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KATERYNA SOROCHAN

ON THE QUESTION OF THE ROUTES AND WAYS
BY WHICH BYZANTINE COINS ENTERED
THE TERRITORY OF KYIVAN RUS' (*)

Questo articolo ricostruisce i canali e i meccanismi attraverso i quali le monete bizantine si diffusero nelle regioni al di fuori dell'impero, in particolare nella vicina Rus' di Kiev (IX – inizio XIII secolo). Si possono identificare tre modalità principali di trasmissione. La prima è la sfera degli scambi economici e commerciali. La seconda è costituita dagli accordi con gli alleati, sotto forma di remunerazione per l'assistenza militare o di generosità diplomatica, espressi attraverso doni degli imperatori bizantini ai principi della Rus'. La terza è l'agenzia dei mercenari, sia della Rus' che scandinavi, al servizio dell'impero. Il ruolo del pellegrinaggio cristiano nella diffusione delle monete rimane un argomento da approfondire. L'arteria principale del movimento monetario era la cosiddetta "Via dai Varanghi ai Greci" (IX – inizio XIII secolo), il cui tratto orientale collegava Costantinopoli e altri territori bizantini a sud con la Scandinavia a nord. Le maggiori concentrazioni di monete bizantine sono state rinvenute a Kiev e Gnezdovo,

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centri nodali lungo questa rotta. Il segmento orientale della rotta varanghi-greca, descritto in modo così vivido da Costantino Porfirogenito nel suo “*De Administrando Imperio*”, aveva Costantinopoli e Amastris come i due principali empori in cui i Rus’ si riunivano per il commercio. L’articolo offre anche un’analisi approfondita della codificazione giuridica delle relazioni diplomatiche e commerciali tra i Rus’ e i Bizantini nei trattati del 907, 911, 944 e 971. I trattati specificano anche le sanzioni pecuniarie per i reati penali, nonché i riscatti per i prigionieri di guerra: pagamenti effettuati in “*zlatniki*” sia dai Rus’ che dai Bizantini. La trasmissione di monete attraverso doni diplomatici e sussidi per aiuti militari può essere rintracciata nei tributi versati ai principi Oleg, Igor, Olga e Sviatoslan. Esistono anche numerose prove del pagamento di mercenari rus’ (“*Oi Pōs*”, anche chiamati “*Ταυροσκύθες*”) e scandinavi (“*Βάραγγοι*”) al servizio di Bisanzio, sotto forma di salari, distribuzioni festive o bottino di guerra.

This article reconstructs the channels and mechanisms through which Byzantine coins spread to regions outside the empire, particularly the neighboring Kyivan Rus’ polity (9th – early 13th centuries). Three principal modes of transmission can be identified. The first is the sphere of economic and commercial exchange. The second is allied agreements, whether in the form of remuneration for military assistance or diplomatic largesse, expressed through gifts from the Byzantine emperors to the princes of Rus’. The third is the agency of mercenaries, both Rus’ and Scandinavian, in imperial service. The role of Christian pilgrimage in disseminating coinage remains a subject for further inquiry. The primary artery of monetary movement was the so-called “Route from the Varangians to the Greeks” (9th – early 13th century), whose eastern segment connected Constantinople and other Byzantine territories in the south with Scandinavia in the north. The greatest concentrations of Byzantine coins have been unearthed at Kyiv and Gnezdovo, nodal centers along this route. The eastern segment of the Varangian-Greek route, so vividly described by Constantine Porphyrogenitus in his “De Administrando Imperio” had Constantinople and Amastris as the two principal emporia at which the Rus’ congregated for trade. The article offers also a thorough analysis of the legal codification of diplomatic and commercial relations between the Rus’ and the Byzantines in the treaties of 907, 911, 944, and 971. The treaties also specify financial penalties for criminal offenses, as well as ransoms for prisoners of war: payments made in “zlatniki” by both the Rus’ and the Byzantines. The transmission of coinage through diplomatic gifts and subsidies for military aid can be traced in the tributes given to princes Oleg, Igor, Olga, and Sviatoslan. There is also ample evidence of the payment of Rus’ (“Oι Pōs”, also styled “Ταυροσκύθες”) and Scandinavian (“Βάραγγοι”) mercenaries in Byzantine service, whether as wages, festive distributions, or spoils of war.

Introduction

The question of how Byzantine coins found their way into the territory of Kyivan Rus' (9th century – early 13th century) is one of the important issues concerning the circulation of Byzantine coins outside the Empire. Historiography offers various perspectives on this matter, necessitating the clarification and systematization of existing data, with a particular emphasis on written sources and numismatic evidence. The aim of our paper is to examine all the ways in which Byzantine coins entered Rus' and to evaluate them.

V. V. Kropotkin, the author of the most comprehensive catalogue of Byzantine coins discovered within the USSR territory to date, argued that Byzantine silver coins entered the southern part of Eastern Europe directly from Byzantium, while in the northern regions of ancient Rus', Byzantine *miliaresia* arrived both from the south, via the Dnieper region, and from the west, through Poland, the Baltic States, and Scandinavian countries. The hypothesis of this north-westward route of coin dissemination is corroborated by the presence of "barbarian" imitations of Byzantine silver coins of Scandinavian style found in hoards in Estonia and northwestern Rus', as well as in mixed hoards of the northern Rus' lands, where *miliaresia* appear alongside Western European *denarii* from the 10th-11th centuries (1). F. Androshchuk shares this view, reconstructing the movement of *miliaresia* alongside Western European *denarii* through Greater Poland and Sweden (2). Some researchers believe that *miliaresia* entered Northern, Eastern and Central Europe together with Arab *dirhams* (3). For example, V.N. Zotsenko concluded that Byzantine coins reached the northern regions of Rus' via the Volga trade route through the Daugava (Western Dvina) River (4). T. Noonan, on the other hand, considered the arrival of *miliaresia*, *dirhams*, and *denarii* as separate phenomena, believing that they were mixed only within Rus' as a result of monetary exchange (5).

C. Morrisson considers the Scandinavians to be the main transporters of Byzantine coins (6). Indeed, the period she identifies as the most active presence of Varangian mercenaries in the service of the Byzantine emperor (980-1054) coincides with the chronological range of Byzantine coins most

(1) KROPOTKIN 1962, p. 17.

(2) ANDROSHCHUK 2013, p. 166.

(3) GLIKSMAN 2009, p. 617.

(4) ZOTSENKO 1991, p. 73.

(5) NOONAN 1980, p. 152.

(6) MORRISSON 1981, pp. 132-134.

commonly found in Rus' and Scandinavia – from the late 980s to 1070 (7). According to F. Audy, 95% of the *miliaresia* discovered in Scandinavia date to the second half of the 10th century (8). Furthermore, 21 out of 33 mixed hoards selected by T. Noonan, which indicate the circulation of *miliaresia* in Rus', were buried between approximately 975 and 1050 (9). A.O. Shevtsov also confirms through his research that the peak influx of *miliaresia* into Rus' occurred in the second half of the 10th century and the first half of the 11th century, as evidenced by hoards of silver coins (10).

Regardless of the geographic direction from which Byzantine coins reached Rus', from our perspective, three main modes of their penetration can be identified:

- economic, trade relations.
- alliances or diplomacy, that is, gifts of coins from Byzantine rulers to the rulers of Rus' or to the leaders of nomadic peoples neighbouring Rus' territories.
- mercenary activity.

There is also a hypothesis that coins arrived with pilgrims, but this is difficult to substantiate with available sources.

A. Shevtsov argues that the nature of imports differed depending on the coin denomination: while silver *miliaresia* most likely reached Rus' through trade or other forms of payment, *nomismata* arrived either as diplomatic gifts or as a result of military campaigns and plunder, since the export of gold was an exclusive privilege of the emperor (11). Furthermore, a long-standing hypothesis in historiography holds that copper *folles* coins, and Byzantine issues could not have served a mean of external economic exchange due to their relatively low purchasing power. Their actual value as pure copper ingots was insufficient to justify their deliberate import. This likely reflects the nature of Rus'-Byzantine relations, whereby various groups of travellers – traders, mercenaries, pilgrims, and others – returned home carrying these copper coins in their pockets. The copper coins may have been useful for subsequent journeys or they have been kept as souvenirs. After arriving in Rus', *folles* presumably did not enter secondary circulation.

Now, let us take a closer look at the different ways that Byzantine coins made their way to Rus'.

(7) MORRISSON 1981, p. 136.

(8) AUDY 2016, p. 151.

(9) NOONAN 1980, p. 152.

(10) SHEVTSOV 2017, p. 302.

(11) SHEVTSOV 2024, p. 160.

1. *Economic relations*

How significant was the role of trade relations between Rus' and Byzantium? It is clear that these connections are a well-established fact in historical scholarship. Two major trade routes crossed the territory of Kyivan Rus': a segment of the Varangian-Greek waterway, which linked the north and south, and the Volga route, which connected east and west. Additionally, the Rus' had contacts with Cherson, the center of a Byzantine province (theme – *θέμα*) located on the Crimean Peninsula at the time. It is possible that some portion of Byzantine coins reached Rus' through Cherson (Korsun') and Sougdaia (Surozh) as intermediaries.

1.1. *Route from the Varangians to the Greeks*

The “Route from the Varangians to the Greeks” was actively used from the late 9th century to the early 13th century. Although the southern Dnieper section was in use by the early 9th century, the entire route did not fully take shape until the second half of the 10th century⁽¹²⁾. It connected the Scandinavian and Baltic countries with the Byzantine Empire. The route began in what is now Sweden, passed through the Baltic Sea, continued along the Gulf of Finland to Lake Ladoga, and then followed rivers to the Dnieper. Boats would travel down the Dnieper to the Black Sea and onward to Constantinople. Evidence of trade between the Rus' and Constantinople is convincingly provided by the Rus'-Byzantine treaties of 911 and 944. Both Scandinavians and the Rus' used this trade route.

The main trading hubs along the route were Kyiv, which leads in the number of Byzantine coins found in Rus', and Gnezdovo (11 km from Smolensk, in modern Belarus). After Kyiv, Gnezdovo boasts the second-largest collection of coins and the widest representation of issues from various emperors in the territory of Ancient Rus'. Coins minted in Constantinople from all three metals (AV, AR, AE) have been discovered here, together with cast coins from Byzantine Cherson⁽¹³⁾. It should be noted that Gnezdovo, as a settlement complex, emerged in the early 10th century, while its active involvement in Rus'-Byzantine trade began only in the mid-10th century⁽¹⁴⁾.

(12) SMYRNOV 1980, p. 74; LITAVRIN 2000, p. 11; DOMANOVSKY 2005, p. 40.

(13) SHEVTSOV 2018, p. 484.

(14) FETISOV 2013, p. 117.

The chronicler of the *Tale of Bygone Years* describes the Route “from the Varangians to the Greeks” in the context of its passage through the land of the Polians, a Slavic tribe that lived along the middle course of the Dnieper and later became one of the foundational groups of the Ancient Rus’ people. In the *Primary Chronicle*, the route is described from south to north, moving counterclockwise if the entire path is viewed as a circle starting in Constantinople and connecting three continents ⁽¹⁵⁾ (Fig. 1). Here is what the chronicle says:

“When the Polyanians lived by themselves among the hills, a trade-route connected the Varangians with the Greeks. Starting from Greece, this route proceeds along the Dnieper, above which a portage leads to the Lovat’. By following the Lovat’, the great lake Il’men’ is reached. The river Volkhov flows out of this lake and enters the great lake Nevo [Lake Ladoga]. The mouth of this lake [the Neva River] opens into the Varangian Sea [Baltic Sea]. Over this sea goes the route to Rome, and on from Rome overseas to Tsar’grad [Constantinople]. The Pontus [Black Sea], into which flows the river Dnieper, may be reached from that point. The Dnieper itself rises in the upland Okovsky forest [forest area that in ancient times covered the Valdai Hills, where the Dnieper, Western Dvina and Volga rivers originate. Thanks to convenient portages, the ancient Dvina-Volga trade route crossed here with the later route from the Varangians to the Greeks], and flows southward. The Dvina [Western Dvina] has its source in this same forest, but flows northward and empties into the Varangian Sea [Baltic Sea]. The Volga rises in this same forest but flows to the east, and discharges through seventy mouths into the Khvalis Sea [Caspian Sea]. It is possible by this route to the eastward to reach the Bulgars [Volga Bulgaria] and the Khvalisy [ancient Rus’ name for the state of Khwarezm, located in the lower reaches of the Amu Darya, and its inhabitants], and thus attain the region of Shem. Along the Dvina runs the route to the Varangians, whence one may reach Rome, and go from there to the race of Ham [Middle East Territories] ⁽¹⁶⁾”.

Thus, the Route “from the Varangians to the Greeks” consisted of segments beginning in Constantinople, passing through the Black Sea to the mouth of the Dnieper River, then following the Dnieper to the Western

(15) PCHELOV 2009, pp. 74-75.

(16) The quoted passage represents the English translation version taken from *The Russian Primary Chronicle Laurentian Text* (CROSS, SHERBOWITZ-WETZOR 1953, p. 53). It could be compared with the corresponding passage in Old East Slavic language in *Povest’ vremennyh let* 1950, pp. 11-12 and in Russian language in *Povest’ vremennyh let* 2012, pp. 11-12.

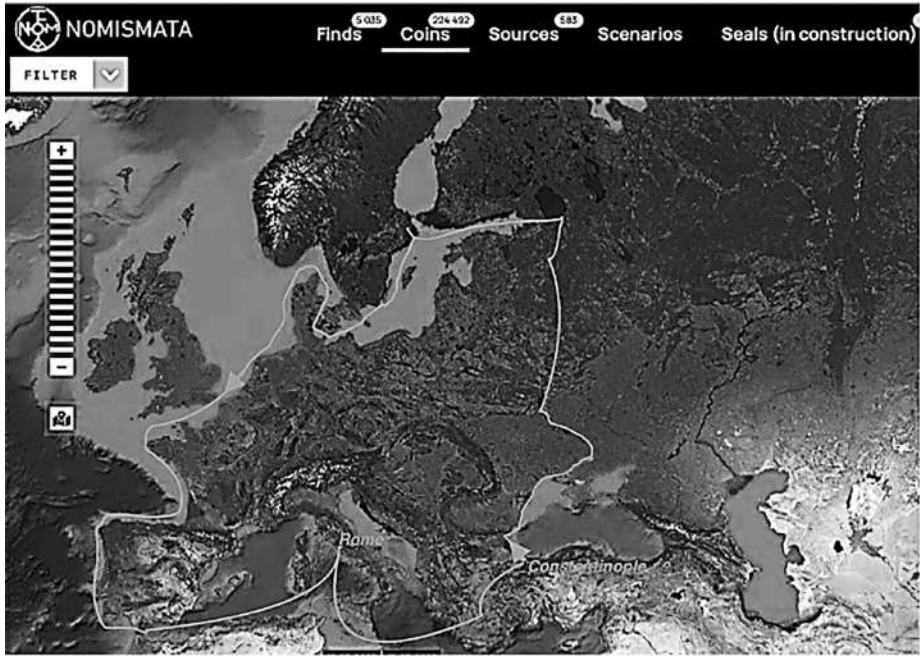


FIG. 1 – The line is a sketch of the “Route from the Varangians to the Greeks” according to the *Primary Chronicle (Tale of Bygone Years)*. The arrows indicate the counterclockwise orientation of itinerary. The background map is that of the NOMISMATA database available online at <https://byzantine.units.it/>.

Dvina, the Lovat River, and Lake Ilmen in the territories of Northern Rus'. From there, it continued along the Volkhov River to Lake Ladoga, and further through the Neva River to the Baltic and Northern Seas. The discovery of Byzantine artefacts in the British Isles confirms the possibility of trade links between these territories and Byzantium (17). From there, the route circled Western Europe, entered the Mediterranean Sea, and passed through the Dardanelles and Bosphorus Straits, returning to its starting point – Constantinople. The entire circuit of the route, starting from Ladoga and traveling around Europe to the mouth of the Dnieper, spanned 9,300 km by sea. An additional 1,900 km along rivers was required to complete the journey back to Ladoga from the Dnieper's mouth (18). The route branching through Ladoga was the primary one during the 10th-12th centuries; however,

(17) SHEPARD 2010, p. 24.

(18) *Povest' vremennykh let* 2012, p. 221.

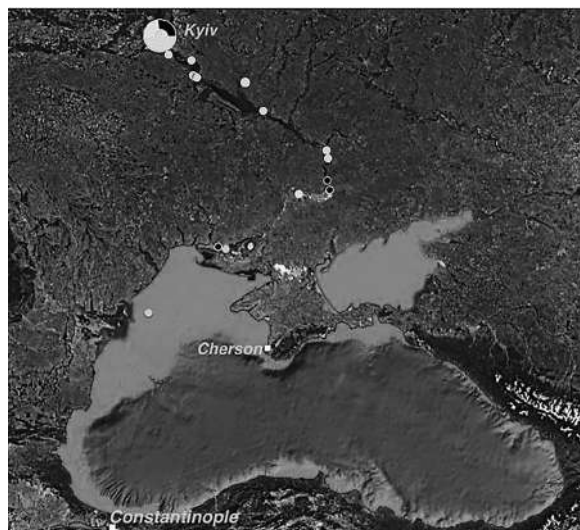


FIG. 2 – Coin finds evidencing the eastern segment of the “Route from the Varangians to the Greeks” along the Dnieper, from Kyiv to the Dnieper estuary in Ukraine and Snake (Levka) Island in the Black Sea (output of NOMISMATA database search tool; available online at <https://byzantine.units.it/>).

alternative paths along the Neman and Western Dvina Rivers also existed. These paths are mentioned, for instance, in the sagas ⁽¹⁹⁾.

The eastern segment of the “Route from the Varangians to the Greeks”, stretching from Kyiv along the Dnieper through the territory of modern Ukraine, across the Black Sea with stops in the lands of present-day Bulgaria, and onward to Constantinople, is described in detail in the 10th-century work “*De Administrando Imperio*” by the Byzantine Emperor Constantine VII Porphyrogenitus ⁽²⁰⁾. Its famous Chapter 9 is titled “*Περὶ τῶν ἀπὸ Ρωσίας ἐρχομένων Ρώσ μετὰ τῶν μονόξυλων ἐν Κωνσταντινουπόλει*” (“Of the coming of the Rus’ people in ‘monoxyla’ from Rus’ to Constantinople”). This historical description is supported by numismatic evidence – Byzantine coin finds along the route within the territory of modern Ukraine ⁽²¹⁾: along the

(19) *Povest’ vremennykh let* 2012, p. 220; VOJTOVICH 2011, pp. 164-171.

(20) CONST. PORPH., *De adm.*², pp. 45-51; PLECHKO 1985, pp. 4-11.

(21) ΚΡΟΠΟΤΚΙΝ 1962, p. 32, n. 161a; p. 179, n. 79 (549); p. 37, n. 277; p. 179, n. 81 (551); p. 37, n. 278; p. 35, n. 247; p. 35, n. 248; p. 178, n. 72 (543); p. 172, n. 29 (506); n. 160; p. 31, n. 154; p. 172, n. 30 (507); ΚΡΟΠΟΤΚΙΝ 1965, p. 172, n. 33 (509); p. 172, n. 35 (511); p. 173, n. 36 (512); p. 173, n. 37 (513); p. 173, n. 38 (514); p. 173, n. 40 (516); p. 173, n. 41 (170); p. 173, n. 42 (517); p. 174, n. 44 (519); p. 174, n. 45 (520); p. 178, n. 72 (543); p. 179, n. 81 (551).

banks of the Dnieper River, its islands, and the islands of the Black Sea (Fig. 2; Table A). Several coin finds have been made in the Dnieper Delta near its mouth into the Black Sea ⁽²²⁾: a hoard of Byzantine gold coins at Stanislav in 1930 (Kherson Oblast); several discoveries on the Tendra Spit (Kherson Oblast); and a hoard found either at the confluence of the Konka River with the Dnieper Estuary or in the eastern part of the Kinburn Peninsula ⁽²³⁾. V. Guruleva clarified the topography of this hoard, noting that it is the same hoard referred to in V. Kropotkin's 1962 monograph as the Konka 1873 hoard, and in his 1965 article as the Dneprovskij Liman (Dnieper Estuary) hoard (n. 267). In fact, both names refer to the same hoard, consisting of either 33 or 43 gold coins ⁽²⁴⁾.

Many coins were found on Levka Island (Snake Island, Ukraine) during the 1830s and 1840s ⁽²⁵⁾. This island in the Black Sea, along with the islands of Saint Aetherus (which modern researchers identify with present-day Berezan Island or the western part of the Kinburn Peninsula) and Saint Gregory (the modern island of Khortytsia), mentioned by Constantine VII Porphyrogenitus, may have been used by the Rus' as stops and resting places on their way to Constantinople ⁽²⁶⁾. These discoveries provide tangible evidence of the active use of this trade route and its connection to Byzantine commerce.

The Primary Chronicle also mentions the Volga route, which connected Scandinavia with the Arab Caliphate and further into Central Asia via the Volga River, passing through the lands of Volga Bulgaria, the Khazar Khaganate, and the Caspian Sea. This route was earlier than the "Route from the Varangians to the Greeks," functioning from the late 8th century until the early 11th century. Only a small segment of it crossed northern Rus', following the Neva River, Lake Ladoga, the Volkhov River, Lake Ilmen, the Msta River, and the upper reaches of the Volga. The Volga route was the main transport channel for Arab silver, but the influx of silver Arab coins ceased by the end of the 10th century. The hypothesis that the Volga route was the primary channel for Byzantine coins entering Rus' is questionable. As is well known, the Volga route lost its importance earlier than the Dnieper route. The greatest activity along the Volga route was observed from the 870s to the 960s – a period marked by the parallel circulation of Byzantine and Arab coins in the Middle Dnieper region ⁽²⁷⁾. The "Route from the

(22) GURULEVA 2025, pp. 88-89.

(23) GURULEVA 2025, pp. 88-89.

(24) GURULEVA 2025, pp. 91-93.

(25) GURULEVA 2025, p. 89.

(26) CONST. PORPH., *De adm.*², pp. 49, 51.

(27) ZOTSENKO 1991, p. 63.

Varangians to the Greeks” lost its transcontinental significance with the revival of trade relations in the Mediterranean, when European powers gained control over maritime communications during the era of the Crusades (and with the capture of Constantinople by the Crusaders in 1204) (28).

Besides Constantinople, there is evidence of only one other city where the Rus’ arrived for trade – Amastris. In the encomium Praise of St. Hyacinth of Amastris, which praises the port city of Amastris as “the eye of Paphlagonia, and indeed of the whole ecumene,” Niketas David Paphlagon (circa 860 – second quarter of the 10th century) wrote that it served as a common marketplace where the Scythians – “those who live on the northern shore of the Euxine, as well as those living to the south” – gathered (*εις ἤν οἱ τε το βόρειον του Ευξείνου μέρος περιρικουντες Σκύθαι, και οί προς νότον δε κείμενοι*) (29). In some cases, the Byzantines referred to the Rus’ as Scythians, although more often the term “Scythians” was more often used to describe steppe nomads, such as the Bulgars, Hungarians, Pechenegs, and Cumans. For example, George Kedrenos called the Rus’ merchants and mercenaries living in Constantinople “Scythians”. He mentioned them in connection with their expulsion from the city ahead of the expected attack by Prince Vladimir Yaroslavich’s fleet in 1043 (30).

(28) PETRUKHIN 2009, p. 65.

(29) NIC. PAPHL., *Or.*, 421 (I, 4); SOROCHAN 2001², p. 315.

(30) GEORG. CED., *Comp.*, II, 551-552.

Table 1: Byzantine coin finds from Kyiv to the Dnieper estuary confirming the “Route from the Varangians to the Greeks” as described by CONST. PORPH., *De adm.* 9 ⁽³¹⁾

N.	Name	Location	Kind of find	Composition	Byzantine coins	Dating of the Coins	Source
1	Vyshhorod 1824	Vyshhorod, Kyiv Oblast, Ukraine	Single find	Nomisma of Theodora (1055-1056)	1 gold	1055-1056	KROPOTKIN 1965, p. 173, n. 36 (512)
2	Vyshhorod 1906	Vyshhorod, Kyiv Oblast, Ukraine	Single find	1 bronze Byzantine coin from the late 10th to early 11th century	1 bronze	980-1025	KROPOTKIN 1965, p. 173, n. 37 (513)
3	Vyshhorod 1937	Vyshhorod, Kyiv Oblast, Ukraine	Single find	Two Byzantine bronze coins: one of Constantine X (1059-1067) and one of Roman IV Diogenes (1068-1071). Identification by S. V. Korshenko	2 bronze	1059-1067 1068-1071	KROPOTKIN 1965, p. 173, n. 38 (514)
4	Vyhurivshchyna 1934	Vyhurivshchyna-Troie-shchyna, Kyiv Oblast, Ukraine	Single find	One anonymous bronze coin from the late 10th to early 11th century	1 bronze	980-1025	KROPOTKIN 1965, p. 172, n. 35 (511)
5	Kyiv 1882 Podil	Podil, Kyiv Ukraine	Single find	One bronze anonymous coin from the 9th to 11th centuries	1 bronze	970-1092	KROPOTKIN 1962, p. 32, n. 169
6	Kyiv 1954	Kyiv, Ukraine	Single find	Bronze cross with a loop and a concave Byzantine bronze coin from the 12th century, possibly of Isaac II (1185-1195), type: Wroth, II, pl. LXXII 5-7 (?). Identified by V.V. Kropotkin	1 bronze	1185-1195	KROPOTKIN 1962, p. 48, n. 187a

(31) More detailed information on the coin finds listed in the table can be found in the geo- and chrono-referenced database of Byzantine coin finds from archaeological contexts (498-1453) – NOMISMATA database, available online at ><https://byzantine.units.it/><. NOMISMATA is a fundamental research tool for scholars of economic, monetary, and political history of the Byzantine world.

N.	Name	Location	Kind of find	Composition	Byzantine coins	Dating of the Coins	Source
7	Kyiv 1843	Kyiv, Ukraine	Single find	One bronze anonymous coin from the 10th to 11th centuries	1 bronze	970-1092	KROPOTKIN 1962, p. 32, n. 164
8	Kyiv 1908-1914	Kyiv, Ukraine	Single find	Several (?) bronze anonymous Byzantine coins from the 10th to 11th centuries	Several (?) bronze	970-1092	KROPOTKIN 1962, p. 32, n. 179, pl. 32
9	10th Century Warrior Burial	Kyiv, Ukraine	Grave	The burial chamber contained a rich inventory of objects included leather purse with four cast bronze coins struck at Cherson and Byzantium in the period c. 875-c. 925: a Basil I (867-886), two Leo and Alexander (886-912), and a Constantine VII Porphyrogenitus (913-959) issues, the latter struck in AD 920	4 bronze	867-886 913-959	IEVLEV 2009, p. 659
10	Bezrodnaya 1875	Kyiv, Ukraine	Single find	One copper coin from the late 10th to early 11th century	1 bronze	975-1025	KROPOTKIN 1965, p. 172, n. 33 (509)
11	Kyiv 1876	Kyiv, Ukraine	Single find	A gold coin of Basil II and Constantine VIII (976-1025)	1 gold	976-1025	KROPOTKIN 1962, p. 32, n. 167
12	Kyiv 1882 Kibalchich	Kyiv, Ukraine	Grave	Two copper scale pans, a folding beam for the scales, nine iron weights covered in bronze, and a fragmented Byzantine bronze coin of Constantine VII (913-959), minted in Constantinople between 919 and 921. The coin corresponds to type: Sabatier, II, 128, n. 12, pl. XLVI, 15; Wroth, II, p. 455, pl. 11, LII, 7	1 fragmented bronze	913-959	KROPOTKIN 1965, p. 173, n. 41 (170)
13	Kyiv 1882 St Sophia Cathedral	Kyiv, Ukraine	Single find	One gold solidus of Constantine VII and Romanos II (945-959)	1 gold	945-959	KROPOTKIN 1962, p. 32, n. 166

N.	Name	Location	Kind of find	Composition	Byzantine coins	Dating of the Coins	Source
14	Kyiv 1883 Beliashevskij	Kyiv, Ukraine	Single find	One Cherson-Byzantine coin of Basil I (877-886)	1 bronze	877-886	KROPOTKIN 1962, p. 32, n. 171
15	Kyiv 1888 Podol	Kyiv, Ukraine	Hoard	A hoard of bronze anonymous Byzantine coins of the 10th-11th centuries (9 coins were identified). Definition of V.B. Antonovich	Several (?) bronze	970-1092	KROPOTKIN 1962, p. 32, n. 172
16	Kyiv 1889 Grebenskij	Kyiv, Ukraine	Hoard	Old Rus treasures, two concave Byzantine gold coins with loops were found: Alexius I Comnenus (1081-1118) and John II Comnenus (1118-1143)	2 gold	1081-1118 1118-1143	KROPOTKIN 1962, p. 32, n. 173
17	Kyiv 1896 Frunze	Kyiv, Ukraine	Hoard	Two silver gilded copper tortoise-shaped fibulae, two silver earrings, a silver fibula and a necklace of beads, two silver Byzantine miliaresia of Romanos I, Constantine VII, Stephen and Constantine (931-944), type: Wroth, II, p. 46, tabl. 461, tabl. LIII, 5. The coins have holes for hanging, one of them was broken off	2 silver	931-944	KROPOTKIN 1962, p. 32, n. 175
18	Kyiv 1899 Ekaterininskaja	Kyiv, Ukraine	Hoard	15 gold Byzantine coins and one gold dinar of the Western Caliphate alongside artifacts of Old Rus' origin: Nikephoros II Phokas (963-969) - 1 coin, type: Sab. II, p. 137, n. 3; Basil II and Constantine VIII (976-1025) - 7 coins, type: Sab. II, p. 147, nn. 1, 4, 5; Romanos III (1028-1034) - 2 coins, type: Sab. II, p. 152, n. 1; Constantine IX Monomachos (1042-1055)-1, type: Sab. II, p. 157, n. 2;	15 gold	963-969 976-1025 1028-1034 1033 1042-1055 1057-1059	KROPOTKIN 1962, p. 32, n. 176

N.	Name	Location	Kind of find	Composition	Byzantine coins	Dating of the Coins	Source
				Isaac I Komnenos (1057-1059) - 4 coins, type: Sab., II, p. 168, n. 1; a total of 15 Byzantine gold coins and a gold dinar of the Western Caliphate of 1033			
19	Kyiv 1908 Desiatynna	Kyiv, Ukraine	Grave	One "barbaric" imitation of the solidus of Basil I and Constantine (869-879). Type: Wroth, II, p. 436, tabl. L, 12. According to other sources, an imitation of the solidus of Basil II and Constantine VIII (976-1025)	1 gilded silver "barbaric" imitation of the solidus	869-879(?) 976-1025(?)	KROPOTKIN 1962, p. 32, n. 178
20	Kyiv 1908 Kyselivka	Kyiv, Ukraine	Hoard	A hoard of Cherson-Byzantine coins: Basil I (867-886) - 28 coins, Basil I and Constantine (867-870) - 2 coins, Romanos I (919-944) - 5 coins, Romanos II (959-963) - 1 coin, Nikephoros II Phokas (963-969) - 1 coin; in total - 37 coins	37 bronze Cherson-Byzantine coins	867-886 867-870 919-944 959-963 963-969	KROPOTKIN 1962, p. 32, n. 177
21	Kyiv 1937 St. Michael's Golden-Domed Monastery	Kyiv, Ukraine	Single find	One bronze Byzantine coin of Alexius I Komnenus (1081-1118)	1 bronze	1081-1118	KROPOTKIN 1962, p. 33, n. 180
22	Kyiv 1950 Podol	Kyiv, Ukraine	Single find	One bronze coin of Alexius I Komnenus (1081-1118)	1 bronze	1081-1118	KROPOTKIN 1962, p. 33, n. 182
23	Kyiv 1955 Vladimirskaia	Kyiv, Ukraine	Single find	One bronze coin of Leo VI the Wise (886-912)	1 bronze	886-912	KROPOTKIN 1962, p. 33, n. 183
24	Kyiv 1959 Nikolska sloboda	Kyiv, Ukraine	Grave	One gold Byzantine solidus of Romanos I and Christopher (919-944)	1 gold	919-944	KROPOTKIN 1962, p. 33, n. 187

N.	Name	Location	Kind of find	Composition	Byzantine coins	Dating of the Coins	Source
25	Kyiv Lukyani- vka 1939	Kyiv, Ukraine	Single find	Several (?) bronze Byzantine coins, ranging from Constantine VII to Constantine X (or Michael VII?): 1) Constantine VII (913-959); 2) From John Tzimisces to Romanos III; 3) Theodora (1055-1056); 4) Isaac I (1057-1059); 5) A worn coin of Constantine X (1059-1067) or Michael VII (1071-1078)	Several (?) bronze Byzantine coins	913-959 969-976 1028-1034 1055-1056 1057-1059 1059-1067 1071-1078	KROPOTKIN 1965, p. 174, n. 45 (520)
26	Kyiv 1920	Kyiv, Ukraine	Single find	One Byzantine miliaresion of John I Tzimisces (969-976)	1 silver	969-976	KROPOTKIN 1965, p. 174, n. 44 (519)
27	Kyiv 1893	Kyiv, Ukraine	Single find	One coin of Constantine VII and Roman II (945-959)	1 un- defined byzantine coin	945-959	KROPOTKIN 1965, p. 173, n. 42 (517)
28	Kyiv 1882 Kibalchi- ch Grave	Kyiv, Ukraine	Grave	Two copper scale pans, a folding beam for the scales, nine iron weights covered in bronze, and a fragmented Byzantine bronze coin of Constantine VII (913-959), minted in Constantinople between 919 and 921. The coin corresponds to type: Sabatier, II, 128, n. 12, pl. XLVI, 15; Wroth, II, p. 455, pl. 11, LII, 7	1 bronze	913-959	KROPOTKIN 1965, p. 173, n. 41 (170)
29	Kyiv 1830	Kyiv, Ukraine	Single find	One nomisma of Theodora (1055-1056)	1 gold	1055-1056	KROPOTKIN 1965, p. 173, n. 40 (516)
30	Tripolie 1874	Trypillia, Obukhiv district of Kyiv Oblast, Ukraine	Single find	One bronze Cherson-Byzantine coin of Romanos I (919-944)	1 bronze Cher- son-By- zantine	919-944	KROPOTKIN 1962, p. 33, n. 191

N.	Name	Location	Kind of find	Composition	Byzantine coins	Dating of the Coins	Source
31	Andrushy 1950	Andrushy, Pereyaslav-Khmelnitsky district, Kyiv Oblast, Ukraine. Near modern Pereiaslav (now submerged under the Kaniv Reservoir)	Single find	One bronze Byzantine coin of Constantine X (1059-1067) of the type: Wroth, II, tabl. LXI, 7, with a hole for hanging. Identification by Y. S. Krushkol	1 bronze	1059-1067	KROPOTKIN 1962, p. 32, n. 161a
32	Kanev uezd 1884	Kaniv, Cherkasy District, Cherkasy Oblast, Ukraine	Single find	One Undefined byzantine coin of John I Zimisces (969-976)	1 undefined byzantine coin	969-976	KROPOTKIN 1962, p. 37, n. 277
33	Knyazhaya Gora 1887	Knyazhaya Gora (near modern Kaniv), Cherkasy Oblast, Ukraine	Hoard	The hoard included two Byzantine gold coins of Nikephoros III Botaneiates (1078-1081)	2 gold	1078-1081	KROPOTKIN 1962, p. 37, n. 278
34	Pekari 1898	Kaniv District, Cherkasy Oblast Ukraine	Single find	One bronze Cherson-Byzantine coin of Roman I (920-944) and 1 bronze scyphate coin of one of the Komnenoi (12th century)	1 bronze Cherson-Byzantine coin and 1 bronze scyphate coin	920-944 12th century	KROPOTKIN 1965, p. 179, n. 81 (551)
35	Sakhnovka 1900 (Fig. 3, 4)	Sakhnivka, Cherkasy Oblast, Ukraine	Hoard	The hoard included two coins: Byzantine aspron of Manuel I Comnenus (1143-1180) and hyperpyron nomisma of John III Ducas Vatatzes (1221-1254). Identification as aspron was recorded in the museum's numismatic inventory book under 1948	1 gold and 1 electrum	1143-1180 1221-1254	KORZUHINA 1954, p. 131, n. 127; KROPOTKIN 1962, p. 37, n. 281 Agreement n. 14 (29 August 2025) for the provision of four coin images

N.	Name	Location	Kind of find	Composition	Byzantine coins	Dating of the Coins	Source
				Pre-war inventory books have been lost ⁽³²⁾			and related information by the National Museum of the History of Ukraine in Kyiv. Inv. n. AU-826, AU-827
36	Voinskaya Greblya 1955	The area of the ancient Rus' town of Voin, part of the Pereiaslav Principality, now submerged under the Kremenchuk Reservoir, Poltava Oblast, Ukraine	Single find	One bronze Byzantine anonymous coin from the 10th-11th centuries. Wroth, II, 497, nn. 6-10, tab. LVIII, 3, 4 Identified by V.V. Kropotkin	1 bronze anonymous coin	970-1092	KROPOTKIN 1962, p. 35, n. 247

(32) Both KORZUHINA 1954 and KROPOTKIN 1962 note that one of the two coins has been lost. Kropotkin also incorrectly lists the Russian Museum and the Hermitage (St. Petersburg, Russia) as the place of conservation. In fact, both coins have been preserved and, as of 1 September 2025, are part of the collection of the National Museum of the History of Ukraine in Kyiv (Ukraine). The coins have been identified by the Museum as asprons (with a question mark ?) in gold of Manuel I Komnenos (1143-1180), according to the 1948 inventory book. Inventory records predating the Second World War have been lost. Unfortunately, no spectrographic analysis of the metal has been conducted, and the identification of gold relies solely on the official assay certificate. Recent identification for both coins was made. The coin of Inventory n. AU-826 is identified as Hyperpyron nomisma of John III Ducas Vatatzes (1221-1254). Second coinage: "Transitional" to "Late" Style. Magnesia mint. Gold (not of the purest quality). Type *DOC IV.2*, p. 485, plate XXX, 5.9 etc. Byzantine Empire. Coin of Inventory n. AU-827 is identified as Aspron trachy nomisma of Manuel I Comnenus (April 1143 – September 1180). First coinage. Constantinople mint. Electrum. Type: *DOC IV.1*, pp. 296/297. Plate XII, 2a.2 - 2b.2. Thus, the dating of the Sakhnovka hoard of 1900 should be corrected from the 12th century to the second quarter of the 13th century. Chronologically, this means that the Sakhnovka hoard may testify the destruction of the settlement during the Mongol-Tatar invasion in the 1240s, while at the same time it may hypothetically indicate the use of the route "from the Varangians to the Greeks" in the early 13th century as a transport artery connecting Byzantium (at that time the Empire of Nicaea) with the territories of Rus'.

N.	Name	Location	Kind of find	Composition	Byzantine coins	Dating of the Coins	Source
37	Voinskaya Greblya 1956-1959	The area of the ancient Rus' town of Voin, part of the Pereiaslav Principality, now submerged under the Kremenchuk Reservoir, Poltava Oblast, Ukraine	Single find	9 bronze Byzantine coins: 1) One anonymous coin from the 10th-11th centuries, type: Wroth, II, tabl. LVIII, 3, 4 Poor preservation, edge broken (area 3, n. 115). 2) One anonymous coin from the 10th-11th centuries, poor preservation, type: Wroth, II, tabl. LXI, 7, 8. 3) One anonymous coin from the 10th-11th centuries with a suspension hole, type: Wroth, II, tabl. LX, 10; LXI, 6; Sab., II, tabl. XLVIII, 4. 4) One anonymous coin from the 10th-11th centuries, type: Wroth, II, tabl. LX, 6, 7. 5) One anonymous coin from the 10th-11th century, type: Wroth, II, tabl. LX, 6, 7. 6) One anonymous coin from the 10th-11th century, type: Wroth, II, tabl. LX, 6. 7) One anonymous coin from the 13th century, type Sab., II, tabl. LVIII, 17. 8-9) Two unidentified Byzantine coins in very poor condition, one of which disintegrated during cleaning. Identified by V.V. Kropotkin	9 bronze anonymous coins	970-1092 13th century	KROPOTKIN 1962, p. 35, n. 248
38	Kremenchuk 1940	Kremenchuk, Kremenchuk District, Poltava Oblast, Ukraine	Single find	One Cherson-Byzantine coin of Basil I (867-886)	1 Cherson-Byzantine coin	867-886	KROPOTKIN 1965, p. 178, n. 72 (543)

N.	Name	Location	Kind of find	Composition	Byzantine coins	Dating of the Coins	Source
39	Ljubimovka 1962	Maly Dubovy Island near Liubymivka, Dniipro District, Dniipro-petrovsk Oblast, Ukraine	Single find	One bronze scyphate coin of John II Komnenos (1118-1143)	1 bronze	1118-1143	KROPOTKIN 1965, p. 172, n. 29 (506)
40	Majstrov 1	Majstrov, an island on the Dnieper River near the Dnieper Rapids, Solonianskij District, Zaporizhzhzhia Oblast, Ukraine	Single find	One concave gold Byzantine coin of Constantine X Ducas (1059-1067)	1 gold	1059-1067	KROPOTKIN 1962, n. 160
41	Dnieper Rapids 1813	Dnieper Rapids, Zaporizhzhzhia Oblast, Ukraine	Hoard	One bronze vessel with a silver notch and a Greek inscription along the throat: ΦΟΝΝΥΔΑΤΕ ΦΟΝΗ...Ν... The vessel contained Byzantine coins of Nicephorus II Phocas (963-969), John Tzimiskes (969-976) and a bronze key	2 undefined	963-969 969-976	KROPOTKIN 1962, p. 31, n. 154
42	Nikopol 1936	Nikopol, Dniipro-petrovsk Oblast, Ukraine	Grave	A fragment of a miliareasion of Constantine IX Monomachos (1042-1055) in Kurgan n. 27, in Nomadic Burial n. 1. Identification by V. A. Shugaevsky. Alongside the coin, the burial contained a sword, gold rings, a gold earring with a bead, and other items	1 fragment of silver	1042-1055	KROPOTKIN 1965, p. 172, n. 30 (507)

N.	Name	Location	Kind of find	Composition	Byzantine coins	Dating of the Coins	Source
43	Stanislav 1930	Near modern Stanislav, Kherson Oblast, Ukraine	Hoard (?)	Two solidi of Constantine VII and Romanos II (945-959), type Wroth, II, p. 465, n. 60	2 gold	945-959	KROPOTKIN 1962, p. 37, n. 270
44	Konka 1873 (Dneprovskij Liman)	Dnieper estuary, Skadovsk District, Kherson Oblast, Ukraine	Hoard	33 or 43 (?) gold coins of Basil I (867-886), Romanos II (959-963), John I Tzimiskes (969-976), Constantine VIII (1025-1028), and Constantine X (1059-1067)	33 or 43 (?) gold	867-886 959-963 969-976 1025-1028 1059-1067	KROPOTKIN 1962, p. 31, n. 158; KROPOTKIN 1965, pp. 172-173, n. 32 (158); GURULEVA 2025, pp. 91-93
45	Zmeinyj Island 1	Snake (Levka) Island Odesa Oblast, Ukraine	Single find	Miliaresion of John I Tzimiskes (969-976)	1 silver	969-976	STOLJARIK 1993, p. 144, n. 90
46	Zmeinyj Island 2	Snake (Levka) Island Odesa Oblast, Ukraine	Single find	Stamenon of Constantine X Ducas (1059-1067)	1 gold	1059-1067	STOLJARIK 1993, p. 149, n. 133; GURULEVA 2025, p. 89
47	Zmeinyj Island 3	Snake (Levka) Island Odesa Oblast, Ukraine	Single find	Follis of Romanus IV Diogenes (1068-1071)	1 bronze	1068-1071	STOLJARIK 1993, p. 149, n. 138
48	Zmeinyj Island 4	Snake (Levka) Island Odesa Oblast, Ukraine	Single find	Electron aspron of Manuel I Comnenus (1143-1180)	1 electrum	1143-1180	STOLJARIK 1993, p. 152, n. 167

1.2. *Organization of trade on the "Route from the Varangians to the Greeks" from Kyiv to Constantinople*

Byzantine Emperor Constantine VII Porphyrogenitus provides a detailed account of this trade in his work "*De Administrando Imperio*", notably in the Chapter 9⁽³³⁾.

In early spring, merchants from all major cities gathered in Kyiv, bringing their goods. Each merchant obtained a certificate from the prince (a seal in the early 10th century and a charter from the 940s onward), specifying the number of boats to be used. The vessels departed from Kyiv along the Dnieper River in May or June. Near Vytichev (*τὸ Βιτετζέβη*), they stopped for another 2-3 days to wait until all the boats had assembled. The Dnieper's tributaries most likely also played an important role in transporting goods along the river, providing convenient routes for their movement. An example of this is the coin find at Divych-Hora, near Sakhnivka village in the Cherkasy region of modern-day Ukraine. The Old Rus' settlement located on this hill was connected to the Dnieper by the Ros' River, one of its tributaries (Fig. 3-4).

Usually about 100-200 monoxyles (a boat made from a hollowed-out tree), or approximately 1,000 people made a caravan from Rus' to Constantinople. The ships were always armed to defend against possible attacks by nomads, with the Pechenegs often being the main threat. At the Great Rapids, boats were hauled ashore and either carried over land on shoulders or dragged along the bank, a process known as portaging. The Black Sea was crossed along its western shore, leading onward to Constantinople⁽³⁴⁾. Of course, this route also functioned in the opposite direction, from Byzantium to Scandinavia.

The final stop for the Rus' caravan on Bulgarian territory was at the mouth of the River Dichina, now known as the Kamchiya River. From Dichina, they would proceed to the area of Mesembria (modern day Nesebar in Bulgaria) – a Byzantine port city-fortress on the East Thracian coast, located 300 kilometers from the imperial capital.

For most of the Rus' (rowers and escort warriors) and a significant number of the ships, as Constantine VII Porphyrogenitus notes, the voyage ended in the area of Mesembria. Mesembria was one of the Empire's key customs stations. It housed an apotheke (*ἀποθήκη*) – a warehouse for goods confiscated or collected in kind as customs duties⁽³⁵⁾. The position of the Rus' in the Empire can certainly be regarded as exceptional: they enjoyed

(33) CONST. PORPH., *De adm.*², p. 45.

(34) SOROCHAN 2023, p. 122.

(35) ANTONIADIS-BIBICOU 1963, pp. 188, 198; LITAVRIN 1999a, p. 444.



FIG. 3 – Hyperpyron nomisma. John III Ducas called Vatatzes (1221-1254). Second coinage: “Transitional” to “Late” Style. Magnesia mint. Gold (not of the purest quality). Type *DOC IV.2*, p. 485, plate XXX, 5.9 etc. Byzantine Empire. Part of the Sakhnovka hoard discovered in 1900. Findspot location: Divych-Hora settlement, Sakhnivka village, Cherkasy region, Ukraine. Gold, struck (4,3 g; 28,0 mm). Inventory n. AU-826. Place of conservation: the coins belong to the collection of the National Museum of the History of Ukraine in Kyiv.



FIG. 4 – Aspron trachy nomisma. Manuel I Comnenus (April 1143 – September 1180). First coinage. Constantinople mint. Electrum. Type: *DOC IV.1*, pp. 296/297. Plate XII, 2a.2 - 2b.2. Byzantine Empire. Part of the Sakhnovka hoard discovered in 1900. Findspot location: Divych-Hora settlement, Sakhnivka village, Cherkasy region, Ukraine. Electrum, struck, weight (2,87 g; 28,0 mm). Inventory n. AU-827. Place of conservation: the coins belong to the collection of the National Museum of the History of Ukraine in Kyiv.

extraordinary trade privileges and other benefits, particularly in Constantinople itself. Consequently, the Rus' did not pay trade duties in Mesembria, at the entrance to the Bosphorus, or in Constantinople. Their stop in Mesembria was primarily for the purpose of ensuring the security of the imperial capital. Here, in the city and its surroundings, under the supervision of the fortress garrison, the Rus' remained until their return journey, hauling their boats ashore and preparing them for the trip back. Some boats carrying goods, accompanied by merchants and envoys, were either escorted by Byzantine cargo ships to the suburb of the Monastery of St. Mamas (*ἡ μονὴ τοῦ ἁγίου*

Μαμῶ) or had their cargo transferred onto these vessels. It is also possible that some goods were transported to Constantinople overland ⁽³⁶⁾.

A representative of the Eparch of Constantinople (a *legatarius*, “overseer of barbarians”, or a subordinate official) prepared a register of envoys and merchants. Based on this, they were provided with *slabnoe* (“*слѣбное*”) (diplomatic allowances) and *mesyachina* (“*месячина*”) (provisions for merchants) during their stay in the capital. The imperial authorities, informed of the number of Rus’ ships (as reported by the Kyiv prince in his charter), conducted an inventory specifying the types and quantities of goods brought by the Rus’. They then determined the designated locations and timeframes for the sale of these goods ⁽³⁷⁾.

The purchase of goods from foreign merchants was conducted wholesale, with Byzantine trade corporations acquiring them not directly at the market in the capital, but rather at the premises where the foreign merchants were accommodated ⁽³⁸⁾. Foreign merchants were only allowed to sell their wares at the markets of Constantinople with special permission from the city’s Eparch after representatives of the Constantinopolitan *systemata* declined to purchase all or part of the goods wholesale ⁽³⁹⁾.

The main centers of interaction between the ancient Rus’ and the Byzantines during Constantine’s era remained Constantinople and Chersonesus. On their return journey home, they may have travelled overland along the right bank and crossed to the left bank via the Krariy crossing, located between the rapids and Khortytsia Island ⁽⁴⁰⁾. While navigating the Dnieper River, Khortytsia Island, located below the Dnieper rapids, served as a resting place not only for the ancient Rus’ – archaeologists have uncovered an Old Rus’ settlement here dating back to the 10th century – but also for the inhabitants of Chersonesus. Archaeological evidence of the Chersonites’ use of the water route to Kyiv is supported by Constantine’s account that at the time, Khortytsia was known as the Island of Saint Gregory ⁽⁴¹⁾: a name that could have been given only by the Christian inhabitants of Chersonesus ⁽⁴²⁾.

Some scholars explain the scarcity of Byzantine coins found on Rus’ territory by the nature of Byzantine trade with Rus’, which may have

(36) LITAVRIN 1999a, p. 445.

(37) *Povest’ vremennykh let* 1950, p. 36; *Vizantijskaya kniga Eparha*, p. 68; LITAVRIN 1999a, p. 443.

(38) *Vizantijskaya kniga Eparha*, pp. 53-56; LITAVRIN 1999a, p. 443.

(39) SOROCHAN 2001², pp. 307-308.

(40) CONST. PORPH., *De adm.* 9.65-67; LITAVRIN 1999b, p. 422.

(41) CONST. PORPH., *De adm.*, 9.71-78.

(42) LITAVRIN 1999b, p. 422.

been primarily based on barter ⁽⁴³⁾. In other words, buying and selling took place mostly within the Empire itself, essentially exchanging Rus' goods for Byzantine products without the actual export of money. Coins, therefore, were rarely taken out of the Empire through trade, as the main focus of imports and exports was on goods rather than currency ⁽⁴⁴⁾. That is, Rus' merchants brought their goods to Constantinople, sold them for money, and immediately spent that money on purchasing Byzantine goods. Within this framework, T. Noonan hypothesized that the Byzantines and Rus' engaged in barter exchanges of goods of equivalent value. He suggested that this practice may have arisen because Byzantium lacked enough coinage to cover the trade deficit in its foreign commerce ⁽⁴⁵⁾. P. Tolochko explains the limited export of coins by the preferences of the Rus' themselves, who favoured exporting highly liquid goods – such as silk, jewellery, glassware, spices, wine, and the like – instead of money ⁽⁴⁶⁾. To these factors, two more must be added. In the 9th-10th centuries, the Byzantine Empire's economy, with its highly developed crafts and trade, significantly surpassed that of Rus'. This created a trade balance favourable to Byzantium ⁽⁴⁷⁾. Simply put, the Rus' purchased more from the Byzantines than the Byzantines bought from the Rus'. Finally, Byzantine foreign trade policy played a role: legislation prohibited the export of precious metals and products made from them, including coins ⁽⁴⁸⁾. All these factors likely hindered the outflow of Byzantine coins to Rus' through trade.

1.3. *The formalization of diplomatic and trade relations between Rus' and Byzantium: the Rus'-Byzantine agreements of 907, 911, 944, and 971*

Trade relations between Rus' and Byzantium were officially documented in the treaties of 907, 911, and 944, as recorded in the Primary Chronicle. The 971 treaty, while not addressing trade, mentions the role of envoys who delivered it to the Byzantine emperor.

The treaties between Rus' and Byzantium indicate that the Rus' were assigned a specific quarter of Saint Mamas, with privileges including free

(43) SORLIN 1961, p. 475; LITAVRIN 2000, pp. 105-106; SYDORENKO 1990, p. 15; SYDORENKO 1992, pp. 6, 47; DOMANOVSKY 2005, p. 36.

(44) DOMANOVSKY 2005, pp. 34-46.

(45) NOONAN 1980, p. 172; NOONAN 1987, p. 399.

(46) TOLOCHKO 1996, p. 191.

(47) DOMANOVSKY 2005, p. 37.

(48) BASIL. LX, XIX. 1. 86, 87; BASIL. LX 1862, LVI. 1. 20; *Les Nouvelles de Leon VI le Sage* 1944, LXIII; DOMANOVSKY 2005, p. 37.

accommodation and access to bathhouses⁽⁴⁹⁾. The words “trade”, “purchase” (“купля”), “merchants” (“гости/гостье”), and “envoys” (“сли/слы”) consistently appear in all three Rus'-Byzantine treaties of 907, 911, and 944, which indirectly suggests the presence of monetary transactions⁽⁵⁰⁾. The 944 treaty includes a provision forbidding the Rus' from buying pavoloki (silk fabric) for more than 50 gold coins (“50 золотникъ”) ⁽⁵¹⁾, which indicates that Rus' merchants had Byzantine currency at least at the time of trading in Constantinople⁽⁵²⁾. The Eparch's official – *legatarius* – imposed a fixed deadline for foreigners to sell their goods and ensured that they concluded their trade and departed Constantinople within three months⁽⁵³⁾. Rus' merchants received from the Byzantine authorities a “mesiachina” (“месячина”) (from the Greek “ταμνηαία, ταμνηαία”), a monthly provision of supplies in kind⁽⁵⁴⁾. Envoys were also provided with food supplies during their stay in the capital, known as “slebnoye” (“слебное”): “*When the Rus' arrive, let them take as much support for their envoys (“слюбное емлют”) as they need; and if merchants come, let them receive a six-month monthly allowance (“мъсячину”) of bread, wine, meat, fish, and fruits*”⁽⁵⁵⁾. G. Litavrin maintained that while residing in the Saint Mamas quarter, the Rus' were provided with provisions in kind – not money – including bread, wine, meat, fish, and vegetables. Rather than receiving these supplies as goods to take away, the Rus' were served regular prepared meals in the refectories of the Saint Mamas monastery⁽⁵⁶⁾.

2. *The alliance and military-political relations between Rus' and Byzantium*

Another way Byzantine coins reached Rus' was through diplomacy. Throughout the entire existence of Rus' and Byzantium, their relations were marked by alternating periods of war and peace. Rus' princes frequently launched military campaigns against Constantinople. These conflicts resulted in several Rus'-Byzantine treaties. The treaties between Rus' and Byzantium – dated 907 (though its authenticity is questioned), 911, 944, and 971 – are among the earliest international agreements of Ancient Rus'. Only the Old

(49) *Povest' vremennyh let* 2012, pp. 23-24, 34.

(50) *Povest' vremennyh let* 2012, pp. 23, 24, 26, 27, 33, 34.

(51) *Povest' vremennyh let* 1950, p. 36.

(52) *Povest' vremennyh let* 2012, p. 34.

(53) *Vizantijskaya kniga Eparha* 1962, p. 68.

(54) *Povest' vremennyh let* 2012, p. 24; LITAVRIN 1993, p. 84.

(55) *Povest' vremennyh let* 1950, p. 24; *Povest' vremennyh let* 2012, p. 24.

(56) LITAVRIN 1993, p. 90.

East Slavic versions of these treaties, translated from Greek, are known to us; they were preserved in the Primary Chronicle, where they were incorporated in the early 12th century. These treaties not only regulated political and military relations but also facilitated economic exchange, including the circulation of Byzantine coinage.

In 907, Prince Oleg led a successful campaign against Constantinople on behalf of the Rus'. The outcome was the treaties of 907 and 911 with Byzantine emperors Leo and Alexander. Under these agreements, Rus' was granted the right to trade duty-free in the markets of Constantinople. The Byzantine side undertook to support Rus' merchants and envoys at their own expense during their stay in the Empire, providing them with everything necessary for their return journey to Rus' ⁽⁵⁷⁾.

After the conclusion of the 911 treaty, the Rus' began to take an active role in Byzantine military campaigns, notably against the Khazar Khaganate, the Pechenegs, the Cumans, and the Arabs. Byzantium was engaged in numerous wars and had a pressing need for warriors from Rus'.

In 941, Grand Prince Igor of Kyiv (912-945) led a disastrously failed campaign against Byzantium. His forces were decimated near Constantinople by the infamous "Greek fire". In 944, seeking to avenge this defeat, he mounted a second expedition. Upon learning of the Rus' advance, the Byzantine emperor ordered his forces to intercept them on the Danube rather than wait for them to reach the imperial capital. There, on the Danube, Igor was met by Byzantine envoys bearing rich gifts. Later in 944, in Constantinople, Prince Igor's envoys and the Byzantine emperors Romanos, Constantine and Stephen concluded a treaty that proved as advantageous for Rus' as the 911 agreement. The treaty encompassed trade and military-political clauses and required Rus' envoys and merchants to carry princely charters to benefit from the granted privileges. Rus' merchants were granted even broader rights and privileges throughout the Byzantine Empire. Rus' committed not to claim Byzantine possessions in Crimea, not to overwinter at the mouth of the Dnieper, and to offer mutual military assistance ⁽⁵⁸⁾.

The next ruler of Rus' to visit Constantinople was Princess Olga, widow of Prince Igor. She came to Constantinople in 946 to settle trade relations and political ties with the Byzantine Empire ⁽⁵⁹⁾. Olga met with Emperor Constantine VII Porphyrogenitus and was baptised. This visit is recorded both in the Primary Chronicle and in the treatise "*De Ceremoniis*" (II,15).

(57) *Povest' vremennyh let* 2012, pp. 23-28.

(58) *Povest' vremennyh let* 2012, pp. 34-35.

(59) KUZENKOV 2020, p. 127.

In the capital, the archontissa received a rather reserved welcome, though she was allowed to moor her boats in an honorable location near the Great Imperial Palace, at the port of Sophia – specifically, at the mole of Souda (the Slavic chronicle name “*Сойда*”) on the Propontis (Sea of Marmara), where she remained for about two months until autumn.

In September and October, Olga was received twice by Emperor Constantine VII in the Great Palace. According to Byzantine ceremonial protocol, the already baptized Olga – now Helena – and her retinue were accorded appropriate honours and were led through all the main ceremonial halls of the Sacred Palace. Together with her sizable retinue, she shared two formal banquets with the imperial family and received monetary gifts. The amount of money given was more akin to a gift for an important envoy than a head of state. The “*De Ceremoniis*” meticulously lists the gifts presented during these two receptions.

On September 9, the following gifts were distributed: her nephew received 30 *miliaresia*, her 8 male relatives 20 *miliaresia* each, the 20 emissaries 12 *miliaresia* each, the 43 merchants 12 *miliaresia* each, the priest Gregory 8 *miliaresia*, the two interpreters 12 *miliaresia* each, Svjatoslav’s men 5 *miliaresia* each, the six men of the emissaries 3 *miliaresia* each and the archontissa’s interpreter 15 *miliaresia*. 500 *miliaresia* were given to the archontissa on a gold plate (“*σκουτελλι’ω*”) decorated with precious stones, 20 *miliaresia* each to her six female relatives and 8 *miliaresia* each to her 18 female attendants⁽⁶⁰⁾, adding another 754 *miliaresia* to the total. The source does not specify how many of Svjatoslav’s representatives were present, but assuming a minimum of two, the total distributed on September 9 amounts to 1,785 *miliaresia*. On October 18th, another banquet was held in the Pentakouboukleion of the Chapel of St Paul. 200 *miliaresia* were given to the archontissa and 20 *miliaresia* to her nephew, 8 *miliaresia* to the priest Gregory, 12 *miliaresia* each to her 16 female [relatives], 6 *miliaresia* each to her 18 women servants, 12 *miliaresia* each to the 22 emissaries, 6 *miliaresia* each to the 44 merchants, and 12 *miliaresia* each to the two interpreters⁽⁶¹⁾. So, October 18, a further 1,080 *miliaresia* were gifted.

In total, the gifts amounted to 2,865 *miliaresia*, or approximately 7,6 kg of silver (calculating 1 *miliaresion* of 2,65 g), plus the ornate platter. Converted into *solidi*, the ceremonially presented silver would equate to just over 238 *nomismata* (1 *nomisma* = 12 *miliaresia*), or about 1 kg of gold (each *solidus* weighing 4,4 g).

(60) CONST. PORPH., *De cerem.*², II, 15 (“*A Reception is Held in the Great Hall of the Magnaura*”).

(61) CONST. PORPH., *De cerem.*², II, 16 (R598-599).

This bounty was relatively modest, especially when compared to the annual salaries (*roga*) of high-ranking Byzantine officials, which could range from 10 to 1,000 *litrae* of gold (72,000 *nomismata*, equivalent to 324 kg of gold coins) per year.

Thus, the diplomatic reception of Olga cost the treasury no more than the annual salaries (*roga*) of two or three lower-ranking officers. Moreover, Olga did not even secure a bishop for Rus'. Clearly, she was seen as a vassal of the Byzantine Empire, expected to bring gifts and provide military aid as part of her vassal obligations. Such treatment, coupled with the relatively modest gifts, could not help but offend and provoke dissatisfaction in the ambitious princess. Military and diplomatic ties between Rus' and Byzantium continued under Olga's son, Sviatoslav.

In 966, Emperor Nikephoros Phokas of Byzantium, looking for an ally to attack the Bulgarians from the rear, offered Grand Prince Sviatoslav Igorevich (945-972) a large payment to lead a campaign in the Balkans against Bulgaria, which was hostile to Byzantium. The emperor sent an emissary, Patrikios Kalokyros, a high-ranking official from Cherson, to deliver the proposal. He also brought a generous payment: chests containing 15 *kentaria* of gold (108,000 *nomismata*, or about 474 kilograms calculating one *nomisma* weight of 4,4 g).

This mission followed the rules of Article 15 of the 944 treaty, which outlined how the Byzantine emperor could ask the Grand Prince for soldiers. With this money, Sviatoslav could hire about 10,000 Rus' warriors, each earning 10-11 *nomismata*.⁽⁶²⁾

In 967, Sviatoslav defeated the Bulgarian army. The chronicle indicates that at that time Sviatoslav was still receiving additional payment from Byzantium for invading Bulgaria: "*Sviatoslav went to the Danube against the Bulgarians. Both sides fought, and Sviatoslav defeated the Bulgarians and captured eighty of their cities along the Danube, and settled there in Pereyaslavets, taking tribute from the Greek.*"⁽⁶³⁾ Hoping to conquer Bulgaria and establish a new capital in Pereyaslavets, Sviatoslav led a series of campaigns across Bulgaria. The Byzantine historian Leo the Deacon wrote that during this time, Sviatoslav's army grew to 60,000 soldiers. It is likely that he paid his troops with loot taken from Bulgaria, which may have included coins.

To stop Sviatoslav, Byzantium intervened. In 968 and 970, battles took place between Sviatoslav's forces and the Byzantines. In 971, during the siege of Dorostolon, Sviatoslav and Emperor John Tzimiskes signed a peace

(62) LEV DIAK., *Ist.*, IV.6, V.1; KARYSHKOVSKIY 1953a, pp. 36-71; KARYSHKOVSKIY 1953b, pp. 224-243; KARYSHKOVSKIY 1955, pp. 26-30; LUGOVYJ 2006, pp. 129-134.

(63) *Povest' vremennyh let* 2012, p. 44.

treaty. Written under unfavourable conditions for Rus', the treaty included a promise that Rus' would refrain from attacking Byzantium.

After concluding peace with Byzantium, Sviatoslav and his army began the difficult journey home. Sviatoslav's army returned to Kyiv in two groups: one by land and the other by river along the Dnieper. The Pechenegs attacked them. The group traveling by river was defeated, Sviatoslav was killed, and the Pechenegs seized their loot, including coins. The land group managed to survive despite battles with the Pechenegs and eventually made it back to Kyiv. Unfortunately, we do not know the fate of the Byzantine money received by Sviatoslav. Did the Pechenegs seize all the money, or did part of it reach Kyiv with the second group of the army? We can only speculate.

"Diplomatic" money is well reflected in the Rus'-Byzantine treaties. Treaties record the concept of tribute and expensive gifts from Byzantine emperors to Rus' princes. Most often, these cases involve the words "gold and pavoloki" ("злато и паволоки").

The term "gold" could refer to both Byzantine coins and other gold items. Sometimes it is possible to determine exactly which precious metal items were given as gifts by comparing data from different sources. For example, The Primary Chronicle says that the Byzantine emperor Constantine gave Princess Olga "*numerous gifts: gold, silver, silks and various vessels*" during her visit to Constantinople ⁽⁶⁴⁾. At the same time, Constantine Porphyrogenitus, in his treatise 'On Ceremonies,' indicates that among the gifts were *miliaresia* and a golden dish encrusted with precious stones ⁽⁶⁵⁾. After the signing of the 911 treaty, "*Tsar Leo honored the Rus' envoys with gifts – gold, silks, and precious fabrics – and sent them back to Rus' to Oleg*" ⁽⁶⁶⁾. During Prince Igor's second campaign against Constantinople, Byzantine Emperor Romanos chose to pay off the Rus' to halt their advance, offering them "*gold and pavoloki*" ⁽⁶⁷⁾. The Primary Chronicle states that after the Byzantines were defeated in battle by Sviatoslav's forces (though Byzantine sources claim the opposite, asserting that the Rus' were defeated), the Byzantines sent Sviatoslav gifts twice before the signing of the 971 peace treaty. These gifts included gold, silks, and weapons ⁽⁶⁸⁾. The only place in the chronicle where tribute is specifically referred to in hryvnias is in the mention of the treaty of 907. During Prince Oleg's campaign against Constantinople, he demanded tribute of 960,000 hryvnias from Emperors

(64) *Povest' vremennyh let* 2012, p. 41.

(65) CONST. PORPH., *De cerem.*², II, 15 (R566-598).

(66) *Povest' vremennyh let* 2012, p. 28.

(67) *Povest' vremennyh let* 2012, p. 32.

(68) *Povest' vremennyh let* 2012, pp. 48-49.

Leo and Alexander: “*And Oleg ordered tribute to be paid for 2,000 ships at 12 bryvniias per person, and there were 40 men in each ship... and then tribute to be paid for the Rus’ cities*”. According to the chronicle, the emperors fulfilled this demand: “*And Oleg returned to Kyiv, bringing gold, silks, fruits, and wine*” (69).

The Byzantines often sought to win over nomadic tribes to protect their borders. In his advice to his son, Constantine VII Porphyrogenitus recommended generously rewarding the Pechenegs to secure protection from the Rus’ (70). J. Shepard notes that typical Byzantine response to foreign affairs problems was to throw money at them, as countless accounts by Byzantine historians attest, describing the offering of gifts to foreign marauders or potential allies. For instance, Leo the Deacon describes “*gifts*” and “*bewitching with seductive words*” as the core of a successful – though somewhat perverted – diplomatic mission to the Rus’ (71).

Another important source of information about money comes from treaty clauses concerning monetary penalties for crimes and ransom payments for captives.

The 911 treaty states that a captive, whether Rus’ or Byzantine, could be ransomed at market rates. Christian captives held by the Rus’ were to be sold back to Byzantium for 20 gold coins (“*20 золота*”) (72) and returned to Byzantine territory (73). The 944 treaty specifies: “*If a servant escapes from Byzantine lands to Rus’, a reward of 2 gold coins was to be paid for their capture. For Christian captives, the Rus’ were to receive 10 gold coins («златникъ 10» [zlatnik]) – for adults, 8 for middle-aged individuals, and 5 for elderly people or children*” (74). Additionally, the Rus’ were required to pay 10 zlatniks to ransom Rus’ slaves held by the Byzantines: “*Аще ли обряцуются русь работающе у грекъ, аще суть плъньници, да искупають є русь по 10 златникъ*” (75). Both the 911 and 944 treaties also include a clause stating: “*If a Rus’ person strikes a Greek, or a Greek strikes a Rus’, with a sword, spear, or any other weapon, the offender must pay 5 litrae of silver («лутръ 5 сребра»)* as compensation, according to Rus’ law” (76).

The last military conflict between the Kyiv princes and Byzantium that mentions money in the sources took place in 1043, between Byzantine Emperor Constantine IX Monomachos and Great Prince Yaroslav the Wise

(69) *Povest’ vremennyh let* 2012, pp. 23-25.

(70) CONST. PORPH., *De adm.*², p. 39.

(71) SHEPARD 1992, p. 66.

(72) *Povest’ vremennyh let* 1950, p. 28.

(73) *Povest’ vremennyh let* 2012, p. 27.

(74) *Povest’ vremennyh let* 1950, p. 37.

(75) *Povest’ vremennyh let* 2012, p. 35.

(76) *Povest’ vremennyh let* 2012, pp. 26, 36.

of Rus'. 400 warships manned by Rus' and Varangian mercenaries serving in Yaroslav's retinue approached Constantinople. They demanded a huge payment – 400,000 nomismata (roughly 1000 gold coins per ship, or about 25 solidi per man, assuming each ship held around 40 men). They refused to accept a smaller compensation. This led to a battle in which the Rus' were defeated. Eight hundred of them were captured and maimed. These events were well documented by various chroniclers ⁽⁷⁷⁾. In our case, this confirms a possible military source of Byzantine money reaching the Rus'. The conflict was resolved in 1046 through expensive gifts, which likely included coins, as well as the marriage of Emperor Constantine Monomachos's daughter Maria to Yaroslav the Wise's son, Vsevolod.

The last known diplomatic mission sent by Byzantium to Rus' took place in 1165. Information about it survives only in the "Epitome" of John Kinnamos. Most likely, this channel of Byzantine "diplomatic" money reaching Rus' ceased by the early 13th century. It certainly did not survive the Mongol-Tatar invasions, although this event did not prevent Byzantium from continuing to pay large sums to mercenaries – Scandinavians from Denmark and Norway, as well as the English (the *Ingľins*) ⁽⁷⁸⁾.

Based on the foregoing, it follows that, the sources confirm that Byzantine coins reached Rus' as gifts to Kyiv princes, envoys, and their retinues. Byzantine money also likely served as payment for military assistance, as was the case with Sviatoslav. Rus' warriors, like other mercenaries, did not fight for the Byzantines for free. When a military treaty obliged Rus' to provide military aid, it meant that the prince supplied warriors and paid them wages. Here, it is necessary to turn to the topic of mercenary service in the Byzantine Empire.

3. *Rus' mercenary service in Byzantium*

3.1. *On terminology: Rus'/ Ρῶς, Varangians and Varyagi*

In the Byzantine army, there were always mercenaries, predominantly foreigners, who were identified as "σῶμμαχοι" (allies) or "ἐθνικαί" (literally from Greek, "external", foreigners). Synonyms included "ζενικός" (outsider) and "μισθοφορικόν" (mercenary unit) ⁽⁷⁹⁾.

(77) ΜΙΚΗ. ΠΣΕ., *Hron.*, VII.24, IX.51; ΙΟΑΝ. ΣΚΥΛ., *Syn.*; ΓΕΟΡΓ. ΚΕΔ., *Comp.*, II, 551-552; ΛΙΤΑΒΡΙΝ 1967, pp. 71-86; ΛΙΤΑΒΡΙΝ 1968, pp. 105-107.

(78) ΛΥΓΟΥΥ 2008, p. 82.

(79) ΚΑΖΗΔΑΝ 2005, pp. 481-482.

Starting in the early 10th century, the number of mercenaries in the Byzantine army began to increase ⁽⁸⁰⁾. This growth was linked to the gradually intensifying crisis of the theme system and the impoverishment of the peasant-soldiers (*stratiotes*), who formed the backbone of the Byzantine army. For this reason, the Byzantines started recruiting an increasing number of foreigners from Northern and Eastern Europe, including the Rus'. The Rus' in Byzantine service were encompassed under the terms “Οἱ Ῥῶς” (Rhos/Rus' people) and “*Ταυροσκόθεις*” (Tauroscythians). The Byzantines could use them to refer not only to the Rus' themselves but also to Scandinavians (at least until the early 11th century) who had come from the lands of Rus' as druzhina warriors of Rus' princes ⁽⁸¹⁾.

Mercenaries arriving directly from Scandinavian territories from the late 10th century onward were referred to in Byzantium as “*Βάραγγοι*” (Varangians). The Byzantine term “*βάραγγος*” and the Old Rus' (Old East Slavic) “*варягъ*” are usually derived from the Old Norse form of the same word, “*varingy*” ⁽⁸²⁾ or “*váringr*” ⁽⁸³⁾. This term appears almost simultaneously in Byzantine and Scandinavian sources (around the turn of the 10th-11th centuries) and carries the same meaning: North European mercenaries in Byzantium ⁽⁸⁴⁾.

From the late 11th century, the term *Ῥῶς* virtually disappears from Byzantine documents ⁽⁸⁵⁾.

Understanding this terminology is essential for the study of money flows to Rus' through mercenaries, as it highlights the agents transporting Byzantine currency and thus sheds light on the routes and methods by which coins reached Rus'.

3.2. *Examples of Rus' and Varangian service as mercenaries in Byzantium*

According to numerous Byzantine, Armenian, Scandinavian, Western European, Rus', Arab, and Armenian sources, the Rus' and Varangians fought against the emperor's enemies in Georgia, Armenia, Thrace, and Macedonia, as well as on Crete, Sicily, Lombardy, and Syria. They also performed garrison and border duties, guarded Byzantine prisons, and could accompany tax

(80) MOKHOV 2013, p. 278.

(81) PETRUKHIN 2014, p. 464; MELNIKOVA, PETRUKHIN 2011, pp. 153-171; AMALRIK 2018, p. 232.

(82) MOSHYN 1931, pp. 519-520.

(83) ILIADI 2005, pp. 182-183.

(84) LUGOVYJ 2008, p. 43.

(85) LUGOVYJ 2008, p. 66.

collectors, especially in regions affected by military campaigns. The Rus' and Varangians were part of the prestigious palace guard, protecting the emperors-basileis from assassination attempts and rebellions. Foreign mercenaries were often preferred for this role, and many Rus' were already serving in this capacity by the first half of the 10th century ⁽⁸⁶⁾.

It is known that in 911, 700 Rus' mercenaries out of total in all for both fleet and cavalry 34,337 soldiers participated in an ultimately unsuccessful campaign of the imperial army and fleet under the command of Patrician Himerios in the Aegean Sea ⁽⁸⁷⁾. The expedition was defeated near Samos in the spring of 912. Before the campaign, the mercenaries-rhos were paid a portion of their wages – 7,200 nomismata – equating to approximately 11 nomismata per person, calculated with the expectation of a subsequent (but ultimately unfulfilled) full payment upon the campaign's completion ⁽⁸⁸⁾.

In 936, the Rus' participated in a campaign against the Lombards in Italy. “*De Ceremoniis*” contains the information about seven *ousiai* (warships) of Rus', which served at stations in Durrachia and Dalmatia as a part of imperial fleet during the reign of Constantine VII Porphyrogenitus. 584 Rus' warriors and 42 their servants were involved in the expedition to Crete in 949 ⁽⁸⁹⁾.

In the mid-10th century, during the reign of Constantine VII Porphyrogenitus, the bronze doors of the palace were guarded by “baptized Rus'” (“*βαπτισμένοι Ρως*”) during imperial receptions in the Great Triclinium of the Magnaura ⁽⁹⁰⁾.

In the successful campaign of Nikephoros Phokas on Crete and the capture of the fortress of Chandax in 961, the Rus' participated alongside Byzantine themes and tagmata, as well as Armenian, Slavic, and Thracian (possibly Bulgarian) *symmachoi*-allies. ⁽⁹¹⁾.

According to the Arab author al-Masudi, the Rus' were consistently present in the border garrisons of Byzantium. Ibn Zafar, Ibn al-Athir, al-Mutanabbi, and other Eastern authors recorded the participation of the “ar-Rus'” in the wars between Byzantium and the Hamdanids ⁽⁹²⁾.

The intense war with Bulgaria at the end of the 10th century led to the creation of a military treatise known by its Latin title “*De Castrometatione*”

(86) LUGOVYJ 2008, pp. 9-22, 126-137.

(87) CONST. PORPH., *De cerem.*, pp. 652-654; CONST. PORPH., *De cerem.*², p. 652; VASIL'EV 1902, pp. 166-170.

(88) BLÓNDAL 1978, pp. 26-27; D'AMATO 2010, p. 48.

(89) CONST. PORPH., *De cerem.*, p. 664.

(90) CONST. PORPH., *De cerem.*, pp. 579, 20-22.

(91) PROD. PHEO., *Zhizn.*, II.16; CHRISTIDES 1984, pp. 172-174.

(92) BEJLIS 1988, p. 8.

(“On the Arrangement of Camps”) (93). Addressed to Emperor Basil II, the treatise proposed various security measures for conducting military operations on enemy territory in mountainous and forested regions. Drawing from personal experience, the anonymous author recommended deploying units of the “Rhos” (*Ῥως*) for operations in Bulgaria, including those detachments directly serving in the emperor’s guard (94). Notably, this was the first mention of the “Rus’” in specialized military literature.

On July 19, 968, Liudprand of Cremona, envoy of the Holy Roman Empire, saw in the harbor of Constantinople two Rus’ ships preparing to set sail for Italy alongside the imperial fleet, which consisted of 24 chelandia and two Frankish vessels (95).

After the outbreak of wars with Prince Sviatoslav in 968 and until 988, when the Kyivan prince Vladimir Sviatoslavich sent a mercenary army to help Emperor Basil II, there are no records of Rus’ troops in the Byzantine army. However, in 971, Sviatoslav reaffirmed his alliance obligations to Byzantium, which is reflected in a treaty document included in the Primary Chronicle.

There are grounds to believe that from the 980s onward, a system of permanent troop supplies from Rus’ to Byzantium was already in place, established by the agreements of 911 and 944. This system was finally formalized by agreements between Emperor Basil II and Prince Vladimir in 988. The six-thousand-strong Varangian corps sent by the prince Vladimir helped Basil suppress rebellions and continued to serve for a long time – until the early 11th century – in Bulgaria, Asia Minor, the Caucasus, Georgia, Armenia, Syria, and Italy (96).

According to the informed Byzantine general Katakalon Kekaumenos, the retinue of the Varangian leader Araltis (*Ἀράλτης*), personally known to him, numbered 500 brave warriors. This Araltis was identified with Harald Sigurdsson (Harald Hardrada), whom Kekaumenos regarded as the son of the “*Basileus of the Varangia*”, that is, Norway (97). Formed and serving in Rus’ between 1031 and 1034, this detachment arrived in Byzantium as mercenaries in the summer of 1043 and, by 1045, upon their return to Rus’, had become remarkably wealthy (98).

Shortly after these events, the chrysobulls of Constantine Monomachos to the Nea Moni monastery on Chios from 1044 and 1049 specify for the first

(93) *Ob ustrojstve lagerya* 2002; *Three Byzantine Military Treatises* 1985.

(94) *Three Byzantine Military Treatises* 1985, pp. 280, 312 (X, XIX and XXV).

(95) LUGOVYJ 2008, p. 81.

(96) GEORG. CED., *Comp.*, II, 444; STEPH. TAR., pp. 308-309; VASIL’EVSKIJ 1908, pp. 176-377; BENEDIKZ 1969, p. 23; BRYSOVA 1972, pp. 51-62; TREADGOLD 1995, p. 37.

(97) KEKAV., *Sov.*, p. 283.

(98) KEKAV., *Sov.*, pp. 283, 591; JACKSON 2000, p. 127; JACKSON 2001, pp. 106-113.

time the composition of the Byzantine mercenary army, distinctly identifying among them the ethnic group of the “Rhos” (99).

In the late 1060s, a particularly large number of mercenaries entered the service of Emperor Romanos Diogenes (1068-1071). These troops are mentioned in accounts of the Battle of Manzikert against the Seljuk Turks in 1071. The last mentions of the Rus' in military actions appear in 1077, and in chrysobulls in 1088 (100). It is likely that the permanent contingent of Rus'-Slavs ceased to exist within a decade or two after the defeat at Manzikert.

Written sources are supported here by archaeology and numismatics. Analysis of Byzantine coin hoards found in the Dnieper region shows that, starting from the coins of Nikephoros Botaneiates (1078-1081) and continuing until the 1180s, Byzantine coins became rare in this area – the main center of both merchant capital and mercenary routes to Byzantium. At the same time, a considerable number of bronze follis coins appear in hoards from northern regions, particularly in Ryazan (101).

The Varangians are mentioned in sources for a longer period. At the end of the 11th century, John Skylitzes noted the existence of palace Varangians (*τω παλατίω Βάραγγοι*) and “external” Varangians (*των εκτός Βαράγγων*) (102). Often, the palace Varangians operated under the name *πελεκηφόροι βάρβαροι ὄμιλος* (“axe-wielding barbarians”), as mentioned by Anna Komnene (*πελεκηφόρων βαρβάρων ὄμιλον*) (II, 9:109) and John Kinnamos (103).

The Varangian guard, composed of various northern peoples serving as *pelekiforoi* – axe-bearers – remained in service to the emperors of the Angelos dynasty (1185-1204). For instance, Salimbene di Adam's “Chronicle” mentions that in 1201, the usurper John was killed by Varangians (“*Guarangi*”) loyal to Emperor Alexios III Angelos (104). Sicard of Cremona reported that on the eve of the Crusaders' capture of Constantinople, Greeks and Varangians (“*Warangorum*”) massacred Venetians and other Western Europeans living there (105).

Overall, however, by the end of the 11th century, the number of mercenaries from Rus' declined. After the death of Yaroslav the Wise in 1054, the unified early feudal state began to fragment into warring territorial principalities, which affected the organization system of Scandinavian mercenaries in Rus' and those from Rus' serving in Byzantium.

(99) BIBIKOV 1986, p. 101.

(100) LUGOVYJ 2008, pp. 101-102.

(101) ZOISENKO 1991, pp. 64, 69-71.

(102) IOAN. SCYL., *Brev.*, 469A-B

(103) FREJDENBERG 1959, p. 47; LUGOVYJ 2008, p. 57.

(104) SALIM., *Chron.*, pp. 31, 724.

(105) SIC. CREM., *Chron.*, 534.

The Byzantines increasingly preferred to hire Western warriors. While units of Rus' and Varangians served in Byzantium, they were constantly replenished through ongoing immigration to the country. Losses in battle were heavy, yet the size of the units ideally needed to remain stable.

3.3. *Legislative regulation of the Rus' mercenary service and the bequeathing of mercenaries' property*

There is a single direct Byzantine testimony regarding the military hiring of the Rus' – the Rus'-Byzantine treaty of 911, Article 10: “*If a recruitment into the army occurs, and the Rus' wish to honor your emperor, and however many of them come at any time and wish to remain with your emperor of their own will, let their desire be fulfilled*”⁽¹⁰⁶⁾. The article demonstrates the continuity of the mercenary route between Rus' and Byzantium during this period. The treaty of 944 further formalized the role of the states in this process. The text of its 15th article reads: “*If we, the emperors, desire warriors from you against our enemies, we shall write to your great prince, and he will send us as many as we desire. And thus, other nations will know the friendship that exists between the Greeks and the Rus'*”⁽¹⁰⁷⁾. According to the 944 treaty, all envoys and merchants arriving in Constantinople were required to present a princely charter and seals. While it was not explicitly stated that mercenaries had to present such documents, the content of the charter (“*Sent a certain number of ships?*”) implied the necessity of this document for mercenary units assembled by the prince. The consequences of failing to fulfil this requirement were as follows: “*If they come without a charter and fall into our hands, we shall detain them under supervision until we notify your prince*”⁽¹⁰⁸⁾.

Since the time of Justinian I, imperial legislation prohibited or severely restricted the export of gold from the empire. However, the property of mercenaries in Byzantium fell under the legal concept of *peculium castrense* (*καστρίσιον*) – property acquired through military service – which the owner could dispose of at his discretion. This meant that mercenaries had the right to export gold coins from the country⁽¹⁰⁹⁾. If the owner of the money died, his property could be exported in accordance with the terms of his will.

Among the mercenaries in Byzantium, especially the Rus' and the Swedes, there were many who maintained ties with their homeland and

(106) PSRL I, 36; *Povest' vremennyh let* 2012, p. 27.

(107) CIGGAAR 1996, pp. 37-38.

(108) *Povest' vremennyh let* 1950, p. 35; *Povest' vremennyh let* 2012, p. 34.

(109) LIPSHYTS 1981, p. 173.

families, which necessitated the recognition of their rights and emphasized earning to support their loved ones. The treaty of 911 already included Article 13: “Concerning the Rus’ serving in the Greek land under the Greek emperor: If any of them dies without having disposed of his property, and has no relatives in Greece, let his property return to Rus’ to the nearest younger relatives. But if he has made a will, let the person to whom the deceased bequeathed his inheritance take it and inherit accordingly”⁽¹¹⁰⁾. Legally, this article established the right of the deceased mercenary’s relatives to inherit his property, including earnings made in Byzantium.

G.G. Litavrin reconstructed the procedural aspects of this article and concluded that, in most cases, the inheritance of a deceased mercenary came under the control of imperial authorities. These authorities were obligated to formally transfer it through Rus’ envoys or trading caravans to the deceased’s homeland⁽¹¹¹⁾. Thus, a Rus’ warrior, under Byzantine law, could bequeath his property to his family in Rus’ or Sweden, to a new family in Byzantium, or to a relative – a brother from the same unit. The treaty guaranteed that the inheritance would reach the designated recipient. This process was facilitated by the simplified testamentary laws applied to military personnel in Byzantium, as introduced by Justinian’s Institutes (II, 11 – “*De militari testament*”). To draft a will, especially during military operations, it was unnecessary for a *nomikos* (notary) to be present. Instead, the presence of only two witnesses was sufficient, compared to the seven required for other types of wills. In extreme circumstances, even a blood-written note from a wounded soldier could be accepted as a valid testament⁽¹¹²⁾.

According to Litavrin, the existence of a permanent corps with constant replenishment likely resulted in several hundred warriors returning home each year, with an equal or slightly greater number (to compensate for combat losses) arriving in Byzantium⁽¹¹³⁾. Upon their return, these warriors easily regained their social standing, and in many cases, even elevated it.

3.4. *The wages of mercenaries*

In the 10th century Byzantium, Scandinavian mercenaries and Rus’ warriors could earn sums during a single military campaign that were up to 20 times higher than what the Kyivan princes could afford to pay the Varangians even in the 11th century, such as under the rule of Yaroslav

(110) PSRL I, 36-37.

(111) LITAVRIN 1991, p. 70.

(112) KHARITONOV 2000, p. 151.

(113) LITAVRIN 2000, p. 96.

the Wise. This level of remuneration made Byzantine service particularly attractive to mercenaries, in contrast to the modest terms under the princes of Kyiv. While Kyivan princes provided Varangians with lodging, food, clothing, and equipment, they also paid them in cash, typically measured in Scandinavian ounces of silver (eyrir), equivalent to 1/8 of a mark, 1/2 of a northern grivna, or approximately 27 grams of silver. Ordinary warriors (*lípsmenn*) received one eyrir per year. Commanders (*skipstjórnarmenn*) earned an additional half-eyrir on top of the standard payment⁽¹¹⁴⁾. This structured payment system reflects the social hierarchy and the differing responsibilities of warriors within the Kyivan service.

In Byzantium, professional mercenaries were far better compensated from the imperial treasury. This can be inferred from several sources. According to Ibn Khordadbeh, a writer from the second half of the 9th century (*Kitāb al Masālik w'al Mamālik* – “The Book of Roads and Kingdoms”, 56a)⁽¹¹⁵⁾, a Byzantine soldier received an annual payment of 12-18 gold dinars (meant nomismata). This amount represented only a portion of their total compensation, as soldiers were also provided with food, clothing, and other necessities. Additionally, these provisions increased significantly during wartime. However, the Arab geographer also noted that this payment was sometimes disbursed once every three or even six years, reflecting potential delays in regular salary distribution.

It is known that one Byzantine litra was equivalent to 72 nomismata (with each nomisma at that time containing 4,4 grams of gold, 22-23 karats). A sharp debasement of the coin occurred beginning in the mid-11th century: under Constantine IX (1042-1055), the gold content was 21,5 karats (90% gold in the alloy). By the reign of Nikephoros III (1078-1081), it had decreased to 7,5 karats (31% gold).⁽¹¹⁶⁾

This payment was distributed annually – on Easter. It is also known that, until the 11th century, mercenaries received monetary rewards on Palm Sunday as well⁽¹¹⁷⁾. The payment was referred to as *roga* (ρογα).

Regarding the specific payments to warriors who came from Rus', a figure is provided in the treatise “*De Ceremoniis*”. The treatise describes the naval expedition of 911 against the Arabs of Crete. The crews of the imperial fleet were paid 5 nomismata per person. The 700 Rus' mercenaries collectively received one *kentinarion* of gold, equivalent to 100 litras (“*De Ceremoniis*”, II, 45).

(114) LUGOVYJ 2008, p. 69.

(115) IBN KHORD., p. 102.

(116) GRIERSON 1954, pp. 390-391.

(117) ANDREEVA 1927, p. 56.

This amounts to approximately 9-10 nomismata per person for a single unsuccessful expedition. Precise calculations are not possible in this case, as it is unlikely that everyone received an equal share. Ten nomismata represented an income significantly lower than the annual earnings of an average workshop (*ἐργαστήριον*) owner in Constantinople, which ranged between 20 and 50 nomismata ⁽¹¹⁸⁾. However, these figures are comparable since mercenaries did not need to spend on weapons or food, and in most cases, they were not responsible for supporting families. Considering this, a payment of 10 nomismata was substantial and allowed mercenaries the opportunity to save money.

There is another mention of payment to Rus' mercenaries. In 949, Constantine VII and Romanos II launched another expedition to Crete, the preparation of which is described in greater detail in the "*De Ceremoniis*" (II, 45) The imperial fleet included 584 Rus' warriors aboard seven chelandia (ships), 368 *toulmatzoi* (either Dalmatians or Pechenegs), and 700 prisoners (possibly rowers). Together, they received a total payment of 116 litras and 17 nomismata ⁽¹¹⁹⁾. The information on individual payments is less specific. The roga (payment) per person in this Rus' contingent ranged from 5 nomismata (when dividing the sum among all categories of warriors) to 8 nomismata (when counting only the Rus' and the *toulmatzoi*). Thus, the roga for a Rus' mercenary in 949 was likely somewhere between the calculated roga for a junior officer of the rank *komes* (6 nomismata) and that of a naval officer, a *drungarios* (20 nomismata) ⁽¹²⁰⁾. It is also clear that there was a practice of fully provisioning allied mercenaries with everything necessary, in addition to the established monthly *siteresia* (*σιτηρέσια*) – food and clothing ⁽¹²¹⁾.

The 44 grams of imperial gold that a Rus' mercenary earned during a single campaign organized by the Empire in the 10th century stand in stark contrast to the 27 grams of Rus' silver that Kyivan princes could afford to pay Varangians in the 11th century. When considering the medieval European gold-to-silver exchange ratio of 12:1 ⁽¹²²⁾, this gold payment amounted to a sum 20 times greater than the silver wages offered by the princes.

Byzantine soldiers and, consequently, mercenaries, received not only their regular roga and monthly provisions and clothing (*siteresia*), but also "gifts and benefactions" (*δωρεὰς καὶ εὐεργεσίας*) – monetary bonuses granted on holidays, during the enthronement of new emperors, and on similar occasions ⁽¹²³⁾. For

(118) SOROCHAN 1997, pp. 300-319; SOROCHAN 2001², p. 166.

(119) CONST. PORPH., *De cerem.*, p. 664.

(120) MORRISSON, CHEYNET 2002, p. 861.

(121) KEKAV., *Son.*, p. 587.

(122) NAZARENKO 1994, p. 58.

(123) *Three Byzantine Military Treatises* 1985, pp. 214-215.

instance, in one of Constantine Porphyrogenitus's treatises, it is suggested that during a campaign, a reward of *miliaresia* be distributed weekly to all soldiers whom the emperor chose to favor with his generosity (124).

Additionally, mercenaries had the opportunity to claim spoils of war from their own successful military actions. A notable example occurred in 1016, when Emperor Basil II, after David Arianites and Constantine Diogenes defeated the Bulgarians on the plains of Pelagonia, divided the spoils into three parts: one for himself, one for the Byzantine army, and one for the Rhos contingent – *τοίς συμμαχοῦσι παρεσχηκῶς Ρως* (125).

Ideally, the system of payments for Byzantine soldiers and mercenaries was meant to function smoothly. However, considering the observation by Ibn Khordadbeh about the instability of the Byzantine government's payments to the army, and the warning in the treatise "*Peri paradromēs*" (late 10th century) regarding the risks of delayed or incomplete payment of such bonuses, the reality was often far from ideal. This situation was exacerbated by the debasement and devaluation of coinage, a problem well-documented in other 11th-century sources (126). While payments to mercenaries eventually increased by nearly threefold, the *nomisma* by that time had significantly diminished in value. Unfortunately, precise figures for payments to Byzantine soldiers from the late 10th century to 1204 remain unknown (127).

The wages of a mercenary in Byzantium clearly surpassed those of a Byzantine stratiote soldier. For instance, a stratiote earned a maximum of 18 *solidi* annually in the mid-9th century, while a mercenary could earn 5-10 *nomismata* for a single campaign in the 10th century. Additionally, every mercenary received monthly provisions in the form of clothing and food, as well as festive bonuses. From the late 10th century onwards, mercenary units were often billeted in settlements, living off the local population rather than spending their earnings, which they could later take back home. Mercenaries were also occasionally employed in tax collection, especially in regions affected by military campaigns. This practice is referred to as *pólítasvarf* among the Varangians and as *γίπα* among the Byzantines. Furthermore, they were entitled to a share of the spoils of war (128).

It is assumed that Rus' mercenaries often returned to the Rus' territories after completing their service, while Norman mercenaries, the Varangians,

(124) CONST. PORPH., *Scrip.*, 110-112.

(125) GEORG. CED., *Comp.*, II, 465.

(126) GRIERSON 1954, pp. 379-394.

(127) LUGOVYJ 2008, p. 180.

(128) STENDER-PETERSEN 1940, pp. 14-19; BLÖNDAL 1941, pp. 96-97; RYDZEVSKAYA 1978, p. 157; JACKSON 2001, pp. 106-113; LUGOVYJ 2008, p. 12.

might have traveled back to Scandinavia and their families, often passing through the Rus' territories via its river routes. This is evidenced by the numerous and detailed historical accounts of Byzantine events preserved in the sagas. Byzantine silver (in the form of *miliaresia*) became part of the monetary circulation in Scandinavia. C. Morrison notes the near impossibility of explaining the presence of Byzantine *miliaresia* in Scandinavia through long-distance trade alone ⁽¹²⁹⁾. Most *miliaresia* found on the peninsula date to the minting of Basil II, with examples also from Constantine VI, Romanos II, John I Tzimiskes, Constantine IX Monomachos, and Constantine X Doukas ⁽¹³⁰⁾. The coins brought back by the Varangians sparked an intriguing phenomenon in the young monarchies of the region: the imitation of Byzantine coinage by Scandinavian mints ⁽¹³¹⁾.

Thus, there is no doubt that the wealth acquired by the Rus' and Varangians (or Verings) during their service in Byzantium was one of the key avenues and regular sources of Byzantine coinage reaching the territories of Rus'. Throughout the 10th and the first half of the 11th centuries, Rus' was Byzantium's sole partner in Northern and Eastern Europe. Scandinavians who came to Byzantium during this period arrived primarily as migrants from Rus'. This system remained in place until sociopolitical transformations in Rus', marked by its fragmentation into feudal principalities, rendered the military supply chain to Byzantium unsustainable and forced the empire to seek other partners.

Until the death of Yaroslav the Wise, Rus' served as the main corridor utilized by Scandinavian Varangians. This was closely tied to the special connections between Yaroslav, his predecessors, and Scandinavia. However, by the late 11th century, Norwegian jarls and English earls began favoring the maritime route around Europe. The lengthy and perilous journey through Rus' no longer appealed to them, as it required navigating the ceaseless internal conflicts among the Rus' princes ⁽¹³²⁾.

(129) MORRISSON 1981, p. 134.

(130) MALMER 1981, p. 125; MORRISSON 1981, p. 136.

(131) MORRISSON 1981, pp. 137-140.

(132) LUGOVYJ 2008, pp. 113-114.

Conclusion

The various opinions in historiography regarding the geographical routes by which Byzantine coins reached Rus' unfortunately cannot yet be reconciled into any kind of consensus. Sources confirm the possibility of coins entering from the south – directly from Byzantium – as well as from the north-west – Scandinavia, Poland and the Baltic states. A small portion may have come from the east via the Volga trade route (late 8th – early 11th centuries), but this certainly could not have been the main source of currency, which was dominated by Arab dirhams. The main trade route along which coins travelled between Byzantium and Scandinavia was the Route “from the Varangians to the Greeks” (late 9th – late 12th centuries) – a waterway from Constantinople through the Black Sea, the Dnieper, the river system of Northern Rus', to the Baltic and North Seas. The main trading centres were Kyiv and Gnezdovo, which led in the number of Byzantine coins found in Rus'.

The eastern section of this route – from Kyiv to Constantinople, with stops in coastal areas of modern-day Bulgaria (such as Mesembria) – was the most active part. This is well documented not only in the treatise “*De Administrando Imperio*” by Constantine Porphyrogenitus and the “Primary Chronicle” but also by coins found along its entire length.

The small number of Byzantine coins found in Rus' can be explained by the legal prohibition on the export of precious metals from the Empire and the peculiarities of trade in Byzantium, where buying and selling took place within the country, and goods, rather than money, were exported. This created a sort of barter system between the Rus' and the Byzantines. However, according to the law, this prohibition did not apply to the export of Byzantine coins by mercenaries, who had earned them as payment for their service.

The legal framework for trade relations between Rus' and Byzantium is documented in the Rus'-Byzantine treaties of 907, 911, and 944, preserved in the “Primary Chronicle”. These treaties frequently use the terms “trade”, “merchants”, and “envoys”. During their trade activities in Constantinople, Rus' merchants were required to stay in the district of Saint Mamas and were provided with a “monthly allowance” – “*mesiachina*” – a supply of food and other provisions distributed on a monthly basis.

The Rus'-Byzantine treaties were drafted following the military campaigns of the Rus' against the Byzantines, with their primary goals being to ensure peace and regulate trade, military, and political relations, including the hiring of warriors from Rus'. Notable examples of diplomatic gifts to Rus' rulers include the gifts to Princess Olga and her entourage in 946, amounting to 2,865 miliaresia, and the chests containing 15 kentenaria of

gold (474 kg) from Nikephoros Phokas to Prince Sviatoslav in 966. The "Primary Chronicle" frequently refers to the lavish gifts from Byzantine emperors to Rus' as "gold and pavoloki" (gold and silk). "Gold" in this context could mean either coins or gold items.

The Byzantines also tried to win over nomads, particularly the Pechenegs, who lived in the steppes of the northern Black Sea region. Payments to nomads and the acquisition of money by nomads as a result of looting may explain the presence of coin finds in the steppe zone of modern Ukraine.

The treaties also include provisions for monetary penalties for crimes and financial ransoms for prisoners, both Rus' and Byzantine, using the term "zlotnik," meaning a gold coin. This indicates another possible channel for the influx of money from Byzantium.

The main carriers of Byzantine coins were most likely mercenaries, both Rus' and Scandinavians. The sources use terms such as "Rhos ("Οι Ρῶς")" "Tauroscythians" ("Ταυροσκήθεις"), "Varangians" ("Βάραγγοι") and "Varyags" ("варягъ"). The variation in terminology is explained by the predominance of either a Rus' ethnic component or a Scandinavian one. There are numerous examples of mercenary service by Rus' and Scandinavians in Byzantium. The first mention of Rus' mercenaries in written documents dates to 911 AD, and the last to 1088 AD. The Varangians continue to be mentioned in sources for a longer period – as "πελεκηφόροι βάρβαροι ὄμιλος" ("axe-wielding barbarians"), they remained in service to the Byzantine emperors of the Angelos dynasty until 1204 AD. However, by the end of the 11th century, the number of mercenaries from Rus' (both Rhos and Varangians) was declining overall. Thus, the second half of the 10th century through the first half of the 11th century represents the period of greatest concentration of mercenary contingents from Rus' and Scandinavia in Byzantium, which is also confirmed by the largest number of Byzantine coins found in Rus' and Scandinavia from this very period.

The hiring of the Rhos is documented in the laws of 911 and 944 AD, and the 911 treaty also reflects the concept of a Rus' mercenary's will and the transfer of his property, including money, to relatives in Rus'. Thus, Byzantine coins could have reached Rus' through these wills. Sources provide limited information on mercenaries' wages – called *roga*. In the mid-10th century, these wages ranged between 6 and 20 *nomismata*, with sources most often citing an average of 8 *nomismata* per military campaign, which was significantly higher than what the Rus' princes could pay their mercenaries. In addition to the *roga* (money), mercenaries received *siteresia* (σιτηρέσια) (food and clothing), gifts from the emperor, monetary payments on holidays, and they could also obtain war trophies, including coins. All these factors

increased the total amount of money a Rus' or Scandinavian warrior could bring home after completing mercenary service.

Finally, it is hypothesized that Byzantine coins may have entered Rus' along with Christian pilgrims, whose numbers increased after the baptism of Rus' by Vladimir in 988 AD. However, this remains an important subject for future research.

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