

SAXON MINERS IN SERBIAN MEDIEVAL LAWS AND WRITTEN TEXTS

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Abstract: The subject of research of this scientific paper is a summary of Serbian medieval laws, documents and files in which Saxon miners were directly or indirectly mentioned, particularly dealing with mining laws (the state, town, and local ones) and their terminology during the period from 14th to 16th century. The development and growth of mining was contributed to by the existence of legal acts: Dušan's Code, the Code of Despot Stefan Lazarević and local Saxon laws, which regulated the exploitation and production of metals, manufacturing workshops, the right of ownership of mines and 'digs' (trials), and their exploitation. Various chronicles, letters, contracts and reports provide evidence of a difficult economic and social position of medieval miners, while beliefs and customs of Saxon miners have been recorded and kept by oral tradition, and through stories and myths. Numerous terms and expressions are still in use in crafts and oral language. In a certain way, this paper represents a sequel to the previous work, with the topic: the influence of Saxon mining on the development of the Serbian medieval state.

Key words: Saxon miners, medieval laws, written texts

Introduction

It has been over 700 years since the Saxons settled the territory of medieval Serbia. There remains little material evidence of their existence and work, such as old mining shafts and tools, medieval weapons, coins and dishes.

Many medieval charters, texts, acts and documents, including laws, have been damaged over the centuries, or are preserved merely as fragments, or manuscripts of the original documents in the Serbian, Latin or Turkish language. However, indirect traces of Saxon miners may nowadays be found in mining terminology, mining legal relations, crafts, tradition, mythology, linguistics and topology (Zirojević, 1987). Among the most significant written monuments of the Saxons and mining are: Dušan's Code, the Code of Despot Stefan Lazarević, manuscripts and fragments of certain local and town laws, mining terms and expressions, and folktales. Historical sources on the earlier form of mines and working conditions, mining tools and equipment, mutual and legal relations of medieval miners come from the Archive of the Republic of Ragusa, through old contracts, letters, reports of merchants and the customs (Zirojević, 1987). According to other sources, the Sasi are also called: Alemanni, Theotonicus and Tedeschi (Italian and sources from Dubrovnik) (Zirojević, 1987). The etymology of the word *Sas*, plural *Sasi*, primarily refers to German settler miners. Having been used for centuries to determine the origins of the miners in Serbia, in 19th century the word *Sas* (Serbian for Saxon) started denoting legal position, not only the origins, but also the personal name (Zirojević, 1987).

Over the centuries a genesis of Serbian and German (Saxon) populations occurred which resulted in the assimilation of the Saxon population into the Serbian. This is evident in the large number of slovenized names and the surnames from Dečani charters with slovenized patronymics ending in -ić, such as Sasinović and Šparić (Ger. Schaffer or Sparen) (Zirojević, 1987). Medieval surveys and written texts of Novo Brdo from 15th century mention the Saxons as another ethnic group, apart from the Serbs (Zirojević, 1987).

Serbian medieval legal and mining laws

Three best-known medieval files related to mining and mining juridical relations were: the Law of Novo Brdo (based on the customary law of the Saxons), Dušan's Code (1346-1349/1354) and the Code of Despot Stefan Lazarević (1412).

One of the most significant Serbian medieval legal documents, the so-called Dušan's Code (1346-1349/1354), named after Tsar Dušan the Mighty (1308-1355), the Emperor of the Serbs, Bulgarians and Greeks, from the house of Nemanjić, mentioned the Saxons (directly and indirectly) in four articles (Art. 123, 168, 169 and 170).

Art. 123 gives the Saxons the right to freely cut down forests and use the cleared land. Art. 168. relates to the freedom of performing goldsmith crafts. Art. 169. relates to the punishments and sanctions on the goldsmiths breaking the regulations from Art. 168, while Art. 170 speaks about the obligations of goldsmiths towards the Tsar and the state. (Stojičić, 1970).

The Code was written in Old Serbian and contains 201 articles. Because of the archaic language, numerous words and terms which no longer exist in modern Serbian language, and the difficulties in translating the articles of the Code, only certain articles were translated and adopted to the modern language.

Art. 123. On Saxons - Order for the Saxons, forest cutting and settling the cleared land:

On market; the forest that the Saxons have cut down until this Council, let it be theirs; if they have illegally taken land from a landlord, let the landlord go to court with them by the law of the Lord Tsar, and thence let the Saxon not cut, and what he cuts, let him not cultivate and settle, but leave it abandoned, for the forest to grow; let nobody prohibit a forest to a Saxon, let him cut as much as the market needs (Kodeks Dušanovog Zakonika).

A hundred years after settling, the Saxons were officially mentioned in one of the greatest and most significant codes of medieval Serbia and the Balkans. Art. 123 regulates the Saxons' rights on using and settling land. It also regulates the rights of Serbian landlords. The Saxons who had cut down a forest until the decisions of the Council, which adopted the Code, were granted the right to maintain the land, in accordance with the existing autonomous rights of free Saxon citizens.

In case of illegal forest cutting or occupying the land on the territory of Serbian landlords, the injured party had the right to litigate according to the laws of the Tsar. In case of forest cutting, the Saxons must not cultivate or inhabit the land. Those areas were supposed to remain abandoned in order for the forest

to restore, which, from the modern point of view, represents preservation of natural resources (the Law of Preservation and Protection of the Environment, Strugar, 2006). It is interesting that English translation does not name the Saxons as miners, but are citizens (*burghers* from the German word *Bürger*), although it refers to the Saxons who conducted trade and customs.

The term Saxon (Sas) did not only refer to the miners or persons belonging to the Saxon-German ethnic group, but it also confirmed that the Saxons were treated as equally as the rest of the subjects of the Serbian Tsar, along with the Serbs, Bulgarians and Greeks. Their rights as free citizens were respected; on the other hand, according to Dušan's Code, nobody could be above the law, not even the Tsar himself (Kosovo i Metohija, 2004).

Art. 168. On Goldsmiths - Goldsmiths must live only in certain markets:

Goldsmiths may nowhere dwell in the districts and in the lands of the Tsar, save in the market-towns where the Tsar has determined that money may be minted (Kodeks Dušanovog Zakonika, undated).

Art. 168 regulates the rights of goldsmiths, referring actually to craftsmen and blacksmiths, who processed and refined precious metals, to do their work in certain places in settlements and towns determined by the Tsar. The purpose of the article was to prevent counterfeiting of money (directing money into legal channels) and precious metal products, preserve and improve economy and crafts, in order to develop towns and settlements. The Saxons are not mentioned in this article directly but indirectly, as free craftsmen and smiths.

Art. 169. On Goldsmiths - Punishments for disobeying the above order on goldsmiths:

And if a goldsmith be found in a town who coins money secretly, the goldsmith shall be branded, and the town shall pay such fine as the Tsar declares. And if a goldsmith be found in a village, the village shall be scattered, and the goldsmith branded (Kodeks Dušanovog Zakonika, undated).

Art. 169. contains elements of criminal law, which punished severely the the craftsmen who had broken the regulations of the Art. 168. In case of clandestine money minting, the goldsmith who had counterfeited money had to be sent to prison, while the town was fined. In case of performing the illegal activity in a village, the village was dispersed, and the goldsmith imprisoned. The word *raspe*, in Serbian can mean *crucify*, as a type of physical punishment, or *disperse* or *drive out* those who covered or helped the offender.

Art. 170. On Goldsmiths - Apart from money, goldsmiths also produce other necessities:

And let the goldsmiths abide in the towns of the Tsar, and let them make other necessary objects (Kodeks Dušanovog Zakonika undated).

Art. 170. regulated the right of the Tsar to, in case of a war, rebellion or any other needs of the state, have all goldsmiths available; in this case, they should, apart from their main activity, do other similar work, such as forging weapons, helmets, tools.

Traditionally, as a Serbian medieval ruler, and through numerous charters and contracts, Tsar Dušan donated to monasteries throughout the Balkans gold and silver from the rich mines of medieval Serbia. This resulted in creating numerous monasteries and buildings, which, by their beauty and architecture, give evidence of the wealth and prosperity of the medieval Serbian state (Milanović, 2005).

The Code of Despot Stefan Lazarević

The most significant legal document from the beginning of 15th century is the Mining Code of Despot Stefan Lazarević from

1412, composed and proclaimed by a committee of 24 miners from Novo Brdo and other mining centres of the Despotate.

The language of the Code is a mixture of Saxon and Serbian mining terms, written in the Old Serbian language, in two versions: Cyrillic and Latin manuscripts. The Latin version represents a copy of the older, Cyrillic version of the original law (Ćirković, 2005).

By its structure and content, the Cyrillic version largely reminds us of a work of literature, with miniatures at the beginning of the Code. In the 15th century Turkish versions of the Code appeared, adapted to everyday practical needs of miners, with numerous comments and explanations of the meaning of certain terms (Ćirković, 2005).

Interestingly, the introductory part of the Code, where the names of the authors of the Code were cited, remained the same in Cyrillic, Latin and Turkish translation *kanun-nama* (laws). It was included in the report on the circumstances in Novo Brdo in 1494. The city law of Novo Brdo was transferred only into a Latin manuscript both by the content and the origin (Ćirković, 2005).

The Latin manuscript of the Code starts with an introduction in which Despot Stefan Lazarević, according to the medieval tradition of the kings from the Nemanjić line, the patrons of religious, cultural and other benefits, thanked God and saints for the delivery of enslaved areas, the city of Novo Brdo, and demanded a city council for composing the Code, with the following words:

“And with the help of God and Immaculate Virgin, and the prayers of St. Simeon and Sava and the late Saint Lazar, my parent, I have liberated this country and towns of my patrimony from the great emir Bayezid. And I came back to my country and came to my city Novo Brdo. And the whole city council gathered and asked my Majesty to pass the law on mines and smelters, and all mining affairs they had had with lords and the late Saint Lazar, my parent. And I, my Majesty, advising my aristocracy, directed them to find 24 good men from other places which have ore, to make the law and courts for them as it used to be and in the way they were familiar with mines, and to bring whatever they do to Me to approve it, and to maintain it in the future” (Ćirković, 2005).

Among the names of the writers of the Code, apart from the names of Serbian miners, there are also names of Saxon and Ragusan origin: Vuk Pipinović, Matko Hutman and Dominik and Bradač, Hazlov's brother, Peik Pacić, Nikola Oput, Ozma Casalin and Tirko and Radosav Hlapen (Ćirković, 2005). Until the fall of Novo Brdo under the Ottoman rule, and later until 16th century, there had still been Old Saxon families and Ragusan ore merchants in the city (Zirojević, 1987). Germanic names appear in the medieval survey of the area of Branković, (1455): Johan (Jochan), Oton (Otton), Šumah (Schumach), Hajnc (Heinz), Paul, Arni (Arnie) and Artur (Arthur) (Zirojević, 1987). The most influential representatives of the aristocracy of Novo Brdo in 15th century, during the reign of Despot Djuradj Branković, among the Saxons, were: Tomko Hanzić, a merchant, Dejan Altomanović, a local noble and Kosovo mining inspector, and Nikola Hamzović, a prominent and capable mining entrepreneur, who lived in Dubrovnik in 1481, after the fall of the Despotate (Zirojević, 1987).

The origin of the nobleman Nikola Altomanović, who ruled western Serbia, Metohia and Hum (today Herzegovina) until 1376, a close relative of the ruler of Kosovo, Vuk Branković, before and after the Battle of Kosovo (1389), may be related to some of the prominent Saxon citizens or mine owners, according to the origin of the surname (author's note).

Two major topics appearing and described in the Code are: *digs* (mines) and *people* (miners and their rights) (Ćirković, 2005).

The part on digs contains articles which regulated the abandonment and restoration of digs and excavations, with an emphasis on *stollens* (adits), which were, as in European mining, of considerable importance since ore exploitation was the subject (Ćirković, 2005). Because of the use of archaic mining terms, words and expressions, which are no longer in use, the translation of the articles of the law have been adapted to the modern reader, to aid better understanding.

One of the main sections of the introductory part of the Code (V) defines the stollen (a horizontal dig, passage in a mine):

As for the stollen, when it comes to a pit, it must dig the ore sitting on a chair three fingers thick and with legs a small ell (*mali lakat*, starts from the part of an arm); the *kilva* (mining hack) must have a small *lakat* long handle, and must dig beneath and above, and on both sides, forwards until it reaches 8 *sežanja* or *rastegalja* (fathoms, used to denote the distance between the fingertips of both hands spread). What it cuts (digs) belongs to it, while the *štoporan* (the direction opposite from the entrance; the direction of the stollen) must go forward (Ćirković 2005).

Section V of the Code describes the way of forming a horizontal level with specified measurements. Since the stollen served as a corridor for airing the mine (a ventilation system), it earned a wage (to the miners who had excavated it) and it had the right to the ore (vein) in the area it intersected.

In the second part of the Code, on miners, the main position is occupied by *varkovi* or *gvarkovi*, owners of shafts in the mine, entrepreneurs, organized as associations, and were devoted most articles. In addition, there are regulations on *žamkost* (joint costs), relations among mining associations. The rates of the services of *urbari* (supervising in a mine - the foreman) were also given special emphasis (Ćirković, 2005).

Regulations concerning joint costs (*žamkost*) and shafts appear in 13th and 14th sections of the Code.

If any of the *gvarkovi* (the owner of a shaft, or one or several parts of it) asks for shafts of one part or risks for the sake of the shaft, the other *gvarci* (owners) may not prevent him or abandon the association. And if God allows, everyone must pay *žamkost*. If they want to remain members of the association, they must agree with the other members, and what God allows, they will have who to work with (Ćirković, 2005).

Section 13 of the Code presents the rights of the owners or joint owners of shafts, saying that they may abandon the association without being prevented by the other members. The right to free enterprise and investment in new shafts was equally granted to everybody. Paying the share was mandatory for all the members of the association, while by mutual agreement they had the right to remain or leave the association for another.

Section 14: Without an agreement with the rest of the *gvarci*, a member may not have *lemšat* (one worker's bestowing to another worker or workers under certain conditions) with *lenhavari* (workers who gain parts under certain conditions, and in this case have the rights and obligations of *gvarci*). If they discover later that he has gained a part clandestinely, the other *gvarci* must pay him his share, and take all his profit (Ćirković, 2005).

Section 14 states that workers or members or an association were not allowed, without the knowledge or written permission of the other members of the association, to bestow their parts (ore or the amount of the work done) on other *gvarci*, that is workers or members who performed temporary work in that association. In case of breaking the agreement, the rest of the members or workers would take away his profit or gain, after they had paid or refunded his share in the association.

The Code of Mines of Despot Stefan contains regulations of the possessory right and utility technique. It also granted

the members of Serbian population the right of share in the ownership of mines, work organization and activities of miners. The regulations of the Code defined the work organization and functioning of mines, individual rights and protection of the rights of miners in relation to the owners.

The measures introduced through the Code of Mines by Despot Stefan were a consequence of the reduced territory of Serbian Despotate, which resulted in the reduction of revenue in towns, decreased trade and the protection of monetary and economic system, with the aim to increase mining, precious metal production, and primary financial resources of the state and army.

Unlike Dušan's Code, the Code of Despot Stefan contains the elements of the Saxon law related to the exploitation and technology of mine processing.

During 15th and 16th centuries the Code of Mines became the base of Turkish legal regulations in mining (Zirojević, 1987).

Other local mining laws

Mining centres having been formed in the mid-13th century, during the rule of King Uroš I, first in Brskovo, Trepča, Rogozna, Novo Brdo, Srebrenica, numerous mines in Kosovo (Old Serbia), and Kopaonik, Saxon privileges (legal and religious) became part of the legislative system of towns, formed by the Councils of voivods, dukes and burghers (Bürger-citizens) (Zirojević 1987). The autonomous rights of the Saxons also related to the organisation of ore exploitation and management of mining courts. Mining judiciary maintained almost unchanged during the first two centuries of the Ottoman rule, and was applied exclusively to the mines in the territory of Serbia and Bosnia (Zirojević, 1987).

In the 13th century the oldest and the first mining centre, Brskovo, had a separate social organisation presided by a duke (Vreibergerius) (Zirojević, 1987).

Apart from Brskovo, special mining rights were also granted to Srebrenica, Novo Brdo (before proclaiming the Code), Kratovo, Trepča, Rudnik and other mining centers (Zirojević, 1987).

In mines Belasica, Plana and Zaplanine, from the area of Kopaonik, opened at the beginning of 14th century (Ivanišević, 2001), the mining law of Novo Brdo and Kratovo was applied. A document from 1488, in which the conditions in the mines Plana and Zaplanine were described, reveals certain correlation between the regulations of Novo Brdo and Kratovo (Ćirković, 2005).

A year after the Battle of Kosovo (1389), Turkish documents on mining mentioned mining regulations from Kratovo (Ćirković, 2005). Norms in Kratovo corresponded to a certain extent to the law of Novo Brdo in terms of punishments, money, shafts, *gvarci*. It is most likely that the mining regulations of Kratovo appeared as a Turkish copy or summary of the law of Novo Brdo in the mid-15th century (Ćirković, 2005).

In Srebrenica, a local law was applied, proclaimed by Voivod Kovač, a local nobleman. This law was also applied to the mines Crnča and Sase. Later acts of the law of Srebrenica from 1445, during the rule of Despot Djurdj Branković, regulated the rights of free purchase and trade in silver for the whole country (Despotate), and export to Dubrovnik, apart from the city of Smederevo (Ćirković, 2005).

Accepting mining laws by smaller centres was not an endemic phenomenon, characteristic of the territory of central Balkans (Serbia), but an influence of firm legal norms on wide geographic areas. For instance, the influence of the mining laws of Jihlava (mine Jihlava from the beginning of 13th century) and Freiberg (a mine of the same name from 1168, near Meissen in Saxony) on other mines (Ćirković, 2005).

Mining centres Rudište near Belgrade, Smederevo, Priština, from the mid-15th century, were under the strict control of Despot Djuradj, as a measure of protection of the economic and monetary system of the Serbian Despotate, which was exposed to constant assaults of the Ottomans in that period. During the second Despotate (1444-1459), the mining legal norms from Novo Brdo and the acts of Dušan's Code were still applied and obeyed. Despot Stefan upheld the strict regulations of Dušan's Code in case of counterfeiting and fake money minting (Ivanišević, 2001).

It is most likely that the death penalty (*poena ignis*) arrived in Serbia with the Saxons and their legal system. Medieval mining laws were characterized by a high level of autonomy concerning mining, that is the rights of local authorities, relations with landlords, for example, in Article 123 of Dušan's Code, on the Saxons, which regulates and limits their right over cleared land (Zirojević, 1987).

More written evidence

Apart from material evidence of the existence of the Saxons on the territory of medieval Serbia, it is worth mentioning an important historical written document (a copy of the text in Serbian named *Hamartolove hronike* (Hamartol's chronicle) from 15th century, now kept in the National Library in Vienna) (Radojičić, 1963). The Hamartol chronicle is a document written on parchment-tanned leather (material often used in the Middle Ages for writing important documents, apart from paper). It was written in one of the medieval mining centers, is made of 221 sheets and contains reports on mines and the lives of miners (the old Serbian word for the miner is *rupnik* - a person working in a dig, hole = Ser. *rupa*). Most reports have not been completely preserved, except in the form of fragments, written on the margins of sheets (Radojičić, 1963).

On sheet 196 of this manuscript, it was written:

"A ot hutmana Raneska. Gvarko, pošljite spenzu raboci. Ne mogu gladni rabotati. Pošljite blizniceh gvodzije."

On sheet 197 it was written:

"Ot hutmana Raneska. Pošljite, gvarko, pošljite, gv..."

Sheet 204 contains the following sentence:

"Pošljite radnikom hleb i voda."

Sheet 214 contains the text:

"Ot hutmana Radosav. Naučite..." (further text incomprehensible)

Furthermore, on one of the sheets it was written:

"Rude dosta velil..." (Radojičić, 1963).

The words and terms, personal names of the miners, the text written without any special attention, with possible linguistic errors, point to the fact that the text may have been written by the Saxons, that is Saxon miners. The reports undoubtedly reveal poor financial and social position of miners (without food and water) (Radojičić, 1963). Compared to the working conditions and life of today's miners, it has not changed greatly, except in the technology of ore excavation and exploitation.

In the Serbian Dictionary by Vuk Stefanović Karadžić from 19th century, one can find the word *hutman* (the foreman of a mine). For the short story and phrase *Srebrni Car* (Silver Tsar), in the Serbian Dictionary, Vuk wrote: "*Golden Tsar* in Serbia is narrated by the people who dig ores" (Radojičić, 1963). Apparently, Vuk was referring to the Saxon miners, while the origin of the short story and phrase *Silver Tsar* can be related to the exploitation of silver ores and the foremen of the mines on the territory of the town of Smederevo - more precisely of the town and former mine Kučajna (Katić, 2001) (*Kuczain*) - their stories and beliefs, founded in German mythology, transmitted from generation to generation (Loma, 1998). There are a number of legends about *Srebrni Car* (*Silver Tsar*), actually versions of the story of the same name, mentioned by Vuk in Srpski Rječnik (Dictionary of the Serbian Language), telling about Damjan Hutman, the foreman of the mine Kučajna, and an encounter with the Silver Tsar, the lord of silver ore (Loma, 1998).

Craft centres in the territory of Serbia were an integral part of medieval cities and mining centres, where ore was processed and refined, metal objects (weapons and tools) were produced and money was minted. Certainly the most significant evidence of this was presence of a large number of shoemaker's and tailor's workshops, the tradition of which is still present not only in centuries long practice of these crafts but also in household words: *šnajder* (Schneider) and *šuster* (Schuster), along with Serbian words *krojač* (tailor) and *obučar* (shoemaker). The whole terminology of the mentioned crafts is still in use, which confirms the fact of the strong influence of the Saxon culture, crafts and German language (Zirojević, 1987).

Medieval surveys and historical documents demonstrate the outspread and diversity of crafts in medieval Serbia, especially on the territory of Kosovo and Metohia. A Turkish survey from the beginning of the 16th century shows the existence of *mahala* (municipalities, quarters) named after certain well-known craftsmen, equally present in both urban and rural places. Thus in Trepča, Vučitrn, Janjevo and Novo Brdo there are: *Mahala Stepana šnajdera* (Quarter of Stepan the tailor), *Mahala Nikole šnajdera* (Quarter of Nikola the tailor), *Mahala Ivaniša šnajdera* (Quarter of Ivanis the tailor). A survey formed later, during the reign of Sultan Selim II (1524-1574) shows the existence of only one shoemaker, while tailors are not mentioned in this survey (Zirojević, 1987).

Language of mining laws

The language and terminology of the miners on the territory of medieval Serbia, by its content, structure and other characteristics, contained similar words and terms to the ones used in the mining terminology on the territories of medieval Czech Republic, Slovakia and Hungary (region Siebenbürgen/Transilvania). They were used, in a more or less modified form, on the territory of the Balkans and Serbia, and were of German-Saxon origin (Ferenc, 1985).

Miners from Serbian mines spoke a specific language rich in technical terms of mining and metallurgy, shaping and adapting words from common language and giving them different meanings. Archaic by its content, the language of miners did not change a lot, thus preserving elements from previous generations. The language of mining customary law remained unchanged at the time; however, because it was transmitted orally, it was not preserved, but disappeared with the dying out of mining in 17th century (Čirković, 2005).

Mining terms of Saxon-Germanic origin

The main trait of the mining language of medieval Serbia was the fact that it underwent several stages of development: initially Saxon terminology; progressively through the language of Serbian community, and finally adapting legal mining terms relating to the Turkish administration and adopting a large number of terms from the German language and Old Serbian mining terminology (Čirković, 2005).

Most words originate from the German language (some of them are still in use in the Serbian language). They relate to technical mining terms, modified and adapted to the language of the community (linguistic substrata), gaining suffixes and prefixes common in the Serbian language. The meaning of most terms has been ascertained. The main obstacle in interpretation lies in the definition of terms and the old measurements, measures and monetary denominations, the meaning of which should be adapted to the modern language and made understandable for those who are not familiar with mining terminology (Čirković, 2005).

Because of a large number of archaic terms and words, which are no longer in use, only those applied in technical terminology and the Serbian language today are referred to here (old mining terms are listed according to the Cyrillic alphabet):

Vadturk - *vatruk*, *vatroq*, refers to a person who is not a miner but purchases and refines ore. Nowadays this word would

correspond to the word *topioničar* (*smelter*) (Čirković, 2005). They were seldom mentioned in laws and regulations, except for once in the Code, section 35 (Čirković, 2005).

Gvark (*gevark, geverk, givark, kivark*) plural *gvarci*-from the Italian and Latin word *guarchi*; German word *Gewerke*, Turkish word *gewark, vark* or *varaq*, whose original meaning of a worker was replaced by an owner of a mine or a part of mine, so-called sharer (user) in mining affairs (Čirković, 2005). According to Hungarian sources, words *Waldbürger* (has a wider meaning of a lord of the forest, wild land) and *Gewerke* are synonyms, where *Waldbürger* does not represent one, main owner of a mine, but rather the one who uses the right within the whole estate (Ferenc, 1985).

Grunt - from the German word *Grund*, denoting land, soil, a piece of land (Čirković, 2005).

Žamtkošt in Turkish translations *žatquš* or *čamkuš*, from the German word *Sammt Kosten* meaning joint costs or investments in the mine. The principal term of mining undertaking in the Middle Ages, also used today to denote any sort of costs, for example: costs of purchase, sale, investment (Čirković, 2005).

Kivala - from the German word *Kielhaue*, denoted a kind of tools for digging or breaking off rocks and ores (a tool similar to a hack) (Čirković, 2005), and appears as a measure of length in section V of the Code (Čirković, 2005).

Klufna - from the German word *Kluft*, denotes a fissure or crevice in a rock (Čirković, 2005), a geographic term in the German language for a gorge or a crevice (fissure) in rocks.

Kram - a wooden construction or a small structure at the entrance into a shaft, where tools and ore were kept (Čirković, 2005). In one of the illustrations in the book *Re de Metallica* by Agricola Georgius, an authentic mining storehouse is shown (Hoover, H.C. and Hoover, L.H 1912). The word *kram* (ger. *Kram*) denotes retail, trifles, while the verb *kramen*-to retail, to ransack. A mining *kram* was most likely a place where the excavated ore was sold or bid, hence the reference to the place where they traded in ore.

Kreg - Italian *creg*, Turkish *girek*, German *Krieg*, means war or fight, figuratively a conflict or disagreement among the shafts around an ore deposit (Čirković, 2005).

Lemšat, lemšad - in Turkish versions *lemšad*, from the German word *Lehenschaft*. According to the Code and other documents, denotes granting or bestowing parts to another worker (Čirković, 2005). One of the versions of the term *lemšad* is *lemšadnik*. The German word *Lehen* appears in Slavic languages as *leno* (*Lehngabe, Lehngut*), which means *good* (community, domain, interest, estate, possession) (Ferenc 1985). According to Agricola, word *Lehen* means Measure (lat. *Demensum*) (Hoover, H.K. and Hoover, L.H., 1912).

Meršain, meršaini - in Turkish versions *meršanin*, from the German word *Merkscheide* (from the verb *merken*-to appreciate, assess, estimate and *scheiden*-to separate, split), refers to landmarks, boundary markers (Čirković, 2005).

Paunati - in Italian and Latin documents *paunare, paonare*, in Turkish versions *paun*, from the German *Bauen*, which means to build, construct. The original meaning of this word referred to digging, ore excavation, miners' work (hard work, labour). Later, it denoted excavation financing until finding the ore (Čirković, 2005).

Prant - from the German *Brant, Brand*, which means ignition or burning (verb *brennen*-to burn). It refers to the fire for smelting ore or rocks (Čirković, 2005).

Pruh - from the German *Bruch*, refers to a mixture of fine sand or pebbles and ore. Both by the etymology and meaning, the

word *pruh* is very close to the Serbian word *prah* (powder, dust), and refers to fine, ground material (Čirković, 2005).

Rat - from the German *Rad*, denoting the wheel for pulling out ore (Čirković, 2005).

Hašpla, hašpl - in Turkish version *hašpula*, from the German *Haspel*, winch or drill, used for ore excavation (Čirković, 2005).

Urbarar - comes from the word *ururbe*, taxes paid to the lord or the owner of the excavated ore. Collecting *ururba* and its further refinement for the lord was passed to customs officials. *Urbarari* were skilled workers, supervisors in a mine enjoying confidence. In the Turkish version of the Code they were mentioned as geometers, who determined measures. They kept record of ownership changes, which had to be documented (Čirković, 2005). The form *urbor* and the Latin form *urbora* also appear occasionally. (*Urbaraufseher*). In 1414 one may come across *Stojak* the *urborar* in *Rudnik*, and in 1413 *Ivan* the *urbor* in *Trepča* (Ferenc, 1985).

Hutman - a term of German origin *Hutmann* (from the German word *Hütte* - metal, foundry or factory) denotes a foreman of a mine (Čirković, 2005). It is among the most essential terms of mining terminology. The word *Hutman* appears in two more forms, as *Berghutmann* or *Bergaufseher* (mining supervisors) (Ferenc, 1985).

It used to be a personal name or a part of a personal name, such as *Damjan* (*Damianus*) *Hutman* (Ferenc, 1985). The word *hutman* appeared in the Serbian language at the beginning of the 15th century. The authority of a *hutman* was limited to the mine and keeping record of and calculating costs, representing the association he worked for (Čirković, 2005). In the village *Jasenovik* (*Kriva Reka* of *Novo Brdo*) there is a family *Utmanci*, who claim that they originate from mine supervisors (*Zirojević, 1987*).

Ceh - in Turkish sources *čah, tehah*, from the German word *Zeche*, a mine (Čirković, 2005). The word *ceh*, in toponymy, gives evidence of the former existence of mines and shafts (such as the place names: *Ceovi, Ceovište*) (*Zirojević, 1987*).

Šafar - from the German *Schaffer*, a supervisor and supplier (provider) in a mine (Čirković 2005). It appears in the forms *Wervalter* and *Grubenaufsehen*, and did not represent a typical element of mining terminology. It is said for a *šafar* that he was *Hauptmann* (Captain). Not only did they manage and control exploitation, but they also provided food and took care of the workers (miners). *Šafar* has been used in Serbian mining terminology since 1536. There were several kinds of the *šafar*, mentioned in Turkish sources: *čarh-šafar* or *šarbar*, who only took care of transport (Ferenc, 1985).

Šajbna - in Turkish sources *šaybna, šaybne*, German *Scheibe*, the term for a shaft or pit, with an opening on the surface, allowing for air circulation in the mine (Čirković, 2005). Today it is used as a term in mechanical engineering, denoting a metal pad in machines.

Šlag - in Turkish documents *išlah*, from the German *Schlag*, punch (the verb *schlagen*-hit, punch, fight). In mining terminology it denotes a side or horizontal passage (Čirković, 2005). Today, in the Serbian language, a sweet (whipped cream) and a medical term, generally accepted: a stroke.

Štolna - in Ragusan documents *stona*, in Turkish *ištolna, štolna, štovna*, from the German *Stollen*, refers to a horizontal gallery starting from a hill slope and transecting vertical pits, allowing for better ventilation and mine lighting. In addition, the term indicating the entrance of a *stollen* was *muloh* (ger. *Mundloch*) (Čirković, 2005).

Conclusion

Although there are few archaeological monuments left by the Saxons, numerous charters and laws from the Middle Ages, such as Dušan's Code, the Code of Despot Stefan Lazarević, the Code of Novo Brdo, give evidence of their presence and strong influence (on metallurgy, mining and coin production) in the development of Serbian medieval mining law in the period from the 13th to the late 15th century, which lasted until the late 17th century, during the Ottoman rule in the Balkans.

Furthermore, one of the principal tasks of science is to determine the position of Serbian mining and mining law, and possible links within the territory of the Balkans and among numerous European mining laws in historical context.

It is of particular interest to determine the link between Balkan mining and its heritage within socio-economic transfers in the New Continent, immediately after its discovery.

The presence and use of Saxon mining terms in modern Serbian language and craft terminology confirm the idea of the influence of Saxon written culture and German language.

Beliefs and customs of Saxon miners have outlasted centuries, and is preserved by oral folk tradition through stories and legends.

A multidisciplinary research study would combine the so far fragmented knowledge and evidence on the Saxons, and define the overall influence of Saxon mining and their material and cultural heritage on the development of Serbian medieval state, and the Balkans in general.

Until then traces of the existence of the Saxons will live in mining and legal terminology, crafts, topology, onomastics and folk tradition.

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