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## RUS' MERCENARIES IN THE BYZANTINE-ARAB WARS OF THE 950S-960S: THE NUMISMATIC EVIDENCE

*In Honor of John P. Karras (1932-2016),  
who dedicated more than half a century  
of his life to the study and teaching of  
Ancient, Byzantine, and Military History  
at The College of New Jersey*

### *Abstract*

*Using specific coin types (tenth-century dirhams and pre-970 Byzantine miliaria) imported from the eastern Mediterranean and upper Mesopotamia in a very restricted chronological period (950s-960s) through (the Dnepr River) and into a confined region of the Northern lands (mainly Sweden) – combined with the evidence of Arab, Byzantine, and Rus' written sources – this study argues that it is possible to trace numismatically the participation of Rus' mercenaries in the Byzantine-Arab wars of the late 950s-960s. While dirhams discovered in the Northern lands are most commonly associated with trade relations between the Islamic world and Viking-age Northern Europe, the coins considered in this study offer a unique opportunity to identify and examine some of the non-commercial origins of silver imported into the region: they were products of loot and payments, generated by the Rus' from their military operations in the eastern Mediterranean basin in the 950s-960s.*

### *Keywords*

*Ru's, 10th century, dirhams, Byzantine armies, Varangians*

## INTRODUCTION

It is rather well known to numismatists and historians of medieval Eurasia that Sāmānid central Asia (lands of eastern Khurāsān, Trans- and Cis-Oxiana) was by far the chief supplier of dirhams or Islamic silver coins to the Northern lands of Europe during the Viking Age (ca. 750-1050). Starting in ca. 900 and continuing into the late tenth century, millions of these coins were carried by Muslim merchant caravans from Sāmānid cities and mints northwestwards through the steppe to the lands of the Bulġārs in the middle Volga basin.<sup>1</sup> From Volga Bulġāria, most of these coins were subsequently exchanged in commercial transactions and re-exported further west/northwest by Rus' merchants to their lands of operations in eastern Europe, from where many of them were carried even further west into the Baltic basin and beyond.<sup>2</sup> While dominated by Sāmānid dirhams, this central Asian route also brought other coins to the Northern lands, such as those minted by the 'Abbāsids and Ṭāhirids (both issued in central Asia in the ninth century), Amīrs of Andarāba, Bānījūrids, and Ṣaffārids. On a much larger scale than these coins, imitations of Islamic dirhams struck in central Asia itself, but mostly those minted in Volga Bulġāria and elsewhere in eastern Europe, also joined this silver flow. Indeed, imitation dirhams (so-called "Sāmānid-prototypes") are found in large quantities in tenth-century hoards of the Northern lands, and it seems rather certain that the great majority of them were minted by the Volga Bulġārs. The latter also issued "semi-official" and "official" dirhams, all of which entered the much larger stream of central Asian silver coins that flowed out of the middle Volga during the tenth century.<sup>3</sup> Again, while genuine Sāmānid dirhams dominated all other silver coin types that moved along this "Volga Bulġār Way" silver route, there were many other dirhams (genuine and imitation) that joined in the flow. Together, all these coins constitute by far the lion's share of all Islamic silver that entered Northern Europe during the Viking Age.

As important as the great tenth-century commercial silver flow was along "The Volga Bulġār Way" for all parties involved, during the same period silver entered the Northern lands from other regions of the Muslim world by alternative routes. For much of the tenth century, the central and western regions of the lands of Islam also possessed notable supplies of dirhams. These coins were struck across a huge area of western Asia and North Africa by the many dynasties that ruled these regions – from western Khurāsān, the southern Caucasus, and Iran through al-'Irāq and upper Mesopotamia to the eastern Mediterranean basin, lower Egypt, and the Gulf of

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<sup>1</sup> Andarāba, Balkh, Bukhārā, Marw, Naysābūr, Samarqand, al-Shāsh, and others; see NOONAN, KOVALEV 2002: 163-174; KOVALEV 2001: 245-271; 2002: 197-216; 2003: 47-79.

<sup>2</sup> NOONAN 2001: 147-151.

<sup>3</sup> KOVALEV 2016: 193-209. Also, see KOVALEV 2013: 67-102.

Oman.<sup>4</sup> These dirhams were available for export to the Northern lands, and some of them were, indeed, carried there during the tenth century. It is true that in their absolute export volumes these coins are greatly overshadowed by central Asian or “eastern” dirhams for all the tenth century.<sup>5</sup> However, the former still constitute an important, but often overlooked, source of silver for eastern Europe and the Baltic. Most importantly, these non-“eastern” dirhams permit the study of alternative routes for silver imports into the Northern lands and the fluctuations in their exports from the Islamic world.

Of all the areas of the central and western Muslim world, by far the most important region for dirham exports to the Northern lands during the tenth century was central and southern Iraq (al-‘Irâq) and all of Iran.<sup>6</sup> During the 900s-980s, coins minted in these regions were exported to eastern Europe via northern Iran, the Caspian Sea and/or the Caucasus, Khazaria, and up the Don River northwestwards. Along the way, dirhams struck in the southern Caucasus joined this flow. Particularly interesting is that none of these coins from Iran, al-‘Irâq, and the Caucasus were brought to the middle Volga basin until ca. 980. It was only in the early ninth decade of the tenth century that Volga Bulğâria tapped into the silver stream from al-‘Irâq and Iran until it dried up by the first decade of eleventh century. Prior to then, between ca. 900-ca. 965, Khazaria acted as the key middleman between the Rus’ and northern Iran in the re-export of coins from al-‘Irâq, Iran, and the Caucasus: Muslim merchants from northern Iran brought dirhams to Khazaria’s capital of Atıl/İtil in the Volga Delta, where they were accepted by the Rus’ in exchange for their goods and thence dispatched north/northwest via the Don-Oka-upper Volga river-system. After their conquest of the Qağanate in ca. 965, the Rus’ made direct contact themselves with northern Iran via the Caspian and the lower Volga until ca. 980, when the Volga Bulğârs forced them out of the lower Volga and thus took over the former Khazar role of intermediary in trade between eastern Europe and northern Iran. By joining the lower Volga with its middle section and tying them both to the upper Volga of the Rus’, in ca. 980 the Volga Bulğârs created a single commercial system of “The Great

<sup>4</sup> These include, but not limited to, dirhams issued by the ‘Abbâsids, Amîrs al-Umarâ’, Buwayhids, Ĥamdânids, İkhshîdids, Qarmaṭs, Fâtîmids, Ziyârids, Sallârids, Ja’farids, Bâwandids, Sharwân Shâhs/Yazîdids, Sâjids, Şaffârids (when struck in ‘Umân), Julandids, Wâjihids, Banu Sama/Governors of ‘Umân, Amîrs of Dâmighân, Sîmjûrids (when struck in Jurjân), and, Sâmânids (when struck in northern Iran).

<sup>5</sup> NOONAN 2001: 140-218.

<sup>6</sup> This conclusion is based on the observation that the overwhelming majority of the dirhams found in eastern Europe came from mints located in al-‘Irâq and Iran, struck at such major ‘Abbâsîd, Buwayhid, and Ziyârid mints as Âmul, Arrajân, ‘Askar min al-Ahwâz, Astarâbâd, al-Başra, Ĥamadhân, İşbahân, Jannâbâ, Jurjân, Madînat al-Salâm, al-Muḥammadiyya, Râmhurmuz, Sâriyya, Shîrâz, Sûq al-Ahwâz, Tustar min al-Ahwâz, Wâsît, and others; KOVALEV 2017A: 95-143.

Volga Way,” which continued to operate for many centuries to come as one of the chief transcontinental arteries of Eurasian trade.<sup>7</sup> Prior to then, however, it was “The Khazar Way” that delivered an additional source of tenth-century Islamic coined silver for the Northern lands, one that is often overlooked in literature. And when these tenth-century coins from al-‘Irâq, Iran, and the Caucasus are noted, it is almost always assumed that they were brought to eastern Europe from Iran via the lower and middle Volga, an assumption that is not at all substantiated numismatically until it became the case after ca. 980.<sup>8</sup> It is clear, however, that there were at least two quite independent sources of Islamic silver and two distinct routes that carried it from the Islamic world to the Northern lands during the tenth century – “The Volga Bulğâr Way” and “The Khazar Way,” both of which were commercial in nature.

Another significant region of dirham production in the tenth-century Islamic world was to the west/northwest of Iran and al-‘Irâq, or areas that can be collectively called “Western Near East” (henceforth WNE) – namely the eastern Mediterranean basin (Palestine/Filasṭîn, Syria/Bilâd al-Shâm, and Egypt/Miṣr), Muslim southeastern Anatolia/Rûm (Cilicia/al-‘Awâṣim), and upper Mesopotamia (al-Jazîra). But, despite the minting and circulation of dirhams in these regions during the first half of the tenth century,<sup>9</sup> these coins were not exported to the Northern lands in any notable quantities until after the mid-tenth century. When they did appear in the early 950s, these coins became a rather regular feature in hoards – especially those in the Baltic basin – although usually found only in single digits per deposit [Appendix]. The present study will explore in detail the deposition patterns of these dirhams in the Northern lands with the intent to shed light on the questions when, why, and how these coins finally made their way from the eastern Mediterranean basin and upper Mesopotamia to Northern Europe.

## THE NUMISMATIC EVIDENCE

The data for this study derives from the complete catalogue of Viking-age dirham hoards from across Afro-Eurasia, which is nearly finished for publication.<sup>10</sup> It includes more than 1750 hoards or assemblages of five or more dirhams, with roughly half a million coins. The present inquiry is dedicated to tenth-century WNE dirham imports into the Northern lands. For this reason, only dirhams struck at tenth-century WNE mints will be considered, although there is no doubt that some dirhams that

<sup>7</sup> KOVALEV 2017A: 125, 130-137.

<sup>8</sup> KOVALEV 2011: 43-155; 2012: 133-183; 2017A: 95-143; 2017B: 126-137.

<sup>9</sup> KOVALEV 2011: 120-125, Tabs. I-II; KOVALEV, LOOS, IN PREPARATION.

<sup>10</sup> NOONAN, KOVALEV, IN PREPARATION.

were issued in the last years of the ninth century at the same mints were brought northwards alongside later coins, since both circulated together in the WNE during the earlier part of the tenth century.<sup>11</sup> The purpose of omitting these pre-900 coins, which are actually found in very small quantities in the Northern lands, is to avoid confusion and contamination in our strict tenth-century chronological framework. Also, it should be kept in mind that dirhams from other regions of the caliphate (e.g., those issued at prolific mints such as al-Baṣra, al-Kūfa, Madīnat al-Salām, Rāmhurmuz min al-Ahwâz, Sûq al-Ahwâz, and Shîrâz) circulated in tenth-century WNE. So, it is more than probable that these coins were extracted from the local coin-stock and transported to the Northern lands together with those issued in the WNE.<sup>12</sup> Since it is impossible to separate the non-local/regional WNE coins from those that were brought to the Northern lands more directly from al-'Irâq and Iran via the "The Khazar Way," they also cannot be included in our database.<sup>13</sup> Another restriction is in chronology – we have to limit the survey to hoards of the 900s-990s; as will be discussed below, a new or "Second Wave" of WNE dirhams came into the Northern lands beginning with the 990s, which brought in a new, "younger" generation of WNE issues from the 990s-1010s. These coins are left out of the database, but will be considered in another study.<sup>14</sup> It should be noted that these later hoards also often held notable numbers of tenth-century WNE dirhams (mostly minted in the 900s-960s), most of which were most probably brought to the Northern lands with the "First Wave." However, these "old" coins are not easy to separate from the

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<sup>11</sup> For instance, the Ṭûlûnid dirham of Hârûn ibn Khumâraway struck in Filastîn, 898/99, discovered in the Swedish Stora Tune III (1910, 1912, 1917) hoard (*tpq* 954) is more than likely to be such an example. The same can be said about the dirhams from the Swedish Ekeskogs (1884), *tpq* 957/58, hoard which not only contained a handful of tenth-century WNE coins, but also 'Abbâsid issues from Naşîbîn (894/95) and al-Râfiqa (894/95). Other such examples can be given, not only from Sweden. For more details on the question of pre-900 WNE dirham imports into tenth-century Northern lands, see KOVALEV 2011: 52, 91-99 and 54-62 for the discussion of relative quantities of pre-900 dirhams in tenth-century WNE hoards.

<sup>12</sup> Since the Ḥamdânid dirhams struck in Madīnat al-Salâm in 943/44 circulated in the western regions of the Near East (e.g., 3 found in the Region of Aleppo, Syria, 1986, *tpq* 945/45 hoard), on the occasion they are found in the Northern lands, it is reasonable to assume that they too were part of the wave that brought the other Ḥamdânid coins in question. However, as noted, these coins will not be entered in the database.

<sup>13</sup> This also includes the Ḥamdânid dirhams: the handful of coins (22 to be specific, or 4.2% of all dirham types under consideration) from al-Baṣra, Madīnat al-Salâm, al-Kūfa, and Shîrâz struck by the Ḥamdânids in the 940s that have been discovered in the Northern lands have been considered, but excluded from our database, as they were not issued in the WNE. It should be observed that it is possible that one or several of the "mint indeterminable" Ḥamdânid dirhams that are registered in the database were, in fact, issued in the 940s in al-'Irâq or Iran; however, their quantities would be so miniscule that it would not at all impact the statistical results of our findings.

<sup>14</sup> KOVALEV, IN PREPARATION.

“First” and “Second” waves. Thus, for the purposes of this study, when these older coins are found together with the new ones, they and their hoards will be excluded. In sum, since the present inquiry considers only tenth-century (pre-990) WNE dirhams that can, with some high degree of certainty, be viewed as tenth-century imports, there is little question that these coins speak of the mere minimum volumes that entered the Northern lands from the WNE. No doubt, the “First Wave” of WNE dirhams brought many more coins than our database would suggest. Since we are presently concerned not with the absolute volumes of these dirham imports into the Northern lands, but with their relative importation patterns and chronological deposition, the data generated for this study is more than adequate.

Using the numismatic data and criteria outlined above, our database records 136 tenth-century deposits in the Northern lands with 500 tenth-century WNE dirhams: 74 hoards with 226 dirhams from Sweden; 27 hoards with 61 dirhams from eastern Europe; 14 hoards with 167 dirhams from Poland; 12 hoards with 28 dirhams from the southeastern Baltic; and, 2-3 hoards each with a handful of coins from Germany, Finland, Denmark, and Norway [Table I]. The Appendix provides a list of the specific hoards. The WNE dirhams include issues struck by the ‘Abbāsids, Amîrs al-Umarâ’, Fâtîmids, Ĥamdânids (including their governors Qarghûyah and Bakjûr), and Ikhshîdids at 22 mints: Âmid, Anţâkiyya, Dimashq, Filastîn, al-Fustât, Ĥalab, Ĥarrân, Ĥims, Irbil, al-Jazîra, al-Maşîsa, al-Mawşil, Mayyâfâriqîn, Mişr, Naşîbîn, al-Râfiqa, al-Raĥbah, al-Raqqah, Ra’s al-‘Ayn, Ṭabariyya, Ṭarsûs, and Thughûr al-Sâmiyya.

The 136 hoards held a total of at least 500 tenth-century WNE dirhams [Table I].<sup>15</sup> Of these coins, specific mints are known for 263; others have either not yet been

<sup>15</sup> Unfortunately, some of the eastern European hoards from the period in question have not yet been fully studied, published, or both. For instance, Rakovtsy (Grodno oblast’, 1987), *tpq* 945/46: a hoard of 2448 dirhams was found, but only very general information regarding certain rulers and dynasties nothing else has been published to date; Rakovtsy (Grodno oblast’, 1971), *tpq* 952/53: a hoard of 826 dirhams was discovered, but no specific years and mints of coin issues are known; Kopievka/Kopiivka (Vinnitsa oblast’, 1928), *tpq* 955/59: a coin-treasure hoard including 500 Sasanian drachms and Islamic dirhams was found, but all that is known is the dynastic and general chronological breakdown; Somewhere In Novozybkovo (Briansk oblast’, pre-2001), *tpq* 956/57: a hoard of ca. 400 dirhams was discovered, but no other information is available; and, Pogorel’shchina (Minsk oblast’, 1955), *tpq* 960s: coin-treasure hoard including 1904 whole and fragmented dirhams was found, but all that is known is the dynastic composition. Other examples may be given (and are to be found below), but the problem should already be apparent. The same can be said about several other regions, namely Poland; there are also very large hoards from this region that have not yet been published, although it is known that they contained a sizable ‘Abbāsīd component. What this means is that it is more than very likely that other WNE dirhams were discovered in eastern Europe than our present database shows. With that said, it is unlikely that the general patterns of importation and deposition would change substantially from what is already observed: a general gravitation of WNE dirhams towards Sweden. Even if there would be a significant increase in the absolute numbers of dirhams in eastern Europe, the absolute number of hoards would still be largest for Sweden.

fully published or the coins are so defaced/damaged that their mints cannot be read. In addition, amongst the 500 coins registered in the database, 226 hold specific years of issues, permitting us to study their chronological patterns of importation and deposition in the 136 above-mentioned hoards. These coins and hoards will serve as the main database for the present study.

**Table I – Spatial Distribution of the Finds of Tenth-Century Western Near Eastern Dirhams in Tenth-Century Hoards of the Northern Lands**

Region	Number of Hoards	% of Total Hoards	Number of Dirhams	% of Total Dirhams
Sweden (including Åland Islands)	74	54.4%	226	45.2%
Eastern Europe (Russia, Ukraine, and Belarus)	27	19.8%	61	12.2%
Poland	14	10.3%	167	33.4%
South-Eastern Baltic (Latvia and Estonia)	12	8.8%	28	5.6%
Northern Germany	2	1.5%	7	1.4%
Finland (proper)	2	1.5%	3	0.6%
Denmark	3	2.2%	6	1.2%
Norway	2	1.5%	2	0.40%
TOTAL	136	100%	500	100%

As can be observed in Table II, exactly half of the dirhams in question derive from only three mints: al-Mawṣil (22.4%), Naṣībîn (16.7%), and al-Maṣīṣa (10.6%). The five mints of Anṭâkiyya (7.6%), Ḥarrân (6.8%), Filastîn (6.4%), Ra's al-'Ayn (6.1%), and al-Râfiqa (5.3%) contributed another 32%. The remaining fourteen mints constitute only 17.6% of the WNE coins discovered in the Northern lands. Thus, 38% (101 out of 263) of these coins had their origins in areas west of the Syrian Desert (Bâdiyat Ash-shâm) or the eastern Mediterranean (including lower Egypt) basin, while the rest (162 or 62%) came from areas to the east or upper Mesopotamia. These numbers are nearly identical to those generated for all the WNE dirhams with mint names that have been found in hoards across western Eurasia, which number more than 1840 coins: 35.6% were from the eastern Mediterranean and 64.4% from upper Mesopotamia.<sup>16</sup> This correlation in relative percentages strongly suggests that the WNE dirhams imported into the Northern lands during the tenth century came directly from the coin-stock of the regions where they were minted and circulated – the western regions of the Near East.

<sup>16</sup> KOVALEV, LOOS, IN PREPARATION.



With the above conclusion in mind, it is important to observe that WNE dirhams circulated in a very limited range of the Islamic world during the tenth century – namely, they could be found in the WNE itself and, in very limited quantities, in the adjacent southern Caucasus (i.e., those issued in upper Mesopotamia).<sup>17</sup> Of the 33 hoards found in the Muslim lands with their 1313 tenth-century WNE dirhams, 21 deposits holding 1242 coins were without a doubt discovered in the eastern Mediterranean and upper Mesopotamia; the rest come from the southern Caucasus, Iran, and India (?).<sup>18</sup> The southern Caucasian hoards of the first half of the tenth century were the only ones from outside of the WNE that even hint at a mild trace of these dirhams: 5 hoards with 43 dirhams or 3.3% of the total found in the Islamic lands come from the southern Caucasus. Since there was a commercial flow of dirhams coming from al-'Irâq and Iran to the Northern lands via the Caucasus during the first half of the tenth century, some WNE dirhams may have been picked up from the region alongside other coins circulating locally in the southern Caucasus and joined the larger silver flow along “The Khazar Way.” Thus, the several upper Mesopotamian coins (Harrân and Nasîbîn) discovered in hoards of the Northern lands in the 910s (Pal'tsevo, Russia, *tpq* 913/14<sup>19</sup>) and 930s (Triberga, Sweden, *tpq* 930/31) may well trace their origins to the trans-Caucasian route. The same may be said for hoards of the 940s, 950s, and even later ones that held these coins; some of these dirhams could have been brought via the southern Caucasus to the Northern lands decades earlier and buried there sometime thereafter. However, there are very good reasons to believe that the overwhelming majority of WNE dirhams entered the Northern lands by a more direct route from their source. To begin to explore this route, it is necessary to briefly survey the tenth-century dirham hoards of the southern Caucasus.

To date, six tenth-century dirham hoards are known from the southern Caucasus, two of which (Pichkhovani, Georgia, *tpq* 909/10; Dvin, Armenia, *tpq* 935/36) date to the first half of the tenth century, while the remaining four to its second half (Borchalu uezd, Georgia, *tpq* 953/54; Iaz-Kiragi, Azerbaijan, 1958, *tpq* 953/54; Nakhichevan', Azerbaijan, *tpq* 951-961; and, Tbilisi, Georgia, *tpq* 977/78). Of these deposits, all but the latest (*tpq* 977/78) held some quantity of tenth-century WNE

<sup>17</sup> KOVALEV 2011: 76-87.

<sup>18</sup> The provenance of seven hoards is unknown; all that is known is that they were discovered somewhere in the Near/Middle East. In other words, some of them may also have been discovered in the WNE. For more specifics on these statistics, see KOVALEV, LOOS, IN PREPARATION.

<sup>19</sup> *tpq* = *terminus post quem* or the year of the latest coin in a hoard, indicating the approximate date of the hoard's deposit. The reasoning behind dating hoards based on the latest coin is connected with the logic that the hoard could not have been deposited before the youngest coin was entered into it; on the other hand, if the hoard was deposited much later than the youngest coin, it would be expected that newer coins would have been added to it before its burial.



dirhams, chronologically by hoard numbering 3, 32, 2, 20, and 3 – all struck by the ‘Abbāsids and Ḥamdānids. Whilst recognizing that the numismatic data for the southern Caucasus is quite limited compared to what is available for some other region of western Eurasia, there still are some obvious distinctions in the dynastic profiles represented in the hoards of the southern Caucasus vs. the Northern lands. Thus, not one Ikhshîdid or Fâtimid coin has been discovered in the coin deposits of the southern Caucasus. But, these coins appear in hoards of the Northern lands starting in the early 950s (Ikhshîdids in Sweden: Smiss, *tpq* 951/52; Mullvalds, *tpq* 953/54; Eketorp, *tpq* 958/59) and 960s (Fâtimids: Russia, Briansk Region, *tpq* 969/70). It would, thus, appear that dirhams from these two eastern/southeastern Mediterranean (North African) dynasties were not exported to the southern Caucasus. It is true that after the three hoards of the 950s-early 960s, the only other remaining southern Caucasian hoard for the rest of the tenth century is the tiny Tbilisi (*tpq* 977/78) deposit. In other words, there is a paucity of hoards from the second half of the tenth century from this area. Be that as it may, none of these dynasties, nor any others that struck WNE dirhams, appear in any post-tenth-century hoards from the region: Nakhichevan’ (*tpq* 951-961) was the last deposit with WNE dirhams found in the southern Caucasus. Moreover, the paucity of post-950s hoards speak volumes regarding the poor state of the monetary circulation in the southern Caucasus in the second half of the tenth century. It can hardly be argued that the southern Caucasus had reserves of any dirhams in the second half of the tenth century for export anywhere.

The general picture outlined above is more clearly seen in the profile of the mints from both regions. Curiously, but not surprising in light of the southern Caucasus’ proximity to upper Mesopotamia, all but one coin – a dirham from Anṭâkiyya (found in the Borchalu uezd, *tpq* 953/54, hoard) – discovered in hoards of the southern Caucasus were issued in al-Jazîra. Indeed, the dirham minted in Anṭâkiyya is the only one found in the southern Caucasus that had its origins in the eastern Mediterranean basin (representing only 2% of the total WNE found in the region). All others came exclusively from regions east of the Euphrates River, or upper Mesopotamia proper: Âmid – 3.9%; Ḥarrân – 2%; al-Jazîra – 2%; Naṣîbîn – 27.4%; al-Mawṣil – 54.9%; al-Râfiqa – 2%; and, Ra’s al-‘Ayn – 5.9%. But, the same cannot be said about the dirhams found in hoards of the Northern lands. As can be recalled, 38% of them had their origins in areas west of the Euphrates,<sup>20</sup> coming from mints of the eastern Mediterranean basin (including lower Egypt): Anṭâkiyya, Dimashq, Filastîn, al-Fuṣṭât, Ḥalab, Ḥimṣ, al-Maṣîṣa, Miṣr, Ṭabariyya, Ṭarsûs, and Thughûr al-Sâmiyya [Map I]. It would, thus, appear that while the southern Caucasus and the Northern lands shared some of the coin-stock of upper Mesopotamia, dirhams minted in the

<sup>20</sup> Technically, the mint al-Rahbah is situated on the western bank of the Euphrates, but the city belongs to the province of al-Jazîra.

eastern Mediterranean basin were singular to the Northern lands. Had the southern Caucasus been the source of WNE dirhams for the north, it would be reasonable to expect a notable presence of these coins in the southern Caucasus themselves.

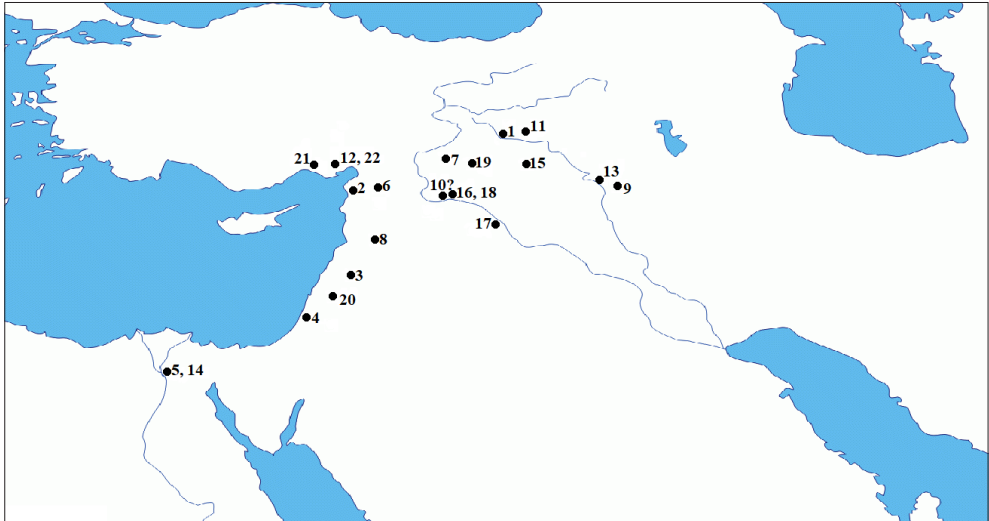
**Table II – Mint Distribution of Tenth-Century Western Near Eastern Dirhams in the Northern Lands (10th-century Hoards)**

[eastern Mediterranean (including lower Egypt) mints indicated in Bold]

Mint	Quantity	Percentage of Total
1. Âmid	2	0.76%
<b>2. Antâkiyya</b>	20	7.6%
<b>3. Dimashq</b>	5	1.9%
<b>4. Filasfîn</b>	17	6.46%
<b>5. al-Fustât</b>	1	0.38%
<b>6. Ḥalab</b>	10	3.8%
7. al-Ḥarrân	18	6.84%
<b>8. Ḥimş</b>	5	1.91%
9. Irbil	1	0.38%
10. al-Jazîira	2	0.76%
11. Mayyâfâriqîn (al-Thughûr Mayyâfâriqîn)	4	1.53%
<b>12. al-Maşîşa</b>	28	10.64%
13. Mawşil	59	22.43%
<b>14. Mişr</b>	4	1.53%
15. Naşfîn	44	16.73%
16. al-Râfiqa	14	5.32%
17. al-Raḥbah	2	0.76%
18. al-Raqqah	1	0.38%
19. Ra's al-'Ayn	16	6.08%
<b>20. Ṭabariyya</b>	5	1.91%
<b>21. Ṭarsûs</b>	5	1.91%
<b>22. Thughûr al-Sâmiyya (= ? al-Maşîşa)</b>	1	0.38%
<b>Total</b>	<b>263</b>	<b>100%</b>

In light of the presence of Ikhshîdid and Fâtimid dirhams, as those struck by the 'Abbâsids and Ḥamdânids in the eastern Mediterranean, in hoards of the Northern lands and their absence in those of the southern Caucasus, it is possible to use these coins as proxies for tracing an alternative route for the export of WNE dirhams from the caliphate northwards. This can be achieved by examining the dirhams and their hoards chronologically and geographically in the Northern lands.

**Map I – Tenth-Century Western Near Eastern Mints  
Represented in Tenth-Century Dirham Hoards of the Northern Lands**



Beginning with the former – the earliest hoard with a tenth-century dirham from the eastern Mediterranean basin found in the Northern lands is the Koz’ianka deposit from Belarus, discovered not far from the bank of the West Dvina River (Polotsk raion). Dated by *tpq* to 944/45, in addition to an old upper Mesopotamian ‘Abbâsid coin (Ra’s al-‘Ayn, 900/01), it held a dated dirham from lower Egypt (Miṣr, 907/08). Despite the existence of one hoard of the 930s in Sweden and three others with WNE dirhams from the 940s in the southeastern Baltic and Sweden, all held only tenth-century upper Mesopotamian coins (Nasîbîn, 902/03; al-Mawṣil, 926/27; Nasîbîn, 903/04; and, 1 mint indeterminable, 942/43). In light of these very modest finds, it would be difficult to argue for a notable infusion of WNE dirhams into the Northern lands in the 930s-940s. Indeed, the deposition of only one, relatively old, coin struck in Miṣr in Koz’ianka can hardly speak for any direct contact between the Northern lands and the eastern Mediterranean. Since dirhams from this mint, albeit very few, did circulate in Iran (e.g., Miṣr, 904/05 found in the Isfahan, 1972 or earlier, *tpq* 936/37, hoard), it would not at all be unreasonable to conclude that this coin came from al-‘Irâq or Iran to eastern Europe via “The Khazar Way,” as did the handful of dirhams from upper Mesopotamia found in Sweden and the southeastern Baltic. In this way, the first five decades of the tenth century witnesses the importation of just a handful of WNE dirhams into the Northern lands. There is no good reason to believe that any of them came there directly from the eastern Mediterranean and upper Mesopotamia.

**Table III – Deposition Patterns of Tenth-Century Western Near Eastern Dirhams in the Northern Lands By Decades and Regions (Hoard Quantity/Coin Quantity)**

Region	910s	920s	930s	940s	940s-950s	950s
Sweden (including Åland Islands)	0	0	1/1	2/2	1/1	21/33
Eastern Europe (Russia, Ukraine, and Belarus)	1/1	0	0	1/2	0	0
Poland	0	0	0	0	0	1/1
Southeastern Baltic (Latvia and Estonia)	0	0	0	1/1	0	2/3
Northern Germany	0	0	0	0	0	0
Finland (proper)	0	0	0	0	0	0
Denmark	0	0	0	0	0	1/1
Norway	0	0	0	0	0	1/1
<b>TOTAL</b>	<b>1/1</b>	<b>0</b>	<b>1/1</b>	<b>4/5</b>	<b>1/1</b>	<b>26/39</b>

There is one hoard that is broadly dated to the 940s-950s, or more specifically to 945-959, based on the presence of two miliaresia or Byzantine silver coins of Constantine VII and Romanus II (945-959) (När, Gotland, Sweden). The hoard also contained a WNE dirham (al-Râfiqa, 906/07). The decade to two gap in the chronology of the “youngest” dirham (‘Abbâsîd, Sûq al-Ahwâz, 936/37<sup>21</sup>) found in the hoard and the Byzantine miliaresia suggests that the dirham hoard was formed in the late 930s and the Byzantine coins were probably added to it in the 950s, or a decade when miliaresia began to appear in the Northern lands (as we shall soon see) and then soon deposited. So, once again, the single, old coin from upper Mesopotamia found in this hoard may have been brought to Sweden in the 900s-930s and cannot necessarily speak of direct connections of the Northern lands with the western regions of the Near East. The two miliaresia, though, most probably do, as will be discussed below.

The deposition of coin types radically changed in the Northern lands with the very first years of the **950s**. During the 950s, 39 WNE dirhams issued by the ‘Abbâsîds, Amîrs al-Umarâ’, Ĥamdânîds, and Ikhshîdîds were entered in 26 hoards spanning the entire decade and discovered in the southeastern Baltic, Poland, Norway, Denmark as well as Sweden. Mints are known for 36 of the coins, and amongst these 10 or 25.6% come from five eastern Mediterranean mints: Anṭâkiyya, Dimashq, Filasṭîn, Ĥims, and al-Maṣṣîsa. The upper Mesopotamian mints in these hoards are represent-

<sup>21</sup> The presence of this dirham alongside a handful of other coins from al-‘Irâq as well as Iran and the southern Caucasus in an otherwise mostly Sāmânîd (with Volga Bulġâr imitations?) dirham assemblage, incidentally, leads to the conclusion that two parcels were combined into one hoard by 936/37 – one coming with coins via “The Volga Bulġâr Way” and the other via “The Khazar Way.”

950s-960s	960s	960s-970s	970s	970s-990s	970s-980s	980s	980s-990s	990s
0	12/42	0	15/43	0	0	1/30	1/1	20/73
0	2/13	1/1	12/30	0	0	6/10	0	4/4
1/1	1/2	0	4/41	0	2/117	0	0	5/5
0	4/4	0	3/15		0	2/5	0	0
0	0	0	0	1/6	0	0	0	1/1
	0	0	1/2		0	0	0	1/1
0	0	0	2/5	0	0	0	0	0
0	0	0	0	0	0	0	0	1/1
<b>1/1</b>	<b>19/61</b>	<b>1/1</b>	<b>37/124</b>	<b>1/6</b>	<b>2/117</b>	<b>9/45</b>	<b>1/1</b>	<b>32/88</b>

ed by dirhams struck across a rather wide range of mints, half of which were previously unknown in the Northern lands: Âmid, Ḥarrân, al-Mawṣil, Naṣībîn, al-Râfiqa, and Ra's al-'Ayn. But, perhaps what is just as important is that many of these coins were very new, or relatively new: the 28 dirhams that carry exact years of issue have the following chronological profile: 900s – 9; 910s – 1; 920s – 2; 930s – 6; 940s – 6; and, 950s – 4. Thus, 35.7% of the coins deposited in hoards of the Northern lands in the 950s were very recent strikes, dating to the decades of the 940s-950s.

In a number of instances, WNE dirhams were amongst the newest, indeed, some the “youngest” coins in the hoards of the 950s: the 951/52 Ikshîdid dirham minted in Filastîn was the newest coin in Smiss (Gotland, Sweden), *tpq* 951/52, hoard; another Ikshîdid dirham struck in Ḥimṣ in 947/48 was found in Mullvalds (Gotland, Sweden), *tpq* 953/54; a Ḥamdânid coin issued in al-Mawṣil in 946/47? was deposited in Kastlösa (Öland, Sweden), *tpq* 953/54; and, Ḥamdânid Naṣībîn (950/51) and al-Mawṣil (940-944) dirhams were held in Häffinds (Gotland, Sweden), *tpq* 957/58. It is instructive to underscore that all these very “young” coins come from Sweden, mostly Gotland. Noteworthy is that not only were these coins channeled to Sweden from their place of striking in the WNE very quickly and arguably directly, but Sweden was clearly their main target of destination: of the 26 hoards with the 39 WNE dirhams discovered in the Northern lands, 21 deposits (80.1%) and 33 (84.6%) of the coins were discovered in Sweden. Amongst these hoards, 14 (holding 25 coins) come from Gotland while the others from six (holding 8 coins) other provinces: Åland, Blekinge, Närke, Öland, Småland, and Uppland. The two hoards from the Åland Islands suggest the bridge that brought these coins to Sweden so rapidly from eastern Europe via the eastern and northern Baltic.

In sum, the 950s very clearly experienced a sudden and notable influx of WNE dirhams (of both types) into the Northern lands: 7.8% of all dirhams in question were deposited in 19% of all tenth-century hoards with these coins discovered in this region. While the absolute volume of these coins may seem rather nominal, compared to the previous five decades their numbers rose almost fivefold – from 8 to 39 – all in one decade – and the quantity of hoards rose nearly fourfold – from 7 to 26. Thus, these coins came in much greater volumes in the 950s than in the previous decades; they came from both areas of the WNE – upper Mesopotamia and the eastern Mediterranean; they included many new and brand new dirhams; and, their geographic distribution was much more expansive than in the previous decades – spanning most of the Baltic. But, the lion's share of the dirhams without a doubt gravitated towards Sweden, mostly Gotland. Seemingly paradoxical is that not one hoard with WNE dirhams from the 950s thus far has been recorded in eastern Europe, assumedly the source of these coins for the Baltic basin. We shall turn to this issue below.

The import of WNE into the Northern lands intensified in the **960s**. Coming from eastern Europe, the southeastern Baltic, Poland, and Sweden, there are 19 hoards with 61 WNE dirhams struck by the 'Abbāsids, Ḥamdānids, Ikhshīdids, and now Fāṭimids recorded in our database. Of the 49 dirhams that preserved their mints, 21 or 42.8% were issued in the eastern Mediterranean (Anṭākiyya, Dimashq, Filasṭīn, Ḥalab or al-Maṣīṣa, al-Maṣīṣa, Ṭabariyya, Ṭarsūs, and al-Sāmiyya), thus significantly rising from the 25.6% of the 950s. The range of eastern Mediterranean mints represented in hoards of the 960s also rose from that of the 950s – from five to seven/eight. Amongst the mints from upper Mesopotamia in the hoards of the 960s were Ḥarrān, Irbil, al-Mawṣil, Mayyāfāriqīn, Naṣībīn, al-Rāfiqa, and Ra's al-'Ayn, i.e., two more mints than in the 950s.

Once again, many new coins from both regions were found in the hoards of the 960s: of the 39 dirhams with exact years, the coins have the following chronological profile: 900s – 1; 910s – 0; 920s – 6; 930s – 7; 940s – 8; 950s – 2; and, 960s – 16. The near total absence of coins from the first two decades of the tenth century is striking. Indeed, 46% of these dirhams were minted just a decade or two prior to their deposition. One can come to the same conclusion when considering the dirhams that can only be placed into decades by year of issue: 909-932 – 1; 920s – 1; 920s-960s – 2; 940s – 4; 940s-950s – 1; 940s-960s – 5; 940-970s – 1; 950-960s – 1; 960s – 5; and, 950s-970s – 1. Quite clearly, a great many new or relatively new dirhams were being shipped and deposited in the Northern lands in the 960s.

As in the 950s, the WNE dirhams are often found as the “youngest” coin in hoards: Lunds II (Gotland, Sweden) obtained its *tpq* from the Ḥamdānid al-Maṣīṣa (?) 962-965 coin. The Birka (Uppland, Sweden), *tpq* 963/64, hoard held two fragments of two coins issued in al-Maṣīṣa in 963/64. Three Ḥamdānid coins struck in 962/63 and

963/64 (2 mints indeterminable and 1 al-Maṣīṣa) date the Stora Vikers (Gotland, Sweden) hoard. Smedby (Östergötland, Sweden) is also dated by its Ḥamdānid al-Maṣīṣa coin struck in 964/65. A Mayyâfâriqîn dirham minted by the Ḥamdānids in 965 dates the Alskog Vicarage/Prästgården (Gotland, Sweden) deposit. Liknatte (Gotland, Sweden) is dated by its 961/62 al-Sâmiyya dirham. Other examples may be given, but it should already be evident that WNE coins were entering Sweden at great speed in the 960s as they did in the 950s.

But, it was not just Sweden that received very fresh dirhams in the 960s. Indeed, three of the four hoards from the southeastern Baltic (Estonian) of this decade held WNE dirhams that were the “youngest” or amongst the “youngest” in the hoards: “Meeksi/Mäxhof?” has the *tpq* of 963/64?, based on its Ḥamdānid dirham struck in al-Mawṣil; the Rathshof (*tpq* 965-967/68) hoard held a dirham struck at an unknown Ḥamdānid mint in 965 or 967/68; and, the Vara (Warrol) assemblage of *tpq* 969/70 included an al-Maṣīṣa or Ḥalab dirham struck in 962-965. The single hoard of the decade from Poland (Puck, *tpq* 965) held a Ḥamdānid al-Maṣīṣa dirham issued in 963/64. Finally, the Russian Briansk Region (*tpq* 969/70) hoard contained some very new WNE dirhams, although not all their exact dates are known: Ḥamdānid al-Maṣīṣa (952/53 or 962/63; 945-967) and mint indeterminable (945-967 and 961-967) as well as a Fâtimid coin (mint indeterminable, 953-975<sup>22</sup>). The single WNE dirham found in the Ukrainian Shpilevka/Shpylivka (*tpq* 966/67) hoard held another broadly dated (929-969, mint indeterminable) Ḥamdānid dirham, which may have been struck in the 960s.

Altogether, it seems evident that WNE dirhams were channeled into the Northern lands in the 960s in great numbers and at great speed, seemingly more so than in the 950s. Indeed, the 960s witnessed the deposition of 14% of all tenth-century hoards with tenth-century WNE dirhams found in the Northern lands, which included 12.3% of all these coins. Thus, the volume of coins deposited in the 960s rose twofold from the previous decade, but the quantities of hoards with these dirhams declined almost twofold from the 950s. Consequently, there were higher concentrations of WNE dirhams in the hoards of the 960s. Very few older coins – those struck in the first three decades of the tenth century – were hoarded in the 960s, while about half of the dirhams that were, had been issued in the 950s-960s. Evidently, these coins were quickly transported from their mint and place of circulation in the WNE to the Northern lands where a notable number of them were very rapidly entered in the ground. As in the 950s, the main region to which these coins gravitated was Sweden, again primarily Gotland: of the nineteen hoards with their 61 dirhams found in the 960s in the Northern lands, twelve or 63% of the hoards and 41 or 67% of the

<sup>22</sup> The mint of the Fâtimid dirham in the Briansk Region (*tpq* 969/70) hoard is effaced, but it was struck in one of these Tunisian mints: al-Qayrawân, al-Manṣûriyya, or al-Mahdiyya.



coins come from Sweden. Of the twelve Swedish hoards, seven are from Gotland (holding 23 coins) and the remaining five (holding 18 dirhams) from Östergötland, Södermanland (2), and Uppland (2).

**The 970s** offer a more nuanced and complex picture. As with the transition from the 950s to 960s, in the 970s the volume of WNE dirhams deposited and the number of hoards with these coins grew twofold from what it was in the 960s: 124 dirhams or 25% of the coins under consideration and 37 hoards or 27% of all deposits come from the 970s. In other words, a quarter of all hoards and dirhams this study is dedicated to were deposited in the 970s. The geographic range is equally impressive: spanning from eastern Europe to Denmark, including the southeastern Baltic, Finland, Poland, and Sweden in between. Of the 124 dirhams from this decade, 84 bear mints: amongst these coins, 40 or almost half (47.6%) were eastern Mediterranean (Anṭâkiyya, Dimashq, Filasṭîn, Ḥalab, Ḥimṣ, al-Maṣīṣa, Miṣr, Ṭabariyya, and Ṭarsûs), as compared to 34% in the 950s and 42.5% in the 960s. The remaining 44 dirhams were struck in upper Mesopotamia: Ḥarrân, al-Jazîra, al-Mawṣil, Mayyâfâriqîn, Naṣîbîn, al-Râfiqa, al-Raqqah, and Ra's al-'Ayn. Compared to the decade of the 960s, several more mints are represented from both parts of the WNE: 9 in the 970s vs. 7/8 in the 960s from the eastern Mediterranean and 8 in the 970s vs. 7 in the 960s from upper Mesopotamia; no doubt the reason for this can be tied to the much larger statistical sample provided by the greater number of coins found in the 970s, although the disparity of one to two mints between the two decades is hardly consequential.

The 67 coins that preserved their years of issue have the following chronological profile: 900s – 9; 910s – 3; 920s – 4; 930s – 12; 940s – 24; 950s – 7; and, 960s – 8. This chronological breakdown illustrates a rather peculiar situation, one showing the reverse trend of the 950s and 960s – the dirhams in question are becoming “aged.” Not one coin dated to the 970s and only 22.4% were issued in the previous two decades, compared to 33% in the 950s and 64% in the 960s. The vast majority of the dirhams deposited in the 970s were old coins dating to the 900s-940s (77.6%). Dirhams that can be arranged only by decades echo this trend: 910s-930s – 4; 930s-970s – 10; 940s – 3; 940s-950s – 2; 940s-960s – 12; and, 960s-ca. 970 – 2. Indeed, not one coin can be securely tied to post-960s, and only two dirhams can be securely dated to the 960s. The absence of dirhams issued in the 970s in hoards of this decade and the decline in the volumes of those struck in the 960s can, at least in part, be explained by the drop in the production rates of these coins at WNE mints, a trend that already began in the 950s (although the 960s were more productive than the 950s).<sup>23</sup> The fewer numbers of these coins, the less of a chance there was for their export. However, as will be seen below, not one dirham issued in the 970s and later found its

<sup>23</sup> KOVALEV, LOOS, IN PREPARATION.

way into the Northern lands in the following decades of the tenth century, suggesting another reason for their absence, which will be considered below.

As in the previous decades, the majority of the hoards (15) and dirhams (42) in question were found in Sweden, in the majority of both (12 hoards and 36 coins) on the Island of Gotland, with two in Skåne and one in Södermanland. Albeit, as in the previous decades, the quantity of hoards and coins found in Sweden continue to decline in comparison to other regions. If the 950s witnessed the deposition of 81% of the hoards in Sweden with 85% of the dirhams and the 960s saw the burial of 63% of the hoards with 68% of the coins, in the 970s both numbers dropped to less than half: 40.5% of hoards and 34.7% of coins. Other regions where WNE dirhams were relatively rare – notably eastern Europe – experienced their heyday of deposition: 12 hoards with 21 dirhams in eastern Europe; 4 hoards with 39 dirhams in Poland; and, 3 hoards with 15 dirhams in the southeastern Baltic region.

Overall, while more WNE dirhams were deposited in many more hoards in the 970s than during any other previous decade, the old age of these coins and that fact that none dated to the 970s themselves, leaves the impression that the WNE silver flow had ceased by ca. 970. It would be reasonable to assume that all dirhams deposited in the 970s were brought to the Northern lands in the previous two decades and remained there in circulation until they found their terminal resting spots in hoards deposited in the 970s. The greater geographic distribution of these dirhams across the Northern lands also seems to indicate that these coins came to be dispersed and entered a greater monetary circulation field by the 970s.

The **980s** experienced a precipitous decline in the deposition of hoards with WNE coins and the volume of these dirhams found in them. Thus, only nine hoards holding 45 dirhams are recorded in our database for this decade, which is an almost fourfold drop in hoard quantities and almost a threefold drop in coin volumes from the 970s. Just as notable is the huge disparity in the geographic distribution of the hoards – only one comes from Sweden while there are six from eastern Europe and two from the southeastern Baltic. Be that as it may, the single Swedish hoard held 30 of the 45 coins recorded for this decade. Accordingly, in terms of coin quantities, Sweden – namely Gotland – remains in the lead for WNE dirham quantities found in the Northern lands for the 980s. There were more hoards from eastern Europe, but few of these coins; it, thus, appears that these dirhams were less concentrated, or were in greater and wider circulation in the region.

Mints are known for 29 dirhams: 38% were from the eastern Mediterranean (Anṭâkiyya, Filastîn, Ḥalab, al-Maṣîṣa, Miṣr, and Ṭabariyya) and the rest from upper Mesopotamia (Ḥarrân, al-Mawṣil, Mayyâfâriqîn, Naṣîbîn, and Ra's al-'Ayn). While in the general ballpark of the previous decades (950s – 34%; 960s – 42.5%; 970s – 47.6%), the drop to 38% from the eastern Mediterranean would seem to suggest a decline in the relative numbers of the two dirham types being deposited. This drop

can also be viewed as a reversal to the situation of the 950s. In terms of chronology of the coins, of the 20 dirhams with specific years, we see the same general pattern of the 970s – no coins issued in the 970s or 980s were present: all were from the first seven decades of the tenth century: 900s – 1; 910s – 0; 920s – 1; 930s – 2; 940s – 7; 950s – 5; and, 960s – 4. Coins with broad chronology show the same pattern: 908-932 – 1; 940s-960s – 3; 940s-990s – 2; 945-974 – 1; 958-961 – 1; and, ca. 960-965 – 2. As in the 970s, the dirhams deposited in the 980s do not lead to suggest that there was any new inflow of WNE silver into the Northern lands during this decade. All the WNE dirhams deposited in the 980s were old coins, brought to the region in the 950s-960s, perhaps with a handful of upper Mesopotamian dirhams carried there during the first half of the tenth century via the Caucasus.

One hoard, a very important one, cannot be placed into a specific decade, since its chronology spans the **970s-980s**; but, it should be considered presently before moving to the 990s. It is the huge Polish Dzierznica II deposit (Wielkopolska region) with 18,200 dirhams (mostly fragments) that, based on West European silver coins (deniers), apparently dates to 976-982.<sup>24</sup> Unfortunately, this hoard has not yet been published in detail, but it is known that it held 2 Fâtimid, 14 Ikhshîdid, 100 Ĥamdânid, and 430 'Abbâsid dirham fragments, the latter of which most probably also included at least some WNE coins. This is by far the largest recorded hoard of WNE dirhams from the Northern lands, holding at least 116 of these dirhams, or almost a quarter (23.2%) of the WNE coins in question found in the entire region for the tenth century. With this hoard included, it can be estimated that 82.3% of all WNE coins that had been deposited in the Northern lands during the tenth century were buried by 990. Until the Dzierznica II coins are published in detail, little else can be said about it presently as it pertains to coin mints and dates. But, we shall return to it in due time, as some of its other coins that have been studied and published in detail cast interesting light not only on the origins of its WNE dirhams, but on the larger question of why, when, and how WNE dirhams came to the Northern lands. To end the 970s-980s, the Polish Obrzycko hoard (*tpq* 978-983) held a unique for the Northern lands Egyptian 'Abbâsid dirham from al-Fuṣṭât (908-932).

The **990s** perhaps offers more questions than answers. This decade witnessed a sharp rise in the number of hoards and the volume of WNE dirhams they contained compared to the previous decade: 32 hoards and 88 dirhams; thus, almost a quarter (23.7) of the hoards with 17.6% of the dirhams under study were deposited during this decade. The geography of their finds also expands to practically every

<sup>24</sup> It has been reported that another part of the Dzierznica II hoard was recovered in 2006; it held 1988 dirham fragments as well as 77 West European, 14 Byzantine, 2 Roman, 542 indeterminate coin fragments, as well as 228 jewelry pieces. So far, I have not found any additional information about this find; see GLIKSMAN 2009, 615.

region – eastern Europe and the Baltic (Finland, Poland, Norway, Germany, and Sweden). Sweden again comes in first place, indeed totally dominates in the quantity of hoards (20) and dirhams (73). Amongst the 88 dirhams from the 990s, 73 have mints, 20 or 27.4% of which were struck in the eastern Mediterranean (Anṭâkiyya, Dimashq, Filastîn, Madînat Ḥalab/Ḥalab, al-Maṣîṣa, and Ṭarsûs), while the remaining 53 in upper Mesopotamia (Ḥarrân, al-Mawṣil, Mayyâfâriqîn, Naṣîbîn, al-Râfiqa, al-Raḥbah, and Ra's al-'Ayn). Thus, the trend for the mint ratio observed in the 980s seems to be repeated – the decline in the percentages of eastern Mediterranean coins in relations to those of upper Mesopotamia: from 47.6% in the 970s to 38% in the 980s to 27.4% in the 990s. This steady – decade by decade – rise of the former over the latter from 950s through the 970s and then decline needs through the 980s-990s requires further study.

Concerning the chronology of the coins: the 60 dirhams with specific years of issue show the following breakdown: 900s – 7; 910s – 3; 920s – 9; 930s – 12; 940s – 13; 950s – 7; and, 960s – 9. The dirhams that can be placed into broader dates show the same general picture: 908-932 – 5; 910s-930s – 4; 934-940 – 1; 941-945 – 1; 940s-960s – 8; and, 950s-960s – 6. We thus observing the same trends as in the 970s-980s – that of the absence of post-ca. 970 dirhams and the “aging effect” of the coins. Accordingly, despite the upsurge in the deposition of WNE dirhams in their relative quantities and increased numbers of hoards with them in the 990s, none of the coins were issued after ca. 970.

Indeed, the utter absence of WNE dirhams struck in the 970s-980s by the later Ḥamdânids (post-968/69 'Uddat al-Dawla and Sa'd al-Dawla), Ikhshîdids, and Qarmaṭîs, or early Fâtîmids (al-Mu'izz or al-'Azîz), and Buwayhids (e.g., 'Aḍud al-Dawla or Ṣamṣâm al-Dawla) in the 980s hoards of the Northern lands is quite strange, particularly because these coins were in circulation in the eastern Mediterranean in the 970s-980s.<sup>25</sup> Not one of the rather large emission – first of the Ikhshîdid Aḥmad ibn 'Alî and then the Fâtîmid Imâm al-Mu'izz (953-975) – at Filastîn in 968/69-969/70 is known in any hoard of the Northern lands: the latest Filastîn dirhams occur in Swedish deposits and were struck in 964/65 and 965/66 (Talby, Södermanland, *tpq* 969/70; Botes, Gotland, *tpq* after 973; Lilla Rone, Gotland, *tpq* 973/74; and, Bols (Botels), Gotland, *tpq* after 983).<sup>26</sup> Not one of the relatively numerous dirham issues in al-Mawṣil between 969/70 and 982/83 entered the Northern lands in the 970s-990s. The same can be said of the Ikhshîdid, Qarmaṭîs, and early Fâtîmid dirhams,

<sup>25</sup> Tel Ashdod (Near Gaza, Palestine, 1935), *tpq* 969/70; Syria (pre-1980), *tpq* 969/70; Region of Aleppo? (Syria, 1987 or earlier), *tpq* 972/73; Caesarea (Israel, pre-1964), *tpq* 975/76; Southern Syria/Palestine, 1981 or earlier), *tpq* 985/86; see KOVALEV 2011: 58-60.

<sup>26</sup> KOVALEV, LOOS, IN PREPARATION.

which vanished from Near Eastern hoards, but not until 975-985.<sup>27</sup> However, the “youngest” coin from the WNE discovered in tenth-century hoards of the Northern lands (excluding Marwânid and ‘Uqaylid dirhams of the very late tenth century that are outside the scope of this study) dates to 968/69 (only 3 in total).<sup>28</sup> It is true that the outputs of WNE mints experienced a precipitous decline after ca. 970 and some mints ceased producing dirhams all together, but these coins were still struck at other mints and circulate in the region in the subsequent decades.<sup>29</sup> Albeit, we do not see any of these coins in hoards of the 970s-990s. Most curiously and telling is that WNE Buwayhid and very late Ḥamdânid coins issued in the 970s do begin to appear in the post-1000 deposits of the Northern lands: about two dozen are recorded in post-tenth-century eastern European, southeastern Baltic, Polish, and Swedish hoards, e.g., Buwayhid ‘Aḍud al-Dawla dirham minted between 977-983 in al-Mawṣil and one in al-Râfiqa? (979/80); but, mainly it was the Ḥamdânid ‘Uddat al-Dawla coins that were, in relative terms, prevalent: minted in al-Mawṣil and Naṣībîn between 969/70 and 979/80. These “younger” WNE dirhams must have come to the Northern lands with the “Second Wave,” which began with the 990s and lasted through the 1010s and chiefly brought Marwânid and ‘Uqaylid dirhams minted in the 990s-1010s. Conversely, it is unlikely that this “Second Wave” would have brought many, if any, older WNE coins, since these ‘Abbâsid and Ḥamdânid issues of the 900s-950s had disappeared from circulation by the turn of the eleventh century, although a small amount of those minted in the 960s could still be found in circulation in the WNE into the 1010s.<sup>30</sup>

In sum, it would stand to reason that nearly all (excluding those few that may have entered via the Caucasus) ‘Abbâsid, Amîrs al-Umarâ’, Fâtimid, Ḥamdânid, and Ikhshîdid WNE dirhams deposited in hoards of the Northern lands during the tenth century were imported there in the 950s-960s. Once there, 20% were deposited during these two decades, while the remaining 80% circulated in the Northern lands and entered hoards in the 970s-990s. What caused the spigot of WNE dirhams to be turned off after ca. 969 can be explained through the examination of historical

<sup>27</sup> Caesarea (Israel, pre-1964), *tpq* 975-76, and Somewhere in southern Syria/Palestine?, 1981 or earlier, *tpq* 985/86. It should be noted that the Qarmaṭis issued dirhams in Filastîn, Dimashq, and Ṭabariyya through the 970s; see VARDANYAN 2011: 423-450.

<sup>28</sup> Mannegårde I, Gotland, Sweden, *tpq* 969/70 (Ḥamdânid, ‘Uddat al-Dawla – al-Mawṣil); Zalesie, Poland, *tpq* ca. 976 (Ḥamdânid, ‘Uddat al-Dawla – mint indeterminable); and, Föhlagen (Smidgårde), Gotland, Sweden, *tpq* after 991 (Ḥamdânid Governor, Qarghûya and Bakjûr – Madînat Ḥalab).

<sup>29</sup> KOVALEV, LOOS, IN PREPARATION.

<sup>30</sup> Eastern Turkey? (1978 or earlier), *tpq* of 1001/02; Northern Mesopotamia? (1997-1998?) *tpq* 1014/15; Northern Iraq/Southeastern Turkey? (pre-1979), *tpq* 1015/16. The first of these hoards held Ḥamdânid dirhams issued in Naṣībîn in 963/64 and 968/69 and 2 in al-Mawṣil in 968/69; see KOVALEV 2011: 61-63, for the discussion of these hoards.

records. But, prior to moving on to the written evidence, two other key numismatically tangential issues should be considered – Byzantine coins found in the same hoards as WNE dirhams and the geographic distribution of hoards with these coins into the Northern lands.

Above, we have had the occasion to speak of a Swedish hoard När, broadly dated to the 940s-950s, or more exactly to 945-959, because it held two Byzantine *miliaresia* of Constantine VII and Romanus II (945-959), which were the “youngest” coins in the deposit. It was suggested that this coin assemblage may well date to the 950s, since it was this decade that witnessed a notable infusion of Byzantine silver coins into the Northern lands. A more precisely dated dirham hoard, also with two such Byzantine coins, is the Estonian Saue (Friedrichshof), *tpq* 951/52, deposit which, like När (al-Râfiqa, 906/07), held a quite dated WNE dirham (al-Mawṣil, 908/09). Whether these old upper Mesopotamian coins came into the Northern lands via “The Khazar Way” many decades prior to their deposition in the 950s, or brought there very recently via another route, is not as important as that these two hoards mark the beginning of a steady infusion of Byzantine coins into the Northern lands. Indeed, Byzantine *miliaresia* become a relatively common feature of hoards of the Northern lands deposited in the second half of the tenth century and on into the next.<sup>31</sup> Yet, there is a particularly strong correlation in the hoarding of pre-970 *miliaresia* (especially those struck in the mid-940s-960s) and WNE dirhams beginning with the early 950s in the Northern lands [Appendix].

Thus, five (or ca. 23%) of the 22 hoards dated to the **950s** that contained WNE dirhams also carried Byzantine *miliaresia*, all but one discovered in Sweden: Smiss, *tpq* 951/52 (3); Åsgårda (Åland), *tpq* 955/56 (1); Birka, *tpq* 957/58 (1); Häffinds, *tpq* 957/58 (1); and, Saue (Estonia), *tpq* 951/52 (2). In total, these five hoards enclosed 8 *miliaresia*: 7 of Constantine VII and Romanus II (945-959) and 1 of Basil I and Constantine (868-879). The 2 *miliaresia* of Constantine VII and Romanus II found alongside one WNE dirham in the more broadly dated Swedish När hoard (*tpq* 945-959) should also be remembered; in light of the obvious influx of Byzantine coins in the 950s, it would be reasonable to date this deposit to its upper chronological span of the 950s. In addition, there is a hoard from Denmark in which WNE dirhams are not recorded (although most of its 134 dirhams and their fragments were not identified), but it did hold a *miliaresion* of Constantine VII and Romanus II (Jyndevad, *tpq* ca. 955-960). Likewise, one Estonian deposit, of which only 6 dirhams are known (none WNE), also carried a “Byzantine coin” (Parivere, *tpq* 952/53). Similarly, one Polish hoard (Turwi/Turew, *tpq* 955) from this decade contained 3 Byzantine coins (apparently struck by Romanus II and Constantine VII), but the 80 dirham fragments deposited along with these *miliaresia* have not been identified; thus, it is unknown

<sup>31</sup> HAMMARBERG, MALMER, ZACHRISSON 1989, 14-15.



whether it held any WNE coins. Finally, 1 or 2 miliaresia of Constantine VII and Romanus II were discovered in another Swedish hoard (Norr Nånö, *tpq* 952/53) that included 5 'Abbâsid dirhams struck between 902 and 907 and 6 indeterminate dirhams, but no specific information is known about the mints of any of these coins. Thus, again, it cannot be determined whether it included any WNE dirhams. Overall, 16 or 17 miliaresia entered ten dirham hoards of the Northern lands in the 950s. Perhaps the deposits with miliaresia and their absolute volumes are not overly impressive, but they should be when considering the absence of these coins in the Northern land prior to the decade of the 950s.

Clearly, the 950s witnessed a new era in the import of Byzantine silver into the Northern lands. What is particularly significant is that all the deposits for which we have detailed information regarding their coin stock carried both WNE dirhams and miliaresia (almost exclusively those minted by Constantine VII and Romanus II), strongly suggesting their codependence in import, circulation, and deposition. Finally, it would be amiss not to note the Norwegian hoard of 14 gold Byzantine (and perhaps also some silver) coins – Nedre Strømshaug (1826, *tpq* 945-959).<sup>32</sup> Dated to the period 921-927 and 945-959, like the contemporary miliaresia, these nomismata may well have been brought as part of the larger flow of coins from Byzantium to the Northern lands in the 950s.

The **960s** witnessed a mild increase in the deposition of Byzantine coins, mainly thanks to one hoard from Russia (Briansk Region, *tpq* 969/70) that held 18 miliaresia of Nikephoros II Phokas (963-969) alongside 12 WNE dirhams. The other contemporary hoard from the same area (Briansk Region, *tpq* mid-960s) carried one miliaresion of Nikephoros Phokas; however, it did not contain any WNE dirhams. But, the next deposit from eastern Europe held both: one WNE dirham and one miliaresion of Constantine VII and Romanus II (Shpilevka/Shpylivka, *tpq* 966/67). A miliaresion of Constantine VII and Romanus II was found together with 2 WNE dirhams in the Swedish Västergårde (*tpq* 961) deposit. Another hoard from Sweden (Birka, 1872), *tpq* 963/64, also held a miliaresion of Constantine VII and Romanus and 6 WNE dirhams, two fragments of which are the “youngest” coins in the hoard (al-Mašîṣa, 963/64). Two Byzantine coins were also found in a Polish hoard (Magnuszewice, *tpq* ca. 967), but its dirhams have not yet been published, so it is unclear whether they included any struck in the WNE. In sum, 24 Byzantine coins come from six hoards of the 960s from the Northern lands, at least four of which also held a minimum of 21 WNE dirhams. Together, these four hoards with both coin types represent 21% of the 19 hoards that held WNE dirhams deposited during the 960s, a number close to that witnessed in the 950s (i.e., ca. 24%). Except for one hoard, all others for which we have specific information regarding their coin contents held not just Byzantine

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<sup>32</sup> SKAARE 1976, 53, 128, no. 4.



coins but also WNE dirhams. In this way, once again the pattern noted for the deposits of the 950s can be observed for the 960s – a strong correlation between the deposition of WNE dirhams and Byzantine *miliaresia*: now not only those struck in the 940s-950s by Constantine VII and Romanus II, but also the very recent issues of Nikephoros II Phokas of the 960s. Indeed, it would stand to reason that both Byzantine and WNE coins were carried together in the same parcels to the Northern lands where they came to be mixed with dirhams from other regions of the Islamic world that were in current circulation (e.g., those issued in al-‘Irâq and Iran by the ‘Abbâsids, Buwayhids, and Ziyârids; central Asia by the Sâmanîds; Volga Bulġâr; and, various imitations). The deposition of *miliaresia* issued in the 960s in hoards of the same decade, where indeed they are often the most recent coins, speaks strongly for their very rapid export from Byzantium to the Northern lands and their very quick deposition in the ground once there. Finally, it would be of interest to note a hoard (Kyselivka, 1906, *tpq* 963-969) of 37 Byzantine copper coins from Kiev, which held Cherson (Χερσώνως/*Chersōnos*)-Byzantine *folis* minted in the Crimea by Basil I (867-886) (28), Basil I and Constantine (867-870) (2), Romanus I (920-944) (5), Romanus II (959-963) (1), and Nikephoros II Phokas (963-969) (1).<sup>33</sup> While these coins were not silver nor directly connected with the WNE, this hoard speaks well of the route and chronology for the larger flow of Byzantine coins northwards from the northern Black Sea region/Crimea up the Dnepr in the 960s.

Hoards of the **970s** and later ones began to include *miliaresia* of John I Tzimiskes (969-976) and Basil II (976-1025), coins that are not of interest to us presently, as they are post-970, i.e., brought to the Northern lands independent of the “First Wave” of WNE dirham imports. But, the earlier *miliaresia* of Constantine VII-Romanus II and Nikephoros Phokas continue to appear in hoards of the 970s alongside pre-ca. 970 WNE dirhams. Indeed, the 970s witnessed by far the largest deposition volumes of pre-ca. 970 *miliaresia*: 194 in total, found in 17 hoards. Thus, just from Sweden (all Gotland) there are six hoards with WNE dirhams, holding 12 *miliaresia* of Constantine VII and Romanus II and 2 indeterminable Byzantine coins in total (Bryor, *tpq* 972/73; Botes, *tpq* after 973; Lilla Rone, *tpq* 973/74; Gâshagen, *tpq* ca. 975; Övide/Unghanse, *tpq* 976/77; and, Sigtors/Lingvide, *tpq* after 978). In addition, there is an unidentifiable Byzantine coin registered in the Swedish Suderbys/Sorbys, *tpq* ca. 978, hoard which is not known to have carried any WNE dirhams; but, it should be kept in mind that of its 141 dirhams and their fragments, 27 remain indeterminable, i.e., some of these may have been the dirhams under study. The Danish hoard (Kongens Udmark, *tpq*, ca. 975) from the same decade held not only four Ḥamdânid dirhams, but also six *miliaresia* of Romanus I-Constantine VII-Stephen, Constantine VII-Romanus II, and Nikephoros Phokas, spanning the period 920-944 through 969.

<sup>33</sup> KROPOTKIN 1962, 32, no. 177; TOLOCHKO 1983, 164, no. 7.

Elsewhere in the Northern lands, in eastern Europe three hoards with 3 miliaresia of Constantine VII-Romanus II and Nikephoros Phokas were deposited, in all cases found alongside WNE dirhams: Sanskoe (*tpq* 973/74); Novgorod (*tpq* 974/75); and, Erilovo (*tpq* 976/77). In addition, there is the Chernigov (Chernigov oblast', 2012), *tpq* 979/80, deposit that consisted of 12 kilograms or some 4000 coins. Unfortunately, the great majority of the coins in this hoard have not been studied (only ca. 1000 coins were examined cursorily and 270 dirhams closely); mints of the 'Abbâsid dirhams, which were in the majority, are unknown. Hence, it cannot be determined whether this hoard held any WNE coins. But, the deposit did include 150 Byzantine miliaresia of Constantine VII-Romanus II and Nikephoros Phokas.

Miliaresia of Constantine VII-Romanus II and Nikephoros Phokas together with WNE dirhams also occur in southeastern Baltic and Polish hoards of the 970s. Thus, three miliaresia of Constantine VII and Romanus II and one of Nikephoros Phokas were found in two Estonian deposits, both also held WNE dirhams: Erra-Liiva (*tpq* 977/78) and Kehra (*tpq* ca. 979). Eight fragments of individual miliaresia of Romanus I (920-944) and Constantine VII as well as 6 other pieces belonging to an unknown basileus were found alongside WNE dirhams in the Polish Ciechanów (*tpq* after 974) hoard. Another Polish deposit that held WNE dirhams as well as one miliaresion of Constantine VII and Romanus II is Zalesie (*tpq* ca. 976). The Polish Maurzyce-Rusków (*tpq* 971/72) hoard held two WNE dirhams as well as a fragment of a miliaresion, perhaps of Basil I. Overall, as in the previous decades, the deposits from the Northern lands of the 970s show the same correlation between the presence of WNE dirhams and pre-ca. 970 Byzantine miliaresia. Leaving aside the 150 miliaresia of the Chernigov (*tpq* 979/80) hoard for which there is no specific information regarding its dirham component, the remaining 15 of the 16 deposits dating to the 970s that held 44 miliaresia all also held WNE dirhams, i.e., 94% of the hoards, representing by far the largest volume of miliaresia-WNE dirhams and hoards with them found Northern lands in comparison to the two previous decades.

Two broadly dated hoards of the **970s-980s** with many miliaresia need to be considered separately. The first is the Polish Dzierznica II (*tpq*, apparently 976-982) that held at least 82 miliaresia (almost all fragments), including those of Michael III (856-866), Basil I and Constantine (868-879), Romanus I, Constantine VII, Stephan and Constantine I (931-944), Constantine VII and Christopher (921-931), mostly (at least 61) Constantine VII and Romanus II (945-959) and, John I Tzimiskes (969-976)<sup>34</sup> in addition to a very large number of WNE dirhams – 116. The closely dated second hoard is another Polish deposit, Obrzycko (*tpq* 978-983), which held one WNE dirham alongside at least 5 miliaresia and their fragments of Constantine VII and

<sup>34</sup> GLIKSMAN 2009, 615.

Romanus I, and Constantine VII and Romanus II (?), and Nikephoros Phokas (?). These two hoards again underscore the close relationship between the deposition of pre-970 Byzantine and WNE coins.

Pre-ca. 970 Byzantine miliaresia continue to appear alongside pre-970 WNE dirhams in **post-970s** hoards, mainly in Sweden. Thus, there is Bols (Botels) (*tpq* after 983) hoard that held miliaresia of Constantine VII and Romanus I (1), Constantine VII and Romanus II (15), and unspecified basileus (5). They were accompanied by 30 dirhams issued by the 'Abbâsids, Ḥamdânids, and Ikhshîdids between 926/27 and 964/65 at 10 different WNE mints. These two coin types also occur together in nine other Swedish hoards, all *tpq* post-ca. 991: Timans (1 miliaresion of Constantine VII and Romanus I and 2 of Constantine VII and Romanus II); Broa (1 of Constantine VII and Romanus II; Östjädra (2 of Constantine VII and Romanus II); Norrkvie II (2 of Constantine VII and Romanus II); Kvarne (Lillängen) (1 of Constantine VII and Romanus I); Hågdarve (1 of Constantine VII and Romanus II); Vivlings (1 of Constantine VII and Romanus II); Föhlagen (Smidgårde) (perhaps 2 Byzantine/basileus?); and, Horda (1 Byzantine/basileus?). Indeed, of the 20 Swedish dirham hoards dated to ca. 991-996 with pre-970 WNE dirhams, seven or more than a third, also carry pre-970 Byzantine coins.

Elsewhere in the Northern lands, it was only in the North Sea-western Baltic where the two pre-970 coin types were found in hoards side by side: Schleswig-Holstein (Waterneversdorf, *tpq* ca. 976-995 – 1 frag. of Nikephoros Phokas) and Brandenburg (Niedelandin, *tpq* ca. 996 – 2 frags. of Constantine VII-Romanus II and Nikephoros Phokas). Another Brandenburg (Alexanderhof, *tpq* ca. 996) hoard held a fragment of Constantine VII and Romanus II miliaresia as well as one whole and another fragment of Nikephoros Phokas miliaresion which were found together with a Ḥamdânid coin, although this dirham we exclude from the WNE database, since it was issued in Madînat al-Salâm. It should be observed, however, that it is not at all unlikely that this deposit did hold some WNE dirhams, since most of the coins in this hoard were fragments, 845 grams of which remain unidentified. But a WNE dirham and a miliaresion (Romanus I) occur together in a hoard from Norway: Tråen (*tpq* ca. 991<sup>35</sup>). Altogether, 41 pre-970 miliaresia were deposited in 14 hoards of the 980s-990s in the Northern lands, all but one of which were accompanied by WNE dirhams.

Taken all together, the coexistence and interconnectivity of pre-970 Byzantine miliaresia with pre-970 WNE dirhams is made strikingly clear by the fact that at least

<sup>35</sup> It should be noted that Tråen is dated by *tpq* to ca. 991 by its West European coin component; its latest dirham-based *tpq* is ca. 951/52, meaning that the dirham and most probably the Byzantine coins form a separate parcel created in ca. 950 and then subsequently added to with West European coins until the 990s when it was finally deposited. This means that the dirhams and the miliaresion form a coin assemblage from the decade of the 950s.

38 or 28% of all 136 tenth-century dirham hoards from the Northern lands found in our database held both types of coins. To look at it another, even more revealing way: of all 48 tenth-century dirham hoards discovered in the Northern lands with pre-970 Byzantine miliaresia, at least 38 or 80% of them also held pre-ca. 970 WNE dirhams. Quite possibly, this interrelationship would be even stronger, if all the dirhams found in the eight hoards with miliaresia, but seemingly excluding WNE dirhams, were fully preserved, examined, and published, as only the Briansk Region (2001, *tpq* mid-960s) hoard has been very well conserved and studied. To further underscore the interrelationship of the two coin types, we should recall that both began to appear in the Northern lands contemporaneously in the early 950s and continued to be brought there through the very late 960s.

Finally, while a detailed study concerning the importation and circulation patterns of WNE dirhams is not the object of the present study, it would be instructive to make one key observation that directly pertains to the geographic interlinkage of pre-ca. 970 WNE dirhams and Byzantine miliaresia in tenth-century hoards discovered in the Northern lands. Specifically, the data of Table I shows that 20% of the tenth-century hoards with WNE dirhams holding 12.2% of the total coins found in Northern Europe were discovered in eastern Europe. The remaining hoards and coins come from other areas of the Northern lands – southeastern Baltic, Poland, Germany, Finland, Denmark, Norway, and Sweden. The last of these regions is represented, by far, with the largest volume of both: 54.8% of the hoards and 45.3% of the dirhams. Interestingly, the Byzantine miliaresia are in general step with the relative percentages of WNE dirhams. Excluding the anomalous Polish (Dzierznica II, *tpq*, 976-982) and the Chernigov (*tpq* 979/80) hoards with unusually large volumes of pre-ca. 970 Byzantine miliaresia (ca. 82 and 150, respectively), 12.8% of the hoards (6) with miliaresia and 17.7% of these coins (23) come from eastern Europe while the rest were found elsewhere in the Northern lands (107/108 coins in 41 hoards). As with WNE dirhams, about half (49%) of all the hoards (23 of 47) and roughly half (47%) of the miliaresia (61/62 of 130/131) discovered in the Northern lands were found in Sweden.

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Before moving forwards to an historical interpretation of the above numismatic data, it would be instructive to take into account the geographic distribution of the hoards with WNE dirhams in the Northern lands. It has already been observed above that Sweden, Gotland in particular, received by far the lion's share of the coins in question. Poland came in second place, but mainly thanks to its one huge hoard with these coins (Dzierznica, II *tpq* 976-982). However, the Baltic basin hoards tell us very little concerning the direction or route they took to reach the Northern lands from the

Islamic world. To answer this question, it becomes necessary to examine the eastern European deposits.

The earliest hoard from eastern Europe that can be linked with the major infusion of WNE dirhams, and Byzantine miliaresia, in the 950s-960s is Shpilevka/Shpylivka (*tpq* 966/67) discovered in Sumy oblast', Ukraine. The Village Shpilevka/Shpylivka is situated just west of the Psël River, a left tributary to the Dnepr River (towards its lower section or south of Kiev). The next deposit is Briansk Region (*tpq* 969/70), the exact location of which is unknown. However, the position of Briansk region squarely places it within the sphere of upper Desna River, another eastern tributary of the Dnepr, this time to the north of its middle section or north of Kiev. The 150 Byzantine miliaresia of Constantine VII-Romanus II and Nikephoros Phokas, and the huge number of dirhams that were left unidentified from the Chernigov (*tpq* 979/80) deposit (discovered on the bank of the lower Desna River in the city) again connects the hoard with the middle Dnepr, just to the north of Kiev. The upper Dnepr basin also has a hoard associated with it: Staryi Dedin (*tpq* 978/79) from Mogilev oblast'. The hoard was found near the Ostior River, a tributary to the Sozh, which itself is a left tributary to the upper Dnepr. In this way, a sizable number of the hoards under study clearly gravitate towards the course of the Dnepr River – its southern, middle, and upper sections.

Another major concentration of hoards under study comes from the Novgorod lands, the earliest of which being the city of Novgorod (*tpq* 971/72) deposit. Situated near Lake Il'men' on the upper Volkhov River, Novgorod lay directly on the route to the Baltic via Lake Ladoga, the Neva River, and the Gulf of Finland. Another hoard from Novgorod (*tpq* 974/75) should also be mentioned, so as the two contemporary hoards from near Novgorod, both *tpq* 973/74: Novaia Mel'nitsa and Near the Khutyn' Monastery. To the west of Novgorod was found the Erilovo (Ostrov raion, Pskov oblast') deposit (*tpq* 976/77), connected with the Velikaia River, a tributary of Lake Chud'/Peipus which drains into the Baltic Sea via the Narva River and the Gulf of Finland.

Linking the upper Dnepr River and the lands of Novgorod is a hoard discovered on the bank of the Lovat' River, one-half kilometer from Velikie Luki, Pskov oblast': Along the Shore of The Lovat' River, *tpq* 976/77 or 978/79. The Lovat' River connects the upper reaches of the Dnepr with Lake Il'men', Novgorod, and the Volkhov River that leads a route into the Baltic discussed above.

Another region with a high concentration of hoards with WNE dirhams in eastern Europe is to its northeast – the Oka River basin. Thus, where the Moscow River flows into the Oka two hoards were discovered in and near Kolomna, Moscow oblast': Kolomna III (*tpq* 975/76) and Kolomna IV (*tpq* 976/77). Just further up-river or towards the middle of the Oka basin in Riazan' oblast', the Sanskoe deposit, *tpq* 973/74, was discovered. Sidorovka (*tpq* 978/79), also in Riazan' oblast',

likewise can be connected to the mid-Oka. Further downstream towards the lower Oka, where it meets the Volga, the Savkovo (*tpq* 970-980) hoard was discovered in Murom raion, Vladimir oblast'. The WNE dirhams discovered in all these hoards are more difficult to tie directly to the Dnepr River, as they lay at some distance to the northeast. But, there are three main directions that these coins could have taken to the middle and lower Oka. The first was by way of the upper Dnepr eastwards to the headwaters of the upper Volga basin and its tributaries (including the Moscow River) that lead to the Oka. Another was via the middle Dnepr eastwards via the Desna and Seim and via Oka's tributaries to the upper Oka. The third bypassed the Dnepr by stretching directly from the Black Sea via Crimea to the Azov Sea and passed up the Don River and/or Severskii Donets-Oskol to the upper Oka. Whichever way these WNE dirhams reached the middle and lower Oka basin, by far the preponderance of the coins and hoards in question were clearly connected with the Dnepr River. This river served as the backbone of the famous route – known as “The Way from the Varangians to the Greeks,”<sup>36</sup> the northern (upper Dnepr River-portage to Lovat' River-Lake Il'men'-Volkhov River-Lake Ladoga-Neva River-Baltic Sea) and central (Dnepr River) sections of which are described in the Rus' chronicle *Povešt' vremennykh lēt* and the middle and the southern sections (from Kiev to Constantinople) in the mid-tenth century by Byzantine Emperor Constantine VII Porphyrogenitus (905-959), whose *miliaresia*, as we have seen, are quite common to hoards of the 950s and later decades in the Northern lands.<sup>37</sup> What should to be added here to the two medieval documents are the several other major routes that bifurcated east and west from its middle section in and around Kiev – one leading into the interior of eastern Europe (Oka basin) and the other west (via Przemyśl and Kraków<sup>38</sup>) to Greater Poland/Wielkopolska, where WNE dirhams as well as *miliaresia* were also found in some traceable quantities [Appendix].

Finally, to better understand the flow of WNE dirhams and Byzantine *miliaresia* into the Northern lands, it would be instructive to turn to one key Russian coin-treasure deposit that held *miliaresia* and WNE dirhams: Briansk Region, *tpq* 969/70. As can be recalled, all its 18 *miliaresia* were struck by Nikephoros Phokas (963-969), all in excellent condition – suggesting very limited circulation. The hoard also held 5 temporal rings, a silver ingot, and 158 dirhams and their fragments (131 + 27), 126 of which have been identified. The dirham part of the hoard consisted of coins (based on dynasties and mints) from four major monetarily distinct areas of the Islamic world – central Asia (Sāmānids – 62%); Volga Bulġāria (Sāmānid proto-

<sup>36</sup> POVEŠT' VREMENNYKH LĚT 2003, 29-34.

<sup>37</sup> CONSTANTINE PORPHYROGENITUS 1967, 57-63.

<sup>38</sup> VASIL'EVSKII 1888: 128-134; BRUTZKUS 1943: 32, 34; NOVOSEL'TEV, PASHUTO 1967: 85-86; FRANKLIN, SHEPARD 1996, 88, 92.



type/Volga Bulğâr imitations – %?); the eastern regions of the Near East or al-‘Irâq and Iran (‘Abbâsids and Buwayhids – 13%); and, the WNE (‘Abbâsids, Ĥamdânids, and Fâṭimids – 9.5%). The remaining dirhams were unidentified imitation and indeterminate. Hoards with such a profile are unknown in the contemporary Islamic world.<sup>39</sup> Indeed, it seems quite evident that the Briansk Region (*tpq* 969/70) deposit was formed from three individual parcels of coins brought there by three distinct routes from three different regions of the Islamic world: one from the Sâṃânid lands via Volga Bulğâria (“The Volga Bulğâr Way”); the second from al-‘Irâq and Iran via “The Khazar Way”); and, the third from the eastern Mediterranean and upper Mesopotamia via the Black Sea and the Dnepr River (“The Way from the Varangians to the Greeks”).<sup>40</sup> Alongside the third group joined in the 18 Byzantine miliaresia. All three parcels came to be combined with the treasure part of the assemblage (which may have been part of any one of the three parcels or autonomous), most probably somewhere in the Briansk lands, where all three routes met in the upper Dnepr River basin and its eastern tributaries.

In sum to all the above numismatic evidence and its interpretations, several main conclusions can be made. WNE dirhams and Byzantine miliaresia began to appear in notable quantities in the Northern lands starting with the early 950s. That decade, 7.6% all pre-970 WNE dirhams (from 18.6% of the hoards) and 12.3% of all pre-970 miliaresia (from 21.3% of the hoards) discovered in tenth-century hoards with these coins from the Northern lands were deposited (excluding here the two anomalous hoards – Dzierznica II, *tpq* 976-982, and Chernigov, *tpq* 979/80). A significant number of these dirhams were new (33% of the WNE dated to the 940s-950s) and the miliaresia were almost exclusively those minted by Constantine VII and Romanus II (945-959). In the 960s, the volume of WNE dirham imports notably increased, as did the geographic range of dirham mints; 12.3% of WNE dirhams (from 14% of the hoards) and 18.5% of the miliaresia (from 12.8% of the hoards) were deposited this decade. Again, the volume of new coins entered in these hoards is noteworthy: 47% of the dirhams were minted in the 950s-960s and miliaresia now included not only those issued by Constantine VII and Romanus II in the 940s-950s, but also those struck by Nikephoros II Phokas (963-969). The 970s witnessed the deposition of even greater numbers of coins than the previous decade: 25.5% of all WNE dirhams (from 27.6% of the hoards) and 33.8% of the miliaresia (from 34% of the hoards) were entered this decade. The latter numbers would have been much larger for the

<sup>39</sup> See KOVALEV 2011: 54-91.

<sup>40</sup> In an earlier study (KOVALEV 2011: 123), it was suggested that the hoard was composed of two parcels – one came from the WNE and the other from the central Asian Sâṃânid lands; however, the Buwayhid component and probably at least a part of the tenth-century ‘Abbâsîd dirhams issued in al-‘Irâq and Iran came via “The Khazar Way,” for which see KOVALEV 2017A: 95-143.



decade, had we included the coins of the anomalous Chernigov (*tpq* 979/80) hoard with an additional 150 miliaresia. But, what is particularly notable is that the coins in hoards of the 970s begin to show signs of aging, i.e., very few WNE dirhams from the 960s and none from the 970s are to be found in the deposits of the 970s. Therefore, there is no reason to think that any additional infusion of dirhams from the WNE occurred during the 970s, and all the WNE dirhams that were deposited in the 970s were earlier imports. The same most probably can be said about the pre-970 miliaresia. They too appear to have been brought to the Northern lands in the previous two decades, where they circulated until they were finally deposited into hoards of the 970s and others thereafter.

Post-970s hoards strongly suggest the same conclusions as observed above. Leaving aside the broadly dated (970s-980s) anomalous Dzierznica II hoard (with its huge numbers of both WNE dirhams and miliaresia), the 980s-990s witnessed the deposition of 26.6% of all WNE dirhams (133) in 32.6% (45) of all tenth-century hoards and 31.5% (41) of pre-970 miliaresia in 30% (14) of all hoards with these coins. However, as in the 970s none of these 980s-990s hoards held a single post-968/69 WNE dirham. Since these dirhams were still minted in the WNE in the 970s-980s, their absence in 970s-990s hoards of the Northern lands lead to the reasonable conclusion that the flow of WNE dirhams ceased after ca. 970. Consequently, all WNE dirhams found in deposits dating to the 970s-990s were coins that came to the Northern lands from the eastern Mediterranean and upper Mesopotamia in the 950s-960s. Almost certainly, because of the interconnectivity in the import, circulation, and deposition of WNE dirhams and miliaresia, the same can be said about the pre-970 Byzantine coins.

The geographic distribution of hoards with WNE dirhams in the Northern lands show that the overwhelming majority of these coins, as well as Byzantine miliaresia, were deposited in the Baltic basin, about half of all deposits and hoards just in Sweden. By far the largest relative volume of WNE dirhams entered Sweden at the very beginning of WNE dirham imports into the Northern lands in the 950s. Thus, of all hoards with WNE dirhams discovered in the Northern lands dating to the 950s, 89% of the coins and 84% of the hoards come from Sweden, especially the Island of Gotland. Judging by the relatively large numbers of new and brand new WNE dirhams deposited in Swedish hoards of the 950s, these coins were very rapidly imported to the region from their place of minting in upper Mesopotamia and the eastern Mediterranean. The same can be said about the dirhams deposited in the 960s, although it was not just Sweden where very new dirhams were being deposited: eastern Europe, Poland, and the southeastern Baltic also received their share of these new coins during the decade. The steady, direct, and rapid stream of WNE dirham imports in the 950s-960s can only be explained by the existence of some special system for their delivery from upper Mesopotamia and the eastern Mediterranean into

the Northern lands. Although *miliaresia* are not as easy to date as dirhams, due to the absence of exact dates of issue on the coins, the presence of mostly Constantine VII-Romanus II (945-959s) and Nikephoros II Phokas (963-969) *miliaresia* in the same hoards as WNE dirhams, the data provided above leads to suggest that Byzantine silver pieces were also channeled into the Northern lands at great speeds in the 960s, as in the 950s, from their mint in Constantinople.

As in the 950s, WNE dirhams and *miliaresia* gravitated towards Sweden (particularly Gotland): 68% of the dirhams and 67% of the 960s hoards with these coins come from Sweden. In the decade of the 970s, the relative deposition volumes of WNE dirhams in Sweden somewhat declined (34.7% of coins in 40.5% of hoards), but only at the expense of other regions where these coins began to appear more regularly and in larger numbers: eastern Europe, southeastern Baltic, Poland, Finland, and Denmark. Seeing that no post-968/69 WNE dirhams were found in tenth-century hoards, it is no surprise that dirhams in deposits of the 970s become “aged,” a process that only escalated into the following decades. The very rapid movement of new dirhams from the WNE mints is no longer observable in the 970s, as it was in the 950s-960s. But, in Sweden, in absolute numbers, the volume of WNE dirhams and hoards with them actually increased somewhat in the 970s as compared to the 960s. The same was the case for all other regions of the Northern lands: twice as many WNE dirhams were deposited in the 970s as in the 960s. What the above, then, suggests is that while no WNE dirhams were being brought to the Northern lands in the 970s, the ones that came there in the 950s-960s remained in circulation into the 970s and were being regularly deposited into hoards during this decade.

We observe the same circumstance during the remaining two decades of the tenth century: while many WNE dirhams were being entered in hoards of the 980s-990s, these were all old coins that were imported into various regions of the Northern lands in the 950s-960s. The same can be said about the pre-970 *miliaresia*. Albeit, Sweden regained its leading position in the finds of both coin types in the 980s-990s: 77.6% of all WNE dirhams found in 52.4% of the hoards come from Sweden. The same region witnessed the deposition of 80.5% of the *miliaresia* in 57% of all hoards with these coins during the 980s-990s.

Finally, the topography of hoard finds in the Northern lands permits us to trace the route by which both coin types travelled into the region: the well-known to medieval and modern literature “The Way from the Varangians to the Greeks,” which not only connected Constantinople with Kiev via the Black Sea and the Dnepr River, but also all the Northern lands with the eastern Mediterranean and upper Mesopotamia. Below, we shall examine the written sources to further shed light on how and why these WNE dirhams and Byzantine *miliaresia* were carried into eastern Europe and the Baltic Sea basin in the 950s-960s so directly, systematically, and with such great speed.

## HISTORICAL INTERPRETATION: RUS' MERCENARIES IN BYZANTINE MILITARY SERVICE PRIOR TO CA. 970

It is well known that the “Varangian Guard” (Τάγμα των Βαράγγων/*Táγμα tōn Varángōn*) was formally established by Byzantine Emperor Basil II (976-1025) in 988, when Grand Prince Vladimir I (980-1015) of the Rus' dispatched 4000 or 6000 (sources vary) Varangians/Vikings to Constantinople at the request of the emperor.<sup>41</sup> But, the use of the latter or the Rus' in Byzantine Imperial military service was more of a tradition rather than a novelty by Basil II's times; he merely institutionalized it. In fact, extant documents begin to speak of Rus' presence in Byzantine military service starting with the end of Emperor Leo VI's (886-912) reign. Specifically, 700 Rus' (Ῥῶς/*Rhos*) were recruited by the Empire as naval troops in 910 for a successful campaign in Syria, during which Laodikeia/Lattakeia was captured; and, then in 911 they were dispatched along with a smaller Byzantine fleet on a diplomatic mission to Arab-held Crete where the Imperial navy suffered a major defeat. For their services, the Rus' were paid one *kentnarion*, equivalent to 32 kilograms, perhaps of gold.<sup>42</sup> Written sources then report that seven vessels with 415 Rus' seamen were amongst the eighteen ships dispatched by the Byzantines to Lombardy, Italy, in 934. Most probably, these same forces were sent to the south of France the following year.<sup>43</sup> It is not known how and why the Rus' first came to be recruited into Byzantine military service starting in 910-911, but evidently their success in Syria impressed the Byzantines enough to sign a treaty with them in late 911, according to which the Rus' were officially invited to participate in the Imperial armies as paid mercenaries.<sup>44</sup>

Curiously, there seems to be no evident numismatic record in the Northern lands of these Rus' martial activities in the Mediterranean basin in the 910s-930s for which they received payments; Byzantine gold (nomismata) or even silver (miliaresia) coins are exceedingly rare in the Northern lands from the first half of the tenth century, not speaking of coins from other places such as Crete, Lombardy, or southern

<sup>41</sup> JOHN SKYLITZES 2010, 319; MICHAEL PSELLUS 1966, 14-15; YAHYĀ OF ANTIOCH 1932: 425-426; IOANNIS ZONARAE 1897, 553. Also, see BLÖNDAL 1978, 43.

<sup>42</sup> CONSTANTINE PORPHYROGENNETOS 2012, 651-652, 654-655, 659-660; ZUCKERMAN 2018, 327-332. Also, see ZUCKERMAN 2015: 57-98. In historiography, the 910 Byzantine campaign in Syria and the participation of the Rus' on the side of the Empire has been misunderstood or overlooked. All attention has been given to the unsuccessful mission to Crete in 911 and the Rus' participation in this fiasco. Very recently, however, Constantin Zuckerman has offered a very convincing interpretation of the sources, which place the Rus' and Byzantine navy and army in Syria in 910, or just prior to the Crete expedition; see above. For literature on the Crete campaign and Rus' participation in it, see VASIL'EV 1902, 166-172; JENKINS 1953: 277-281; MAKRYPOULIAS 2000: 353, n. 33. For *kentnarion*, see OXFORD DICTIONARY OF BYZANTIUM 1991, 1121.

<sup>43</sup> CONSTANTINE PORPHYROGENNETOS 2012, 660-661.

<sup>44</sup> THE LAWS OF RUS' 1992, 6, art. 10.

France that have not been found in the region from this period. Possibly, the absence of a numismatic trail coming from these regions of the Mediterranean can be attributed to very limited coin circulation zones of the said areas of southern Europe at the time. But, the same cannot be said of the WNE, which was well within the zone of silver coin circulation since the last decade of the ninth century.<sup>45</sup> The discovery of several hoards in northern Syria/southeastern Anatolia dating to the first two decades of the tenth century suggest that ‘Abbâsid dirhams struck across the central areas of the caliphate as well as a noticeable dose of local WNE coins circulated when the Rus’ were engaged in Laodikeia/Lattakeia.<sup>46</sup> Did few, if any, of the Rus’ return to the Northern lands with their coins after the 911 Cretan fiasco? Whatever the reason for the absence of a coin trail between southern Europe and the Northern lands, Rus’ martial activities in the Mediterranean basin in the 910s-930s do not seem to be traced numismatically as they are in the written records.

Peaceful relations and the participation of the Rus’ in the Byzantine military in the 910s-930s was interrupted by the Rus’ attack on Constantinople in 941.<sup>47</sup> Hostilities did not end then, as soon thereafter the Rus’ Grand Prince Igor’ (d. ca. 945) threatened to invade Byzantine territories south of the Danube with major forces in 944.<sup>48</sup> However, with a very favorable treaty for the Rus’, especially in regards to trade, that followed later that year, war was averted. Aside from establishing peace and commercial relations, the Treaty of 944 stipulated that “If our (Byzantine) imperial majesty wishes [to receive] warriors from you (the Rus’) for war with our opponents, and if they write about this to your Grand Prince, then let him send to us as many [warriors] as we wish.”<sup>49</sup> In this way, the Rus’ once again became Byzantine allies, an arrangement that lasted for the next quarter century. Thus, starting with the last year or two of Igor’s rule, all through his widow Grand Princess Olga’s rather prolonged regency (ca. 945-ca. 958), and lasting through much of Grand Prince Sviatoslav’s rule (effective r. ca. 958-972), the Rus’ were trustworthy Byzantine allies. As is well known, Olga (Ἐλγα/Elga), herself, traveled to Constantinople where she visited with Emperor Constantine VII. It was probably then and there that she received her baptism at the hands of the patriarch and the emperor who acted as her godfather – most likely in 946.<sup>50</sup> She and her many attendants received “gifts” of *miliaresia* dur-

<sup>45</sup> KOVALEV 2015: 334-335.

<sup>46</sup> KOVALEV 2011: 54-55.

<sup>47</sup> SKYLITZES 2010, 221-222; LIUDPRAND OF CREMONA 2007, 179-181; THE POVEŠŤ’ VREMENNYKH 2003, 254-328. Also, see ZUCKERMAN 1995, 264-268.

<sup>48</sup> THE POVEŠŤ’ VREMENNYKH 2003, 265-271.

<sup>49</sup> THE LAWS OF RUS’ 1992, 11, art. 2.

<sup>50</sup> CONSTANTINE PORPHYROGENNETOS 2012, 594-598; SKYLITZES 2010, 231; THE POVEŠŤ’ VREMENNYKH 2003, 389-411. Scholars have been at odds on the question of whether

ing their stay in the Byzantine capital during the years 946-947.<sup>51</sup> A year or two later, however, Olga refused Constantine VII's request to send him mercenaries, probably because the Grand Princess felt slighted by the emperor during her visit (perhaps because she was refused a Byzantine-Rus' dynastic tie to marry her son Sviatislav to a Byzantine princess).<sup>52</sup> Since the written sources again begin to speak of the Rus' participation in Imperial military service in 949, it would stand to reason that this breach in relations between the two sides was soon normalized (see below). Indeed, it is quite likely that Olga's strong ties to Constantinople kept her son Sviatoslav from breaking peace with the Byzantines even after he reached the age of majority in ca. 958. Some two decades after her conversion to Christianity, Olga's pagan son fought against the Danubian Bulgars in 967 at the request of the Byzantines, who promised an advance payment of 1500 pounds of gold.<sup>53</sup> It was only after Olga's death in 969 that Sviatoslav finally broke peace with the Empire when he launched an invasion of the lower Danube and engaged the Byzantine armies there in major battles between 970-971.<sup>54</sup> But, prior to then, the Rus' were at peace with the Empire and, thus, it is not surprising to find Rus' mercenaries acting as Byzantine auxiliaries in their many military operations during the course of the 950s-960s.

In the post-944 Byzantine-Rus' Treaty era, the earliest date that extant written sources speak of the Rus' serving in the Imperial armies is 949, when 629 Rus' sailing in nine ships took part in the unsuccessful Byzantine expedition to recover Crete from the Arabs, for which they were paid out *nomismata* (gold coins) and *miliaresia*.<sup>55</sup> The next reference to the Rus' in Byzantine service comes from the year 954; it is a

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Olga was baptized in Kiev or Constantinople and when this occurred. The dates that have been proposed range from 945 to 959. For the basic discussions and literature on the date of Olga's conversion, see FRANKLIN, SHEPARD 1996, 134-137. Since then, there have been a handful of other important studies that should be mentioned: KRESTEN 2000, 6-19, 33-41; ZUCKERMAN 2000: 647-672; NAZARENKO 2001, 218-310; FEATHERSTONE 2003: 241-251; TINNEFELD 2005: 551-563. I find the arguments for 946-947 most convincing, in large part because of B. Flusin's recent and convincing study (2017: 151-168), which reexamines the sources and upholds much of the generally persuasive arguments put forwards by Constantin Zuckerman that Olga's trip to Constantinople and the conversion occurred in 946-947.

<sup>51</sup> CONSTANTINE PORPHYROGENNETOS 2012, 597-598.

<sup>52</sup> THE POVEŠT' VREMENNYKH 2003, 410. Specifically, *sub annum 955*, *Povešt' vremennykh lēt* states that the Byzantine ambassadors from the emperor requested, amongst slaves, wax, and furs, mercenaries to be send to him. For the dating of this embassy, reasons for Olga's refusal, and other related issues, see NAZARENKO 2001, 301-308.

<sup>53</sup> LEO THE DEACON 2005, 111-112; SKYLITZES 2010, 265-266; THE POVEŠT' VREMENNYKH 2003, 434-435. Also, see STOKES 1961-1962, 44-57.

<sup>54</sup> LEO THE DEACON 2005, 128-133, 155-157, 180, 192-201; SKYLITZES 2010, 275-278, 281-294; THE POVEŠT' VREMENNYKH 2003, 476-512.

<sup>55</sup> CONSTANTINE PORPHYROGENNETOS 2012, 664, 667, 673-674; VASIL'EV 1902, 282, 284; MAKRYPOULIAS 2000, 353-356.

poem written by al-Mutanabbî (915-965), a bard at the court of Ḥamdânid Amîr of Ḥalab/Aleppo Sayf al-Dawla (r. 944-967), where the Rus' are noted to have fought on the side of the Byzantines in northern Syria. The poem taunts the inability of the Byzantines, Rus', and other allies that year to capture the Ḥamdânid fortress of al-Ḥadath/Adata, situated in the upper Euphrates region. After a battle that lasted from morning until the night of October 30, the Imperial army was defeated – many fighting on the Byzantine side were killed and captured by the Ḥamdânids.<sup>56</sup> Byzantine-Ḥamdânid conflict continued into the next year, most probably in which the Rus' continued to fight on the side of the Empire.<sup>57</sup> In his *Book of Warnings* (written in 955-956), the well-informed and reliable Arab historian al-Mas'ûdî (ca. 896-ca. 957) reported that Rus' garrisoned many Byzantine fortresses along the Byzantine borders with Syria in ca. 956.<sup>58</sup> The use of the Rus' in Byzantine armies, thus, changed from being that of mainly naval auxiliaries/marines in the 910s, 930s, and late 940s to that of garrisoned foot soldiers in Byzantine forts situated along the northern Syrian frontier by the 950s. Such a shift in service would, in fact, correspond well with the Byzantine escalation in the hiring of light infantry mercenaries of various ethnic backgrounds beginning with the 950s.<sup>59</sup> Perhaps prior to the Treaty of 944, the Rus' could not yet be trusted as reliable guards. Conversion to Christianity may have been one main method for earning this trust. Baptized Rus', for instance, were to be found amongst the representatives of the Imperial Naval Forces during the ceremonies held at the Imperial Palace in Constantinople in honor of the ambassadors sent by the Amîr of Tarsus in 946.<sup>60</sup> By the 960s, the Rus' were a regular part of the Byzantine light infantry (javelineer) units according to the military manual *Praecepta militaria* written by Nikephoros Phokas.<sup>61</sup> As for their imbursement for military service, in the prior decade Constantine VII specifically noted: "Cash for the expenses of the expedition, for largesse for those who fight in battle and their leaders, and for other expenses: sacks of coin in (gold) *kentēnaria* and in *miliarēsia*..." Curiously enough, the Emperor specifically had Syria in mind when he wrote these words.<sup>62</sup>

<sup>56</sup> BLACHÈRE, PELLAT 1993, 769-772; BIANQUIS 1997, 103-110. Also, see VASIL'EV 1902, 295. Ibn Zâfir (1171-1226) and Ibn al-Athîr (1060-1233) also speak of the Rus' being present at the siege of al-Ḥadath in 954, presumably using the same poem for this source; see their texts in VASIL'EV 1902, 85, 118.

<sup>57</sup> VASIL'EV 1902, 296.

<sup>58</sup> AL-MAS'ÛDÎ 1894/2014, 140-141. Russian tr. of the text, see BEILIS 1961, 23 & commentary 28-29.

<sup>59</sup> MCGEER 1995, 201.

<sup>60</sup> CONSTANTINE PORPHYROGENNETOS 2012, 579.

<sup>61</sup> MCGEER 1995, 15.

<sup>62</sup> CONSTANTINE PORPHYROGENITUS, 1990, 111; also, see 66-68, regarding Syria.



The Rus' were involved in the successful Byzantine naval expedition against Crete in 960-961, during which the Amîr of Crete was captured along with his large treasury and the rest of the wealth found on the island (including silver and gold), which was later displayed at the Hippodrome in Constantinople:<sup>63</sup> "The quantity was so great that it resembled an abundantly flowing river."<sup>64</sup> It would be amiss not to note that during the siege of Chandax (the main Cretan city), Nikephoros Phokas, the Byzantine commander, rewarded his soldiers with silver (presumably one miliaresion) for every dead enemy head they severed and brought back to him. It can be assumed that the Rus' used this opportunity seriously to "cash in," although Leo the Deacon makes specific mention that it was the Armenian corps that took this command with particular zeal.<sup>65</sup> The Rus' also participated in the unsuccessful Byzantine campaign in Sicily in 964-965.<sup>66</sup> As noted above, the Rus' were also engaged on the side of the Empire when they invaded the lands of the Danubian Bulgars in 967 at the request of the Byzantines. The last time the Rus' were known to have been involved in fighting on the side of the Empire prior to Sviatoslav's violation of Byzantine-Rus' peaceful relations in 969 was that same year when two Rus' ships took part in a Byzantine flotilla that was first dispatched to Bari, Italy, and then apparently to Syria.<sup>67</sup> In this way, it is most evident that the Rus' were very active military allies and mercenaries for Byzantium for much of the 950s-960s, or roughly the period between the Byzantine-Rus' Treaty of 944 and Sviatoslav's violation of it in 969.

Unfortunately, written sources seem to be silent regarding the participation of Rus' mercenaries for much of the 960s in the Byzantine-Ḥamdânid Wars in Syria and upper Mesopotamia, which finally ended with the Byzantine annexation and establishment of a Byzantine protectorate of Aleppo as its tributary state in 969.<sup>68</sup> Above it was noted that records relate that the Rus' were present along the Byzantine-Arab northern Syrian frontier in the 950s and perhaps 969. In light of the inadequacy and paucity of written documents, we can only make the logical assumption that the Rus' continued to be engaged in these campaigns and profit from their ventures through Byzantine payments as well as looting, bribery-ransom payments, and perhaps occasional trade with the locals during the 960s. Indeed, opportunities for plunder and acquisition of dirhams circulating in this region of theater of war were numerous. Locally-minted dirhams – struck across the eastern coast of the Mediterranean and

<sup>63</sup> LEO THE DEACON 2005, 60-69, 76-81; SKYLITZES 2010, 240-241; THEOPHANIS CONTINUATUS ch. 16, p. 48; TSOUGARAKIS 1988, 63-74.

<sup>64</sup> LEO THE DEACON 2005, 81.

<sup>65</sup> LEO THE DEACON 2005, 67.

<sup>66</sup> LEO THE DEACON 2005, 115-117; YAACOV 1984: 235-236; HALM 1996, 406.

<sup>67</sup> LIUDPRAND OF CREMONA 2007, 256-257, 259.

<sup>68</sup> For the Byzantine-Ḥamdânid Wars, see VASIL'EV 1902; CANARD 1951.



upper Mesopotamia – were quite numerous, as is attested to by the deposition of hoards in the 960s throughout the area, most probably precisely because locals buried their dirhams for safekeeping in response to the turmoil of the period.<sup>69</sup> Thus, despite the setback of 954, al-Ḥadath was taken and raised by the Byzantines in 957. Later that year and into the next, under the command of John Tzimiskes, the Byzantines seized several fortresses in the regions of Âmid, Arzan-ar-Rûm/Erzerum, Mayyâfâriqîn, and then besieged and took Sumaysât/ Samosata.<sup>70</sup> The financial gains for the victors in these conflicts are usually not reported in the Arabic sources (not surprisingly), but there are exceptions. For instance, in 950 Sayf al-Dawla's "...baggage, transport, stores, money and arms were taken, and the Byzantines became possessed of such booty as they had never seen," thanks to Leo Phokas' victory at one of the passes of the Taurus Mountains.<sup>71</sup> A decade later, when Leo Phokas again defeated Sayf al-Dawla's army in 960 near Adrassos – a site on the Cappadocian-Cilician frontier – the amîr "...ordered that the silver and gold that he was carrying with him be scattered in heaps on the path. By thus diverting the attack of the Romans, who busied themselves picking up the gold."<sup>72</sup> Much other booty (plundered Byzantine and Arab) was also taken from Sayf al-Dawla's camp and then distributed amongst the Byzantine army.<sup>73</sup> How much truth is to be found in these accounts is not clear; but, wealth of all sorts, including local dirhams, would surely have been collected by the Byzantines, including their Rus' auxiliaries, during these numerous campaigns.

Most probably, after the conquest of Crete in 961, the Rus' followed the Byzantine expedition to Cilicia that resumed in early 962 as part of the Nikephoros Phokas' campaign to reconquer Syria. That year the Byzantines captured fifty-four forts belonging to the Amîr of Tarsus as well as 'Ain Zarbah/Anazarbus.<sup>74</sup> Later that year, the Byzantines seized and raided Sayf al-Dawla's capital Aleppo (except its citadel).<sup>75</sup> There, they took ten thousand Muslim prisoners, 390 talents of silver (= ca. 12,870 kilograms or 12.87 metric tons, *sic!*) from the amîr's palace, and "...carried off stores belonging to Sayf al-Dawla and property belonging to the merchants of which quan-

<sup>69</sup> Near East/Syria?, pre-1995, *tpq* 961/62 (706 dirhams); Near East/Syria?, pre-1985, *tpq* 964/65 (119 dirhams); Syria, pre-1980, *tpq* 969/70 (58 dirhams); and, Tel Ashdod, Near Gaza, Palestine, 1935, *tpq* 969/70 (at least 90 dirhams and Byzantine miliaria); for these and other, earlier hoards, see KOVALEV 2011: 56-59.

<sup>70</sup> Yahyâ of Antioch in VASIL'EV 1902, 300-302. Ibn al-Athîr also speaks of the Byzantine raid on Mayyâfâriqîn (dating it to 956) and adds that there was a Byzantine seaborne raid on Ṭarsûs in 956 and the same town as well as ar-Ruhâ/Edessa were besieged in 959/60; see VASIL'EV 1902, 118-119.

<sup>71</sup> MISKAWAYH 1920-1921, 125 (129). Also, see SKYLITZES 2010, 234.

<sup>72</sup> LEO THE DEACON 2005, 75.

<sup>73</sup> LEO THE DEACON 2005, 75; SKYLITZES 2010, 241.

<sup>74</sup> MISKAWAYH 1920-1921, 190-191 (206-208). Also, see CANARD 1951, 805-817.

<sup>75</sup> SKYLITZES 2010, 243.

tity passes limit and description.”<sup>76</sup> That same year, Mar’ash/Germanikeia was taken. Enormous wealth was captured by the Byzantines during this 962 campaign year.<sup>77</sup> In 964 and 965, the Byzantines seized more than twenty fortresses in Cilicia, including al-Ḥadath, ‘Ain Zarbah, al-Maṣṣa/Mamista, and Ṭarsûs.<sup>78</sup> Having captured the last of these, “he (Leo Phokas or the emperor)... permitted each man to carry away a specific amount of booty,” while taking the rest of the city’s wealth himself.<sup>79</sup> In 966, amongst other cities, the Byzantines captured Membiji/Hierapolis<sup>80</sup> and in 968 Nikephoros Phokas reached as far south as the fortress of ‘Arqa/Arka – situated south of Tripoli (which he did not take) – and “...plundered it for nine whole days, and carried off from there untold wealth; and many other fortresses he captured as well...”<sup>81</sup> Amongst some of these strongholds were apparently Pagras, Synnephion, Laodikeia/Lattakeia and, if we are to believe John Skylitzes, the emperor forced Tripoli and Damascus to pay tribute.<sup>82</sup> Finally, Aleppo was taken fully, looted for what was not plundered in 962, and temporarily occupied by the Byzantines in 969.<sup>83</sup>

It is more than likely that the Rus’ continued their martial services in the Byzantine armies in these decisive and most profitable Syrian expeditions through the 960s, as they had in the 950s. Their employer, Nikephoros Phokas, surely would have had little, if any, objection to the plundering of his Rus’ mercenaries; even by the standards of the day, the emperor carried the following image of a liberal looter: “... his soldiers were committing thousands of confiscations and he did nothing to stop them. ... When he entered the city, many citizens, both high and low, were plundered without him doing a thing to bring the culprit to justice.”<sup>84</sup> Indeed, these Byzantine-Hamdânid Wars were the perfect opportunity for the Rus’ to acquire WNE dirhams. With fighting focused on northern Syria and upper Mesopotamia, the Rus’ were operating in highly monetized areas and, as part of their spoils or peaceful exchange with the locals, they came into the possession of local dirhams. For their martial services in these campaigns the Byzantines paid the Rus’ *miliaresia*. Rus’ serving in the Imperial Guard also received *miliaresia* as payment. Coins of both types found

<sup>76</sup> MISKAWAYH 1920-1921, 192-193 (209-210). Also, see SKYLITZES 2010, 243.

<sup>77</sup> LEO THE DEACON 2005, 81-82, 84.

<sup>78</sup> MISKAWAYH 1920-1921, 202-203, 212 (216-217, 225); LEO THE DEACON 2005, 101-102; SKYLITZES 2010, 256-259.

<sup>79</sup> SKYLITZES 2010, 258.

<sup>80</sup> YAḤYĀ OF ANTIOCH 1924: 805-806.

<sup>81</sup> LEO THE DEACON 2005, 119, no. 83; 122.

<sup>82</sup> SKYLITZES 2010, 260.

<sup>83</sup> LEO THE DEACON 2005, 132-134; YAḤYĀ OF ANTIOCH 1924: 823; SKYLITZES 2010, 262.

<sup>84</sup> SKYLITZES 2010, 262.

in the Northern lands, thus, can act as proxies for tracing Rus' mercenaries in the Byzantine service during the 950s-960s.

Here would be an opportune place to observe that since the mid-fifth century the late Eastern Roman/Byzantine Empire restricted the commercial outflow of silver, as well as gold and other commodities, from its territories to "barbarians" (i.e., those not within their political "orbit").<sup>85</sup> The paucity of finds of Byzantine coins in the Northern lands has, indeed, been interpreted as evidence that the Byzantines maintained this restriction during the period in question.<sup>86</sup> This limitation on the export of "forbidden" (*kekolymena*) items, however, did not imply that silver or other restricted goods could not be shipped out from the Imperial territories for non-commercial purposes: they were used as diplomatic gifts, bribes, tribute-concession payments to "barbarians," and payments for specific services rendered such as martial when need arose. It is the last of these that led the Byzantines to disburse *miliaresia* to the Rus' in the 950s-960s. Seeing that the chronology of the *miliaresia* discovered in the Northern lands corresponds perfectly with the timetable of the Rus' acting as Byzantine mercenaries in the 950s-960s, it would stand to reason that the two are directly interrelated.<sup>87</sup> When the Rus' rejoin the Imperial service as Basil II's mercenaries and guards starting in 988, the flow of *miliaresia* alongside later WND dirhams northwards resumed. Both were the consequence of the Rus' reengagement in their martial activities on the side of the Byzantines in upper Mesopotamia and the southwestern Caucasus, which is numismatically very well documented by hoards deposited in the Northern lands during the 990s-1010s.<sup>88</sup> In the intervening years of the 970s, *miliaresia* issued by John Tzimiskes (969-976) also traveled to the Northern lands, but these were most probably the byproduct of the Rus'-Byzantine Wars in the Balkans, a subject that needs to be studied in the future.

There is a way to further illustrate and elaborate on the above-proposed historical interpretation of the numismatic evidence. Specifically, there are several hoards with unique dirhams from the Northern lands that, with a good dose of certainty, can be used to trace the activities of Rus' mercenaries to the successful Byzantine inva-

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<sup>85</sup> The strict prohibition on the commercial export of goods deemed strategic included not only precious metals but also grain, wine, olive oil, pearls, gems, silks, iron, and other items; see CODEX JUSTINIANUS 1954, 4.41.1-2, 178-179; BASILICORUM LIBRI 1960, 19.1.82, 86 (7), 923; ROMAN LAW IN THE LATER ROMAN EMPIRE 1938, 23, 27, 53.

<sup>86</sup> HENDY 1985, 257; NOONAN 1980: 143-181.

<sup>87</sup> It should be noted that the connection between the import of Byzantine coins into the Northern lands and the participation of the Rus'/Varangians in Byzantine military service is by no means a novel one; see MORRISSON 1981: 131-140; HAMMARBERG, MALMER, ZACHRISSON 1989, 18; and, GLIKSMAN 2009, 113-114. What has, thus far, not been well explained is how and why these coins were brought to the Northern lands. The present study attempts to answer these questions.

<sup>88</sup> KOVALEV, IN PREPARATION.

sion and conquest of Crete in 961, the booty from which was enormous (including "...a vast amount of gold and silver... as well as barbarian coins of refined gold"<sup>89</sup>). The already mentioned Polish Dzierznica II (*tpq* ca. 976-982) hoard not only held a quarter of a kilogram of Byzantine coin fragments, but also fragmented dirhams: 100 Ḥamdānid, 14 Ikhshīdīd, and 2 Fāṭimid. However, the most fascinating coins found in this assemblage are the one fragment of a dirham struck in 952/53 at the mint of Iqrīṭish?/Crete? by 'Abd al-'Azīz (954-961) – the Amīr of Crete – and 20 fragments of dirhams issued by the Zaydī Imāms/Rassids al-Hādī (897-911), al-Naṣr (913-936), and an indeterminable imām – all minted in their Yamani city of Ṣa'da sometime during their reigns.<sup>90</sup> The only other known dirham from Crete found in the Northern lands – also minted by 'Abd al-'Azīz (in 350H-961) – has been discovered in a Swedish hoard (probably from Gotland) of unknown *tpq* date.<sup>91</sup> These two extremely rare coins minted in Crete aside, dirhams of Zaydī Imāms are not registered elsewhere in our database, with one exception: the 3 fragments of Zaydī Imāms, one struck by al-Naṣr and two others by an indeterminable imām in Ṣa'da, in the earlier-mentioned Polish Ciechanów hoard (*tpq* after 974). At first glance these very rare Zaydī Imām coins for dirham hoards of Afro-Eurasia may not seem relevant to our present study. However, arguably their appearance in the Northern lands is not accidental, considering the close relations Zaydī Imāms maintained with the Fāṭimids and the latter with the Amīrs of Crete. The Shī'a imām rulers in Yaman had such close connections with the early Shī'a Fāṭimids of north Africa that they even struck their coins in the name of Fāṭimid caliphs in early 910s.<sup>92</sup> The Fāṭimids, themselves, were involved in the affairs of Crete, although in 961 they supported its amīr only "morally:" al-Mu'izz (953-975), the Fāṭimid caliph, sent a threatening letter to the Byzantine Emperor and called for organizing a naval force together with the Ikhshīdīds to counter the Byzantines, which in the end failed to materialize.<sup>93</sup> Be that as it may, it can be argued that the close ties between the Zaydī Imāms, Fāṭimids, and the Amīrs of Crete brought the former's coins to the Island from where they came to be exported by the Rus' to the Northern lands as a result of looting or prisoner ransom payments in 961. Chronologically, the coins in question (those of the Amīr of Crete and Zaydī Imāms) not only do not contradict such a possibility, but fully support it, as the *tpq* for these dirhams is 961, the year Crete was captured and mark the death of 'Abd al-'Azīz. Probably not coincidentally, the Fāṭimid dirhams of Imām al-Mu'izz (struck in the Tunisian mints of al-Qayrawān, al-Manṣūriyya, or al-Mah-

<sup>89</sup> LEO THE DEACON 2005, 81.

<sup>90</sup> KMIETOWICZ 1995: 21-28.

<sup>91</sup> MILES 1970, 81-83.

<sup>92</sup> See ALBUM 1998, 56.

<sup>93</sup> YAACOV 1984: 236; HALM 1996, 405.

diyya) discovered in the Northern lands began to occur in hoards starting with the above-mentioned Briansk, *tpq* 969/70, deposit. Quite possibly these coins were also brought from Crete as the result of the Rus' martial activities on the Island in 961.

In sum, it is very likely that 'Abd al-'Azîz's Cretan and Zaydî Imâm Yamani dirhams were carried by Rus' mercenaries alongside other coins – be they dirhams struck in Syrian mints or those in upper Mesopotamia or Byzantine-issued *miliaresia* – to the Northern lands directly from the theater of Byzantine-Arab Wars of the 950s-960s in the eastern Mediterranean via the Black Sea and the Dnepr River. The Rus' chiefly obtained these coins through their martial activities in these wars, i.e., as payments for their services, loot, ransom, and perhaps some form of commercial exchange with the locals. Starting with the early 950s, on their return to the Baltic – Sweden in particular – Rus' along with their parcels of coins (WNE dirhams and *miliaresia*) travelled directly and immediately up “The Way From the Varangians to the Greeks” route, along which few, if any, of these coins were left behind. This would explain why nearly all WNE dirhams and *miliaresia* deposited in the 950s come from Sweden, most notably on the islands of Gotland, Åland, and Öland. But, in the 960s both types of coins came to be deposited or partially dispersed into local circulation in a broader area of the Northern lands, thereby entering the local coin-stock which eventually came to be enclosed into regional eastern European, southeastern Baltic, Polish, Finnish, or other hoards. However, as in the 950s, the majority of these coins were carried to the main Rus' mercenaries' base of operations – Sweden. Quite probably, during the 950s-960s some of these mercenary Rus' or others who joined them as Byzantine paid soldiers came to permanently settle in other areas of the Northern lands, which would explain, in part, the greater distribution of both coin types across the region as the century progressed. However, all these martial activities came to an end in 969 when Rus' Grand Prince Sviatoslav broke the longstanding peace treaty signed in 944 with the Byzantines by attacking Danubian Bulgaria that year, leading to a Rus'-Byzantine War that ended in 971 with another peace accord. Unlike the 944 Treaty, however, this one had no stipulations regarding the dispatch of Rus' mercenaries to the Byzantines.<sup>94</sup> As noted above, it was only in 988 that Rus' mercenaries were again requested by the Byzantines. It is for this reason that from 969 until 988, written sources do not speak of Rus' mercenaries participating in the Byzantine military enterprises, nor is there any numismatic evidence that would suggest differently. Finally, it should be underscored that unlike the other two major tenth-century silver routes operating between the Islamic world and the Northern lands (“The Volga Bulġâr Way” and “The Khazar Way”), the route that brought WNE dirhams and *miliaresia* via “The Way From the Varangians to the Greeks” was non-commercial, as this coined silver had its origins in martial activities and military services rather than trade.

<sup>94</sup> THE LAWS OF RUS' 1992, 13.

## CONCLUSION

In conclusion, this study argues that starting in ca. 950 and lasting until ca. 969 “Western Near Eastern”/WNE dirhams (minted in Egypt, Syria, Crete, and upper Mesopotamia/al-Jazira) came to be infused into the Northern lands (eastern Europe, the southeastern Baltic, Poland, Germany, and Fennoscandia) in a relatively brief and small, but historically significant, wave of imports. It is argued that these coins were brought to the Northern lands not from the two key distributors of tenth-century Islamic silver – Iran and al-‘Irâq brought there by “The Khazar Way” route and Sâmânid central Asia via “The Volga Bulġâr Way” commercial artery, but directly from the eastern Mediterranean via the Black Sea and the Dnepr River (i.e., the famous route “The Way From the Varangians to the Greeks”). From the early 950s, Byzantine *miliaresia* joined in this flow of Islamic silver from the eastern Mediterranean and upper Mesopotamia northwards. Using the information provided by Arabic, Greek, and Rus’ written sources, it is argued that these WNE dirhams and Byzantine *miliaresia* were brought to the Northern lands not as the result of trade, but because of martial activities (looting, ransom, and payments) of Rus’ mercenaries in Byzantine armies fighting the Arabs in the 950s-960s in Crete, Cilicia, Syria, and upper Mesopotamia. Thus, these coins supplement the rather laconic and cryptic written accounts concerning the activities of the Rus’ mercenaries in the 950s-960s, who after 988 came to be officially established and known as the Byzantine “Varangian Guard”.

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## APPENDIX

TENTH-CENTURY HOARDS WITH WNE DIRHAMS  
AND PRE-970 MILIARESIA DISCOVERED IN THE NORTHERN LANDS

Hoards*	Pre-970 WNE dirhams and their frags.	Pre-970 Byzantine coins and their frags.
<b>EASTERN EUROPE</b>		
PAL'TSEVO, Tver' oblast' (1923), <i>tpq</i> 913/14	1	0
KOZ'IANKA, Vitebsk oblast' (1973), <i>tpq</i> 944/45	2	0
BRIANSK, Briansk Region (2001), <i>tpq</i> mid-960s	0	1
SHPILEVKA/ SHPYLIVKA, Sumy oblast' (1887), <i>tpq</i> 966/67	1	1
BRIANSK REGION, Briansk oblast' (2005), <i>tpq</i> 969/70	12	18
KASHIN, Kalinin oblast' (1937), <i>tpq</i> 961-976	1	0
NOVGOROD, Novgorod oblast' (1953), <i>tpq</i> 971/72	5	0
NOVAIA MEL'NITSA, Novgorod oblast' (1924), <i>tpq</i> 973/74	1	0
NEAR THE KHUTYN' MONASTERY, Novgorod oblast' (1983), <i>tpq</i> 973/74	2	0
SANSKOE, Riazan' oblast' (2011), <i>tpq</i> 973/74	2	1
NOVGOROD, Novgorod oblast' (1956), <i>tpq</i> 974/75	3	1
KOLOMNA III, Moscow oblast' (2011-2012), <i>tpq</i> 975/76	1	0
ERILOVO, Pskov oblast' (ca. 1930), <i>tpq</i> 976/77	8	1
KOLOMNA IV, Moscow oblast' (2015), <i>tpq</i> 976/77	2	0
ALONG THE SHORE OF THE LOVAT' RIVER, Pskov province (1802 or 1803), <i>tpq</i> 976/77 or 978/79	2	0
STARYI DEDIN, Mogilev oblast' (1926), <i>tpq</i> 978/79	2	0
SIDOROVKA, Riazan' oblast' (1960) <i>tpq</i> 978/79	1	0
CHERNIGOV, Chernigov oblast' (2012), <i>tpq</i> 979/80	?	150
SAVKOVO, Vladimir oblast' (1997) <i>tpq</i> 970/71-979/80	1?	0
BEL'KOVKA, Pskov oblast' (1901), <i>tpq</i> 980/81	1	0

\* Quantities provided here per hoard of both coin types are at the absolute minimal, as sometimes all that is known is that at least one WNE dirham or miliaresion was present in the hoard.

BORKI, Riazan' oblast' (1958), <i>tpq</i> 982/83	1	0
KOROSTOVO, Riazan' oblast' (1891), <i>tpq</i> 985/86	1	0
NEAR BOLGAR, Tatarstan (2010), <i>tpq</i> 985/86	3	0
KRASNAIA, Vitebsk oblast' (1896), <i>tpq</i> 986/87	3	0
BELYI, Tver' oblast' (2011), 988/89	1	0
SHELEBOVO, Vladimir oblast' (1852), <i>tpq</i> 990	1	0
SMOLENSK REGION, Smolensk oblast' (2006), <i>tpq</i> 995/96	1	0
POCHINKOVO Smolensk oblast' (1998, 2000), <i>tpq</i> 990s	1	0
BARSUKI, Smolensk oblast' (1998), <i>tpq</i> ca. 999	1	0
<b>SOUTHEASTERN BALTIC</b>		
NEAR REVAL/TALLINN Estonia (before 1789), <i>tpq</i> 942/43	1	0
MÄKSA (MEKSHOF) Estonia (1878), <i>tpq</i> 947/48	2	0
SAUE (FRIEDRICHSHOF) Estonia (1913), <i>tpq</i> 951/52	1	2
PARIVERE, Estonia (1924), <i>tpq</i> 952/53	0	1
MÄKSA (MEKSHOF) Estonia (1878), <i>tpq</i> 954/55	2	0
“MEEKSI” (MÄXHOF)?, Estonia (1884), <i>tpq</i> 963/64?	1	0
RATHSHOF, Estonia (before 1838), <i>tpq</i> 965 or 967/68	1	0
VARA (WARROL), Estonia (pre-1847), <i>tpq</i> 969/70	1	0
ÄÄSMÄE (ESSIMÄGGI), Estonia, 1845, <i>tpq</i> , 967/68	1	0
SALASPILS LAUKSKOLA, Latvia (1967-1975), <i>tpq</i> 973/74	1	0
ERRA-LIIVA, Estonia (1933-1939), <i>tpq</i> 977/78	1	1
KEHRA, Estonia (1940), <i>tpq</i> ca. 979	13	3
EASTERN LATVIA, Eastern Latvia (mid-1970s), <i>tpq</i> 983/84	1	0
SAAREMAA II, Estonia (pre-2016), <i>tpq</i> 984/85	4	0
<b>POLAND</b>		
OLIWA, Pomerania (1880), <i>tpq</i> 951/52	1	0
TURWI/TUREW, Wielkopolska (1846), <i>tpq</i> 955	0	3
PUCK, Pomerania (1853), <i>tpq</i> 965	2	0
PIASKI-DRAMINO, Pomerania (1900), <i>tpq</i> 950-967	1	0
MAURZYCE-RUSKÓW, Polska Środkowa (1933), <i>tpq</i> 971/72	2	1
MAGNUSZEWICE, Wielkopolska (1873), <i>tpq</i> ca. 967	0	2
CIECHANÓW, Mazowsze (1982), <i>tpq</i> 974	19?	8+6
SIEROSZEWICE, Wielkopolska (1901), <i>tpq</i> ca. 976	4	0
ZALESIE, Wielkopolska (1922), <i>tpq</i> ca. 976	16	1

DZIERZNICA, Wielkopolska (1909), <i>tpq</i> 976-982	116	82
OBRZYCKO, Wielkopolska (1842), <i>tpq</i> 978-983	1	5
MOSKORZE, Pomerania (1931-1932), <i>tpq</i> ca. 991	1	0
RADZIKÓW I, Silesia (1884), <i>tpq</i> ca. 993	1	0
WICIMICE, Pomerania (1878), <i>tpq</i> ca. 996	1	0
POŁCZYŃ-ZDRÓJ, Pomerania (1886), <i>tpq</i> ca. 996	1	0
MURCZYN, Wielkopolska (1893), <i>tpq</i> ca. 999	1	0
<b>FINLAND (PROPER)</b>		
VANHAKARTANO, Satakunta (1926), <i>tpq</i> 976/77	2	0
HADVALA, Piikkiö parish (1949), <i>tpq</i> 998	1	0
<b>DENMARK</b>		
KANNIKEGÆRDE, Bornholm (1996), <i>tpq</i> 952/53	1	0
JYNDEVAD, Sønderjylland (1863), <i>tpq</i> ca. 955-960	0	1
KONGENS UDMARK, Bornholm (1861), <i>tpq</i> ca. 975	4	6
TARUP, Fyn (1862), <i>tpq</i> 976/77?	1	0
<b>GERMANY</b>		
WATERNEVERSDORF, Schleswig-Holstein (1873), <i>tpq</i> ca. 976-995	6	1
ALEXANDERHOF, Brandenburg (1901), <i>tpq</i> ca. 996	0	3
NIEDELANDIN, Brandenburg (1900), <i>tpq</i> ca. 996	1	2
<b>NORWAY</b>		
HOLTAN, Sør-Trøndelag (1905, 1913, 1920), <i>tpq</i> 950/51	1	0
TRÅEN (NUMEDAL), Buskerud (1906), <i>tpq</i> ca. 991	1	1
<b>SWEDEN (INCLUDING ÅLAND ISLANDS)</b>		
TRIBERGA, Öland (1960), <i>tpq</i> 930/31	1	0
GANNARVE, Gotland (1914), <i>tpq</i> 944/45	1	0
TÄNGLINGS II, Gotland (1941), <i>tpq</i> 945/46	1	0
NÄR, Gotland (1846, 1849), <i>tpq</i> 945-959 (probably 950s)	1	2
SMISS, Gotland (1878), <i>tpq</i> 951/52	3	3
ÄNGES (ENGES), Gotland (1869, 1870, 1874, 1877, 1914-1915), <i>tpq</i> 952/53	1	0
NORR NÄNÖ, Öland (1870), <i>tpq</i> 952/53	0	1 or 2
MULLVALDS, Gotland (1853), <i>tpq</i> 953/54	1	0
KASTLÖSA, Öland (1952), <i>tpq</i> 953/54	1	0
RANGSARVE, Gotland (1950, 1980, 1983, 1990), <i>tpq</i> 953/54	2	0

YXNARUM, Blekinge (1902), <i>tpq</i> 954/55	1	0
STORA TUNE, Gotland (1891, 1893, 1984, 1985), <i>tpq</i> 954/55	2	0
GULLARVE, Gotland (1938, 1977-1978), <i>tpq</i> 954/55	1	0
ÅSGÅRDA, Åland, Finland (1869), <i>tpq</i> 955/56	1	1
TJÄNGVIDE, Gotland (2009), <i>tpq</i> 955/56	1	0
SÖREGÅRDE, Småland (1903-1910), <i>tpq</i> 956/57	1	0
RINGS, Gotland (1970), <i>tpq</i> 956/57	1	0
STORA VELINGE, Gotland (1968, 1971, 1982), <i>tpq</i> 957/58	1	0
BIRKA, Uppland (1873), <i>tpq</i> 957/58	1	1
EKESKOGS, Gotland (1884), <i>tpq</i> 957/58	3	0
HÄFFINDS, Gotland (1975), <i>tpq</i> 957/58	3	1
EMKARBY, Åland, Finland (1933), <i>tpq</i> 958/59	1	0
ROMMUNDS, Gotland (1937), <i>tpq</i> 958/59	1	0
EKETORP, Närke (1950, 1985), <i>tpq</i> 958/59	2	0
HAGEBY, Gotland (1861), <i>tpq</i> 958/59	4	0
BUTERS, Gotland (1869), <i>tpq</i> 959/60	1	0
VÄSTERGÅRDE, Gotland (2006), <i>tpq</i> 961	2	1
LIK NATTE, Gotland (1903, 1977), <i>tpq</i> 961/62	2	0
LUNDS II, Gotland (1937, 2015), <i>tpq</i> 962-965	4	0
BIRKA, Uppland (1872), <i>tpq</i> 963/64	6	1
STORA VIKERS, Gotland (1993, 1998, 1999, 2000, 2002, 2005, 2007), <i>tpq</i> 963/64	6	0
SMEDBY, Östergötland (1967-1968), <i>tpq</i> 964/65	5	0
KAUNGS, Gotland (1887), <i>tpq</i> 965	5	
ALSKOG VICARAGE (PRÄSTGÅRDEN), Gotland (1840), <i>tpq</i> 965	1	0
NÄSBY, Södermanland (1892), <i>tpq</i> 967/68 or later	1	0
MANNEGÅRDE I, Gotland (1876, 1877), <i>tpq</i> 969/70	4	0
RÖCKSTA, Uppland (1889), <i>tpq</i> 969/70	2	0
TALBY, Södermanland (1936), <i>tpq</i> 969/70	4	0
UGGÅRDS I, Gotland (1856), <i>tpq</i> 971-974	1	0
BRYOR, Gotland (1941), 972/73	4	2
GÖSTAVS (GUSTAFS), Gotland (1929, 1980, 1986), <i>tpq</i> 972/73	1	0
BOTVALDE, Gotland (1899), <i>tpq</i> 972/73	1	0
GRAUSNE I, Gotland (1882, 1885, 1888, 1945, 1978, 1990), <i>tpq</i> after 973	3	0
BOTES, Gotland (1860), <i>tpq</i> after 973	11	6+2?
MÅRTENS, Gotland (1907), <i>tpq</i> after 973	3	0



LILLA RONE, Gotland (1861), <i>tpq</i> 973/74	2	2
GÅSHAGEN, Gotland (1869 and later), <i>tpq</i> ca. 975	3	2
SKÅNE PROVINCE, (by 1860), <i>tpq</i> 976/77	1	0
FÅGELSÅNGEN, Södermanland (1924), <i>tpq</i> 976/77	3	0
ÖVIDE/UNGHANSE, Gotland (1884), <i>tpq</i> 976/77	4	1
STÄVIE (RAMSÅKERN), Skåne (1853-1857), <i>tpq</i> after 977	2	0
SUDERBYS/SORBYS, Gotland (1870), <i>tpq</i> ca. 978	0	1?
SIGTERS (LINGVIDE), Gotland (1955, 1981, 1982, 1983, 1990, 2014), <i>tpq</i> after 978	3	1
KVIE, Gotland (2010), <i>tpq</i> after 979	1	0
BOLS (BOTELS), Gotland (1879), <i>tpq</i> after 983	30	16+5?
TÄRNÖ, Blekinge (1862), <i>tpq</i> 983-996	1	0
STORA HULTE, Gotland (1874), <i>tpq</i> after 991	1	0
TIMANS, Gotland (1954 and later), <i>tpq</i> ca. 991	4	3
BROA, Gotland (1913), <i>tpq</i> ca. 991	2	1
ALSKUTE, Gotland (1950s), <i>tpq</i> ca. 991	2	0
ÖSTJÄDRA, Västmanland (1917), <i>tpq</i> ca. 991	11	2
NORRKVIE II, Gotland (1834), <i>tpq</i> after 991	1	2
BROE III, Gotland (1913), <i>tpq</i> after 991	2	0
VIVLINGS, Gotland (1925), <i>tpq</i> after 991	3	0
LAUHAGE, Gotland (1877), <i>tpq</i> after 991	1	0
FÖLHAGEN (SMIDGÅRDE), Gotland (1866), <i>tpq</i> ca. 991	6	2?
HÄGVALDS/ HÄGVALLS, Gotland (1943), <i>tpq</i> ca. 991	12	0
RIDDARE, Gotland (1985), <i>tpq</i> ca. 991	1	0
KVARNE (LILLÄNGEN), Gotland (1906 and later) <i>tpq</i> ca. 994	12	1
SKAVSTA, Södermanland (1913, 1973), <i>tpq</i> after 995	1	0
HORDA, Småland (1828), <i>tpq</i> after 995	1	0
MALLGÅRDS, Gotland (1940, 1980, 1981 and later), <i>tpq</i> ca. 996	1	0
HALLEGÅRDE, Gotland (1901 and later), <i>tpq</i> after 996	4	0
KVARNE (KVARNA) I, Gotland (1839), <i>tpq</i> after 997	3	0
HÄGDARVE, Gotland (1931), <i>tpq</i> ca. 997	4	1
BJÄRS, Gotland (1879), <i>tpq</i> 997/98	1	0