

Coinage of the Nezak Shah

A Perspective from the Hoard Evidence

Matthias Pfisterer and Katharina Uhlir

Amongst the four discernible main groups of Huna coinages in the Indo-Iranian borderlands—the “Kidarites”, the “Alkhan”, the “Nezak” and the so-called “genuine Hephthalites”—the Nezak coinage is one of the most frequent, with a large number of extant specimens. Nevertheless, the internal order of this group still poses major problems. In contrast to the other three Hunnic groups mentioned above, the originators of the Nezak coinage used a highly standardised type that remained virtually unchanged over a long period, showing on the obverse the bust of a ruler wearing a winged crown surmounted by a bull’s head. The legend also invariably refers to a certain *nyčky MLK’*, thus to someone calling himself *Nezak Shah*. It is evident that the latter name or appellation cannot refer just to a single person because the coin series extends over too long a period of time, as will be demonstrated below. Since there are two variants of the legend, one of them written correctly as cited above and the other one written in the form *nyčky MLDš*, each variant correlating with minor differences in typology and style, Robert Göbl concluded that the series should be divided into two subseries originating from different mints. According to him, the š-type belongs to Ghazni¹ and the ā-type to Kabul,²

The numismatic analysis and discussion is by M. Pfisterer, while the metal analyses were evaluated and interpreted by K. Uhlir, Conservation Science Department, Kunsthistorisches Museum Wien. We thank Marta Anghelone, Conservation Science Department, Kunsthistorisches Museum Wien, for agreeing to undertake metallurgical analysis of the coins at the IAEA (International Atomic Energy Agency), Laboratories Seibersdorf. We also thank M. Redl, Kunsthistorisches Museum Wien, for taking the photographs of the “Kandahar” hoard, C. Krüger for the layout of the tables and plates and S. Kidd for revising the English.

¹NumH 217: Göbl 1967: I, 150 f., and related types.

²NumH 198: Göbl 1967: I, 132–136, and related types.

the mint attributions being based on provenances known to him. More cautiously, Michael Alram used the neutral terms “group I” and “group II”, eschewing direct mint attributions.³ In a recent re-evaluation of the Nezak coinage and its connections with the later, so-called Western Turkic coinages that evolved from it, Klaus Vondrovec follows this rather cautious approach;⁴ his results will be discussed below.

A recent opportunity to examine a coherent group of Nezak coins originating from a larger hoard has provided an occasion for taking a new look at the series.

Nezak in History

Following the publication of A. Cunningham’s article on the “Later Indo-Scythians: Ephtalites, or White Huns”, the Pehlevi inscription on the coins was for a long time read as *Napki Malka*.⁵ In 1967 Robert Göbl stated that this reading could not be correct. He demonstrated that the second part of the legend must be the ideogram *MLK’*, standing for “*Shah*”. He transliterated the first part as “*Nspk*”, though admitting that he had no plausible interpretation for this.⁶ Finally, in 1969 Janos Harmatta presented the correct reading *nyčky MLK’*, equivalent to *Nezak Shah* in Middle Persian.⁷ Richard N. Frye came to the same conclusion independently in 1974.⁸ As regards the portrait, Cunningham had already noted a correspondence with a number of Chinese sources stating that the ruler of *Kipin* wore a crown in the form of a bull’s head.⁹ *Kipin* or *Jibin* in the Tang records, called *Cao* in older records from the Sui period, can be identified with *Kapisa/Begram*,¹⁰ and there is a possibility that the term

³Alram 1996: 529. Robert Göbl had already used the terms “Gruppe I” and “Gruppe II”, but, rather confusingly, he used “I” for the ā-type and “II” for the š-type, thereby inverting his own sequence; see Göbl 1967: II, 72. Michael Alram, loc. cit., amended this transposition, albeit without any further comment.

⁴Vondrovec 2010.

⁵Cunningham 1894: 267.

⁶Göbl 1967: I, 134 f.

⁷Harmatta 1969: 407 f.

⁸Frye 1974: 116 f.

⁹Cunningham 1894: loc. cit., Kuwayama 2002b.

¹⁰Chavannes 1903a: 52, n. 1; Göbl 1967: II, 69; Kuwayama 1999: 29–32; Kuwayama 2002b: 210.

might also refer to Kabul, at least from the end of the seventh century onwards.¹¹ Another Chinese term that has been connected with Kapisa appears in the *Ts'ö fou yuan koui*, compiled in the 11th century, where it is stated that *Na-sai*, King of *Ho-p'i-che*, in 719 CE sent a Tokharian dignitary as envoy to China to take a lion and an exotic bird as gifts to the Tang court.¹² *Ho-p'i-che* was identified as Kapisa and *Na-sai* as “*Nazuk*” by Harmatta and Litvinsky.¹³ If this interpretation is correct, it confirms the connection described above linking the bull’s head crown and the name or appellation *Nezak* with Kapisa. However, F. Grenet rejects the identification of the place name with Kapisa because, as said above, most of the other sources of the time use the term *Kipin / Jibin* for it, and furthermore because a Tokharian—someone from north of the Hindukush—played the role of the middleman. On the other hand, Grenet accepts the equation of *Na-sai* with *Nezak*.¹⁴ The problem of *Ho-p'i-che* must be left to the linguists for the time being, though Chavannes’ interpretation still sounds quite plausible, and it fits the other evidence. Moreover, a Tokharian could well have been the perfect intermediary between Kapisa and China, as he would have originated from an area situated on the route between both countries and was therefore possibly capable of translating between the two languages.¹⁵

The earliest mention of *Nezak* in the Chinese sources occurs in connection with a Tang victory over the Eastern Turks in 630 CE. Minoru Inaba lists fourteen further appearances of the term *Nezak* in Chinese sources up to the early eighth century, including that mentioned above. Most of the later appearances are in a Turkic context.¹⁶ The Arab sources also mention several individuals called *Nezak*, starting in 651 CE—here as a “*Hephthalite*” leader; later appearances of the term, again more in a Turkic context, occur well into the ninth century.¹⁷ In general, it can be stated with certainty that *Nezak* refers to a number of different persons. As Minoru Inaba demonstrates, the term sometimes appears as a proper name

¹¹Kuwayama 2002c: 198; Inaba 2010.

¹²Chavannes 1903b: 40.

¹³Harmatta and Litvinsky 1996: 374; also Kuwayama 1999: 60.

¹⁴Grenet 2002: 215 f., n. 21. See also Inaba 2010: 192.

¹⁵For example, the same source states that in the same year the King of *Fou-lin* (Rome) also sent a Tokharian to take two lions and two antelopes: Chavannes 1903b: 37 f.

¹⁶Inaba 2010.

¹⁷Frye 1974: 117 f.; Harmatta 1969: 406–409; Inaba 2010.

but is also used as a title.¹⁸ The *Nezak* who sent the Tokharian envoy in 719 CE seems to have been a ruler of Kapisa.

The identity of the ruling dynasty is rather difficult to define. As the Chinese sources state, in the year 658 CE Kapisa was ruled by a certain *Hejiezhi*, a descendant in the twelfth generation of a dynastic founder named *Xingnie*.¹⁹ The latter name has been convincingly interpreted as the Chinese version of *Khingila*.²⁰ Shōshin Kuwayama argues that this dynastic founder should be dated to the middle of the sixth century, which would give an average of less than ten years for each ruler. Further he states that the dynasty could not be “*Hepthalite*” — here to be understood as “*Hunnic*” — because Xuanzang reports for the year 629 CE that the king of Kapisa belonged to a family of *Chali*, the term used by Chinese sources for the *kṣatriya* class.²¹

As regards the coin evidence, the skull of the depicted ruler might be artificially deformed, even if not to the extent seen in the Alkhan coin portraits.²² This would be a display of a Hunnic habitus, although it should be said that at least in early medieval Europe, where this practice was imported by the Attilanic Huns, people of indigenous origin also seem to have adopted artificial skull deformation as an attribute of nobility at times.²³ The affiliation with the *kṣatriya* class is, in my eyes, not necessarily a decisive criterion, seen in the light of the integrative character of Indian society. For example, the *Mahābhārata* states that “*it is in consequence of the absence of Brahmanas from among them that the Sakas, the Yavanas, the Kamvojas and other Kshatriya tribes have become fallen and degraded into the status of Shudras.*” (Rāy 1893: 13.33) This passage demonstrates clearly that immigrated people, even Greeks (*Yavanas*), could very well be regarded as fitting into the *varṇa* system.

The name *Khingila* is also attested for later rulers of the Kapisa-Kabul kingdom, so the reference to this lineage seems to have carried some importance. For the eighth century, a Turkic Kabulshah named *Khingila*

¹⁸Inaba 2010.

¹⁹Chavannes 1903a: 131.

²⁰Kuwayama 1999: 41.

²¹Kuwayama 1999: 42–45, 55; see also Inaba 2010: 193.

²²See esp. Göbl 1967: II, 242 f. with strong arguments in favour of artificial head deformation.

²³For examples see Czarnetzki, Uhlig and Wolf 1983: 100 f.; Timpel 1999: 146 f.

is attested by Arabic sources, and the *Khingila* in the inscription of the marble Gaṇeśa from Gardez also dates to the eighth century, when the Kabulshahs were Turks.²⁴ Thus, the tradition of this name evidently survived a change of dynasty, an event that might have occurred in the second half of the seventh or the first years of the eighth century.²⁵ Now, the most notable bearer of the name *Khingila* belongs to the Alkhan Huns who had ruled the region from the fifth into the sixth century, after which they seem to have moved their focus of power further eastwards and were succeeded in Kapisa-Kabul by the originators of the Nezak coinage.²⁶ As will be shown below, elements of the Nezak coinage are derived from Alkhan coin typology, although this of course has little significance. Nevertheless, the Nezak dynasty may originally have been related to the Alkhan dynasty, and may have obtained the name tradition in this way, rather than from another person called Khingila in the sixth century, as proposed by Kuwayama. Moreover, as the name tradition obviously continued through a change of dynasty in the seventh or early eighth century as stated above, the same might apply to the change from the Alkhan to the Nezak dynasty around 500 CE.

The Nezak Coinage

The most remarkable trait of the Nezak coinage, the š-type (group I) as well as the ā-type (group II), is its uniformity, adhering to the same basic type with only minor alterations although it seems to cover more than a century:

Obverse

Bust r., wearing a winged bull's head crown with crescent in front. On good specimens there is a bridle visible on the nose of the bull. The depicted person wears an earring with two beads, a necklace with flying ribbons at the neck and a garment with beaded decorative stripes. Under the bust is an ornament resembling twigs or wings.

Pehlevi legend *nyčky MLD-š* (FIGURE 4.1(a)) or *nyčky MLK-ā* (FIGURE 4.1(b)).

²⁴Kuwayama 1999: 44.

²⁵Kuwayama 1999: 55; Inaba 2010: p. 192.

²⁶Göbl 1967: II, 71 f.; Alram 1996; Vondrovec 2008: 276–278.



Figure 4.1

Sometimes a Brāhmī *akṣara* to l. of bust under the ribbons.

Reverse

Fire altar with ribbons and flames on top. To l. and r. a figure in a long garment, holding a tall staff vertically. Behind each figure a row of dots, sometimes positioned like wings or a mantle, sometimes without connection to the figures. Over each figure a wheel.

To l. and r. the Brāhmī *akṣaras* NA and RI.

According to Robert Göbl²⁷ the š-type (group I according to Alram's terminology, see FOOTNOTE 3), which he attributes to Ghazni, is the earlier one and starts some time after 460 CE. Around 515 CE, after the death of Toramana and in a time when the Alkhan are directing the focus of their activities towards India, the latter lose Kapisa-Kabul to the Nezak rulers who start minting the ā-type (group II) there. Around 560 CE, together with the Hephthalites north of the Hindukush, the "Ghazni" branch comes to an end as a result of Sasanian military action, while the "Kabul" branch (Göbl's type 198) continues, according to Göbl's model, up to the beginning of the eighth century, with a steady decline in silver content until the coins

²⁷Göbl 1967: 72–74.

are nearly pure copper. An important event in this history is the “remigration” of the Alkhan from India. In Göbl’s model they reach Zabulistan around 590/600 CE and start a new coinage there that mixes Alkhan and Nezak elements,²⁸ but the development of the ā-type is unaffected by these events until it is followed by Göbl’s types 200ff., exhibiting an altered style and restored silver content. In its rough outlines this model is still valid, although in particular Göbl’s absolute dates might benefit from revision.

In his recent re-evaluation of the Nezak coinage Klaus Vondrovec proposes the third crown of Peroz as the model for the Nezak crown, which would mean a more probable *terminus post quem* of 474 CE for the start of this coinage.²⁹ Nevertheless, he confirms Göbl’s view that the š-type (group I) is the earlier one, starting with types 217 and 221, while positing some time after 500 as the start of the ā-type/type 198 (group II), in parallel with type 222 of the š-type. In contrast to Göbl, he does not believe in a continuation of the ā-type/type 198 far into the seventh century, despite the fact that in this group the silver content seems to have decreased further than in the š-type.

On the other hand, it is precisely this decline in silver content of the Nezak coinage that parallels that in the Alkhan coinage. Although there are as yet no metallurgical analyses of Alkhan drachms that could be used for the purpose of direct comparison, the outer appearance of the coins from different stages gives us a rough idea. Here it is obvious that in particular the latest Alkhan issues display a massive drop in the silver content, leading to Göbl’s type 150 which seems to contain only very little silver, if any. For this latest phase we can safely assume the death of Mihirakula in ca. 540 CE as the *terminus post quem*.³⁰ This corresponds with the development of the Nezak ā-type/type 198 (group II), while even the latest stages of the š-type (group I) still seem to be made from comparatively good metal.³¹

After the period of low silver, a “relaunch” of the ā-type seems to have taken place. These “reformed” types are Göbl’s type 200 and the following

²⁸The *Alkhan-Nezak crossover coinage* as Klaus Vondrovec has recently dubbed it; see Vondrovec 2010: 182–184.

²⁹Vondrovec 2010: 171; Schindel 2004: 395–398. The similarity with the third crown of Peroz had already been noted by Robert Göbl, but he rejected this idea for other reasons; see Göbl 1967: I, 134.

³⁰Aram 1999/2000: 132.

³¹Vondrovec 2010: 178.

numbers, and they display an ostensibly improved silver content. At first they copy type 198, with a different style and a few typological alterations; eventually, however, the typology starts to change, leading into new types that go beyond the scope of this article.

Nevertheless, the development of style and iconography constitutes the main criterion for the internal arrangement of this vast coinage. As the reverses are frequently misstruck and, moreover, were apparently not made with the same care by the die-cutters as the obverses, the latter must be our main guideline. Nevertheless, the reverses sometimes also give us criteria on which to base the arrangement. This concerns for example the position of the *akṣaras* on either side of the image. In some cases also a dot is visible on the altar shaft. The question of whether this dot was intended as a regular feature of the picture or had some administrative significance—like the symbols on Sasanian coins—cannot be answered at present. In many cases the reverses are so badly struck that it is impossible to decide whether there originally was a dot on the die or not.

The “Gardez” Hoard

During his stay at Kabul in 1962 Robert Göbl purchased a portion of a hoard, according to him around eighty coins, all belonging to the \bar{a} -type/type 198. Later he was able to acquire further specimens which in his opinion also had the same provenance. The hoard had allegedly been found at Gardez, to the east of Ghazni.³² Today, forty-nine coins from the hoard are preserved at the Bernisches Historisches Museum in Bern, Switzerland, and with the inclusion of Göbl’s documentation which is preserved at the Numismatic Institute of Vienna University the number of documented coins amounts to a total of around seventy specimens. The hoard will be separately published in a sylloge of Huna coins in Swiss collections which is currently in preparation. The present contribution will confine itself to discussion of the broad characteristics of the hoard and their implications for the internal arrangement of the \bar{a} -type/type 198. In general, the coins from the “Gardez” hoard can be arranged into four major style variants (see also FIGURE 4.2):

1. The bust is low and triangular and the face has a sharp profile with a very prominent nose. The chin is flat and not very fleshy. The ends

³²Cf. Göbl 1967: 36–38.

of the necklace ribbons, especially the upper one, are often curved with a wave in the middle and only in a few cases simply rounded, while the base of the ribbon ends is indented, a feature shared by the following groups. On good specimens the twig or wing ornament under the bust is slightly curved in the center.

2. The bust is high and triangular and the face is less bony. The chin is rounded and rather fleshy. The end of the upper necklace ribbon is regularly curved with a wave in the middle. Here, too, on better examples the twig or wing ornament under the bust is slightly curved in the center.
3. The bust is asymmetric, as the right shoulder still points downwards while the left shoulder tends to be more horizontal and considerably longer than the right one. The end of the upper necklace ribbon is normally rounded; the “wave” as in the previous groups is visible only sometimes, but is not very prominent. The twig or wing ornament under the bust is shaped almost like the segment of a circle, either without a curve or only a slight curve in the center.
4. The bust is asymmetric as in group 3. The right shoulder points downwards while the left shoulder tends to be horizontal or even points slightly upwards. The ends of the necklace ribbons are invariably rounded without a “wave”. The face appears rather young and fleshy, and the hair behind the ears is more prominent. The twig or wing ornament under the bust is invariably shaped like the segment of a circle with no curve in the center.

The four groups in the hoard seem to display more or less continuous development, as is demonstrated in FIGURE 4.2. From the material in the “Gardez” hoard, the transition between groups 1 and 2 is less easy to demonstrate, as group 1 is represented in only a few examples, while there are several coins displaying traits of both group 2 and 3, and even more specimens that have traits of both group 3 and 4.

Göbl noted that coins featuring the characteristics described for variants 1, 2 and 3 tend to be made of better silver—to judge from their outward appearance—while the coins of variant 4 seem to have a considerably lower silver content. His conclusion that this is a chronological argument for placing the coins with better silver earlier and those with low or no silver content later is still valid.³³ Further arguments that we can

³³Göbl 1967: 36 f. and 74.



(a) Group 1



(b) Intermediate between groups 1 and 2



(c) Group 2



(d) Intermediate between groups 2 and 3



(e) Group 3

Figure 4.2 Style groups represented in the “Gardez” hoard



(f) Intermediate between groups 3 and 4

(g) Group 4

Figure 4.2 Style groups represented in the “Gardez” hoard (contd.)

extract from the evidence of this hoard for the arrangement of the coinage are:

- the shape of the bust
- the facial features of the portrait
- the shape of the necklace ribbons
- the shape of the twig or wing ornament under the bust.

The “Kandahar” Hoard

Recently, we have been given access to 125 Nezak coins, all of the ā-type/type 198 and nearly all from the period of low silver content, originating from a large hoard dispersed on the coin market. The hoard is said to have been found near Kandahar and to have originally contained 1,600 or 1,700 coins. Stylistic analysis allowed us to divide these 125 coins into six different stylistic groups. The argument relies mainly on the obverses, as the reverses are frequently misstruck, and because they are stylistically very inconsistent. All in all, the “Kandahar” hoard displays wider stylistic diversity than the “Gardez” hoard, containing obverse style varieties that do not appear among the specimens of type 198 published by Göbl in 1967. Generally the spectrum seems to be somewhat later than that of the “Gardez” hoard. Moreover, it has been possible to analyze the metal composition of thirty-four coins by X-ray fluorescence analysis. This technology does not give absolute data as it does not penetrate the surface of the coins, but it does at least indicate significant trends.



Figure 4.3



Figure 4.4

Group A (FIGURE 4.3)

- 1 specimen
- Die position: 4

Represented by only one specimen in our sample, this group corresponds with what we called style variant 1 in the “Gardez” hoard: low, triangular bust and beardless, sharp facial profile with a prominent nose. The ribbons of the necklace are rounded at the end on this specimen and indented at the base. The shape of the ornament under the bust is not readily recognizable due to the wear of the coin, as is also the case with the Brāhmī *akṣara* which should be behind the neck. The reverse die is neatly cut, with triangular flames on the altar. The coin has a notably higher silver content than the other coins in the sample (see below). In addition, it shows considerably more traces of wear than the other coins, leading to the conclusion that it is the earliest coin in the sample.

Group B (FIGURE 4.4)

- 44 specimens
- Die positions: 2 (1x), 3 (16x), 4 (22x), 5 (5x)

This group fits what we called variety 4 in the “Gardez” hoard: the bust is asymmetric with the left shoulder close to horizontal or pointing



Figure 4.5

upwards. The face appears to be rather “young”, with a rounded, full chin, on some dies displaying an underbite. The beard is absent but in some specimens there is a faint moustache. The ribbons of the necklace are rounded at the end and indented at the base. The twig or wing ornament under the bust is invariably shaped like the segment of a circle with no curve in the center. To the left of the bust, beneath the ribbons, there is a small Brāhmī *akṣara*, most probably an A or NA. The reverses are accurately cut but poorly struck and blurred in many cases. On some reverse dies there is a dot on the altar shaft. The flames on the altar are normally bushy and rounded at the top.

Despite the consistent style, the size of the portraits varies considerably, a feature which may constitute a criterion for the internal arrangement of the group. Therefore the coins of group B are arranged in the catalogue with three further subdivisions according to the size and features of the head. Those termed “big head” have rather rounded and soft features, while the other extreme (“small head”) includes examples that are smaller, slimmer and often have a somewhat protruding chin. “Medium head” describes those with intermediate features. These distinctions will become clear with reference to the coins themselves (FIGURES 4.18 to 4.23).

Group C (FIGURE 4.5)

- 28 specimens
- Die positions: 3 (24x), 4 (2x), 9 (2x)

The bust is asymmetric, the left shoulder being longer and more horizontal than the right one. The face appears comparatively “old” on most of the dies, exhibiting a prominent nose, strongly marked, high eyebrows and a distinct moustache, while the skullcap is notably small in this group. The indentation at the back of the head is particularly clear, indicating artificial head deformation. The wings are small and on some dies the wing at the back appears not to be connected to the head. In most cases the



Figure 4.6

bridle on the bull's head, which is prominent in the previous groups, is omitted. The ribbons of the necklace are triangular with no indentation at the base and have concave or straight ends, only in a few cases with a small protrusion in the middle that may reflect the “wave” design characteristic of groups 1 and 2 of the “Gardez” hoard. The *akṣara* behind the neck is always omitted. The twig or wing ornament under the bust is curved. One very prominent feature is the blundered Pehlevi legend: the first letter is often so small that it is barely visible. The reverses are generally rather coarsely cut but, interestingly, the minting quality and legibility of the reverses is far better than in group B, a feature that also applies to the following groups. Characteristically the Brāhmī *akṣaras* to the left and right are inverted, as is their position. On two reverse dies there is a dot on the altar shaft. The altar flame is shaped like a feather on most of the dies. Only on a few specimens is the flame rather bushy; interestingly, on these the obverse bust has a somewhat “younger” appearance. Possibly these specimens represent another phase inside the same style group. On average, coins belonging to this group have a somewhat smaller diameter than those from the other groups.

Group D (FIGURE 4.6)

- 2 specimens
- Die positions: 3 (2x)

This “group” is represented by only two specimens from the same obverse die. The style closely resembles group C, but is nevertheless too distinct to be simply incorporated into the latter. The outline of the bust in particular is different, as well as the treatment of the face and a number of other details. Behind the neck there is a single stroke in the place that is occupied by the *akṣara* in other groups, constituting a clear difference to group C which always omits the *akṣara*. On the reverse, the altar flame is shaped like a feather and the *akṣaras* are inverted as in group C.



Figure 4.7



Figure 4.8

Group E (FIGURE 4.7)

- 1 specimen
- Die position: 9

The iconography of this single coin is clearly connected with groups C and D, and the reverse also exhibits the typical inversion of the *akṣaras*. Nevertheless, the quality of the die cutting is so inferior that this is likely to be a contemporary copy rather than an officially issued coin.

Group F (FIGURE 4.8)

- 49 specimens
- Die positions: 2 (5x), 3 (42x), 4 (2x)

















While the style groups described above form homogenous, clearly definable complexes within the hoard, a considerable number of remaining coins defy any attempt to reduce them either to a common denominator in terms of style or to divide them into further subgroups. Nevertheless, they all share certain iconographic features, so we must assume that they belong to more or less the same phase. First of all, most of them are poorly made and seem to have extremely low or no silver content. Furthermore, all of them have necklace ribbons of the triangular shape with no indentation at the base, as described above for group C. Moreover, the bull's head never seems to wear a bridle, another argument for the vicinity of these stylistically inconsistent coins to group C. The wing ornament beneath the bust is crescent-shaped, a feature that they share with group B. The *akṣara* behind the neck is sometimes present but sometimes omitted. The dot on the altar shaft mentioned above appears on some reverses but not on others, although it must be said that in the case of a considerable number of reverses there is no way of telling whether there was in fact a dot on the die or not. The shape of the flames on the altar varies considerably within group F. Sometimes they are bent outwards at a marked angle. The feather-like flames as exhibited by group C never appear in this group. The style of the portraits displays a wide range, extending from “fleshy” faces with a prominent nose and almond-shaped eyes (FIGURE 4.8(a)) to others which have rather slender and delicate features (FIGURE 4.8(b)).

Die Identities and Die Positions

True die linkages—overlapping series of obverse and reverse dies—are not found in the “Kandahar” hoard, although this is possibly also due to the poor legibility of so many reverse dies. Nevertheless, the hoard contains multiple occurrences of obverse dies and in some cases also of die-pairs:

- Group B:
 - Catalogue numbers 2–3: same obverse die
 - Cat. nos. 4–6: same obverse die
 - Cat. nos. 30–31: same obverse die
- Group C:
 - Cat. nos. 46–49: same obverse die
 - Cat. nos. 50–51: same obverse die

Table 4.1 Summary of iconographic details of the style groups in the “Gardez” hoard and in the “Kandahar” hoard

Style Group	Ribbons (upper ribbon)	Wing ornament	Other typological features
1/A			Triangular bust, sharp profile
2			Triangular bust
3			Asymmetric bust
4/B			Asymmetric bust, “young” face
C			Asymmetric bust, “old” face; often no bridle on bull’s nose. Rev.: <i>akṣaras</i> on inverted position; flames on altar often shaped like a feather
D			Like C, but other style
E			Like C and D, but blundered style
F			

- Cat. nos. 52–56: same obverse die, 52–53 also from the same reverse die
- Cat. nos. 57–58: same obverse die
- Cat. nos. 59–63: same obverse die, 59–60 also from the same reverse die
- Cat. nos. 64–65: same pair of dies
- Cat. nos. 66–68: same pair of dies
- Group D:
 - Both coins from this “group” share the same obverse die
- Group F:
 - Cat. nos. 77–79: same obverse die

While die identities are rather scarce in the other groups, the pattern of group C is strikingly different: a comparatively small number of dies were used to strike a large number of coins, a ratio that possibly points to huge production volumes over a relatively short period of time resulting from an increased need for coinage. In any case, the coins of group C seem to be the result of a different method of production than those of the other groups.

Like most of the other Hunnic coinages, the Nezak coinage also follows the Sasanian model of positioning the dies principally at 3 o'clock. However, the precision of the die position varies considerably between the different groups in the “Kandahar” hoard. Little can be said about those groups that are represented by just one or only a few specimens, namely groups A, D and E. However, in the latter case it is interesting that the inverted die position at 9 o'clock corresponds with the blundered style, a further argument for classifying this coin as an unofficial contemporary copy.

Although all die positions in group B are on the correct side, the tolerance is quite high, oscillating between 2 and 5 o'clock with more examples in the lower positions towards 4 o'clock. By contrast, group C displays a much higher degree of precision, even if there are two specimens with an inverted die position. The same applies to group F in which the positioning of the dies is also very accurate. Altogether one gets the impression that these findings might be due to technical differences in the striking process. The pattern of group B gives the impression that the reverse dies were held freely when applied to the blank; by contrast, the high degree of

precision in groups C and F might be due to some technical device which helped to keep the reverse dies in the correct position.

The implications from these findings are rather interesting in the light of the fact that until now the coins of the ā-type/type 198 were commonly thought to come from one and the same mint, and that this mint was Kabul, if we follow Robert Göbl. However, when we compare the technical patterns visible here we can see at least three different modes of operation behind the coins in the “Kandahar” hoard:

Group B balanced ratio between dies and coins, low degree of precision in positioning of dies.

Group C unbalanced ratio between dies and coins, high degree of precision in positioning of dies.

Group F balanced ratio between dies and coins, high degree of precision in positioning of dies.

Moreover, the coins from group C additionally have a somewhat smaller average diameter than the coins from the other groups (see catalogue).

Each of the described peculiarities is insufficient to be significant *per se*, but taken as a whole the technical differences between the groups might suggest that—at least in the period represented by the coins in the hoard—coins of the ā-type were not produced by just one single mint. Moreover, it is striking that coins displaying the characteristics of group C, so strongly represented here, are completely absent from the material used by Robert Göbl in 1967 to illustrate the stylistic range of type 198, as can be seen from his plates. The reason for this must lie in the material sources he had to hand. This raises the question of whether the different style groups also have different geographic distribution patterns, which would provide a further argument for the assumption of more than one mint. On the other hand, as additional material from other phases of the ā-type still remains to be investigated, including a more thorough examination of the “Gardez” hoard, this interpretation—striking as it may be—should be treated with caution for the time being.

Metal Analyses

Thirty-four coins from the “Kandahar” hoard were investigated using x-ray fluorescence (XRF) analysis³⁴ (see TABLE 4.4). Within these coins, six groups (A–F) can be observed. Group A consists of only one coin (coin 1), which is the earliest in the “Kandahar” hoard. Twelve coins belong to group B (“big head”: coins 4, 5, 6, 17; “medium head”: coins 21, 25, 28, 29; “small head”: coins 34, 35, 36, 42), eight coins to group C (coins 46, 48, 52, 56, 59, 60, 64, 65), two coins to group D (coins 74, 75), again only one coin to group E (coin 76), and ten coins to group F (coins 81, 84, 86, 87, 89, 94, 96, 100, 115, 117). Additionally, six selected \bar{a} -type coins from phases not represented in the “Kandahar” hoard were analysed in order to obtain data for comparison (see TABLE 4.5). Four of these coins (A1–A4) are from the “reform” period, being later than the material represented in the “Gardez” and “Kandahar” hoards, while the two others fall within the scope of investigation: coin A5 lies between groups 2 and 3 of the “Gardez” hoard, and coin A6 between groups 3 and 4 (the latter referred to as group B in the “Kandahar” hoard).

XRF analysis³⁵ was chosen for performing the measurements on the coins because it is a non-destructive method allowing quantitative measurements of the composition of the coins. Nevertheless, as XRF analysis is only surface-sensitive, corrosion and any kind of surface treatment affects the results. The results obtained (TABLES 4.4 and 4.5) can therefore only be seen as indicating general trends in the material composition. Moreover, the comparability of the thirty-four “Kandahar” hoard coins to the six coins measured for comparison is somewhat problematic because of the different cleaning methods initially employed: in the first case the coins were cleaned mechanically whereas the six additional pieces were cleaned chemically. This means that the “Kandahar” hoard coins still have a lot of corrosion products on their surface, while on the surface of the six coins measured for comparison the silver component may be distorted in another direction.³⁶

³⁴See Müller 1967, Jenkins 1977 and Janssens 2004.

³⁵The measurements were performed using a portable XRF instrument provided by the International Atomic Energy Agency (IAEA), Laboratories Seibersdorf/Austria. For this opportunity we gratefully thank Ernesto Chinea-Cano, Andrzej Markowicz and Roman Padilla-Alvarez; cf. Buzanich et al. 2007.

³⁶For the phenomenon of surface enrichment on silver coins and the resulting problems with XRF analysis see Gitler and Ponting 2003.

Among the thirty-four analysed coins from the “Kandahar” hoard the highest silver content (41%) was found in the only coin belonging to group A. The gold detected in the same coin is a natural trace element observable with XRF in objects with a higher silver content. In group B, the percentage of silver is distinctly lower, mostly oscillating around 10%; in some specimens (coins 34 and 36) slightly less silver (around 4–5%) was detected. Here again, the problem inherent in surface analysis should be taken into consideration, as it implies a relatively high uncertainty in the absolute values of the concentrations. It is nevertheless interesting to note that the two lowest silver contents inside group B can be found in the “small head” variety. If we assume that the silver content has a tendency to decrease, this diagnosis may give us the direction of the internal development of this group. To arrive at secure conclusions in respect of this theory, a further scientific investigation of a broader sample is necessary. Moreover, there is one specimen (coin 35) in group B (“small head”) that stands out in terms of its composition, with tin instead of silver being detected, making it very likely that it is an unofficial contemporary copy.³⁷

The coins of group C contain no silver at all, nor do those of the associated groups D and E. Almost the same is true for group F. However, a considerable number of specimens from this group contain very faint traces of silver. These traces are far too small to be intentional. The question of why they appear in some specimens has yet to be considered. Moreover, several coins belonging to group F contain traces or considerable amounts of tin, like the single curious exception in group B (coin 35, as discussed above). The reason for this phenomenon in group F might be a different source of metal than that used for groups C, D and E. In any case, the metallurgical difference supports the assumption that there was more than one mint in operation.

The coins A1–A4 from the “reform” period again contain a considerable amount of silver (16–24%) with observable traces of gold and again some tin. Nevertheless, the highest proportion of silver is found in coin A5 (38%), the second highest in coin A6 (28%), but neither contain any tin. This would supply a match to the analyzed coins of group B, although the silver content is too high for this group; however, here again the different surface treatment should be taken into consideration. Moreover, according to the

³⁷Tin was frequently used, at least in a Roman context, to give bronze forgeries of silver coins a silver-like appearance; see Peter 2001: p. 239, n. 801; Pfisterer 2005; Pfisterer 2007.

Table 4.2 Proportions of both hoards in comparison

“Gardez” hoard		“Kandahar” hoard	
Group	Quantity	Group	Quantity
1	3	A	1
2	23		
3	21		
4	20	B	44
		C	28
		D	2
		E	1
		F	49

model of the chronology outlined above, both of these coins are earlier than the material represented in the “Kandahar” hoard.

Relation between the “Gardez” Hoard and the “Kandahar” Hoard

TABLE 4.2 gives an overview of the distribution of the different style groups in the “Gardez” hoard and the “Kandahar” hoard.³⁸ As both hoards together only represent a limited segment of the Nezak coinage as a whole, the labeling of the style groups must remain provisional for the time being. Therefore, in the present paper the sequence of the style groups in the “Gardez” hoard has been assigned numbers, while letters have been given to that in the “Kandahar” hoard. Nevertheless, group 1 of the “Gardez” hoard seems to correspond to group A of the “Kandahar” hoard, and group B of the latter matches, at least in part, group 4 of the “Gardez” hoard. However, this latter style group seems to be represented by a wider spectrum in the “Kandahar” hoard than in the “Gardez” hoard. The latter contains almost exclusively specimens of the “big head” variety, so those dies with a smaller and slimmer head as represented in the “Kandahar” hoard (“small head”) are probably a little later than the others. To sum up, the two hoards obviously represent two different stages in the development of the ā-type, the “Gardez” hoard ending with group 4/B, the “Kandahar”

³⁸In order to simplify the account of the style groups in the “Gardez” hoard, any coins lying between two style groups have been added to the prior group.

hoard starting at this point. Additionally, both hoards contain a few specimens of group 1/A, which should be regarded as the earliest coins in each case.

While it seems quite evident that the style groups in the “Gardez” hoard represent a chronological sequence, the interrelation between the groups in the “Kandahar” hoard is not as clear, because the material might have been produced by more than one mint, as mentioned above. In order to examine this question more closely, we must extend the context of the discussion a little further.

The Overstrikes by the “Remigrating Alkhan”

At some point in the second half of the sixth century, the Alkhan Huns, who had extended and finally shifted their focus of power into Northern India, launched an action westwards against the Nezak dynasty. First postulated by Robert Göbl in 1967 who assumed a “remigration” of the Alkhan “people” as a whole—a model that has been abandoned meanwhile—these events can only be reconstructed on the basis of the numismatic evidence and have since been extensively discussed.³⁹ According to the current model, the military defeat of Mihirakula in India in around 530 CE forms a first *terminus post quem*. As the coins which were struck by them in the course of these events can safely be connected with one of Mihirakula’s successors named Toramana (II.)⁴⁰, the death of Mihirakula in around 540 CE forms a further *terminus post quem*. Göbl dated the events to within a timeframe of c. 570/580–600 CE, a dating that stands undisputed for the time being.

The coin type struck by the Alkhan Huns in the course of this operation, probably in the area of Kabul, is Göbl’s type 150.⁴¹ The type underwent a development in itself: the first variant shows on the obverse the bust of a king wearing a crown with two crescents which contain a blossom or trident. In his extended right arm, on which a bracelet is visible,

³⁹Göbl 1967: II, 70 f.; Alram 1996: 528–532; Alram 1999/2000; Vondrovec 2010: 174–180; Pfisterer 2014.

⁴⁰The reading of the name by Göbl as “Narana/Narendra” has recently been corrected on the basis of new, well-preserved specimens to “Tora(mana)” who must be a second Alkhan ruler bearing this name for chronological reasons, see Pfisterer 2014.

⁴¹ For the discussion of this type and the Kabul hoard confined exclusively to these coins, see in particular Alram 1999/2000.



Figure 4.9

the king holds a bunch of three plants. The reverse is poorly legible on all known specimens; it seems to show a fire altar with two attendants above whose heads there might be a wheel or circle as on the Nezak coins.⁴² The second variant shows the same iconographic features on the obverse, but the reverse is completely blank and was probably never intended to bear any motif. On the third variant the king holds only two plants; here again, the reverse is blank.

It is this third variant of type 150 (FIGURE 4.9) which has special importance for the evaluation of the Nezak coinage because some specimens are overstrikes on Nezak coins of the \bar{a} -type. The first of these overstrikes came to light in the so-called Kabul hoard,⁴³ and further examples have come to light in the meantime.⁴⁴ Hitherto it has only been clear that the undertypes must belong to the period of low or no silver, but their position in the sequence of the Nezak coinage has always been rather vague. The “Kandahar” hoard now gives us the opportunity of establishing a sounder classification of the undertypes in order to define the relative position of the two coinages. In the Coin Cabinet at the Kunsthistorisches Museum, Vienna, there are three overstrikes which will be discussed here (FIGURE 4.10).

While on two examples (FIGURE 4.10(b) and FIGURE 4.10(c)) the new obverse is overstruck onto the obverse of the undertype, more or less obliterating it, on one example (FIGURE 4.10(a)) it is overstruck onto the reverse. Therefore, thanks to the blank reverse of the third variant of type 150, the portrait of the Nezak coin has survived the overstriking process quite well. A comparison with the coins extant in the “Kandahar” hoard has now brought a close parallel (Cat. no. 96; FIGURE 4.11). As the different positions of the wings and of the letters in the legend show, it is not from the

⁴²Vondrovec 2010: 174.

⁴³Alram 1996: 530–532; Alram 1999/2000: 133 f.

⁴⁴Vondrovec 2010: 176 f.

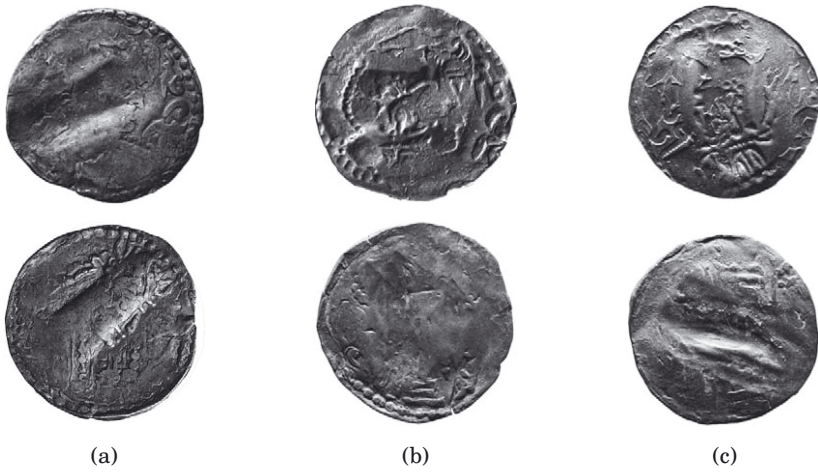


Figure 4.10



Figure 4.11 (2:1)

same die, but the portrait clearly belongs to group F, namely the “fleshy” faces with a prominent nose and almond-shaped eyes as described above. Unfortunately the necklace ribbons are largely obliterated, but it can at least be stated that they have a triangular base, and the wing ornament is shaped like a crescent.

The reverse of the undertype is not as well preserved. In any case, the *akṣaras* are in the regular position, safely excluding attribution to group C.

The second overstrike (FIGURE 4.10(b)) is far less informative. On the obverse, no diagnostic features have been preserved, while on the reverse

it is obvious that here too the *akṣaras* are in the regular position. The third overstrike (FIGURE 4.10(c)) likewise shows only faint traces of the undertype, but here, fortunately, the necklace ribbons can be made out, which clearly belong to the triangular variant and therefore correspond to groups C–F. The traces of the reverse are too few to be of any use. Nevertheless, the relatively secure match of one of the overstrikes with group F is relevant enough to suggest that coins belonging to this group were already in circulation when the “Remigrating Alkhan” minted their type 150.

Conclusions: Reconstructing the Bigger Picture

The most important lesson that can be learned from the analysis of the “Gardez” hoard and the “Kandahar” hoard is the fact that the development of style might very well be roughly linear, as to be observed from group 1/A to group 4/B, but that the iconography does not necessarily display a similarly predictable behaviour. Particular shapes of iconographic elements such as the necklace ribbons or the wing ornament are initially connected with certain stages of the coinage, but they can also reappear rather unpredictably at a much later stage. Therefore the development of isolated iconographic elements should not be taken as absolute evidence for the relative chronology. The best example of this is the wing ornament: in its curved shape it originates from Alkhan coinage in the 5th and early 6th century CE; in later stages the curved shape is replaced by the crescent shape. Moreover, most of the later successor coinages such as the “Alkhan-Nezak crossover coinage” and the “reform” coinage of the ā-type invariably display the wing ornament as a crescent shape. But our group C, which definitely belongs to a very late stratum in the material covered by our two hoards,⁴⁵ being at least parallel with or rather later than group 4/B, which consistently features the crescent shape, suddenly restores the curved shape of the wing ornament. In respect of style, however, group C is not part of the tradition of groups 1/A–4/B and appears to be some kind of a late “start-up” in its own right. If the technical peculiarities described above are as significant as they seem, this could well have occurred at a

⁴⁵See also Alram 1999/2000: The coin he presents on p. 133 and in pl. 7, 120 as representing the latest stage of type 198 clearly belongs to group C.



Figure 4.12

different mint than that which produced the “mainstream” of the ā-type coinage.

Obviously, the die-cutters did not necessarily use the latest coins to hand as a model when preparing the dies for a new issue, but they could equally borrow elements from much older stages of this long coinage, making the iconographic development rather confusing. Nevertheless, a preliminary if rather broad outline for the history of the ā-type can be postulated.

There is no room within the scope of this article to discuss at length the beginning of the ā-type (see FIGURE 4.12(a)) and its relation in respect to its antecessor, the š-type.⁴⁶ In any case, the earliest style group which is represented in our two hoards (group 1/A, FIGURE 4.12(b)) still seems to follow the stylistic tradition of the very earliest issues of this type, even though a number of changes in the iconography had already occurred: on the earliest examples of the ā-type the necklace ribbons have an angular shape that does not recur in the period of our hoards, and the bull’s head points downwards into the crescent, while it already points out across the latter in group 1/A.

The development from group 1/A to group 4/B is fairly consistent, and most probably takes place at a single mint, even if there is already a tendency towards a decline in silver content in this (probably rather extended)

⁴⁶Vondrovec 2010, esp. p. 173.



Figure 4.13

period. Then, at a certain point, one or possibly more new mints seem to appear suddenly, if our interpretation of the technical peculiarities described above is correct. This is combined with a sharp drop in silver content and, at least in the case of group C, with increased production, if the unbalanced ratio between dies and coins in this group permits this interpretation. Taken as a whole, these new developments convey the impression of a crisis, and quite fittingly the overstrikes by the “Remigrating Alkhan” appear to date to or directly after this period.⁴⁷ At the moment it cannot be ascertained whether the overstrikes mark the very end of this last phase of type 198, or if the coinage continued for a further period.

However, after the definitive discontinuation of type 198 there might have been a shorter or longer hiatus before the \bar{a} -type was re-launched with the “reform” coinage, but at the moment this cannot be determined with any certainty. In any case, the next younger phase in the development of the \bar{a} -type is probably represented by a coin classified by Robert Göbl as belonging to type 198 and depicted in his plates as No. 198/45 (FIGURE 4.13).⁴⁸ Göbl’s classification is disputable in this case; the coin is a much better match with his type 202, and it also displays the same Z-like sign at the position of the *akṣara* on the obverse as type 202. Nevertheless, at least visually⁴⁹ the coin still seems to contain no or nearly no silver, while many other coins of type 202 do indeed display a clearly silver-like color. It is unfortunate that no metal analyses are available at present. In any case, the style of the portrait has changed distinctly, and as a comparison with later examples of the “reformed” \bar{a} -type demonstrates, it is this late style which appears here for the first time. There are also a number of

⁴⁷Cf. Vondrovec 2010: 178.

⁴⁸Göbl 1967: III, pl. 44.

⁴⁹All remarks concerning the color of the coins mentioned here rely on autopsy or on digital color photographs; for the locations of the coins see the illustration credits.



Figure 4.14

iconographic changes visible. The necklace ribbons have rounded ends, as was typical of group 4/B, for example, but all in all their shape is much more oblong and graceful. Even more important, the direction of the bull's head on the crown has changed: it points downwards into the crescent, thereby copying an iconographic feature typical of the š-type. On the ā-type it is only present in the very first stages that antedate the horizon represented in the “Gardez” and “Kandahar” hoards, as stated above. The coin is poorly preserved; nevertheless, another diagnostic feature is visible that constitutes a connection with the next types to be discussed: directly above the bull's head, it seems as if one of the dots of the dotted rim of the picture had a small protrusion downwards. This protrusion is in fact a small globe placed on top of the bull's head, as the coin in FIGURE 4.14 demonstrates.

The latter coin clearly belongs to Göbl's type 202. The mix of the iconographic elements is also interesting here: the bull's head again points downwards into the crescent, but the necklace ribbons this time display a “wave” as found in group 1/A to 3. As can be seen from Göbl's plates,⁵⁰ the graceful oblong shape as described for the previous coin appears here on other specimens. The reverse displays another typological connection as the flames on the altar have a feather-like shape that to a certain extent recalls those on some reverses in group C. The feather-like flames later become a standard feature in the development of the ā-type, namely for type 200. We do not have any metal analysis for this coin, but to judge from the color of the coin, the silver content would now seem to be considerably higher.

Finally, another type belonging to this initial period of the “reformed” ā-type coinage is type 201 (FIGURE 4.15). The necklace ribbons display the graceful oblong shape, and the bull's head points downwards and is

⁵⁰Göbl 1967: pl. 45, 202.1–2.



Figure 4.15

surmounted by a globe. However, the sign behind the neck, which appears in the form of a “Z” on the types just described, is replaced on this type by a small version of tamgha S2 which we know from Alkhan coins on the one hand and Hephthalite coins on the other.⁵¹ There is an additional new element in the form of a small star on the left shoulder of the bust. The two analyzed coins of this type (A3 and A4)⁵² display a silver content of 23.7% and 18.4% respectively.

The coin types mentioned here are all rather rare and form a bridge with the developed “reform” coinage chiefly represented by the more frequent type 200⁵³ (FIGURE 4.16(a)), which was usually struck on broad, thin flans of relatively good silver (see the XRF analysis for coins A1 and A2). In the case of this type, the globe on the bull’s head is dropped again and the *akšara* behind the neck reappears in the usual form, or in some cases is completely omitted. Many examples still display the bull’s head pointing downwards into the crescent accompanied by necklace ribbons that are mostly narrow and angular. In later stages, the flans of type 200 decrease in size again, and the dotted decoration of the garment is replaced by continuous lines (FIGURE 4.16(b)). While on early specimens the wing ornament appears in the crescent shape, on late examples it has mutated into a row of small waves; evidently it was no longer understood after a time. A detailed analysis of the development of the “reformed” ā-type still remains to be carried out.

Finally, the general direction of the relative chronology in this period is also attested by an overstrike in an American private collection (FIGURE

⁵¹Cf. Alam and Pfisterer 2010: 36. Confusingly, Robert Göbl listed this version of tamgha S2 under a different number. He named it S101 although it is obviously the same symbol; see Göbl 1967: IV, pl. 16.

⁵²See list below and the chapter on the analyses above.

⁵³Together with Göbl’s type 200A, which is basically a preliminary stage of type 200, but still struck on flans in the smaller format of the preceding emissions.



Figure 4.16



Figure 4.17

4.17).⁵⁴ It is a late type 200 coin overstruck on a specimen of type 201: to the left the typical graceful necklace ribbons with rounded ends are visible, and underneath them the outer contour of tamgha S2 (= S101).

⁵⁴The picture is oriented according to the traces of the undertype. We thank Thomas K. Mallon-McCorgray for allowing us to publish his picture of the coin.

Table 4.3 Catalogue of the "Kandahar" hoard

No.	Weight (gm)	Diam. (mm)	Die axis	Metal analysis	<i>akṣara</i> on obv.	Dot on rev.	Inv. No.
Group A							
1	2,94	25	4	X	X		125
Group B							
<i>Big head</i>							
2	3,47	26	4		X		124
3	3,30	26	3		X		1
4	3,55	27	5	X	X		4
5	3,54	25	4	X	X		5
6	3,42	26	4	X	X		3
7	3,99	26	3		X		7
8	3,61	27	4		X		12
9	3,51	27	4		X		11
10	3,48	27	4		X	X	6
11	3,48	26	4		X		13
12	3,37	27	4		X		15
13	3,32	27	3		X		10
14	3,28	26	5		X		2
15	3,25	28	3		X		8
16	3,23	27	4		X		9
17	3,10	26	4	X	X	X	14
<i>Medium head</i>							
18	3,84	27	4		X		23
19	3,79	27	4		X		26
20	3,76	27	4		X		17

Table 4.3 Catalogue of the “Kandahar” hoard (cont.)

No.	Weight (gm)	Diam. (mm)	Die axis	Metal analysis	<i>akšara</i> on obv.	Dot on rev.	Inv. No.
21	3,67	25	3	X	X		21
22	3,62	28	3		X		18
23	3,60	25	3		X		24
24	3,46	27	4		X	X	25
25	3,40	26	5	X	X		16
26	3,40	27	3		X		27
27	3,22	27	3		X	X	20
28	3,04	27	5	X	X		22
29	2,59	27	4	X	X		19
<i>Small head</i>							
30	3,62	26	3		X	X	35
31	3,61	27	3		X		34
32	3,80	26	3		X		32
33	3,79	28	3		X		37
34	3,70	26	3		X		30
35	3,60	28	3	X	X		40
36	3,46	29	4	X	X		28
37	3,46	26	3		X		31
38	3,45	27	4		X		36
39	3,45	28	4		X		41
40	3,42	25	4		X		29
41	3,42	26	2		X		43
42	3,41	27	4	X	X		33
43	3,39	27	4		X		38
44	3,37	27	4		X		39
45	3,10	27	5		X		42

Table 4.3 Catalogue of the "Kandahar" hoard (cont.)

No.	Weight (gm)	Diam. (mm)	Die axis	Metal analysis	<i>akṣara</i> on obv.	Dot on rev.	Inv. No.
Group C							
46	4,00	25	3	X			46
47	3,93	25	3				47
48	3,51	25	3	X			44
49	3,47	25	3				45
50	3,13	26	3				48
51	2,68	26	3				49
52	3,86	25	3	X			53
53	2,63	25	3				54
54	4,82	26	3				50
55	3,52	25	3				51
56	2,75	25	3	X			52
57	3,41	25	9				55
58	2,85	26	3				56
59	5,03	26	3	X			62
60	2,77	25	3	X			61
61	4,12	26	3				63
62	3,27	26	3				64
63	2,55	26	4				65
64	3,97	26	3	X		X	67
65	3,70	25	3	X		X	66
66	4,40	25	3				69
67	3,93	26	3				70
68	2,94	24	3				71
69	3,52	25	4				58
70	3,33	26	3				57
71	3,30	25	3				68

Table 4.3 Catalogue of the “Kandahar” hoard (cont.)

No.	Weight (gm)	Diam. (mm)	Die axis	Metal analysis	<i>akṣara</i> on obv.	Dot on rev.	Inv. No.
72	3,24	26	3				60
73	3,11	25	9			X	59
Group D							
74	4,13	26	3	X	?		72
75	3,53	28	3	X	?		73
Group E							
76	2,35	25	9	X	X		78
Group F							
77	3,71	26	3		X	X	105
78	3,56	29	3		X		81
79	3,56	27	3		X		93
80	4,10	27	3		X		77
81	4,04	26	3	X	X	X	102
82	4,01	25	3		X		116
83	3,97	26	3		X		113
84	3,97	25	3	X	?	X	100
85	3,89	27	3		X	X	109
86	3,85	26	3	X	?	X	101
87	3,81	25	2	X	?	X	121
88	3,79	25	3		X		89
89	3,78	27	4	X	X		79
90	3,72	26	3			X	107
91	3,70	26	3		?		98
92	3,67	26	3		?		117

Table 4.3 Catalogue of the "Kandahar" hoard (cont.)

No.	Weight (gm)	Diam. (mm)	Die axis	Metal analysis	<i>akṣara</i> on obv.	Dot on rev.	Inv. No.
93	3,67	26	3		X		97
94	3,67	25	2	X	?		120
95	3,66	25	3		?		119
96	3,64	25	3	X			86
97	3,63	27	3				94
98	3,62	28	2		X		88
99	3,62	26	3		?		115
100	3,60	25	3	X	?		99
101	3,59	26	2		?		122
102	3,57	25	3		?		92
103	3,57	27	4				123
104	3,52	25	3		X	X	106
105	3,50	27	3		X		118
106	3,48	26	3		X	X	108
107	3,47	25	3		X		75
108	3,46	26	3		X		87
109	3,41	29	3		?		112
110	3,41	26	3		X		80
111	3,39	26	3				91
112	3,38	27	2		X	X	104
113	3,36	27	3				111
114	3,35	27	3		X		114
115	3,31	26	3	X	?		74
116	3,31	28	3		?		82
117	3,31	26	3	X	X	X	103
118	3,29	27	3		?		85
119	3,26	26	3				84

Table 4.3 Catalogue of the “Kandahar” hoard (cont.)

No.	Weight (gm)	Diam. (mm)	Die axis	Metal analysis	<i>akṣara</i> on obv.	Dot on rev.	Inv. No.
120	3,25	25	3		?		95
121	3,24	26	3		X		110
122	3,14	25	3				90
123	3,14	27	3		X		96
124	3,11	27	3		X		83
125	2,85	27	3		X		76

Table 4.4 Results (weight %) of the x-ray fluorescence analysis of coins from the “Kandahar” hoard

No.		Ag	Cu	Fe	Zn	Au	Pb	Sn
Group A								
1	<i>Mean</i> ⁵⁵	41.0	56.5	0.84		0.48	0.31	
	Std. dev.	4.3	4.8	0.22		0.10	0.11	
Group B								
4	<i>Mean</i>	10.8	85.9	0.71	2.04		0.25	
	Std. dev.	4.8	2.8	0.24	1.81		0.10	
5	<i>Mean</i>	10.3	86.1	0.72	0.33		2.30	
	Std. dev.	1.4	3.1	0.11	0.09		3.83	
6	<i>Mean</i>	12.7	85.9	0.60	0.26		0.16	
	Std. dev.	1.2	1.2	0.05	0.02		0.07	
17	<i>Mean</i>	10.8	87.6	0.69	0.34		0.19	
	Std. dev.	1.8	1.9	0.07	0.11		0.07	
21	<i>Mean</i>	13.1	85.3	0.62	0.27		0.28	
	Std. dev.	1.3	1.3	0.13	0.03		0.07	
25	<i>Mean</i>	13.2	85.2	0.80			0.13	
	Std. dev.	4.3	4.5	0.20			0.05	
28	<i>Mean</i>	6.8	91.7	0.83	0.26		0.15	
	Std. dev.	0.9	1.3	0.34	0.01		0.05	
29	<i>Mean</i>	8.6	90.1	0.59			0.21	
	Std. dev.	1.2	1.4	0.16			0.08	
34	<i>Mean</i>	4.2	94.5	0.50	0.29		0.17	
	Std. dev.	2.3	2.6	0.07	0.05		0.04	
35	<i>Mean</i>		95.1	0.90			0.13	3.33
	Std. dev.	0.8	0.58			0.02	0.23	
36	<i>Mean</i>	4.9	93.3	0.54			0.63	
	Std. dev.	1.1	1.2	0.09			0.13	
42	<i>Mean</i>	9.3	88.8	0.82	0.26		0.31	
	Std. dev.	0.8	0.9	0.49	0.04		0.11	
Group C								
46	<i>Mean</i>		98.5	0.95	0.27			
	Std. dev.		0.3	0.24	0.01			
48	<i>Mean</i>		99.0	0.54	0.25			
	Std. dev.		0.1	0.05	0.03			
52	<i>Mean</i>		97.8	1.66				
	Std. dev.		0.7	0.62				
56	<i>Mean</i>		98.3	1.08			0.17	
	Std. dev.		0.3	0.20			0.03	

⁵⁵The results given are the mean values out of 5 measurements with the according standard deviation (std. dev.)

Table 4.4 Results (weight %) of the x-ray fluorescence analysis of coins from the “Kandahar” hoard (cont.)

No.		Ag	Cu	Fe	Zn	Au	Pb	Sn
59	<i>Mean</i>		98.0	1.38	0.25		0.10	
	<i>Std. dev.</i>		0.3	0.34	0.05		0.03	
60	<i>Mean</i>		98.6	0.89	0.26			
	<i>Std. dev.</i>		0.3	0.22	0.01			
64	<i>Mean</i>		98.4	1.13				
	<i>Std. dev.</i>		0.2	0.11				
65	<i>Mean</i>		98.8	0.70				
	<i>Std. dev.</i>		0.2	0.15				
Group D								
74	<i>Mean</i>		98.6	0.84	0.32			
	<i>Std. dev.</i>		0.5	0.43	0.03			
75	<i>Mean</i>		98.5	0.70	0.43		0.15	
	<i>Std. dev.</i>		0.2	0.16	0.03		0.04	
Group E								
76	<i>Mean</i>		98.5	0.98	0.25			
	<i>Std. dev.</i>		0.1	0.05	0.01			
Group F								
81	<i>Mean</i>		97.5	0.67	0.28		0.25	1.04
	<i>Std. dev.</i>		0.0	0.06	0.01		0.07	0.07
84	<i>Mean</i>		98.1	0.79	0.26			0.51
	<i>Std. dev.</i>		0.4	0.36	0.01			0.10
86	<i>Mean</i>		98.8	0.71				
	<i>Std. dev.</i>		0.1	0.05				
87	<i>Mean</i>		90.7	1.71			0.30	6.79
	<i>Std. dev.</i>		1.4	1.55			0.11	0.95
89	<i>Mean</i>	0.5	98.2	0.93	0.25			
	<i>Std. dev.</i>	0.1	0.2	0.15	0.06			
94	<i>Mean</i>		95.9	0.57			0.26	2.75
	<i>Std. dev.</i>		0.3	0.07			0.03	0.19
96	<i>Mean</i>	0.3	98.3	0.88	0.26			
	<i>Std. dev.</i>	0.0	0.2	0.19	0.02			
100	<i>Mean</i>		98.1	0.67	0.26			0.69
	<i>Std. dev.</i>		0.3	0.14	0.01			0.20
115	<i>Mean</i>	0.7	98.0	0.85	0.26			
	<i>Std. dev.</i>	0.1	0.5	0.46	0.01			
117	<i>Mean</i>	2.1	95.0	1.42				0.97
	<i>Std. dev.</i>	0.1	0.9	0.75				0.31

Table 4.5 Results (weight %) of the x-ray fluorescence analysis of selected types not in the “Kandahar” hoard

No.		Ag	Cu	Fe	Zn	Au	Pb	Sn	Type
A1	<i>Mean</i>	24.6	72.4		0.28	0.58	0.42	1.13	Göbl 1967, type 200
	<i>Std. dev.</i>	4.9	5.6		0.03	0.09	0.29	0.40	
A2	<i>Mean</i>	16.5	81.7			0.41	0.19	0.52	Göbl 1967, type 200
	<i>Std. dev.</i>	1.3	1.6			0.08	0.02	0.26	
A3	<i>Mean</i>	23.7	73.3		0.34	0.33	0.53	1.29	Göbl 1967, type 201
	<i>Std. dev.</i>	3.6	4.0		0.05	0.10	0.10	0.72	
A4	<i>Mean</i>	18.4	79.6		0.24	0.40	0.25	0.56	Göbl 1967, type 201
	<i>Std. dev.</i>	1.0	1.2		0.01	0.04	0.07	0.13	
A5	<i>Mean</i>	38.2	59.0		0.33	0.79	0.76		Göbl 1967, type 198, group 2 or 3
	<i>Std. dev.</i>	9.4	10.0		0.07	0.22	0.37		
A6	<i>Mean</i>	28.2	69.9		0.31	0.53	0.27		Göbl 1967, type 198, group 4/B
	<i>Std. dev.</i>	7.6	7.7		0.04	0.08	0.10		



1

Figure 4.18 Group A



2

3

4

5

6

7

8

9

Figure 4.19 Group B



Figure 4.19 Group B (contd.)



Figure 4.19 Group B (contd.)



Figure 4.19 Group B (contd.)



Figure 4.19 Group B (contd.)



Figure 4.19 Group B (contd.)



Figure 4.20 Group C



Figure 4.20 Group C (contd.)



Figure 4.20 Group C (contd.)



Figure 4.20 Group C (contd.)



Figure 4.21 Group D



Figure 4.22 Group E



Figure 4.23 Group F



Figure 4.23 Group F (contd.)



Figure 4.23 Group F (contd.)



Figure 4.23 Group F (contd.)



Figure 4.23 Group F (contd.)

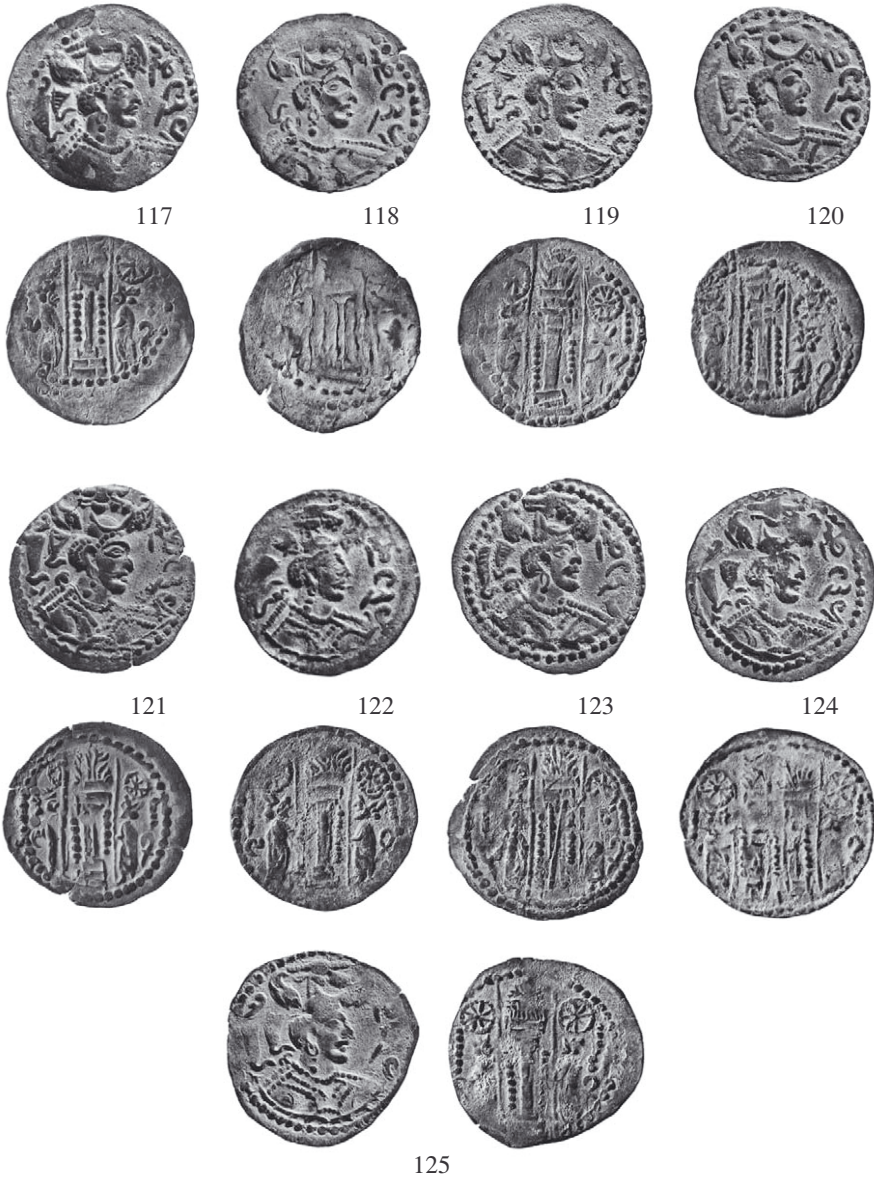


Figure 4.23 Group F (contd.)



Figure 4.24 Coins analysed for comparison

References

- Aram, M. (1996). "Alchon und Nēzak: Zur Geschichte der iranischen Hunnen in Mittelasien". In: *La Persia e l'Asia centrale da Alessandro al X secolo*. Atti dei convegni Lincei 127. Rome, 517–554.
- (1999/2000). "A Hoard of Copper Drachms from the Kāpīśa-Kabul Region". In: *Silk Road Art and Archaeology* 6, 129–150.
- Aram, M., D. Klimburg-Salter et al., eds. (2010). *Coins, Art and Chronology II: The First Millennium C.E. in the Indo-Iranian Borderlands*. Veröffentlichungen der Numismatischen Kommission 50. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.
- Aram, M. and M. Pfisterer (2010). "Alkhan and Hephthalite Coinage". In: Aram, Klimburg-Salter et al. 2010, 13–38.
- Buzanich, G. et al. (2007). "A Portable Micro-XRF-Spectrometer with Polycapillary Optics and Vacuum Chamber for Archeometric and Other Applications". In: *Spectrochimica Acta B* 62.11, 1252–1256.
- Chavannes, E. (1903a). *Documents sur les Tou-Kiue (Turcs) occidentaux*. Paris, St. Petersburg.
- (1903b). *Notes additionnelles sur les Tou-Kiue (Turcs) occidentaux*. Separately paginated addendum to Chavannes 1903a. Paris, St. Petersburg.
- Cunningham, A. (1894). "Coins of the Later Indo-Scythians: Ephtalites, or White Huns". In: *Numismatic Chronicle (3rd Series)* 14, 243–293.
- Czarnetzki, A., C. Uhlig and R. Wolf (1983). *Menschen des frühen Mittelalters im Spiegel der Anthropologie und Medizin*. Stuttgart.
- Frye, R. N. (1974). "Napki Malka and the Kushano-Sasanians". In: *Near Eastern Numismatics, Iconography, Epigraphy and History: Studies in Honor of George C. Miles*. Ed. by D. K. Kouymjian. Beirut, 115–122.
- Gitler, H. and M. Ponting (2003). *The Silver Coinage of Septimius Severus and his Family (193–211 AD): A Study of the Chemical Composition of the Roman and Eastern Issues*. Glax 16. Milan.

- Göbl, R. (1967). *Dokumente zur Geschichte der Iranischen Hunnen in Baktrien und Indien*. 4 vols. Wiesbaden.
- Grenet, F. (2002). “Regional Interaction in Central Asia and Northwest India in the Kidarite and Hephthalite Periods”. In: *Indo-Iranian Languages and Peoples*. Ed. by N. Sims-Williams. Proceedings of the British Academy 116. British Academy, 203–224.
- Harmatta, J. (1969). “Late Bactrian Inscriptions”. In: *Acta Antiqua Academiae Scientiarum Hungaricae* 17, 297–432.
- Harmatta, J. and B. Litvinsky (1996). “Tokharistan and Gandhara under Western Türk Rule (650–750)”. In: *History of Civilisations of Central Asia III: The Crossroads of Civilisations: A.D. 250 to 750*. Ed. by B. A. Litvinsky, Z. Guang-da and R. S. Samghabadi. UNESCO, 367–401.
- Inaba, M. (2010). “Nezak in Chinese Sources”. In: Alram, Klimburg-Salter et al. 2010, 191–202.
- Janssens, K. (2004). “X-Ray Based Methods of Analysis”. In: *Comprehensive Analytical Chemistry* 42, 129–147.
- Jenkins, R. (1977). *Einführung in die Röntgenspektrometrie*. London.
- Kuwayama, S. (1999). “Historical Notes on Kāpīsi and Kābul in the Sixth–Eighth Centuries”. In: *Zinbun (Annals of the Institute for Research in Humanities, Kyoto University)* 34.1, 25–77.
- (2002a). *Across the Hindukush of the First Millennium: A Collection of Papers*. Kyoto.
- (2002b). “Identity of the Napki Coins”. In: Kuwayama 2002a, 208–221.
- (2002c). “The Horizon of Begram III and Beyond: A Chronological Interpretation of the Evidence for Monuments in the Kāpīsi-Kābul-Ghazni Region”. In: Kuwayama 2002a, 173–199.
- Müller, R. O. (1967). *Spektrochemische Analysen mit Röntgenfluoreszenz*. Munich.
- Peter, M. (2001). *Untersuchungen zu den Fundmünzen von Augst und Kaiseraugst*. Studien zu Fundmünzen der Antike 17. Berlin.

- Pfisterer, M. (2005). "Eine Gruppe severerzeitlicher Fälscherförmchen aus der Sammlung des Instituts für Numismatik und Geldgeschichte". In: *Numismatische Zeitschrift* 113 (Vindobona docet: Festschrift zum vierzigjährigen Bestehen des Instituts für Numismatik und Geldgeschichte der Universität Wien), 139–152.
- (2007). "Falschgeld und Beischläge der Prinzipatszeit in Carnuntum—Ein Überblick". In: *Numismata Carnuntina—Forschungen und Material (Die Fundmünzen der römischen Zeit in Österreich, Abteilung III, Niederösterreich, Bd. 2: Die antiken Fundmünzen im Museum Carnuntinum)*. Ed. by M. Alram and F. Schmidt-Dick. Vol. 2. Vienna, 635–642.
- (2014). *Hunnen in Indien: Die Münzen der Kidariten und Alchan aus dem Bernischen Historischen Museum und der Sammlung Jean-Pierre Righetti. Mit typologischen Zeichnungen von Theresa Eipeldauer*. Veröffentlichungen der Numismatischen Kommission 57. Vienna: Verlag der österreichischen Akademie der Wissenschaften.
- Rāy, P. C., ed. (1893). *The Mahabharata of Krishna-Dwaipayana Vyasa Translated Into English Prose*. Calcutta: Anuçasana Parva.
- Schindel, N. (2004). *Sylloge Nummorum Sasanidarum: Paris-Berlin-Wien, vol. III: Shapur II.-Kawad I./2. Regierung*. Denkschriften der Phil.-hist. Klasse der Österreichischen Akademie der Wissenschaften 325. Veröffentlichungen der Numismatischen Kommission 42. Vienna.
- Timpel, W. (1999). "Thüringer: Ein bedeutendes Volk und Reich in Mitteleuropa". In: *Ur- und Frühgeschichte Thüringens*. Ed. by S. Dušek. Stuttgart, 143–165.
- Vondrovec, K. (2008). "Obole in der Münzprägung der iranischen Hunnen". In: *Numismatische Zeitschrift* 116/117 (Festschrift für Günther Dembski zum 65. Geburtstag, vol. I.), 269–300.
- Vondrovec, K. (2010). "Coinage of the Nezak". In: Alram, Klimburg-Salter et al. 2010, 169–190.

Coins Illustrated in the Text (“Kandahar” hoard abbreviated as “K”)

FIGURE 4.1(a): Jean-Pierre Righetti, 225.

FIGURE 4.1(b): Paris, 1986.148.

FIGURE 4.2(a): Numismatische Zentralkartei, Institut für Numismatik und Geldgeschichte, Vienna University.

FIGURE 4.2(b): Bernisches Historisches Museum, BHM 68.1255.

FIGURE 4.2(c): Bernisches Historisches Museum, BHM 68.1236.

FIGURE 4.2(d): Bernisches Historisches Museum, BHM 68.1207.

FIGURE 4.2(e): Bernisches Historisches Museum, BHM 68.1227.

FIGURE 4.2(f): Bernisches Historisches Museum, BHM 68.1250.

FIGURE 4.2(g): Bernisches Historisches Museum, BHM 68.1240.

FIGURE 4.3: K, Cat. no. 1.

FIGURE 4.4: K, Cat. no. 9.

FIGURE 4.5: K, Cat. no. 46.

FIGURE 4.6: K, Cat. no. 75.

FIGURE 4.7: K, Cat. no. 76.

FIGURE 4.8(a): K, Cat. no. 88.

FIGURE 4.8(b): K, Cat. no. 89.

FIGURE 4.9: Wien KHM, MK GR 42.336.

FIGURE 4.10(a): Wien KHM, MK GR 42.337.

FIGURE 4.10(b): Wien KHM, MK GR 43.240.

FIGURE 4.10(c): Wien KHM, MK GR 43.241.

FIGURE 4.11 left: Wien KHM, MK GR 42.337.

FIGURE 4.11 right: K, Cat. no. 96.

FIGURE 4.12(a): Bern, ex coll. Göbl 1968.1274.

FIGURE 4.12(b): Aman ur Rahman, 140.

FIGURE 4.13: Berlin, Hunnen 22.

FIGURE 4.14: Jean-Pierre Righetti, 146.

FIGURE 4.15: Jean-Pierre Righetti, 190.

FIGURE 4.16(a): Jean-Pierre Righetti, 181.

FIGURE 4.16(b): Jean-Pierre Righetti, 176.

FIGURE 4.17: Private coll., USA.

