

# 'Temple Pendants' in Medieval Rus': How were they Worn?

Natalija Ristovska

In Byzantium, as in other medieval societies, ear ornaments represented one of the most prominent and certainly most ubiquitous elements of the female attire. Although numerous Byzantine ornaments falling into this category have been published to date, little attention has been dedicated to tackling the problem of how such objects were actually worn. This is particularly true for the ornaments which, based on certain criteria, are believed not to have been worn by threading through the earlobe, but to have been suspended by various means from the hair or headdress; for better or worse, these are generally referred to by scholars as 'temple pendants',<sup>1</sup> or 'headdress rings'.<sup>2</sup>

A useful contribution towards the understanding of the wearing practices of Byzantine and other medieval ear ornaments is supplied by archaeological evidence from the territory of medieval Rus', which has accumulated in the course of the past century or so. Recent studies by scholars such as M. A. Saburova, A. S. Agapov and T. G. Saračeva<sup>3</sup> have put such evidence to good use and introduced fascinating new insights into the old debate of how such ornaments were worn in Rus'. It is the aim of the present paper to provide a brief review of the Rus' evidence and of the recent developments on the subject, in view of the implications this material may have for the study of Byzantine and other contemporary ear ornaments.<sup>4</sup> The discussion will focus on those ornaments which were worn suspended from the hair or headdress (rather than being worn through the earlobe), since I believe that the latter objects have been poorly understood in past scholarship on Byzantine jewellery.

The study of the wearing methods in medieval Rus' consists entirely of archaeological evidence, as ear ornaments with suspension equipment are neither mentioned in the written sources, nor depicted in the extant visual sources.<sup>5</sup> However, before proceeding to examine the Rus' evidence in question, it is necessary to note first the distinction made by Russian and Ukrainian scholars between the different categories of ear or temple ornaments, as this issue is closely related to the perception of how the respective objects were worn.

Two categories are of interest here. The first comprises hollow crescent-shaped, circular and star-shaped ear ornaments, since the late 19th century uniformly referred to as 'kolty' (колты) or 'kolti' (колти) in Russian and Ukrainian respectively (PIs 1–4).<sup>6</sup> The term, which is now used exclusively to designate this type of medieval jewellery, originally derives from the Old Slavonic word for earrings or ear ornaments (къльѣтки/колотки/колки),<sup>7</sup> variants of which were still in use on the territory of Russia and Ukraine in the second half of the 19th century,<sup>8</sup> when the artefacts now generally known as 'kolty' were first published. The second category consists of ornaments labelled descriptively by archaeologists as 'temple rings' (Rus. височные кольца, Ukr. скроневі кільця), after the

part of the head at which they are believed to have been worn. These include a wide range of types, from simple loops of wire with or without spiral or S-shaped terminals, through hoops decorated with one, three or more beads or rhomboid sheets, to elaborate crescent-shaped ornaments with triangular or axe-like protrusions along their lower rim (PI. 5).<sup>9</sup> Some of the ear ornaments of the latter types are also occasionally called 'earrings' (Rus. серьги/сережки, Ukr. серги/сережки),<sup>10</sup> a term rarely applied to kolty.<sup>11</sup> As extant written sources indicate, all these terms were indeed used in medieval Rus' to designate ear ornaments (колци: 11th century; къльѣтки/колотки: 12th century; серги: 14th century),<sup>12</sup> but there is little evidence to suggest the shape, construction or wearing method of the objects they referred to.<sup>13</sup> A notable exception is the reference to ear ornaments in the 11th-century *Lection on the life and slaying of the blessed martyrs Boris and Gleb*, according to which objects designated as колци were worn on the ears,<sup>14</sup> presumably threaded through the earlobe. Hence, it is clear that, despite its use of historic terms, the present-day archaeological taxonomy of Rus' ear ornaments does not reflect the medieval written evidence, as it is entirely based on modern pre-conceptions. It will moreover become evident below that the archaeological evidence from medieval Rus' burials also does not support the rigid classification framework which has been heretofore applied to it.

## Kolty

The discussion on how kolty were worn has mainly revolved around a particular type of strap which occurs in pairs in hoards on the territory of medieval Rus'. These are made either of gold and silver plates in circular, quatrefoil, or rectangular shape connected to one another by a hinge joint,<sup>15</sup> or of ribbed semi-cylinders made in the same materials and held together by metal or linen threads.<sup>16</sup> Both variants terminate at one end in a small chain, and at the other in an open hoop which was probably secured by a small pin or wire. The most commonly reproduced reconstruction, proposed first by B. A. Rybakov in the 1940s, has these straps – with kolty attached at the lower end – suspended from the top of a tall hat or crown, dangling freely while reaching down as far as the chest or shoulders.<sup>17</sup> Although Rybakov's arguments regarding this matter were plausibly refuted by G. F. Korzhuhina shortly thereafter<sup>18</sup> and scholars are far from unanimous on the use of the straps (which have been variously identified as suspension chains, necklaces, and bracelets),<sup>19</sup> his reconstruction still remains influential and different versions of it continue to be reproduced in recent publications (PI. 6).<sup>20</sup>

Subsequent archaeological finds have, however, shown that Rybakov's view concerning the wearing of kolty can no longer be sustained. Thus, a silver pair, found *in situ* within a female burial at Rajkovetskoe Gorodišče, and which were attached to



**Plate 1** Gold and enamelled *kolt* found at Knjaža Gora (12th–13th century)



**Plate 2** Silver and niello *kolt* found at Kiev (12th–13th century)



**Plate 3** *Kolt* of lead-tin alloy found at Novgorod (13th century)



**Plate 4** Gold *kolt* found at Kiev (12th–13th century)



**Plate 5** 'Temple rings' found on the territory of medieval Rus' (10th/11th–14th century)



**Plate 6** Reconstruction of the wearing style of crescent-shaped *kolty* (M. Rusjaeva)



**Plates 8a–b** Straps with *kolty* attached, found at Staraja Rjazan' (12th–13th century)



**Plate 7** Silver headband with a pair of *kolty* attached to it, Rajkovetskoe Gorodišče (12th–13th century)

two silver straps of the type employed in Rybakov's reconstruction,<sup>21</sup> leaves little room for doubt as to how these ornaments had been worn: the straps had evidently been secured to each other to form a diadem around the head, while the *kolty* had been suspended at the sides from the short chains connecting the straps (Pl. 7). This wearing method is further substantiated by the finds in a hoard unearthed in 1911 near the Tithe church in Kiev, where the end chains of two gold straps of the second variant are said to have been threaded through the suspension hoops of enamelled *kolty* made in the same material.<sup>22</sup> While two hoards found at Staraja Rjazan'<sup>23</sup> seem to suggest that metal straps constructed of ribbed semi-cylindrical elements were indeed used for suspending the *kolty* from the headdress,<sup>24</sup> it should be noted that these are significantly shorter than the straps employed in Rybakov's

reconstruction<sup>25</sup> and terminate at both ends in a small closed hoop, one presumably for attaching the *kolt* to the strap, the other for fastening the strap to the headdress (Pls 8a–b and 9). Organic remains found on some of the Rjazan' fragments indicate that the semi-cylindrical elements and the triangular terminals had been held together by coarse linen threads, while the entire strap had been sewed onto a leather lining.<sup>26</sup>

There may also have been alternative, hitherto unidentified, methods for securing *kolty* to the headdress.<sup>27</sup> One, or more, of them probably involved the large coiled wire devices which were attached to the suspension hoop of the silver *kolty* found in a hoard at Svjatoe Ozero near Černigov (Pl. 10).<sup>28</sup> Identical objects, termed 'temple rings' by the archaeologists who published them, have recently turned up in another hoard at Gubin (in Ukraine) together with two pairs of





**Plate 9** Reconstruction of the wearing style of the star-shaped *kolty* found at Staraja Rjazan' (V.P. Frolov)



**Plate 10** Silver *kolt* with a coiled hoop attached to it, found at Svjatoe Ozero (12th–13th century)



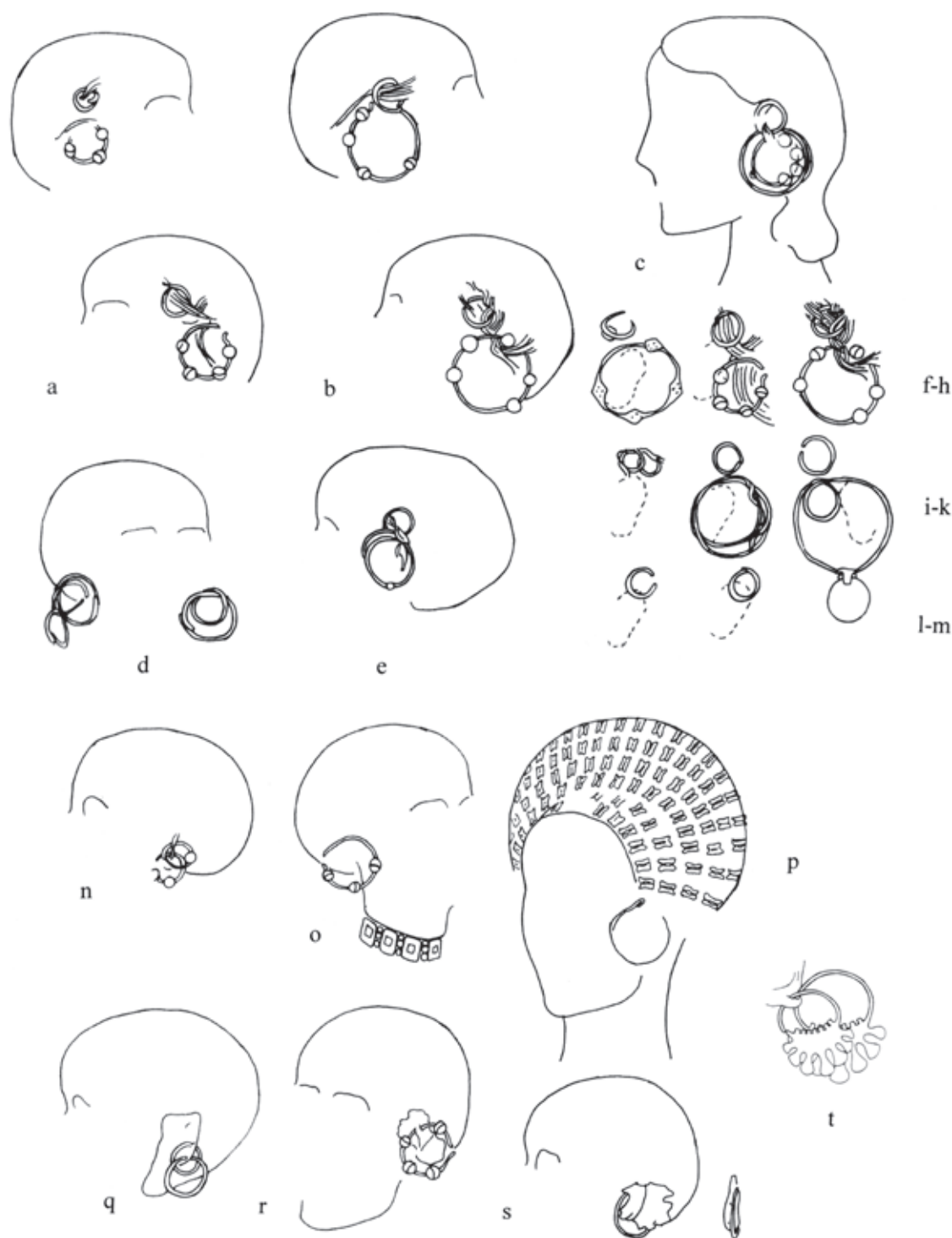
**Plate 11** Silver *kolty* and coiled wire hoops found at Gubin (12th–13th century)

silver *kolty* and other jewellery (Pl. II). In the latter case, the coiled wire hoops occur as two sets of twelve pieces and are made of the same material as the *kolty*.<sup>29</sup> It may be argued that a single hoop, as those found at Svjatoe Ozero, could have facilitated the attachment of the *kolt* to a separate suspension chain or strap, or alternatively, served for fastening the *kolt* directly to the hair or headdress in a way similar to a modern hair pin; a series of interlinked hoops could have been used as a chain for suspending the *kolt* from the headdress. As will be mentioned below, the use of both wearing styles, involving comparable hoops, has been attested for other types of ornaments by finds in medieval Rus' burials.<sup>30</sup>

## 'Temple rings'

The objects normally referred to as ‘temple rings’ by Russian and Ukrainian scholars seem to have involved a wider range of wearing styles than those attested for *kolty*. Excavations of medieval cemeteries in northern Russia, where the soil conditions are more favourable for the preservation of organic materials, have, in fact, shown that the same types of ‘temple rings’ were worn in a number of different ways: threaded through the earlobe, secured in the hair, attached directly to the headdress, or fastened to a vertical strap which was secured to the headdress.

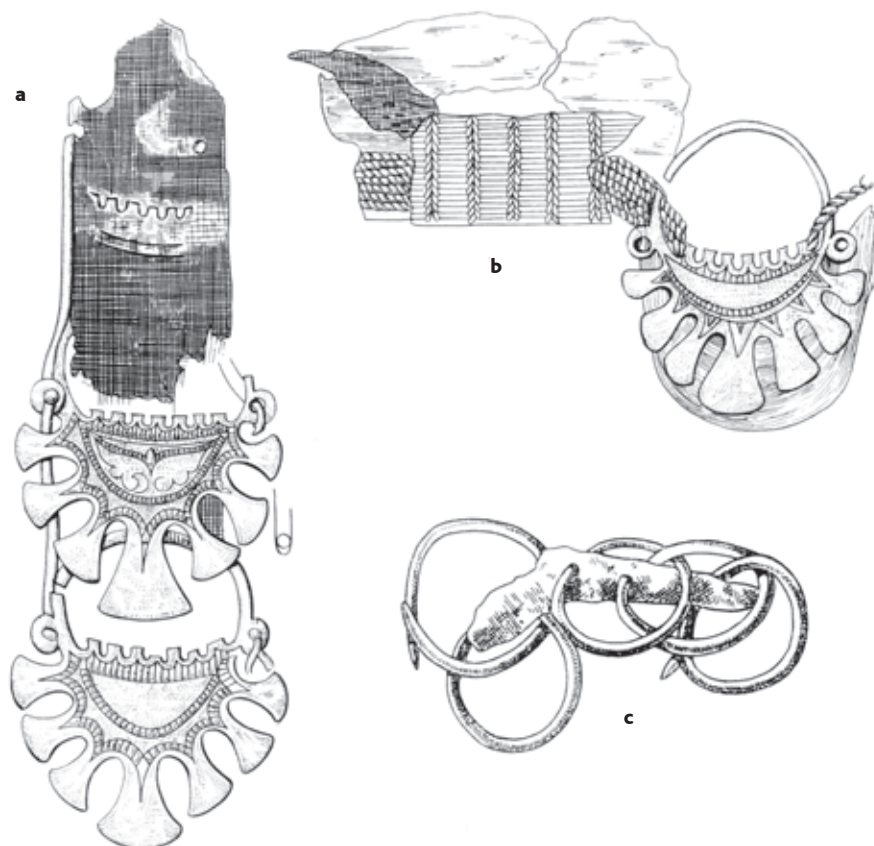
As established by forensic analysis of human skin found in medieval Rus' burials, piercing along the entire length of the earlobe and the upper part of the ear made it possible for two to



**Plate 12** Methods of wearing 'temple rings' in Rus'

eight rings to be simultaneously worn on the ear (Pls 12n, o, q, t and 14g); there were also instances when more than one ornament was threaded through a single opening.<sup>31</sup> It is noteworthy that some of these pieces were of not inconsiderable size, with a suspension hoop ranging in thickness between 1.4 and 2mm. Human remains in burials, together with the precise location of ornaments on the body (often revealed by oxide staining on the skeleton), have moreover shown that up to 12 rings were worn entangled in the hair at each side of the head, either in a cluster at the level of the temples or ears (Pls 12a–k), or arranged in a single row in the area between the forehead and the shoulders (Pls 14f–g), the latter style usually occurring with simple hoops of small

size.<sup>32</sup> All ornaments, irrespective of type, size and the style preferred, were worn entangled in the hair individually (Pls 12a–b, f–h, k–m and 14f–g),<sup>33</sup> or interlinked as a chain (Pls 12c–e, i–j, and 14h).<sup>34</sup> In fact, it was not uncommon for one or two large or more elaborate ornaments to be suspended from a small hoop secured in the hair, which in this case acted as a hair pin (Pls 12c, e), nor for them to be directly attached to the hair under one or more small hoops secured in the same way (Pls 12a–b, f–h, j). In some cases, it has been established that the ornaments were threaded through – or were secured by – plaits or twisted sections of hair which ran from the temples to the back of the head (Pls 12a–b, e, g–h).<sup>35</sup>

**Plate 13** Remains of headdresses with 'temple rings' attached

On the other hand, organic remains of headgear in burials (**Pl. 13**) have revealed that one or more rings were worn threaded through leather and textile straps hanging from a headband or hat (**Pls 14c, e**).<sup>36</sup> The ornaments, in such instances, were often arranged on the straps one above the other in a single row stretching from the level of the temples to the ears or neck. An alternative wearing style has been attested by metal suspension equipment, which included straps constructed of semi-cylindrical elements and triangular terminals,<sup>37</sup> or chains made up of series of interlinked (but detachable) small hoops (**Pl. 14h**).<sup>38</sup> In both cases, a single ornament, usually consisting of a ring with three beads, was suspended from the lower end of each chain or strap. Finally, the same sort of evidence indicates that one or more ornaments were worn attached directly to the headdress: they were either arranged in a horizontal row on a metal headband, or threaded through a textile (or felt) headband, hat or headscarf (**Pls 12p, r-s, and 14a-b, d**), being usually clustered at the temples or next to the ears.<sup>39</sup>

Altogether, a number of general observations pertaining to the ear or temple rings found in the territory of Rus' may prove instructive for the future study of medieval ear ornaments recovered in excavations elsewhere (including the territory of the Byzantine Empire).

1. It is noteworthy that ornaments belonging to a single type were worn using more than one method of suspension. In fact, almost all types were evidently worn threaded through the earlobe and suspended from the hair or headdress.
2. More than one ornament was often worn at each side of the head at the same time.
3. It was not unusual for the number of ornaments worn at one time to differ between the left and right side of the head.

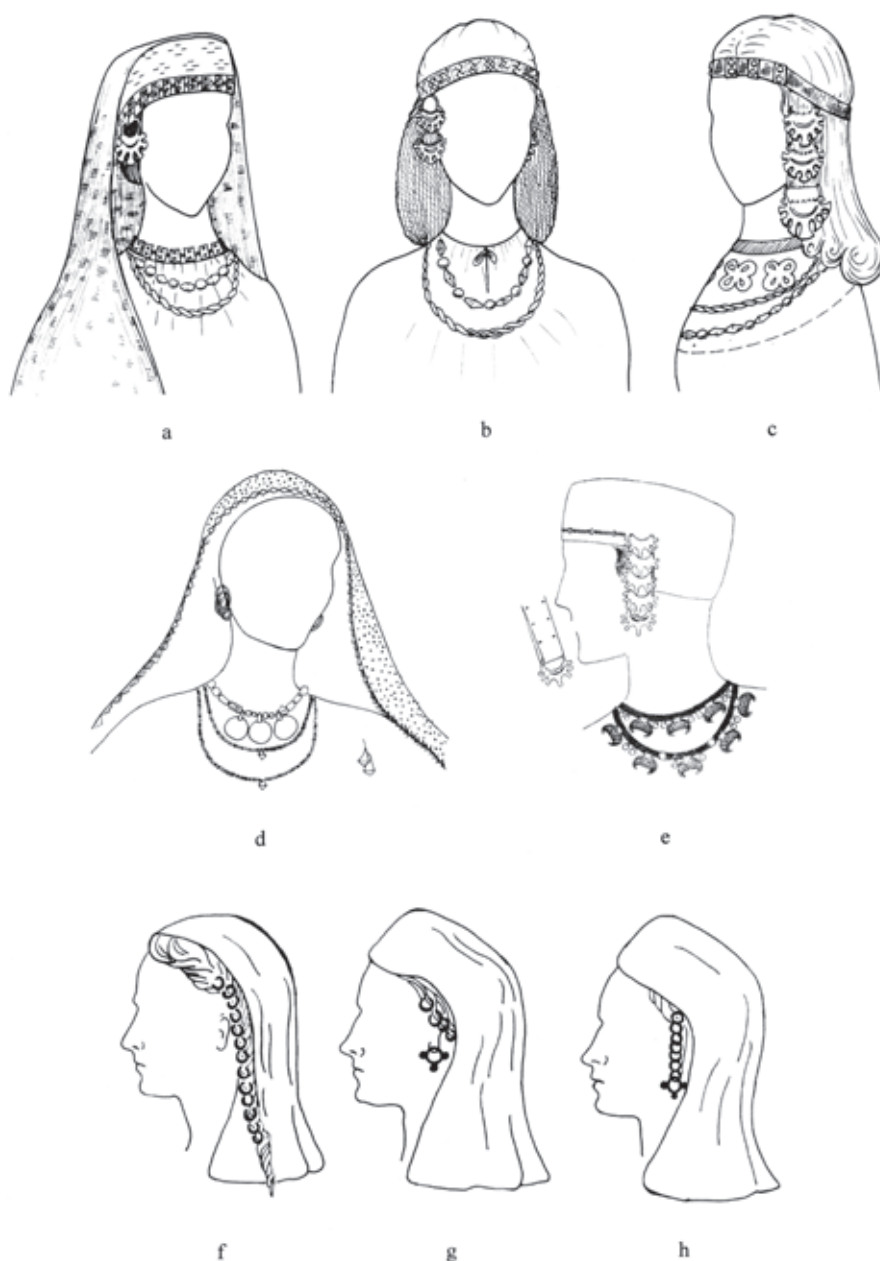
4. The wearing of combinations of different ornament types on each side of the head was common.
5. The same or similar types of ornaments were worn at different spots on the sides of the head, anywhere between the temples and the neck; simple hoops of small size were also worn in the hair or headdress as far as the lower part of the neck or shoulders.
6. The thickness of the suspension hoop, the securing device and the size of the individual pieces does not seem to point to a single wearing method. Relatively large ornaments with a thick suspension hoop and/or overlapping or tied terminals were worn threaded through the earlobe, while simple, small and lightweight hoops were worn attached to the hair or headdress.

### Conclusion

Archaeological finds from the territory of medieval Rus' provide particularly revealing evidence concerning the wearing methods of medieval ear ornaments. Several conclusions may be drawn from the survey of this material.

While the objects in modern scholarship generally known as *kolty* were evidently worn with suspension equipment (coiled wire hoops, chains or metal straps), those termed 'temple rings' employed a wide range of suspension methods which, due to the soil conditions in burials as well as other factors, have been heretofore little attested elsewhere. These include styles such as the wearing of ornaments on the ear by threading the suspension hoop through the earlobe; the securing of ornaments in the hair by plaits or twisted sections, directly or by means of a small hoop; attaching directly to a metal or textile headband; attaching directly to the veil or headscarf; suspension from the headdress by means of interlinked but detachable hoops forming a chain; as well as

**Plate 14** Methods of wearing 'temple rings' in Rus' (M.A. Saburova)



suspending from vertically-arranged leather or textile straps, which were, in turn, secured to a hat, headband or veil. The finds in burials, moreover, attest to other wearing peculiarities of the ornaments in question, particularly concerning the number of pieces worn on each side of the head at one time, the combining of different ornament types, and the exact spot on the head where these objects were worn.

The Rus' material does not only provide us with a unique glimpse into the variety of evidence available to the archaeologist upon careful systematic excavation; it also offers an opportunity for valuable methodological lessons to be learned. Closer inspection of the scholarship on the Rus' finds, for instance, reveals that the rigid archaeological taxonomies which were applied in the past to the ornaments in question fall short of adequately interpreting the complexities posed by the newly-excavated archaeological material, and are the cause of confusion and misinterpretation. On the one hand, entire types (as defined by shape) were attributed *en bloc* to a single category of ornaments, either 'temple rings' or 'earrings'. On the other hand, examples of the same types of ornaments were variously labelled 'temple rings' and 'earrings' within a

single publication for no apparent reason (see note 10). Recent studies (see note 3), have shown that scholars studying this material need to allow for more flexibility and demonstrate more consistency in the classification and interpretation of the available artefacts. Objects labelled 'temple rings', for instance, are now known to have been worn threaded through the earlobe as well as suspended from the hair and headdress; in burials, they occur on the head anywhere between the temples and the neck. Moreover, there are some indications that the wearing of *kolty* involved the same suspension methods as those attested for some of the 'temple rings' (metal straps as well as a single hoop, or multiple hoops interlinked as a chain), despite the fact that they were considered two separate categories of ornaments. We are certainly faced with similar methodological difficulties in the study of Byzantine and other ear ornaments: neat classification schemes pertaining to what are, to a large extent, matters of personal choice, and based on evidence from only a few artefacts, prove difficult to sustain. Keeping abreast with newly excavated material, we may well have to repeatedly readjust our perceptions (and pre-conceptions) on the use of the artefacts we study.



## Notes

- 1 W.D. Wixom, 'Temple pendant and stick', in K.R. Brown *et al.*, 'Medieval Art and the Cloisters', *The Metropolitan Museum of Art Bulletin*, n.s., 49/2 (1991), 15; W.D. Wixom, 'Two cloisonné enamel pendants: the New York temple pendant and the Cleveland enkolpion', in C. Moss and K. Kiefer (eds.), *Byzantine East, Latin West: art-historical studies in honor of Kurt Weitzmann*, Princeton, 1995, 659–62; W.D. Wixom, 'Temple pendant and stick', in H.C. Evans and W.D. Wixom (eds.), *The Glory of Byzantium: art and culture of the Middle Byzantine Era, AD 843–1261*, New York, 1997, 246–7, no. 170; P.S. Griffin, 'Jewellery from Kiev', *Jewellery Studies* 6 (1993), 5–18.
- 2 U. Fiedler, *Studien zu Gräberfeldern des 6. bis 9. Jahrhunderts an der unteren Donau*, I, Bonn, 1992, 170–80.
- 3 M.A. Saburova, 'Ženskij golovnoj ubor u Slavjan (po materialam Vologodskoj ekspeditsii)', *Sovetskaja arheologija* (1974/2), 85–97; M.A. Saburova, 'O ženskih golovnyh uborah s žestkoj osnovoj v pamjatnikah domongol'skoj Rusi', *Kratkie soobščeniia Instituta arheologii* 144 (1975), 18–22; M.A. Saburova, 'Drevnerusskij kostjum', in B.A. Kolčín and T.I. Makarova (eds), *Drevnjaja Rus': byt i kul'tura*, Moscow, 1997, 93–109; M.A. Saburova and M.V. Sedova, 'Nekropol' Suzdalja', in I.P. Rusanova (ed.), *Kul'tura i iskusstvo srednevekovogo goroda*, Moscow, 1984, 91–130; A.S. Agapov and T.G. Saračeva, 'O sposobah nošenija viso čnyh kolets', *Rossijskaja arheologija* (1997/1), 99–108.
- 4 The material included in the present paper is part of a larger discussion dealing with the Byzantine wearing practices of ear ornaments which will be published elsewhere.
- 5 G.F. Korzuhina, *Russkie klady IX–XIII vv.*, Moscow/Leningrad, 1954, 53–55. Only a few mentions of ear ornaments occur in Rus' written sources of the 11th–15th centuries. They provide little additional information apart from a brief reference to the materials of which these objects were made: G. N. Lukina, 'Nazvanija predmetov ukrašenija v jazyke pamjatnikov drevnerusskoj pis'mennosti XI–XIV vv.', in R.I. Avanesov *et al.* (eds), *Voprosy slovoobrazovanija i leksikologii drevnerusskogo jazyka*, Moscow, 1974, 248, 250–1; A.A. Zaliznjak, *Drevnenovgorodskij dialekt*, II, Moscow, 2004 (2nd ed.), 267–8: no. 644; 359–60: no. 429; 372–3: no. 335.
- 6 See T.I. Makarova, *Peregorodčatye emali drevnej Rusi*, Moscow, 1975, pls 1–5 and figs 5–6; W. Seipel (ed.), *Gold aus Kiew: 170 Meisterwerke aus der Schatzkammer der Ukraine*, Vienna, 1993, figs on 291–3, 295, 297, 320–1, nos 114–18, 132; Evans and Wixom (n. 1), figs on 310–11, 314, no. 212A–G, 214A; D.S. Lihačev *et al.*, *Velikaja Rus': istorija i hudožestvennaja kul'tura X–XVII veka*, Moscow, 1994, col. pls III: 26, 29, 31, 33–4, 36a–b; col. pl. V: 26; B.A. Rybakov, *Remeslo drevnej Rusi*, Moscow, 1948, figs 80, 83, 89; B.A. Rybakov, *Russkoe prikladnoe iskusstvo X–XIII vekov*, Leningrad, 1971, figs 24–5, 37, 41, 49–56, 143; M.V. Sedova, 'Juvelirnye izdelija drevnego Novgoroda (X–XV vv)', in A.V. Artsihovskij and B.A. Kolčín (eds), *Trudy novgorodskoj arheologičeskoj ekspeditsii*, II, Materialy i issledovanija po arheologii SSSR 65, Moscow, 1959, figs 1/13–17; M.V. Sedova, *Juvelirnye izdelija drevnego Novgoroda (X–XV vv)*, Moscow, 1981, figs 1/5, 5/1–11.
- 7 Lukina (n. 5), 250–1; I.I. Sreznjevskij, *Materialy dlja slovara drevnerusskogo jazyka*, Moscow, 1958 (reprint of the 1893 edition), s.v. 'Колтки'; *Slovar' russkogo jazyka XI–XVII vv.* (hereafter *SRJa*), VII, Moscow, 1980, s.v. 'Колтки'.
- 8 In fact, the word 'koltki' and its variants continued to be used in local dialects well into the 20th century. In the modern period, these words denoted earrings, earring pendants, or earrings with pendants: cf. N.P. Kondakov, *Geschichte und Denkmäler des byzantinischen Emails*, Frankfurt, 1892, 343–4; *Slovar' russkikh narodnyh govorov*, XIV, Leningrad, 1978, s.v. 'Кóлткы/колтки', 'Колтóчки', 'Кóлтуши/колтуши', 'Колтúшка', 'Колтúшки/колтушки', 'Колтушóк'; Lukina (n. 5), 250–1; *SRJa* (n. 7), VII, s.v. 'Колты'; *Bol'shaja Sovetskaja Entsiklopedija* (hereafter *BSE*), XII, Moscow, 1973 (3rd ed.), s.v. 'Колт'. The claims that in modern Russian the word 'kolty' designates 'temple rings' (K.R. Brown, 'Russo-Byzantine jewellery in the Metropolitan Museum of Art', *Apollo* 111/215 [1980], 6), or indeed, rings or hoops (Griffin [n. 1], 8) are, thus, incorrect. In the scholarship of the region, the archaeological term 'temple rings', to the best of my knowledge, has never been used for the ornaments known as 'kolty'. The erroneous claim that 'kolty' denotes rings or hoops could have arisen from the confusion of the word колт with the modern кольцо (= ring or hoop).
- 9 See Sedova 1959 (n. 6), figs 1/1–10; Rybakov 1948 (n. 6), figs 16, 24, 130–31; Rybakov 1971 (n. 6), figs 5, 7–10; R.L. Rozenfel'dt, 'Raskopki kurganov u s. Bitjagovo v 1968–1970 gg.', *Sovetskaja arheologija* (1973/1), figs 3/1–17, 21–4 on 195; Saburova 1974 (n. 3), fig. 5 on 92; E.A. Rjabinin, *Kostromskoe Povolž'e v epohu srednevekov'ja*, Leningrad, 1986, pl. 1; T.I. Makarova *et al.*, 'Ukrašenija iz dragotsennyh metallov, splavov, stekla', in Kolčín and Makarova (n. 3), pl. 51.
- 10 For instance, in Korzuhina (n. 5), and Rybakov 1971 (n. 6), 36, 38. This taxonomic inconsistency becomes particularly striking in cases where ear ornaments of the same type are called both 'earrings' and 'temple rings' within a single publication, despite the fact that some of them were found in hoards and thus lack reliable evidence for the way in which they were worn. Compare, for instance, nos 119–23 (= Ohrgehänge) with no. 135 (= Schläfenring) in Seipel (n. 6), and nos 93, 95–6, 100–01, 103 and 105 (= серьги) to no. 97 (= височное кольцо) in V. M. Vasilenko, *Russkoe prikladnoe iskusstvo: istoki i stanovlenie*, Moscow, 1977.
- 11 The word 'earrings' was used for ornaments of this type mostly in early publications, when the relevance of the term 'kolty' for medieval artefacts was still being discussed (Kondakov [n. 8], 343–4; N. Kondakov, *Russkie klady*, St Petersburg, 1896, 195–6). Conversely, in the *Large Soviet Encyclopedia*, 'kolty' is described as a pendant attached to the headdress, rather than an earring (*BSE* [n. 8], XII, s.v. 'Колт').
- 12 Zaliznjak (n. 5), 267–8: no. 644, and 372–3: no. 335; Lukina (n. 5), 248, 250–1; Sreznjevskij (n. 7), s.v. 'Колтки'; *SRJa* (n. 7), VII, s.v. 'Колтки'. The word усе́ра.зи/оу́се́ра.зи is also attested for ear ornaments in 12th–14th-century Rus' sources, but seems to have gone out of use shortly thereafter (Zaliznjak [n. 5], 359–60, no. 429; Lukina [n. 5], 250).
- 13 Evidence of this type exists only for the more recent periods. In the 18th–20th centuries, as well as now, the word серьги/серги/сережки denotes earrings, while the word кольцо/кільце signifies a ring, hoop, link of a chain and, in general, any object shaped as a circle or hoop (*Slovar' russkogo jazyka XVIII veka*, X, St Petersburg, 1998, s.v. 'Колцо'). For the meaning of the word колтки and its variants in the 19th–20th centuries, see n. 8 above.
- 14 И се вънзѣпу испадоста єи златни колци, иже носаше въ ушню своєю. D.I. Abramovič and L. Müller, *Die altrussischen Hagiographischen Erzählungen und liturgischen Dichtungen über die Heiligen Boris und Gleb*, Munich, 1967, 24; Lukina (n. 5), 248.
- 15 For illustrations, see Makarova (n. 6), figs 5–6 and pls 6–10; Evans and Wixom (n. 1), fig. on 312, no. 213A–B; Lihačev *et al.* (n. 6), col. pl. III: 31; A. L. Mongajt, *Staraja Rjazan'*, Materialy i issledovanija po arheologii SSSR 49, Moscow, 1955, fig. 115/1; Makarova *et al.* (n. 9), pl. 42/11.
- 16 For illustrations, see Rybakov 1948 (n. 6), fig. 82 on 316; Seipel (n. 6), figs on 295: nos 116–17, and 320: no. 133; Lihačev *et al.* (n. 6), col. pl. III: 29.
- 17 B.A. Rybakov, 'Znaki sobstvennosti v knjažeskom hozjajstve Kievskoj Rusi X–XII vv.', *Sovetskaja arheologija* 6 (1940), 251; Rybakov 1948 (n. 6), 316–17, 338, 383–4; B.A. Rybakov, 'Drevnosti Černigova', in N.N. Voronin (ed.), *Materialy i issledovanija po arheologii drevnerusskikh gorodov*, I, Materialy i issledovanija po arheologii SSSR 11, Moscow/Leningrad, 1949, 58, figs 23 (top) and 25 (middle).
- 18 Korzuhina (n. 5), 53–4.
- 19 Rybakov 1948 (n. 6), 316–17, 383; Makarova (n. 6), 40; Griffin (n. 1), 6, 8.
- 20 For instance, see Seipel (n. 6), fig. 13 on 52 (after M. Rusjaeva); Saburova 1997 (n. 3), pls 71, 73.
- 21 V.K. Gončarov, *Rajkovetskoe gorodišče*, Kiev, 1950, 107–08.
- 22 Korzuhina (n. 5), 54, and 109, no. 69.
- 23 One hoard contained three pairs (and some fragments) of silver star-shaped *kolty*, as well as semi-cylindrical and triangular elements of the same material which have been reconstructed as four straps for the suspension of *kolty*. The other hoard contained a pair of circular *kolty* made of silver and decorated with niello, and semi-cylindrical elements reconstructed as two suspension straps. Both hoards also consisted of other objects: V. P. Darkevič and V. P. Frolov, 'Starorjazanskij klad 1974 g.', in T.V. Nikolaeva (ed.), *Drevnjaja Rus' i Slavjane*, Moscow, 1978, 342–3 and figs 1–5 on 344–8; V.P. Darkevič and A.L. Mongajt, *Klad iz Staroj Rjazani*, Moscow, 1978, 6, 9, nos 3–4, and pls 2–3. For another hoard found at Staraja Rjazan' containing a single strap of the same type, see V.P. Darkevič and A.L. Mongajt, 'Starorjazanskije klady 1967 g.', *Sovetskaja*



- arheologija* (1972/2), 207, and fig. 3 on 208.
- 24 If the straps were indeed correctly reconstructed. The semi-cylindrical and triangular strap elements were found detached and in fragments, with only part of them surviving and having been subjected to reconstruction.
  - 25 Each of the straps found with the circular *kolty* in the second Rjazan hoard is 15.5cm long in its reconstructed state (Darkevič and Mongajst 1978 [n. 23], 9, nos 3–4). In contrast, the gold straps made of semi-cylindrical segments and ending in a chain and an open hoop which were found near Sahnovka in Ukraine are 22cm long (P. Dandridge and O.Z. Pevny, 'Temple pendants and suspension chains', Evans and Wixom [n. 1], 313, no. 214B). The straps constructed of hinged gold or silver plates were even longer: each of the two complete examples from a gold and enamelled pair found in the Tithe church at Kiev, for instance, measures 31.1cm in length (K.R. Brown, 'Ceremonial ornaments', in Evans and Wixom [n. 1], 313, no. 213A).
  - 26 Darkevič and Mongajst 1972 (n. 23), 207; Darkevič and Frolov (n. 23), 342–43, 351.
  - 27 For instance, neither of the two pairs of *kolty* excavated in burials at Černigov in 1878 and 1883, respectively, are reported to have been accompanied by suspension equipment (Korzuhina [n. 5], 52). This may be due to the summary method of excavation and publication in this period, but could also mean that alternative methods of suspension were used for these objects.
  - 28 Rybakov 1948 (n. 6), figs 77/5 and 83/Б; Rybakov 1949 (n. 17), figs 23 (bottom right), 26 (top right). Korzuhina called these wire devices 'clasp rings' and believed that they were used for the suspension of *kolty* (Korzuhina [n. 5], 138, no. 152/1, and 120–21, no. 103/22).
  - 29 I.S. Vinokur *et al.*, 'Rečovij skarb iz litopisnogo Gubina', *Arheologija* 2003/1, figs 8–9 on 59 and figs 15–16 on 62.
  - 30 See pp. 217–18 above, and Pls 12c,e and 14h. The coiled wire devices appear to be related to 'temple rings' of simple hoop shape with overlapping ends which were found elsewhere on the territory of mediaeval Rus'.
  - 31 Saburova 1974 (n. 3), 85–6, 89–91; Agapov and Saračeva (n. 3), 101–07, figs 1–3.
  - 32 Saburova 1974 (n. 3), 86, 88; Saburova and Sedova (n. 3), 114–18.
  - 33 Saburova 1997 (n. 3), 108, pl. 75/10.
  - 34 *Ibid.*, 108, pl. 75/9.
  - 35 Saburova 1974 (n. 3), 86–8, 91.
  - 36 *Ibid.*, 88; Saburova 1975 (n. 3), 18–19; Saburova 1997 (n. 3), 108, pl. 73/3. It should be noted that reports on traces of 'leather' headgear and suspension equipment in burials should be treated with caution, as some of the fragments believed to be straps on which the 'temple rings' were suspended, upon forensic analysis turned out to be pieces of human ears: see Agapov and Saračeva (n. 3).
  - 37 Saburova 1997 (n. 3), 108, pl. 75/13.
  - 38 *Ibid.*, 108, pl. 75/9.
  - 39 E.A. Šinakov, 'Naselenie verhnego tečenija reki Psěl v XI–XII vv. (po materialam Gočevskogo arheološkičeskogo kompleksa)', *Vestnik Moskovskogo universiteta*, ser. 8, *Istorija* (1982/2), 93; Saburova 1974 (n. 3), 88–9; Saburova 1997 (n. 3), 108–09, pls 78/1 and 78/3. For the parallel use of hoop-like ornaments on finds from Poland and the Czech Republic, see P.M. Barford, *The Early Slavs: culture and society in Early Medieval Eastern Europe*, London, 2001, fig. 37 (bottom left) on 361, and J. Schráníl, *Die Vorgeschichte Böhmens und Mährens*, Berlin/Leipzig, 1928, 297–8, pl. LXVIII/8.