

# HESPERIA

THE JOURNAL OF THE AMERICAN SCHOOL  
OF CLASSICAL STUDIES AT ATHENS

VOLUME 93: NUMBER 1 | JANUARY–MARCH 2024



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# HESPERIA

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# A TANG DYNASTY COIN IN 13TH-CENTURY CORINTH

## CONTEXT AND TRANSMISSION

### ABSTRACT

During the 1960 campaign of the Corinth Excavations, a Tang Dynasty coin was found in an ash and charcoal layer with deposits from the mid- to late 13th century CE and earlier. Considering similar coin finds from the Xinjiang Uygur Autonomous Region, China, and the Chui Region, Kyrgyzstan, this article argues that the Corinth Tang coin is likely an Anxi Protectorate issue, though a Chui valley origin cannot be ruled out. This article discusses the origins, survival, and mobility of this minimal-value cash coin in a web of Eurasian connections, with particular focus on the connectivity of the Church of the East and the Jewish merchant network from the 8th to the 13th century CE.

During the 1960 campaign of the Corinth Excavations, an 8th-century CE Chinese coin was found in an ash and charcoal layer of the Frankish period (Fig. 1).<sup>1</sup> The coin (Corinth 1960-999) has long been an item of curiosity in the study collection of the Corinth Archaeological Museum's coin room. Interestingly, it was not the first object of East Asian origins found. A fragment of Chinese porcelain was discovered in an undisturbed fill from the 13th century CE. Morgan highlighted this fragment (among others) in his discussion of "oriental" influences in medieval Corinthian pottery. He drew attention to potential similarities between the Green

1. I express my sincere gratitude to the American School of Classical Studies at Athens and the Corinth Excavations for their generous support and the opportunity to work on the Corinth Tang coin during my time as a regular member in the 2015–2016 academic year. I would like to acknowledge Corinth Excavations assistant director emerita Nancy Bookidis for being the first to identify the Corinth Tang coin as a Qianyuan Zhongbao type in the 1970s. The identification process must have been an adventure at

the time. I am grateful for the invaluable guidance and support provided by the Corinth Excavations, particularly then-director Guy Sanders, assistant director Ioulia Tzonou, and numismatist Orestes Zervos, who offered their expertise on Byzantine and Frankish materials at Corinth. I also extend my appreciation to Rossana Valente, who guided me through the process of ceramic identification and analysis, and to the current Corinth Excavations director Christopher Pfaff for reviewing and providing feedback on

earlier drafts. I was also fortunate to have received comments from Jeremy McInerney in reading the 2016 report I submitted to the Corinth Excavations. Throughout my research, I was fortunate to receive feedback from esteemed scholars and archaeologists from Chinese institutions. I would like to thank Kung Man (Hong Kong University Jao Tsung-I Petite Ecole), Li Ming (Shaanxi Academy of Archaeology), Lin Lijuan (Peking University), Lin Ying (Sun Yat-Sen University), Shen Ruiwen (Peking University), Guo



and Brown Painted style pottery from the early 11th century CE and Tang pottery from the 7th to 9th century CE.<sup>2</sup> He also proposed that there might have been additional similar Chinese porcelain pieces that made their way to Corinth via Fustat, Egypt. Fustat was a bustling industrial and commercial center from the second half of the 9th century until 1168 CE, specializing in the import and distribution of Chinese export wares and other merchandise from the East.<sup>3</sup>

The discovery of the Corinth Tang coin during the excavations of the Forum Southwest in 1960 provides an interesting supplement to the impression of Eurasian connectivity already seen with the export porcelain wares. This coin, originally designed as a temporary object with little intrinsic value, held significance primarily within a specific monetary framework. In this article, the Corinth Tang coin is studied in detail, exploring its historical and production contexts, as well as examining the processes of deposition and transmission. This analysis forms part of a larger investigation into the Eurasian connections between the 8th and 13th centuries CE.

Jinsong (Peking University), and Zheng A-Cai (Nanhua University) for their valuable insights and kind assistance. I am truly grateful to Fu Ma of Peking University for his insightful comments. I would like to acknowledge the assistance provided by Zhuang Yu and Hu Guangyue also from Peking University, who aided in translating numismatic studies in Russian. Numismatists François Thierry, Vladimir Belyaev, and Alexander Kamishev generously shared images of central Asian coins and provided assistance during the revision process. I would like to express my appreciation to the anonymous reviewers who provided valuable critiques, remarks, and bibliographical information. I have endeavored to incorporate their feedback to the best of my ability. Last and not least, I am in debt of the

editorial team at *Hesperia*, who have been tremendously supportive of this project and most generous in providing assistance throughout the publication process. Any remaining errors are solely my own responsibility.

The use of [unprov.] indicates that an object was acquired after November 14, 1970, but has been published in a qualifying publication.

2. *Corinth XI*, p. 171, perhaps a reference to the *sancai* ware (tricolored earthenware) that used a combination of green, amber, and brown glazes applied in random mottles or specific arrangements to allow for free flow in the heated kiln. Cf. Valenstein 1989, p. 64.

3. *Corinth XI* (pp. 170–171) provides insights into the topic. For a comprehensive examination of Fustat and Chinese porcelain spanning from

**Figure 1. The Corinth Tang coin (Qianyuan Zhongbao type): (a) obverse; (b) reverse. Corinth 1960-999. Scale 3:1. Photo P. Dellatolas; courtesy American School of Classical Studies at Athens, Corinth Excavations; © Hellenic Ministry of Culture and Sports/Hellenic Organization of Cultural Resources Development (H.O.C.RE.D.)**

the 8th to the 14th century, refer to Mikami (1988, pp. 10–11). Vezzoli (2019, pp. 829–838, esp. p. 835, n. 55) sheds light on the role of the Fustat court as an intermediary between Chinese and Mediterranean markets, highlighting the use of Chinese porcelain wares in banquets and their presentation as gifts to foreign ambassadors, European dignitaries, and Eastern princes. To explore the comparisons between protomajolica and Chinese porcelain wares, see Yenışehirlioğlu 2004, p. 374. For a survey of the technical and stylistic influences of Chinese ceramics on the west Asian industry, see Kerr and Wood 2004, pp. 732–739. Kerr and Wood (2004, pp. 747–749) also discuss Chinese influences on Mediterranean ceramics starting from the 15th century onward.

## THE CORINTH TANG COIN

Corinth, Archaeological Museum 1960-999

Fig. 1

Metal coin. Qianyuan Zhongbao type, Suzong of Tang (r. 756–762 CE). Diam. 21 mm. Wt. 1.87 g.

Obverse: “Qian” “Yuan” (up–down), “Zhong” “Bao” (right–left).

Cf. Yoshida 2005, p. 104, no. 372.

The Corinth Tang coin is a small round artifact, measuring 21 mm in diameter and weighing 1.87 g. The dark metal fabric features an uneven square hole with a slight dent on the right edge. The obverse side of the coin displays four Chinese characters, enclosed within raised rims along both the external and internal contours. On the reverse side, there are no visible markings or traces of rims, either external or internal. The characters on the obverse are read from top to bottom as “Qianyuan” (乾元), which refers to the second *nianhao* (reign name) of the Tang emperor Suzong (r. 756–762 CE). Reading from right to left, the next characters are “Zhongbao” (重寶), indicating that this coin is a multiple denomination of the Kaiyuan Tongbao (KY), a well-known Tang currency. Further details about the KY will be provided below.

## CONTEXT

Theodora Stillwell discovered the Corinth Tang coin in a layer consisting of ash and charcoal,<sup>4</sup> located a few meters south of the southernmost point of the West Shops (Figs. 2, 3).<sup>5</sup> There are clear indications that this coin was found as part of a Frankish Corinth assemblage, but retracing the location of the coin requires the use of spatial references related to Byzantine structures uncovered in the 1959–1960 campaign.<sup>6</sup> Notes and drawings in the Corinth Excavation’s records that attempt to illustrate the stratigraphy suggest that this ash and charcoal layer extended approximately 10 m in length and had a depth of around 40 cm, running in a north–south direction.<sup>7</sup> The more informative drawing (by Stillwell) indicates that there were tiles and a layer of yellow clay soil above the ash layer.<sup>8</sup> There is no clear indication of the width of the debris field. Together with the Tang coin, fragments of ceramics and a dozen coins were discovered, dating from the Hellenistic and Late Roman periods to the

4. Corinth Notebook 218, pp. 91–94, 112. The same ash and charcoal layer was also documented by Ronald Stroud (Corinth Notebook 219, p. 95).

5. For the scope of the excavation, see Robinson 1962, pp. 95–110. Robinson (1962, p. 104) later described this area in summary as “structures . . . presented at the time of excavation a most chaotic plan, the result of extensive rebuilding and overbuilding,” and the plan in figure 3 of the 1962 report “gives a simplified picture, from which have been omitted all later and earlier walls which cannot, or do not yet, reveal any coherent elements of plan.” For a photo of the area of excavation, see

Robinson 1962, pl. 34a.

6. Unfortunately, this ash and charcoal layer was not thoroughly documented in 1960, nor was it mentioned in the 1962 report by Henry Robinson. An unpublished report by Stillwell in the Corinth Excavations archive titled “Corinth Excavations 1960. Agora South-West, section B, Notebook #218” (pp. 10–11) provides a narrative for the ash and charcoal layer within the excavation area: “Over 7 there was a heavy layer of ash and charcoal. All the significant sherds (i.e., 12th c or later) below that, from ca. 84.65 to 84.00 were from before the end of the twelfth century or the very early 13th. . . . If the heavy

black ash layer can be taken as evidence of the destruction of at least 7, and no doubt Y, the buildings must have been destroyed before the very beginning of the thirteenth century.” For comparison, later documentation methods described a burned layer nearby that contained reddish soil mixed with a large amount of animal bones, oyster shells, and tile fragments beneath the Frankish court or Unit 7, described by Susanne Hofstra and John Lee in 1997 (Corinth Notebook 896, p. 154).

7. Corinth Notebook 218, pp. 90, 94, 112; Corinth Notebook 219, pp. 88–90.

8. Corinth Notebook 218, p. 112.

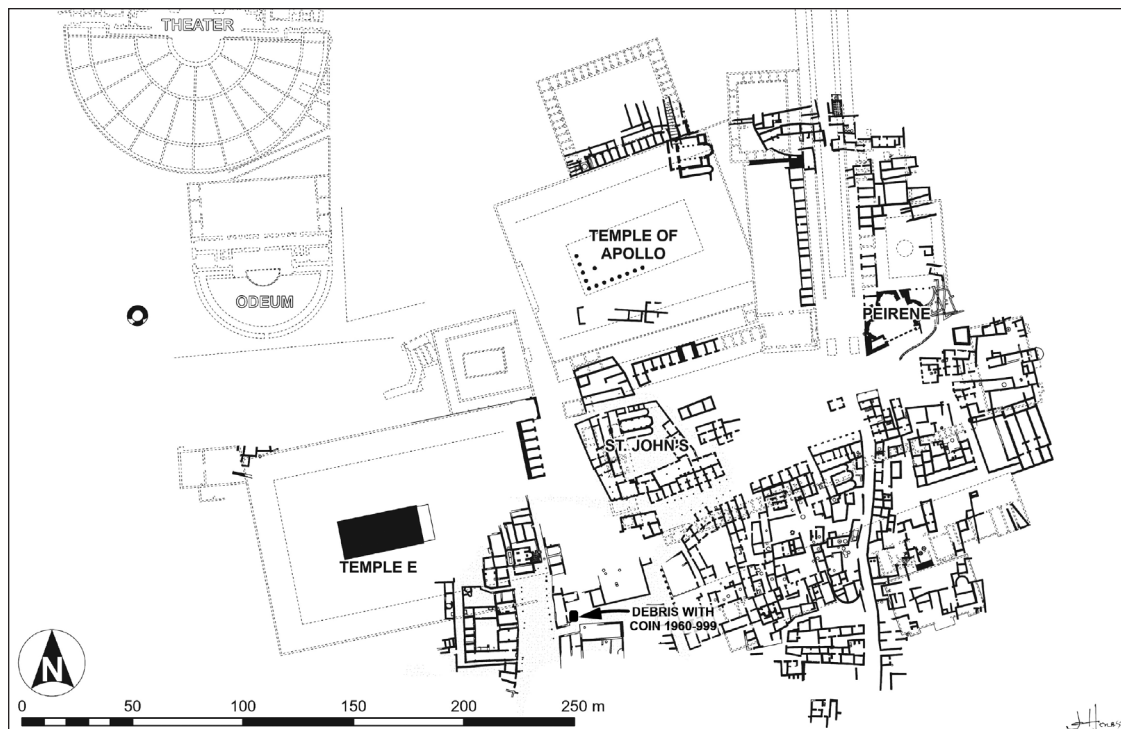


Figure 2. Medieval plan of the central area of Corinth, with the approximate location of the coin indicated. J. Herbst; courtesy American School of Classical Studies at Athens, Corinth Excavations

Byzantine and Frankish periods.<sup>9</sup> Among the coins found were a Latin imitative coin (1204–1261 CE) and several Villehardouin “petty coppers” of the CORINTVM type, both within and beneath the ash and charcoal layer.<sup>10</sup> The CORINTVM type generally is regarded as the first coinage issued by the third Villehardouin prince, Guillaume de Villehardouin (r. 1246–1278 CE), though this view remains hypothetical.<sup>11</sup>

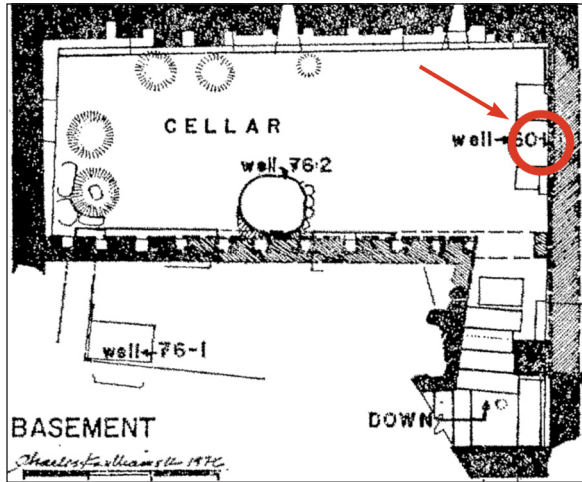
9. The finds are reported in Corinth Notebook 218, p. 90. Uninventoried ceramic finds from the layer (lot 386) included a considerable amount of Intermediate Style incised sgraffito/Medallion (1,385 g, 11.90%), slip painted glaze (1,219 g, 10.47%), and slip plain glaze (1,365 g, 11.72%) wares. Also of note are some amounts of late sgraffito wares (497 g, 4.27%) and small bits of Protomajolica fragments (25 g, 0.21%), Islamic imported (5 g, 0.04%) and Islamic frit (2 g, 0.02%), along with one base with concentric circles of the so-called Zeuxippus ware. The identification and weighing of pottery from lot 386 were carried out on June 21–22, 2016, in consultation with Guy Sanders and Rossana Valente. All errors are mine. Other legible coins from the same context include 1960-992 (Valentinian II, 388–392 CE); 1960-996 (Romanos I, 919–921 CE); 1960-994 (anon. AE, class B, 1028–1034 CE);

1960-1058 (anon. AE, class E, 1067–1059 CE); 1960-997 (anon. AE, class I, 1078–1081 CE); 1960-1060 (Alexios I, 1081–1118 CE); 1960-995, 1960-998, 1960-1061 (Manuel I, 1143–1180 CE); and 1960-1059 (Latin imitative, 1204–1261 CE). Below the layer were six coins of Manuel I (1960-1063 [five pieces], 1960-1070), two coins of Villehardouin CORINTVM type (1960-1062, 1960-1071), and two coins of John II, 1118–1143 CE (1960-1068 [two coins]).

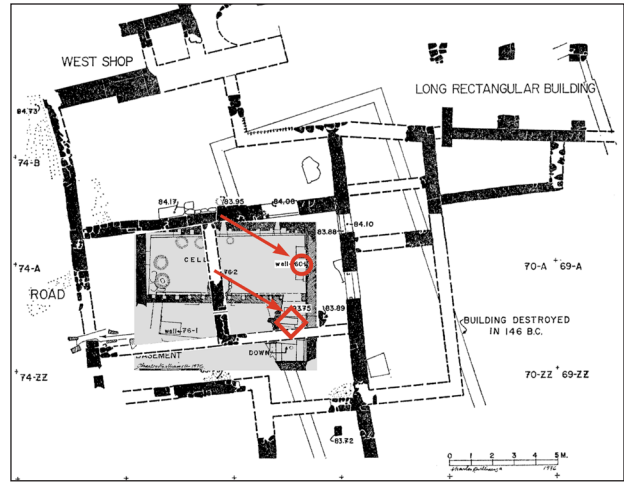
10. Also of note is an English short-cross sterling pence (1960-1123; class 7, excavated in 1960), produced between 1222 and 1227 CE, found in the ash and charcoal layer in Stroud’s section; see Corinth Notebook 219, p. 90.

11. The primary source of confusion arises from the ambiguous initial “G” found on the obverse legend “G P ACCAIE” of the CORINTVM type. This confusion stems from the fact that the first two princes of Frankish

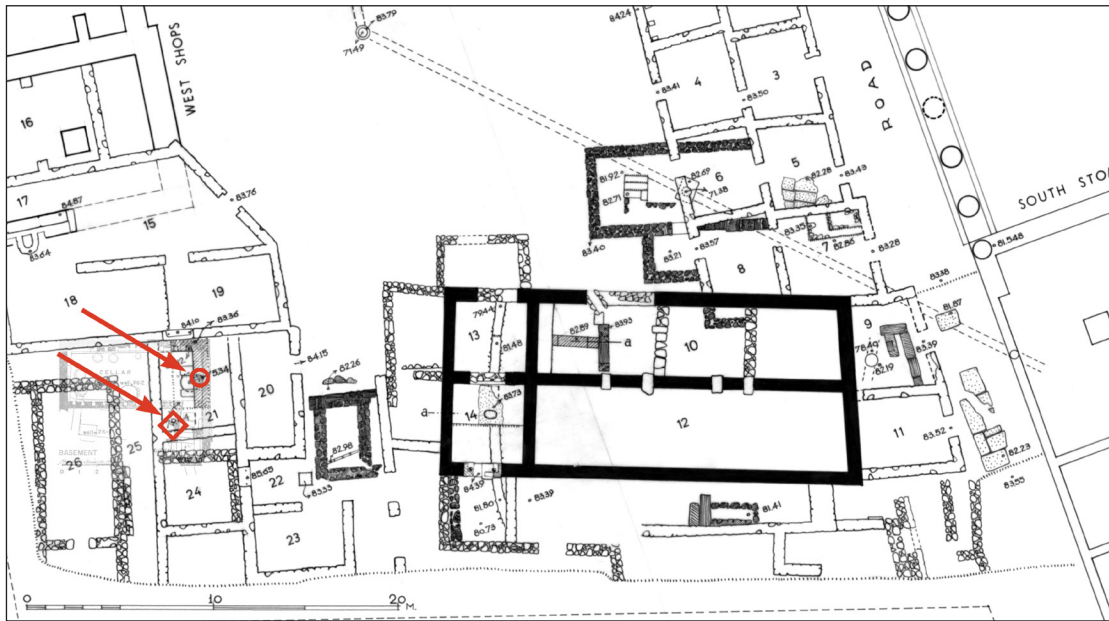
Achaea were named Geoffroi, while the third was Guillaume. The prevailing viewpoint, as expressed by Metcalf (1965, p. 204; 1966, p. 237) and Baker and Stahl (2013, pp. 163–164), is that the early Villehardouin rulers continued to use the tetartera from the 12th century and the Latin imitative trachea. Alternatively, Bellinger (1930, pp. 66–67) pointed out that if all the copper denier types were minted by Guillaume, then Guillaume’s father, Geoffroi II, would have held the title of Princeps of Achaea for nearly two decades without issuing his own coinage. The same could be said for Geoffroi I. Bellinger’s reconstruction suggests that the CORINTVM type may have been in circulation as early as 1218, followed by the CORINTI type struck from 1245 onward, until the introduction of the Clarenza issues between 1250 and 1278 CE.



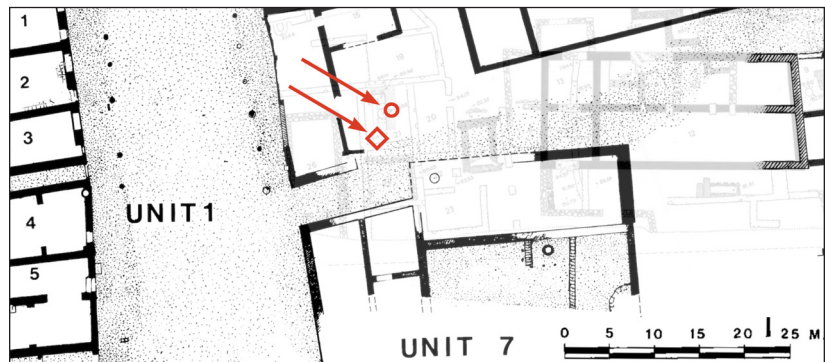
a



b



c



d

Figure 3. Approximate findspot of the Corinth Tang coin, various views: (a) Byzantine room 21, terracotta pithos (in circle); (b) area of Roman Cellar Building, well 60-1 (diamond); (c) detail of area from Byzantine Corinth plan; (d) detail of area from Frankish Corinth plan. C. K. Williams II (a, b, d); courtesy American School of Classical Studies at Athens, Corinth Excavations

The coin deposits provide a tentative terminus post quem for the ash and charcoal layer, ca. the mid- to third quarter of the 13th century. Robinson suggested that this layer resulted from the destruction of an unknown structure in the late 13th century.<sup>12</sup> From the contents of the ash layer, the identification of a residential building would be plausible. The state of preservation, however, made it challenging for him to provide a more precise classification.<sup>13</sup>

Excavation notebooks provide clues that permit the projection of this debris field to later site plans.<sup>14</sup> Reference points shared with pre-1976 excavations are used. The first reference point is a terracotta pithos (+83.75) from room 21 featured in Robinson's 1962 report, which de Grazia and Williams specifically referred to in 1977 (see Fig. 3:a).<sup>15</sup> The second reference point is well 60-1 (+79.54), located at the center of room 21, built into the east wall of the basement of the so-called Roman Cellar Building (see Fig. 3:b).<sup>16</sup> The terracotta pithos and well 60-1 form a line roughly 1.5 m east of "wall 7" in Stillwell's unpublished report.<sup>17</sup> Together, these reference points can be used to indicate the approximate location of the ash and charcoal layer on published site plans of Byzantine (see Fig. 3:c) and Frankish Corinth (see Fig. 3:d).

The depth, extent, and contents of the ash and charcoal layer, along with associated architectural remnants, suggest that the Corinth Tang coin was found east of the colonnaded street of the Frankish Quarter, perhaps associated with the complex called the Frankish Hall, located just across from the large hostel and infirmary complex (Unit 1) with an attached guardhouse (Unit 5), and north of Unit 7. Both complexes were built upon Byzantine structures that were damaged and remained unrepaired for several decades.

The Frankish Hall was constructed above a bothros (pit) filled with debris containing coins and pottery indicative of a mid-13th-century date.<sup>18</sup> The contents of the bothros may have been debris from an earlier Frankish phase.<sup>19</sup> Since the contents found in the ash and charcoal contain material from the third quarter of the 13th century, the bothros may be from a different context. Williams considered that the Frankish Quarter may have been the area where Frankish Corinth accommodated the influx of Venetian refugees, traders, and merchants and their families following the Byzantine recapture

12. Robinson 1962, p. 108: "Room 26 and the smaller rectangle within the area of room 24 are apparently slightly later in date than the complex which lies to the north and east. No distinct floor levels were observed. The fill within the area, near the preserved tops of the walls, is presumably to be associated with the destruction of the building; it contained pottery and coins of the late thirteenth century."

13. Robinson 1962, p. 104: "We must imagine that all the structures west of the court were purely residential in character. Little can be made of rooms 20-26, which occupy an area much built over in Frankish times." See

also Robinson 1962, p. 107: "In addition to the buildings of the twelfth century already described, we have found in the 1960 campaign some walls which appear to be of the Frankish period or later. . . . In most cases these late walls are preserved only as frusta disiecta which defy attempts at reconstruction of plan."

14. Corinth Notebook 644, pp. 8-11; Corinth Notebook 645, pp. 1-2; see also Corinth Notebook 648, pp. 26-27, on the surface-cleaning process and the removal of walls left behind by Robinson's excavation.

15. Robinson 1962, p. 104; de Grazia and Williams 1977, p. 65. Hence, 50-MΔ is the center point of grid

square 72-A.

16. For this "storage well," see Robinson 1962, pp. 111-112; de Grazia and Williams 1977, pp. 58-60. This well lies to the south of grid square 72-B.

17. Corinth Notebook 218.

18. Lot 76-2, with pottery including *zembilia* coarse ware, including bowls, jugs, cooking wares; a matt-painted strap handle; and green-painted and slip-painted wares. Coins include 1976-27 (Constantine I, 330/5 CE) and 1976-28 (Louis IX, 1226-1270 CE); see Corinth Notebook 639, p. 22.

19. De Grazia and Williams 1977, p. 67.



of Constantinople in 1261 CE.<sup>20</sup> If the ash and charcoal layer was indeed a separate event and later than the bothros, this layer may be related to the clean-up and modifications in the Frankish Quarter as the refugees settled in.

Focusing solely on specific events is inadequate when considering the presence of numerous Byzantine coins and pottery within the ash and charcoal layer.<sup>21</sup> Unlike the Late Roman coins and fragments of Hellenistic black glaze and African red-slip Roman sigillata, which could be seen as intrusions, the Byzantine artifacts appear to be an integral and significant part of the layer itself. Scranton's description,<sup>22</sup> as well as Sanders's summation of the challenges in understanding the excavated results of 11th- and 12th-century Corinth,<sup>23</sup> provides some clarification. The intense urban activity and "somewhat squalid" civic hygiene practices led to the accumulation of 1.50–2.00 m of occupation deposits between 1050 and 1250 CE.<sup>24</sup> Although the ash and charcoal layer may have been formed at a time that coincided with the retaking of Constantinople in 1261 CE and the influx of Venetian refugees, the composition of the deposits likely underwent a complex, multiphased deposition process for decades if not centuries prior to that historical event. Therefore, it is possible that the Corinth Tang coin already had reached Corinth during the Byzantine period and subsequently became subject to numerous series of redeposition events.

A number of medieval Chinese coins found in Europe could have undergone a similar multiphased deposition process. For example, two early Northern Song Dynasty coins discussed in some length by Green suggest that unforeseen connectivity between East Asia and the British Isles may have existed as early as the 11th century, when the coins were issued.<sup>25</sup> There is an important difference between these Northern Song Dynasty coins and the Corinth Tang coin. In the documentation for the two Northern Song Dynasty coins, Wang cautioned that they were not found in an excavated context, and are more likely "a more recent loss from an [sic] curated collection" instead of a genuine medieval find.<sup>26</sup> The Corinth Tang coin, in contrast, was produced more than two centuries before the Song coins, and it was found in a 13th-century archaeological context.

20. Williams 2003, pp. 424–425, n. 6.

21. Lot 386; Corinth Notebook 218, p. 90.

22. *Corinth* XVI, p. 87. Also see Metcalf 1973, pp. 186–189, discussing the difficulties of interpreting Scranton's excavation results, with the "great many of the fills stretching over three centuries" containing a wide-ranging mix of 10th-century coins and sherds, with 12th- and 13th-century material down to the lowest levels.

23. Sanders 2002, pp. 652–654.

24. Sanders 2002, p. 652.

25. The first coin is a Xining Yuanbao (1068–1077 CE) found in the Vale Royal area of Cheshire (Liverpool, National Museums LVPL-4F4637 [unprov.]: see C. Green, "An

Eleventh-Century Chinese Coin in Britain and the Evidence for East Asian Contacts in the Medieval Period," *Dr. Caitlin R. Green* [blog], March 21, 2018, [www.caitlingreen.org/2018/03/an-eleventh-century-chinese-coin.html](http://www.caitlingreen.org/2018/03/an-eleventh-century-chinese-coin.html); see also T. Gilmore, "LVPL-4F4637: A Medieval Coin," 2011, <https://finds.org.uk/database/artefacts/record/id/444971>). The second is a Xiangfu Yuanbao (1008–1016 CE) found in Buriton, Hampshire, in 2018 (Hampshire Cultural Trust HAMP-C2BC79 [unprov.]: see C. Green, "Another Medieval Chinese Coin from England," *Dr. Caitlin R. Green* [blog], December 28, 2020, [www.caitlingreen.org/2020/12/another-medieval-chinese-coin-from-england.html](http://www.caitlingreen.org/2020/12/another-medieval-chinese-coin-from-england.html);

see also K. Hinds, "HAMP-C2BC79: An Early Medieval Coin," 2018, <https://finds.org.uk/database/artefacts/record/id/924566>). I thank Guy Sanders for providing these references.

26. For the entry on the Xining Yuanbao find, see <https://finds.org.uk/database/artefacts/record/id/444971>; on the Xiangfu Yuanbao find, see <https://finds.org.uk/database/artefacts/record/id/924566>, including Helen Wang's comment that "if there's no other context, I'd suggest it's just a random coin-find. Chinese coins were taken on ships from China to SE Asia, South Asia, the Middle East, so this coin could have come that way (at any date after 1008) or fallen out of a pocket not so long ago."

As follows, this study attempts to establish a preliminary foundation by closely examining the Corinth Tang coin within the context of other coins of its type, potentially determining its origin of issue. It is also feasible to draw upon existing patterns of intercontinental connectivity to establish baselines for assessing the possible routes by which the coin could have traveled westward.

## CLASSIFICATION

The Corinth Tang coin belongs to a type of coinage known as the Qianyuan Zhongbao (QY), named after the inscription found on the obverse. There are hundreds of recognized subtypes and variants of the QY series. Shoji Yoshida's catalogue lists 397 subtypes and offers a good starting point for studying QY coinage.<sup>27</sup> Several aspects of the catalogue, however, do not conform to Western numismatic standards. There is no detailed information, such as diameter and weight, included but only an attempt to give users a sense of scale through impressions of each module. The method of illustration is also problematic. Traditional Chinese numismatic studies use rubbings or ink-pressed images instead of photographs, allowing users only to view the contours, Chinese characters, and other markings on the coins but not the coloration and metal fabric. Yoshida's catalogue still is useful, however, as the characters already provide substantial information such as the calligraphic style and cast production-related traits that can be helpful in distinguishing types and subtypes of Chinese coins.

Among the coins in Yoshida's catalogue, the Corinth Tang coin bears similarities to a specimen termed the *duantou yuanshou* (短頭元首, or "short-headed *yuan*" style) that was reportedly found in "the Western Regions" (*xiyu*), roughly corresponding to the present-day Xinjiang Uygur Autonomous Region in the People's Republic of China.<sup>28</sup> Notable distinctions include the brushstrokes of the bottom character *yuan*—the first horizontal stroke appearing shorter than in other examples, and the second horizontal stroke displaying a more pronounced curvature. Another significant difference is the absence of a "hook" stroke in the right leg. Additional distinguishing features are evident in the top character *qian*, with the slightly blurred bottom horizontal stroke. In the right character *zhong*, the lower two horizontal strokes connect with the raised central rim. The strokes of the Chinese characters on the obverse of the Corinth Tang coin are noticeably less well-defined than those of the "short-headed *yuan*" style from Yoshida's catalogue, with their contours appearing bloated and bleeding into the rim. The character *bao* also is positioned too closely to the central hole. Moreover, the central square appears irregular, possibly due to casting irregularities, and the rim on the reverse side is ill-defined. The obverse and reverse surfaces of the Corinth Tang coin exhibit an uneven and granular texture.

The bloated, ill-defined borders and imperfect surfaces can be attributed to the sand-casting technique.<sup>29</sup> The process involved creating two sand-filled

27. Yoshida 2005.

28. Yoshida 2005, no. 372, p. 104.

29. Dick 2020, pp. 5–7.

half-molds impressed with *zìqian*, or “seed coins” (made from *muqian*, or “mother coins,” using the same technique). An iron rod was used to create the main casting channel, and sprues were cut out between impressions and the main casting channel. The two half-molds were then joined, and molten copper alloy was poured from the top hole of the mold. After removing the mold, a “coin tree” would form, from which the coins could be harvested.<sup>30</sup> Sand patterns on molds could become disrupted, however, with repeated pouring, or quick pouring. Even in newly prepared sand molds, unstable sand particles could lead to uneven surfaces.<sup>31</sup> As some coin evidence suggests, certain casters would reuse the mold without repatterning either when facing time constraints or having less regard for the finished product.<sup>32</sup> The making of ceramic molds required more time, labor, and expertise than sand molds, and scholars have attributed the increased usage of sand casting to unfavorable conditions, such as during the An Lushan Rebellion (755–763 CE), during which time the QY was introduced as a wartime currency to address the imperial court’s tenuous financial position.<sup>33</sup>

One efficient way to examine the placement of the Corinth Tang coin within the realm of Tang coinage is to generate a scatter plot created using diameter and weight data of 264 QY specimens from the *Zhongguo Lidai Huobi Daxi* III (*ZLHD* III), a standard reference work that published coins from museums and archaeological storage in dynastic order (Fig. 4). This visual representation provides two comparative perspectives:

1. A comparison of the Corinth Tang coin with coins and their respective form factors as documented in the imperial histories. This includes (a) the KY coins, the staple Tang coinage by which the value of the QY was determined; (b) the standard QY coins; and (c) the Qianyuan Zhongbao Chonglun (QYc) coins.
2. A comparison of the Corinth Tang coin with actual QY specimens from the *ZLHD* catalogue, which provides data on dimensions and weight based on collections in Shanghai and Xi’an museums.<sup>34</sup>

Though Yoshida’s catalogue points to a “Western Regions” identification, the *ZLHD* catalogue solely includes the dimensions and weight of a single coin (no. 720) from this area. The rest are finds in the “Central Plains” (*zhongyuan*) of the Tang Empire.

30. On the early stages of applying the sand-casting method to coin casting, see Yang and Zhou 2017, pp. 7–10. For an overview of the sand-casting method in Chinese coin production based on Song Dynasty sources, see Thierry 2017, pp. 561–572. Also relevant here is the type IV KY discussed by Thierry (2017, pp. 241–243), who took note of low-quality production outcomes such as smaller modules, poor casting execution, and thickened Chinese characters due to overmolding

(“caractères empâtés en raison de l’abus du surmoulage”).

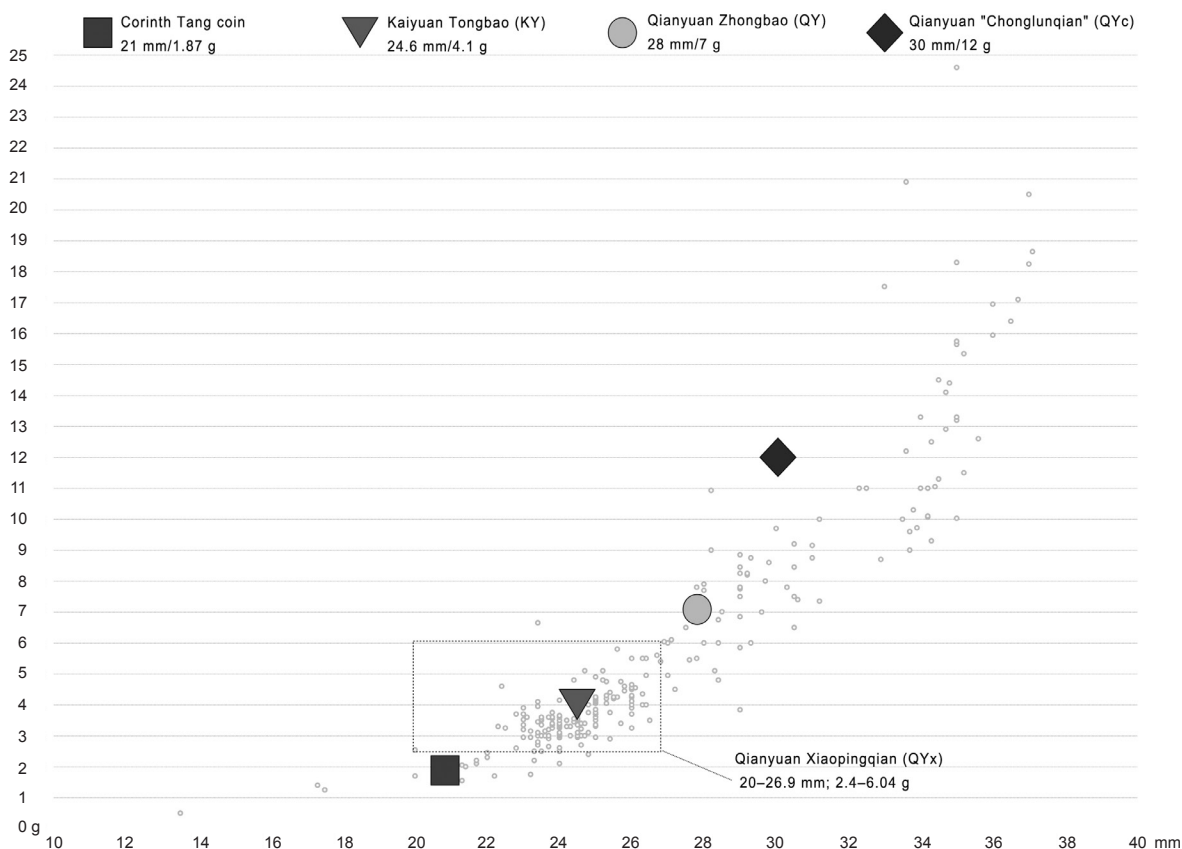
31. Yue 2017, pp. 86–87.

32. Yang 2016, pp. 14–15.

33. Yue 2017, p. 88.

34. Data from *ZLHD* III, pp. 134–194. The weights and diameters reported for the KY, QY, and QYc are approximations as converted by the authors of *ZLHD* III. The authors also discuss the historical sources used to obtain the diameter and weight information for the different QY and

KY modules, as well as the method employed to convert the measurements into the metric system (*ZLHD* III, pp. 11–13). For more precise dimensional definitions of the early, middle, and late phases of the KY series, Du and Gu (1996, pp. 41–61) offer more refined details. The focus of this paper, however, lies within the middle phase, which encompasses dimensions ranging from 24.0 to 25.5 mm in diameter and 3.5 to 4.6 g in weight.



One notable observation is that the QY and QYc coins did not adhere consistently to imperial standards. Instead, these standards appeared to be more aspirational guidelines rather than strict regulations. While some coins were larger and heavier than the KY in accordance with these standards, there was no uniform production. Interestingly, there is also a variant group of QY coins that the *Zhongguo Qianbi Dacidian* (ZQD) III described as the Qianyuan Xiaopingqian (QYx) that attempted to adhere closely to the formal characteristics of the KY, disregarding the imperial aspirations for larger and heavier coins.<sup>35</sup>

For now, what stands out is that the Corinth Tang coin does not align with any of the aforementioned evolving tendencies. Since none of these coins truly conform to the imperial standards, counterfeiting is not the primary issue. A historical explanation is perhaps more preferable. The Tang Empire faced a significant existential crisis from 755 CE onward. By the 760s sociopolitical circumstances had become highly volatile, and government finances were strained. It is tempting to associate these circumstances with the fluctuating coinage standards observed in the ZLHD III and the apparent disconnect between the Corinth Tang coin and the majority of QY specimens in the ZLHD III catalogue.

It is important to place the unique characteristics of the Corinth Tang coin in this turbulent historical context. The Corinth Tang coin, like other subtypes of the QY series, would have been fixed to a specific value based on the KY coin that was the standard introduced by the first Tang emperor Gaozu (r. 618–626 CE) in 621 CE.

Prior to the Tang Dynasty, copper currencies relied on “pseudo-intrinsic” valuations based on the inscribed weight symbols on each coin.<sup>36</sup> Insufficient

Figure 4. Corinth Tang Coin compared with standard Tang coinages. C.-Y. Wu

35. See ZQD III (*Tang*), pp. 419–436.

36. For the jurist-Confucianist state’s “harmonious relationship” (“rapport harmonieux”) doctrine between intrinsic copper value and weight symbols, see the discussion in Thierry 2001, pp. 134–136; Thierry (2017, pp. 65–69, esp. p. 68) also discussed the principle of assessing real value by fine metal content, in addition to overall weight. For *liang* or *zhu* across different kingdoms and dynasties, see Peng 2015, pp. 58–60, 80–82; Thierry 2017, pp. 57–58.

quantities of coins in circulation and counterfeit coinage constantly disrupted these valuations, especially during times of political and economic instability such as the upheaval immediately before the Tang Dynasty was founded in the early 7th century.<sup>37</sup> To address economic and monetary instability, Gaozu introduced a coin series that fixed 1,000 pieces of the KY coin to the weight of 6 *jin* and 4 *liang*, and 10 pieces of coin to the weight of 1 *liang*.<sup>38</sup> The KY was the first coin issue in which value no longer depended on the inscribed nominal weight.<sup>39</sup> It also became the reference currency of 1-cash, and subsequent Tang issues including the QY adhered to it.<sup>40</sup>

The KY was plagued by widespread counterfeiting, however, as production issues limited the coin supply.<sup>41</sup> Efforts were made to rectify the shortage of cash coins and combat counterfeiting, but they were largely unsuccessful. Examples include a “fictive-value” currency called the Qianfong Quanbao that Tang Gaozong (r. 649–683 CE) introduced in 666 CE to replace the widely counterfeited KY.<sup>42</sup> The Qianfong Quanbao was valued at 10-KY cash coins when it was only slightly larger and heavier. This effort to combat forgery caused instead a demonetization of the market and a spike in commodity prices.<sup>43</sup> Empress Wu Zetian (r. 701–705 CE) resorted to publishing standards so that counterfeiting could be identified, but the shortage of cash coins meant that lower-quality coins became more acceptable, again increasing the number of counterfeit coins.<sup>44</sup>

Under Tang Xuanzong (r. 712–756 CE) a robust counterfeit market formed in the Jiang-Huai region, where coin-hoarders would exchange one “good” for five “bad” coins, then mix the bad with the good when they returned to the city of Chang’an.<sup>45</sup> Illicit mints in the Jiang-Huai region also produced copper coins mixed with iron and tin, with seven or eight of these coins being equivalent to one “good” coin.<sup>46</sup> It is therefore not a surprise that, in such a fragile monetary environment, the stability (if any) of the Tang economy relied on a diverse range of payment instruments,

37. See Peng 2015, pp. 181–200, for highly inflationary coinage practices by pre-Tang cash currency issuers that led to habitual deliberate depreciations of cash currency value, and the disjunct between state and market actors in using licit and illicit cash coins, including forgeries and government-banned coinage of prior dynasties.

38. Cartier (1976, pp. 325–326) cast the policy as one that sought to use currency as a means to maintain social order and an instrument to exert rigorous control of monetary circulation and economic life. He also described the KY as a coin between 4.18 and 4.50 g, with 0.1 oz of copper, or 3.7 g, but there are various perspectives. The *Tongdian* (TD), a work on imperial protocols and standards, gave the mid-Tianbao era formula roughly 83% copper, along with 14% of a type of lead-tin alloy called *baila*, and 2% tin (21210 *jin* : 3709 *jin* : 540 *jin*); TD 9.204; XTS 54.1386; see

also the discussion in Xu and Wang 2013, p. 225. Modern compositional testing results, such as those carried out by Fudan University and published in ZLHD III, suggest that the actual copper content of common KY modules may be closer to 74%–78%, though one large KY module tested in this batch of nine coins does have a copper content of 84.5%; see ZLHD III, pp. 559–560; Thierry 2017, pp. 252–253. Zhou 2004 (pp. 48–54) offers a diachronic view for the composition of the KY based on 134 specimens, all consistently with 70% copper content (also see discussion on p. 304), but only 15% had copper content above 80%, and still only 7% matched the proportions given in the *Tongdian* (pp. 307–308).

39. Thierry (2017, p. 208) provides a good explanation: the KY was to be a “treasure” (*bao*) “that passes freely” or “that circulates” (*tong*), and one that “opens” (*kai*) a “new era” (*yuan*),

essentially instruments for everyday transactions and not for store of value, like silver and gold; but also see Peng 2015, pp. 5–6.

40. Du and Gu 1996, pp. 1–3; Peng 2015, p. 217.

41. Peng 2015, p. 244; Thierry 2017, pp. 209–210.

42. Thierry (2017, p. 216) translates *xuqian* (from XTS 54.1387) as “valeur fictive.”

43. Peng 2015, p. 244; Thierry 2017, p. 210; XTS 54.1384; JTS 5.90–91. It is useful to consult Cartier 1976 (pp. 327–332) for a short but clear account (including timelines and a logarithmic graph that clearly demonstrate inflation) of what he describes as the six periods of Tang price fluctuation between the early 7th and late 9th centuries.

44. JTS 48.2096.

45. JTS 48.2099.

46. XTS 54.1386.

including silk bolts, hemp bolts, hanks, piculs, and strings of cash coins, which accounted for only an estimated 15% of total state revenue.<sup>47</sup>

The creation of the QY, the prototype of the Corinth Tang coin, was the direct result of the systemic disruption of all aspects of the Tang economy during the An Lushan Rebellion.<sup>48</sup> During the reign of Emperor Suzong, ministers leaned heavily toward “fictive-value” cash coinage to compensate for disrupted textile and agricultural production, rising commodity prices, and a general strain on cash coin liquidity.<sup>49</sup> The term *zhong* (“heavy” or “weighted”) used in the Qianyuan Zhongbao was intended to signify that it was a multiple of the KY 1-cash coin.<sup>50</sup>

The initial release of the QY series in 758 CE featured coin dimensions of ca. 28 mm and a weight of 7 g,<sup>51</sup> making it 12% larger and 40% heavier than the KY. It was again over-tariffed at 10-cash, this time to sustain the war efforts through “a search for liquidity,” as Thierry puts it.<sup>52</sup> This search for liquidity continued in 759 CE, when Suzong’s minister Diwu Qi ordered the Jiangzhou mints (in modern Shanxi Province) to create a variant of the QY tariffed at 50-cash specifically for paying salaries, with a slightly larger dimension (ca. 30 mm) and twice the weight (ca. 12 g) of the standard QY.<sup>53</sup> A double-rim design was added to set this class apart from the standard QY, and hence it is also called the Chonglunqian (here abbreviated as the QYc).<sup>54</sup> From a modern perspective, the QYc represented a devaluation on the order of 85%–95%.<sup>55</sup>

Counterfeiting increased as a matter of course, with hundreds of coins produced in 760 CE.<sup>56</sup> Another response from the imperial court was to peg the KY to the QY at 10-cash, while lowering the QYc to 30-cash.<sup>57</sup> This

47. Cartier 1976, p. 338; Hansen and Rong 2013, p. 290.

48. For a standard account in English on the rebellion, see Peterson 1979, pp. 468–497.

49. Peng 2015, pp. 247–250.

50. Thierry 2017, p. 508.

51. *XTS* 54.1386 gives the size and weight as one *cun* in diameter for each coin and 10 *jin* per *min* (1,000 coins); *ZLHD* III, p. 12 gives the general size and weight as 28 mm and 7 g.

52. Thierry 2017, p. 215; *JTS* 48.2100.

53. *CFYG* 501.5998–5999: “In the second year (of the Qianyuan era) . . . a decree (on the QYc) was issued: . . . now at the mints of Jiangzhou there shall be a new module cast, with a new additional rim, and the current inscription unchanged; each piece of such coinage shall be 50-cash . . . with 20 *jin* as one *guan* (or 1000 cash), the rest of the coinage bureaux continue as previously ordered . . . the new coinage from Jiangzhou ought to be taken for winter’s salary.” *JTS* 48.2100: “third month of the second year of the

Qianyuan Era: Diwu Qi became premier; he again beseeched the emperor to cast ‘Chonglun’ Qianyuan coins, tariffed at 1 to 50-cash value, with each *guan* weighing 20 *jin*. Permission granted via edict.”

54. Thierry (2017, p. 216) translates Chonglun as “double rebord” (or double rimmed). *JTS* 10.257: “mais avec un double rebord.” Thierry (2017, p. 217) also treated the “Chonglengqian” (重稜錢; *JTS* 10.259, 48.2100–2101; *XTS* 54.1386–1387) as synonymous to the Chonglunqian (重輪錢): “À cette époque, les trois types de monnaies circulaient conjointement dans la population. Les [plus] grandes, en raison de leur double rebord et de leur arête saillante étaient appelées ‘pièces au double rebord saillant’ [Chonglengqian, 重稜錢].” This opinion is also maintained by Tang Shifu in *ZQC*, p. 102, s.v. chongleng: “designation for a feature of a round coin, namely chonglun” (重稜: 圓錢部位名。即重輪); see also p. 103, s.v. chonglun: “designation for a feature of a round coin, meaning two external rims. The word *lun* means the external

rim of a coin, or the outer contours.

*Chonglun* is doubling of the outer contours” (重輪: 圓錢部位名。外郭兩重者, 稱重輪。輪為錢幣之外緣, 即外郭, 重輪為重外郭).

55. Cartier 1976, p. 336.

56. *JTS* 48.2100: “In the city of Chang’an people competed in counterfeiting; bells and statues from temples and shrines were mostly destroyed to cast money. Evil men and powerful clans breach the law endlessly. The mayor of the capital Zheng Shu-Qing arrested most with no mercy, and tortured to death 800 or more souls within a few months.”

57. *JTS* 48.2100: “In the sixth month of the Shangyuan era, it was decreed that . . . the 50-cash Chonglunqian shall be reduced to 30-cash, and the old Kayuan coinage shall be used as 10-cash; the Qianyuan 10-cash shall continue at the established rate.” *XTS* 54.1387: “The first year of the Shangyuan era, the Chonglunqian is reduced to 30-cash, while the Kaiyuan and the Qianyuan 10-cash are now both 10-cash coinage.”

arrangement remained in effect until Daizong succeeded Suzong in 762 CE and issued two edicts to down-tariff the QY series to 1-cash equivalents.<sup>58</sup> Mints, whether official or illicit, responded by melting down older and larger QY and QYc coins to cast smaller denominations, resulting in a pool of QY variants. In later numismatic studies, these smaller QY variants were known as Xiaopingqian (QYx), but this term was not used in the official historical accounts such as the *Xintangshu* (XTS), *Jiutangshu* (JTS), and *Tongdian* (TD).<sup>59</sup> In Chinese numismatic studies and compendia, any coin below 28 mm and 7 g could be classified as a QYx variant.<sup>60</sup>

For our purposes, an important question concerns whether QYx variants were (or should be described as) counterfeits. Control marks on many “standard” QY and QYc issues (that is, those likely produced by official mints) also appear on QYx variants.<sup>61</sup> Some scholars suspect that QYx coins may have been “licitly” cast by imperial or provincial authorities.<sup>62</sup> Wang Yumin’s argument is particularly interesting. He argues that since Suzong’s Shangyuan edict of 760 CE equalized the tariff of the KY and the QY at 10-cash while lowering the QYc to 30-cash, and Daizong’s second Baoying edict of 762 CE accepted all existing QY issues as 1-cash equivalents (with the exception of illicitly produced large modules), all mints—licit or otherwise—would have had an incentive to avoid producing QY-standard coins of lesser value with

58. *JTS* 48.2101: “In the fourth month of the Baoying Era, the Qianyuan coinage was set at 2-cash, and the Qianyuan Chonglun small module was also 2-cash; the Chonglun large module was 3-cash. Later all large and small Qianyuanqian were 1-cash. Privately caste Chonglun large modules were not counted as licit coinage.”

59. A simplified explanation of the Xiaopingqian can be found in Tang Shifu’s *ZQC*, s.v. pingqian: “pingqian: terminology, also called xiaoping, a round coin used for one *wen*, generally uninscribed” (平錢: 述語, 又稱小平, 做一文使用之圓錢, 通常無銘). The Xiaopingqian designation was not applied to Tang Dynasty coinage in the conventional accounts concerning imperial standards—even earlier numismatic treatises only took note of the curious existence of small QY coins and did not classify them further. In Thierry’s recent account (2017, p. 299), the Xiaopingqian was discussed only in the context of Song Dynasty coinage: “la monnaie de base du système est la petite pièce de bronze, le xiaoping 小平, qu’on appelle wen 文 quand il s’agit de l’unité de compte et 錢 lorsqu’on parle de l’objet lui-même.” That said, in an earlier volume, Thierry (2003, pp. 105–106) discussed a set of antonymous

terms that appeared in the Tourfan documents of the 7th century CE, in which *pingqian* (平錢) was the opposite of *cangqian* (藏錢). Thierry (2003, pp. 105–106) suggested that the former ought to mean “ordinary” (*ping*) coins already in circulation, while the latter were coins that were just newly injected into circulation from official treasuries (“les premières [sc. pingqian] étant des pièces ordinaires ayant déjà circulé, et les cang qian des pièces neuves sortant des trésoreries officielles”).

60. Du and Gu (1996, pp. 110–112) defined the Xiaopingqian as coins below 25.5 mm and between 3 and 4.5 g, including five main subclasses of the “Xiaopingqian.” There are other, different diameter- and weight-based definitions for the “Xiaopingqian.” Wang (2006, pp. 16–17) attempts to classify the Xiaopingqian into 14 variants between 25 and 23.2 mm, weighing from 4 to 3.10 g. Also, *ZQD* III (*Tang*) identified 65 variants of the QYx between 20 and 26.9 mm and 2.4 and 6.04 g, likely cast between 762 and 763 CE in response to the Baoying edict (*ZQD* III [*Tang*], pp. 419–436), and also a subclass of “private/illicit” issues between 1.35 and 2.07 mm and 0.5 and 2.2 g (*ZQD* III [*Tang*], pp. 436–439). Yoshida 2005 (pp. 40–83) has 170 QYx

variants, but no formal factors were used to define them.

61. Du and Gu (1996, pp. 112–114) identified their module II and module III QYx as likely such types. Du You’s emphatic statement (*TD* 9.204) that both the QY series have been terminated, melted down, and recast into artifacts soon after the introduction of the QYc in 759 CE, and that they “no longer exist in the human realm,” seems to be a generalization of this development.

62. Peng 2015, p. 216: “Quite a number of Qianyuan Zhongbao coins have been passed down through the ages, especially the Xiaopingqian, second to only the Kaiyuan Tongbao. Perhaps it has been cast and used even after the An Lushan Rebellion.” Taking Peng’s observation further, Dick (2020, pp. 4–5) pointed to passages in the official records and proposed four categories of “sanctioned” but not necessarily coordinated mints during the Tang period: imperial, provincial, “auxiliary” (or mints gifted by the emperor, which production would finance royal family members of favored ministers), and permitted private mints (when the imperial government had difficulties increasing coinage production).

more metal.<sup>63</sup> In other words, the QYx variants could be understood as QY coins issued after the edict of 762 CE, as opposed to illicit counterfeits. Their formal similarities to the KY can then be explained because they were “official” productions, despite their lack of uniformity.

Within this context, the Corinth Tang coin stands out as a remarkable specimen due to its smaller and lighter size, not only compared to the KY but also in relation to the majority of known QYx examples. The Baoying edict of 762 CE established the base value of the Corinth Tang coin as 1-cash, but why is it significantly smaller and lighter than other coins on record? There are two potential interpretations to consider.

The first version is that the Corinth Tang coin is an outright counterfeit. Counterfeits, however, typically aim for a low-cost reproduction with standard dimensions to maximize the chance of acceptance. Considering the scatter plot in Figure 4 as a guide to the acceptability of the QY series, the Corinth Tang coin is an anomaly. Even if the Tang cash coin economy was in turmoil and counterfeiting was rife, the Corinth Tang coin’s significantly smaller weight and dimensions still would have made it much less desirable than others, leading to the possibility of rejection. Why would someone create a counterfeit that did not seek to mitigate the risk of rejection? This is particularly concerning since risk mitigation can be achieved in various ways. Low-cost counterfeits did not necessarily need to be smaller in size but rather could have been diluted with other metals. Also, profit in counterfeiting did not always derive from dilution but could have stemmed from the availability of convertible metal repurposed for casting, such as high-quality bronze bells and statues from temples. According to the *Jiutangshu*, this strategy was indeed adopted by counterfeiters.<sup>64</sup>

The second interpretation is that the Corinth Tang coin was produced by a “legitimate” or at least officially sanctioned mint for a government agency facing both dire constraints in metal resources and an urgent need for some cash coin liquidity of even substandard dimension and weight. The second explanation may be more attractive. This possibility will be explored in detail, below, as the Corinth Tang coin is examined from the perspective of a special group of QY coinage produced in the Western Regions, also known as the “Anxi Protectorate” after 648 CE, as documented by Yoshida (see p. 90, above).

## ANXI PROTECTORATE COINAGE?

As mentioned above, the Corinth Tang coin shares similarities with specimens from the Western Regions. In Chinese accounts from the Han Dynasty (202 BCE–220 CE) onward, this was the accepted term for the Tarim Basin and its environs. It is distinct from the Central Plains of the dynastic empires of China. In the Western Regions, numerous oases and

63. Wang 2006, pp. 15–16; a similar argument is made by Sun and Hu (1989, pp. 37–38), noting that a QYx variant had the Chinese character hong on the reverse, like the KY series that

were issued in 845 CE, and some QYx variants may have been continuously produced in the 8th and the 9th centuries CE.

64. *JTS* 48.2100.



river plains sustained ancient kingdoms that utilized silver and gold coinage, following the established norms of the Sasanian and Sogdian regions in central Asia since the 5th century. Notably, the Merv issues of the Sasanian king Barham V (r. 420–438 CE) served as a paradigm for the Bukhar-khuda drachms minted in Sogdian centers like Bukhara and Samarkand during the 6th and 7th centuries.<sup>65</sup> The bronze coinages of Han and Tang China also circulated there.<sup>66</sup> Some kingdoms even minted imitative copper coins that showcased clear influences from Chinese coinage, especially during the periods when the Han and the Tang (618–907 CE) Empires held dominance in the region.<sup>67</sup>

In 630s CE, following a series of military conquests, the Tang Empire established the Anxi and Beiting Protectorates to exert control over a network of “tributary” states, the farthest extending to the Sogdian and Tocharian heartlands.<sup>68</sup> The Tang Empire maintained its authority through a system of fortified garrisons that oversaw settlements populated by diverse and economically versatile communities.<sup>69</sup> Migrants, goods, and coins flowed from the Central Plains of the Tang Empire; these had a long-lasting transformative impact on the socioeconomic landscape of the Western Regions and even certain parts of central Asia outside the immediate control of the Tang Dynasty.<sup>70</sup> The protectorate framework brought about large-scale agricultural irrigation installations and cultivation in the garrison settlements. Contracts and leases show not only considerable activity in horse and sheep stock management but also the extensive property holdings and robust economic activities of Buddhist temple establishments, among others.<sup>71</sup>

The KY eventually became one of the preferred forms of payment in addition to textiles and grains, but only until the early years of the 8th century.<sup>72</sup> The impact of Tang coinage on the protectorate economy was at first negligible. As early as the mid-6th century, the Western Regions,

65. Zeimal 1994, pp. 246–249.

66. Hansen and Rong (2013, pp. 282–283, 287–292) discuss currencies in cash and in kind used from preserved ledgers and official documents, including a considerable number of references to silver and bronze coins used in documents of the 6th–early 8th century. See Figure 7, below, for examples of Han Wuzhu (Fig. 7, nos. 1a, 1b) and Qiuci (nos. 3a, 3b) imitatives.

67. Thierry (2017, pp. 199–203, esp. p. 200) discussed the versatility of local authorities, issuing copper issues when Chinese empires retreated, and bronze coinage from central China when they expanded; Peng (2015, pp. 85–86, 225–226) gave brief notes on Han and Tang influences on central Asian coinage styles. Li (2008, p. 269) included a useful geographic summary of the imitative coinage correlations for Sogdiana: Samarkand = Seleukid/Antiochean coinage; Bukhara = Euthydemus

dynastic coinage of Greco-Bactria and Sasanian coinage; Kabul = early Seleukid coinage with the bust of Alexander.

68. As Skaff (1998, pp. 87–89) explains, the so-called tributes and missions were actually goods carried by merchants, pointing to *JTS* 198.5296 as the key evidence in which the imperial advisor Wei Zheng discussed the kingdom of Kaochang’s blockade of barbarian/western merchants and their tribute/cargo. A visualization of the network at its maximum extent is seen in Figure 9, below.

69. For the standard English account on the establishment of the Anxi Protectorate, see *CHC* III.1, pp. 224–228; in Chinese, Xue (1996, pp. 19–68) gave a comprehensive account on the competition for the control over the kingdoms in the Tarim Basin between the Onoq Khanate and the Tang Empire and the Tubo Kingdom as Taizong pushed westward the

Anxi Protectorate apparatus.

70. Skaff 1998, p. 103.

71. Yin 2007, pp. 194–392. Also see Zhang et al. (2011, pp. 116–143) for multidirectional mobility patterns and production activities of officials, colonists, monks, emissaries, and military personnel represented from the local documents and from literary sources. On the strategic posture of watchtowers, forts, and garrisons surrounding administrative centers, see Zhang 2006, p. 177; Xing 2010, pp. 116–123.

72. The consensus of an early 8th-century date for the end of the transition is mostly clearly expressed by Skaff (1998, pp. 71–77), who breaks down the silver coin finds based on rulers, mint dates, and known burial dates for coins found in funerary contexts, leading to the useful observation that silver coins mainly circulated in Turfan for the entirety of the 7th century and lasted to 706 CE.

along with the Hexi Corridor, which falls within today's Gansu Province, had a well-established tradition of using Sasanian drachms as legal tender, following the practice of central Asian commercial operations.<sup>73</sup> The use of Sasanian coins can be seen in various aspects of life, including correspondence,<sup>74</sup> everyday transactions, taxation,<sup>75</sup> and funerary rites.<sup>76</sup> The Hephthalites played a significant role in this regard. They were the third Hunnic group with linguistically Indo-Iranian backgrounds, who captured Balkh from the Sasanians in 474 CE; eventually they dominated Sogdiana and forced the Sasanian king Peroz (r. 457–484 CE) to submit, pay tribute, and turn over his son as a hostage to the Hephthalite court.<sup>77</sup> Their exploitation of silver from the Sasanians in the 5th century laid the foundation for the adoption and later imitation of Sasanian coinage in the 6th and 7th centuries.<sup>78</sup>

By the mid-7th century, however, the Sasanians were overrun by the caliphs Umar and Uthman between 634 and 651 CE.<sup>79</sup> The flow of silver drachms eastward tapered off.<sup>80</sup> Within 50 years, the effects of a depleted silver stock in central Asia began to appear. There was decreased purity of Sasanian imitations,<sup>81</sup> and silver coinage became scarce in archaeological contexts from Xinjiang.<sup>82</sup>

In documentary sources, silver coins continue to appear until the turn of the 8th century CE.<sup>83</sup> A contract of sale of a vineyard in 683 CE already involved the use of holed money (*kongqian*, or “monnaies trouées”), and by 733 CE, the word *qian* was universally associated with copper coins.<sup>84</sup>

73. De la Vaissière 2005, pp. 171–175.

74. See de la Vaissière (2005, pp. 46–55) on translations and analyses of the Sogdian merchant network observable from four nearly complete ancient letters written in the Sogdian language and found by Stein in 1907. These include “Ancient Letter V” (de la Vaissière 2005, pp. 50–51), in which a merchant reported his whereabouts as being in Wuwei (modern Gansu), with a list of cargo ready for dispatch, and also news about debts owed by a number of individuals, calculated in silver stater.

75. Thierry (2000, p. 128) and Hansen and Rong (2013, p. 287) discuss the earliest documentary evidence from a grave inventory of 543 CE that mentions 100 silver coins along with six different types of “exotic” cloth, including Persian and Chinese silks (Urumqi, Xinjiang Museum 72TAM179: *TCWI* 143). De la Vaissière (2005, p. 174) mentioned a fragment of Tang fiscal statute that required westerners to pay taxes in silver coins first, then switch to payment in kind after two years.

76. Thierry (1993, pp. 100–102)

discusses the coins found in the mouth of the deceased from tombs in Astana and Yarkhoto, a curious local practice that is different from and much earlier than the Chinese funerary rite of filling the mouth of the deceased with jade.

77. Wiesehöfer and Rollinger 2020, pp. 321–324.

78. See Skaff 1998, pp. 85–86; de la Vaissière 2005, pp. 110–112, 136.

79. For standard narratives of the caliphs' advances into Sasanid central Asia between 634–651 CE, see Zarrinkoub 1975 (pp. 4–26), and more recently Kennedy 2004, pp. 57–75.

80. Skaff 1998, pp. 78–79.

81. The silver content of the Bukhar-khuda coins in the 7th century dropped noticeably, particularly with the inclusion of a copper layer; see Zeimal 1994, pp. 246–247.

82. Thierry (2000, p. 137) posited that the circulation of silver coins in the Tang protectorates likely soon ceased after the mid-7th century, since they do not appear in post-650 CE archaeological contexts in Xinjiang. Thierry (1993, pp. 89–96) discusses the 60 archaeological contexts and their Sasanian coins.

For a cross-reference of secure dates of mint versus dates of burial in the Astana and Karakhoja tombs, see Skaff 1998, p. 77, table 3.

83. Hansen and Rong (2013, pp. 291–293) discussed two groups of documents that shed light on the persistence of silver coin circulation in the Turfan region after 640 CE. The first group of 15 contracts comes from the tomb of Zuo Chongxi, securely dated to 673 CE, in which we find one being a loan of silver coins charging 10% interest, and using silver coins for purchases of items such as grass and land rent. Hansen (1995, pp. 60–61) also discusses the prevailing rate of interest at Astana. The second group includes a receipt securely dated to 692 CE by the Ruyi reign period, in which was mentioned that two silver coins are the equivalent of 64 copper coins, hence a 1:32 exchange rate and a pathway for the eventual phasing out of the silver coinage; see Trombert and de la Vaissière 2007, p. 28. For provenance of the receipt, see Urumqi, Xinjiang Museum 64TAM35:28: *TCW* VII, p. 441.

84. Thierry 2000, p. 137.

The KY and local imitations also began to appear in central Asia.<sup>85</sup> In the Sogdian centers of trade both close copies and also less faithful imitations, including miniaturized types marked with local *tamgha*, or seals, are found.<sup>86</sup>

Tang coinage also left a mark in the Kafirnihan and Vakhsh valleys north of Balkh (Fig. 10, no. 15, below), where three distinct groups of holed coins were produced: some with Bactrian cursive legends and others with Sogdian legends, amid a strong tradition of anepigraphic scyphate and flat copper coins attributable to the 6th–7th century.<sup>87</sup> The influence of Tang coinage continued until the An Lushan Rebellion (755–763 CE), with some lingering effects lasting until the late 8th to the 10th centuries in certain pockets of central Asia.

Stein's collection at the British Museum offers valuable insights into the adjustments made to the Tang bronze currency system in the Anxi Protectorate in response to the events triggered by the An Lushan Rebellion.<sup>88</sup> In the following scatter plot (Fig. 5), 420 of Stein's QY specimens from Xinjiang are compared with the specimens in Figure 4.<sup>89</sup> The data of the Stein collection is taken from Wang's published dissertation, "Money on the Silk Road: The Evidence from Eastern Central Asia to c. A.D. 800," among which a number of coins purchased or acquired with no specific geographic information are excluded.<sup>90</sup> Coins with missing diameter or weight information also are excluded. The Xinjiang finds are presented here using Wang's classification of the coins: large (gray square, 28–30 mm; n = 94), medium (gray triangle, 25.5–26.5 mm; n = 21), and small (gray circle, 21–22 mm; n = 305).

The first group to discuss is the "Anxi QY medium." This group's diameter and weight ratio roughly correspond to the standard definition of the QYx of the ZQD III (*Tang*), which aligns with a considerable number of ZLHD III's central China specimens and is markedly different from the composition of the Anxi QY coinage. As mentioned above, the QYx variants were likely the outcome of the Shangyuan edict of 760 CE,

85. Li (2008, pp. 271–276) offers an extensive survey for Sogdian coinage produced in the Zaravshan and Kashka Darya river basins, including the KY-inspired coins of Shishpir (r. 642–655 CE), Vuzurg (r. ca. 7th century CE), Varhuman (r. 650–696 CE), Mastan-Navyan (r. 698–700 CE), Tarhun (r. 700–710 CE), Gurek (r. 710–738 CE), Turghar (r. 738–750 CE), and coinage of Sogdian (Li 2008, pp. 276–279) and "west Sogdian" kings of the 8th century CE (Li 2008, pp. 283–284; chronologically less secure). Li (2008, p. 323) also describes the 7th–8th-century CE Khaqan and Tutuq copper coinage, produced in Ferghana of the Syr Darya River valley. For the Turghesh and Karluk of the Semirechye, Li (2008, pp. 324–333) gives a useful

overview of Chinese and Japanese scholars along with clear images. Li (2008, p. 325, fig. 9.96) also reproduces an important numismatic analysis produced by Kamyshev, showing the range of local Turghesh and Karluk imitative coinage in the 7th–8th century CE.

86. Zeimal 1994, pp. 247, 250, 252, nos. 1, 14–17, figs. 2, 3.

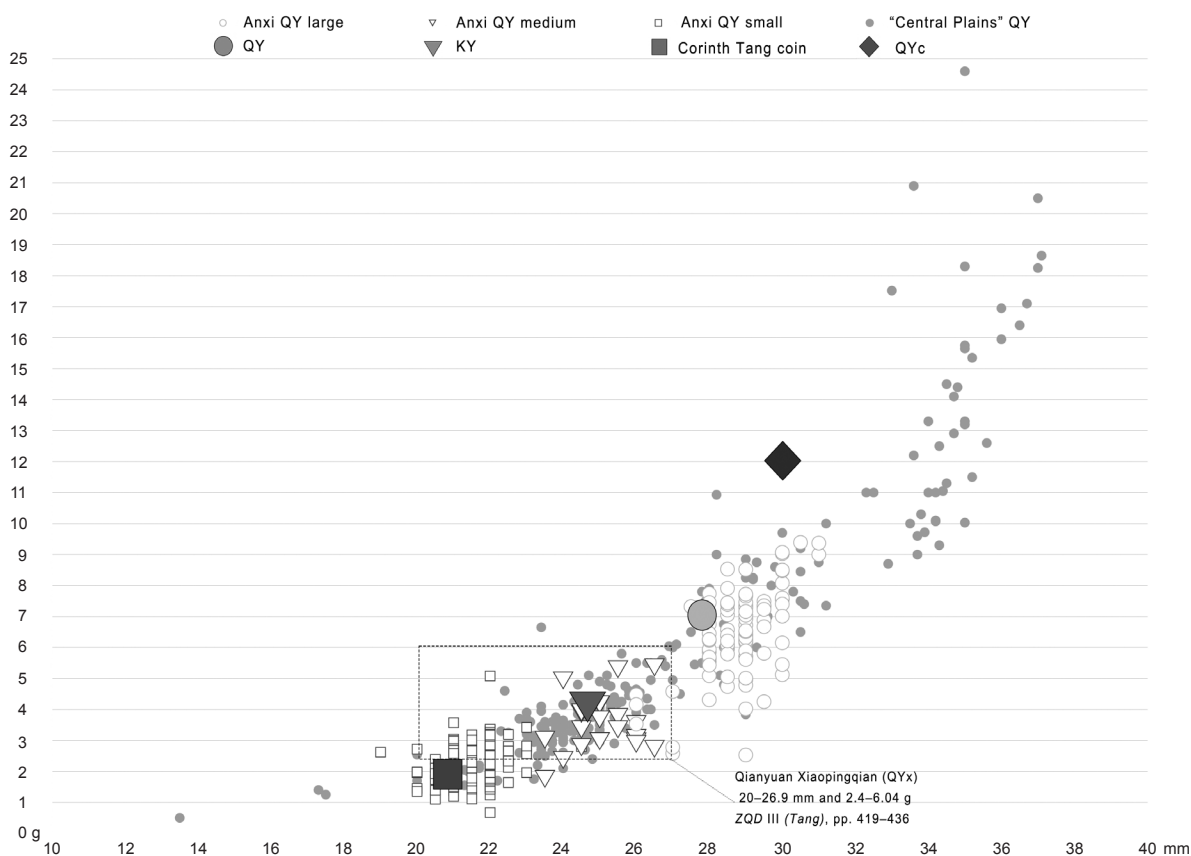
87. Zeimal 1994, pp. 257, 258, no. 9–35, fig. 5.

88. Wang (2004, pp. 128–243) lists 424 QY finds, but it is claimed (p. 30) that there are 417 QYs in the Stein collection. Technically, the Anxi Protectorate was renamed Zhenxi Protectorate in 757 CE (XTS 67.1870) in part to respond to the imperial court's loss of contact with its

command, but with contact restored in 781 CE the designation was restored (XTS 137.6124–6125); in this article, "Anxi" is used throughout. Pelliot's 11 specimens of the QY kept at the Cabinet des médailles (Thierry 1997, pp. 165–166), while significant because of Thierry's in-depth study of the casting techniques and their association with other Anxi coinage, are numerically less significant.

89. As previously mentioned, only one find from Xinjiang (no. 720) was among the coins catalogued in ZLHD III, but with no weight and diameter information, and it is hence not considered in the scatter plot for this study.

90. Wang 2004, pp. 128–243.



when the KY was re-tariffed at 10-cash and hence equivalent to the QY. Figure 4 shows the impact of this change, as large numbers of QYx with dimensions and weight close to KY standards were produced. In Figure 5, the relative scarcity of the “Anxi QY medium” suggests that the Anxi QY coinage rapidly shrank in size without the middle phase, unlike the development of the QYx in the Central Plains of the Tang Empire. Such a difference in the evolutionary process of the QY series may be attributed to the adverse effects of the Tibetan offensive against targets in the Hexi Corridor between 758 and 764 CE.<sup>91</sup> There was likely a steep decline in movement of imported goods, along with specific knowledge of the sort of QY variants acceptable in central China between 760 and 762 CE. Briefly, the Anxi Protectorate skipped an evolutionary phase of the QY immediately following the new QY-KY equivalence. Local production output of the “Anxi QY medium” instead may have been dictated by cost-saving considerations.

This brings us to the “Anxi QY small” coins. The group of 305 specimens has an average diameter of 21.6 mm and a weight of 2.30 g, with 59 specimens below 1.87 g (the weight of the Corinth Tang coin). The overwhelming proportion of such coins (>72%) in the Anxi QY corpus seems to suggest that the small form type (which the Corinth Tang coin shares) commonly was accepted in the Anxi Protectorate. Of course, the Corinth Tang coin is still on the smaller and lighter side of the group, but two other Anxi coinage series issued after 766 CE—the Dali Yuanbao (766–779 CE) and the Jianzhong Tongbao (780–783 CE)—show an increasingly diminutive

Figure 5. Anxi variants compared with the Corinth Tang coin, KY, and the QY series. C.-Y. Wu

91. See Beckwith 1993, pp. 143–155; Xue 1998, pp. 277–278.

form factor trending toward 20 mm.<sup>92</sup> It is likely that the Anxi Protectorate authorities were intentionally producing smaller and smaller cash coins.

Based on this empirical data, it is reasonable to consider the possibility that the Corinth Tang coin was either produced within the Anxi Protectorate or by an agent connected to the protectorate. If this is indeed the case, it would have significant implications for understanding how the coin could have made its way to Corinth. Exploring this line of inquiry, however, would largely rely on intuitive and comparative analysis, such as comparing the Corinth Tang coin with proxy coin specimens found in the Anxi Protectorate.

The Dali Yuanbao and Jianzhong Tongbao coinages serve as important proxy coinages for understanding the “Anxi” context. The question of who issued these coins has been a topic of debate. Initially, it was believed that the Dali and Jianzhong coinages were produced by central Chinese mints, and their discovery in garrison sites and Buddhist grottoes led Huang to conclude that the Anxi Protectorate remained connected to central China during the Dali and Jianzhong eras.<sup>93</sup>

This view changed with two publications by Wang. Wang associated earlier discoveries of coins in the Kucha region with the subsequent unearthing of thousands of Dali and Jianzhong coins at garrison sites near the seat of the Anxi Protectorate in Kucha during the 1990s.<sup>94</sup> The quantity of finds is particularly remarkable, as only a few have been found in hoards from central China.<sup>95</sup> Moreover, the official records of the Tang court make no mention of the issuance of these coins, unlike the KY, QY, and Qianfeng Quanbao previously discussed.<sup>96</sup> Wang concluded that these two series probably were produced when the Anxi Protectorate became completely separated from the Central Plains of the Tang Empire. This theory has gained substantial support among scholars.

Thierry’s research on the Dali and Jianzhong coinage of the Anxi Protectorate provides significant support for the argument of coin saturation in a limited geographic area.<sup>97</sup> Thierry’s evaluation, known as the “mother-link” analysis, draws parallels to die-link analysis commonly used in Western numismatic studies. He identified formal similarities between the Dali and Jianzhong coins in the Pelliot collection (collected by Pelliot near Kucha in the early 20th century) and the KY and QY coinage.<sup>98</sup> He interpreted

92. Thierry (1997, p. 152) gives two dimensions for each coinage from the Pelliot collection: the large Dali is ca. 23 mm, and the small Dali is 21.5–22 mm; the large Jianzhong is 22.5 mm, and the small Jianzhong is 20–21.5 mm. Data for the Stein collection given by Wang (2004, pp. 128–243) includes 83 Dali coins with averages of 22.4 mm/2.57 g, and 38 Jianzhong coins with averages of 21.5 mm/2.51 g, aligning with the “Anxi QY small” in terms of dimensions in particular. There are also two other types of coinage with only the word yuan or the word zong on the obverse have a diameter ca. 20 mm.

See the discussions in Thierry 1988, p. 20; 2017, pp. 223–224.

93. Huang 1958, p. 107.

94. Wang 1995, pp. 21–22; 1996, pp. 4–5.

95. Thierry (2017, p. 224, nn. 40–43) surveyed the finds of Dali and Jianzhong coins and their variants in Xinjiang (n = 1,000+) versus finds in central China (n = 2).

96. Wang 1996, p. 3.

97. Thierry 1997, p. 157.

98. Thierry 1997, pp. 156–157; also see a reconstruction of the mold design process using KY and QY coins (Thierry 1997, p. 171).

the similarities as indications of a systematic production process in which existing KY and QY coins in circulation were repurposed as mother coins for creating sand molds to produce the Dali and Jianzhong coins. This production method not only reproduced certain calligraphic traits found in the KY and QY coins but also replicated their distinctive production characteristics, such as misalignments and habitual mishandling of attempts to clear the burrs in the central hole for stabilization with a square rod when trimming the outer rims (see, for example, Fig. 7, nos. 2a, 2b, below).<sup>99</sup> The conclusions drawn from Thierry's mother-link analysis have gained broad acceptance in scholarship. As a result, Dali and Jianzhong coins are now regarded as coinage produced by the Anxi Protectorate, headquartered in Kucha, utilizing pre-766 CE coinage that was already in circulation.<sup>100</sup>

The mother-link analysis assumes that formal resemblance between different types of sand-casted coins indicates that they were made with a similar batch of mother coins. An alternative argument can be made based on the metal fabric of the coins. A stronger case could be built by examining the signature of local copper ores found in the Anxi Protectorate, along with specific dimensions and weights unique to Anxi coinage. In fact, Thierry's mother-link analysis was inspired by his observation that there were "red copper" KY, QY, Dali, and Jianzhong coins in the Pelliot collection with identical metal fabric traits and dimensions.<sup>101</sup> His observation that small QY coins "were all of red copper" is of interest to assessing the origins of the Corinth Tang coin.<sup>102</sup> If the Corinth Tang coin's metal fabric bears similar signatures to those of Anxi coins, then there is a good case to be made for the Corinth Tang coin to have been an Anxi Protectorate product, licit or otherwise.

Unfortunately, Thierry's paper lacks a clear definition of what constitutes a "red copper" coin, and the catalogue's black-and-white illustrations do not provide sufficient visual evidence for direct comparisons. It is necessary, then, to turn to Zhou Weirong's specific definition of a "red copper" coin as having a 95%–100% copper content. He defined a "near-red copper" coin as having a copper content greater than 90%, though he also noted that the coloration would be identical for any coin with a greater than 90% copper content.<sup>103</sup> The clarity is welcome, but the vast majority of coins that scholars have designated "red copper" have not been subject to metallurgical analysis—some naked-eye observation of hints of reddish coloration seemed to suffice. For our purposes, a heuristic assumption that the QY coin with form factors and calligraphical features similar to the Corinth Tang coin would (in theory) increase the likelihood that the Corinth Tang coin was a red copper coinage produced in the Anxi Protectorate. Thierry kindly has shared images of coins found in the vicinity of Kucha. One in particular from the Département des monnaies, médailles et antiques of the Bibliothèque

99. Thierry 1997, pp. 153–156.

100. Thierry 2017, pp. 221–225; *ZQD III (Tang)*, pp. 478–483.

101. Thierry 1997, pp. 151–152: "Some of the kai yuan brought back by Pelliot can be clearly attributed to the mints in central China, when the colour of the metal, yellow-grey or yellow-pink (P469-3, P469-4 and P469-5) is

taken into consideration. . . . Some of these coins are of yellow-grey bronze and clearly come from mints in central China. . . . All the Kerish and Duldur-Aqur hoard kai yuan, mostly of Type I, are made of red copper, which was available locally in great quantity."

102. Thierry 1997, p. 152.

103. Zhou 2004, p. 458.



Figure 6. An Anxi QY specimen, BnFMMA CMCII no. 1211 (P54) (a), compared with the Corinth Tang coin (b). Wt. 2.64 g (a), 1.87 g (b). Scale 3:1.

Photo (b) P. Dellatolas; (a) courtesy Département des monnaies, médailles et antiques, Bibliothèque nationale de France; (b) American School of Classical Studies at Athens, Corinth Excavations

ationale de France (BnFMMA; Fig. 6:a) was likely part of the so-called Kerch hoard collected by Pelliot between 1906 and 1909.<sup>104</sup>

As is the case with the mother-link analysis, some formalistic aspects can help establish baselines of comparison. The Corinth coin and the example from the Pelliot collection share a close resemblance in the overall arrangement of the characters in proportion with the obverse field, the external rim, and the central hole. The strokes on the Kerch coin (see Fig. 6) are ill-defined and bleed into the outer and inner rims, clear signs of production by the sand-casting techniques. The Corinth Tang coin is egregious by comparison, with barely any defined strokes except for the character yuan. The shaft of the Corinth Tang coin's qian is also different, as it has a natural curvature trending right, unlike the straight and angular bends in coins (see Fig. 6:a) that resemble the specimens from Yoshida's catalogue. The bottom character yuan on each of the two coins is identical. The short bar followed by the longer curved bar of the character yuan has been regarded as a signature feature of Anxi coinage, due to the recurrence on small Dali coins, also observable in Figure 7, no. 4b.<sup>105</sup>

As to the coloration of the two coins, beneath a heavily darkened surface the Corinth Tang coin has a bit of a reddish glow to the bottom right of the character qian and to the bottom left of the character bao. The coin from the Pelliot collection in the BnFMMA (see Fig. 6) is photographed in grayscale, so unfortunately a direct comparison could not be made. Thierry reported that it had a glowing or murky dark reddish color.<sup>106</sup> The two coins may in this sense be comparable, though closer comparisons would be necessary, including metallurgical studies.

104. Département des monnaies, médailles et antiques, BnFMMA CMCII no. 1211 (P54); Thierry 1988, no. 5; 1997, pp. 150, 166, 173.

105. Thierry 1997, p. 154: "The design of the character yuan [for the Dali Yuanbao] is very close to those of the small Qian Yuan zhong bao of the Kerish hoard . . . : the strokes are thick

and curved, and the second stroke rises to the left, but does not make a clear hook; the character bao is closer to those of the small Qian Yuan than to those of the large Da Li coins."

106. Thierry 1988, p. 20: "這批包有開元通寶、乾元重寶、大曆元寶、建中通寶，'元'字錢及若干枚五銖，錢的錢幣色澤相同，銅色自光澤的紅色到混濁暗

黑的紅色，沒有銅綠，未被氧化" (This batch of coins includes KY, QY, Dali, Jianzhong, "yuan" character coins and a number of Wuzhu coins; the copper coloration of the coins is identical, including a glowing red to a murky darkish red, without bronze rust, no oxidization).

As mentioned above, the traditional thinking in Chinese numismatic circles is that certain properties of the copper ore (near Kucha?) used to cast coins may result in a reddish coloration, but the reported finds and sightings of red copper coinage in Xinjiang rarely have been based on clear definitions on how such a designation is applied.<sup>107</sup> Recent thinking is that the interaction between a coin's metal content and the soil in which it was buried also could contribute to the creation of a reddish "rust."<sup>108</sup> Metallurgical analysis of these coins may yield better insight. At this point, what also can be done is to consider a larger set of visual data for coins designated as "red copper" in order to understand how such coins are classified in the current scholarly tradition, thereby arriving at a better understanding of how the Corinth Tang coin can be classified.

Wang's study of the Stein collection of coins (systematically gathered in Xinjiang between 1900 to 1916) included a number of examples that provide the opportune data set.<sup>109</sup> There are 13 QYs designated as "red" among the 420 specimens; unfortunately there are no color images for these in the British Museum online database.<sup>110</sup> An alternative is to search for coins designated as "red" in Wang's catalogue that are represented with images in the British Museum online database (Fig. 7).<sup>111</sup> To create visual contrasts, the "red" coins (see Fig. 7, nos. 1a, 3a) are compared with coins of the same types but designated "bronze" (see Fig. 7, nos. 1b, 3b, 4a) or otherwise of undesignated metallic content or color of the fabric (see Fig. 7, nos. 2a, 2b, 4b). Following initial comparisons, a group shot was commissioned to document the coins under the same lighting conditions. Within the coin assemblage, Wang's classification includes several coins designated as "red." These include a Han Dynasty Wuzhu (see Fig. 7, no. 1a) and a Qiuci Wuzhu (see Fig. 7, no. 3a), both exhibiting a yellowish-green metal fabric covered with red or ochre-colored rust. These coins clearly are distinct from the dark fabric of the "bronze" coins. Additionally, there are two QY coins without an official designation that show a slight hint of a reddish hue, one from Khotan (see Fig. 7, no. 2a) and the other from

107. Yan 2001, 2016; Xue 2008 (these references were kindly suggested by an anonymous reviewer). Yan (2001, pp. 7–11) introduces three KYs, one QY, two Dali, two Jianzong, and three "da" variants in the context of Thierry's (1997) analysis of locally produced coinage in the Anxi Protectorate. Yan identified the QY as red copper and 21 mm (p. 8), but the rubbing image less than satisfactory for comparison. Yan (2016, pp. 62–65) reported the 2016 discovery of a coin hoard comprising 23,124 coins across different dynasties, including 32 QYs in large (29 mm/8–10 g) and small (24 mm/5 g) modules, and he merely noted that the small module's size "is associated with weight reduction" of the QY standard, with no

discussion on the color of their fabric. For descriptions of the colors of coins collected by Pelliot, see Thierry 1997, pp. 152–153.

108. These points were suggested to me by F. Thierry (pers. comm.).

109. Wang 2004, pp. 128–243.

110. London, British Museum (Stein collection, early 20th century) AK.XVII.a.5–AK.XVII.a.7, AK.XVII.a.13, AK.XVII.a.14, AK.XVII.a.22, AK.XVII.a.23, AK.XVII.a.25, IA.III.A.n.12, IA.III.B.f.21, IA.III.B.f.22, IA.III.B.g.37, S.IV.B.b.10: Wang 2004, pp. 151–152, 158, 214, 222, 224.

111. London, British Museum AK.XIV.o.29 (Wuzhu "red" [Khotan/Rawak]; 25mm/2.13 g; Fig. 7, no. 1a); AK.XIV.I.1 (Wuzhu "bronze" [Khotan/

Rawak]; 25 mm/2.75 g; Fig. 7, no. 1b), IA.III.B.a.7 (QY small, no designation [Khotan]; 22 m/3.13 g; Fig. 7, no. 2a), S.IV.A.a.40 (QY small, no designation [Khotan/Borazan/Yotkan]; 21.5 mm/2.63 g; Fig. 7, no. 2b), IA.XV.c.18 (Qiuci Wuzhu "red" [Kucha/Yulduz-bagh]; 20 mm/1.48 g; Fig. 7, no. 3a); IA.XV.a.18 (Qiuci Wuzhu "bronze" [Kucha]; 20.5 mm/2.13 g; Fig. 7, no. 3b), IA.XVI.c.3 (Dali Yuanbao "bronze" [Kucha/Toghrak-akin]; 22 mm/2.98 g; Fig. 7, no. 4a), AK.IV.a.7 (Dali Yuanbao large [Khotan/Chalma-kazan]; 24 mm/3.05 g; Fig. 7, no. 4b): Wang 2004, pp. 135, 144, 150, 155, 215, 240, 241, 242. All "bronze" designations here are given following the British Museum online catalogue entries.



Figure 7. “Red” versus “bronze” coins. British Museum, Stein collection. Scale 1:1. © The Trustees of the British Museum

Inventory nos., British Museum, London:  
 (1a) = AK.XIV.0.29; (1b) = AK.XIV.I.1;  
 (2a) = IA.III.B.a.7; (2b) = S.IV.A.a.40;  
 (3a) = IA.XV.c.18; (3b) = IA.XV.a.18;  
 (4a) = IA.XVI.c.3; (4b) = AK.IV.a.7



Yotkan near Khotan (see Fig. 7, no. 2b). The Yotkan coin appears closer in color to the Corinth Tang coin, but this could be attributed to variations in lighting conditions. Another undesignated coin is the Dali Yuanbao from Chalma-kazan (Fig. 7, no. 4b), which has a fabric color more aligned with the “bronze” coins, including the Wuzhu from Rawak (see Fig. 7, no. 1b) and the Qiuci Wuzhu from Kucha (see Fig. 7, no. 3b). Interestingly, the Dali Yuanbao from Toghrak-akin (see Fig. 7, no. 4a) is classified as “bronze,” but its color is closer to the undesignated group, displaying a slight reddish hue similar to the Corinth Tang coin.

The comparison presented in Figure 7 demonstrates that Wang’s classification of “red” coins displays a distinct yellow-reddish hue, which the Corinth Tang coin does not possess. While it is also noticeably different from the “bronze” coins with a green hue, the inclusion of the Dali Yuanbao from Toghrak-akin complicates a straightforward categorization. Given these observations, it is best to leave the Corinth Tang coin undesignated within this context.

Again, the objective of this analysis is to determine whether the coins in the Stein collection, classified as “red copper” or “bronze” by the same numismatist, would exhibit clear contrasts under the same lighting conditions, and if they can be used as a basis to classify the Corinth Tang coin. If the Corinth Tang coin can be classified as “red,” it would suggest a closer association with a Xinjiang origin, as there is a belief in numismatic circles that coins with a reddish hue are more likely to be from Xinjiang.

Relying solely on the notion of “Xinjiang red” carries significant risks because red copper coinage is not exclusively limited to Xinjiang or central Asia. Abundant examples of red copper or near-red copper (Cu >90%) Han Banliang and Wuzhu coins were cast by central China mints, perhaps because production sites had limited access to tin and lead, and they were unable to maintain the right proportion of standard bronze coinage.<sup>112</sup> Similarly, it would be incorrect to assume that all coins produced in Xinjiang would be red. One example is the Hongqian (literally, “red money”), a coinage produced by the Qing Empire following local traditions after the annexation of the Yarkent Khanate in 1759 CE.<sup>113</sup> These are exclusively produced in Xinjiang,

112. See Zhou 2004, p. 458.

113. See Zhou 2004, pp. 459–461; Wang 2011, pp. 203–204.

and they were generally 95% copper content or above, and hence with a reddish hue.<sup>114</sup> Some Hongqian coins in Xinjiang, however, were cast with a bronze fabric, despite the region's limited access to tin ore, which required imports from markets in Xi'an and increased production costs.<sup>115</sup>

There exists the possibility that, even if the Corinth Tang coin is indeed "bronze" and not "red copper," it could have been cast with an imported metal alloy in the Anxi Protectorate. One study that supports this reasoning is by Fang and colleagues, who used nondestructive Raman microscopy, energy-dispersive X-ray spectroscopy (EDX), and wavelength-dispersive X-ray spectroscopy (WDX) analysis to determine the authenticity of two specimens of Sino-Kharosthi coins and one Sino-Brahmi coin associated with the kingdom of Khotan.<sup>116</sup> They identified the presence of antimony in two specimens (Sb, C6-1 = 5.24%; C6-2 = 2.79%).<sup>117</sup> Antimony is not found naturally in Khotan but is more likely sourced from modern Gansu or Hunan Province.<sup>118</sup> Another example comes from Zhou's metallurgical analysis of six Dali specimens.<sup>119</sup> While Dali coinage is often attributed to the Anxi Protectorate, they were cast with metallurgical proportions identical to KY coinage from central China. Zhou rightly advises against assuming that all Dali and Jianzhong coinage were exclusively "red copper." In turn, assuming a single origin of production of any Anxi coinage would carry risks.

While any one particular trait would not be sufficient grounds to classify the Corinth Tang coin as being of Xinjiang origin, the combination of traits—small diameter, subpar casting, dark-red/non-bronze coloration—do point toward that likelihood. Future metallurgical analysis of the Tang coin is needed to test this assumption, even though metallurgical analysis of a coin would not be a definitive indicator of where that coin was made. The British Museum's metallurgical study of its own Chinese coin collection have included Tang coins found in Xinjiang, and these can serve as reference data for a Xinjiang Tang coin's metal fabric. It appears that Tang coins from Xinjiang tend to have a significant amount of lead. Two Dali coins have 37% and 49% copper versus 46% and 38% lead, respectively.<sup>120</sup>

This tendency is seen also in QY coins from Xinjiang. Xinjiang specimens from the British Museum study (Fig. 8),<sup>121</sup> collected by the

114. Zhou 2004, pp. 101–102; XHQ1–XHQ16, 97% copper (except XHQ12, at 96.79%), XHQ18, XHQ19 (Cu >98%), XHQ21–XHQ23 (Cu >98%).

115. See Zhou 2004, pp. 460–461.

116. Fang et al. (2011, pp. 246–247) surveyed existing literature and found that there are two positions in the scholarship—that the Khotan coins are bronze, or they are red (pure) copper—but "thus far there as been no analytical data to support or refute either opinion."

117. One specimen (no. C5) with a clear reddish hue has an overall average of 96.60% pure copper with 2.33%

silver, while the two other specimens with a more green hue have an overall average of 88.66% (no. C6-1) and 95.12% (no. C6-2) copper content.

118. Fang et al. 2011, p. 256.

119. Zhou (2004, p. 54) provides the results of his own metallurgical analysis for several Dali coins with the note "from Xinjiang" (出新疆): TQ136 (unprov.; 23 mm/2.9 g/71% Cu), TQ137 (unprov.; 22 mm/4.2 g/78.93% Cu), TQ138 (unprov.; 21 mm/3.3 g/86.63% Cu), TQ139 (unprov.; 21 mm/2.4 g/70.77% Cu), TQ140 (22 mm/2.8 g/70.87% Cu).

120. Bowman, Cowell, and Cribb

2005, p. 13, nos. 96, 97 (London, British Museum 1902,0608.166 = 37% Cu, 15% Sn, 46% Pb; no. 1902,0608.167 = 49% Cu, 13% Sn, 38% Pb).

121. London, British Museum 1902,0608.198 (29 mm/5.15 g [Cu 6.8%, Sn 18.0%, Pb 74.0%]; Fig. 8, no. 1); 1902,0608.197 (28 mm/6 g [Cu 68%, Sn 18.1%, Pb 11.6%]; Fig. 8, no. 2); 1902,0608.160 (22 mm/2.6 g [Cu 25.0%, Sn 14.0%, Pb 60.0%]; Fig. 8, no. 3); 1902,0608.159 (22 mm/2.48 g [Cu 44.0%, Sn 13.0%, Pb 43.0%]; Fig. 8, no. 4); Wang et al. 2005, p. 12, nos. 84, 85, 94, 95.



**Figure 8. QY specimens from Xinjiang.** Scale 1:1. © The Trustees of the British Museum

Inventory nos., British Museum, London:

(1) = 1902,0608.198; (2) = 1902,0608.197;  
(3) = 1902,0608.160; (4) = 1902,0608.159

Indologist Hoernle from Kucha in 1902, have some of the lowest copper content among the QY coins tested, with 6.8%, 25%, and 44%.<sup>122</sup> While it may be tempting to consider low copper content as a defining feature of coins produced outside the Central Plains of the Tang Empire, the British Museum study provides a different perspective. Out of the total 18 QY specimens tested, only seven have copper content above 70%, with an average of 76.88% copper, 11.34% tin, and 10.35% lead.<sup>123</sup> Five other QY specimens from central China hover between 52% and 68% copper, 9.9% and 20% tin, and 9.3% and 20% lead.<sup>124</sup> One specimen even has only 36.1% copper content and a lead content of 44.5%.<sup>125</sup> It is not secure to identify the origins of a coin only based on copper content. Bowman and colleagues observed that tin and copper were more expensive than lead, and during periods of copper shortages and increased demand for coinage, higher lead content would be utilized.<sup>126</sup> Both the Anxi Protectorate and the Central Plains of the Tang Empire would have faced the challenge of maximizing coin production with limited copper resources. After 760 CE, when the Anxi Protectorate was cut off from the Central Plains, increasing lead content in coins was likely attractive. Considering the combination of factors, a potential characteristic of Anxi QY coinage may be the decrease in amount of copper content.

Existing tests on coloration and metal content have shown that standards beyond dimensions and weight of coins do not provide decisive insight

122. See Cribb 2005, p. 2.

123. London, British Museum 1883,0802.309, 1884,0511.844, 1884,0511.859, 1884,0511.880, 1884,0511.881, 1884,0511.882, 1996,0217.264 [unprov.]: Bowman et al. 2005, p. 12, nos. 80, 86–90, 93. It may be useful to compare this group with the 14 specimens of KY in the British Museum study—these have a bronze content no lower than 67% and with a ratio of 74.5% copper, 9.9% tin, and 13.8% lead. Official literary accounts

stated that central mints issued KY coins with at least 80% copper, which apparently is the inaugural or ideal proportion; see Bowman et al. 2005, pp. 11–12.

124. London, British Museum 1884,0511.879, 1884,0511.883, 1884,0511.842, 1884,0511.846, 1908,0605.145: Bowman et al. 2005, p. 12, nos. 79, 82, 83, 91, 92.

125. London, British Museum 1886,1006.775: Bowman et al. 2005, p. 12.

126. Bowman et al. 2005, p. 6.

into a coin's origin. This article argues that the natural fit of the Corinth Tang coin's size and weight with hundreds of other Tang coins found in Xinjiang forms the one reliable basis to designate the Corinth Tang coin as an Anxi Protectorate coinage. Additional indicators such as faulty sand-casting techniques and coloration are helpful since these properties do tend to be observable on coins found in Xinjiang, but they provide only support of the second order. Future metallurgical analysis of the Corinth Tang coin can perhaps offer additional support for this designation of origin. That said, while the Anxi Protectorate is a good general area in which to situate the Corinth Tang coin, it is possible to further home in on the origin of production.

## CHUI RIVER VALLEY COINAGE?

The expansion of the Tang Empire into the Western Regions brought with it the dissemination of its bronze coinage, which even reached as far as central Asia. For example, recent finds in the Chui River valley in modern Kyrgyzstan<sup>127</sup> contained more than 114 coins with characteristics attributable to the KY style alone.<sup>128</sup> Of more interest are the locally found coinages of the second half of the 8th century—not just KY but also QY, Dali, and Jianzhong types. Some would have been imported, but a significant number of specimens show traits so unaligned with the expected norms of Tang coinage that they could have been produced locally.<sup>129</sup>

In this article, these unique types are referred to as Tang-concept coinage because in concept their designs demonstrate a certain alignment with reference Tang coinage, but their actual execution can vary significantly.<sup>130</sup> Although the Corinth Tang coin does not fall into the category of the more radical Tang-concept coinage, its small size and substandard sand-casting technique align well with the observed production practices of coins found in the Chui valley.<sup>131</sup> This section aims to explore the potential connections between the Corinth Tang coin and the Tang and Tang-concept coinage of the Chui valley. The focus is on Suiye, a major city that was under the direct control of the Anxi Protectorate during certain periods from the 5th to the 11th century CE.<sup>132</sup>

Suiye was at first a Sogdian settlement in the Chui River valley that developed into a well-watered capital of the Western Turkish and Türgesh khaganates during the 6th and 7th centuries CE, as it was on the receiving end of a wave of migrants from Sogdiana set in motion by the Arab-Islamic

127. For geomorphological analysis along with GPS coordinates of the 12 identified archaeological sites in the Chui River valley, see Sato et al. 2018, pp. 8–9.

128. Kamyshev (2002, pp. 28–29) describes 46 specimens of “first type” KY (622–660 CE), 31 “lunate type” specimens (660–718 CE), and

37 specimens of a third type, with clearly smaller dimensions, inferior production quality, and additional markings on the reverse (718–758 CE).

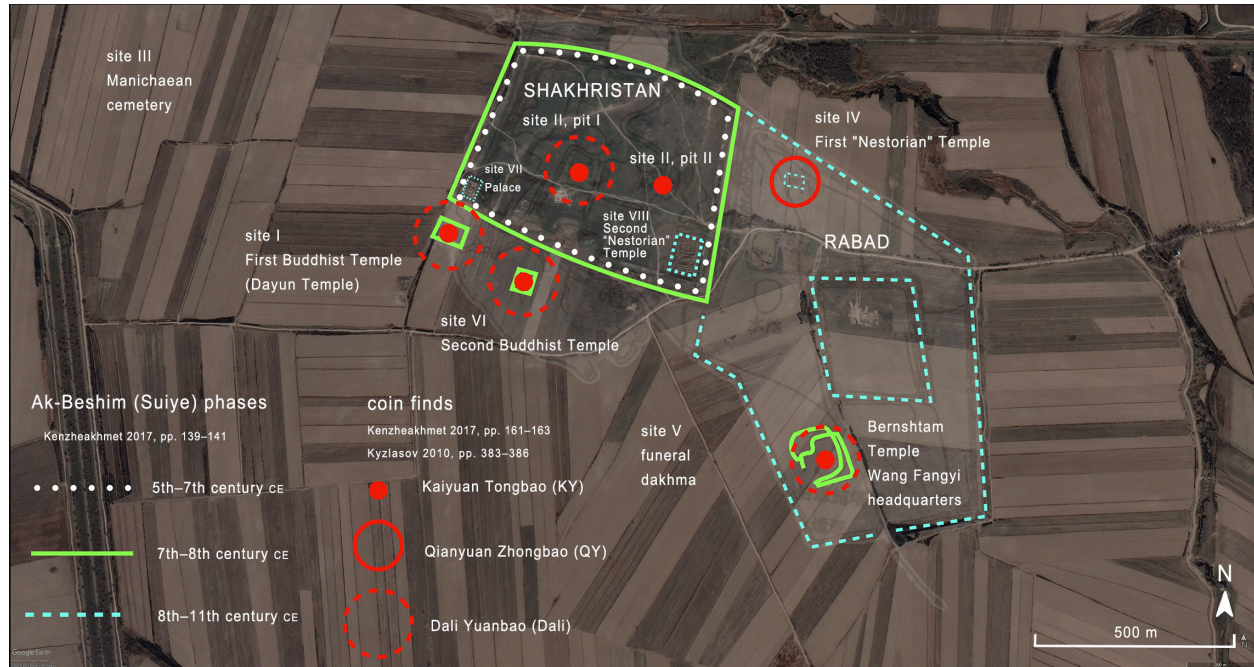
129. Kamyshev 2002, pp. 31–38; Belyaev et al. 2012, pp. 131–133.

130. Kamyshev (2002, p. 32) proposes “местные варварские подражания,” or local barbaric

imitations, for many of the coins that resemble modern washers with a round hole, some anepigraphic but others potentially with some markings or strokes.

131. I would like to thank an anonymous reviewer for raising this possibility.

132. Kenzheakhmet 2017, pp. 139–158, esp. pp. 147–150.



**Figure 9. Findspots of Tang Coins during excavations at Ak-Beshim.**

Base image Google © 2021 CNES/Airbus; annotations C.-Y. Wu, after Kyzlasov 2010, pp. 248–249, figs. 43, 44; Kenzheakhmet 2017, p. 89, figs. 3, 4; Kakinuma 2019, p. 563

conquests.<sup>133</sup> The Tang Empire established one of the four Anxi garrisons at Suiye as early as 648 CE and maintained a military presence intermittently across the next half century due to continuous pressures from the Western Turkish Khaganate and the Tubo Kingdom.<sup>134</sup> The garrison left a visible mark in the archaeological record, with three Buddhist temples and a magistrate's quarter that, according to Kenzheakhmet, was the headquarters of Tang military commander Wang Fangyi between 680 and 682 CE. (Fig. 9).<sup>135</sup>

In 703 CE, Suiye was seized by the Turgesh khagan Wuzhile, and from this point on a number of buildings with central Asian and even Near Eastern influences such as the palace, the rabad, and two “Nestorian”<sup>136</sup>

133. See Kakinuma 2019 (pp. 556–561) for a synopsis of the history of Suiye before and after Tang control, as well as the precarious hold that the Tang Empire exercised over the city, with only two decades of actual control between 648 and 719 CE; see also Kyzlasov 2010, pp. 254–255; Kenzheakhmet 2017, pp. 9–10, 152–153.

134. *XTS* 221.6232; except for the period between 670 and 678 CE, when the Tubo Kingdom controlled the domain of the Anxi Protectorate, see *XTS* 196.5224, 198.5304; Kenzheakhmet 2017, pp. 167–172.

135. *JTS* 84.2802–2803. The most important indicator of Tang imperial presence is the complex known as the “Bernshtam” Temple excavated

by Bernshtam in 1939–1940 (or the “castle-tower” in Kyzlasov 2010, p. 263). Kenzheakhmet (2017, pp. 172–180) argued that not only was the earliest phase the 7th to 8th century CE, when Tang presence was attested in historical sources, but the majority of finds including tiles and architectural members were dimensionally and stylistically comparable to central Chinese examples. Kenzheakhmet (2017, pp. 184–187) also argues that fragments of a stele honoring Tang official Du Huaibao in the vicinity of the Bernshtam Temple also supports this identification. For other Buddhist temples as indicators of Tang presence in the 7th to 8th century CE, see assessments of the Tang-style Bernshtam Temple proper versus the Sogdian-Han

fusion styles of the First Buddhist Temple (or the so-called Dayun Temple) and the Second Buddhist Temple in Kenzheakhmet 2017 (pp. 202–230).

136. As Winkler (2019, p. 120) explains, what is described as “Nestorian” in the archaeological literature is best understood as a misnomer for the Church of the East from a theological point of view, since the term implies that the practitioners regarded the humanity and divinity in the one Jesus Christ as separate, but this view was rejected by the Church of the East from the 6th century onward. For the analysis of the critical 5th–6th century, during which the position of the Church of the East shifted definitively, see Brock 1996, pp. 33–34.

churches were introduced.<sup>137</sup> Despite these developments, Tang coinage continued to be imported into the region.<sup>138</sup> The Türgesh khaganate also issued its own coinage, closely resembling Tang coins but featuring the Türgesh script on the obverse, which indicated the issuing khagan.<sup>139</sup> Some of these coins displayed exceptional craftsmanship, likely the work of Chinese craftsmen.<sup>140</sup> Coins found during stratigraphic excavations at the shakhristan (site II) include two KY and one Dali specimen,<sup>141</sup> one QY from the First “Nestorian” Church (site IV),<sup>142</sup> and 20 Türgesh, 11 Karakhanid, and 150 “local” issues.<sup>143</sup>

The discoveries at Nevaket (Krasnorechensk settlement), located approximately 20 km northwest of Suiye, provide additional insights.<sup>144</sup> A number of coins have been reported in the past two decades, identified as QY, KY, and Türgesh coins.<sup>145</sup> Kamyshev studied a significant number of these.<sup>146</sup> He found that KY, QY, Jianzhong, and Dali issues at Krasnorechensk were not only imported but also imitated locally, and by the 9th–10th century, increasingly abstract designs evolved out of such Tang-concept coinage.<sup>147</sup> Such evolution may have been localized, indigenous solutions in response to the Karluks’ annexation of the Türgesh territory.<sup>148</sup> The holed coin tradition was maintained, perhaps attributable to the habitual reliance on Tang (both imported and locally cast) and Türgesh coinages, as well as the continuity of interaction between the Chui valley and the Anxi Protectorate.<sup>149</sup>

Is it possible to separate a “small” square-hole QY coin produced in Anxi from a small square-hole QY coin produced in the Chui valley? There are no clear objective parameters for such classification at this stage. The shape of the hole is the only reliable indicator. In theory, circular-hole coins

137. Kyzlasov (2010, p. 360) identified the First “Nestorian” Temple (site IV) as a church built in the 7th–8th century, with a baptistry in an “exposed cross” layout comparable with the Greek-cross plan used in 7th–8th-century churches in Asia Minor and Armenia, which imitated earlier Christian architectural styles in Syria. Kenzheakhmet (2017, p. 238) pointed to central Asian influences to its western courtyard. Kenzheakhmet (2017, pp. 241–242) also sees resemblances between the 8th-century Second “Nestorian” Temple (site VIII)—a large monastery complex with a library and winemaking facilities—with the 6th–7th century “Nestorian” monastery complex on al-Khawr, Abu Dhabi.

138. Smirnova (1981, pp. 35–36) reported finding what she described as pseudo-Tang coins during excavations at Pendjikent, and further that these differed from actual Tang coins because they have a coarser finish, uneven surfaces, and blurry characters.

Smirnova also noted that “while pseudo-Tang finds are rare, they seem to be ubiquitous” (Находки таких псев дотанских монет в Средней Азии хотя и редки, но почти повсеместны). Unfortunately, this work does not report QY, Jianzhong, and Dali coinage.

139. Lin 1993, pp. 50–51; Yao 2016, pp. 14–15.

140. Kamyshev 2002, pp. 43–45.

141. Kyzlasov 2010, p. 385: “Site II. Stratigraphic excavation at shakhristan, pit 1, year 1953, no. 142, context 9–10 centuries, Chinese coin of the Tang Dynasty, issued in 769, Dali yuanbao”; “Site II. Stratigraphic excavation at shakhristan, pit 2, year 1953, no. 154, context 9–10 centuries, Chinese coin of the Tang Dynasty, Kaiyuan tangbao”; “Site II. Stratigraphic excavation at shakhristan, pit 1, year 1954, no. 157, context not dated, Chinese coin of the Tang Dynasty, Kaiyuan tangbao [sic] (618–626).”

142. Kyzlasov 2010, p. 386: “Site IV.

Church, year 1954, no. 175, context not dated, the upper layer, Canyuan zhongbao (758–760).” Also found were four Türgesh coins “in a fallen wall,” and two other coins attributable to a Chinese coinage in appearance but uncertain whether they are Tang or Türgesh issues.

143. Kyzlasov 2010, pp. 383–386.

144. Kamyshev (2002, pp. 31–32) notes the difficulties of conserving Tang or imitative Tang coinage, including political interventions for finds of Chinese coinage, and general awareness issues, as holed coins look like “modern bronze washers with a hole” (современные бронзовые шайбы с круглым отверстием).

145. Fedorov 2004–2005, p. 133.

146. See Kamyshev 2002. I thank an anonymous reviewer for suggesting this piece of scholarship.

147. Kamyshev 2002, p. 107.

148. See Kamyshev 2002, pp. 35–36.

149. Kamyshev 2002, p. 36.

more likely would be associated with non-Anxi Protectorate origins, as this shape does not conform to the Chinese tradition.<sup>150</sup>

Nonetheless, the production of Tang and Tang-concept coinages suggests ongoing economic interactions within the Anxi Protectorate. These interactions were not aimed primarily at trading with central Asian states that had already adopted the dirham or dirham-concept coinage.<sup>151</sup> Simultaneously, the Anxi Protectorate authorities continued issuance of Tang coinage to support their expenditures and demonstrate loyalty to the Tang court. This makes them a plausible candidate for producing the Corinth Tang coin.

Overall the Corinth Tang coin's origin and time of production may be evaluated from several aspects. The critical assessment is its alignment in size and weight with the 305 "Anxi QY small" coins from the Stein collection (see Fig. 5). Secondly, the characteristics and overall structure of the Corinth Tang coin align closely with a coin from the collection found near Kucha (see Fig. 6). These factors suggest that the Corinth Tang coin might have been produced in Kucha, potentially after the Baoying decree of 762 CE and even after the introduction of the Dali coinage around 766 CE. It is plausible that the production capacity of the Anxi QY small coins was not replaced entirely within a short period. In this "Kucha" scenario, the Corinth Tang coin could have a terminus ante quem of 790 CE, coinciding with the end of the Anxi Protectorate in the Western Regions.

Alternatively, a Chui valley origin is also possible. Similarities in form, size, and weight to coins from the Chui valley suggest that locations beyond the Anxi Protectorate could have been the source of the Corinth Tang coin. The appearance of Tang-concept coinages in the Chui valley marks a transition away from calligraphy-based imitations and could serve as a terminus ante quem. While the fall of the Anxi Protectorate in 790 CE is a significant reference point, a dating to the 9th century is not entirely improbable.

## TRANSMISSION TO CORINTH

How the Corinth Tang coin made its way to Corinth is a frustrating (and some might say naive) question. There is at least four centuries' worth of time and a wide selection of Eurasian routes available before reaching the Mediterranean and finally Corinth. If we speak in general terms, any Silk Road narrative would do. A recent example is Li Qiang's statement on the transmission of Byzantine coinage to central China: "it is generally agreed that most Roman [sic] coins came to China by the following three routes: the steppe route, the land route and the South Sea route."<sup>152</sup> Another example concerns a golden necklace from the tomb of Li Jingxun excavated

150. There is no apparent connection to be made with the mid-7th- to 8th-century coins (Zeimal 1994, pp. 258–259) found near the Vakhsh district in modern Tajikistan, but the roundness of the coins' holes are a common feature, a coincidence that

has not been mentioned by Zeimal or Kamyshev.

151. Zeimal (1994, pp. 251–257) discusses the penetration of Arab dirhams in northern Tocharistan and the eventual replacement of all pre-Islamic copper issues by the end of

the 8th century; see also Zeimal 1994, pp. 261–264, on the modification of Khwarazm's local silver coinage and eventual conformation to the Arabic dirhams.

152. Li 2015, p. 284.

by the Shaanxi Provincial Institute of Archaeology in 1957 in Xi'an.<sup>153</sup> Kiss regarded it as “far from being a unique find: it constitutes part of the Oriental-Occidental trade relations so little documented, in my view, by archaeological relics, and within the framework of which silk was exported from China to the West along the overland silk route.”<sup>154</sup> One could assume the same with the Corinth Tang coin: how could it not have passed through one of these seemingly perennial routes?

That said, there seems to be some potential benefit to revisit some of the dynamics at work underlying how past scholars have envisioned the process of transmission along these routes, and whether these offer a potential fit for the Corinth Tang coin. In Li's summation of the opinions of Chinese researchers, the South Sea route seemed more unlikely for transmission because Byzantine coins might have been retained for circulation or hoarding. On the steppe or land routes, however, coins simply would change hands between Persian, Turk, and Sogdian intermediaries, as if along a highway, before reaching the central regions of China.<sup>155</sup> Yes, hoards concealed or buried along trade routes in Xinjiang, Qinghai, Henan, and Shanxi Provinces do suggest that Sasanid silver coins were important for long-distance trade.<sup>156</sup>

There is more to be considered. As Thierry argued, to the Chinese markets in the post-Han world, cash was at best a token for exchanging products or paying for services with as little intrinsic value as possible, for intrinsic value only creates the condition for hoarding.<sup>157</sup> The established method of payment and transactions—including government expenditure for wages, goods, and services rendered—was instead grains and textiles. The proportion of metallic coins increased only in the 6th century as a result of relative stability, but even then precious metal currency had no role except in the Hexi Corridor and southern port cities of Canton and Tonkin.<sup>158</sup> In other words, the majority of Sasanian drachms entering into Chinese markets in the central regions would have been only an exchange “good” comparable to textiles and grains, and at times not necessarily the best choice to trade for desired goods from the Chinese markets.<sup>159</sup> From this perspective, merchants who carried silver coins across central Asia valued them because they were versatile and useful on the road,<sup>160</sup> not necessarily for their exchange value in the Chinese market. Skaff's observation that there are rarely “freshly imported” silver coins in Turfan with less than a decade of interval between minting and burial could then be understood, perhaps, as the indication that Sasanian silver coins were generally retained

153. Tang 1959, p. 472.

154. Kiss 1984, p. 38.

155. Li 2015, p. 285.

156. For a comprehensive list of nonfunerary Sasanian hoards, see Xia 1974, p. 92 (updated in Thierry 1993, pp. 89–96). The most representative hoard is from Ulugh Art or Wuqia county, discovered during road construction work in 1959 and promptly investigated and surveyed by the Xinjiang Archaeological Institute of the Chinese Academy of Social Sciences. A total of 947 Sasanian and Sasanian imitative

coins (3,800 g) were found along with 13 gold bars (1,330 g) in a crevice, likely wrapped in cloth or sack by a merchant who had to evade bandits. See Li 1959 for the original report.

157. Thierry 1993, p. 132.

158. Thierry 1993, p. 133.

159. Thierry 1993, p. 105. Hansen and Rong (2013, pp. 297–305) provide a useful selection of accounts to demonstrate the various forms of goods used to procure items, and coins were only used for specific types of goods or circumstances. One document

is particularly illustrative. As the Tang official Zuo Chongxi's account book (Urumqi, Xinjiang Museum 64TAM4:46/1: *TCW* III, pp. 225–226) suggests, degummed silk is best for transactions of larger value such as horses and sheep, while coins were used for purchases of small value such as seasonings and meat, but on one occasion he did not have the bolt of degummed silk for the purchase of a female slave, so he used coins instead.

160. Rong 2011, pp. 1–5.



for circulation in central Asia before being taken out of the local economies on the journey eastward.<sup>161</sup>

Now imagine a bronze or copper coin making the reverse journey. With no precious metal content, it could have been discarded intentionally at any time beyond a market that would appreciate its token value. Chances for the Corinth Tang coin to pass from one region to another across central Asia would depend on border subsistence trade between neighboring communities with homogenized monetary traditions.<sup>162</sup> The Chui valley offered a scenario in which its persistent use of Tang and Tang-concept coinage (discussed above) would have been conducive to exchange with central Asian economies, but even in that instance not all central Asian economies developed in the same trajectory. Even if the Corinth Tang coin made it to the Chui valley, chances for it to survive loss, discard, or destruction in an intensifyingly dirham-based central Asia would have been unlikely.

Yet the Corinth Tang coin reached the Mediterranean. To better understand this unlikely phenomenon, the potential constraints that would have limited the coin's circulation must be examined first, and then it is necessary to explore the possible mechanisms that could have facilitated its transmission westward. The records of emissaries from the Tang imperial court can provide valuable insights into the chronological and geographical parameters of this inquiry. Table 1 presents a chronological sequence of "emissaries" recorded in the official documents of the Tang court, beginning with the aftermath of the Arab victory over the Tang in 751 CE at Talas and continuing until the Tubo annexed the Anxi Protectorate from 790 to 808 CE.<sup>163</sup> The majority of data is collected from the *Ce Fu Yuan Gui*, a comprehensive institutional history of the imperial government. Emissaries from the Huihe (or Uyghur Empire), the Tubo (or Tibetan Empire), and the states positioned to the northeast and south of China are excluded for clarity (these make up the bulk of emissaries received in Chang'an after 760 CE).<sup>164</sup>

Emissarial data from the Tang court is a limited source of information: it is not known whether each data point represents representatives of a kingdom or state, pretenders, or prominent merchants. The term "Bosi," for example, was long a designation for the Sasanian court, but its recurrence in the Tang literary records down to the 9th century suggests that the semantics of the term could have changed into an umbrella term for Manichaeans, Mazdaists, or Nestorian Christians from the 8th century CE onward.<sup>165</sup> Potential state actors of Sasanid descent in

161. Skaff (1998, p. 77) states that among the 30 coins issued between 460 and 679 CE and in funerary deposits of Turfan, seven were found in tombs dated between 604 and 706 CE, and five such coins have a gap of 30 or more years from minting to burial. The two coins with mint-to-burial intervals less than a decade include a Yazdgerd III Sasanian drachm (C11) issued in 632 CE and buried between 632 and 640 CE, and an Arab-Sasanian dirham (C13) issued in 651 and buried in 651–653 CE.

162. See Barfield 2001, pp. 18–22.

163. For a comprehensive study of the last years of the Anxi Protectorate and the geopolitical complications involving the Tang-Uyghur alliance of 765 CE, attempts from the Tang to co-opt the Tubo Kingdom during the reign of Dezong (779–805 CE) to suppress military insurrections against Dezong's strategic inward turn, and the final dissolution of the various Tang protectorates, now exclaves, under Tubo advances, see Xue 2009.

164. Additional information from

the *Jiutangshu*, *Xintangshu*, and *Zizhi Tongjian* are gleaned in Shi and Chen 2012, pp. 516–745.

165. Lipman (1997, p. 25, n. 61) and Schottenhammer (2019, p. 27, n. 21) discuss a newly discovered funerary stele of a "Bosiguo ren" (individual from Bosi), which claims that the deceased was born in 761 CE in the Western Regions and arrived in Yangzhou via the maritime route, before passing away in 835 CE. Here, the term "Bosi" seems to be a general reference to a person of "Iranian" origin.

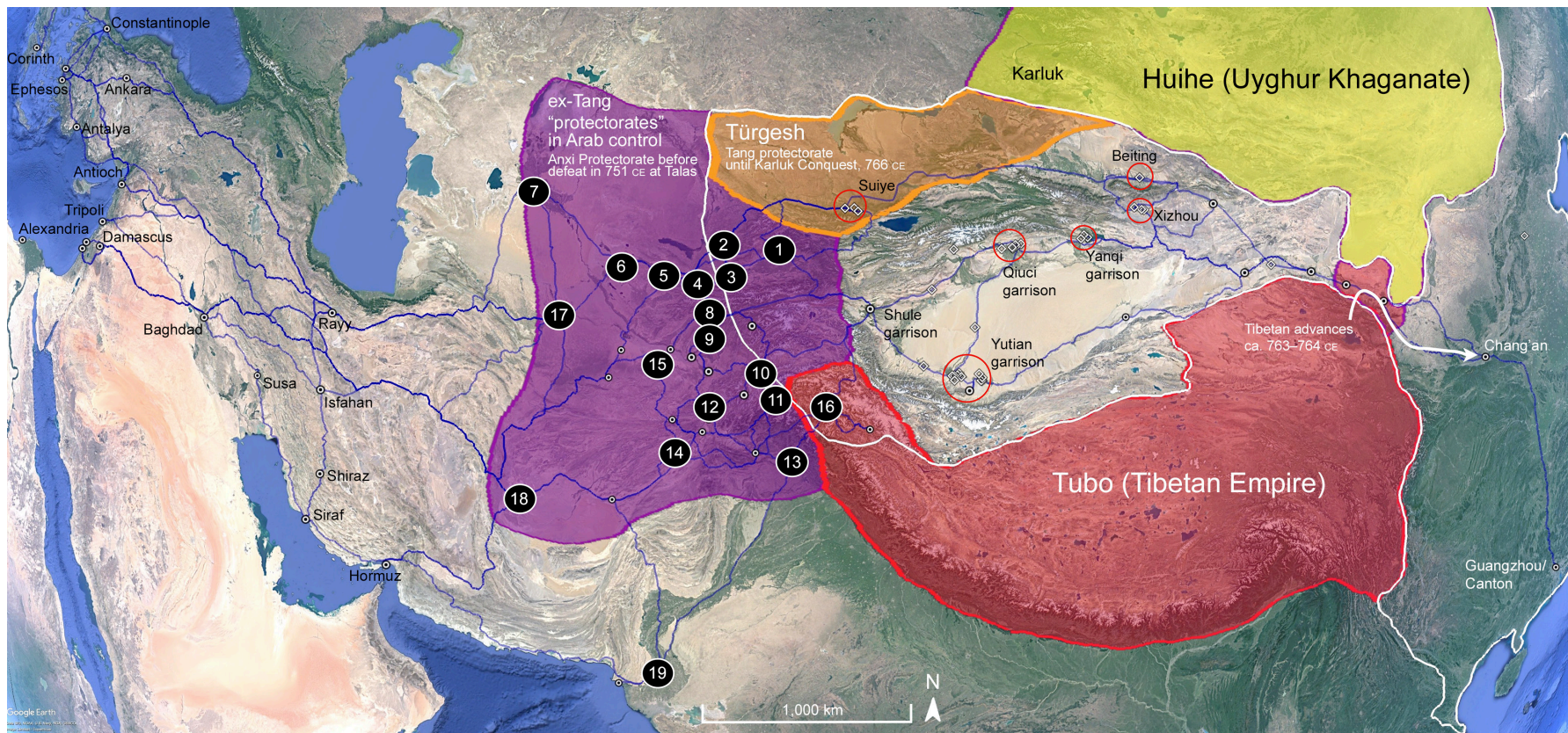
TABLE 1. CENTRAL ASIAN AND INDIAN EMISSARIES TO THE TANG IMPERIAL COURT, 751 TO 791 CE

<i>Year = Regnal Year</i>	<i>States</i>	<i>Source</i>
751 CE = Tianbao year 10	An (Bukhara); Bosi (Abbasid?); Huoxun (Afrighid Khwarazm); Jumi (Darvaz); Kang (Samarkand); Ningyuan (Kosonsoy) (two visits); Surixidan (Surestan, Babylonia?)	CFYG 971.11413
752 CE = Tianbao year 11	An; Dongcao (Ushrusana); Geluolu (Karluk) (two visits); Guduo (Qurgonteppa); Guiren (Gilgit); Heiyi Dashi (Bukhara?) (two visits); Kang; Ningyuan (two visits); Shemuo(?)	CFYG 965.11350, 971.11413–11414, 975.11458; XTS 221.6245
753 CE = Tianbao year 12	An; Bolu (Baltistan); Geluolu (two visits); Guduo; Heiyi Dashi; Humi (Eshkashem) (two visits); Jianbing (Kapisi); Ningyuan; Shi (Tashkent); Shule; Tuhuoluo (Balkh); Tujishi (Türgesh); Xieyu (Gazni)	CFYG 721.8588, 965.11350, 971.11413–11414, 975.11458, 999.11724
754 CE = Tianbao year 13	An; Dongcao; Heiyi Dashi; Juwei (Chitral); Kang; Mi (Penjakent); Ningyuan (three visits); Shihanna (Dushanbe); Tuhuoluo; Tujishi (two visits)	CFYG 971.11414, 973.11434, 975.11458–11459; XTS 215.6069
755 CE = Tianbao year 14	Dongcao; Guiren; Kang; Ningyuan; Shi; Tuoba (Tabaristan)	CFYG 971.11414, 975.11459
756 CE = Tianbao year 15/ Zhide year 1	Dashi(?); Heiyi Dashi; Khotan	CFYG 971.11414, 973.11434
757 CE = Zhide year 2	Bahanna (Ferghana/Shi?); Dashi	ZZTJ 219.7014; XTS 6.158
758 CE = Zhide year 3/ Qianyuan year 1	An; Bosi; Gushimi (Islamabad); Heiyi Dashi; Humi (two visits); Jianbin (two visits); Kang; Qiantuoluo (Taxila); Tuhuoluo (two visits); Zhongtianzhu (Manora-Debal/Sindu?)	CFYG 971.11414, 976.11460; JTS 10.252, 198.3513
759 CE = Qianyuan year 2	An; Bosi; Humi; Ningyuan; Tujishi	CFYG 971.11414, 976.11461
761 CE = Shangyuan year 2	Baiyi(?); Poye(?)	CFYG 971.11414
762 CE = Baoying year 1	Bosi; Heiyi Dashi; Huoxun; Ningyuan (two visits); Shi; Shizi (Sri Lanka)	CFYG 972.11415
769 CE = Dali year 1	Heiyi Dashi	CFYG 972.11248
771 CE = Dali year 6	Bosi	CFYG 972.11248
772 CE = Dali year 7	Dashi; Kang; Mi	CFYG 972.11248
774 CE = Dali year 9	Heiyi Dashi	CFYG 972.11249
791 CE = Zhenyuan year 1	Heiyi Dashi	CFYG 972.11249

central Asia, not yet fully identified, could have been sending diplomatic missions even after the Sasanid Empire's demise.

The first official visit from the Sasanid court-in-exile was in 651 CE, when the Bosi king Beilusi sent tributary emissaries requesting assistance against the Umayyads; Tang Gaozong responded by appointing him as chief of the Persian Command based in Jilingcheng (modern Zaranj/Zabol; Fig. 10, no. 18).<sup>166</sup> Beilusi commonly is recognized as Peroz, who with his

166. XTS 221.6258, 221.6259; CFYG 964.11341, 966.11365. See also Su 1988, p. 124.



- concentration of Anxi coinage (Anxi QY small, Dali, Jianzong)
  - ◇ Anxi coinage finds
  - ① tributary/emissarial polities (Table 1)
- |                      |                      |                       |                                      |
|----------------------|----------------------|-----------------------|--------------------------------------|
| 1. Ningyuan/Kosonsoy | 6. An/Bukhara        | 11. Juwei/Chitral     | 16. Bolu/Gilgit                      |
| 2. Shi/Tashkent      | 7. Huoxun/Khwarazm   | 12. Jibin/Kapisi      | 17. Heiyi Dashi/Merv?                |
| 3. Dongcao/Ushrusana | 8. Shihanna/Dushanbe | 13. Gushimi/Islamabad | 18. Bosi/Zabol?                      |
| 4. Mi/Panjakent      | 9. Guduo/Qurgonteppa | 14. Xieyu/Ghazni      | 19. Zhongtianshu/Mansura/Brahmnabad? |
| 5. Kang/Samarkand    | 10. Humi/Eshkashemi  | 15. Tuhuoluo/Balkh    |                                      |

Figure 10. Hypothetical extent of Tang interactions in Central Asia, 760s CE. Base image Google © 2021 Image Landsat/Copernicus, with annotations by C.-Y. Wu, after Tan 1982, pp. 34–35; Stein Gazetteer of the Digital Silk Road Project, National Institute of Informatics

father Yazdgard III relocated to Merv following Umayyad advances, and subsequently died in Chang'an after failed attempts to retake his ancestral land.<sup>167</sup> There are some indications in the Pahlavi literary tradition, along with iconographic evidence such as the Hermitage's gilded silver plate found at Lugovka in 1909, that suggest the descendants of the Sasanid court-in-exile may have held court in the southern Hindukush and maintained some diplomatic relations with the Tang Empire until the mid-8th century CE.<sup>168</sup>

The terms "Dashi" or "Heiyi Dashi" also pose challenges in interpretation. Do they refer to the Abbasid caliphate, de facto autonomous Arab lords in central Asia, or non-state actors such as merchants or local dignitaries with Arab backgrounds? Recent interest in a funerary stele of a high-ranking eunuch official Yang Liangyao, found in 1984, brought to light an extraordinary Tang imperial delegation sent to the Abbasid court in 785 CE, likely to negotiate for concerted military action against the Tubo Kingdom.<sup>169</sup> Rong Xinjiang demonstrated that Yang Liangyao's itinerary could have been based on Arabian travel accounts—it would have taken approximately 18 months for a round-trip journey between Guangzhou/Canton and Muscat in the Persian Gulf. Geographical treatises such as the one preserved in the *Xintangshu*, in which a passage of the "periplus" genre described a maritime route between Guangzhou and Baghdad—perhaps based on data systematically collected by Jia Dan, imperial chancellor since 793 CE.<sup>170</sup> Schottenhammer, for example, is confident in attributing references to Dashi or Heiyi Dashi emissaries as caliphate dispatch sent directly from the Abbasid to the Tang court.<sup>171</sup>

It is important to consider, however, that some of the missions referred to as Dashi or Heiyi Dashi may not necessarily represent emissaries from the Abbasid court in Baghdad. Central Asian origins for these missions, representing local leaders or political entities in the region, also were plausible. Since the early stages of the Abbasid revolution, the Abbasid province of Khurasan experienced uprisings and rebellions against the central caliphate authority. The removal of Abu Muslim by Caliph al-Mansur may have even fueled anti-Abbasid sentiments in Transoxiana.<sup>172</sup> Inaba suspects

167. See Daffinà 1983, pp. 132–135; Compareti 2003, p. 203.

168. Agostini and Stark 2016, pp. 26–33.

169. The stele was found during field-survey work in 1984 and published in the local gazetteer. An official academic publication of the full text did not appear until 2005. See Zhang 2005 (pp. 6–7) for an initial discussion of the relevant sections on the voyage, and Rong 2012 (pp. 232–242) for a comprehensive study on the historical context and the unique choice at the time to take a maritime route westward. Rong's analysis has shown that Yang's delegation was sent the same year when a Tubo delegation arrived in Chang'an to request the Tang emperor Dezong to honor his pledge of ceding the Anxi and Beiting Protectorates in exchange

for Tubo's assistance in suppressing the military insurrection between 783 and 784 CE.

170. *XTS* 33.1153. Rong 2012 (pp. 239–240) provides modern references, mostly following a coastal sailing route, with the most significant ocean crossing being from the peripheral archipelagos of Sumatra to Sri Lanka, through the Nicobar Islands. On risks regarding the attribution of Jia Dan as the author or compiler of this passage in the *XTS*, see Schottenhammer 2015b, p. 205, n. 124.

171. Schottenhammer 2019, pp. 35–36: "the 'Abbāsids (Heiyi dashi 黑衣大食), for example, sent a total of twelve diplomatic missions to the Tang court between 752 and 798."

172. In *The History of al-Ṭabarī* one can find a list of rebellions in central

Asia between the mid-8th and early 9th centuries, and some examples include the Zoroastrian Sunbadh in 755 CE, in response to the killing of Abu Muslim (McAuliffe 1995, pp. 44–45); the governor of Khurasan Abd al-Jabbar renounced his allegiance in 759 CE after finding Caliph al-Mansur unsatisfied with his method of suppressing insurrection in Khurasan caused by supply shortages and inflation (McAuliffe 1995, pp. 69–70). For the rebellion of Ustadsis in western Afghanistan in 767 CE, and concerns with the rebellion of Yusuf Ibrahim in Khurasan in 776 CE, see Kennedy 1990, pp. 44–45, 181–182. In 777 CE, Hakim al-Muqanna rebelled near Merv (Kennedy 1990, pp. 196–197). Also see Bosworth 1989 (pp. 259–260), on Rafi's revolt of 805 CE.

that local leaders after Abu Muslim may have carved out political entities rivaling that of the Abbasid caliphate at Baghdad, leading to equivocal expressions in Tang court parlance when logging their emissaries into the archival records.<sup>173</sup> In this view, there was a deliberate equivocation of the myriad central Asian authorities, and misrepresentation could have been based on either the lack of situational awareness or a purposeful structuring of power relations from a self-centric worldview, a practice also observable in the Roman and Persian Empires.<sup>174</sup>

Yet such an alternative view would assume either a naive Tang court cursorily handling diplomatic affairs of unknown lands or a deliberate doctoring of records. Since the *Xintangshu* took note that various officials of the Tang court (including the imperial chancellor Jia Dan) systematically collected and preserved records of armed conflict and diplomatic missions between the Tang and foreign states, including land and terrestrial routes, the Tang court was perhaps operating on relatively updated information regarding central and western Asia until the late 8th century.<sup>175</sup>

Even when taking uncertainties into account, the overall impression from Table 1 is still a decline in the number of reported emissarial visits, and this correlates well with the historical shift in central and East Asia. At the very least it can be assumed that direct contacts between the Tang and the Sogdian centers of trade were in rapid decline in the second half of the 8th century CE as well. In this case, even if the emissaries were no more than Sogdian merchants, the list still could represent the spatial limits of the Tang foreign market, and in turn the more possible domains where Tang fiduciary coinage could reach from the second half of the 8th century CE onward.

Figure 10<sup>176</sup> presents a rendering of the location of Anxi coin finds by Stein in relation to the hypothetical political boundaries of central Asia, the Anxi Protectorate, and the Tang court in Chang'an while a major Tubo offensive was underway between 760 and 764 CE.<sup>177</sup> By 764 CE the Hexi Corridor connecting the Anxi Protectorate with the Central Plains of the Tang Empire seemed to have become entirely inaccessible. The Khotan king Viśa Sheng (who answered Xuanzong's call to arms in 755 CE) declined Emperor Daizong's request that year to lead his army through the Hexi Corridor back to his kingdom, and instead requested the emperor to

173. Inaba 2010, pp. 40–46.

174. Canepa 2010, p. 131.

175. *XTS* 43.1146 explains that the Tang court maintained contact with many “tributary states” under its so-called *jimi* (loose reins) system, and court bureaus such as the *Honglusi* (鴻臚寺) kept various forms of records and maps that could be presented to the emperor when so ordered. For a discussion of the sources of Jia Dan's various records and cartographic works presented to the emperor in 798 and 801 CE, see Schottenhammer 2015b, pp. 204–205.

176. Blue lines connecting dots are generated using the “directions/foot

travel” function of Google Earth Pro, while routes from Beiting to Suiye and Shule to locations beyond the border of the People's Republic of China are drawn based on modern road data from Google Earth Pro. The white contour represents the extent of the Tang Empire by 741 CE, illustrated in Tan Qixiang, *The Historical Atlas of China 5: The Sui Dynasty Period: The Tang Dynasty Period. The Five Dynasties and Ten Kingdoms Period* (1982), pp. 34–35, and the purple domain represents the extent of the Anxi Protectorate in 669 CE, as hypothesized by Tan (1982, pp. 63–64). The locations of states in Table 1 are tagged with

the closest approximation to known associations between ancient sites and modern cities, based on Tan 1982, pp. 63–64. Diamond shapes indicate locations where Stein reported hoards and purchased coins published by Wang (2004), with locations cross-referenced using the Stein Gazetteer of the Digital Silk Road Project, National Institute of Informatics (<http://dsr.nii.ac.jp/digital-maps/stein/place-names/map/index.html.en>).

177. For the account in the *Old Tibetan Annals*, see Dotson 2009, pp. 130–132; *ZZTJ* 223.7146–7147; Xue 1998, pp. 277–278; *JTS* 12.329, 144.3925.

bestow the Khotan kingship upon his brother, who was regent at the time. By 772 CE, such visits seemed to have become impossible. Nevertheless, in 780 CE, the Anxi Protectorate managed to establish some intermittent contact via the Huihe. As these literary sources suggest, boundaries of control must have been shifting dynamically as the Tang Empire struggled against Tubo offensives.

Monetary circulation in Sogdian centers during the second half of the 8th century was likely in a state of flux. Kamyshev observed that Türgesh Tang-concept coinage found in hoards at Krasnaya-Rechka and Ak-Beshim/Suiye exhibited a significant correlation with QY coinages in terms of weight and diameter evolution. He proposed that the An Lushan Rebellion had a direct impact on monetary issuance and circulation in the Chui valley.<sup>178</sup>

Yet in other regions, there is no clear correspondence, only a sudden cessation of holed coinage in central Asian trade centers during the second quarter of the 8th century. Given that copper and bronze coins have a prolonged period of circulation after issuance, some of the earlier locally issued copper and bronze issues could have been in use down to the time of the Arab conquest of Samarkand (712 CE)<sup>179</sup> or slightly later down to the first anti-Arab uprisings that eventually led to the so-called Abbasid revolution in the Merv Oasis (731–750 CE),<sup>180</sup> but unlikely later.<sup>181</sup>

An example is a coin hoard from the 1998 campaign of the Kuva excavations in the Fergana valley (see Fig. 10, no. 1). It had 61 specimens of “small copper discs 10–18 mm in diameter, quite irregular in shape, again with a small circular or square central aperture but with no legends,” likely produced during the 7th–8th century CE, but how long into the 8th century remains a question.<sup>182</sup>

When interpreted generously, the evidence mentioned above suggests that certain regions in central Asia continued to issue pre-Islamic coinage, and local bronze coins maintained some value in relation to Arabic dirhams and fulus until the 760s.<sup>183</sup> By the 760s, however, local authorities began adopting Arabic fals coins and gradually phased out pre-Islamic type coins.<sup>184</sup> Legends found on bronze Arabic fulus in the 8th century indicated exchange ratios for silver dirhams, such as 60 in a dirham and 120 in a dirham.<sup>185</sup>

Whether Tang coinage can be accepted under such an exchange rate in the 760s and later is difficult to determine. The only exchange ratio between Tang cash coins and silver coins comes from documentary evidence in the Western Regions. In Turfan, one officer’s receipt of 692 CE

178. Kamyshev 2002, pp. 46–50.

179. For a standard narrative on Qutayba ibn Muslim’s conquest of Samarkand and elsewhere in the Transoxania as Caliph Al Walid’s governor of Khurasan during the first half of the 8th century CE, see Cobb 2009, pp. 237–241.

180. For a recent narrative of the Abbasid revolution and its beginnings with the revolt of al Harith ibn Surayj in 734 CE, see Daniel 2009, pp. 469–479.

181. Kuznetsov and Fedorov 2010.

182. Ivanov 2003, pp. 206–207.

183. Koshevar (2005, p. 90) discussed the documents of the so-called Mug Archive cited in Smirnova (1963, p. 43) and Raspopova (1976, pp. 45–46 [*non vidi*]) to demonstrate that Sogdian royal documents of the early 8th century CE tabulated daily expenses in bronze coin value, and suggested that such chancellery practice can be seen as indirect evidence of substantial purchasing power of bronze coins.

184. Zeimal 1994, p. 245.

185. On the question of the exchange ratio between bronze Arabic fals and silver dirhams, Koshevar (2005, p. 90) cites Smirnova (1981, pp. 67, 75–80, 419–421) for discussions on the only source indicating the value ratio of silver and bronze coins in Sogdiana as being the Arabic legends on bronze fals indicating “60 in a dirham” and “120 in a dirham.” Also, he referred to Fedorov (2004, pp. 14–15), who discussed the likelihood that different sizes of bronze Sogdian coins may be used to distinguish between different denominations.

for a horse used for long-distance transportation recorded the purchasing price as “two silver coins, equal to 64 cash coins,” which suggests that a stable exchange market between silver coins and Chinese cash coins would have been tariffed at a 1:32 ratio.<sup>186</sup> Considering the lingering interest in producing holed coins from certain pockets in central Asia, there might be a brief period in which localized mechanisms of accommodation were in effect, but unlikely sustainable.

It is worth noting that Arabic literary sources from the 9th century mention a limited presence of Tang coins in the port of Siraf.<sup>187</sup> Abu Zayd al-Sirafi, in his second book of travel accounts to China and India, written between 884 and 943/4 CE,<sup>188</sup> documented the Chinese practice of using copper coins, both large and small, which could be found at Siraf, strung together for transactions.<sup>189</sup> In this passage, Abu Zayd not only provided a specific exchange ratio (stating that each thousand of these coins equaled a mithqal of gold) but also highlighted the Chinese argument for using copper coins instead of the Arabs’ preferred dinars and dirhams—thieves could easily carry off much greater value if the coins were silver dirhams or gold dinars rather than copper coins.

In Abu Zayd’s earlier travel accounts to China and India, written during 851–852 CE, there is a subtle contextual difference when compared with his discussion of copper coins used by the ruler of China to purchase camphor, “paying fifty fakkuj for a maund, the fakkuj being a thousand copper coins.”<sup>190</sup> A generous interpretation may suggest some very limited acceptance of Chinese copper coins at Siraf, similar to the acceptance of silver and gold coins in the Hexi Corridor and the southern port cities of China, as discussed by Thierry.<sup>191</sup>

Shipwreck cargo seems to indicate that there could have been a small but steady stream of Chinese copper coins heading westward on the maritime route between the 9th and the 12th centuries CE. The 9th-century Belitung shipwreck in the Karimata Strait, excavated between 1998 and 1999, was a *dhow* built in the Arab tradition,<sup>192</sup> but carried a number of KY coins<sup>193</sup> along with 9th-century Changsha ceramics from Hunan Province, *sancai* ware, and rare examples of unglazed blue-and-white ware from the Yue kilns of Zhejiang Province, 10 tons of lead ingots, and an assortment of

186. Hansen and Rong (2013, p. 293) assert that the 1:32 ratio was still the appropriate rate in 731–732 CE based on two documents: first, a 692 CE document mentions two silver coins tariffed at 620 copper coins (64TAM35:28); second, a receipt of expenses of 731–732 CE in Beiting, in which a bolt of largeloom degummed silk (the equivalent of a silver coin in 692) was the equivalent of 300 copper coins (Hansen and Rong 2013, pp. 301–302, document 4 = 73TAM506:4/11.1–7, lines 18–19). De la Vaissière (2005, pp. 52–53) also takes note of the exchange rates from these examples to discuss prices mentioned in Sogdian letters tentatively

dated between the 4th and 6th centuries CE, but supplies an additional and nearly identical price ratio from a Turfan document of 743 CE, along with a supplementary information on the gold to silver exchange rate of 1:20 in Dunhuang in the first half of the 8th century.

187. Whitehouse 1968, p. 2.

188. As Mackintosh-Smith (2014, pp. 5–12) explains, while book 1 is securely dated based on the author of book 2 to 851–852 CE, there is less clarity with book 2, which could only be approximately assigned a 920s date for the final compilation based on a variety of factors.

189. Mackintosh-Smith 2014,

pp. 73–75 (Abu Zayd al-Sirafi 2.3.3).

190. Mackintosh-Smith 2014, p. 45 (Abu Zayd al-Sirafi 1.8.3). For the date, see Mackintosh-Smith 2014, p. 67 (Abu Zayd al-Sirafi 2.1.1).

191. Thierry 1993, pp. 133–134.

192. Guy 2019, pp. 1647–1649.

193. Flecker (2001, p. 344) states that these were stamped with the characters Kaiyuan Tongbao, “showing that they were produced from A.D. 618–26 at the very beginning of the Tang Dynasty,” but the KY series cannot be summarily dated by the four characters alone, hence the suggestion of an early 7th-century date must be taken with extreme caution.

other items.<sup>194</sup> The 12th-century Song Dynasty Nanhai I shipwreck had more than 6,000 bronze coins, from Han Dynasty Wuzhu to Tang KY and also Song Dynasty coins. These were part of a massive cargo that included high-quality ceramics, perhaps aimed for Arab and Iranian elite customers and heading for a destination in the Indian Ocean.<sup>195</sup> The porcelain from these two shipwrecks was from different ceramic production centers spread across both northern and southern Tang and Song China. Chen's recent contribution pointed out that these involved complex transactions between producers, transporters, and procurers as well as government agencies intervening for taxation in kind and also resale to producers to strike a profit.<sup>196</sup> There is no intent here to argue that the coin was simply part of the cargo that was transported westward. Rather, we can build on Chen's observation and suggest that systematic maritime export activities likely served as an impetus for moving both export wares and coins of all sorts toward ports of call, creating the condition for the transmission of the Corinth Tang coin.

As for trading on land, weight and value considerations would make any merchant less likely to carry meaningful amounts of copper coinage on the road. Noonan concluded this in his study on the disproportionately small quantity of Arabic bronze fulus found in European Russia compared to silver dirhams and Byzantine copper coinages.<sup>197</sup> If we balance Abu Zayd's account, the shipwreck evidence, and Noonan's study, a scenario emerges in which central Asian centers of trade have just about phased out Tang and Tang-concept coinage by the third quarter of the 8th century. Holed coinage, however, still had a limited degree of mobility by virtue of its minimum utility, hence appearing or even circulating at select locations that were beyond Tang's maximum sphere of influence, but directly connected to Tang centers of trade.

In sum, even if Tang or Tang-concept coins did circulate in central Asia after 760 CE, such nonprecious metal coins would be unlikely to have ventured farther. If Abu Zayd's account in book 2 can be taken to reflect circumstances in Siraf (and this would be a very generous interpretation indeed), Siraf and ports such as those in the Indian Ocean would have been one of the very rare terminal points where Chinese coins maintained some cash value and had meaningful local circulation. The natural limits point to obvious need for further explorations on how the leap in the Corinth Tang coin's "transmission"—as opposed to circulation—to Corinth was achieved.

Also, there is the question of eastward transmission. Dali and Jianzhong coins have been found in central China, though they are very few in number.<sup>198</sup> Their presence in central China, however, suggests that, even with the Tubo barrier, the smaller form factor, and the wrong sort of inscriptions, some Anxi coinage produced in the 770s and 780s eventually—against all odds—moved eastward. The scale of Anxi QY variants in central China has not yet been systematically studied, but considering the presence of even Dali and Jianzhong coins, the presence of Anxi QYs in central China should not be ruled out.

Next is an exploration of the westward and eastward scenarios. It is important to note that these situations are not the only possible transmission process that could have brought the Corinth Tang coin to Corinth, but they serve as examples illustrating Corinth's role as a hub of interconnected

194. Flecker 2001, pp. 339–342. Chen (2023, pp. 108–110) provides an updated list of shipwrecks in southeast Asia.

195. Schottenhammer 2019, pp. 46–50; there is also some speculation as to the origins of the crew and the merchant or owner—unusual items such as the remains of cobras (as pets?) and a splendid silver waist belt untypical of a Chinese owner, which Schottenhammer pointed to as support for an Arab or Indian ethnicity.

196. Chen 2023, pp. 155–156.

197. Noonan 1974, pp. 451–452.

198. See n. 95, above.



mobility and communication channels in the trans-Eurasian landscape during the Byzantine and Frankish periods.

### WESTWARD SCENARIO

First, it is necessary to consider Tang Suzong's efforts to canvass for military support from central Asian polities from 757 to 758 CE, finally assembling a throng of Uyghur, Arabic, Bukharan, and Farganan forces that helped the Tang retake Chang'an.<sup>199</sup> The reference to Arabic forces seems to suggest that Abbasid Caliph al-Mansur actually sent aid, but the circumstances in central Asia makes it unlikely. In al-Tabari's account, between 757 and 758 CE was a rather turbulent period, with the murder of the Khurasan governor Abu Dawud Khalid b. Ibrahim at Merv by discontented elements of the Khurasani army.<sup>200</sup> In 758–759 CE, there was the revolt of the Rawandiyah, a Khurasani group and followers of Abu Muslim.<sup>201</sup> Taking into account the Abbasid troubles coinciding with the An Lushan Rebellion, Inaba proposed that it might have been Arab rebels and irregular mercenaries (including the so-called *chakar* forces) that answered Suzong's call.<sup>202</sup>

Following Suzong's ceremonial laudation of their efforts in 759 CE,<sup>203</sup> some may have returned west, which was an important opportunity for small-change cash coin both from central China and from the Anxi Protectorate to be carried westward. Even so in this scenario, the true value of any QY coin may not have been monetary. Most of the copper or bronze coins likely would have been spent or discarded far from Mediterranean shores. Rather, the Corinth Tang coin would have been more likely converted into a symbolic object, a decorative element attached to an object,<sup>204</sup> or even an accidental possession as the consequence of travel. Carrying the coin intentionally would seem the most unlikely, though the Corinth Tang coin could have held singular significance to specific individuals who arrived in Corinth, regarding it as a souvenir or heirloom item.

In the Chinese context, scholars have commented on the practice of collecting odd coins and converting them for different purposes. Two finds from the 6th to 8th century CE serve to illustrate this.<sup>205</sup> The first is from a coin or charm found in situ underneath the remains of the deceased in Astana cemetery tomb 519 (inv. no. 73TAM519) during the 1973 excavations, in which a reused early 1st-century CE coin (Wang Mang, 50-cash) was inscribed with an auspicious inscription, *gao chang ji li* (great prosperity and luck).<sup>206</sup> Another such *gao chang ji li* coin or charm was found in the Hejiacun hoard excavated by the Shaanxi Provincial Institute of Archaeology among 30 gold and 421 silver KY-class coins, 15 older Chinese coins,

199. ZZTJ 218.6998; CFYG 973.11434.

200. See McAuliffe 1995, pp. 59–60.

201. See McAuliffe 1995, pp. 62–63.

202. Inaba (2010, pp. 46–48) discusses the absence of evidence and alternative proposals.

203. CFYG 976.11461.

204. This is a suggestion kindly

raised by Fu Ma of Peking University. He observed that the reverse of the Corinth Tang coin seems to be worn much more so than the obverse, and he wondered whether it was intentionally shaven for mounts or insets. The suggestion is certainly interesting, but there are abrasive marks on both the reverse and the obverse, directionally

random and with varying granularity. That said, the coin may have already been suitable for mounts or insets without needing any physical reduction.

205. Xinjiang Weiwuer Zizhiqu Bowuguan 1975, p. 17.

206. Cribb 1986, p. 6.

and several coins of foreign origin, including five Japanese silver coins, a Sasanian silver coin (Khusrau II Parviz, r. 590–628 CE), and an imitative gold coin of Heraclius (r. 610–641 CE).<sup>207</sup> There are no apparent modifications to the Corinth Tang coin to such effect, except for the small dent to the right side of the central hole, but that is just as likely to have been an imperfection caused during sand casting. However, mounting or setting the coin into another item, such as weaponry, equestrian equipment, or clothing, would also have been possible.

It could be useful to posit a class of agents capable of facilitating transmission (as opposed to circulation) of coins, particularly people who have access to intercontinental networks of movement and might take an interest in converting an exotic coin into a collectable item. Emissaries, although not necessarily in need of cash coins, may have found value in possessing a unique object, even if it was adapted from a cash coin. Tamim ibn Bahr's account of his journey to the Uyghur capital of Karabalghasun around 821 CE illustrates how perceptive and curious emissaries traversing central Asia were, gathering information about ethnic groups and geographic regions, and potentially collecting intriguing items during their journey.<sup>208</sup> According to Minorsky, who reconstructed and translated Tamim's text, this was no amateur traveler from (perhaps) Transoxiana but rather a dignitary "on an important mission," supported by the Uyghur khaqan's relay-horses that operated at a "post-haste" traveling speed.<sup>209</sup>

Then there were Sogdian merchants who navigated the Umayyad conquest of central Asia, the Tang's retreat, the Abbasid revolution, and local revolts.<sup>210</sup> Merchants from Sogdiana were represented in Baghdad when the city was founded by al-Mansur in 762 CE,<sup>211</sup> and many remained prominent in their respective centers of trade well into the 9th century, some even longer.<sup>212</sup> De la Vaissière argues that the 9th century textual references to the community of the Σογδοῖοι in the Crimea could be associated with the Sogdians of central Asia, and that this may represent a dimension of connectivity between Byzantine frontiers and central Asian centers of trade.<sup>213</sup> If accepted, some odd items such as a Chinese coin could have been transmitted through such connections.

During the 8th century, Judeo-Persian travelers had a growing visibility in central Asia (perhaps at the expense of the Sogdians) and present another possibility.<sup>214</sup> Primarily identified from archival letters and inscriptions, these

207. I thank an anonymous reviewer for remarks regarding this hoard and providing the reference to Qi 2016, p. 62. For the *gao chang ji li* coin mentioned in the excavation report of the Hejiacun treasure, see Shaanxi Sheng Bowuguan Wenguanhui Geweihui Xiezuoxiaozu 1972, p. 33.

208. Minorsky 1948, pp. 283–285.

209. Minorsky 1948, p. 303.

210. For an analysis of the first phase of conquest and destruction and a second phase of pragmatist approach by the Umayyads that permitted the conquered non-Muslims a degree of continuity in

terms of local lifestyles, but under the status of *dimmi* and payment of the *gizya*, see de la Vaissière 2020.

211. De la Vaissière 2005, pp. 283–284.

212. De la Vaissière 2005, pp. 284–286.

213. De la Vaissière 2006, pp. 177–180.

214. Zhang 2016, pp. 671–672. I would like to thank Fu Ma of Peking University for bringing the Judeo-Persian merchants in Khotan to my attention.

operators spoke different regional Judeo-Persian dialects<sup>215</sup> but wrote in Hebrew square script.<sup>216</sup> They traversed not only Khuzistan, central Fars, southern India,<sup>217</sup> and the upper Indus valley<sup>218</sup> but also Bukhara in Sogdiana as well as the kingdom of Khotan, south of the Tarim Basin in today's Xinjiang Uygur Autonomous Region in the People's Republic of China, which had very close ties with the Tang court. One from Khotan—known as Dandan Uiliq II—deserves further discussion.<sup>219</sup> The sender claimed to have received encouragement from his “rabi” (interpreted by Zhang and others as the sender's “superior” in general terms) and others “far away” to support the war effort against the Tubo should the fight reach Kashgar.<sup>220</sup> The sender announced that he indeed had committed “100 patku coins' worth of supplies” to the cause.<sup>221</sup> Zhang Zhan associated the word *patku* with the Sogdian *ptkwok*,<sup>222</sup> which Bi and Sims-Williams interpreted as the Chinese *guan* (1,000 cash coins strung together) based on a Sogdian document from Khotan.<sup>223</sup> If so, this would be among the largest expressions of cash coin value from documents in Khotan, and a clear indication of the sender's wealth.<sup>224</sup>

The sender's intention to impress his receiver by means of cash coins is interesting. Using cash coin terms to describe value must have reflected how value was described in everyday life at Khotan during the very last years of Tang control, and it would have not been out of place for a reader familiar with local circumstances. But what about the sender's “superior” operating at a higher level of network hierarchy from “far away,” as Zhang extrapolated from the contents of the letter?<sup>225</sup> As Yoshida and Zhang have

215. Shaked (2009, pp. 450–451) summarizes the five dialect groups of Early Judeo-Persian: Khuzistan, Central Fars, Bukhara, Chinese Turkestan, and Afghanistan.

216. Paul (2013, pp. 9–14) describes the linguistic and historical background of the Early Judeo-Persian in relation to Early New Persian in Arabic script; Paul (2021, pp. 77–81) offers the most recent overview of this dialect written in the Hebrew alphabet as part of his treatment of a late-10th- or early 11th-century letter from the Cairo Geniza in the Cambridge University Library's Taylor-Schaechter collection (T-S 18K3.16).

217. See Perczel (2019, pp. 662–671) for a recent discussion on the documentary evidence describing various Jewish and Christian migrants arriving in south India in the Early Medieval period, in particular the copper plates that described the local royal grants for the foundation of settlements, or emporium for Thomas of Kana (assigned to 345 CE) and later Maruvan Sapir Iso (arrival sometime after 825 CE), the “Quilon (Kollam) Copper Plates” of 849 CE. For detailed analysis of the

various scripts (Judeo-Persian written in standard square Hebrew script, Arabic in Kufic alphabet, and cursive Pahlavi), see Cereti 2009, pp. 32–39.

218. A short rupestral epigram at Tang-i Azaq, 570 km west of Kabul, left by three travelers (anonymous son of Abraham, Zachary son of Smi'il, and Samuel son of Ramis) from “Koban” (likely Kabul) in the year 1064, or 752/3 CE in the era of the “Hellenes,” commemorating the return of Seleukos I Nikator to Babylon in 311 BCE (for recent discussions of the Seleukid era, see Kosmin 2018, pp. 26–37); Henning (1957, pp. 335–336, 342) suggests that this path was the ancient road linking Herat with Bamian or Kabul. As Neelis (2010, pp. 271–272) further places this inscription alongside another left by two Jewish merchants recently found, and argues that the upper Indus River valley was traversed by Buddhists, Jewish merchants, and Sogdian merchants from the 8th century onward, forming a triangular network between India, China, and Sogdiana.

219. The first letter (Dandan Uiliq I) was found in 1901 at Dandan-Uiliq near Khotan by Stein and was

subsequently published two years later, while the second (Dandan Uiliq II) was found in 2004 (also in the Khotan region), either at Dandan Uiliq or at Damagou. Zhang and Shi (2008, pp. 72–75) provide a brief but clear explanation on the discovery and history of scholarship of the first letter, along with careful description, transcription, translation, and analysis of the second letter; Zhang (2016, pp. 667–668) further observed that letters were likely written in the very last years of the 8th century and by very similar if not identical hands; also, given the fact that both letters mentioned two identical names, the likelihood is that they were communications from the same group of merchants, if not also the same sender. For an overview of the content and historical context, see Hansen 2012, pp. 217–218.

220. Zhang 2016, p. 662, §7–§9, p. 664, §49.

221. Zhang 2016, p. 664, §45–§51.

222. Zhang 2016, p. 666, §48.

223. Bi and Sims-Williams 2010, pp. 505–506.

224. Zhang 2016, pp. 666–667.

225. Zhang 2016, pp. 670–671.

demonstrated, the distance may be postulated by examining linguistic traits from the two Dandan Uiliq letters. The loanwords of Chinese origin may be acquired via Khotanese,<sup>226</sup> but the Sogdian elements—including loanwords, dating formula, the ordinal ending *-mī*, and an optative-infinitive construct for honorific and polite expressions<sup>227</sup>—suggest a bilingual operator well trained in a literary form of Persian with unique expressions characteristic of his origins.

Zhang proposed two possibilities: Samarkand/Sogdiana proper, or Anxi/Hexi, where Sogdian migrant communities were prevalent.<sup>228</sup> In the former, more feasible assumption, Judeo-Persian operators in Khotan, such as the one in question, would have a network coverage that included Samarkand and potentially Khuzistan, similar to the Sogdian merchants. That said, Zhang is rightly skeptical, for in Dandan Uiliq II we learn that the landlord in Khotan requested the receiver's daughter to collect money for purchases of sheep—Samarkand is a bit far for a Khotanese landlord to have a say.<sup>229</sup> This assessment seems correct; furthermore, the description of the supplies in terms of cash coins would likely seem out of place in a communication with recipients operating in Samarkand 30 years after most Tang and Tang-concept coinage had been phased out. In other words, while it is possible that a Judeo-Persian merchant network had extensive connections beyond Khotan and areas under Tang influence or control, it is equally plausible that their ties eventually were transformed into more localized trade networks, especially given the adverse geopolitical circumstances of the time. For the Corinth Tang coin to move westward, many more such local networks would have been needed to be in place.

For a more far-reaching network with high-mobility agents, one might have to look toward the Church of the East.<sup>230</sup> The QY coin found at the First “Nestorian” Temple (site IV) in Suiye, mentioned above, suggests that practitioners of the Church of the East were among the likely bearers of the QY series during the third quarter of the 8th century CE. Understanding the pattern of mobility of the Church of the East may have positive implications for recognizing the potential for QY transmission in the broader central Asian landscape.

Initially confined more to Sasanid Persia between the 5th century and the early 7th centuries CE,<sup>231</sup> the Church of the East thrived under the

226. Zhang 2016, pp. 665–666.

227. Zhang 2016 (pp. 668–669) assembles a list of proper nouns from the two letters that are likely Sogdian loanwords; Zhang and Shi (2008, p. 92) identified the ordinal suffix *-mī* as opposed to the Persian suffix *-im/-omīn*; Yoshida (2016b, pp. 625) gives three examples of the Sogdian optative-infinitive construct, two from Dandan Uiliq I (lines 4, 32) and one from Dandan Uiliq II (line 24). A short explanation of this feature can be found in Yoshida 2016a.

228. For the assessment that writers of Early Judeo-Persian texts show

intent to present a literary form of Persian, but lacking a central authority to impose standards, and therefore resulting in localized grammatic and lexical characteristics, see Shaked 2009, p. 449. Yoshida (2016b, pp. 625–626) built upon Shaked's assessment and suggested treating the sender(s) of the two Dandan Uiliq letters as bilingual(s) of Sogdian and Judeo-Persian, but did not specifically associate the sender(s) with Sogdiana proper. Zhang (2016, pp. 669–671) proposed solutions including Anxi or Hexi but also considered Samarkand as a possibility.

229. Zhang 2016, p. 671.

230. The Church of the East is a web of autocephalous Christian communities with claims to apostolic origins (Mari's evangelization of Mesopotamia and Thomas's work in Fars and potentially India) and an ecclesiastical seat at the Parthian capital of Seleucia-Ctesiphon, officially recognized by 315 CE. The Church spread across Asia and India from the 3rd century CE onward, with bishoprics and metropoleis ordained by the patriarchs based in Seleucia-Ctesiphon. For a recent standard account, see Chaillot 2021, pp. 11–33.

231. Vine 1937, pp. 46–47, 78–79.

Umayyad and Abbasid Caliphates due to its relatively well-educated talent base and centers of learning. This led not only to administrative posts in the caliphate but also to respectable social status and cultural prestige among central Asian states. Several examples are found at Nisibis, Gundeshapur, and Merv (Fig. 10, no. 17; Fig. 11), and the so-called Second “Nestorian” Temple (site VIII) at Suiye, with its extended monastery complex housing, potentially, a library, among other learning and living quarters.<sup>232</sup> The Church of the East also made inroads in both central China and even the eastern Mediterranean, with establishments in Cilicia, Cyprus, and Egypt.<sup>233</sup> Archaeological remains of Christian monasteries found along the Indian Ocean and the Persian Gulf also suggest quite successful infrastructural investments and improved missionary outcomes in these regions between the 4th and 9th centuries CE.<sup>234</sup>

In the Sogdian centers of trade, the Church of the East thrived as well. The recent discovery of Samarkand’s Urgut church—in operation between the 7th and 13th centuries, based on organic materials and ceramics—is a helpful illustration.<sup>235</sup> An excerpt from the *Chronica minora* compiled in the *Corpus scriptorum christianum orientalium (CSCO)* demonstrates the evangelical work in Turkestan under the leadership of the Metropolitan of Merv, taken to mean regions that border upon if not also include the Anxi Protectorate.<sup>236</sup> The patriarch Timotheus I’s *Epistolae* (also in the *CSCO*) mentions the creation of a metropolitan in “the kingdom of the Turks” and the death of a metropolitan of China.<sup>237</sup> A unique example is the community of immigrant Christian merchants from west Asia whose grants from a local lord were recorded on the “Quilon Copper Plates.” They have been regarded as direct contributors to local urbanization and the transregional maritime trade that connected the Indian subcontinent with markets in Fatimid Egypt.<sup>238</sup> As for central China, the Church of the East managed to maintain prominence from 635 CE onward. According to the so-called Nestorian Stele, some of its ranking clergy were dignitaries and imperial officials in the Tang court.<sup>239</sup> Of note is the priest Issu, the son of another priest from Balkh (Fig. 10, no. 15) and a decorated officer of the Tang court, who served alongside the famous commander Guo Zi-Yi.<sup>240</sup>

232. Vine 1937, pp. 91–92; see Figure 10. For a short run-down of bishoprics, see Houston 1980, p. 62, listing Syria, Armenia, Persia, Arabia, Halavan, Herat, Merv, Tashkent, Samarkand, Baluk, Kashgar, and Malabar in India. For ‘Amr’s compilation of a “semi-official list” documenting the Metropolitans of the “Nestorian Church” in Transoxiana, China, and India, see Mingana 1925, p. 323.

233. On the Church of the East in China and the famous “Nestorian Stele” of 781 CE, see Vine 1937, pp. 130–134. On the Mediterranean expansion, see Vine 1937, pp. 125–126: “the extension of the power of the Caliphate over regions that had formerly been under

the Roman Empire made it possible for Nestorian missions to be sent where previously the Roman authorities would have forbidden them.”

234. Seland 2013, pp. 386–388; for a recent list of 14 documented examples of Church of the East architecture in Mesopotamia, the Persian Gulf region, and central Asia, see Ashurov 2019, pp. 141–147.

235. Ashurov 2019, pp. 132–141.

236. Mingana 1925, pp. 305–306.

237. Braun 1915, p. 107, letter 13 (Latin translation of Syriac), in which Timotheus informs Sergius, the metropolitan of Elam, about a particularly difficult metropolitan of Sarbaziah refusing to take up his post, and when

forced to do so he asked Timotheus for a travel allowance, to which Timotheus replied, “Multi monachi transeunt maria in Indiam et Sinas cum baculo et peratantum. Reputa te sicut illos cum copia pecuniae mari profectum esse.” (Many monks traversed the seas to India and China with a staff and a bag. Reflect that you shall cross the seas with an abundance of money just like them.)

238. Liji 2008, p. 317.

239. For a translation of the Nestorian Stele, see Saeki 1951, pp. 53–77; a more recent translation and commentary is Eccles and Lieu 2016.

240. Saeki 1951, p. 68. On the locations of the military campaigns, see Saeki 1951, pp. 96–97.

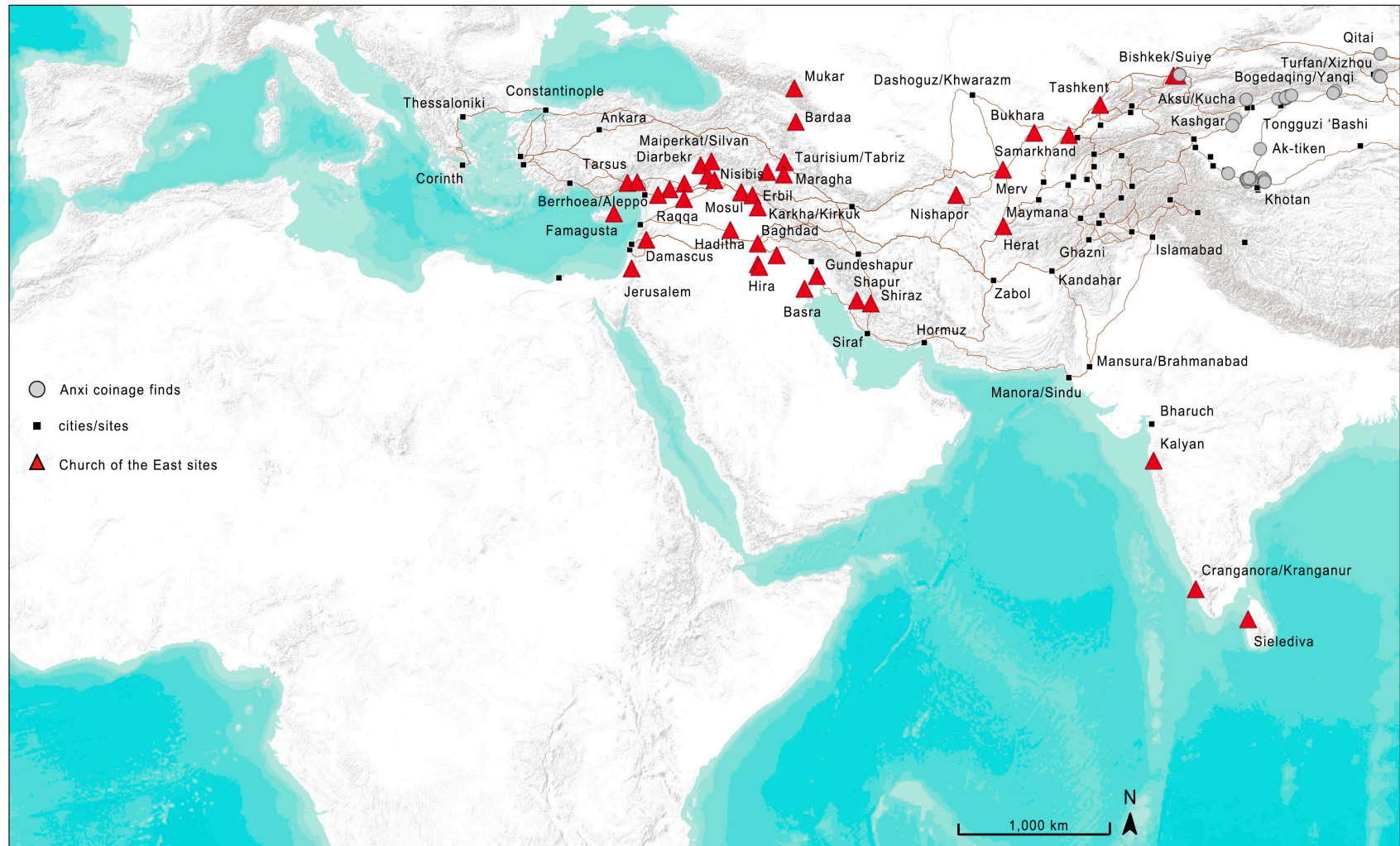


Figure 11. The network of the Church of the East. Base image Esri Terrain, with annotations by C.-Y. Wu, after Vine 1937, p. 126

Such connections between bishoprics in central Asia and those in central China were likely affected in the 770s CE onward due to the military operations in the Hexi Corridor. The patriarch Timotheus I spoke of preparing to consecrate a metropolitan for the Tubo in the 790s CE, suggesting that the Tubo Kingdom may not have been an insurmountable barrier for the communications between centers of the Church of the East.<sup>241</sup> In fact, Fu Ma's recent article demonstrated that Buddhist and "Nestorian" monasteries were vital relay posts and hubs for official envoys during the late 8th–early 12th century. At that time, there was no integral postal system in place to provide the security, hospitality, and logistics needed for travel on a continental scale.<sup>242</sup> The extent of the network is presented in Figure 11.

The land connectivity of the Church of the East provides a roundabout way to return to the (somewhat truistic) "routes" narrative for describing the Corinth Tang coin's journey to the Mediterranean. The assumption here is not simply a haphazard series of intermediary exchange networks, a framework that is antithetical to nonprecious metal coinage transmission. Instead, the Church of the East can serve as a model for what structured and systematic communications between central China, central Asia, and the Near East looked like: a web of nodes that was operated by an intellectually and culturally sophisticated organization with considerable ties to locally paramount social and political institutions. In this system of communication operated by (assumedly) more curious and perceptive individuals, the likelihood for an odd nonprecious metal object to be converted to a token should be relatively higher than a purely random intermediary exchange framework, leading to a greater potential for the Corinth Tang coin's transmission.

Although promising, there are still limitations with the Church of the East network. The first concerns the longevity of this network since the Church of the East was adversely affected by political persecution.<sup>243</sup> In 845 CE, Tang Wuzong (r. 840–846 CE) issued an edict ordering all monks—Buddhist or Christian—to "return to the secular life and cease to confuse our national customs and manners."<sup>244</sup> The Church of the East seemed to have continued its operations for some time in Tang China despite adversity, such as indicated by the report that the mid-9th-century patriarch Theodose (852–858 CE) still spoke to the archbishops of China alongside Samarkand and India.<sup>245</sup> But the separation between the church in China and central Asia likely became more significant, and by the first half of the 10th century Arabic sources speak of the total disappearance of Christianity in China proper.<sup>246</sup> In other words, historical circumstances could have caused disruptions that it made it less likely for the Corinth Tang coin to move along such structured networks.

The second difficulty concerns the directionality of the Church of the East's mobility. Accounts written by the leadership of the Church of the East tend to emphasize the eastwardly advances of their missionaries. For example, in one letter written around 781 CE, the patriarch Timotheus I

241. Mingana 1925, p. 306.

242. Fu 2020, pp. 244–252.

243. Prichodko 2020, p. 187.

244. Vine 1937, p. 134.

245. Mingana 1925, p. 325.

246. Prichodko 2020, p. 186.

claimed that “many monks crossed the sea and went to the Indians and the Chinese with only a rod and a scrip.”<sup>247</sup> Of course, one would expect that there are references in passing of news returning via letters dispatched by merchants and diplomatic correspondence. One such report is provided by the metropolitan of the Dailamites (southeastern Caspian Sea) who claimed that news of the Church of the East’s evangelical work “reached the farthest points of the East,” and that his correspondent “may learn all these clearly from the letter which some merchants and secretaries of the kings, who had penetrated as far as there for the sake of commerce and of affairs of State, wrote to [the patriarch] Mar Timotheus.”<sup>248</sup> This remark is interesting, for communications of the Church of the East seemed to have been dependent upon networks of merchants and state actors.

The network approach provides frameworks of possibilities. What is still required are candidates—merchant, organization, or state actors—that could have had direct contact with Corinth. Here we transition from an East or central Asian perspective to a Corinthian one. Corinth was not devoid of coins with central Asian or Near Eastern connections between the 8th and 9th centuries CE. During the 1995 excavation campaign, one Abbasid bronze coin, with clipped edges and issued between 750 and 825 CE, was found in the frigidarium of a bath that was dismantled during the late 8th or early 9th century.<sup>249</sup>

Again, we are confronted with questions on how to rationalize singular finds. Treadgold hypothesized that during the caliph Harun al-Rashid’s major offensive against the Byzantines in 806 CE, Humayd ibn Ma’yuf al-Hajuri may have led a naval expedition that reached the Peloponnese, stirring up the Slavs and besieging Patras.<sup>250</sup> Even if some Abbasid elements, however, were indeed directly involved in the Slavonic uprising of 806 CE, and their presence in the Peloponnese led to the transmission of some Abbasid coinage there, there is very little reason to also expect any of them to have been carrying a nonprecious metal Tang coin of poor production quality issued half a century ago. That is, unless we assume that the coin was an heirloom item in the possession of a Khurasani warrior with ancestral ties to central China or the Anxi Protectorate—again, a narrative of the fantastic.

## EASTWARD SCENARIO

The eastward scenario requires the Corinth Tang coin (or the object it was attached to) to first enter central China, make its way to a port city in the south, board a cargo ship, survive the many transactions along ports of the Indian Ocean, and reach Corinth via Egyptian or Levantine hubs. The first

247. Mingana 1925, p. 306; *Timothei Epistolae* 1, p. 107 (“multi monachi transeunt maria in Indiam et Sinas cum baculo et pera tantum”). Latin translation of Syriac by Braun (1915).

248. Mingana 1925, p. 307 (from Syriac).

249. Slane and Sanders 2005, p. 246, n. 12: “An Abbasid coin of the second half of the eighth or first quarter of

the ninth century (95–377) was found in a demolition context in the bath’s frigidarium (in the Panayia field).”

250. Treadgold (1988, p. 148) describes the event, but his source seems to be only Constantine Porphyrogenitus’s *De administrando imperio* 49 for the main account of the Abbasid role in the Slavonic revolt. The only relevant line in the text (lines 8–9)

seems to be a reference to “African Sarcacens” (μεθ’ ἑαυτῶν ἔχοντες [sc. Σκλάβοι] καὶ Ἀφρικῶδες Σαρακηνοῦς). Theophanes Confessor’s account only mentions Humayd’s (or Choumeid’s) naval expedition against Rhodes; see Mango and Scott 1997, pp. 662–663. al-Tabari’s account mentions also Cyprus; see Bosworth 1989, p. 262.



condition of this scenario was possible as shown by Anxi coins entering the Central Plains, though indeed very few in number. Three Jianzhong and five Dali coins were found in central plains provinces including Anhui, Henan, and in the northeastern province of Jilin, supporting the possibility of entering central China.<sup>251</sup>

As for the second condition, direct maritime commerce between Guangzhou and ports in the Indian Ocean gradually increased in volume and frequency in the wake of the mid-8th century crisis of the Tang Empire.<sup>252</sup> Whitehouse observed that the range and quantity of Chinese ceramics found in Siraf were particularly significant in the period between 815 and 825 CE, just as the Congregational Mosque was completed.<sup>253</sup> When considered with written evidence of merchants from the Persian Gulf to China (such as Abu Ubayda al-Saghir, ca. 775 CE) and the founding of Baghdad by al-Mansur in 762 CE, the composite picture supports more directly if not intensely connected trade relations between the Abbasid and the Tang markets in the first half of the 9th century CE. In addition to long-distance trade, regional trade in southeast Asia continued. Shipwrecks found laden with Chinese cargo off the coast of Java (Belitung wreck, ca. 850 CE; Intan wreck, ca. 940 CE; the Cirebon/Nan-Han and the Karawang shipwrecks, ca. 930–990 CE) are examples of regional commerce.<sup>254</sup> In fact, the Corinth Tang coin may even have been treated as a coin if it was in the hands of trading merchants heading toward west Asia in the 9th century.

By the 10th century, however, prospects for a Tang cash coin moving westward would have become particularly unfavorable. The Tang Dynasty disintegrated in 908 CE, and the Eurasian world-system underwent an “economic recession and decline in trade,” as Beaujard put it.<sup>255</sup> Trade between India and southeast Asia continued—Yemen and Egypt acquired new importance in transcontinental exchange networks.<sup>256</sup>

Yet it so happens that the rise in long-distance connectivity in the Indian Ocean also coincided with the growth of Jewish mercantile activities expanding beyond the Mediterranean world. Already during the reign of the Abbasid caliph al-Mu'tamid (r. 870–892 CE), Ibn Khurdadhbih, the postmaster general of Baghdad, recorded various routes via which multilingual Jewish Radhanite merchants carried out long-distance commercial operations, utilizing sizable fleets and various means to transport slaves and goods across land and sea routes between the Mediterranean and China proper.<sup>257</sup> This network continued into the age of the Crusades,

251. Thierry (2017, pp. 224–225) offers the most up-to-date survey of scholarship on the respective finds.

252. For an updated narrative on long-distance and transcontinental commerce and trade activities that built up since the 7th century, particularly the networking effects brought about by the tribute embassies of states and principalities along the land and maritime routes connecting the Far East with India, Iran, Mesopotamia,

and east Africa, see Beaujard 2019, pp. 24–30.

253. Whitehouse (1985, pp. 341–344) shows that the increase of Chinese ceramics in Siraf, which now included table wares and increased from 0.2% to 0.7% of all pottery in use in the early 9th century (as compared with a growth from 7.5% to 17.1% of Islamic glazed wares), happened to have coincided with the construction project of the Congregational Mosque between

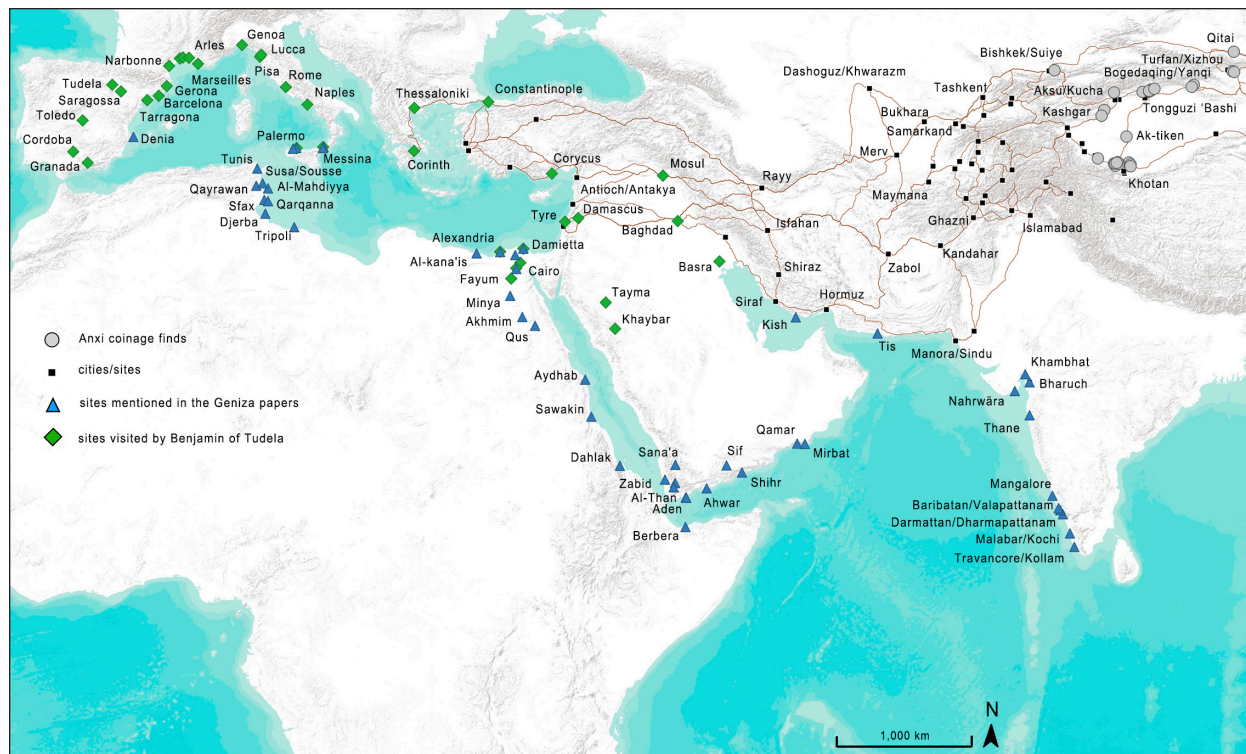
815 and 825 CE.

254. Hall 2010, pp. 17–23. For an excellent survey of the evolution of southeast Asian maritime trade between the 7th and 10th centuries CE in relation to Tang and Song administrative policies, see Heng 2009, pp. 25–36.

255. Beaujard 2019, p. 13.

256. Beaujard 2019, pp. 12–13.

257. Beaujard 2019, p. 64.



as demonstrated from the letters in the Old Cairo Geniza documents.<sup>258</sup> Jewish merchant families and organizations were systematically maintaining and expanding trade routes from Cairo to Aden, India, and east Africa during the 11th and 12th centuries.<sup>259</sup>

Both Cairo and Aden played crucial roles as central terminals for the exchange of letters between India and other cities. Some letters addressed to recipients in India were sent back and deposited in the Cairo Geniza, where they were stored alongside correspondence between these central nodes and cities in the Mediterranean region.<sup>260</sup> In the letters are found business ties and commercial operations of the Lebdi family, which operated a trade business based in Cairo for generations from as early as 1097–1240 CE. Their activities spanned from Mahdiya in southern Tunisia to Anhilvarah, India (Fig. 12).<sup>261</sup> There is also a letter from an “India trader,” Abraham Benyiju, to his brothers and sisters following his safe arrival in Aden; his family members extend from Messina in Sicily, Fustat, and Alexandria in Egypt, and al-Mahdiyya in Tunisia.<sup>262</sup> To Goitein, the Geniza letters “reveal an astonishing degree of interdenominational cooperation . . . business relationships between Jews and

**Figure 12. The Geniza network and Benjamin of Tudela’s travels.** Base image Esri Terrain, with annotations by C.-Y. Wu, after Adler 1907 (map); Vine 1937, p. 126; Goitein and Friedman 2008, pp. 916–918

258. The Cairo Geniza documents referred to here are letters, contracts, and other writings of historical value deposited in the Ben Ezra Synagogue in Old Cairo as a longstanding practice among synagogues to preserve texts containing the name of God. A useful and up-to-date introduction of the nature, quantity, and types of the Cairo

Geniza documents can be found in Goldberg 2012, pp. 5–11.

259. See Chaudhuri 1985 (pp. 58–60, 98–101, 205) and now Goldberg 2012 (pp. 296–336, esp. p. 305) for a standard account of the activities of 11th- and 12th-century Jewish merchants connecting their business operations in the

Mediterranean and the Indian Ocean based on the papers from the Ben Ezra Synagogue in Cairo.

260. Goitein and Friedman 2008, pp. 8–10.

261. Goitein 1954, pp. 191–197.

262. Goitein and Friedman 2008, pp. 679–689.

Muslims, or Hindus, or Christians were commonplace and the members of other religious communities are referred to with the same honorable and amicable epithets as the writers' own brethren."<sup>263</sup> This operational principle of cooperation among diverse religious groups may have also facilitated the exchange and conversion of symbolic objects and ideas in addition to cargo and currency.

The Jewish network is of particular significance in this context, especially considering the presence of a Jewish community in Byzantine Corinth and its involvement in various commercial and trade activities, such as dyeing.<sup>264</sup> Benjamin of Tudela (1130–1173 CE), for example, traveled through Corinth in the decades after Roger of Sicily's sacking of that city. His records indicate that the Jewish community there still comprised 300 individuals under three leaders. In the greater Corinthian Gulf area, he noted 50 Jews at Arta, 100 at Kifto-Lepanto, and 200 at Krissa. Farther north, at Thebes, there was a Jewish community of 2,000.<sup>265</sup>

Following the Latin conquest of Constantinople, the Jewish merchant network operated in conjunction with the Venetians. Romaniote Jewish communities and merchants settled in new political and administrative centers in the 13th century, demonstrating their mobility across political, cultural, and linguistic boundaries under Venetian rule.<sup>266</sup> Candia (Crete) served as a major hub connecting Constantinople, Venice, Egypt, and the Frankish states in the Levant. In essence, the extensive Jewish network intersected with the emergence of new commercial practices in Java and interconnected trade routes on a Eurasian scale.

Political instability in northern China and central Asia prompted a shift from land to maritime routes, with Muslim merchants dominating trade along the main routes of the Indian Ocean.<sup>267</sup> Multiple cultural influences became prominent drivers for the development of porcelain styles and imitations during this period. Islamic-style pottery and porcelain produced in Chinese workshops became the preferred trade ware ordered by Jewish merchants and sold in Levantine markets and beyond.<sup>268</sup>

It also happens that Tang coins did hold some monetary value in the 10th–13th century CE. It has been long noted that Chinese coins of all dynasties were valued by Javanese and other southeast Asian states as legitimate instruments of trade and commerce during this period. Commonly mentioned are literary and archaeological evidence on the use of Chinese coins as state currency in the Khmer Empire (small transactions), the Ly Dynasty in Vietnam (alongside the state-issued copper coins), and Kota Cina, the autonomous region of Barus in northwestern Sumatra. In addition there are inscriptions from Java and Bali in the 11th century that

263. Goitein and Friedman 2008, p. 25.

264. Starr (1936, pp. 42–48) discussed the epitaph of a dyer at Corinth, and the Jewish “monopoly” of the dyeing industry. For a recent survey of primary sources and modern scholarship that discuss Jewish personages and individuals at Corinth and the Peloponnese from antiquity to the

end of the 12th century, see Panayotov 2014, pp. 66–68.

265. Adler 1907, p. 10 [p. 16]; Benjamin of Tudela's journey across the Mediterranean world to the Middle East (and then back again) probably began in the late 1150s and certainly concluded before 1173 CE; see the discussion in Adler 1907, pp. 1–2, n. 2. For more recent discussions on Jewish

communities in the Peloponnese and the Morea immediately before and after 1204 CE via the lens of Benjamin of Tudela's travels, see Bowman 2001, pp. 79–83.

266. Jacoby 2015, pp. 257–266.

267. Schottenhammer 2015a, pp. 440–442.

268. He 2011; Li 2012; Zhou 2012.

use the term *satak*, or string of coins, suggesting that Chinese currency or Javanese imitations of Chinese coins were in circulation.<sup>269</sup>

The volume of Chinese coinage across the Tang and the Song Dynasties was so significant that scholars have wondered whether the aggregate export of a portion of such coins could have supported state-level monetarization during the Majapahit Empire from 1293 to 1527 CE.<sup>270</sup> In fact, the upsurge of Sino-Indonesian trade during the 11th–13th century was one of the few opportunities for Chinese coins to have been imported in any significant volume to sustain later usage as a monetary instrument at the state level. Indeed, the silk trade was the primary driver of commerce, but there was also a significant demand for Chinese coins, because Chinese merchants used them alongside gold and silk to pay for their purchases.<sup>271</sup> The polities of Vietnam and Java, in particular, were keen importers of Chinese bronze coins for much of the 11th–13th century, and literary sources inform us that Chinese bronze coins were used as both financial instruments and a potential source of metal.<sup>272</sup> Literary sources indicate that the Song government gave strings of cash money in return for the tributes submitted by southeast Asian states and principalities, further boosting the quantity of Chinese bronze coinage abroad, and the utility of such cash currency for transaction purposes.<sup>273</sup>

Movement of mercenaries was also likely a contributing factor. A hoard of 381 Song Dynasty coins found in Yaphuwa, Sri Lanka, also has been associated with Chinese mercenaries recruited by the Sinhalese Kingdom to counter incursions from south India and Java.<sup>274</sup> While Song Dynasty coins tend to make up the majority of the hoards found in southeast and south Asia, Thierry noted that the composition of the hoards seems to also include a small number of Tang coins, as well as Vietnamese, Malaysian, and Javanese imitations. Even Japanese coins and Japanese coin imitations could be found in sites along the Indian Ocean, including the coast of east Africa.

Overseas coin hoards after the Tang period tend to be of heterogeneous composition, as coins of the preceding dynasties are inclined to continue to circulate alongside newly issued currencies despite demonetization laws. These laws were political in nature and seldom achieved the desired effect of removing coins from circulation that happened to have been issued by defunct authorities.<sup>275</sup> Cribb and Potts noted that a considerable amount

269. Beaujard 2019, pp. 255–261. Christie (1996, p. 245) observed that “most of the early Chinese coins that have been found in the region (of southeast Asia) appear to have come in along with coins of later mintings.” On the Javanese local currency using Chinese or Chinese imitative coins during the Majapahit Empire, see Hall 1993, p. 226.

270. Van Aelst 1995, pp. 362–363.

271. Thierry 1998b, p. 201.

272. Hall 2004; Heng 2006. The following translation of the *Zhufan-chi* is from Hirth and Rockhill 1911, p. 78 (book 1, chapter 14): “There is

a vast store of pepper in this foreign country (Java) and the merchant ships, in view of the profit they derive from that trade, are in the habit of smuggling (out of China) copper cash for bartering purposes.” Hirth and Rockhill (1911, pp. 81–82) also presented a short account on the great demand of Chinese copper cash based on literary sources, including 64,000 strings of cash given to the San-fo-ts’i mission of 1079, and the 1182 edict by the Song imperial government to check unlawful exportation of copper cash.

273. Wade (2009, pp. 225–226), quoting the *Songsbi*, pointed out that

the 11th-century tributary missions from Champa, “an Arab polity,” “the Cola polity,” and Srivijaya presenting local goods and produce to the Northern Song emperor were given copper coin and silver bullion in return, instead of the customary gold, silver, or copper objects in the late 10th century CE, and while the Southern Song Dynasty banned the export of copper cash, foreign merchants were paid in copper cash in transactions, with the expectation that they would exchange this cash money into goods before leaving port.

274. Thierry 1998a, p. 191.

275. Thierry 1998b, p. 210.

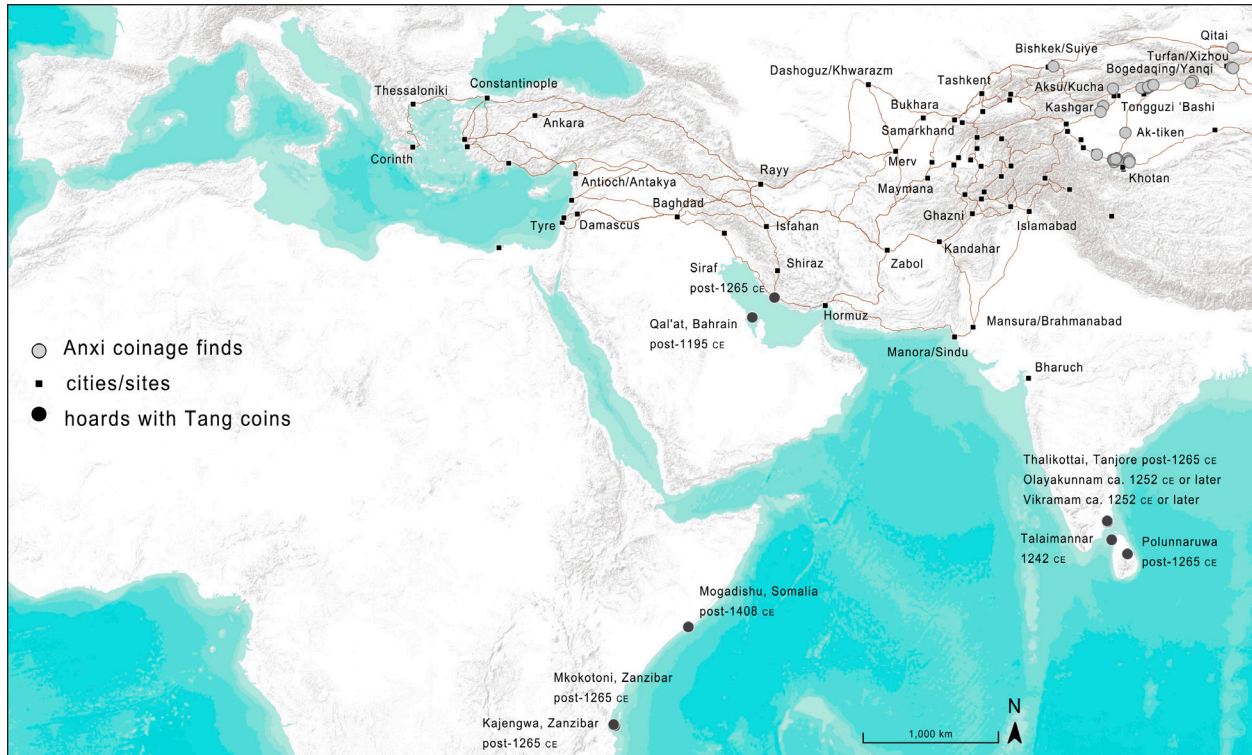


Figure 13. Coin hoards with Tang Dynasty coins in the Indian Ocean Rim in the context of earlier mentioned networks. Base image Esri Terrain, with annotations by C.-Y. Wu

of Song and Ming Dynasty hoards along the coast of the Indian Ocean generally contained some 9% of Tang Dynasty coins.<sup>276</sup> In these hoards, the longevity and mobility of Chinese bronze coinage far exceeded their intended period and geographical region of circulation (Fig. 13).<sup>277</sup>

Among the data, the 60 bronze coins found during excavations led by the British Institute of Persian Studies at Siraf, Iran, are of particular interest. This group of coins was uncovered in the post-medieval occupation phase at site F, a residential quarter west of the Great Mosque.<sup>278</sup> The terminus post quem of site F's post-medieval occupation phase was primarily determined by 14th-century Islamic coinage found in the undisturbed layer of agricultural soil that sat on top of House S of the medieval occupation phase; the 60 Chinese coins discussed here were also found in this layer of soil.<sup>279</sup> As the excavator Whitehouse described, it was "a hoard of sixty Chinese copper coins, lying in a manner which suggested that they had been strung together on a cord. The coins span more than 600 years. The earliest pieces were minted by [Gaozu of Tang] (618–626 CE) . . . the latest

276. Cribb and Potts 1996, pp. 113–114.

277. Cribb and Potts 1996, pp. 114–115. There are 4,388 specimens of Chinese dynastic coinage with a wide chronological range found in at least 23 sites across south India and Sri Lanka, Iran, Bahrain, Saudi Arabia, Oman, Somalia, Kenya, and Tanzania. Particularly impressive is the hoard of 1,812 Chinese bronze coins from Thalikottai in Tanjore, India,

which had three pre-Tang inclusions and 124 Tang coins in addition to the 1,571 specimens of the Northern Song Dynasty (960–1127 CE) and 114 specimens of the Southern Song Dynasty (1127–1279 CE). Another hoard of 176 Chinese bronze coins from Kajengwa, Zanzibar (Tanzania), is also interesting. While predominantly comprising coins of the Northern Song Dynasty (108 coins) and the Southern Song Dynasty (56 coins),

there are four Tang coins of Gaozong (r. 618–627 CE). See the list in Freeman-Grenville 1957, p. 164.

278. For the topography of Siraf and a description of site F, see Whitehouse 1970b, pp. 145, 150–152. No photograph of the hoard in its described state, nor a catalogue of the coins, is attached to the published report.

279. See Whitehouse 1970a, p. 15.

coins were minted by [Lizong of Song] (1237–1240 CE), etc.”<sup>280</sup> The coins were not randomly lost objects with unclear monetary significance. The Tang and Song coins spanning seven centuries were strung together as an acceptable cash payment unit when it was deposited sometime between the 14th and 15th centuries. This is a clear example of a string of coins brought westward as coins by merchants operating directly between Siraf and the Far East. This is quite late for the Corinth Tang coin, which was in its final deposition by the second half of the 13th century. Considering that the interest in Tang bronze coinage began much earlier, there is a chance that the Corinth Tang coin was brought westward in a similar manner, strung together with other coins to worlds beyond its time and place of origin.

Another layer of connectivity between the Indian Ocean, the Near East, and Egypt with Corinth existed, namely, the pilgrimage network that was operated in large part by Venetian fleets. One reconstruction of a pilgrim’s hypothetical journey on his way to Jerusalem and back would involve complicated expenditure, including transportation costs, license fees, taxes, room and board, and extortion and ransom. Wealthier pilgrims paid more for comfort, and poorer pilgrims managed to reach Jerusalem and back as conditions allowed.<sup>281</sup> The pilgrimage trade was not a purely Venetian matter; Crusader states and even the Mamluks sought to maintain the influx of this important stream of revenue. The paradoxical result was that “pilgrimage to the Holy Land during the two centuries after the fall of the crusaders’ kingdom surpassed all previous records,” until the rise of the Ottoman Empire and the decline of Venetian naval power.<sup>282</sup>

In addition to Venetian operations, specific historical events such as the Byzantine recapture of Constantinople in 1261 CE<sup>283</sup> and the Mongol invasion of Mesopotamia that threatened Venetian and Frankish holdings in the Levant<sup>284</sup> also increased mobility in the eastern Mediterranean, including Corinth. One case pertaining to such movement is documented in Garvie-Lok’s interesting study that examined tooth enamels from the burial group in Unit 1 of the Frankish Quarter.<sup>285</sup> At least 200 individuals were interred in room 4. One individual had a high enamel  $\delta^{18}\text{O}$  value coupled with high enamel  $\delta^{13}\text{C}$  and collagen  $\delta^{15}\text{N}$ , which Garvie-Lok interpreted as indications of an individual who “originated from an area with a climate significantly different from Corinth’s,” perhaps from the Middle East or Egypt, “and may not have moved from there to Corinth until relatively shortly before his death.”<sup>286</sup> Again, the intent is not to designate this individual as the bearer of the Corinth Tang coin. Rather, such individuals at Corinth whose personal histories were intertwined with regions where Tang coins have been found offer at least some concrete sense of a well-connected Corinth around the terminus ante quem of the Corinth Tang coin’s final deposition.

280. Whitehouse 1970a, p. 15. However, Thierry (1998b, p. 206) cautioned that “many archaeological reports date [KY coins] simply from a single reign of the Emperor Gaozu (r. 618–626 CE), on the grounds that

this was the date of the first and best known of the kaiyuan [sic] issues.”

281. Savage 1977, pp. 40–59.

282. Savage 1977, pp. 66–67.

283. Williams 2003, p. 428.

284. Runciman 1969, pp. 571–572.

285. For descriptions of burials of the three distinctive groups (including immigrants) from three distinct eras, see Garvie-Lok 2009, pp. 246–248.

286. Garvie-Lok 2009, p. 254.

## CONCLUSIONS

This article rests upon one certainty, namely, the archaeological context within which the Corinth Tang coin was excavated. It was a debris field accumulated between 1050 and 1250 CE that included Roman to Frankish-period coins, buried underneath the Frankish Hall built well into the 13th century.

There are a number of questions that are difficult to resolve. The first concerns the Corinth Tang coin's type. The *nianbao* (reign name) indicates that the coin was a QY cash coin produced after 758 CE. The many unusual aspects both with this coin itself (including size, weight, and casting technique) and with the QY type in general make it challenging to assign a specific date, a location of manufacture, and the extent of its circulation. These in turn create further difficulties for assessing how the Corinth Tang coin ended up in Corinth.

Another question concerns the time of the Corinth Tang coin's arrival. The earliest possible date would be in the late 8th century. The presence of an 8th–9th-century Abbasid coin found in the Panayia bath complex suggests that there was contact between Corinth and the Abbasid world, though the frequency, volume, and nature of the contact remains to be determined. Yet again, the coin could have arrived at Corinth any time between the 9th and 13th centuries.

The third question is whether the Tang coinage could have been regarded as coins to traders and travelers of the Indian Ocean. One additional question is whether the Corinth Tang coin could have entered Corinth as a coin with a monetary value, contrary to all expectations. As mentioned above, there is quite some uncertainty regarding the type of currency in circulation after the Frankish siege of Corinth—scholars have posited that the early Villehardouins continued to use the 12th-century Byzantine copper tetartera and the Latin imitative trachea, until the CORINTVM type finally was issued in the mid-13th century.<sup>287</sup> If there was indeed a significant transitional period at least in terms of currency issuance and circulation, was there an opportunity for a copper-alloy coin—even when holed and with foreign legends—to be used together with Byzantine AE issues or Latin imitatives?

An assortment of methods were employed to assess the potential origins of the Corinth Tang coin. Its size probably is too small to fit into the QY coins issued in central China, which trended toward the KY standard (see Fig. 5). Instead, the Corinth Tang coin comfortably fits into the “Anxi QY small” coin group that probably was produced by Anxi Protectorate authorities after 762 CE (see Fig. 6). While an Anxi product is likely, alternatives are also possible. By 764 CE, the Tang court seemed to have lost all contact with the Anxi Protectorate, but the Anxi authorities there continued to issue Tang *nianbao* coin types including QY, Jianzhong, Dali, and other variations. Lingering attachment to the Tang currency system also took place in select pockets of central Asia, such as the Chui River valley, which produced imitatives of Tang coinage and later even created Tang-concept coins likely for local circulation. The two possible origins could be understood as indistinguishable. Suiye had been part of the Anxi

287. Metcalf 1965, p. 204; 1966, p. 237; Baker and Stahl 2013, pp. 163–164.

Protectorate in the 7th and early 8th centuries, and it continued to remain closely attached to the Anxi economy toward the end of the 8th century. There is currently no satisfactory method to distinguish between Anxi and Chui valley QYs, apart from apparent anomalies such as the round-hole Tang variants, or uninscribed but dotted coins mentioned by Kamyshev,<sup>288</sup> which the Corinth Tang coin does not have.

How the Corinth Tang coin arrived at Corinth is an even more perplexing problem. There were natural limits for Tang and Tang-concept coinage circulation, particularly after the Umayyad conquests in central Asia led by Qutayba ibn Muslim (705–715 CE) and Ziyad ibn Salih's successful push farther northeast up to Talas (751 CE).<sup>289</sup> The growth of an Islamic east in the 8th century CE made it unlikely for the Corinth Tang coin to be considered a cash coin of meaningful value beyond the Anxi garrisons (see Fig. 10). Then there are many factors prohibitive to the Corinth Tang coin's transmission, including the coin's nonprecious metal fabric. A poorly cast petty copper-alloy coin would seem unlikely to be as appealing and hence transmissible as the precious metal coinages of the Byzantine, Sasanid, Umayyad, or Abbasid Empires.

There is the possibility that the Corinth Tang coin may have had shifting ontological states. It could have started off as a coin, but then become bound or attached to an object, or converted into a symbolic item. A serendipitous combination of handlers and their viewpoint of a petty piece of copper alloy was required for the Corinth Tang coin to arrive at Corinth.

This transmission process was likely multistaged, involving a series of existing communications networks. Some institutions able to utilize multiple networks at once may be prime candidates. The Church of the East, for example, had its own suite of monasteries that served as relay posts, and it was able to access other existing networks run by commercial and state actors (see Fig. 11). The transmission of symbolic specimens—if the Corinth Tang coin was converted into such—could have taken place by interested parties utilizing this same communications network.

That said, the Church of the East did not seem to have a presence in Corinth. According to 12th-century sources, Corinth did, however, have a small Jewish community. Given the extensive commercial contacts and opportunities to cooperate with interdenominational partners observed from the Geniza letters, and the eagerness of Jewish travelers to connect with different communities in the Mediterranean world, the Jewish network offers a possible scenario that could have brought the Tang coin to Corinth (see Fig. 12).

Finally, hoards containing Tang coins were found at various locations along the Indian Ocean rim, which suggests the likelihood of indirect transmission (see Fig. 13). Pilgrims taking advantage of the Venetian maritime network, or individuals who may have personal histories involving Near Eastern or Egyptian origins, as the one in Garvie-Lok's study (see p. 134, above), could have taken an interest in a coin of unknown origins.

To conclude, what this article hopes to have contributed is a structured way to discuss the origins and movement of a minimal-value cash coin in a web of Eurasian connections. The proposed communication networks and channels of potential transmission are by no means evidence for the actual

288. Kamyshev 2002, pp. 35–36.

289. Daniel 2009, pp. 455–457.



transmission process of the Corinth Tang coin, nor do they exclude other possible conduits and methods of exchange and transmission processes. Du Huan's descriptions of exotic lands preserved in the *Tongdian* suggest that travelers and in particular Buddhist monks ventured far and wide across the Indian Ocean, even potentially reaching east Africa;<sup>290</sup> Beaujard discusses other Arab and Persian connections;<sup>291</sup> and more recently, Chen theorized about Chinese and Arabic connections.<sup>292</sup>

This article hopes to provide a logical pathway of transmission for a nonprecious, nearly valueless metal object. This conduit represents a different dimension of mobility and channels of communication in an interconnected trans-Eurasian landscape during the Byzantine and the Frankish period. If there is one conclusion to be made, then it is that the Corinth Tang coin is a useful token to reflect on the pluralistic dimensions of connectivity, one that gave a petty copper-alloy coin a chance to arrive at a land far away from its origins.

290. Beaujard 2019, pp. 37–41.

291. *TD* 192.5213, 193.5243, 193.5250, 193.5252–5253, 193.5261, 193.5264–5266.

292. See Chen 2023 (pp. 118–134) for an up-to-date assessment of Arabic presence in southeast Asia in the of Arabic and Chinese sources, and Chen

2023 (pp. 58–69) for a useful discussion of silk, porcelain, and aromatic spices from textual sources and archaeological studies. For Arab merchants in Guangzhou and Quanzhou between the 11th and 12th centuries CE, see Chen 2023, pp. 181–210.

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