The First Documentary Evidence for Qara Qorum from the Year 635/1237-8

Summary

The history of the foundation of Qara Qorum is clouded by contradicting evidence. All information came either from later memorial inscriptions or from chronicles written at least decades after the events at different places. The joint excavation of the Mongolian Academy of Science and the Bonn University yielded the earliest dated primary documentary evidence of Qara Qorum, a coin, struck in the year (6)35 H./1237-8 A.D., about two years after the supposed construction of the palace of Ögedai in 1235. The coin was presumably struck within the palace compound, in a workshop under the control of the Muslim community. It was found within a coppersmiths workshop located in the Chinese commercial area of the city.

The Documentary Evidence¹

The Foundation of Qara Qorum

According to a late Chinese inscription of the year 1346 Qara Qorum was founded by Činggis Hān (reigned 603–624/1206–1227) in 1220². Also the Yuanshi, the Chinese chronicle of the late 14th century about the Yuan dynasty, provides this date for the foundation of the Mongol capital. However, according to K. Sagaster this date contradicts the course of historical events for this year and is thus unlikely. The reason for this early dating lies probably more in the desire to trace the foundation of the imperial centre back to the divine Činggis Han. The "Secret History of the Mongols", written about the middle of the 13th century mentions Qara Qorum only once. Ögedai (reigned 624-639/ 1227-1241) dismounted at Qara Qorum at the end of a military campaign against the Altan Han, ruler of the northern Chinese Jin-empire. Chinese sources date these events to the year 1233. But it is likely that at that time Qara Qorum did not mean more than merely a camp of tents. The Yuanshi reports under the year 1235 that in spring the emperor Ögedai fortified Holin (Qorum) and built his famous Wan-An Palace. This can be taken as the beginning of urbanisation and the foundation of Qara Qorum. In 1246 the Franciscan John de Plano Carpini (d. 1252) was on a diplomatic mission to the Qagan, the Mongol emperor. John heard about the city of Caracoron. Nine years later, the Franciscan William of Rubruck (d. about 1270) stayed for two months in Qara Qorum and gave a detailed description of the city. The viziers of the Persian Ilhans 'Ala' ad-Din al-Ğuwaini (d. 681/1283) and Rašid ad-Din (d. 718/1318) describe the palace of Qara Qorum.

¹ I am indebted to Jan Bemmann and Ernst Pohl, Bonn University, who invited me to study the coin finds from the Qara Qorum expedition, as source for the history and economy of the capital of the Mongol empire. The analysis and report of the coin finds will be provided in a later publication.

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They inserted their description into the reports about the reign of Ögedai³. The utmost importance of the dating of the foundation of Qara Qorum lies in the fact that the city has become the symbolic focus of Mongolian national identity in the twentieth century⁴.

The Document



Fig. 1. Silver coin, Qarah Qorum, (6)35/1237-8.

Silver, *Mitqāl*, Qarah Qorum, (6)35 H. (1237-8 A.D.) Obv. in single circle: arabesque / لاعظم ا / لاعظم ; three ringlets (tamġā ?) on the right side *Qarah Qorum / al-imām a / l-a ʿzam /* arabesque Marginal inscription: (...) Rev. in a single circle within a square: winged palmetto in 'teardrop'-vase / S (-shaped tamġā) الله / illegible word in Uighuro-Mongolian script. Marginal inscription beginning at the top: (...) (...):

Kar 2-2004–3960 1.25g 18mm die axis at 7h.

Compare similar types with *al-urdū al-a zam*, the magnificent Horde, and without noting a mint in Yih 1993, Bajpakov/Nastič 1981, 39-40 no. 8, pl. 11 no. 10-14.

The document is the first contemporary dated evidence for the existence of the city of Qara Qorum. It is dated 635/1237–8. This is two years after the Yuanshi reports the fortification of the city and the construction of Ögedai's Wan-An Palace. The denomination is called *mit_qāl*. The coin weighs 1.25 g. *Mit_qāl* is also a measure of weight in the Arab-Persian world then equating about 4.2 g to 4.3 g. It

- ³ About the sources of early history of Qara Qorum see: Sagaster 1999, Barkmann 2002, Hüttel 2005.
- ⁴ About the interaction between historians and modern political outlooks see: Lewis 1975.

94

seems to be the first legible occurrence of $mitq\bar{a}l$ as denominaton. Other early Mongol silver coins from Qorum provide *dirham* as denomination in the inscription⁵.

The Mint

Mint workshops can accompany a roaming tribal military and court of a Hān and are not bound to a city. Travelling mints are usually called in the Mongol period $urd\bar{u}$ (horde) or $b\bar{a}z\bar{a}r$ (market of the horde), the market accompanying the military expedition. The coin here explicitly mentions the name *Qarah Qorum* (QRH QRM). This indicates a city. The establishment of a mint points to economic activities or to a market place. A further subtype until now undated shows the name in the abbreviated form QRM = Qorum without the attribute 'black' (*qarah*). Also the Chinese name *Holin* means only Qorum without the attribute. These subtypes are among the excavated coins⁶.

Coins naming a QRM were known before. They were found among a hoard in the oasis of Utrār in December 19747. Utrār is nowadays located in the south of the Republic of Kazakhstan. Bajpakov and Nastič attributed the QRM-coins to the city of Qrim, on the homonymous peninsula in the Black Sea, a location presently known as Staryj Krym. The Black Sea mint is usually written as QRYM on coins, but the $y\bar{a}$ ' served only as mater lectionis and is not necessary for a correct spelling of the name. Furthermore the coins of Qrim differ much in style from those found in Qara Qorum and Utrar. The coins which are concerned here are neither found in excavations on the Crimean peninsula nor are present in any major collection formed in western Russia⁸. They are from Qara Qorum. One of these coins from the Utrūr hoard allows a closer localisation of the mint. If it is read correctly, this undated coin explicitly states in Persian language: mu'tamal sarāi dar šahr-i Qorum - worked in the palace in the city of Qorum9. The mint was then probably located within the palace compound of Ögedai.

The Mint Authority and the Muslim Community

The coins mention an *al-imām al-a ½am*, the magnificent imām. This phrase on early Mongol coins invariably refers to the caliph in Baghdad namely to an-Nāşir li-Dīn Allāh (reigned 575–626/1180–1225). The posthumous reference to him is a feature of the early Mongol coinage. In 635/1237–8 this caliph was ten years dead. At that time another imām-caliph was still ruling in Baghdad.

The coins of Islamic type minted in the first decades of Mongol rule in Central and Western Asia as well as in Eastern Europe did not name the supreme Han with two exceptions mentioned below. The central Mongol administration did not seem to determine coin protocols or send out rules for it like the Islamic administration. Before the Mongol invasion Islamic coins of precious metal usually name scrupulously the entire hierarchy of power from the caliph to the sultan, over the regional king to the local ampr, sometimes up to five different names. The caliph as universal ruler was believed as the source of all legitimate sovereignty in the Islamic Empire. His chancellery in Baghdad wrote investiture diplomas for even the farthest rulers to confirm their rule. The fiction of the sovereignty of the 'Abbasid empire and the caliph stretching from Egypt to Central Asia was upheld until the conquest of Baghdad in 656/1258. The inclusion of the name of the ruler into the coin protocol (sikka) was seen as the proof of actual rulership.

- Kar2-2004–3519, 3270, 3864.
- ⁷ About this remarkable hoard and the circumstances: Bajpakov/Nastič 1981 and Bajpakov 1990.
- ⁸ About the coinage of Qrim recently: Mayer 2005: 8, 96– 101.
- ⁹ Bajpakov/Nastič 1981: 44 no. 14, pl. 12 no. 9.

⁵ The following word resembles "al-abad" – the eternity. Although money is sometimes called with the epithet 'eternal', *dirham bāqī* in Syria of the 13th century or "Ewiger Pfennig" in Germany of the Middle Ages, the reading here is not yet established due to an only partially legible margin.

Činggis Hān is only named on two rare issues of the mint of Ğazna in the year of conquest $618/1221-2^{10}$ and one from Buhārā¹¹. The indication of Mongol authority is often only indirectly expressed. In some cases it is evident where the title $Q\bar{a}'\bar{a}n$ or al-Hāqān is used. Later, Möngkä (reigned 649–659/1251– 1259) was the first Mongol ruler whose name was used on coins of Islamic type throughout his empire, but not in all mints and not on all issues and not always with the same spelling.

More frequently tamgas¹² as symbols of collective sovereignty were placed on the coins. The simple S-shaped tamga left of the word Allāh seems to be related to Ögedai¹³. It can be seen as his mark of sovereignity on the coin, although it is not in a prominent position. Two other symbols need explanation. The three ringlets and the winged palmetto. The first might be a tamga, but undetermined yet. The winged palmetto might be suggested as tamga too. It is found as well on the related al-Urdū al-a'zam coins¹⁴. The winged palmetto is an ornament, which has been well known in Islamic art for centuries¹⁵. Tamgas usually have the look as being derived from Chinese or Tibetan characters or depict weapons, like bows, swords and axes. However, it must be considered as a mark of undetermined purpose or mint mark.

The Mongol claim for universal rulership was developed under Chinese cultural influence but it was not congruent with it. The Qagans did not see themselves as being in the line or being heirs of the Chinese emperors. The Činggisid Qagan was invested by Tängri, the Altaic supreme god, who was seen as the creator of all religions. This is the reason for the Mongol tolerance in religious matters. The Mongols, as nomadic tribes unified by Činggis Han, had no central organisation for mints and coinages. For the coin protocols within the Mongol realm local or regional solutions were sought. Mongol coins of the early decades from Europe to Qara Qorum frequently bear the name and the titles of the caliph in Baghdad, an-Nāșir li-Dīn Allāh, mostly posthumously. It is obvious that the mention of the imām-caliph was not intended to express any political sovereignty over Mongol territory. The reference served probably a double purpose. Firstly, money tends to be conservative in order to establish confidence and to ensure its acceptance among the central Asian population, which were used to certain designs and protocols. The second notion is the religious one. Probably *al-imām al-a žam* was seen as another religious symbol which should be mentioned on valid coins like the Islamic creed (*šahāda*)¹⁶. Nevertheless it remained an explainable but still curious incident that the Islamic universal ruler, the imām-caliph, is mentioned on the first coins in the very capital of the competing universal Mongol empire, where Muslims were probably only a minority.

The coin presented therefore bears probably only the S-shaped tamġā as symbol of Mongol sovereignty. In the early decades, the minting in Qara Qorum and probably in other cities in central Asia as well might nevertheless be reg-

- ¹⁰ See for the billon issue: Schwarz 1995: no. 646–649; for the gold issue which appeared in a hoard of the 1990s see: Spengler 1996; cp. Album 1997, no. 36 (brief description of the hoard), Album 2004, no. 24 and Album 2005, no. 97. Several of these gold coins are known. They all came from a single hoard of about 70 specimens and are distributed in trade since the middle of the 1990s. There is no proper publication on these coins.
- ¹¹ Coin Hoards V 1979: 83 no. 238, fig. 13.3–4; Peus 2004: No. 1407 (ill.).
- ¹² Tamġās are symbols of a clan or a tribe. They were probably originally brands to mark the live stock and the herds. Tamġās express sovereignity as that of a collective and perhaps later of even an individual. For centuries they remained a characteristic of Mongol coins. Until now studies are still missing which analyse systematically the information about tamġās on coins and above all to whom they refer.
- ¹³ Nyamaa 2005: 45–47. Cp. the S-tamgā on the gold coins of the al-Urdū al-a zam: Mayer 1998: no. 66.
- ¹⁴ Compare the *al-Urdū al-a zam* coins in Yih 1993, 2000 and Mayer 1998: no. 66, 67.
- ¹⁵ Kröger 1999.
- ¹⁶ About the conflicting claims of universal rulership, the double alliances of dependent rulers to the caliph and the qagan as well as the practice of coin protocols in this time see: Heidemann 1994, 44–61. Another type of an *al-imām al-a žam* coin from the hoard of Utrār has *balīfat Allāh* on the other side: Bajpakov/Nastič 1981, 42–43 no. 12a, pl. 12 no. 1.

ulated and authorised by local or regional Mongol authorities. However the actual production, the minting or the workshop might be organised by groups of the Muslim community either at the court or in the market. Coins of Qorum were found in Utrār¹⁷ and vice versa¹⁸. Many single coin finds in Utrar are from the Song period as well, similar to the findings in Qara Qorum¹⁹. Utrār lies more than 4.600 km west of Qara Qorum across the Altai and Tianshan mountains. More important than the distant find place seems to be the coin design. It points to Xinjiang and further into the direction of Utrar and Almalig in Transoxiana. There are coins quite similar in design, with Allah on one side and beneath it the unread same Uighuro-Mongolian word and a winged palmetto. On the other side stands $al-Urd\bar{u} / al$ a zam, the magnificent Horde. Here Mongol sovereignty is expressed as collective. These coins which do not bear a mint were found mostly in Xinjiang and struck probably in the 1240s and 1260s²⁰. Similarities in the inscriptions of the coins over the decades to those from Utrār and Almālig may indicate a relation to these cities as well²¹. Rubruck reports about a Muslim quarter with a market in Qara Qorum. Perhaps this colony had its origin in Xinjiang and Transoxiana.

Stefan Heidemann

The Archaeological Context

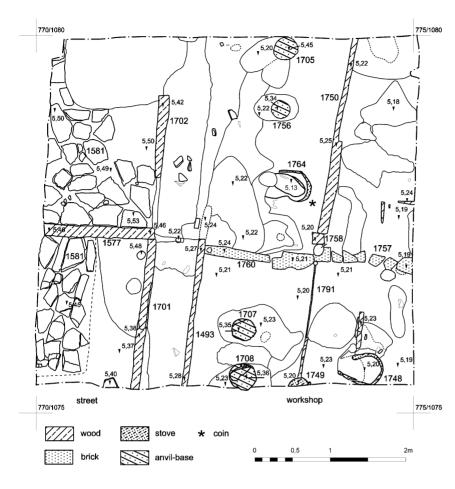
Since 1999 the Institute of Prehistoric and Early Historic Archaeology at the University of Bonn has been engaged in excavations in the centre of the ancient Mongolian capital of Qara Qorum, as part of the Mongolian-German Karakorum Expedition (MDKE)²². The city, surrounded by a rampart, is divided into four quarters by a central cross-roads. In 2000, the excavation area I lay immediately south of the cross-roads. In 2001, an additional area II was opened up 50 m south of area I. The north-south axis of the cross-roads and structures on both sides of the road were revealed. The road was made up of irregularly broken limestone paving stones. This paving was divided by a timber framework into areas measuring 2×3 m. The framework possibly served to prevent a lateral movement of the paving. At the same time it appears to have functioned as a system of expanding joints, to prevent frostdamage. The paving rested on a bed of gravel²³.

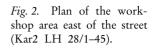
During the excavation campaign in 2004, a silver coin, minted in 1237–38 was found east of the road in area I, LH 28/1–45²⁴. On its obverse is the oldest-known contemporary usage of the name Qara Qorum²⁵. The coin was recovered in a section of excavation area I, which in the excavation campaign in 2004 produced remarkable features associated with metalworking, in this case bronze-working (Fig. 2)²⁶. The coin was found ca. 18 cm southeast of feature 1764, in a homogenous, midbrown, very sandy, hard layer of clay, which is interpreted as a floor-surface.

East of the road, a total of four wooden blocks ca. 30–40 cm wide and 80 cm high were revealed. They were positioned parallel to the road (Fig. 3). Two blocks respectively form a pair. The distance between the blocks of the

- ¹⁸ Kar 2-2000-0486, Heidemann 2002.
- ¹⁹ Akišev/Bajpakov/Erzakovič 1987: 228, 235, no. 433, 435, 539.
- ²⁰ Yih 1993, Yih 2000, Xinjiang Numismatics 1991: 37–40 (excavations in Changji, at the northern foot of the Tianshan mountains, north west of Urumqi). Other similar coins of this type show the 'Phagspa word for Chinese 'coin (*bao*)' or some Arabic lettering beneath the word Allāh.
- ²¹ In Utrār the earliest coins bear the protocol with *al-imām al-a ½am* in a different gold series which starts at about the 620s / 1220s; Mayer 1998: no. 6. In Almāliġ south of Utrār the first known dated coin of an anonymous *al-imām al-a ½am*-series starts in 637 / 1239–1240, Mayer 1998: no. 78.
- ²² For the previous state of excavation see Erdenebat/ Pohl 2002, Erdenebat/Pohl 2005.
- ²³ Erdenebat/Pohl 2005: 170–171.
- ²⁴ For the exact position of LH 28 / 1–45 see Erdenebat/ Pohl 2002: 38–42.
- ²⁵ See above Chapter 2
- ²⁶ A short description is to be found in Erdenebat/ Pohl 2005: 173.

¹⁷ Bajpakov/Nastič 1981.





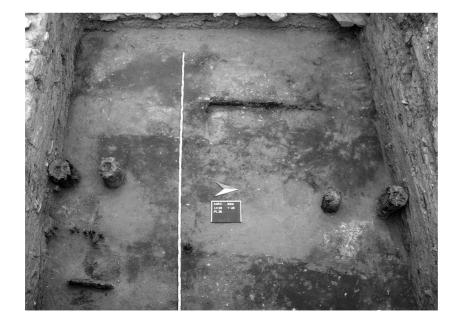


Fig. 3. The four wooden anvil bases seen from east.

Fig. 4. Two anvil bases (features 1707 and 1708) seen from west.



southern pair (features 1707 and 1708) (Fig. 4) is ca. 34 cm and that between the northern pair (features 1705 and 1756) is 48 cm. The sediment surrounding the blocks, as well as their upper surfaces, are densely powdered with bronze particles. A rectangular slot in the upper surface of all four blocks served as a placement for an anvil (Fig. 5).

A round, stove-like kiln without a dome (feature 1749) was uncovered 52 cm east of the southern pair of blocks, projecting out of the southern section. The preserved height of the kiln was 19 cm; the true diameter of the feature can be first ascertained when the baulk is taken down. This type of kiln was investigated several times during the course of previous excavations, whereby a diameter varying between 20 and 22 cm was observed. Bundles of up to five vertical scored lines on the inside wall are characteristic of these small kilns. These bundles could also be observed on the wall fragment of a kiln found in area I, LH 28/1-45. The function of this type of kiln is at present unclear. They were possibly used to swiftly reheat the sheetbronze which becomes brittle through beating, removing the tension from the material before being worked further²⁷. The small-finds from this area of the excavation, above all fragments of sheet-bronze as well as leather and textile fragments, which were used as an underlay

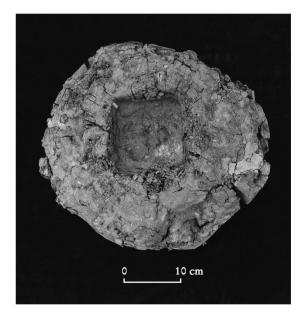


Fig. 5. Top plan view of anvil base feature 1707.

during the process of metal-beating, indicate the production of beaten-bronze objects.

The remains of a droplet-shaped kiln, 60 cm long and 42 cm wide (feature 1748) were recorded 110 cm east of the southern pair of blocks. This kiln extended only a few centimetres into

²⁷ For the process of bronze-beating see Längerer 1996: 22–32.

the southern section. The remains of a dome were preserved as a hard-fired, up to 6 cm wide band of clay on the outer edge of the feature. Traces of a reinforcement for the dome, for example in the form of a wickerwork construction, were not observed. Feature 1764, lying to the south and connected with the northern pair of blocks can also be interpreted as a kiln. Thus a workshop area was disclosed, in which the different stages of bronze-working took place in close proximity. It possibly began with the production of flat, cast-bronze ingots (Planschen)28 using a domed kiln, followed by the beating-out of rough sheet-bronze and ended in the production of finished beaten-bronze objects using an anvil and the small stove-like kiln.

As yet, no evidence has been found that the workshop area was situated in an, at least partly open, roofed building. Between the pairs of blocks and at right angles to the course of the road, lies a wall of unfired clav-bricks ca. 20 cm wide (feature 1757), in which a post 14 cm in diameter was set (feature 1758). Three layers of bricks could be documented, but due to the poor state of preservation of the feature, it could not be ascertained whether the wall was originally made up of whole bricks or of re-used brick fragments. The wall extended from the eastern section of the excavation for a length of 1,86 m: from thereon individual bricks were not recognisable. A 10-12 cm wide and 86 cm long band of hard clay was recorded, at whose western end traces of a wooden post, some 6 cm in diameter, were found (feature 1760).

These two sections of wall replaced a wooden construction whose remains could be traced beneath the wall. Fragments of wood (feature 1750) connected with the wooden posts within the wall (feature 1758) could be documented to a length of 278 cm parallel to the road. The remains of a wooden board, 15 cm wide and 16 cm long, abutted onto the wooden post. Due to poor preservation, it could not be determined whether the wooden fragments to the north are those of a beam or a board. Wooden fragments (feature 1791) aligned parallel to the road were also observed south of the wall. Their slight width, 2–3 cm, suggests that they are the remains of a wall of vertical boards. Such a construction is indicated by the remains of six boards joined by a wooden lath, which was recovered during the excavation south of the unfired clay-brick wall (feature 1757).

Further wooden fragments were uncovered between the southern pair of wooden blocks and the road. They lay parallel to the road for a length of 196 cm. The continuation of the hard clay strip (feature 1760) abutted at right angles to their northern end.

On the basis of present information the following scenario is presented for discussion: east of the north-south axis of the cross-roads, two workshop areas for bronze-working could be identified. Each contained two wooden blocks with slots for anvils, used for metal-beating, and different types of kilns. These workshop areas were separated by a construction of unfired clay-bricks, which was preceded by a wooden construction. Traces of wood between the wooden posts and the road indicate the presence of a boundary. The wooden remains east of the wooden posts and at right angles to the wall indicate the possibility of a further spatial differentiation within the workshop area.

The inadequate preservation of the features precludes a positive statement about the structure of the boundary of the workshop area. It may have been a knee-high or hip-high fence or wall, which on the one hand separated the workshop from the traffic on the road, but did not obscure the potential customers' view of the finished products and the work processes.

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Illustration Credits:

1 Heidemann, 2 Bechstein / Höhn / Kelzenberg, 3, 4 Kelzenberg, 5 Pohl.

²⁸ Längerer 1996: 31.

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Bibliography

- Akišev, K. A. / Bajpakov, K. M. / Erzakovič, L. B. 1987 Otrar v XIII-XV vekach. Alma-Ata.
- Album, S.
- 1997 Price List 136 (June 1997). Santa Rosa.
- 2004 Price List 194 (January 2004). Santa Rosa.
- 2005 Price List 205 (May 2005). Santa Rosa.
- Bajpakov, K. M.
- 1990 Po sledam drevnich gorodov Kazachstana (Otrarskij Oazis). Alma-Ata.

Bajpakov, K. M. / Nasti, V. N.

1981 Klad serebrjan'ych veščej i monet XIII v. iz Otrara. In: Margulan, A. Ch. (ed.): Kazachstan v épochu feodalizma (problemy etnopolitičeskoj istorii), 20–60. Alma-Ata.

Barkmann, U.B.

2002 Qara Qorum (Karakorum) – Fragmente zur Geschichte einer vergessenen Reichshauptstadt. In: Roth, H. R. / Erdenebat, U. / Pohl, E. / Nagel, E. (eds.): Qara Qorum-City (Mongolia) I (=Bonn Contributions to Asian Archaeology 1), 2nd revised edition, pp. 5–21. Bonn.

Bonn

2005 Kunst- und Ausstellungshalle der Bundesrepublik Deutschland (ed.): Dschingis Khan und seine Erben – Das Weltreich der Mongolen. Munich.

Coin Hoards V

1979 The Royal Numismatic Society (ed.): Coin Hoards V. London. Erdenebat, U. / Pohl. E.

- 2002 Karakorum 2 Archäologie im Stadtzentrum. In: Roth, H. R. / Erdenebat, U. / Pohl, E. / Nagel, E. (eds.): Qara Qorum-City (Mongolia) I (=Bonn Contributions to Asian Archaeology 1), 2nd revised edition, pp. 37–52. Bonn.
- 2005 Aus der Mitte der Hauptstadt Die Ausgrabungen der Universität Bonn im Zentrum von Karakorum. In: Kunst- und Ausstellungshalle der Bundesrepublik Deutschland (ed.): Dschingis Khan und seine Erben – Das Weltreich der Mongolen, pp. 168–175. Munich.

Heidemann, S.

- 1994 Das Aleppiner Kalifat (A.D. 1261). Vom Untergang des Kalifates in Bagdad über Aleppo zu den Restaurationen in Kairo. Islamic History and Civilization. Studies and Texts 6. Leiden etc.
- 2002 A Coin Pendant from Central Asia. In: Roth, H. R. / Erdenebat, U. / Pohl, E. / Nagel, E. (eds.): Qara Qorum-City (Mongolia) I (=Bonn Contributions to Asian Archaeology 1), 1st edition, 79–80; 2nd revised edition, pp. 97–98. Bonn.

Hüttel, H.-G.

2005 Karakorum – Eine historische Skizze. In: Kunst- und Ausstellungshalle der Bundesrepublik Deutschland (ed.): Dschingis Khan und seine Erben – Das Weltreich der Mongolen, pp. 133–137. Munich.

Kröger, J.

 1999 Vom Flügelpaar zur Flügelpalmette. In: Finster, B. / Fragner, C. / Hafenrichter, H. (eds.): Rezeption in der Islamischen Kunst – Bamberger Symposium vom 26. 6.–28. 6. 1992 (=Beiruter Texte und Studien 61), pp. 193–205, pl. XXV-XXVIII. Beirut.

Längerer, G.

1996 Treiben, Schmieden, Feuerschweissen – Erfahrungen eines Kunstschmiedes. In: Biel, J. (ed.): Experiment Hochdorf. Keltische Handwerkskunst wiederbelebt. Schriften des Keltenmuseums Hochdorf/Enz 1: 22–39. Stuttgart.

1975 History – Remembered, Recovered, Invented. Princeton.

Mayer, T.

- 1998 Sylloge Numorum Arabicorum Tübingen, Nord- und Ostzentralasien, XV b Mittelasien II. Tübingen, Berlin.
- 2005 Sylloge der Münzen des Kaukasus und Osteuropas im Orientalischen Münzkabinett Jena (Orientalisches Münzkabinett Jena 1). Wiesbaden.
- Nyamaa, B.
- 2005 The Coins of Mongol Empire and Clan Tamgha of Khans (XIII-XIV). Ulaanbaatar.

Peus

2004 Dr. Busso Peus Nachf., Frankfurt, Auktion 378 (28. April 2004).

Sagaster, K.

1999 Die mongolische Hauptstadt Karakorum. In: Beiträge zur Allgemeinen und Vergleichenden Archäologie 19: 113–128. Mainz.

Schwarz, F.

 1995 Sylloge Numorum Arabicorum Tübingen, Gazna/Kabul, XIV d Hurāsān IV. Tübingen
– Berlin.

Spengler, W.

1996 Hoard of Genghis Khan Gold Dinars Recalls Calamitous History. In: Oriental Numismatic Society Newsletter 147 (Winter 1996): 16–18.

Xinjiang Numismatics

1991 Dong Qinxuan / Jiang Qixiang: Xinjiang Numismatics. Hongkong.

Yih, T.-D.

- 1993 Tri-lingual Coins. In: Hoc, M. / Hackens, T. / Mouchart, G. (eds.): Actes du XI^e Congrès International de Numismatique / Proceedings of the XIth International Numismatic Congress, vol. 3: Monnaies byzantines, monnaies médiévales et orientales, pp. 343–348. Leuven
- 2000 Chaghatayid Coins from Sinkiang. In: as-Sikka. Online Journal of The Islamic Coins Group 2,1 (Spring 2000). [http://islamiccoinsgroup.50g.com/assikka.htm; July 14th 2005].

102

Lewis, B.