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## The Monetary System of The Golden Horde \*

'The Monetary System of The Golden Horde' was the last book of a prominent Russian historian, the Late G. A. Fedorov-Davydov (1931–2000). The author of many books and articles, G. A. Fedorov-Davydov was a recognised expert in Russian and Tatar numismatics, archaeology and history. The Golden Horde and its monetary system was the focus of his scientific interests and, in many respects, this book sums up the author's views on the history of the Horde coinage which was closely connected with the political and economic history of the region.

The Golden Horde coinage was quite developed, silver and copper coins having been struck in great numbers. The coins were minted on flattened pieces of metal by special coin stamps. Flattened blanks prepared for minting are occasionally found in hoards and cultural layers of the Golden Horde settlements.

Weight units, *miskal* and *dannik*, are important for the establishing of standard weights of the Golden Horde coins. *Dannik* weighed 0.78 grams. An anonymous 14th century report on the Khorezm monetary system along with the actual weights of Khorezm coins enables us to establish that 6 *danniks* were equal to 1 *miskal* with a weight of 4.68 grams. Weights of ten and hundred *miskals* have been found in a number of the Golden Horde towns.

The first coins of the Golden Horde were struck in 1240-1250 in the town of Bolgar. These coins feature the name of the Late Baghdad Caliph Nasir Lid Din and, later, names of the Mongol rulers — Great Khan Mongke (1251–1259) and Arig-Buga (1259–1264). In the course of the 13th century the weights of the silver coins gradually decreased from 1.00-1.25 g to 0.40-0.50 g.

The coins became anonymous, they were minted in Bolgar and featured a double-pointed prong -a kin tamga of the Batu clan - with an epithet 'chief' or 'highest'.

Mongke-Timur Khan issued his own coins, the earliest dating to 677 AM (1272–1273). This coin-striking reflected almost a complete separation of *ulus* Jochi from Mongol rulers.

The maximum weight of Mongke-Timur's coins (both anonymous and bearing his name) amounted approximately to two *danniks*, i. e. 1.45-1.60 g. From 1280 onwards lighter anonymous coins (1.3-1.4 g) were minted. Mongke-Timur's successors did not place a Khan's name on the coins which featured only a *tamga* of the Jochi clan.

Copper coins younger than those bearing the Mongke name are unknown in the 13th century deposits in the Middle Volga region and such coins probably were not minted after Mongke's reign.

<sup>\*</sup> Translated by L. I. Smirnova (Holden).

The second centre of the early Juchid coinage was the Crimea, where the first coins were struck from 685 AM (1265-1266). Initially, the coin weight was close to half a *miskal* (2.00-2.20 g), but it was reduced to 1.45 g by the end of the 13th century. These coins feature the names of the towns of Salhat and Sakchi (on the Lower Danube). Copper coins bearing Juchid *tamga* and no Khan's name were minted in the Crimea from 1270 onwards.

At the same time, silver coin-striking occurred in Sarai, the capital town of the Golden Horde, and later in Khorezm, Uvek and Azak. Until the first decade of the 14th century, these towns issued only silver coins, copper coins being either minted in small numbers only or not struck at all. Bolgar, Bilar, Sarai and Khorezm also struck silver coins of a half or a quarter of the standard weight, so called small change coins.

In the reign of Toqta Khan a reform to unify coinage was carried out and in 710 AM (1310–1311) many new silver coins were minted in Sarai-al-Mahrus. The old coins were probably withdrawn from circulation and exchanged for the new ones with some benefit for the state treasury.

Local coin-striking was suppressed and during the reign of Janibek Khan such towns as Bolgar and Azak, as well as the Crimea centres, ceased minting their own coins. Instead, unified (in weight) silver coins were issued which were struck in Sarai and later in Gulistan. Up until the 1370s the weight of these coins changed but little from 1.48 g to 1.54 g, that being approximately equal to a third of a *miskal* or two *danniks*.

From 1360 to 1370 Azak, and possibly the nomadic court of the Horde in the Lower Dnieper and the Azov steppe, resumed minting coins in abundance. The standard weight of these coins was different from that of Sarai coins, which implied the end of unified currency of the Golden Horde. A new monetary crisis began and the shortage of silver coins became apparent.

In 1379 and 1380 Toqtamysh-Khan carried out a monetary reform and established a unified standard weight of silver coins. Once again a great number of new coins were struck. However, the reform was fully implemented only in the Lower Volga region, whereas in other areas the new coins coexisted with the old ones and were exchanged at spontaneously fixed rates.

After a currency reform of Toqta in 1310 almost all towns minted copper coins in the course of the 14th century.

In 802 AM (1398–1388) in the reign of Edigey, the third state monetary reform was carried out. However, like the previous reforms this one did not establish a unified currency. In the early 15th century the weight of coins struck in New Bolgar was different from that of the coins minted in the southern cities of the Golden Horde. In the 15th century the former outweighed the latter by a factor 1.5:1.

In the course of the 15th century new coin-striking centres emerged — Birdi-Bazar, Horde-Bazar and others. It is probable that those were temporary nomadic courts. The weight of coins minted there corresponded at times either to the northern or to the southern standards, which depended on the movements of the nomads. In the Crimea coins were minted in the old centres and the towns on the southern coast (Kaffa). From 1424 onwards there appeared new bilingual coins, so called Tatar-Genoese coins which featured *tamgas* of the Crimea Khans of the Girey clan, the later examples bearing the so-called Genoese portal, the symbol of the bank of Genoa.

Silver and copper coins of the Golden Horde were very diverse, coins minted at the same time in various centres differing considerably from one another. All the coins, however, feature the name of a Khan and the name of a coin-striking centre on the obverse and the date on the reverse side. If the coin is anonymous, the side bearing a religious legend or a *tamga* is considered to be obverse. When the coin is anonymous and features an image, the reverse side is the one bearing an image. Occasionally, old stamps were used for the reverse side, whereas the obverse side features the name of a new Khan. At times the date occurring on the reverse side seemingly contradicts the name of a passed away or dethroned Khan featured on the obverse side.

The *tamga* of the Batu clan symbolising the unity of the ruling clan as well as the common property of the state for the ruling clan, was commonly placed on 13th century coins and on provincial coin issues of the first third of the 14th century. This symbolic meaning was also emphasised by large numbers of anonymous coins. *Tamga* in the form of a two-pointed prong was retained on the coins minted in Bolgar, Mokhsha and the Crimea up until the reign of Janibek, marking the disappearance of this image for the rest of the 14th century. Different variants of the *tamga* are found occasionally on 15th century coins. The removal of the *tamga* from 14th century coins can be seen in connection with the growing strength of the ruling dynasty and the predominance of the dynastical principle over the old concept of common possession of land by all Batu's descendants. Principles of the throne succession also reveal these changes.

A great variety of religious inscriptions have been encountered on 13th century coins, especially on those from the Bolgar region: 'Symbol of Faith', 'Kingdom to God', 'Humility to God, One and Almighty', etc. Amongst 14th century coins, religious symbols are found mostly on the Sarai silver coins. Unlike in Muslim European centres of the Golden Horde, in Khorezm Muslim inscriptions were placed only on anonymous coins. In the 13th century Khorezm, *tamgas* were always featured on anonymous coins, usually along with religious inscriptions. This can be seen as a certain proclamation of separatist ideas of the local authorities which in the mean time could not go as far as to strike their own coins.

Benevolent greeting and piety maxims are also often featured on silver coins, predominantly on 13th century specimens from the Bolgar region reading: 'Life is short, use it for godly deeds', 'Be happy', 'Temperance substitutes for wealth', etc.

The design of copper coins was simpler: they conventionally bear just the date and the mint. The name of a Khan is featured rarely and religious inscriptions occur hardly ever. The religious and dynastic symbolisms are thus somewhat weakened here, whereas the urban aspect is obviously emphasised.

The inscriptions are usually written in Arabic and with Arabic letters. Names of Khans and the town of Bolgar are sometimes written with Uigur letters. A few Turkic inscriptions (written in Arabic or Uigur letters) have been encountered. Turkic texts written with Arabic letters usually informed on the issue of a new coin and on the ratio between copper and silver currency and weight units, often with an additional 'by the royal order'. Since these were crucial matters, they were written in the language coherent to the common people.

The names of the cities often occur with certain cliched epithets 'Al-Jadid – New', 'al-Makhrusa – Guarded by God'.

The dates are usually written in figures, very rarely in words, digits being often misplaced in the sequence.

Silver coins were called '*dirhams*', copper — '*puls*' and golden — ' $d\bar{t}n\bar{a}rs$ '. Sometimes these words were placed on the coins.

Thirteenth century silver coins and 14th century coppers coins (puls) often feature images

of birds, fishes and beasts (predominantly predators). Images of a lion against the background of the rising sun and a double-headed eagle were borrowed from Iranian coinage.

The metrology of the Golden Horde coinage can be reconstructed for the period of its ultimate stability (1310-1360). A silver coin, *dirham* (or '*yarmak*' in Turkic) amounted for two *danniks* (units of weight) equal to 1/6 of a *miskal*. At the same time, a Khorezm *dirham* was equal to 2.5 *danniks*. Six *dirhams* were equal to a  $d\bar{n}n\bar{a}r$  ('*alt* $\bar{n}n$ ' in Turkic).  $D\bar{n}n\bar{a}rs$  equal to six *dirhams* were used in Hulagulad Iran and in Jagataid Central Asia, where large coins equal to six *dirhams* were struck.

A copper coin -pul — was equated with *danniks:* sixteen *puls* were equal to one *dannik* and this was by inscriptions on many copper coins. This ratio is also referred to by Pegalotti, a Florentine banker who visited the town of Azak in the first half of the 14th century.

In the course of the 14th century a so called 'open' or 'free' striking of coins out of silver raw material brought to the mint by private customers is believed to have existed in the Golden Horde. These people would receive back a certain number of coins per unit weight of the raw material. These coins were of a fixed weight and metal quality and a few of them were retained by the mint as a deduction for their services and as a state tax. This custom was also described by Pegalotti.

'Free' coin-striking was practised in the Golden Horde only during a period when there was silver in abundance. The inflow of silver was guaranteed by levies paid to the invaders by the Russian principalities. The abundance of silver caused a low gold to silver ratio. In coeval Central Asia and Iran this ratio was higher. Gold or silver, evaluated too low in the monetary system, were exported to the areas where they were more expensive, or entered the earth as hoards. A certain shortage of silver lead to a situation in which the raw silver market price was higher than the value of silver contained in coins (fixed by the old other metals/silver ratio). In this case it was more profitable to withdraw coins from circulation and keep them as a bulk of precious metal. Such disproportions occurring occasionally in the Golden Horde demanded an increase in the value of silver in a coin. A lighter coin retained the same nominal value as a previous heavier coin, which in turn resulted in rapid and spontaneous loss of the market value of lighter, inferior value coins.

The Golden Horde Khans and their financial advisors made certain corrections of the coin circulation by means of constant manipulations with copper coins. Every now and again the treasury would issue newly designed *puls*, often bearing the inscription 'a new *pul*'. The use of old puls was likely to be forbidden and the population had to exchange them for new coins, not without a certain loss for themselves. In order to make the new puls look more attractive, they were made heavier, more 'solid'. Generally speaking, the weight of *puls* was far from standardised, which leads to a conclusion that they circulated with no concern about their weight and under a certain pressure of a forced fixed rate, sixteen *puls* equalling one *dannik*.

In provincial towns, this rate was probably fixed by the local authorities and was valid only in those towns and their hinterland.

Since *puls* were only symbolic in value, they could not be kept for a long time. Copper coins are rarely found in hoards, however they are often uncovered from cultural deposits of the Golden Horde towns.

Having traced the role of copper coins in the Golden Horde coinage as rate regulators and stabilisers for silver *dirhams* within the common practice of 'open' coin-striking of mints, we

come to better understanding of the link between the absence of copper mint in the Volga-Bolgar region during the 13th and 15th centuries and coeval instability of *dirham* weights. In the 15th century when payments from the Russian principalities were often delayed and the shortage of silver became apparent, the 'open' coin-striking based on silver brought by the population ceased and was replaced by the state centralised supply of silver to the mints. This made unnecessary the constant weight of *dirham*. It was possible in times of silver shortage to decrease the amount of silver in a coin, and thus its weight, whilst retaining the nominal value. The mint of copper coins in large numbers was not needed any more.

Hoards are the main source for the study of the monetary system. They are found in clay and metal vessels, sometimes wrapped in textile. At times it is possible to see the reason for the hoard deposition in connection with certain historical events. Hoards reveal a gradual replacement of old coins by the new ones, whereas reforms cause a sharp change of coins.

Four periods can be distinguished in the history of the Golden Horde coinage.

First period (second half of the 13th century up to the reform of Toqta Khan of 1310–1311).

During this period there were a few shifts in circulation of silver coins in the Volga-Bolgar region: the earliest coins bore the names of Caliphs, then coins featuring the names of great Mongol Khans appeared, later replaced by coins bearing the names of the Golden Horde Khans and anonymous coins. The number of anonymous coins increased in the 1290s and, as the hoards reveal, these coins circulate almost exclusively within this region. A similar situation occurred in the Crimea, where local coins were practically unknown outside the peninsular and the area to the north-west of the Black Sea.

Second period (1312–1379) stretched in time from the reform of Toqta Khan up to the reform of Toktamish of 1280–1281. Thirteenth century coins disappeared almost completely from circulation. Silver coins were minted in Sarai and Sarai-al-Makhrusa during the reign of Janibek Khan. Coin-striking was carried on, however, at the same time in Bolgar, Azak, the Crimea and Mokhsha. Janibek Khan and Khans in the 1360's minted coins with stable weight in abundance in Sarai, Sarai-al-Makhrusa and Gulistan. These coins reached the North Caucasus, the Lower Dniester region, the Crimea and the Mordva region in the Middle Volga in quantities and forced the local *dirhams* out of circulation.

The highest number of hoards were deposited in the 1360s, the period of distemper and feuds in the Horde. Azak resumed minting coins. The regions of Azov and Lower Dniester became 'numismatic provinces'. Coins struck in the capital town ceased to dominate in most parts of the state.

Third period (1380–1398) began with the reform of Toqtamish of 1380–1381. From then on all European towns of the Golden Horde and the Transcaucasian region struck coins of a standard weight bearing Toqtamish's name. All over the land old silver coins started disappearing and were replaced with the new ones. In the hoards of this period Toqtamish's coins account for more than 50% of all coins.

However, the implementation of this reform was limited. Toqtamish's coins are rarely found in the deposits of the Golden Horde towns. Town markets declined, silver was slipping away from the transit trade and merchandise capital and entering the ground. The hoards of this period were deposited along the Volga, Dnieper and Oka river trade routes. Fourth period began with the reform of 1399–1400. It did not even lead to a temporary unification of the currency. The hoards of the first quarter of the 15th century reveal a more intensive fragmentation of the coin circulation. Coins bearing Toqtamish's name were replaced with new coins featuring the names of Shadibek and, later, Pulad and other Khans. Scarce 15th century hoards in the Lower Volga region contain almost exclusively new coins struck in various mints: Azak, the Crimea, Kaffa, the Horde, Hadji-Tarhan. Coins struck in Sarai are found rarely.

Coin circulation in the Volga region declined. Coins served mainly in the transit trade along the Volga River. In the second quarter of the 15th century coins ceased to circulate in the Lower Volga region: no hoards or coins from urban cultural deposits dated to this period are known. The mid to late 15th century saw attempts at minting coin in Tadji-Tarhan, but these coins inevitably passed away to the areas, where coin circulation was retained. One of them was the Kazan Khanate, which struck its own silver coins and where also coins from Russian principalities of Moscow and Nizhniy Novgorod circulated.

In other regions of the Golden Horde coin circulation was retained to a certain extent. Old Juchid coins were still in use, but they featured additional new stamps verifying the fact that these coins were issued into circulation by the authorities. Some regions used coins from the Crimea, Azak, and the Horde, where coin-striking continued in the 15th century. Western European coins reached western parts of the state. Foreign coins, Trapesund, Byzantine and Italian, had penetrated the Golden Horde land earlier, during the time when coinage flourished. Venetian ducats have been found in the Astrakhan and the Lower Dniester regions. A gold coin struck by Egyptian Sultan Beibar has been uncovered from a mausoleum near Astrakhan. Prague *groshes* circulated in the western areas. Two coins struck in Meissen have been found in a burial mound near Saratov. Fairly numerous gold Indian coins, mostly struck by sultans of Dehli, circulated in the Golden Horde. There are finds of Jurchen coins and ingots from the Yuan' period in China.

Silver ingots, *sum* in Turkic and *sommo* of Italian written sources, were in use as means of payment along with coins. They are also referred to by Rubruck. The ingots are found in hoards together with coins or without them. The coexistence of ingots (a metallic form of silver) and *dirhams* (a monetary form of silver) reveals roughly similar values of silver in the market and monetary systems. This is also proven by a small fraction of 14th century *dirhams* of increased value struck in the capital, where a 'free' supply of silver to mints was practised.

The second chapter of the book provides a complete description of 175 hoards of Juchid coins which the author came to know over the recent years. The description includes the date and location of each find, hoard contents, reference to a museum (or other institution) where the hoard is stored as well as bibliographical notes if the finds were published.

The catalogue of the Golden Horde coins presents a description of 614 specimens. Each coin type is provided with the date and place of mint, a translation of the inscription and a drawing of the obverse and reverse sides. This is the most complete catalogue of the Golden Horde coins ever published.

The final section of the book presents a bibliography of publications on Juchid numismatics. Compiled by the colleagues of G. A. Fedorov-Davydov, this bibliography includes 510 references in chronological order. It is the first attempt to cover the most significant publications on The Golden Horde numismatics and related subjects. There are also author and subject indices.