953: 204, 207; Deliđ 1892: 89). Serbian bakers marked the loaves provided to customers on tally sticks; bakers' tallies were four-sided and 20 to 30 cm long. The foil was cut out of around two thirds of the stock and kept by the customer, while the stock remained with the baker. For every loaf the baker gave to a customer, he made a notch across both parts of the tally stick after putting them together. The account was settled after composing the stock and foil and counting the notches. When the bill was paid, the notches were removed with a knife. In some places in the south of Serbia, bakers continued to use tally sticks until the mid-20th century (Drobnjaković 1933; Filipović 1951: 21).

Debt recording tallies were also used when customers borrowed **money or mer chandise** which they could not pay immediately. Jewish money lenders marked the sums of loaned money on a tally stick with notches and then split the stick lengthwise – they kept one part and gave the other to the loan recipient. The Museum of London has a specimen of such a tally stick (5.3 cm long, alder or hazel) from the 13th century.<sup>13</sup> They recorded the loans made to churches, local authorities, and wealthy individuals (tradesmen, merchants) in a similar way.

To keep evidence of loaned money, wooden promissory notes were used in Visperterminen, Switzerland. The village community had a joint capital fund from which the farmers could borrow money. Every loan was marked on a tally stick (*Ka pitaltessel*), which the farmer handed over to the head of the local community. On one side of the tally stick was the farmer's sign, and on the other side the debt was marked. These tallies were strung on a cord through the holes in their ends and kept until the debts were paid. The same method was used for recording the loans the farmers obtained from the church (Menninger 1992: 235; Pallestrang 2004: 59).

The Chuvash and Mari (Cheremis) of central Russia used tally sticks for recording loans of money in the 19th century. The tally stick was halved lengthwise, and the sums of money loaned were marked with notches on both parts, after which a witness carved his mark across both parts. The creditor and debtor each marked their half of the tally stick and exchanged them (Ibrah 2000: 66).

Prosperous farmers in Bosnia marked the amounts they loaned to poor farmers on tally sticks. They had a tally stick with special symbols for every debtor and kept them in a secure place (Bogičević 1953: 208). Grain was often the subject of loans. For this purpose a double stick was used in Estonia (Rank 1997: 118) and by prosperous farmers in Bosnia who loaned grain to poor farmers (Bogičević 1953: 205, 208).

<sup>13</sup> Internet source: <http://www.museumoflondon.org.uk/English/Collections/OnlineResources/RWWC/objects/record.htm?type=object&id=372215> (19. 5. 2009).

The use of tally sticks was further very common among **innkeepers**, who served their guests drinks on credit or “on the tab”. Bosnian innkeepers used tally sticks for this purpose, while coffee house owners used them to mark the number of cups of coffee consumed (Bogijević 1953: 207). Village innkeepers in Bohemia used tally sticks to record the quantities of beer they delivered to farmers. The farmers settled their debts in barley around St Martin’s Day (Domluvil 1904: 206). Dalmatian innkeepers used tally sticks to record lard received and wine sold (Škarpa 1933: 173).

**Merchants** made similar use of tally sticks when they gave customers merchandise on credit, e.g. in the towns of Bosnia and Herzegovina. Tally sticks were used by Sarajevo merchants to trade with illiterate customers, even if they were literate themselves. Some used conventional symbols for various kinds of merchandise. Every customer had a tally with the merchant and the merchants carved identification symbols on them to differ between their customers. Some merchants carved their own symbol on the tally sticks so that customers who frequented several merchants could tell them apart (Bogijević 1953: 206).

### **Shepherds’ and cowherds’ tally sticks**

In parts of Europe where common pasturing was practised, shepherds and cowherds recorded the numbers of animals and their owners on their tally sticks, as well as other information, e.g. the different categories of animals by age, sex, milk yield, and the quantities of milk, cheese, butter, etc. Tally sticks were common in the Swiss Alps. They were used to mark the number of animals in the flock, the number of sterile animals, and the numbers of sheep and goats. They also used parallel tallies (Ibrah 2000: 64) for other kinds of data. A special three-sided tally stick, called an *Alpscheit*, was used in the Lötschental as a kind of certificate of their right to pasture animals on communal pastures. Small pieces were cut out of each of the three surfaces at regular intervals. The farmers kept these inset pieces as evidence of their individual pasture rights in ornately carved boxes, and the shepherd or cowherd kept the tally stick (Menninger 1992: 234). In another use related to communal pasturing a tally stick determined the order of guarding the cattle when it returned from the mountain pastures on St Michael’s Day, and another tally stick record the transport of cow dung to the valley. Special tally sticks were in use in Switzerland in the 19th century to determine the order of the houses responsible for providing board and lodging to the cowherd (Pallestrang 2004: 56, 58). The cowherds used five-to-eight-sided milk tallies, 15 to 20 cm long, made of alder or ash. They marked the owners of the cows on the tally stick with symbols and below these symbols they recorded the milk yields of the cows of the individual farmers. The daily milk yield had to be processed and delivered immediately. As the pastures

were close to the village, a peasant came to the pasture every day to make cheese from the milk of all the cows. The recorded quantities of milk yielded by the cows of every individual farmer made sure that the cheese was shared out evenly. Milk tallies were still in use in the 20th century (Menninger 1992: 229–230).

Such tally sticks were also used in Britain. Shepherds in the Ceredigion area of Wales used four-sided tally sticks: the total number of sheep was marked on the first side, the number of lambs on the second; the third recorded the number of castrated rams, and the fourth the farmer's name. Four specimens of such tally sticks, around 30 cm long and 1.5 cm wide, are kept in the Ceredigion Museum.<sup>14</sup> Tally sticks were used to record the number of milk cows in Scotland. Such a tally stick, around 12 cm long and last used in 1879, is in the National Museum of Scotland, Edinburgh.<sup>15</sup>

Double tally sticks were also common in Sardinia; their owners marked on them the number of animals they had entrusted to a shepherd. Some shepherds in Sardinia joined forces to organise their work (pasturing, milking, processing milk, etc.) more efficiently. They usually had about the same number of animals, but they nevertheless recorded daily the milk yield. Every shepherd had his own tally stick - *musròju* – for the division of the milk. The stick had several functions: it was a unit of measurement, a counting device, a device for keeping records on the quantities of milk yielded over several days, and a kind of account book on measured and total quantities of milk (Maxi).

Hungarian shepherds used tally sticks on communal pastures to record the number of sheep from individual farmers and the quantities of milk yield. They marked the number of milk sheep on one side of a four-sided tally stick, the number of infertile sheep on the second side, the milk yield on the third side, and the farmers on the fourth side. Individual farmers were separated by notched crosses (Ortutay 1981: 375–376).

Tally sticks were used by shepherds in Bohemia in the 16th century, if not earlier (Burian 1959: 2). A four-sided stick or walking stick, which also served as a tally, was marked on all four sides. First the stick was lengthwise divided into fields signifying individual farmers, and for every sheep owner they carved the total number of sheep or young lambs, processed butter or cheese, and the salt the shepherds fed the sheep. In the first half of the 19th century, shepherds from Wallachia, Moravia, used tally sticks to record the number of sheep owned by individual farmers, as well as their milk yield. They further marked the total number of sheep they had on the

<sup>14</sup> Internet source: <http://pilgrim.ceredigion.gov.uk/index.cfm?articleid=1692> (19. 5. 2009).

<sup>15</sup> Internet source: <http://nms.scran.ac.uk/database/record.php?usi=000-100-000-143-&scache=5ma8q4b033&searchdb=scran> (11. 3. 2009).

pasture and the quantities of cheese and butter they gave the owners, as well as the quantities of salt the sheep were fed (Domlivil 1904: 207; Kašlik 1943).

Shepherd's tally sticks were used in Serbia where communal pasturing was practised. Evidence of the number of animals was kept on tally sticks by the sheep owners and shepherds. The shepherd had a tally stick with as many sides as there were sheep owners. At the top of the tally stick was a small hole for tying it to the shepherd's belt. The shepherd made notches below this hole, marking the number of sheep of individual farmers, followed by the milk yield and other information. In some places around 10 cm long tally sticks were in use to record the quantities of milk belonging to individual farmers. In the 1930s, tally sticks were still in use here and there in Serbia (Drobnjakovič 1933), and in the south of Serbia some shepherds used tally sticks until the mid-20th century (Filipovič 1951: 21). Macedonian shepherds used tally sticks to measure the milk yield, and there are two specimens in the Macedonian Museum in Skopje.

Tally sticks were also used in Bosnia. In addition to those which were similar to the tally sticks used by shepherds and cowherds elsewhere, a special tally reminiscent of a messenger stick was in use. When a farmer sent a boy to the herdsman on the mountain pasture, he gave him a wooden stick with notches from which the herdsman could read how much cheese he was to send to the farmer and which cows he was to take down to Sarajevo in advance, that is before the end of the pasture season (Rütimayer in Bogičević 1953: 209).

### Carters' tally sticks

Viennese carters engaged in snow removal used triple tally sticks. The central part including the handle was kept by the carter, one side part by the supervisor present at the snow loading, and the second side part by the supervisor responsible for unloading. All three parts were marked with the same number. The number of transports was marked with notches on all three parts of the tally stick. The carter stuck his part of the tally in his boot. The two supervisors hung the side parts of the tallies of the different carters on a wire and carried them around their neck.

The central part of the tally, kept by the carter, was called a *Weibl* (female), and the corresponding part a *Manndl* (male). Besides triple tallies, double ones were used with the same names for the parts (Haberlandt 1895: 54). Transports of building material were recorded on a tally stick in Klagenfurt and in Trieste, where they were also employed on cargo boats (Vilfan 1944: 108).

The number of transports or quantities of delivered material was also marked on tally sticks in Bosnia. In the mid-20th century rafters on the Drina still thus marked the number of log rafts they floated down the river. A carter from Ćajnič, Bosnia,

recorded the number of bricks delivered with a horse team on a tally stick, which he kept stuck in his belt (Delić 1892: 89; Bogičević 1953: 207–208). In Dalmatia, sailors marked the quantities of wine they loaded onto their boat on a tally stick (Škarpa 1933: 176), as well as the number of bundles of wood merchants handed over to them.

### **Accounting tally sticks**

In some activities tally sticks were used to record quantities only for the sake of statistical data on annual crops. Such were the tallies used to count the grain brought to the barn in Poland, or the grape pickers' tallies, on which the pickers marked the daily quantities of picked grapes in Austrian Styria. At the end of the workday they left them in the room where the grapes were pressed (Pallestrang 2004: 60, 61). Tally sticks were among others used for recording the quantities of picked grapes and olives in Dalmatia (Škarpa 1933: 176).

### **Other tally sticks**

Tally sticks were used in mining ore in Europe in the Late Middle Ages. Saxon miners used them in Serbia and Bosnia to record the quantities of mined ore (Bogičević 1953: 203), and Bohemian miners made use of them in the 16th century (Burian 1959: 2).

Single tally sticks were also used in the past to count votes. In Northern Italy representatives in village communities were elected by notches on a tally stick (Dolenc 1935: 170; Mažuranić (1908–1922: 1265). Similar practises existed in Croatian Istria. According to Valvasor, in the 17th century the mayor, representatives of the village community, the town gatekeeper, court usher, sexton, and smith were elected in this way (Vilfan 1955: 116; Vilfan 1996: 139).

In some European villages tally sticks were used to determine the order of and record tasks to be performed by all the members of a community (night watch, flag bearing, forestry work, the ringing of bells, etc.). Many such tally sticks were employed in Switzerland in the 19th century. House symbols carved on four-sided tally sticks determined the order of the tasks, e.g. the night watch, guarding the cattle on the pasture and when taking them back home from the mountains, collecting money borrowed from the church, providing for the village herdsman, cross and flag bearing in processions, etc. Tally sticks also regulated the order for the right to employ a breeding bull and for baking bread (Pallestrang 2004: 58–59). In the village of Nugla near Roč in Croatian Istria, all the inhabitants had to take turns in ringing the church bells. Evidence that they had performed their duty was kept on a long stick, on which each inhabitant carved his letter. Older inhabitants carved



their letter in the Glagolitic script, younger ones in the Latin script (Vilfan 1944: 108; 1944a: 246). Field guards in Bosnia had sticks they used for walking as well as to record the number of cattle that caused damage in the fields, their owners, and the kind of damage (Bogičević 1953: 208).

Tally sticks were employed in Bohemian breweries to keep evidence of the number of times beer was brewed, the quantities of malt added, the quantities of beer purchased, free beer given, and of beer sold to inns. The Rakovník brewery kept its accounts on tally sticks in 1150, and they were used in Jindřichov Hradec when barley was brewed in the late 16th century. Records on timber processing, e.g. sawing logs, were kept on tally sticks (Burian 1959: 2) and, similarly, when cutting firewood, in Croatia.<sup>16</sup> Another kind of use was practised in building, introduced among others in Ostrava, Bohemia, in the late 18th century (*ibidem*).

Tally sticks related to water rights were important in the canton of Wallis, Switzerland. The farmers relied heavily on the water channels running from the mountains, especially in summer when the arable land lay dry. They constructed special irrigation channels to direct water to the fields of individual farmers. Because the water flow was owned by the entire village community, they had to agree whose fields would receive water and for how long. Records of the water rights (in hours) were kept on tally sticks. The holes on a rectangular stick marked the number of irrigation days, and the tally sticks tied to the individual holes with strings recorded the number of irrigation hours (Menninger 1992: 235; Pallestrang 2004: 59).

Boys in German-speaking Switzerland kept special “St Nicholas sticks”, on which they marked the “good deeds” they performed during the year. At the eve of St Nicholas’s Day they presented their notched sticks to St Nicholas and were given presents in accordance with the number of notches. The custom of “St Nicholas sticks” survived in southern Alsatia until the turn of the 20th century (Klein 1981: 163).

A tally stick called a *bata scoir* was used in school classes in Ireland in the 19th century and was related to efforts to eradicate the Irish language and teach the children English. The children had a string with an attached small wooden stick around their neck and the teacher made a notch on it every time a child spoke Irish. At the end of the day punishment (e.g. slaps) was meted out in accordance with the number of notches (Coleman 1998: 96; Crowley 2005: 122).

According to oral legend, the Turkish authorities in Bosnia fought the anti-Turkish activities of the Bosnian hajduks in 1822 by marking on a tally stick which peasants were to be killed in revenge. Bosnian women marked the age of their children with notches at the top of a distaff, and peasants marked the age and growth of their

<sup>16</sup> Two such specimens are in the Ethnographic Museum in Zagreb.

children with incisions on the walls of the house (Bogičević 1953: 204, 210–211). Tally sticks were used in the delivery of wine and olives in Dalmatia, and people also had *prayer tallies* – small sticks with notches and dents to count the prayers said (Škarpa 1933: 178, 170, 172).

Some tally sticks were used for more “personal” reasons. A contemporary of Pieter Brueghel (1520–1569) reports that the Flemish painter was living with a young girl in Antwerp and wanted to marry her, but that she was given to lying. The two agreed that Brueghel would make a notch on a stick for every lie she told, and that he would not marry her if the notches reached the end of the stick (Menninger 1992: 226).

### Wooden calendars

Some authors count the wooden calendars and almanacs which people used to mark the months, weeks, and feast days in the past, as special forms of tallies. Wooden calendars were in use in Europe from the Early Middle Ages on and were preserved here and there until the late 19th century; they were common in Germany, England, France, Austria, Scandinavia, and the Balkans (Graber 1954: 372–373). Two different forms of calendars were most commonly used in Europe: tablets for the individual months, tied together with a string; and three-, four- or six-sided sticks or laths, often with a hole at one end for hanging them on the wall. Ole Worm wrote a book entitled *Fasti Danici* (Gavazzi 1930: 332) on Danish calendars with entries in runic script in 1643. Wooden calendars were used in Norway to keep track of the seasons and feast days. Their use started to dwindle in the early 19th century when the first printed calendars appeared (Haugen 1947: 145). Wooden calendars were also common in Sweden. In Austrian Carinthia, two pearwood calendars in the form of sticks with a handle, dating from the 17th century, have been preserved (Graber 1954).

Wooden calendars were in use in areas of Dalmatia, Bosnia, Vojvodina, and the Banat, as well as Bulgaria (Gavazzi 1930). Shepherds and cowherds seem to have used wooden calendars south of Tamnište in Serbia until around 1910 (Filipović 1951: 122). Many homes in Bosnia continued to use wooden calendars until the end of the 19th century. They were preserved longest among shepherds and cowherds who took animals to mountain pastures. A hazel branch was fashioned into a four-sided lath and in the making of calendars the shepherds and cowherds were assisted by teachers, priests, and other literate people, who knew the dates of the church feast days, or already had printed calendars. Only a couple of months were marked on these wooden calendars. The parts for the weeks that had passed were cut off and discarded (Grčić-Bjelokostić 1891: 457; Bogičević 1953: 209; Filipović 1958: 223).

Wooden calendars were also used by Croatian shepherds and cowherds. The Ethnographic Museum in Zagreb has a specimen of a wooden calendar from the island of Olib that was used by the local shepherds and cowherds. It is a 74 cm long, four-sided lath with 4 cm long sides, and it has a hole for hanging at one end. It has notches for the days of three months on each side. Above these notches there are additional marks for the feast days. Given that there are no marks for Sundays and variable church feast days, Gavazzi (1930: 332–333) considered it to be a permanent calendar.

Somewhat different wooden calendars were used in Estonia: they consisted of six (occasionally seven) thin wooden tablets, and notches for the days of one month were made on each side of every tablet (Rank 1997: 19).

## The use of tally sticks in Slovenia

The story of the tally stick in Slovenia is very similar to elsewhere in Europe: tally sticks were of similar kinds, and the ways of use and marking were alike. Their use in Slovenia is attested by archive, written, pictorial, and oral sources, as well as preserved specimens in museums and private collections. Vilfan wrote that “the tally stick is the principal notebook of our peasants and tradesmen” (Vilfan 1944: 106). Tally sticks were still in use in many places around Slovenia in the late 19th century (Babnik 1883: 75), but very few survived into the next century. One of the main reasons why so few tally sticks have been preserved was the dwindling use of many types of tally sticks around the turn of the 20th century. Another reason is that they were usually destroyed after use. And if any notched stick, lath, or board did survive, it was of no interest to collectors of “antiques”. These circumstances are reflected in our museums. Some Slovene museums with ethnological collections have no tally sticks at all, while others have only a handful of specimens. Metal tokens, the successors of tally sticks, are similarly poorly represented in museum collections. The Posavje Museum in Brežice, for instance, has a couple of grape pickers’ tallies and two bundles of tally sticks for wine loaning. The Celje Regional Museum has a handful of tally sticks, the Maribor Regional Museum a single one. The Murska Sobota Regional Museum has several tokens, the Ptuj Regional Museum some grape pickers’ tallies and replicas of tokens. The Bela krajina Museum in Metlika has a few bundles of tally sticks from the region’s neighbourhood wine cellars.<sup>17</sup>

Slovene ethnology has carried out very little research into tally sticks, but they received more attention from certain lawyers. The lawyers Janko Babnik and Aleksander Hudovernik, who were researching common law, were the first to draw attention to the use of tally sticks in Slovenia and the need to research them, in 1883. Babnik wrote: “Tally sticks are still in use in many places in Slovenia and it would be worth studying and describing their use in detail” (Babnik 1883: 75). Tally sticks however became a subject of research only much later, in the mid-20th century, when many kinds no longer existed. In the course of his research into common law, the lawyer Sergij Vilfan approached tally sticks in a more systematic way in the 1940s, and he wrote the following about them: “It is thus appropriate that we should try to record as many data as possible about the essence, forms, and uses of tally sticks before these interesting legal antiques vanish from folk life” (Vilfan 1944: 106).

A tally stick could be a branch, stick, club, or wooden lath and the kinds of wood mostly used for them in Slovenia were hazel, linden, spruce, sweet chestnut, oak, bee

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<sup>17</sup> The tally sticks are from Dragomlja vas, Lokvica, Slamna vas, and Drašiji (Dular 1963/64: 44).

ch, dogwood, and willow. In terms of form, tally sticks are single or split/sawn double or triple. A single tally stick was made of a solid piece of wood and primarily used for counting, whereas with double and triple tallies the branch, stick, or board is split, cut out, or sawn into two or three parts to make it possible for the conventional symbols (notches) to be visible on all parts. The tally stick is usually divided in such a way that the entire length is preserved only in one of its parts, and in many Slavic languages the term “hen” is used for the stock, and “chick” for the shorter, cut-off part (the foil), but these terms were not common in Slovenia (Vilfan 1944: 106). Past research has not yet yielded a commonly accepted Slovene term for the longer part with a handle; the term *matica* was adopted by Sergij Vilfan after the name used in Dalmatia. The cut-off foil is known by the names that were in use in Bela krajina – *izkolek* (cut-off, because one part was cut off the branch or lath), or *cepek* (split off). Carters of building material in Ljubljana used the terms *mandlc* (for the foil) and *vajblc* (for the stock) (Vilfan 1944: 106), and they derived from the names used by the snow clearing carters of Vienna (*Weibl, Manndl*) (Haberlandt 1895: 54). In western Slovenia, the foil of a tally stick for drawing lots was sometimes called a *zrno* (“seed”).

### Tax tallies

The tally sticks used for recording taxes were usually single ones. Single tallies were used to record paid duties in Prekmurje until the early 20th century. Every farmer who had to pay taxes had his own tally stick on which paid taxes were recorded. The tally stick was kept at the home of the (illiterate) mayor (Vilfan 1944: 110; 1944a: 246–247; 1996: 146). Tax tallies were also in use in western Slovenia. Each was made of a single piece of wood, divided with notches into several sections that corresponded to individual farmers. Accounts related to the time around 1900 mention that the two field guards (*vardjana*) of the village of ŸrnotiŸe each had their own stick, on which they carved the symbols I, V, and X for the house numbers and for each of them the number of cattle and sheep, and the amount of tax the inhabitants owed for the communal tax, which the guards collected from door to door (Vilfan 1996: 220–221). The Slovene Ethnographic Museum has an original tax tally from Prekmurje (cat. no. 2) and an illustration of a tally stick from western Slovenia (cat. no. 21).

### Tally sticks recording work done

Double tally sticks were used to count and record corvée performed in the feu dal era; later single or double tallies were used as certificates for the work done by hired hands. Hazel sticks, around a metre long and called *Ÿihtne palice*, were used in Dolenjska; the farmer carved on them the number of workdays performed by the

hired hands; the notches for whole workday were carved on one side, those for half workday on the other. Farmers kept the sticks recording the work done for them by hired hands (smallholders) behind a beam in the house; the workers were usually hired for a period of 40 days a year. Farmers in Dolenjska and their farm hands recorded advance payments on double tallies. For every instalment the farmer paid in advance, each made a notch on his own tally. The farmer made a notch for every workday and then wrapped a thread around every notch.<sup>18</sup> They both took great care of their tallies. The notches on the sticks told them how much the farmer owed the hand at the end of his contract.<sup>19</sup>

Similar tally sticks, *škontrine*, were used by farmers in Primorska to count the workdays of their *coloni* or tenant farmers. A horizontal notch meant a whole day's work, a slanting notch half a day, and a cut around the tally marked the seventh day or a whole week. Farmers on Šentviška gora marked the number of workdays of their hired hands with a string. The farmer had a string for each worker and made a knot on it for each workday.<sup>20</sup>

Vineyard workers from Haloze marked their workdays on a single tally, around 30 cm long: for a whole day's work they carved out a long notch, and for a part of a day a short one. When payment was due, the tally served as a record of the work done, but the winegrower had no control over it (Vilfan 1944:109). Similar single tallies were used to record workdays in the environs of Idrija (Vilfan 1996: 144). Single tallies were still used in Porabje (Gornji Senik) in the early 20th century. Hired hands who helped bring in the harvest made notches on them in the form of lines and crosses to record the number of harvested bunches of hay, and they were paid in accordance with the notches (Kozar - Mukiš 1996: 134). Tallies in the form of sticks were used in Istria to keep record of duties performed – ringing the bells and guarding the clock in the tower. The “bell ringers’ tally”, as it was called, was passed on to the house that was next in line for ringing (Grašič 1940: 419; Vilfan 1944: 247; 1996: 146). Tallies were used by the village guards of Osp; they recorded on them the damage people or domestic animals caused in the vineyards, fields, and forests.<sup>21</sup>

### ***Tokens recording work done as the successors of tally***

***sticks*** A more recent form of tallying work performed made use of metal tokens (*špan*, *špon*, *špen*, *pleh*). The word *špan* derives from the German word *Span*, a lath or splinter, confirming that it is the successor of the tally stick. The word was borrowed

<sup>18</sup> Field trip 5, Šentvid pri Stični, 1950, notebook 20, p. 36; notebook 21, p. 29 (SEM, Documentation Department).

<sup>19</sup> Field trip 5, Šentvid pri Stični, 1950, notebook 21, p. 29 (SEM, Documentation Department).

<sup>20</sup> Field trip 11, Cerkljansko, 1954, notebook 18, p. 75 (SEM, Documentation Department).

<sup>21</sup> Field trip 4, Marežice, 1950, notebook 14, p. 25 (SEM, Documentation Department).

from the Hungarian *ispán* (steward), 'župan', a loanword from the Slovene *župàn* (mayor) (Bezljaj 1995: 95; Vilfan 1996: 143; Snoj 1997: 641). The word *špan* has several meanings in Slovene: 1. Steward of an estate, chosen from the subjects by the landlord; 2. Head of a commune or village mayor; 3. Small metal plate certifying work done (Bajec 1985: 1097). A *špan* was also the leather receipt a tanner gave to a customer who brought him a hide for tanning (Kelemina 1933: 86), and it further served to identify the tanned hide. The term was used in the sense of steward on the estate of a landlord in Dolenjska and elsewhere. In every village one man was appointed to collect the tax on the communal fields and to make sure that the peasants performed their corvée and brought in the tithe. He had the use of a field called a *župnca*, and his entire property was called a *španija*.<sup>22</sup> Originally, a *špan* was a free man, who was exempted from corvée and the tithe, and he was initially appointed by the landlord, but later elected by the villagers. Some quite frequent house names contain the word: *pri Španu*, *Špaju*, *Španýku*, *Španku*, etc.<sup>23</sup> The Slovene phrase *v španoviji* (*u špon / u španovijo*) means shared use or ownership. Peasants had, for instance, the shared use of a meadow, well, threshing machine, harrow, tr

The *špan* was in use as a metal token for recording work done in particular in Slovenske gorice and Haloze. The farmer gave a token to the worker at the end of the workday or after a job was finished as a certificate and the basis for payment. Tokens were usually made of sheet iron and were therefore in some places called *pleh* (sheet metal), but there were also galvanised iron, sheet copper, and brass tokens. The tokens were square, rectangular, triangular, rhombic, or hexagonal, and they were either "full", "three-quarter", or "half" tokens. Square or rectangular tokens signified a whole day's work (a full token), when a piece of the token was cut off it signified a job done in three-quarters of day (a three-quarter token). Triangular tokens stood for work done in half a day (a half token). The initials of the farmer and his house number were cut or imprinted on the token with a punch, occasionally joined by the token's consecutive number. Every token had a little hole in the top left or right corner so that the workers could thread them on a piece of clematis vine, a string, or piece of wire. They were usually made by the local blacksmith or, later, tinsmith (Vodan 2000: 49).

Farmers used to give tokens to hired hands after the work was done and they were common among the vineyard workers of Slovenske gorice and Haloze. They served for counting the workdays and indirectly for paying hired labour. They were used to record the work of hired hands over a whole year, a specific job, or a job performed within a certain period of time, and the additional jobs performed by

<sup>22</sup> Field trip 5, Šentvid pri Stijni, 1950, notebook 20, p. 42 (SEM, Documentation Department).

<sup>23</sup> Field trip 5, Šentvid pri Stijni, 1950, notebook 20, p. 44; notebook 22, p. 14 (SEM, Documentation Department).

vineyard workers: some farmers used them only occasionally, when they were short of money or kind to pay the workers (Stanek 1940: 354). Farmers kept evidence of the work done and handed out tokens in special accounts books, and the workers kept the strings of tokens received from individual farmers at home. When a worker lost a token, he was not paid (Stanek 1940: 354; Vilfan 1944: 109; 1996: 143–144).

A hired hand received one token for a day's work. In Slovenske gorice, one work day was at least 10 hours of work. If they worked less, workers were given a half or three-quarter token. They were given a token and a half for one day's work on the heaviest jobs. In a year's time a worker would gather several hundred tokens and he was paid around New Year (Childermas, December 28). The accounts were settled at the farmer's home. Based on the records in his notebook he added up the work done (number of cart transports, hours of ploughing, etc.) and the quantities of kind he had given to the worker (number of piglets, quantity of potatoes or grain, etc.), and converted these into workdays (*težaki*<sup>24</sup>). The worker laid all the tokens he had gathered out on the table and the farmer checked if they were all his. This was a quick way of establishing whether the farmer's services and goods matched the number of tokens – whether they were quits. If the comparison showed that the farmer owed the worker, he paid the difference in cash or kind (piglets, maize, grain, etc.). If the worker owed the farmer (this seems to have occurred quite frequently, because the farmers tended to overrate their contributions), the debt was carried over into the next year and the worker started to receive new tokens only when the debt was settled. An autumn piglet, for instance, was worth eight tokens, a spring piglet 10, a transport within the municipality was worth one token, outside it two or more tokens; one hour of ploughing was worth one token. Farmers also used to give the workers leaves or firewood in exchange for tokens. After the accounts were settled, the farmer usually treated the workers to a hearty meal (Vodan 2000: 49–50). Before the Second World War, the value of a young piglet was 15 tokens in Spodnja Volijina in winter, but a vineyard worker had to give only 10 tokens for it in summer.

Tokens were used in the vineyards of Prlekija owned by townspeople and probably also by peasants. Landowners allowed smallholders to gather leaves, mow grass, etc., on their land, but the smallholders had to be available for work in exchange. A farmer or farm manager gave the day labourers one token for every workday, or two tokens when the labourer did not eat at his home, and recorded the numbers of the tokens. At the end of the agreed work, the day labourer submitted the tokens as evidence of the work done (Vilfan 1944: 109).

Vineyard workers in the eastern parts of Slovenske gorice recorded work done in the vineyards (spraying and digging the vineyards, carting and carrying dung, etc.)

<sup>24</sup> A *težak* also was the unit of measurement for the value of a job.



and on the farmer's property (cutting trees, firewood transports, and the like). For every job done, the vineyard worker received one token and he presented them to the vineyard owner at New Year, when he was paid in cash or kind (grain, firewood, a piglet) (Koren 1967: 100). Some smallholders, e.g. the vineyard workers from the environs of Sveti Jurij ob Ščavnici kept records of their work themselves; they had a notebook in which they entered the name of the farmer, the number of work days, and the kinds of job they had performed. The farmers, too, had a kind of work notebook, in which they recorded the work they performed for the smallholders (ploughing, dung transports, etc.).

In the eastern parts of Slovenske gorice tokens were used to record the work of the vineyard workers (spraying and digging) and the accounts were settled around New Year. If the worker had more tokens than the value of what he had received in kind, the farmer promised him a piglet in spring. In Grabšinci, a vineyard worker who had a "surplus" of 36 tokens was given firewood or grain by the farmer: 12 tokens were worth 3–4 carts of unsawn firewood, 10 tokens a piglet, and 7–8 tokens were worth 50 kg grain. Similar values were in use in Kutinci, where a vineyard worker received firewood for 32 tokens, fodder for 30 tokens, or could rent a field for 20 tokens. Some vineyard workers also bound and weeded the vines growing close to the farmer's house. For this kind of work they were given tokens which were settled in kind at New Year. They were also given tokens for felling trees in the forest and carting firewood to the farmer's home. In some places tokens were given as certificates for dung transports and for fertilising the vineyards (Koren 1967: 99–100).

As mentioned above, a token could represent the unit of work done or one workday, which an individual had to perform in exchange for a service granted to him. Landowners from the vineyards of Prlekija allowed smallholders to gather leaves, mow grass, etc., on their land, but the smallholder had to perform a certain number of workdays – *špani* – in exchange (Vilfan 1944: 109). Tokens serving as a kind of currency<sup>25</sup> survived here and there in Slovenske gorice into the 1970s (Vodan 2000: 48).

### Voting with tally sticks

Valvasor's accounts show that a tally stick was used in the election of mayors in Istria in the 17th century. The members of a local community first agreed who among them was to mark the votes on a wooden stick. This trustworthy individual then prepared a three-sided hazel stick. He proceeded to every member of the ne

<sup>25</sup> Such currency in the form of round or square tokens was also common in foundries. Foundry owners paid their nail makers with their own currency from the 16th century to the late 18th century. Every issuer of such tokens imprinted his initials on them, and the nail makers could use them in shops designated by their masters. Specimens of such payment tokens are in the Iron Forging Museum of Kropa.

ighbourhood in succession and they whispered him the name of one of the twelve candidates. He marked the votes with notches on the part of the stick that corresponded to the candidate. The members of the neighbourhood were of course not allowed to know which part of the stick corresponded to which candidate. The candidate who had the most votes became the mayor, and the second and third ranked were appointed vice-mayors. In the 18th century the outcome of the elections still had to be approved by the landlord. The town's gatekeeper, court usher, sexton, and municipal smith were elected in the same way in the past (Vilfan 1944: 107–108). The introduction of municipal administration and elections changed the election practises and the use of tally sticks in elections therefore lost its function in the mid 19th century, though it was preserved here and there, but only for electing the village elder and field guards (Vilfan 1955: 120).

In some places in Primorska, such as in Osp before the Second World War, the mayor was elected using beans but elsewhere tally sticks were replaced by slips of paper<sup>26</sup> in the election of mayors; in Marežige near Koper drawing straws was used – the candidate (out of three) who drew the longest straw, was appointed mayor.<sup>27</sup>

In a way similar to the election of mayors in the past, the members of the young men's community in the Istrian village of Podgorje elected their "mayor" and two to three "vice-mayors". The votes were collected by carving them on a stick. The community first chose a trustworthy member to mark the votes. He then fashioned a roughly one metre long hazel stick with a handle at one end, and shaped the other, longer end into a triangular form or three sides. To differentiate between them, he marked every edge on the handle with a tiny cross, which he hid under his thumb during the elections. He of course had to know exactly which part of the stick corresponded with which candidate, and to make it impossible for the other young men to find out. He then proceeded from one member to the next and each of them whispered him the name of the candidate he voted for. He carved all votes cast on the corresponding parts of the stick. Candidates were forbidden to vote for themselves and rowdy voters were fined. After the votes of all the men present were collected they were counted. The candidate with the most notches or votes became the "mayor" of the young men's community, and the second and third ranked "vice-mayors". The mayor of the young men's community in Podgorje was elected in this way until the First World War (Vilfan 1944: 107–108; 1955: 116–117; 1996: 138).

The tally stick also had an important role in trials conducted at people's courts (Dolenc 1924: 183); besides witnesses and visits to the scene, tally sticks were considered legal evidence. The first accounts on the use of tally sticks in trials in Slove

<sup>26</sup> Field trip 8, Kobarid, 1951, notebook 2, p. 19 (SEM, Documentation Department).

<sup>27</sup> Field trip 4, Marežige, 1950, notebook 15, p. 14 (SEM, Documentation Department).

nia date from the 16th century. Decisions arrived at by using a tally stick were at the time pronounced in Prekmurje (Dolenc 1935: 170, 480), and the method was also used by people's courts in Istria, where civil actions in small areas were conducted by the mayor. The mayor, a representative elected from among the local inhabitants, first conducted the trial, then summarised its essential content and proposed two ways of solving the matter. The court's assessors (individuals who were held in high esteem among the members of the community) had to decide between the two proposals by secret voting on a tally stick. The chairman of the court carved the votes for either of the solutions on separate parts of the tally. It was of course possible to cheat in marking the votes, and the Estates (e.g. of Bled) complained in 1528 and later years with the Emperor about these practices of the peasant courts.

Valvasor criticised the peasant courts and voting with tally sticks, called "wooden records" in a similar vein in the 17th century.

*No one can be expected to stand trial in front of peasants and mayors given the irregular conduct of the law, because these people carve their decisions on a tally stick (Robasch). The peasants and subjects from these parts use the following method: when they want to reach a decision, the mayor or whoever holds the court's tally stick, suggests to the assessors two ways to solve the matter, from which they have to choose one and pronounce their decision. The person holding the tally stick carves the decision of every individual on the stick. And the party that gathers more votes wins the trial. Your Royal Highness will understand that if the mayor or the appointed judge wants the party that enjoys his favour to win, he will suitably tailor its presentation for the assessors to fall for it and give their votes to that party.* (Valvasor, quoted in Vilfan 1996: 138)

In spite of the complaints and the risk of cheating, tally sticks remained in use for a long time. They were used among the Venetian Slovenes from the Nadiža/ Natisone Valley until the mid-19th century: when the farmers or members of a neighbourhood had to decide between two proposals in minor disputes or voted on common matters, they carved notches on two ends of a stick (Babnik 1883: 75; Vilfan 1944: 106–107; 1996: 137–138). Tally sticks are mentioned in courts records, e.g. in trials about vineyards and in the records of the town court of Metlika, from the 18th century (Vilfan 1944: 108).

### **Talla sticks as receipts for cloth received**

Tradesmen – weavers, fullers, dyers, and millers – marked the cloth they received for processing on short double tally sticks; one part of the tally was given to the customer, and the tradesman used the other part to mark the received cloth (Vilfan 1996: 141). The tradesman usually kept the stock and the customer received the foil. The tally sticks were not only receipts, since they also made it possible to make

a list of the quantities of received material, and after the cloth was processed the owners could identify their cloth by the tallies.

**Weaver's tallies** were 5–10 cm long, double sticks. A weaver marked the weight of the balls of wool, flax, or other yarn customers brought him on such sticks. He then stuck one stick into the balls, and gave the other to the customer. After weaving the cloth he stuck the wooden stock in it. The customer identified which cloths were his by the corresponding foil.

Until the First World War raw cloth was taken to a dyer or fuller, who used fulling mills to turn it into cloth or sackcloth.<sup>28</sup> Fullers used double **tally sticks** (cat. nos. 18, 23, 27). The stock was attached to the cloth received; the foil was the customer's receipt and further used to identify his cloth after processing because fulling made it shrink.

Tally sticks were used by the **dyers** of wool, yarn, and cloth, and some of them also printed cloth. When peasants brought wool or yarn to the dyer, he marked the quantity of the received material on a double tally stick. The peasants received the foil, and the dyer marked the material's owner on the stock and attached it to the material with a wire. When the customer came to collect his dyed wool or yarn, he could identify it by the matching stock (Žontar 1940a: 311). Things were similar when cloth was brought for dyeing, but the dyer then attached the stock to the cloth.

Weavers, fullers, and dyers mostly used short sticks sharpened at one end, on which they could write the customer's surname or name. They stuck these sticks into the balls or cloth. Weavers' and fullers' tallies were made in several ways. Notches were carved on a wooden stick and one part of the stick was then cut off; or they used two sticks of equal length, cut off half way, to make them match. In western Slovenia fullers' tallies were wooden laths, cut into two pieces down the middle at an angle, the pieces were then put together one on top of the other and notches made across both parts. An identical use was that of two separate sticks on which the same notches were made (e.g. V and X); one stick was stuck into the wool and the other handed to the customer. The marks on the stick occasionally marked the weight of the received material in pounds (500 g); weavers in some places in Dolenjska marked received wool in this way.

The numbers of weavers, fullers, dyers, and cloth printers dropped sharply after the First World War due to the spread of cheap textile industry products (Kobe - Arzenšek 1968: 20); pedlars brought industrially made and printed cloth to the most remote places in the countryside (Makarovič 1974: 60). The use of weavers' tally sticks survived here and there in north-eastern Slovenia for a surprisingly long time – until around 1950 (Vodan 2000: 48).

<sup>28</sup> Cloth is woven from wool yarn; to make sackcloth linen yarn is added.

Like weavers, fullers, and dyers, millers also employed double tally sticks: they stuck one part of a tally stick into the bag of grain and gave the other part to the customer to identify his flour after milling. The quantities and types of grain brought to the mill were marked on the tallies.

### ***Metal tokens as the successors of fullers' and dyers' tally***

**sticks** Besides recording cloth received for processing on double tally sticks, it was common among cloth fullers, dyers, and printers to use pairs of metal tokens (*roši*, sing. *roš*). The word *roš* (also *rož*) derives from *rovaš* and is used as its synonym, for instance in the phrases *na roš* (on the tab) and *naredim roš* (I vote) (Bezljaj 1995: 200). Glonar's *Dictionary of the Slovene Language* lists *roš* and *rovaš* as synonyms (Glonar 1936: 341).

The tradesman would attach or sew one token to the received cloth or products and give its double as a receipt to the customer, who then also used it to identify his cloth after treatment (cf. Kotnik 1949: 15; Kobe - Arzenšek 1968: 19; Makarovič 1974: 59). Dyers kept a list of cloth received in a special notebook, in which they entered the symbols from the tokens and the names or surnames of the customers and their wishes relating to dyeing and printing. In the Pirc Dyeing Mill in Kranj, regular accounting was introduced in the late 19th century (Kobe - Arzenšek 1968: 19). Such ways of marking cloth and keeping evidence of received cloth were common in all dyeing mills in Europe (Dular 2000: 33).

The metal tokens were designed for repeated use. When a dyer returned dyed cloth to a customer, he used the token he removed from the cloth, and the corresponding one which he was given back by the customer, for the next client. It is not possible to ascertain exactly when metal tokens started to replace wooden tallies in Slovenia, but they were undoubtedly first used by the big dyers from the towns. The oldest metal token in the Slovene Ethnographic Museum dates from the turn of the 19th century and stems from the Pirc Dyeing Mill in Kranj (cat. no. 171).

The tokens were made of different materials, took different forms, and bore different symbols. They were usually made of sheet brass, copper or iron of different thickness, and some were galvanised on one or both sides. The most frequently used ones were round, square, or rectangular, while less frequent ones were rounded on one side or drop shaped. The square and rectangular tokens usually had bevelled corners. Every token had one or two little holes through which it was bound or sewn to the cloth. Most holes were round, rarely rectangular (these are found on the oldest specimens of tokens in the Slovene Ethnographic Museum). A token with only one hole usually had it at the top, less often on side, and if there were two holes, they were on the left and right edges or at the top and bottom.

Letters and numerical symbols were punched into the tokens, usually the dyer's initials, less frequently only the initial of his surname. A number was punched below the initials. Some dyers marked their tokens only with punched numbers, and they were therefore referred to as *numera* in Štajerska.<sup>29</sup> Beside their initials, some dyers added the initials of the places where they frequented fairs until the First World War. Such marks were useful to fullers and dyers in particular when they returned cloth to their customers at the fair. The fuller Ivan Keber, for instance, visited the fair in Šoštanj on the feast day of St Achatius (June 22), where he returned fulled cloth to his customers against the twin tokens (Kotnik 1949: 15). The dyer Hofbauer from Vitanje also returned fulled and dyed cloth to peasants at fairs. The tokens of the peasants who received their cloth back at the fair in Dravograd were marked with the letter D, those from Mislinja with the letter K, and those from Oplotnice with the letter B.<sup>30</sup> In rare cases other symbols were punched into the tokens, e.g. a star (\*), an equals sign (=) or a line (–) in the centre of the token. The meaning of these symbols has not been fully clarified. The star on the tokens of the dyer Hofbauer from Vitanje signified cloth that was the dyer's property.<sup>31</sup> Besides the cloth dyers received for dyeing from peasants, some of them also bought cloth, dyed it, and sold it at fairs (compate Makarovič 1974: 64).

Tanners issued their customers as a receipt for hides brought to them for tanning a piece of leather, which was in some places called a *špan* (Vilfan 1944a: 247; 1944: 109).

### Tally sticks for recording debt

Tally stick recording debts in goods or money used to be very common in Slovenia. They were called *računski lesovi* (accounting sticks) and were usually double tallies. They enabled creditors to keep evidence of debtors and their debts, while they also gave debtors evidence of their debts. Cheating by either side was prevented as the creditor always kept the stock and the debtor the foil. Merchants and some tradesmen (innkeepers, bakers, butchers, millers, lime burners) used tallies to record debts, goods given in advance, or work done, and these accounts were settled at an agreed time (e.g. monthly, yearly). Such tallies were also used in the neighbourhood wine cellars of Bela krajina.

The first references to tally sticks recording debts are from the 14th century and relate to miners and foundry workers; they are also mentioned in the records of vineyard trials and those of the town court of Metlika from the 18th century. The oldest reference to tally sticks as promissory notes is in the Mining Order of Jese

<sup>29</sup> Field trip 20, Vitanje, 1963, notebook 1, p. 16 (SEM, Documentation Department).

<sup>30</sup> Field trip 20, Vitanje, 1963, notebook 1, pp. 1–15 (SEM, Documentation Department).

<sup>31</sup> Field trip 20, Vitanje, 1963, notebook 1, pp. 1–15 (SEM, Documentation Department).

nice from 1381. The provisions concerning the workers mention how their debts with their employer (recorded on tally sticks) were settled. Foundry workers also borrowed merchandise and had the debt recorded on a tally stick, but this was quite a risk for them as they often incurred excessive debts. It seems to have occurred in the 16th century that they bought so many foodstuffs “on the tab” (tally) that they no longer received wages in cash, even for a period of fifteen years. If a worker lost his part of the tally stick, the foreman’s tally was seen as sufficient evidence if he swore on it (Vilfan 1996a: 191, 300).

**Innkeepers’ tallies** were used to record the debts of customers who consumed on credit. When a customer could not pay on the spot, the innkeeper took a wooden stick or lath and made notches on it, marking the quantity of consumed drinks, split the stick in two halves, gave one half to the debtor and kept the other half. When the first debt occurred, the innkeeper carved the debtor’s house number or some other symbol on the stick or lath to identify the debtor. Innkeepers usually made a hole in their part of every tally stick to keep them in bundles on a string or wire. The next time the customer wanted to consume drinks on credit, the innkeeper and customer put the stock and foil together and made new notches on both parts. And when the customer paid his debt, the innkeeper gave him the stock (Hudovernik 1883: 5), cut off the debt, or destroyed the tally. Similar tallies were used by merchants and various tradesmen when their customers did not pay the bill for bought or delivered goods on the spot. In these cases, too, the seller always kept the stock and the customer the foil (Vilfan 1944: 108; 1996: 141).

Tallies in the form of rectangular sticks, around one metre long, were used by lime burners to record the quantities of lime they delivered to customers.<sup>32</sup>

Double tallies, and in some places single ones, were used to record loans from the **neighbourhood wine cellars of Bela krajina**. These were usually located close to the filial church and owned by the village community. When the cellar was founded, the members of the village community gathered stocks of wine and, in some places, grain as well, and both were sold (including outside the community) or loaned to members, while their debts were recorded on tally sticks (Žontar 1957: 78). Members also borrowed wine from this cellar on the occasion of the biggest farming operations (mowing, harvest, threshing), when they ran out of wine at home, as well as on Sunday afternoons when they gathered in the wine cellar. Grain was also borrowed in times of poor harvests (Dular 1963/1964: 42, 45). Most of the neighbourhood wine cellars stopped operating in the 1880–1890 period when the vineyards were destroyed by the phylloxera plant louse, and only a handful survived until the Second World War. Some cellars revived their operation after the war and

<sup>32</sup> Field trip 12, Brkini, 1955, notebook 20, p. 18 (SEM, Documentation Department).

nine were still operating in the 1960s. Instead of on tally sticks, they recorded loans in debtor ledgers (Dular 1994: 171–172). A single neighbourhood wine cellar is still operative today in Drašiji. In 2008 its membership consisted of 65 wine-growing families.

Such a cellar was managed by two to three keepers of the church, who were elected by the villagers. One of their tasks was to keep evidence of loaned wine. Peasants who borrowed wine from the cellar had to return it with a 50 percent surcharge when the new wine was ready. For every borrowed *firkelj* of wine the peasant had to return a *firkelj* and a half in the autumn. Wine was also sold from the cellar to non-members, wine merchants, and innkeepers. The same rule of a 50 percent surcharge was applied to borrowed grain, which had to be returned after the harvest. Grain was loaned from some neighbourhood wine cellars until the First World War. The accumulated surplus was used by the members of the neighbourhood to cover the expenses of maintaining the filial church, village roads and funeral expenses for its members, and to help the poor (Dular 1963/64: 41–42, 47, 50).

The keepers of the church recorded the loans on single or double tallies. If they kept wine and grain in the same cellar, they used separate sticks, though in some places (e.g. Dragomlja vas) one side of a tally stick was used to record wine loans and the other side grain loans. The foil was always given to the debtor, and the keepers kept the stocks arranged in bundles on the wall of the cellar (Žontar 1957: 79; Dular 1963/64: 44). All tallies had a hole at one end to thread them on a string, wire, or willow branch attached to a bow (Vilfan 1969: 128). The keeper always had a couple of sticks ready in the cellar. Upon the first wine loan he marked the quantity (in jugs) on the stick and split it in two halves. One half remained in the cellar and the keeper wrote the name of the debtor on it, his house number, or marked it in some other way. All the halves remaining in the cellar were tied together and hung on a wall. The peasant took the other half home and brought it with him to the cellar when he wanted to borrow more wine. In this case the two halves were put together and the keeper and peasant made new notches. When the peasant paid his debt, either both parts were destroyed, or the keeper handed the stock to the debtor (Lokar 1912: 19).

In eastern Bela krajina single tally sticks were also used; they were rectangular hazel chestnut, or oak sticks, around 30 cm long, fashioned by a keeper or a member of the neighbourhood. Single tally sticks required greater confidence in the keeper, because the debtor had no proof. The sticks had a hole at the top end to thread them on a piece of clematis vine, a string, or wire, and tie them to a hazel bow that was hung on a wall. The owners of the tallies were recorded by carving or writing (with a pencil) the house number at the top of the tally. Instead of using numerals



to identify their owners, some of the tallies were bevelled in different ways at the top end. Tallies were used not only for wine loans, but also in the autumn collection of must, when the keeper carried the bundle of tallies across his shoulder and at every house marked the quantity of must he received on the corresponding tally. When after the Second World War the population became gradually more literate, tally sticks were completely replaced by debtor ledgers (Dular 1963/64: 43–44, 53). In the cellar of the only still operating neighbourhood wine cellar in Drašiči, a bow with tally sticks still hangs on the wall and its use is demonstrated to visitors.

### Shepherds' or cowherds' tally sticks

Tally sticks were also used by shepherds and cowherds, especially where communal pasturing was practised. A single tally, called a "shepherd's stick" was used to record the total number of animals or the numbers of animals from individual farmers. Such tally sticks were used in such places as Podkoren, and the Slovene Ethnographic Museum has one specimen (cat. no. 41). In the case of communal pasturing, the quantities of yielded milk were also recorded on the tally stick, and if the farmers had joint cheese making, the quantities of milk yielded by the animals of each farmer was marked, while the cheese was shared out at the end of the pasturing season according to the marks on the tally. These data refer in particular to the late 19th century, but tally sticks were probably used for the same purposes as early as the Middle Ages (Vilfan 1944: 110; 1996: 146, 382–383; 1996a: 245). Milk tallies were also in use in Istria, where one notch meant one *librc* (33 dcg).

### Carters' tallies

Carters' tallies were used until the mid-20th century to record the number of transports and indirectly the quantities of delivered goods (building material). In the countryside they were used to mark the number of transports of gravel for road repair. A carter's tally was called a *rubežen* or *škontrin* (Italian *scontrino*) in Ljubljana. The expression *škontrin* was probably introduced by Friulian builders. The carters of Ljubljana who transported peat from the Ljubljana Marshes marked the number of transports on a tally stick, which the carter kept stuck in his boot. Until around the end of the Second World War, carters' tallies were used by building companies in Ljubljana to count the number of transports carried out for them by hired carters. Carters' tallies were made of sawn laths of different shapes using different kinds of wood. To differ between the tallies of individual carters, a chisel was used to separate the foil from the stick at an angle, or the foils were cut off from the handles at different angles. Later, the carter's name was written in pencil. The carter took the stock and stuck it in a sheet metal ring on the wooden frame of his cart, his boot, or

the horse collar. The other part of the tally was kept by the company's representative – the site foreman. For every delivered transport the foreman put both parts of the tally together and made a notch with a knife or saw. When the carters were paid, the foreman counted and compared the number of notches on the stock and foil.

In addition to single and double tallies, triple ones were also in use, at least in Ljubljana, which consisted of a stock and two foils. These were used to count the quantities of the material loaded (e.g. in a sand pit) and delivered to a building site. In this case, too, the stock remained with the carter. After loading the material he put the stock together with the foil kept by the supplier of the material (e.g. the foreman of a sand or gravel pit) and made a notch across one foil and the stock, and when he delivered the material to the building site, the clerk of the works extended the notch across his foil. The builder could then settle his accounts with the supplier and carter. In the 1940s, double carters' tallies were used in Ljubljana by the construction companies of Leopold Bricelj and Matko Curk, and the G. Tönnies Construction Company used double and triple ones. After the Second World War, carters' tallies were gradually replaced by paper receipts for deliveries (Vilfan 1944: 108; 1944a: 246; 1996: 142–143). The Slovene Ethnographic Museum has three specimens of carters' tallies of the kind used in Ljubljana in the 1940s (cat. nos. 5, 6

### Counting tallies

Counting tallies were usually single ones, used to count or record various items or activities, and their purpose generally was of a statistical nature. One type used in Slovenia was for counting the baskets in which grapes were brought to the wine cellar or cart during the grape harvest. Grape baskets have different names (*brenta* in Dolenjska and parts of Štajerska; *püta* in Prekmurje and Slovenske gorice), and the names of this specific counting tally also differ: it was called *brentarska palica* in Dolenjska and parts of Štajerska, *pütarska palica* in Slovenske gorice, *kou* or *palca* in Bizeljsko, and *obiralna palca* in the environs of Krško.

In the early 20th century, the delivered baskets of grapes were recorded on double tally sticks, or in some places (e.g. Bizeljsko) on two separate sticks: on the picker's tally and on the masher that crushed the grapes. Because these records were primarily intended to provide an overview of the annual grape crop, (single) grape pickers' tallies were mostly used (Vilfan 1944: 109–110), of the kind that are today still in use here and there. They seem to have been used in Istria in the past (Kuret 1989: 37), but they were most common in the vineyards of Štajerska (Prlekija, the environs of Slovenske Konjice, Bizeljsko), the environs of Krško, and here and there in Dolenjska and Bela krajina. In Dolenjska, the tally was made from an unbleached branch of sweet chestnut, in Štajerska from a split spruce; such sticks were prima-

used for supporting the vines. Every grape picker had his own tally on which he leant when carrying full baskets, and on which he made notches to count the baskets taken to the wine cellar or emptied into the grape press. Usually, one notch was made for each basket, and every tenth basket was marked with a cross. The notches were counted in the evening to establish the total number of baskets delivered, and in some places this total was written on the door or wall of the wine cellar to compare it with the crops of previous years (Vilfan 1944: 109–110; 1944a: 246; 1996: 145).

Grape pickers' tallies were used for one year or more. One-year use is indicated by notches in a single row or on just one side of the tally, while several rows on different sides may indicate that the tally was used over several years. Some winegrowers carved the year of the harvest on the tally. They stored the grape pickers' tallies for several years to compare the grape crops by year through the notches on the tallies and the records written on the door or wall of the wine cellar. The notches on the grape pickers' tallies served mostly to establish the annual crop (Vilfan 1996: 145; Vodan 2000: 47–48). In some winegrowing areas grape pickers' tallies still serve the same function, either out of habit or because of a conscious effort to preserve grape harvesting traditions. A grape pickers' tally is depicted in the coat of arms of the village of Podgradje in Prlekija, and because it symbolises the area's winegrowing tradition (Serec 2001: 42) it also features on the village signpost.

Tally sticks were used in Primorska in dealings with *coloni* or tenant farmers. The arrival of a new tenant farmer in Goriška Brda was accompanied by stock taking: the number of vines was marked with notches on a tally, and the start of a new tenant farmer's operation was thus referred to as "*when we counted the vines*". The landowner kept the tally until the tenant's departure, when they settled their accounts. Tallies were also used to keep evidence of the division of the crops, e.g. grapes, must, or wine, between the landowner and the tenant farmer. The landowner received the best part of the crop – the juice – and the tenant farmer the pomace (Vilfan 1992: 144–145; 1996: 371).

Single tallies were used in the past to count the baskets of dung strewn on the fields in the Selce Valley and the environs of Slovenske Konjice (Vilfan 1996: 145–146).

Memoirs by World War II partisans mention that they marked the number of enemies killed with notches on their gunstock.

### **Tally sticks for drawing lots**

Tally sticks for drawing lots were used to ensure that common goods were shared out evenly between the members of a local community. To this purpose double tally sticks were employed. They were called *špica* or *škontrin (za jegranje)* in western Slovenia and the drawing was called *ígranje* or *jegranje na špice* (Goriška Brda,

Istria). The members of a neighbourhood used them to divide the crops from the communal lands. They first made as many heaps of hay, firewood, litter, leaves, etc. as there were farms. For every heap a 5 to 15 cm long stick was fashioned, on which symbols were cut and it was then split in a way that the symbols were visible on both parts. In some places in Goriška Brda (Biljana), the stick was not notched but simply broken in two. In both cases, however, one part of the stick was stuck into a heap of the communal crop and the other part was put in a vessel or hat.

The members of the village neighbourhood then drew lots by taking one half of a stick from the vessel or hat. Every farmer received the heap with the matching half.

Between Socerb and Slavnik on the Karst, tally sticks were used to share out litter, hay, and firewood. As many heaps as there were houses or households entitled to communal crops were prepared, regardless of the share of work done. Sharing out firewood and litter in this way was abandoned after 1900 (Vilfan 1996: 144–145; 1996a: 245).

Tally sticks for drawing lots were here and there replaced with slips of paper, which had to be “drawn”. In Borjana, for instance, the municipal authorities selected and numbered the trees in the communal forest that were to be felled. The same numbers were then written on slips of paper, which were drawn by the representatives of the farms. They were then allowed to fell the tree with the number corresponding to that on the drawn slip.<sup>33</sup> The communal forest of the village of Svino was shared in a similar way. First the forest was divided into roughly equal parts and these were marked with numbers; lots were then drawn from the slips of papers with the same numbers.<sup>34</sup> For the division of shares in the communal lands (e.g. mowing for litter) the numbers were replaced by tally sticks. In Gradec near Pivka, the total crops were divided into as many shares as there were farms and the shares were numbered. The same numbers were written on slips of paper, which were put in a hat and the farmers then drew lots.<sup>35</sup>

### Wooden calendars

Calendar days used to be marked with conventional notches on wooden objects. Wooden calendars or almanacs were in use in Slovenia until at least the 18th century. Such a calendar is said to have hung at Strmol Castle in the late 19th century (Benkovič 1895: 56). Data gathered so far indicate that only two specimens of wooden calendars have been preserved. One is a wooden calendar for the year 1756, made from a 140 cm long and 8.5 cm wide lath with carved symbols (little men, animals,

<sup>33</sup> Field trip 7, Kobarid, 1951, notebook 2, p. 19 (SEM, Documentation Department).

<sup>34</sup> Field trip 7, Kobarid, 1951, notebook 27, pp. 2–3 (SEM, Documentation Department).

<sup>35</sup> Field record of Marija Makarovič, 1978 (SEM, Documentation Department).

lines) and is in the Slovene Ethnographic Museum. The calendar is from Višnja gora and was acquired in 1899 (Smrekar 1900; Vilfan 1944: 110; 1944a: 247; Ma karovič 1995: 46). A quite special form of calendar is kept in the Franciscan Monastery of Novo mesto: it is made of a 1 cm thick round wooden board with a diameter of 13 cm. The calendar for 1783 is on one side and that for 1784 on the other side. The calendar reveals carved symbols for the workdays and Sundays, and the feast and saint days are also marked. The faces of saints are carved on the calendar, some also with their attributes. Martyrs are accompanied by the instruments they were murdered with, and even the phases of the moon are marked. The calendar is undoubtedly the product of a skilled woodcarver; such calendars were possibly made by monks and distributed to lay people. Because the calendar is quite small, it could easily be carried on one's person and, who knows, it may even be the first specimen of a wooden pocket calendar (Benkovič 1895a: 768; Schindler 1959).  
Wooden calendars were replaced by printed ones when literacy increased.

## Conclusions

Tally sticks, nowadays completely forgotten devices for memorising, recording, and marking very different things, played an eminently important role in the past. They were connected with the development of numbers and counting, and in some periods and places they were part of official law, from where they passed into common law. Spreading literacy caused their use to decline and it is therefore no surprise that they were longest preserved for business dealings among illiterate peasants and tradesmen. They functioned as counting tools, receipts, delivery notes, invoices, account ledgers and contracts. Following the introduction of new devices, which were mostly based on letter and numeral symbols, tally sticks were almost completely eradicated from people's lives. They were replaced by data written on paper and, more recently, by various ways of analogue and digital recording. One might even say that credit cards are in a way successors of tally sticks, albeit the debts are now magnetically recorded: one paper slip is the seller's confirmation, and the buyer keeps the second one as evidence of his expenditures. Unlike tally sticks, where the issuer was usually the lender, a third person – a bank – is included in the use of credit cards. Evidence of received and supplied goods is today kept, instead of on tally sticks, by bar codes which are read optically. In the same way as tally sticks were carried and kept in safe places in the past, their modern replacements are carefully kept. What is perhaps most astonishing is that similar types of tally sticks and similar ways of using them developed in different parts of the world, where (at least in the very remote past) we can hardly assume intercultural influences. It thus seems that tally sticks met a universal need to record quantities, and that this need was solved in very similar ways in different cultures.

The tally stick – once a so important and necessary device in daily life – started to lose its importance, at least in most of Europe, at the turn of the 20th century and is today nearly completely absent from people's memory. But it has left traces in most European languages and this is also true of the Slovene term *rovaš*. Few people today know what the word means. Some know phrases in which it is used, but are unsure where it comes from. Most types of tally sticks have long since stopped being used. The last preserved form of tally sticks is the grape picker's tally used in some winegrowing areas, such as Slovenske gorice and Bizeljsko.

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# CATALOG OF SUBJECTS

## CATALOGUE OF OBJECTS





## Introductory note

The catalog of objects includes rovaše, roša and spana, which are kept by the Slovenian Ethnographic Museum (SEM). The museum acquired wooden rovašes and their metal successors roša and spana in different periods of time and on the basis of different initiatives. Some Rovaš were originally in the collections of the Carniola Regional Museum and later became the property of the Ethnographic Museum, today's SEM. This mainly includes examples of bunches of rovašev for borrowing wine from Belokrajne neighborhood brick houses.

The museum's field teams also played an important role in the acquisition of various types of rovasche and information about them, which obtained individual specimens mainly while studying viticulture and folk law. Thus, over a long period of time, the sticks from Brent came to the custody of agrarian activities in connection with viticulture.

Most of the credit for today's collection of other rovas (tax, driving, weaving, rolling, lottery...) undoubtedly goes to the lawyer Sergij Vilfan, who during his research on human law also paid a lot of attention to rovas. He did part of the research on his own, and part in the museum's field teams.<sup>1</sup> He handed over most of the fossils he obtained in the field to the museum. Thanks to him, today we have a nice collection of different types of rovas.

Roše was acquired by the museum in 1999 and 2000, when SEM curator Andrej Dular was preparing the exhibition *Captured indigo in images - Blue printing in Slovenia*. They came to the museum from the hands of former dyers or their descendants: Alojz Hofbauer donated 14 roše from Hofbauer's dyer's shop in Vitanje to the museum, 21 roše from Wagner's bar varna in Radovljica were obtained from Marija Wagner and 90 roše from Piry's dyer's shop in Kranj from Darja Okorn - Kern. During the preparations for the first part of the permanent exhibition SEM *Between nature and culture*, where we wanted to draw attention to the collection of Rovas and their successors, Anton Vodan donated the spanners to us.

The catalog therefore includes the rošas and their successors, the rošas and spani, which are kept in the SEM collections. The roša and spani are the originals, while the rovas are also illustrations that the locals made from memory at a time when the rovas were no longer in use. Most of the illustrations are based on Vilfan's research.

The catalog is divided into two parts, a section with roši (wooden) and a section with roši and spani (metal). In both, items are sorted by ascending SEM inventory numbers. In addition to the name of the item, all catalog units contain information on the place and time of manufacture, use, material and dimensions. Each item has an SEM inventory number, some also an old inventory number. When it is an illustration with rovas, this is pointed out next to the name of the object. There is also information about its function among the Rovaši

<sup>1</sup> He researched folk law in the areas of Šentjurij - Škocjan - Turjak (1948), Šmarje - Sap - Polica (1949), Šentvid pri Stični (1951), Mokronog (1951), Kobarid (1951), Šentjernež (1952), Goriška Brda (1953). ) and Brkini (1955).

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CATALOG OF OBJECTS

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and the number of components. The catalog consists of 183 units, with the ropes connected by a string or suspended from a bow presented as a group. There is a photo of the object next to each catalog item.

Indexes of objects classified by function, number of components, place of use or manufacture and material have been added to the object catalog.

**Abbreviations used:** inv.

no. = inventory number SEM old inv.

no. NM = old inventory number of the National Museum old inv. no. G = old inventory number in the Grebený collection<sup>2</sup> cat. no. = serial number

in the catalog

v = height

d = length

š = width

2 r = diameter

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<sup>2</sup> Items collected by prof. Oto Grebenc in the first half of the 20th century. In 1929, the objects were bought and given to the National Museum. After World War II, part of the collection was taken over by the then Ethnographic Museum (Makarovič 1962: 243–252).

## Introductory note

The catalogue of objects includes the tally sticks and tokens held by the Slovene Ethnographic Museum. The museum acquired the wooden tally sticks and their later replacements, metal tokens, at different times and as a result of different initiatives. Some tally sticks were originally part of the collections of the Carniolan Provincial Museum and were later transferred to the Slovene Ethnographic Museum. These include sets of tally sticks that were used in loaning wine between neighbouring wine cellars in the Bela krajina region.

An important role in the acquisition of different types of tally sticks and the gathering of data on them was played by the museum's research teams, which acquired individual specimens mostly in the course of their research into wine growing and common law. The tally sticks used by grape pickers, for instance, arrived at the museum over a longer period by way of the department of agrarian activities and in connection with wine growing. The greatest contribution to the existing collection of other tally sticks (used by taxmen, carters, weavers, fullers, for drawing lots, etc.) was undoubtedly made by the lawyer Sergij Vilfan, who in his research into common law dedicated considerable attention to tally sticks. He carried out part of this research independently, and part as a member of the Ethnographic Museum teams.<sup>1</sup> He handed over most of the tally sticks he acquired in the field to the museum. Vilfan must thus be credited for the rich variety of types of tally sticks in the present collection.

The metal tokens for marking cloth (*roši*) were acquired by the museum in 1999 and 2000 when the curator Andrej Dular designed the exhibition *Indigo caught in images – Blueprinting in Slovenia*, and they were acquired from former dyers or their descendants. 14 metal tokens from the Hofbauer Dye Mill in Vitanje were donated to the museum by Alojz Hofbauer, 21 metal tokens from the Wagner Dye Mill in Radovljica were acquired from Marija Wagner, and 90 metal tokens from the Pirc Dye Mill in Kranj from Darja Okorn-Kern. Other metal tokens for counting work days (*špani*) were donated by Anton Vodan at the time of the preparations for the first part of the museum's permanent exhibition, *Between Nature and Culture*, where we wanted to present the collection of tally sticks and what replaced them.

This catalogue covers all the museum's tally sticks and their later replacements, metal tokens. The metal tokens are original items, while the tally sticks include illustrations which were made from memory by locals at a time when tally sticks

<sup>1</sup> Vilfan carried out research into common law in the field areas of Šentjurij - Škocjan - Turjak (1948), Šmarje - Sap - Polica (1949), Šentvid pri Stični (1951), Mokronog (1951), Kobarid (1951), Šentjernej (1952), Goriška Brda (1953), and Brkini (1955).

were no longer in use. Most of these derive from Vilfan's research into tally sticks.

The catalogue is divided into two sections: wooden tally sticks and metal tokens. In both the objects are classified in the ascending order of the museum's accession numbers. The following data are listed for every catalogue unit: the name of the object, data on the place and time of production or use, the material, and dimensions. Every object is listed with the accession number and in some cases the old accession number is also mentioned. Tally sticks that are illustrations are marked as such after the object's name. For every tally stick the function is given, as well as the number of its pieces. The catalogue includes 183 units; tally sticks attached to a string or hanging from a bow are treated as single units. Every catalogue unit is accompanied by a photograph of the object.

The catalogue of objects is completed by indexes of the objects, classified by function, number of pieces, place of use or production, and the material.

**Abbreviations:**

acc. no. = Slovene Ethnographic Museum accession number

old acc. no. NM = old accession number of the National Museum

old acc. no. G = accession number in the Grebenc Collection<sup>2</sup>

cat. no. = consecutive number in the catalogue

h = height

l = length

w = width

d = diameter

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<sup>2</sup> These objects were collected by professor Oto Grebenc in the first half of the 20th century. They were purchased by and transferred to the National Museum in 1929. After the Second World War, a part of the collection was transferred to the then Ethnographic Museum (Makarovič 1962: 243–252).

## Rovaši / Tally sticks

1.

**ROVAŠ – Brentar stick** / one-piece / probably Styria / before World War II / wood / d = 86 cm / inv. no. 2575.

**TALLY STICK – grape picker's** / single / probably Štajersko / before WWII / wood / l = 86 cm / acc. no. 2575.



Peeled beech stick with thickening at the top. Just below the top, the numbers 1 2 3 4 are incised around the stick, and the characters I and X are incised along the four sides of the stick. The ten straight cuts are always followed by an X. Below the thickened part, the stick is slightly burnt, with cracks in some parts. Rovaš was used to count brents of picked grapes.

2.

**ROVAŠ - tax** / one-piece / Prekmurje / beginning of the 20th century / wood / d = 102 cm / inv. no. 2832.

**TALLY STICK – taxes** / single / Prekmurje / early 20th c. / wood / l = 102 cm / acc. no. 2832.



A four-edged and slightly curved stick made of linden wood. On one side, the characters I, V and X are incised in various combinations. Individual combinations are separated by smaller central notches. Some characters are cut off at the bottom edge. On the opposite side of the rod is written in pencil no. 17 and the double underlined signature of Matjašiy Štefan and the inscriptions Rovaš and Lipa with a fountain pen. Today there are traces of two stamps of the Novine newspaper. Rovaš was used by the village mayor to mark the submitted duties.

3.

**ROVAŠI – to indicate debt** / two-part / unknown place / before World War II / wood / d (rovašev) = 12.3 cm – 17.2 cm / inv. no. 2833.

**TALLY STICKS – debt recording** / double / provenance unknown / before WWII / wood / l (tally sticks) = 12.3 cm – 17.2 cm / acc. no. 2833.

## CATALOG OF OBJECTS



A bunch of nine sticks of different lengths made of spruce, walnut and hazel wood strung on a string. Each stick is butchered along part of its length. They are two-piece nuts, but only the nuts are in the bunch. Each has a hole at the top through which a string runs. Above or below the hole are incised signs or combinations of signs I and V, on one nut there is a cut number 5. On the narrower part of the rod are parts of the incised signs I, V and X (the remaining parts of the signs are on the missing protrusions).

4.

**ROVAŠI – for debt marking** / two-part / unknown place / before World War II / wood / d (rovašev) = 11 cm – 19 cm / inv. no. 2834.

**TALLY STICKS – debt recording** / double / provenance unknown / before WWII / wood / l (tally sticks) = 11 cm – 19 cm / acc. no. 2834.



A bunch of eight spruce sticks of different lengths strung on a string. Seven sticks are cut along part of the length, one along the whole grain. They are two-piece nuts, but only the nuts are in the bunch. The seven sticks have a hole at the top through which the string runs. Below the hole are incised signs or combinations of signs I, V and X. On the narrower part of the stick are parts of the incised signs I, V and X (the remaining parts of the signs are on the missing bumps). Half of the stick, folded along its entire length, is without a hole, so it is tied into a bunch with a string.

5.

**ROVAŠ – driving** / three-part / Ljubljana / middle of the 20th century / wood / d (whole) = 25.7 cm; w = 2.5 cm / inv. no. 3187.

**TALLY STICK – carter's** / triple / Ljubljana / mid 20th century / wood / l (total) = 25.7 cm; w. = 2.5 cm / acc. no. 3187.



The spruce board is sawn lengthwise in three layers so that the middle part adheres to the handle, and the top and bottom parts are sawn off. There are notches on the sides that run across all three parts. The upper part is written in pencil: *Voznik žerne / Battelino cave / 1m / gravel from the wall / chemical building*. The lower part is missing. Rovaš was used by the company Tönnies from Ljubljana to count passengers gravel wagons.



## CATALOG OF OBJECTS

6.

**ROVAŠ – driving** / two-part / Ljubljana / 1944 / wood / d (whole) = 29.5 cm; w = 2.5 cm / inv. no. 3188.

*TALLY STICK – carter's / double / Ljubljana / 1944 / wood / l (total) = 29.5 cm; w. = 2.5 cm / acc. no. 3188.*



A plank of spruce wood is sawn lengthwise into two layers so that the lower part adheres to the handle, and the upper part is sawed off. There are notches on the side that run across both parts. On the upper part is written in pencil: *(Moses) / Capožnik from 20.-22. IV. 44 / ball access / m<sup>2</sup> 28 – a 60 =;* on the bottom: *(Moses) / Capožnik from 20.-22. IV. 44.* Rovaš was used by the company Leopold Bricelj from Ljubljana to count transported gravel wagons.

7.

**ROVAŠ – driving** / two-part / Ljubljana / 1944 / wood / d (whole) = 32.5 cm; w = 3.5 cm / inv. no. 3189.

*TALLY STICK – carter's / double / Ljubljana / 1944 / wood / l (total) = 32.5 cm; w. = 3.5 cm / acc. no. 3189.*



A plank of spruce wood is sawn lengthwise into two layers so that the lower part adheres to the handle, and the upper part is sawed off. At the transition between the handle and the sawn part, a wavy transition is made with a chisel, i.e. the mark by which wagoners were distinguished. There are notches on the side that run across both parts. Ro vaš was used by the company Matko Curk from Ljubljana to count transported gravel wagons.

8.

**ROVAŠ – Brentar stick** / one-piece / Trebelno pri Mokronog / 1951 / wood / d = 98 cm / inv. no. 6593.

*TALLY STICK – grape picker's / single / Trebelno near Mokronog / 1951 / wood / l = 98 cm / acc. no. 6593.*



Peeled beech stick. A series of thirty-nine notches run along the length of the rod. The wood is cracked in some parts and has holes from the woodworm in some places. Rovaš was made and used for counting brent grapes by a local from Trebelne.

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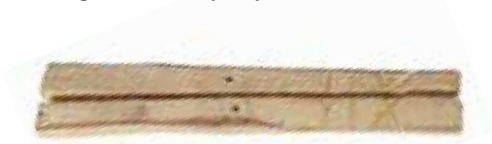
CATALOG OF OBJECTS

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9.

**ROVAŠ (illustration) – draw / two-part / ýrnotiýe / made in 1953 / wood / d = 9.3 cm / inv. no. 7003.**

*TALLY STICK (illustration) – drawing lots / double / ýrnotiýe / made in 1953 / wood / l = 9.3 cm / acc. no. 7003.*



Two four-edged staves with incised characters IIX running across both staves. With such rovashi, the produce from the common farm was distributed among the members of the village community. Rovaš was made by a local from ýrnotiý.

10.

**ROVAŠ (illustration) – draw / two-part / ýrnotiýe / made in 1953 / wood / d = 26 cm / inv. no. 7004.**

*TALLY STICK (illustration) – drawing lots / double / ýrnotiýe / made in 1953 / wood / l = 26 cm / acc. no. 7004.*



Peeled willow stick, pointed at one end, cut diagonally at the other. Marks XII are incised on the uncut part, half of the cut part is butchered. There is no excavation with the same markings. With such rovashi, the produce from the common farm was distributed among the members of the village community. Rovaš was made by a local from ýrnotiý.

11.

**ROVAŠ (illustration) – raffle / two-part / ýrnotiýe / made in 1953 / wood / d = 14 cm / inv. no. 7005.**

*TALLY STICK (illustration) – drawing lots / double / ýrnotiýe / made in 1953 / wood / l = 14 cm / acc. no. 7005.*



Unpeeled willow stick, pointed at one end, cut diagonally at the other. Marks XX are incised on the cut part, half of the cut part is butchered. If the nut and the core are folded together, the notched marks are also assembled. With such rovashi, the produce from the common farm was distributed among the members of the village community. Rovaš was made by a local from ýrnotiý.

CATALOG OF OBJECTS

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12.

**ROVAŠ (illustration) – drawing / two-part / ýrnotiye / made in 1953 / wood / d = 10.5 cm / inv. no. 7006.**

*TALLY STICK (illustration) – drawing lots / double / ýrnotiye / made in 1953 / wood / l = 10.5 cm / acc. no. 7006.*

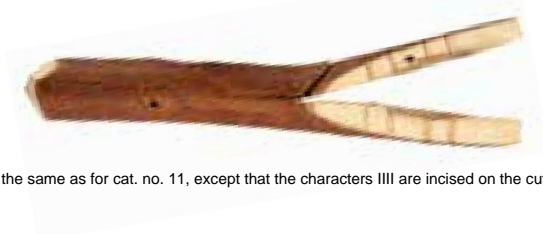


The description of the item is the same as for cat. no. 11.

13.

**ROVAŠ (illustration) – draw / two-part / ýrnotiye / made in 1953 / wood / d = 8.5 cm / inv. no. 7007.**

*TALLY STICK (illustration) – drawing lots / double / ýrnotiye / made in 1953 / wood / l = 8.5 cm / acc. no. 7007.*



The description of the item is the same as for cat. no. 11, except that the characters III are incised on the cut part.

14.

**ROVAŠ (illustration) – raffle / two-part / ýrnotiye / made in 1953 / wood / d = 8 cm / inv. no. 7008.**

*TALLY STICK (illustration) – drawing lots / double / ýrnotiye / made in 1953 / wood / l = 8 cm / acc. no. 7008.*



The description of the item is the same as for cat. no. 11, except that the sign ~ is incised on the cut part.

15.

**ROVAŠ (illustration) – draw / two-part / ýrnotiye / made in 1953 / wood / d = 9 cm / inv. no. 7009.**

*TALLY STICK (illustration) – drawing lots / double / ýrnotiye / made in 1953 / wood / l = 9 cm / acc. no. 7009.*

CATALOG OF OBJECTS

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The description of the item is the same as for cat. no. 11, except that the signs III are incised on the cut part.

16.

**ROVAŠ (illustration) – drawing / two-part / ýrnotiýe / made in 1953 / wood / d = 10.5 cm / inv. no. 7010.**

*TALLY STICK (illustration) – drawing lots / double / ýrnotiýe / made in 1953 / wood / l = 10.5 cm / acc. no. 7010.*



The description of the item is the same as for cat. no. 11, except that it is without a bump.

17.

**ROVAŠ (illustration) – draw / two-part / ýrnotiýe / made in 1953 / wood / d = 16.5 cm / inv. no. 7011.**

*TALLY STICK (illustration) – drawing lots / double / ýrnotiýe / made in 1953 / wood / l = 16.5 cm / acc. no. 7011.*



The description of the item is the same as for cat. no. 11, except that an X mark is incised on the cut part and there is no gouging.

18.

**ROVAŠ (illustration) – rolling / two-part / Javorje pri Ilirska Bistrica / made in 1955 / wood / a = 7 cm; b = 7.2 cm / inv. no. 7449.**

*TALLY STICK (illustration) – fuller's / double / Javorje near Ilirska Bistrica / made in 1955 / wood / a = 7 cm; b = 7.2 cm / acc. no. 7449.*



Two unpeeled glitter sticks. Each rod is cut to half its length. If the sticks from the hatch are partly folded together, they are congruent. With such rovashi, the rollers marked the fabrics they received for rolling. Rovaš was made by a local from Javorj.

## CATALOG OF OBJECTS

19.

**ROVAŠ (illustration) – draw / two-part / Rožice / made in 1955 / wood / d = 5.5 cm / inv. no. 7450.**

*TALLY STICK (illustration) – drawing lots / double / Rožice / made in 1955 / wood / l = 5.5 cm / acc. no. 7450.*



Unpeeled glitter stick, cut along the entire length on one side. Marks IIIIV are incised on the cut part, the stick is folded lengthwise into two parts. With such rovashi, the produce from the common farm was distributed among the members of the village community. Rovaš was made by a local from Rožice.

20.

**ROVAŠ (illustration) – draw / two-part / Povžane / made in 1955 / wood / d = 7.5 cm / inv. no. 7451.**

*TALLY STICK (illustration) – drawing lots / double / Povžane / made in 1955 / wood / l = 7.5 cm / acc. no. 7451.*



An unpeeled stick, which is cut diagonally at one end, the bark has been removed along the entire length on one side, one part of the stick has been cut off. The sign I is incised across both parts of the rovaš. Such rovaš were used to distribute produce from the common farm among the members of the village community. Rovaš made do macin from Povžane.

21.

**ROVAŠ (illustration) – tax / one-piece / Gabrk near Ilirska Bistrica / made in 1955 / wood / d = 50 cm / inv. no. 7452.**

*TALLY STICK (illustration) – taxes / single / Gabrk near Ilirska Bistrica / made in 1955 / wood / l = 50 cm / acc. no. 7452.*



A four-sided stick made of linden wood. The sides have notches colored in ink pencil and inscriptions, also in ink pencil. The rovaš is divided into five parts along its length. The pages are followed by incisions and inscriptions: 1.

*III · VI · / · IIIII · · /*

*· IIII · 3 · R · 6 · st · 2 / in A · st · 1 // 2. ,st, / st./ st. /// 3. / Villages /*

*antique / Roveš / Gaberk /*

*Tomažij Lovrenc / Gaberk 13 / 4. / st. down / st. down / st. down. / cent. down. /*

*cent. down. / cent. down. / cent.*

Village mayors used such rovaches to mark the submitted duties. Rovaš made his home rank from Gabrk.

CATALOG OF OBJECTS

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22.

**ROVAŠ (illustration) – weaving / two-part / Suhorje / made in 1955 / wood / d = 11.5 cm / inv. no. 7453.**

*TALLY STICK (illustration) – weaver's / double / Suhorje / made in 1955 / wood / l = 11.5 cm / acc. no. 7453.*



A conical stick with a NAME written on it in pencil . There is no related work. With such rovashi, the rollers marked the fabrics they received for rolling. Rovaš was made by a local from Suhorij.

23.

**ROVAŠ (illustration) – rolling / two-part / Suhorje / made in 1955 / wood / d = 11.5 cm / inv. no. 7454.**

*TALLY STICK (illustration) – fuller's / double / Suhorje / made in 1955 / wood / l = 11.5 cm / acc. no. 7454.*



A four-sided stick with a chiseled part, XV markings are incised across both parts. The NAME inscription is incised on the nut . With such rovashi, the rollers marked the fabrics they received for rolling. Rovaš was made by a native of Ostrovica.

24.

**ROVAŠ (illustration) – raffle / two-part / Gabrk near Ilirska Bistrica / made in 1955 / wood / d = 8 cm / inv. no. 7455.**

*TALLY STICK (illustration) – drawing lots / double / Gabrk near Ilirska Bistrica / made in 1955 / wood / l = 8 cm / acc. no. 7455.*



Peeled glitter stick. Part of the stick is missing. With such rovashi, the produce from the common farm was distributed among the members of the village community. Rovaš was made by a local from Gabrk.

25.

**ROVAŠ (illustration) – raffle / two-part / Gabrk near Ilirska Bistrica / made in 1955 / wood / d = 11 cm / inv. no. 7456.**

*TALLY STICK (illustration) – drawing lots / double / Gabrk near Ilirska Bistrica / made in 1955 / wood / l = 8 cm / acc. no. 7456.*

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CATALOG OF OBJECTS

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An unpeeled stick, part of the bark is cut out at one end. With such rovashi, the produce from the common farm was distributed among the members of the village community. Rovaš was made by a local from Gabrk.

26.

**ROVAŠ (illustration) – draw / two-part / Ducks / made in 1955 / wood / d = 8.5 cm / inv. no. 7457.**

*TALLY STICK (illustration) – drawing lots / double / Rajčice / made in 1955 / wood / l = 8.5 cm / acc. no. 7457.*



An unpeeled stick, a piece of bark is cut out in the middle. With such rovashi, they shared the produce from the common farm among the members of the village. Rovaš was made by a local from Rajčice.

27.

**ROVAŠ (illustration) – roller / two-part / Barka / made in 1955 / wood / d = 10 cm / inv. no. 7458.**

*TALLY STICK (illustration) – fuller's / double / Barka / made in 1955 / wood / l = 10 cm / acc. no. 7458.*



The four-sided glitter stick is cut diagonally in half in the middle. There are three longer and one shorter notches on each part. With such rovashi, the rollers marked the fabrics they received for rolling. Rovaš was made by a local from Barka.

28.

**ROVAŠ (illustration) – draw / two-part / Podbeje / made in 1955 / wood / d = 3.5 cm / inv. no. 7459.**

*TALLY STICK (illustration) – drawing lots / double / Podbeže / made in 1955 / wood / l = 3.5 cm / acc. no. 7459.*



Unpeeled gloss stick, trimmed along its entire length on two sides. On one of the trimmed pages, the number 29 is written in pencil. There is no corresponding part. With such rovashi, the produce from the common farm was distributed among the members of the village community. Rovaš was made by a local from Podbež.

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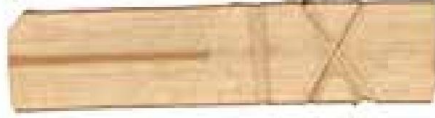
CATALOG OF OBJECTS

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29.

**ROVAŠ (illustration) – raffle / two-part / Gradišje pri Materija / made in 1955 / wood / d = 5 cm / inv. no. 7460.**

*TALLY STICK (illustration) – drawing lots / double / Gradišje near Materija / made in 1955 / wood / l = 5 cm / acc. no. 7460.*



Half of the unpeeled gloss stick is cut lengthwise. Marks IX are incised on the cut part. There is no related work. With such rovashi, the produce from the common farm was distributed among the members of the village community. Rovaš was made by a local from Gradišje.

30.

**ROVAŠ (illustration) – draw / two-part / Potok pri Vremy / made in 1955 / wood / d = 3 cm / inv. no. 7461.**

*TALLY STICK (illustration) – drawing lots / double / Potok near Vreme / made in 1955 / wood / l = 3 cm / acc. no. 7461.*



Half of the lengthwise cut off the peeled glitter stick. There is a notch on the edge of the stick. There is no related work. With such rovashi, the produce from the common farm was distributed among the members of the village community. Rovaš was made by a native of Potok.

31.

**ROVAŠ (illustration) – raffle / multi-part / Hotijna / made in 1955 / wood / d = 43 cm / inv. no. 7462.**

*TALLY STICK (illustration) – drawing lots / multi-part / Hotijna / made in 1955 / wood / l = 43 cm / acc. no. 7462.*



Partially peeled polish stick has chipped pieces along its entire length. With such rovashi, the produce from the common farm was distributed among the members of the village community. Rovaš was made by a local from Hotica.



## CATALOG OF OBJECTS

32.

**ROVAŠ (illustration) – for marking debt** / one-piece / ýrneĵa vas / made in 1956 / wood / d = 15.5 cm; w = 1.6 cm / inv. no. 7715.

**TALLY STICK (illustration) – debt recording** / single / ýrneĵa vas / made in 1956 / wood / l = 15.5 cm; w. = 1.6 cm / acc. no. 7715.



A stick with a hole at one end. Above the hole, the sign II and below the hole the sign I, the number 1 is written on the side of the wand. There are three notches along the narrower side. Borrowed wine was marked on such scumbags in the neighborhood brick house. Rovaš was made by a local from the village of ýrneĵa vas.

33.

**ROVAŠ – Brentar stick** / one-piece / Podboĵje / around 1930 / wood / d = 117 cm / and in. no. 7718.

**TALLY STICK – grape picker's** / single / Podboĵje / around 1930 / wood / l = 117 cm / acc. no. 7718.



Unpeeled gloss stick, pointed at the bottom. The characters I and X are incised along the four sides of the rod. In some sets, the X follows the ninth character, and in some the tenth character I. Between the sets of notches, another wider notch runs around the rod. Rovaš was made and used by a local from Podboĵje to count brents of picked grapes.

34.

**ROVAŠ – Brentar stick** / one-piece / Slinovce / 1955 / wood / d = 127 cm / inv. no. 7719.

**TALLY STICK – grape picker's** / single / Slinovce / 1955 / wood / l = 127 cm / acc. no. 7719.



Unpeeled glitter stick. On the upper end, the initials of the maker's and user's names MK are incised. Below them, the markings I and X are incised along the rod on four sides in different sequences. Rovaš was made and used for counting brents of picked grapes by a native of Slinovci.

35.

**ROVAŠI – for indicating length** / one-piece / Predgrad / 1887 / wood / d (rovašev) = 7.5 cm – 21 cm / inv. no. 9015/ a–v.

**TALLY STICKS – debt recording** / single / Predgrad / 1887 / wood / l (tally sticks) = 7.5 cm – 21 cm / acc. no. 9015/ a–v.

## CATALOG OF OBJECTS



A bunch of twenty-two sticks of different lengths made of linden and spruce wood strung on a string. All sticks have a hole at the top through which the string runs. The sticks are incised with the characters I, V and X, some have notches that go around the whole stick. Some sticks are cut. One stick has the year 1887 written in ink. Several sticks have notes in pencil (*Ivan Spehar bros / Speharski Rovaši / Kargetan / Ivekov / Miserijj*). Some sticks have holes from woodworms, some are broken off at the end. Rovaše were used in church masonry to mark borrowed wine.

36.

**ROVAŠI (illustration) – for indicating length** / one-piece / Drašijji / made in 1966 / wood / d (rovaši) = 15 cm – 20 cm / inv. no. 12663.

**TALLY STICKS (illustration) – debt recording** / single / Drašijji / made in 1966 / wood / l (tally sticks) = 15 cm – 20 cm / acc. no. 12663.



A string is tied to the willow bow, on which hang twenty-one linden sticks. The sticks have a hole at the top through which the string runs. Below or above the hole, the numbers from 1 to 21 are written with a pencil, indicating the members of the neighborhood. Such rovašes were used in the neighborhood brickyard to label borrowed wine.

37.

**ROVAŠ – Brentar stick** / one-piece / Jerusalem / 70s of the 20th century / wood / d = 98 cm / and in. no. 14752.

**TALLY STICK – grape picker's** / single / Jeruzalem / 1970s / wood / l = 98 cm / acc. no. 14752.



Peeled oak stick with a protrusion that acts as a handle. There are four sets of incised I's and X's along the length of the stick so that the nine straight cuts are followed by an X. The stick is damaged (cracked and broken) at the top, so it is wrapped in wire and has several nails driven into it. Rovaš was made and used for counting brents of picked grapes by a native of Jerusalem.

38.

**ROVAŠ – Brentar stick** / one-piece / Veliyjane / 70s of the 20th century / wood / d = 113 cm / inv. no. 14754.

**TALLY STICK – grape picker's** / single / Veliyjane / 1970s / wood / l = 113 cm / acc. no. 14754.

## CATALOG OF OBJECTS



Three-pronged stake made of spruce wood. On one of the pages, the signs I and X are incised so that the nine straight lines are followed by the sign X. Rovaš was made and used for counting brents of picked grapes by a native of Veliyan.

39.

**ROVAŠ – Brentar stick** / one-piece / Veliki Brebrovnik / 70s of the 20th century / wood / d = 112 cm / inv. no. 14755.

**TALLY STICK – grape picker's** / single / Veliki Brebrovnik / 1970s / wood / l = 112 cm / acc. no. 14755.



Peeled stick. Along the rod, there are sets of shorter and longer notches on several sides, which are arranged in such a way that nine shorter notches are always followed by one longer one. Rovaš was made and used for counting brents of picked grapes by a local from Veliki Brebrovnik.

40.

**ROVAŠI – to indicate debt** / two-part / Valijna vas / first quarter of the 20th century / wood / d (rovašev) = 9 cm – 14 cm / inv. no. 20336 / old inv. no. NM 16748.

**TALLY STICKS – debt recording** / double / Valijna vas / first quarter 20th c. / wood / l (tally sticks) = 9 cm – 14 cm / acc. no. 20336 / old acc. no. NM 16748.



Seven sticks made of linden wood, which have a hole at the top, through which they are strung on a string. One part is removed from each stick. There are straight notches on the narrower part of the sticks. It's nuts. Rovaše were probably used in church masonry to mark borrowed wine.

41.

**ROVAŠ – shepherd** / one-piece / Podkoren / 1880 / wood / d = 11.5 cm / inv. no. 20337 / old and in. no. G 11435.

**TALLY STICK – shepherd's** / single / Podkoren / 1880 / wood / l = 11.5 cm / acc. no. 2033 / old acc. no. G 11435.



Stake made of linden wood. The characters I, V and X are incised on both sides. Some parts of the characters are cut out. Rovaš was used to count livestock on a common pasture.

## CATALOG OF OBJECTS

42.

**ROVAŠI – for indicating the length** / two-part / White landscape / late 19th century / wood / d (rovašev) = 5.5 cm – 18 cm / inv. no. 20426 / old inv. no. NM 8128.

**TALLY STICKS – debt recording** / double / Bela krajina / late 19th c. / wood / l (tally sticks) = 5.5 cm – 18 cm / acc. no. 20426 / old acc. no. NM 8128.



The linden sticks have a hole on one side through which they are strung on a string tied to a bow. There are 11 sticks in the upper set and 37 in the lower set. One part is cut from each stick.

The characters I, V and X are incised on the sticks, as well as barely visible pencil writing. Rovaše were used in the neighborhood brick house to label borrowed wine.

43.

**ROVAŠI – to mark the length** / one-piece / White landscape / late 19th century / wood / d (rovašev) = 14 cm – 24 cm / inv. no. 22614 / old inv. no. NM 8127.

**TALLY STICKS – debt recording** / single / Bela krajina / late 19th c. / wood / l (tally sticks) = 14 cm – 24 cm / acc. no. 22614 / old acc. no. NM 8127.



Twenty-four sticks of linden wood, which have a hole at the top, through which they are strung on a string that is tied to a peeled stick (the remains of a bow). Most of the sticks have Arabic numerals written or incised above the hole with a pencil to indicate the members of the neighborhood. The characters I, / and X are incised on the sticks, and on some of them there are poorly visible pencil inscriptions (*ŷurila*; *ive ...*; *Miko ...*). Your hand was used in the neighborhood brickyard to denote a borrowed wine.

44.

**ROVAŠI – to mark the length** / two-part / White landscape / late 19th century / wood / d (rovašev) = 6 cm – 19 cm / inv. no. 22615 / old inv. no. NM 8130.

**TALLY STICKS – debt recording** / double / Bela krajina / late 19th c. / wood / l (tally sticks) = 6 cm – 19 cm / acc. no. 22615 / old acc. no. NM 8130.

## CATALOG OF OBJECTS



The wooden bow (it is broken at the top) has holes on each side, which are connected by strings on which linden wooden sticks are strung. The sticks have a hole at the top through which the string runs. There are 27 sticks strung on the top string, 42 sticks on the bottom. Above or below the hole, Arabic numerals are written with a pencil, indicating the members of the neighborhood. The characters I and X are incised on the narrower part of the sticks, in some cases the same characters are also written with a pencil. Markings are cut off on some sticks. A few sticks have poorly visible pencil inscriptions. Most rovaše are of a similar type, they are nuts. Rovaše was used in the neighborhood brick house to mark borrowed wine.

45.

**ROVAŠI – for marking the length** / one-piece / White landscape / late 19th century / wood / d (rovašev) = 18.5 cm – 24 cm / inv. no. 22616 / old inv. no. NM 8129.

**TALLY STICKS – debt recording** / single / Bela krajina / late 19th c. / wood / l (tally sticks) = 18.5 cm – 24 cm / acc. no. 22616 / old acc. no. NM 8129.



A wooden bow (broken at the top) to which is tied a string with twenty-one linden sticks strung together with holes in the top. Above the hole, Arabic numerals are written with a pencil, indicating the members of the neighborhood. The characters I, / and X are incised on the sticks. Some of the sticks have inscriptions in pencil (*Križevska vas 1877; March 25, 1877 Karlovič; Mlinar*). Rovaše was used in the neighborhood brick house to mark borrowed wine.

46.

**ROVAŠI – for marking the length** / one-piece / White landscape / late 19th century / wood / d (rovašev) = 15 cm – 23.5 cm / inv. no. 22617.

**TALLY STICKS – debt recording** / single / Bela krajina / late 19th c. / wood / l (tally sticks) = 15 cm – 23.5 cm / acc. no. 22617.



The remains of a wooden bow (most of it is missing) to which is tied a string with nineteen linden sticks strung together with holes at the top. Above the hole are incised or penciled Arabic numerals, which indicate the members of the neighborhood. The characters I, \ and X are incised below the hole. Some sticks have notches from being cut. A few sticks have pencil inscriptions (*Janes Težak; Ta pushel je Rosalnički; Rosalnice; boldin (?), Božakovo, 1875*). Rovaše was used in the neighborhood brick house to mark borrowed wine.



## Roši in špani / *Metal tokens*

47.

**ROŠ – for marking goods** / Vitanje / before World War 1 / brass / 2 r = 2.6 cm / inv. no. 20491.

*TOKEN – for marking cloth* / Vitanje / before WWI / brass / d = 2.6 cm / acc. no. 20491.



A round plate made of brass sheet with rectangular holes on the sides. The initials JH (Johan Hof bauer), 1 letter K (mark for Mislinja) and the number 33 are stamped into the tile. Roš is from Hof bauer's paint shop in Vitanje. The dyer used it to mark the goods he received for dyeing.

48.

**ROŠ – for marking goods** / Vitanje / before World War 1 / brass / 2 r = 2.5 cm / inv. no. 20492.

*TOKEN – for marking cloth* / Vitanje / before WWI / brass / d = 2.5 cm / acc. no. 20492.



Round tile with holes on the sides. The initials JH (Johan Hof bauer), the letter K (mark for Mislinja) and the number 43 are imprinted in the plate, the rest as in cat. no. 47.

49.

**ROŠ – for marking goods** / Vitanje / before World War 1 / brass / 2 r = 2.5 cm / inv. no. 20493.

*TOKEN – for marking cloth* / Vitanje / before WWI / brass / d = 2.5 cm / acc. no. 20493.



Stamped initials JH (Johan Hof bauer) and number 55, rest as with cat. no. 48.

50.

**ROŠ – for marking goods** / Vitanje / 1st half of the 20th century / brass / 2 r = 2 cm / and in. no. 20494.

*TOKEN – for marking cloth* / Vitanje / 1st half 20th c. / brass / d = 2 cm / acc. no. 20494.

<sup>1</sup> Johan (Ivan) Hofbauer ran a dye shop in Vitanje from 1884 to 1939 (Dular 2000: 27–28).

CATALOG OF OBJECTS

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Stamped with the initials AH (Alojz Hofbauer)<sup>2</sup> and the upside down number 36.  
The object has a duplicate with the same markings, the rest as with cat. no. 48.

51.

**ROŠ – for marking goods** / Vitanje / 1st half of the 20th century / brass / 2 r = 2 cm / inv. no. 20495.

*TOKEN – for marking cloth* / Vitanje / 1st half 20th c. / brass / d = 2 cm / acc. no. 20495.



Roš is a duplicate of the object with cat. no. 50.

52.

**ROŠ – for marking goods** / Vitanje / 1st half of the 20th century / brass / 2 r = 2.6 cm / inv. no. 20496.

*TOKEN – for marking cloth* / Vitanje / 1st half 20th c. / brass / d = 2.6 cm / acc. no. 20496.



Imprinted initials AH (Alojz Hofbauer), letter B (mark for Oplotnica) and number 41. The item has a duplicate with the same marks, the rest as with cat. no. 48.

53.

**ROŠ – for marking goods** / Vitanje / 1st half of the 20th century / brass / 2 r = 2.6 cm / inv. no. 20497.

*TOKEN – for marking cloth* / Vitanje / 1st half 20th c. / brass / d = 2.6 cm / acc. no. 20497.



Roš is a duplicate of the object with cat. no. 52.

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<sup>2</sup> Alojz Hofbauer, son of Ivan Hofbauer, ran the dye shop in Vitanje from 1939 to 1954 (Dular 2000: 27–28).



CATALOG OF OBJECTS

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54.

**ROŠ – for marking goods** / Vitanje / 1st half of the 20th century / brass / 2 r = 2.6 cm / inv. no. 20498.

*TOKEN – for marking cloth* / Vitanje / 1st half 20th c. / brass / d = 2.6 cm / acc. no. 20498.



Imprinted initials AH (Alojz Hof bauer), letter B (mark for Oplotnica) and number 42, rest as with cat. no. 48.

55.

**ROŠ – for marking goods** / Vitanje / 1st half of the 20th century / brass / 2 r = 2.7 cm / inv. no. 20499.

*TOKEN – for marking cloth* / Vitanje / 1st half 20th c. / brass / d = 2.7 cm / acc. no. 20499.



Stamped initials AH (Alojz Hof bauer), letter B (mark for Oplotnica) and the number 43. The object has a duplicate with the same marks, the rest as with cat. no. 48.

56.

**ROŠ – for marking goods** / Vitanje / 1st half of the 20th century / brass / 2 r = 2.7 cm / inv. no. 20500.

*TOKEN – for marking cloth* / Vitanje / 1st half 20th c. / brass / d = 2.7 cm / acc. no. 20500.



Roš is a duplicate of the object with cat. no. 55, except that it is tied to a string.

57.

**ROŠ – for marking goods** / Vitanje / 1st half of the 20th century / brass / 2 r = 2.5 cm / inv. no. / 20501.

*TOKEN – for marking cloth* / Vitanje / 1st half 20th c. / brass / d = 2.5 cm / acc. no. / 20501



Imprinted with the initials AH (Alojz Hof bauer), a cross and the number 63. The object has a duplicate with the same markings, the rest as with cat. no. 48.

CATALOG OF OBJECTS

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58.

**ROŠ – for marking goods** / Vitanje / 1st half of the 20th century / brass /  $2 r = 2.5 \text{ cm}$  / inv. no. 20502.

*TOKEN – for marking cloth* / Vitanje / 1st half 20th c. / brass /  $d = 2.5 \text{ cm}$  / acc. no. / 20502



Roš is a duplicate of the object with cat. no. 57.

59.

**ROŠ – for marking goods** / Vitanje / 1st half of the 20th century / brass /  $2 r = 2.2 \text{ cm}$  / inv. no. 20503.

*TOKEN – for marking cloth* / Vitanje / 1st half 20th c. / brass /  $d = 2.2 \text{ cm}$  / acc. no. 20503.



Stamped initials AH (Alojz Hof bauer) and the number 86, the rest as with cat. no. 48.

60.

**ROŠ – for marking goods** / Vitanje / before World War 1 / brass / roš:  $2 r = 2.6 \text{ cm}$ ; cardboard:  $7.3 \times 6.7 \text{ cm}$  / inv. no. 20504.

*TOKEN – for marking cloth* / Vitanje / before WWI / brass / *TOKEN*:  $d = 2.6 \text{ cm}$ ; card board:  $7.3 \times 6.7 \text{ cm}$  / acc. no. 20504.



Imprinted with the initials JH (Johan Hof bauer), the letter D (mark for Dra vograd) and the number 16. The plate is tied to a rectangular cardboard with a string. On the cardboard is written in pencil *Županjova 15.60 cents*, the rest is as with cat. no. 48.

61.

**ROŠ – for marking goods** / Radovljica / before World War II / copper /  $2 r = 2.4 \text{ cm}$  / inv. no. 20507.

*TOKEN – for marking cloth* / Radovljica / before WWII / copper /  $d = 2.4 \text{ cm}$  / acc. no. 20507.

CATALOG OF OBJECTS

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A round plate made of copper sheet with a hole at the top and an imprinted fracture number 43. Roš is from Wagner's paint shop in Radovljica. The dyer used it to mark the goods he received for dyeing.

62.

**ROŠ – for marking goods / Radovljica / before World War II / copper /  $2 r = 2.3$  cm / inv. no. 20508.**

*TOKEN – for marking cloth / Radovljica / before WWII / copper /  $d = 2.3$  cm / acc. no. 20508.*



Stamped number 68, rest as with cat. no. 61.

63.

**ROŠ – for marking goods / Radovljica / before World War II / copper /  $2 r = 2.4$  cm / inv. no. 20509.**

*TOKEN – for marking cloth / Radovljica / before WWII / copper /  $d = 2.4$  cm / acc. no. 20509.*



Stamped number 149, rest as with cat. no. 61.

64.

**ROŠ – for marking goods / Radovljica / before World War II / copper /  $2 r = 2.4$  cm / inv. no. 20510.**

*TOKEN – for marking cloth / Radovljica / before WWII / copper /  $d = 2.4$  cm / acc. no. 20510.*



Stamped number 756, rest as with cat. no. 61.

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CATALOG OF OBJECTS

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65.

**ROŠ – for marking goods** / Radovljica / during World War II / copper / 2 r = 2.4 cm / inv. no. 20511.

*TOKEN – for marking cloth / Radovljica / during WWII / copper / d = 2.4 cm / acc. no. 20511.*



Stamped number 2802, rest as with cat. no. 61.

66.

**ROŠ – for marking goods** / Radovljica / during World War II / copper / 2 r = 2.4 cm / inv. no. 20512.

*TOKEN – for marking cloth / Radovljica / during WWII / copper / d = 2.4 cm / acc. no. 20512.*



Stamped number 2888, rest as with cat. no. 61.

67.

**ROŠ – for marking goods** / Radovljica / after World War II / copper / 2 r = 2.8 cm / inv. no. 20513.

*TOKEN – for marking cloth / Radovljica / after WWII / copper / d = 2.8 cm / acc. no. 20513.*



Stamped number 0168, rest as with cat. no. 61.

68.

**ROŠ – for marking goods** / Radovljica / after World War II / copper / 2 r = 2.8 cm / inv. no. 20514.

*TOKEN – for marking cloth / Radovljica / after WWII / copper / d = 2.8 cm / acc. no. 20514.*

CATALOG OF OBJECTS

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Imprinted number 0469, the lower edge of the plate is missing, the rest as with cat. no. 61.

69.

**ROŠ – for marking goods** / Radovljica / before World War II / copper / 2.3 x 2.3 cm / inv. no. 20515.

*TOKEN – for marking cloth / Radovljica / before WWII / copper / 2.3 x 2.3 cm / acc. no. 20515.*



Square tile with chamfered corners and embossed number 294, the rest as in cat. no. 61.

70.

**ROŠ – for marking goods** / Radovljica / before World War II / copper / 2.3 x 2.3 cm / inv. no. 20516.

*TOKEN – for marking cloth / Radovljica / before WWII / copper / 2.3 x 2.3 cm / acc. no. 20516.*



Stamped number 425, rest as with cat. no. 69.

71.

**ROŠ – for marking goods** / Radovljica / before World War II / brass /  $d = 2.7$  cm / inv. no. 20517.

*TOKEN – for marking cloth / Radovljica / before WWII / brass /  $d = 2.7$  cm / acc. no. 20517.*



Round brass sheet plate, stamped number 850, rest as with cat. no. 61.

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72.

**ROŠ – for marking goods / Radovljica / before World War II / brass / 2 r = 2.7 cm / inv. no. 20518** **TOKEN – for marking cloth /**

*Radovljica / before WWII / brass / d = 2.7 cm / acc. well. 20518*



Stamped number 859, rest as with cat. no. 71.

73.

**ROŠ – for marking goods / Radovljica / before World War II / brass / 2 r = 2.7 cm / inv. no. 20519.**

*TOKEN – for marking cloth / Radovljica / before WWII / brass / d = 2.7 cm / acc. no. 20519.*



Stamped number 724, rest as with cat. no. 71.

74.

**ROŠ – for marking goods / Radovljica / before World War II / brass / 2 r = 2.5 cm / inv. no. 20520.**

*TOKEN – for marking cloth / Radovljica / before WWII / brass / d = 2.5 cm / acc. no. 20520.*



A round plate made of brass sheet with holes on the sides. In plate co, the initials AW (probably Anton Wagner)<sup>3</sup> and the number 76 are imprinted, the rest as with cat. no. 61.

75.

**ROŠ – for marking goods / Radovljica / before World War II / brass / 2 r = 2.6 cm / inv. no. 20521.**

*TOKEN – for marking cloth / Radovljica / before WWII / brass / d = 2.6 cm / acc. no. 20521.*

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<sup>3</sup> Anton Wagner (born 1884) ran the dyehouse from 1920 until World War II (Dular 2000: 25).

CATALOG OF OBJECTS

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Stamped number 130, rest as with cat. no. 74.

76.

**ROŠ – for marking goods** / Radovljica / late 19th, early 20th century / brass / 2.4 x 2.4 cm / inv. no. 20522.

*TOKEN – for marking cloth* / Radovljica / late 19th or early 20th c. / brass / 2.4 x 2.4 cm /  
acc. no. 20522.



A square brass plate with chamfered corners and a square hole along the right edge. The initials AW (probably Alojz Wagner)<sup>4</sup>, the sign = (it is the same) and the number 23 are stamped into the plate, the rest is the same as for cat. no. 61.

77.

**ROŠ – for marking goods** / Radovljica / before World War II / copper / 2.9 x 1.9 cm / inv. no. 20523.

*TOKEN – for marking cloth* / Radovljica / before WWII / copper / 2.9 x 1.9 cm / acc. no. 20523.



A rectangular plate made of copper sheet with rounded corners and a hole on the left side. The number 458 is stamped into the plate, the rest is the same as with cat. no. 61.

78.

**ROŠ – for marking goods** / Radovljica / before World War II / copper / 3.2 x 2 cm /  
and in. no. 20524.

*TOKEN – for marking cloth* / Radovljica / before WWII / copper / 3.2 x 2 cm / acc. no. 20524.



Stamped number 774, rest as with cat. no. 77.

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<sup>4</sup> Alojz Wagner (born 1853), son of Anton Wagner, managed the dyehouse in the years 1880–1920 (Dular 2000: 25).

CATALOG OF OBJECTS

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79.

**ROŠ – for marking goods / Radovljica / before World War II / copper / 3.2 x 2.4 cm / inv. no. 20525.**

*TOKEN – for marking cloth / Radovljica / before WWII / copper / 3.2 x 2.4 cm / acc. no. 20525.*



A drop-shaped plate made of copper sheet with holes at the top and bottom. The number 509 is stamped into the plate, the rest is the same as for cat. no. 61.

80.

**ROŠ – for marking goods / Radovljica / before World War II / copper / 3.2 x 2.4 cm / inv. no. 20526.**

*TOKEN – for marking cloth / Radovljica / before WWII / copper / 3.2 x 2.4 cm / acc. no. 20526.*



Stamped number 526, rest as with cat. no. 79.

81.

**ROŠ – for marking goods / Radovljica / before World War II / copper / 3.2 x 2.4 cm / inv. no. 20527.**

*TOKEN – for marking cloth / Radovljica / before WWII / copper / 3.2 x 2.4 cm / acc. no. 20527.*



Stamped number 551, rest as with cat. no. 79.



CATALOG OF OBJECTS

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82.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/15 .

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/1.*



A round plate made of galvanized iron sheet with a hole in the top. In plate co, the initials MP (probably Matija Pirc)<sup>6</sup> and the number 101 are imprinted. Roš is from the Pirce tannery in Kranj. The dyer used it to mark the goods he received for dyeing.

83.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/2.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/2.*



Stamped number 104, rest as with cat. no. 82.

84.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/3.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/3.*



Stamped number 105, rest as with cat. no. 82. The object has a duplicate with the same markings.

85.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/4.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/4.*

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<sup>5</sup> In the SEM inventory book, under inv. no. 20531 received 60 roshes. For the needs of the catalog, I marked them with the numbers 20531/1–60.

<sup>6</sup> Matija Pirc (1824–1891) took over the craft in 1856 and led it until his death. From 1887, his son Metod (1866–1891) also participated intensively in the work (Kobe - Arzenšek 1968: 19).

CATALOG OF OBJECTS

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Roš is a duplicate of the object with cat. no. 84.

86.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/5.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/5.*



Stamped number 108, rest as with cat. no. 82.

87.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/6.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/6.*



Stamped number 109, rest as with cat. no. 82.

88.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/7.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/7.*



Stamped number 121, rest as with cat. no. 82.

89.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/8.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/8.*

CATALOG OF OBJECTS

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Stamped number 123, rest as with cat. no. 82. The object has a duplicate with the same markings.

90.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/9.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/9.



Roš is a duplicate of the object with cat. no. 89.

91.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/10.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/10.



Stamped number 128, rest as with cat. no. 82.

92.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/11.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/11.



Stamped number 143, rest as with cat. no. 82.

93.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/12.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/12.

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Stamped number 144, rest as with cat. no. 82.

94.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/13.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/13.*



Stamped number 147, rest as with cat. no. 82.

95.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/14.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/14.*



Stamped number 148, rest as with cat. no. 82.

96.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/15.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/15.*



Stamped number 152, rest as with cat. no. 82.

97.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/16.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/16.*

CATALOG OF OBJECTS

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Stamped number 153, rest as with cat. no. 82.

98.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/17.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/17.*



Stamped number 154, rest as with cat. no. 82. The object has a duplicate with the same markings.

99.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/18.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/18.*



Roš is a duplicate of the object with cat. no. 98.

100.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/19.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/19.*



Stamped number 156, rest as with cat. no. 82.

101.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/20.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/20.*

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Stamped number 158, rest as with cat. no. 82.

102.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/21.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/21.*



Stamped number 161, rest as with cat. no. 82.

103.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/22.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/22.*



Stamped number 169, rest as with cat. no. 82. The object has a duplicate with the same markings.

104.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/23.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/23.*



Roš is a duplicate of the object with cat. no. 103.

105.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/24.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/24.*

CATALOG OF OBJECTS

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Stamped number 175, rest as with cat. no. 82.

106.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/25.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/25.*



Stamped number 178, rest as with cat. no. 82.

107.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/26.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/26.*



Stamped number 179, rest as with cat. no. 82.

108.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/27.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/27.*



Stamped number 182, rest as with cat. no. 82.

109.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/28.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/28.*

CATALOG OF OBJECTS

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Stamped number 184, rest as with cat. no. 82.

110.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/29.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/29.*



Stamped number 187, rest as with cat. no. 82. The object has a duplicate with the same markings.

111.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/30.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/30.*



Roš is a duplicate of the object with cat. no. 110.

112.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/31.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/31.*



Stamped number 188, rest as with cat. no. 82.

113.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/32.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/32.*



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Stamped number 189, rest as with cat. no. 82.

114.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/33.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/33.*



Stamped number 190, rest as with cat. no. 82.

115.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/34.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/34.*



Stamped number 191, rest as with cat. no. 82.

116.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/35.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/35.*



Stamped number 192, rest as with cat. no. 82.

117.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/36.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/36.*

CATALOG OF OBJECTS

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Stamped number 199, rest as with cat. no. 82.

118.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/37.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/37.*



Imprinted number 203, the rest as with cat. no. 82.

119.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/38.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/38.*



Stamped number 210, rest as with cat. no. 82.

120.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/39.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/39.*



Stamped number 217, rest as with cat. no. 82. The object has a duplicate with the same markings.

121.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/40.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/40.*

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Roš is a duplicate of the object with cat. no. 120.

122.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9$  cm / inv. no. 20531/41.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron /  $d = 2.9$  cm / acc. no. 20531/41.



Stamped number 220, rest as with cat. no. 82.

123.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9$  cm / inv. no. 20531/42.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron /  $d = 2.9$  cm / acc. no. 20531/42.



Stamped number 221, rest as with cat. no. 82. The object has a duplicate with the same markings.

124.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9$  cm / inv. no. 20531/43.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron /  $d = 2.9$  cm / acc. no. 20531/43.



Roš is a duplicate of the object with cat. no. 123. The letter P is poorly visible.

125.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9$  cm / inv. no. 20531/44.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron /  $d = 2.9$  cm / acc. no. 20531/44.

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Imprinted number 227, the rest as with cat. no. 82.

126.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/45.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/45.*



Stamped number 228, rest as with cat. no. 82.

127.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/46.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/46.*



Stamped number 230, rest as with cat. no. 82.

128.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/47.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/47.*



Stamped number 232, rest as with cat. no. 82. The object has a duplicate with the same markings.

129.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron /  $2 r = 2.9 \text{ cm}$  / inv. no. 20531/48.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron /  $d = 2.9 \text{ cm}$  / acc. no. 20531/48.*

CATALOG OF OBJECTS

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Roš is a duplicate of the object with cat. no. 128.

130.

**ROŠ – for marking goods / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/49.**

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/49.*



Stamped number 236, rest as with cat. no. 82.

131.

**ROŠ – for marking goods / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/50.**

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/50.*



Stamped number 237, rest as with cat. no. 82.

132.

**ROŠ – for marking goods / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/51.**

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/51.*



Stamped number 239, rest as with cat. no. 82.

133.

**ROŠ – for marking goods / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/52.**

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/52.*

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Stamped number 241, rest as with cat. no. 82.

134.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/53.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/53.



Stamped number 245, rest as with cat. no. 82. The object has a duplicate with the same markings.

135.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/54.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/54.



Roš is a duplicate of the object with cat. no. 134.

136.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/55.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/55.



Stamped number 246, rest as with cat. no. 82. The item has a duplicate with the same markings.  
The tile is damaged.

137.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/56.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/56.

CATALOG OF OBJECTS

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Roš is a duplicate of the object with cat. no. 136.

138.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/57.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/57.*



Stamped number 247, rest as with cat. no. 82.

139.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/58.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/58.*



Stamped number 248, rest as with cat. no. 82.

140.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/59.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/59.*



Stamped number 251, rest as with cat. no. 82.

141.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2 r = 2.9 cm / inv. no. 20531/60.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / d = 2.9 cm / acc. no. 20531/60.*

CATALOG OF OBJECTS

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Stamped number 252, rest as with cat. no. 82.

142.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.7 x 3 cm / inv. no. 20532/17 .

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / 2.7 x 3 cm / acc. no. 20532/1.*



A rectangular galvanized iron sheet tile with cut corners and a hole at the top and in the upper left corner. The initials PM (probably Pirc Matija) and the number 21 are stamped into the tile. Roš is from the Pirč dyeworks in Kranj.

The dyer used a roš to mark the cloth he received for dyeing.

143.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.8 x 2.8 cm / inv. no. 20532/2.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / 2.8 x 2.8 cm / acc. no. 20532/2.*



A square tile with a hole at the top. The number 22 is stamped into the plate, the rest is the same as for cat. no. 142.

144.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.7 x 3 cm / inv. no. 20532/3.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / 2.7 x 3 cm / acc. no. 20532/3.*



The number 23 is stamped into the rectangular plate, the rest is the same as for cat. no. 143.

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<sup>7</sup> In the SEM inventory book, under inv. no. 20532 received 22 roshes. For catalog purposes, they are marked with the numbers 20532/1–22.



CATALOG OF OBJECTS

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145.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.6 x 3.2 cm / inv. no. 20532/4.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / 2.6 x 3.2 cm / acc. no. 20532/4.*



Stamped number 24, rest as with cat. no. 144.

146.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.6 x 3.1 cm / inv. no. 20532/5.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / 2.6 x 3.1 cm / acc. no. 20532/5.*



Stamped number 46, rest as with cat. no. 144.

147.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.8 x 3 cm / inv. no. 20532/6.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / 2.8 x 3 cm / acc. no. 20532/6.*



Stamped number 50, rest as with cat. no. 144.

148.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.8 x 3.1 cm / inv. no. 20532/7.

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / 2.8 x 3.1 cm / acc. no. 20532/7.*



Imprinted number 59, the rest as with cat. no. 144.

CATALOG OF OBJECTS

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149.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.7 x 3 cm / inv. no. 20532/8.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron / 2.7 x 3 cm / acc. no. 20532/8.



Imprinted number 60, the plate is slightly damaged on the lower edge, the rest as with cat. no. 144.

150.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.9 x 3 cm / inv. no. 20532/9.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron / 2.9 x 3 cm / acc. no. 20532/9.



Stamped number 63, rest as with cat. no. 144.

151.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.8 x 3 cm / inv. no. 20532/10.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron / 2.8 x 3 cm / acc. no. 20532/10.



Stamped number 64, rest as with cat. no. 144.

152.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.7 x 2.9 cm / inv. no. 20532/11.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron / 2.7 x 2.9 cm / acc. no. 20532/11.



Stamped number 65, rest as with cat. no. 144.

CATALOG OF OBJECTS

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153.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.7 x 3 cm / inv. no. 20532/12.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron / 2.7 x 3 cm / acc. no. 20532/12.



Stamped number 66, rest as with cat. no. 144.

154.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.5 x 3.1 cm / inv. no. 20532/13.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron / 2.5 x 3.1 cm / acc. no. 20532/13



Stamped number 67, rest as with cat. no. 144.

155.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.5 x 3 cm / inv. no. 20532/14.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron / 2.5 x 3 cm / acc. no. 20532/14.



Stamped number 69, rest as with cat. no. 144.

156.

**ROŠ – for marking goods** / Kranj / 2nd half of the 19th century / iron / 2.7 x 3 cm / inv. no. 20532/15.

*TOKEN – for marking cloth* / Kranj / 2nd half 19th c. / iron / 2.7 x 3 cm / acc. no. 20532/15.



Stamped number 75, rest as with cat. no. 144.

CATALOG OF OBJECTS

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157.

**ROŠ – for marking goods / Kranj / 2nd half of the 19th century / iron / 2.8 x 2.8 cm / inv. no. 20532/16.**

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / 2.8 x 2.8 cm / acc. no. 20532/16.*



The number 77 is stamped into the square tile, the rest is the same as for cat. no. 144.

158.

**ROŠ – for marking goods / Kranj / 2nd half of the 19th century / iron / 2.5 x 3 cm / inv. no. 20532/17.**

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / 2.5 x 3 cm / acc. no. 20532/17.*



The number 80 is stamped into the rectangular plate. The object has a duplicate with the same marking, the rest as with cat. no. 144.

159.

**ROŠ – for marking goods / Kranj / 2nd half of the 19th century / iron / 2.5 x 3 cm / inv. no. 20532/18.**

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / 2.5 x 3 cm / acc. no. 20532/18.*



Roš is a duplicate of the object with cat. no. 158.

160.

**ROŠ – for marking goods / Kranj / 2nd half of the 19th century / iron / 2.5 x 3 cm / inv. no. 20532/19.**

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / 2.5 x 3 cm / acc. no. 20532/19.*



Stamped number 84, rest as with cat. no. 144.

CATALOG OF OBJECTS

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161.

**ROŠ – for marking goods / Kranj / 2nd half of the 19th century / iron / 2.5 x 3 cm / inv. no. 20532/20.**

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / 2.5 x 3 cm / acc. no. 20532/20.*



Stamped number 85, rest as with cat. no. 144.

162.

**ROŠ – for marking goods / Kranj / 2nd half of the 19th century / iron / 2.7 x 3 cm / inv. no. 20532/21.**

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / 2.7 x 3 cm / acc. no. 20532/21.*



Stamped number 90, rest as with cat. no. 144.

163.

**ROŠ – for marking goods / Kranj / 2nd half of the 19th century / iron / 2.5 x 3 cm / inv. no. 20532/22.**

*TOKEN – for marking cloth / Kranj / 2nd half 19th c. / iron / 2.5 x 3 cm / acc. no. 20532/22.*



Stamped number 97, rest as with cat. no. 144.

164.

**ROŠ – for marking goods / Kranj / 1st half of the 19th century / brass / 2.2 x 2.2 cm / inv. no. 20533/18 .**

*TOKEN – for marking cloth / Kranj / 1st half 19th c. / brass / 2.2 x 2.2 cm / acc. no. 20533/1.*

<sup>8</sup> In the SEM inventory book, under inv. no. 20533 misled four roshi. For catalog purposes, they are marked with the numbers 20533/1–4.

CATALOG OF OBJECTS

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A square tile made of galvanized brass sheet with cut corners with holes on the sides. The initials P. (Pirc) and the number 178 are stamped in the tile. Roš is from the Pirce tannery in Kranj. The dyer used a brush to mark the goods he received for dyeing.

165.

**ROŠ – for marking goods** / Kranj / 1st half of the 19th century / brass / 2.2 x 2.2 cm / inv. no. 20533/2.

*TOKEN – for marking cloth* / Kranj / 1st half 19th c. / brass / 2.2 x 2.2 cm / acc. no. 20533/2.



Brass sheet plate, stamped number 262, rest as with cat. no. 164.

166.

**ROŠ – for marking goods** / Kranj / 1st half of the 19th century / brass / 2.2 x 2.2 cm / inv. no. 20533/3.

*TOKEN – for marking cloth* / Kranj / 1st half 19th c. / brass / 2.2 x 2.2 cm / acc. no. 20533/3.



Stamped number 287, rest as with cat. no. 165.

167.

**ROŠ – for marking goods** / Kranj / 1st half of the 19th century / brass / 2.2 x 2.2 cm / inv. no. 20533/4.

*TOKEN – for marking cloth* / Kranj / 1st half 19th c. / brass / 2.2 x 2.2 cm / acc. no. 20533/4.



Stamped number 328, rest as with cat. no. 165.

168.

**ROŠ – for marking goods** / Kranj / 1st half of the 19th century / brass / 2 r = 2.4 cm / inv. no. 20534/19 .

*TOKEN – for marking cloth* / Kranj / 1st half 19th c. / brass / d = 2.4 cm / acc. no. 20534/1.

9 In the SEM inventory book, under inv. no. 20534 misled four roshi. For catalog purposes, they are marked with numbers 20534/1–4.

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Round plate made of galvanized brass sheet with holes on the sides. The initials P. (Pirc) and the number 181 are imprinted in the tile. Roš is from the Pirce tannery in Kranj. The dyer used a rosh to mark the cloth he received for dyeing.

169.

**ROŠ – for marking goods** / Kranj / 1st half of the 19th century / brass / 2.5 x 2.5 cm / inv. no. 20534/2.

*TOKEN – for marking cloth / Kranj / 1st half 19th c. / brass / 2.5 x 2.5 cm / acc. no. 20534/2.*



A square tile made of one-sided galvanized brass sheet with cut corners and a hole in the upper left corner. The number 128 and the letters I: S: are stamped into the plate, the rest is the same as for cat. no. 168.

170.

**ROŠ – for marking goods** / Kranj / 1st half of the 19th century / brass / 2.2 x 2.2 cm / inv. no. 20534/3.

*TOKEN – for marking cloth / Kranj / 1st half 19th c. / brass / 2.2 x 2.2 cm / acc. no. 20534/3.*



Stamped initials SP (Simon Pirc)<sup>10</sup>, number 157 and star. On the unpainted side, the letters SS are imprinted, the rest is the same as with cat. no. 169.

171.

**ROŠ – for marking goods** / Kranj / end of the 18th, beginning of the 19th century / brass / 2.4 x 2.4 cm / inv. no. 20534/4.

*TOKEN – for marking cloth / Kranj / late 18th or early 19th c. / brass / 2.4 x 2.4 cm / acc. no. 20534/4.*



A plate with a hole along the upper edge. The letters A (Andrej?)<sup>11</sup> are cut into the tile, one of them is turned upside down, there is a cross in the middle of the tile, the number 3 and the letter Z below, the rest as in cat. no. 169.

<sup>10</sup> Simon Pirc ran the dyehouse from 1809 to 1851 (Kobe - Arzenšek 1964: 19).

<sup>11</sup> Andrej was the son of Lovro Pirca, who was engaged in dyeing already in the 18th century. After his father's death, Andrej enlarged and modernized the plant in 1797 and managed it until 1808 (Kobe - Arzenšek 1964: 19).

CATALOG OF OBJECTS

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172.

**ŠPAN – for counting working days** / Slovenske gorice / 1st half of the 20th century / iron / 4 x 4 cm / inv. no. 20575.

*TOKEN – counting workdays / Slovenske gorice / 1st half 20th c. / iron / 4 x 4 cm / acc. no. 20575.*



Triangular plate of galvanized iron sheet with cut corners and lu book on top. The letters AN (owner's initials) and number 20 (house number) are stamped into the tile. It is a half span (work done in half a day). The Spanish were used by peasant masters and indentured laborers to keep records on the number of working days.

173.

**ŠPAN – for counting working days** / Slovenske gorice / 1st half of the 20th century / iron / 3.5 x 3.5 cm / inv. no. 20650.

*TOKEN – counting workdays / Slovenske gorice / 1st half 20th c. / iron / 3.5 x 3.5 cm / acc. no. 20650.*



Rhombus tile of galvanized iron sheet with cut corners and lu book on top. It is a full span (full day's work). The rest as with cat. no. 172.

174.

**ŠPAN – for counting working days** / Slovenske gorice / 1st half of the 20th century / iron / 4 x 4 cm / inv. no. 20652.

*TOKEN – counting workdays / Slovenske gorice / 1st half 20th c. / iron / 4 x 4 cm / acc. no. 20652.*



The description is the same as for cat. no. 172, except that the number 20 is above and the letters AN below.

175.

**ŠPAN – for counting working days** / Slovenske gorice / 1st half of the 20th century / iron / 2.6 x 4 cm / inv. no. 20654.

*TOKEN – counting workdays / Slovenske gorice / 1st half 20th c. / iron / 2.6 x 4 cm / acc. no. 20654.*



Hexagonal plate made of galvanized iron sheet with a hole in the top. The rest as with cat. no. 174.



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176.

**ŠPAN – for counting working days** / Slovenske gorice / 1st half of the 20th century / iron / 2.3 x 2 cm / inv. no. 22620.

**TOKEN – counting workdays** / Slovenske gorice / 1st half 20th c. / iron / 2.3 x 2 cm / acc. no. 22620.



A rectangular galvanized iron plate with cut corners and a hole in the upper right corner. The number 13 (house number) and the letters JA (owner's initials) are stamped into the tile. It is a whole span (one day's work).

The rest as with cat. no. 172.

177.

**ŠPAN – for counting working days** / Slovenske gorice / 1st half of the 20th century / iron / 2.3 x 1.9 cm / inv. no. 22621.

**TOKEN – counting workdays** / Slovenske gorice / 1st half 20th c. / iron / 2.3 x 1.9 cm / acc. no. 22621.



The description is the same as the item with cat. no. 176, except that the upper left corner of the tile is cut off, the span is three-quarters (work done in three-quarters of a day).

178.

**ŠPAN – for counting working days** / Slovenske gorice / 1st half of the 20th century / iron / 2.9 x 2.4 cm / inv. no. 22622.

**TOKEN – counting workdays** / Slovenske gorice / 1st half 20th c. / iron / 2.9 x 2.4 cm / acc. no. 22622.



A square plate of galvanized iron sheet with cut corners and a hole in the upper right corner. The numbers 18 and 200 (house number and span number) and the letters JB (owner's initials) are stamped into the tile. It is a full span (full day's work). The rest as with cat. no. 172.

179.

**ŠPAN – for counting working days** / Slovenske gorice / 1st half of the 20th century / iron / 2.4 x 2.6 cm / inv. no. 22623.

**TOKEN – counting workdays** / Slovenske gorice / 1st half 20th c. / iron / 2.4 x 2.6 cm / acc. no. 22623.

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A rectangular plate made of galvanized iron sheet with a hole in the upper right corner. The number 8 (house number) and the letters FS (owner's initials) are stamped into the tile. It is a full span (full day's work). The rest as with cat. no. 172.

180.

**ŠPAN – for counting working days** / Slovenske gorice / 1st half of the 20th century / iron / 2.4 x 2.6 cm / inv. no. 22624.

*TOKEN – counting workdays* / Slovenske gorice / 1st half 20th c. / iron / 2.4 x 2.6 cm / acc. no. 22624.



A square tile of galvanized iron sheet with cut corners and a hole in the upper left corner. The letters MW (owner's initials) and the number 27 (house number) are stamped into the tile. It is a full span (full day's work). The rest as with cat. no. 172.

181.

**ŠPAN – for counting working days** / Slovenske gorice / 1st half of the 20th century / iron / 2.4 x 2.6 cm / inv. no. 22625.

*TOKEN – counting workdays* / Slovenske gorice / 1st half 20th c. / iron / 2.4 x 2.6 cm / acc. no. 22625.



A square tile made of galvanized iron sheet and a hole in the top. The letters KA (owner's initials) and the number 564 (house number) are stamped into the tile. It is a full span (full day's work). The rest as with cat. no. 172.

182.

**ŠPAN – for counting working days** / Slovenske gorice / 1st half of the 20th century / iron / 2.2x 2.8 cm / inv. no. 22626.

*TOKEN – counting workdays* / Slovenske gorice / 1st half 20th c. / iron / 2.2x 2.8 cm / acc. no. 22626.



Triangular plate of galvanized iron sheet with cut corners and hole on top. It is a half span (work done in half a day). The rest as with cat. no. 179.

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183.

**ŠPAN – for counting working days** / Slovenske gorice / 1st half of the 20th century / iron / 2.2x 2.8 cm / inv. no. 22627.

*TOKEN – counting workdays* / Slovenske gorice / 1st half 20th c. / iron / 2.2x 2.8 cm / acc. no. 22627.



A square galvanized iron sheet tile with cut corners and a hole in the upper left corner. The letters LMZ (own coin initials) and the number 27 (house number) are stamped into the tile. The lower right corner of the tile is cut off, the span is three-quarters (work done in three-quarters of a day). The rest as at cat. no. 172.



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dr. Nena Jews

**ROVAŠI**

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