

Social Hierarchy of Early Novgorod on the Evidence of an Analysis of the 10th–11th Century Single-Sided Composite Combs

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Novgorod; social hierarchy; combs

Combs, however humble objects they might be deemed, by virtue of their intrinsic characteristics represent a special category of artefacts from urban contexts providing ample evidence for the study of broader aspects of social and cultural development in a medieval community. These characteristics are:

1. clear function;

The majority of combs are tools for combing hair or beards, whether ritual (liturgical combs, bridal combs) or hygienic (for the sake of tidiness and cleanliness, or in order to keep lice at bay). This denotes their status as objects unlikely to be shared with other people and thus personifying individuals with their personal tastes as well as, probably, gender, age, ethnic background and social status etc

2. universality;

In the sense of the availability with certain limitations to all members within a community (whether this can be proven remains to be seen)

3. status as products of professional artisans;

Almost never being 'home-made' items for personal use, combs provide insights into the character and status of comb-makers through revealing the use of particular raw materials and through the application of specific techniques

4. statistical representativity;

Of all categories of small finds from waterlogged contexts, combs form, probably, the most statistically representative group, providing the opportunities for distributional analyses (both spatial and chronological)

5. specific primary mechanisms of deposition; High percentage of almost complete combs in

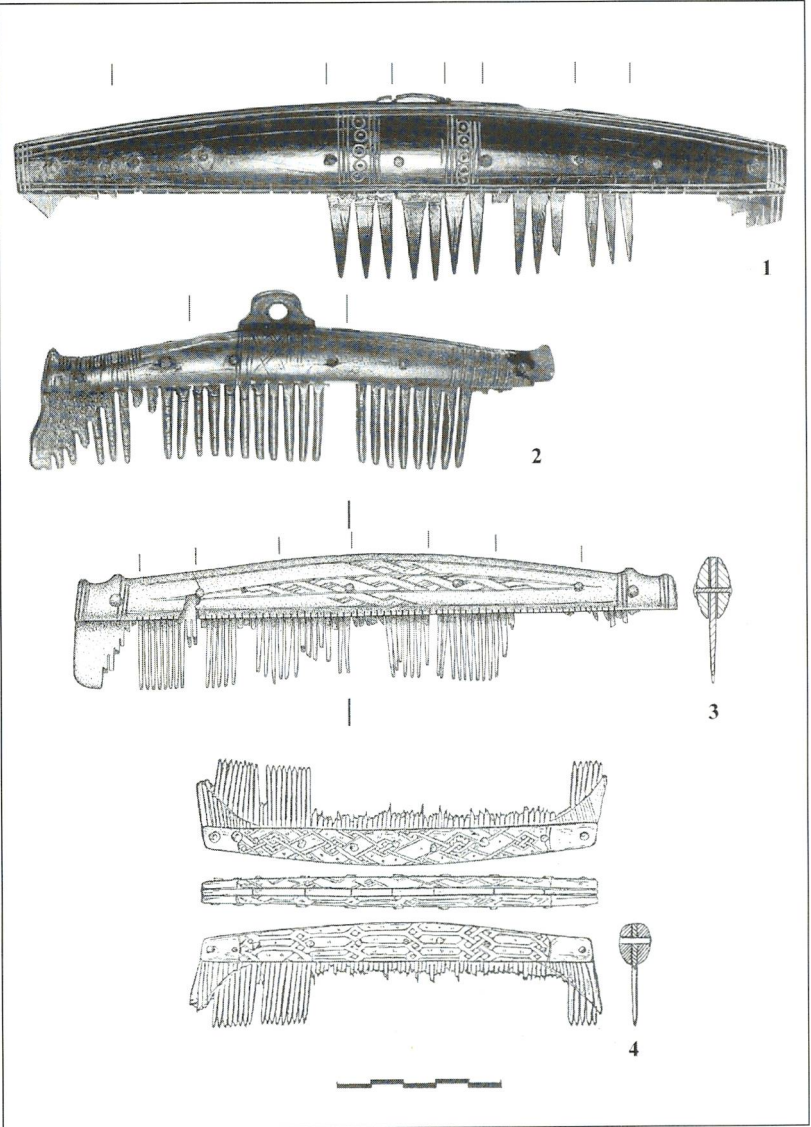
many assemblages implies that these (most likely lost or misplaced rather than deliberately thrown away) have more chances to lie close to their original deposition point (both spatially and chronologically) and be, therefore, utterly informative of the immediate physical and structural environment within which they were presumably used and lost.

All these become especially valuable when applied to sub-assemblages from the earliest deposits of European urban centres. In the medieval town of Novgorod, over 600 specimens derive from waterlogged contexts dated to the earliest period of the mid 10th–11th centuries. They fall into two main comb classes: single-sided composite combs and comb cases (class 1) and simple (one-piece) double sided combs (class 2). Whereas all class 1 combs are made invariably of antler, simple combs are encountered in antler (class 2a) and wood (class 2b). Chronological distribution of main comb classes during the first two centuries of Novgorod history, based on the evidence from the Troitsky excavation (1973–2000, 6336 sq.m) in the Liudin End of the town (Brisbane/Gaimster 2002, x, Fig. 2, No. 20), is shown in Table 1. Up to the mid 11th century, single-sided composite combs formed the overwhelming majority of combs utilised in Novgorod. A sharp decline in numbers of class 1 combs preserved in the mid-late 11th century deposits was compensated by an increase of simple combs in skeletal materials which, up to the early 13th century, became the most common class of combs used by the town dwellers. A handful of four class 1 combs are known from later 12th century contexts. These (featuring either side plates with T-shaped openings against the background of bronze sheeting, or straight

long narrow side plates with extravagant use of copper alloy rivets) are chronologically isolated from the majority of class 1 combs and stylistically alien to the assortment of combs utilised in Novgorod at that time (Smirnova 1997).

Traditionally, single-sided composite combs and comb cases are treated as separate categories. As a rule, none of the cases in any assemblage can be associated with a specific comb, and examples of finds of complete sets are extremely rare (e. g. Fig. 3,6; 3,7). In this paper, cases without matching combs (e. g. Fig. 2,6; 3,5) and combs with certain constructive features (retaining hole and others) which ascribe them to the group designed to be kept in cases for protecting the teeth when not in use (Fig. 2,5; 3,3; 3,4), are treated indiscriminately as surviving parts of the whole, since both deputize equally for the complete set. Two groups, therefore, are distinguished: cased combs (Fig. 2,5; 2,6; 3,3–3,7) and 'non-cased' combs (Fig. 1; 2,1–2,4; 3,1–3,2). This separation, however, does not mean that the latter were not kept in other kinds of cases protecting comb teeth. They may well have been stored in leather or textile purses suspended on the waist when not in use (Arbman 1940, Taf. 136,1; 161,2). Cased combs fall into two main groups, those which have one pair of the case side plates (Fig. 3,3–3,7), and those with two pairs of contiguous side plates (Fig. 2,5; 2,6) (Table 2).

The dynamics of chronological changes in the composition of class 1 combs is demonstrated in Table 2 compiling objects deriving from stratified contexts. The analysis of stylistical peculiarities of single-sided composite combs and their chronological distribution in the cultural deposits of Novgorod allows a nexus embracing Novgorod with certain parts of the Northern lands of the Viking hegemony to be drawn, with Eastern Scandinavian contacts prevailing in the earliest period and Southern Baltic links predominant from the turn of the 11th century. This has been proven by the analysis of forms of combs and their elements, decorative styles, riveting systems and raw materials (Smirnova 2002a, chapter 3) (Table 3). During the period from the mid 10th to the early 11th century, the repertoire of single-sided composite combs was in accordance with the sites in Eastern Scandinavia. Especially close parallels can be found in materials from the latter half of Birka's life span (10th century) (Ambrosiani 1981; Arbman 1940; Hyenstrand



1991) and the middle period on Gotland (Thunmark-Nylén 1991). To the east of the Baltic assemblages revealing a similar range of morphological features derive from the later period of the early princely residence in Rurik Gorodishche (Nosov 1990; Verkhorubova/Shorin 1985), horizon D of Staraia Ladoga (Davidan 1962; 1999), early stratum of the town of Beloozero by the Lake with the same name (Golubeva 1973), burial mounds in the lands to the south-east of Lake Ladoga (Kochkurkina 1973; 1989; Kochkurkina/Linevsky 1985) and eastwards of Lake Onega (Makarov 1990), Timerevo Mikhailovskoe and Petrovskoe burial fields in the Upper Volga region (Fekhnér 1963) as well as settlement Bolshoe Timerevo (Dubov 1982), burial grounds Gnezdovo and Shestovitsy in the Upper and Middle Dnieper region (Put iz variagi 1996; Blifeld 1977).

Fig. 1: Rare types of the 10th century single-sided composite combs from Novgorod (photos by S. Bocharov; drawings by S. Shapovalova).

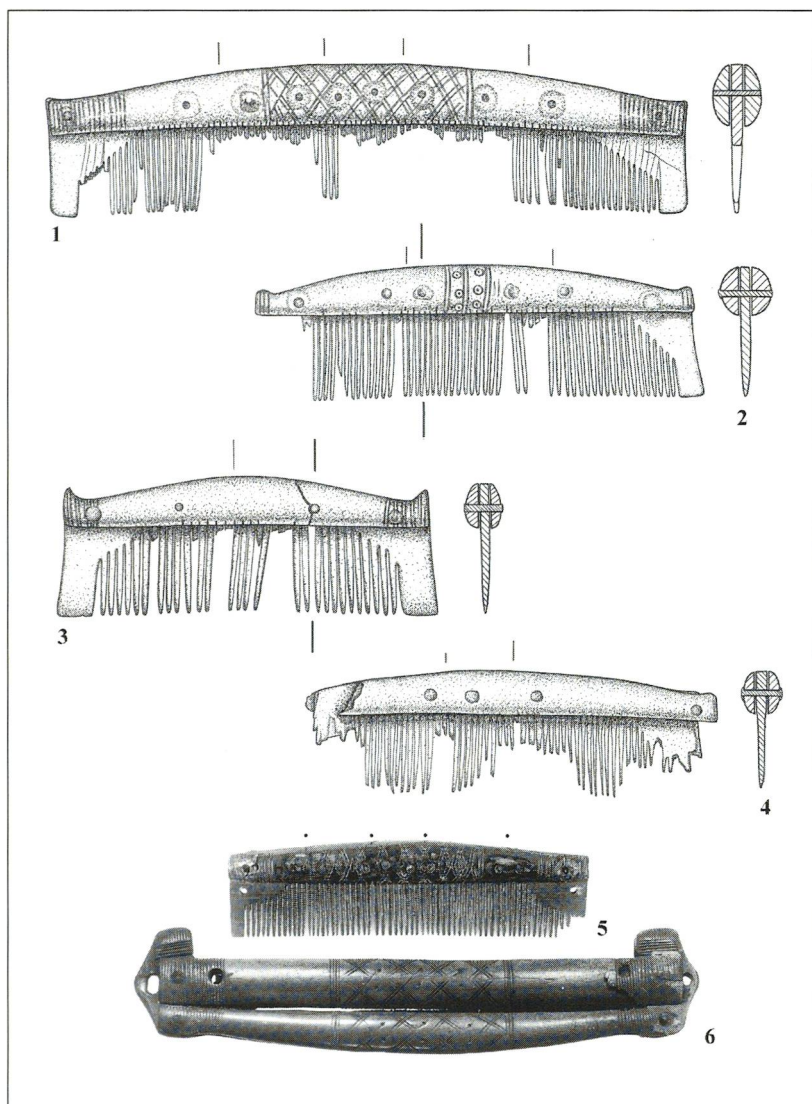


Fig. 2: Common types of the 10th to early 11th century single-sided composite combs from Novgorod (photos by S. Bocharov and S. Orlov; drawings by S. Shapovalova).

Non-cased combs dominated in the earliest decades (mid 10th century period). Using K.Ambrosiani's classification, there can be distinguished large 'A' combs (width over 160 mm) with shallow side plates (K. Ambrosiani's index of relative depth < 3.5) and small 'B' combs with deep plano-convex side plates (index K.A. < 3.5) (Ambrosiani 1981, 61) (Fig. 1:3, 4; 2:1–4). 'A' combs (three specimens in the Novgorod assemblage) feature evenly spaced iron rivets accurately placed to minimise intrusiveness to border-lined decorations with no apparent concern whether rivets are passing through the billet or at the junction of the billets (e. g. Fig. 1, 1: 3).

The vast majority of non-cased early combs at Novgorod are smaller 'B' which have either little (terminal decoration with vertical lines) or no decoration (Ambrosiani's B2 and B4 types) are most numerous (e. g. Fig. 2,3; 2,4), 'eared'

variants being more common (Fig. 2,3). A few combs feature decorations similar to Birka B3 types with groups of ring-and-dot eyelets.

Other types with terminal and central decorative zones defined by the vertical lines and filled with cross-hatching lines (grid patterns and saltires) (B1 Birka type) are less frequently encountered on non-cased combs (Fig. 2,1), but they are most common on cased specimens featuring cases with two pairs of contiguous side plates (Fig. 2,5; 2,6). The chronological distribution of the two main groups of cased combs shows that cases with two pairs of contiguous side plates are older than the others, the peak of their occurrence in the cultural deposits of Novgorod being in the late 10th century (Table 3).

Copper alloy rivets are most common on the 10th to early 11th century cased and non-cased 'B' combs, however, there is a small group of iron-riveted combs among the oldest finds in the collection (Fig. 1,4). The most common riveting practice widely represented among the early class 1 combs enacts riveting billets at both ends. This riveting practice reveals a concern about the secure fastening of billets, rather than about even spacing of rivets or about disfigurement to the ornament. It has been demonstrated elsewhere (Smirnova 2002b) that there is a strong correlation between riveting systems and utilisation of certain antler raw materials. Riveting through the ends of billets is commonly encountered on the elk antler specimens featuring commonly two to three billets in the assembly. Dynamics of chronological changes in the use of antler raw material as revealed on the evidence of 269 identified specimens from dated contexts (Smirnova 2002b, Table 2), demonstrates that elk antler and red deer antler formed at certain stages the major parts in the utilised raw materials, the former being predominant amongst the 10th century specimens, the latter on the objects deriving from the 11th century layers.

The late 10th century marks a substantial increase in the use of cased combs which began to supersede non-cased types (Table 2). Combs from settlements do not reveal the sex of their owners, the material from graves excavated elsewhere, however, offers some evidence for the sex attributions. Thus at Birka, cases (i. e. parts of cased combs) are particularly associated with male graves (Ambrosiani 1981, 26; 27). It does make sense that

cases of composite construction providing a better protection for the teeth of combs when not in use were especially useful in a man's life full of hazards. Cased combs decorated with double bands of saltires positioned centrally in the area defined by vertical lines (B1,3 type) also reveal a close correlation with male graves at Birka. In Novgorod this type of cased combs was most common in the 10th century. It is reasonable to assume that other cased combs (once cases and one most common type of cased combs are associated with male graves) also belonged to men. Materials from other burial grounds (Shestovitsy (Blifeld 1977, 121; 172, Table VI, XI)), Timerevo (Fekhnner 1963, Fig. 8; 23,10) confirm the connection between cased combs and male graves.

Late 10th century also marks a noticeable shift towards the cased specimens which had cases with a single pair of side plates, which dominate amongst 11th century combs (Table 3). These should not be mixed up with non-cased and cased 'B' combs described above. The new designs are small combs (width > 160 mm) with shallow plano-convex (index K.A. 3.5) or rectangular cross-sectional side plates, relatively short teeth (ca. 50% of the comb height) and more elongated proportions, which feature a totally different tradition of comb-making in comparison to that of earlier predominant types (Fig. 3).

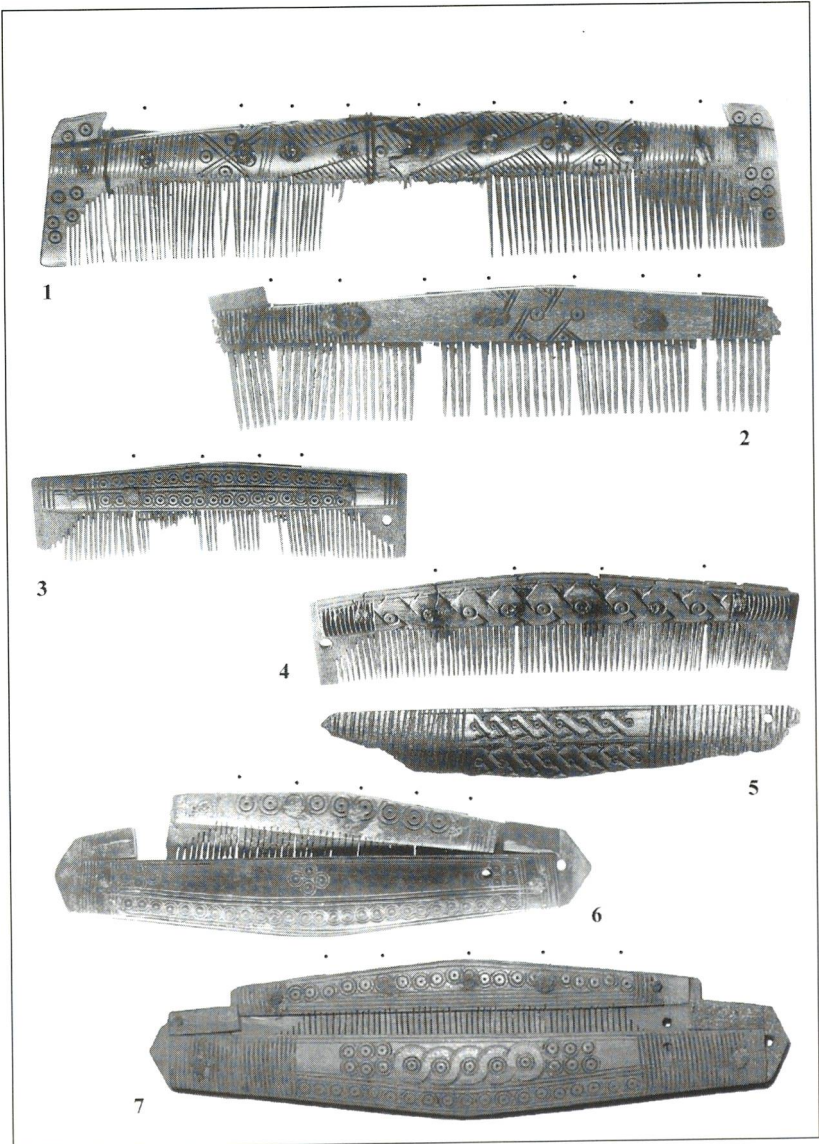
In contrast with the prevailing decorative patterns in the earliest period, arranged by means of vertical incisions segregating decorative zones, decorative schemes arranged horizontally along marginal lines are dominant, but with terminal vertical incisions persisting. The most common decorative motifs invariably incorporating marginal lines are groups of ring-and dot eyelets, combined with ring-and-dot bands (Fig. 3,3; 3,6; 3,7) or stylised interlace (Fig. 3,1; 3,2; 3,4; 3,5).

This decorative style most likely originated in the Southern Baltic (probably in Denmark, since the earliest examples come from Hedeby (Tempel 1969, Taf. 25; 26)). One can find numerous contemporary counterparts from the excavations in Århus (Tempel 1969), Lund (Persson 1976), Trelleborg (Tempel 1969), Hamburg (Tempel 1969), the Mecklenburg area (Lampe 1981), in Polish towns of Szczecin (Cnotliwy 1973), Wollin (Wilde 1953), Kolobrzeg and Gdansk (Hilczerówna 1961), as well as in Ostrov Lednicki (Kurnatovska 1995) and

Kruszwica (Cnotliwy 1993). Cased combs with marginal lines and ring-and-dot bands or stylised interlace decoration are known in Estonia (Luik 1998). Single finds of almost exact parallels to these combs are known in the British Isles as well, with combs from York (MacGregor et al. 1999, Fig. 867; 884; 889) and a comb case from Dublin (Dunlevy 1988, Fig. 12), however, they belong to the rare types there.

Cased combs with marginal lines and ring-and-dot bands, as well as those with stylised interlaced decoration, are widely distributed in the late 10th–11th century materials from urban centres in the west, north-west and north of Old Rus. They were uncovered in Be-loozero (Golubeva 1973), Pskov (unpublished material), Novogrudok (Gurevich 1981), Pinsk (Lysenko 1974), and Lukoml (Shtykhov 1978).

Fig. 3: Common types of the late 10th–11th century single-sided composite combs from Novgorod. (photos by S. Bocharov and S. Orlov).



Tables

Date	Class 1 combs		Class 2a combs		Class 2b combs		Σ
	A	B	A	B	A	B	
m. 10th C.	52	98.1	0	–	1	1.9	53
l. 10th C.	67	90.5	0	–	7	9.5	74
e. 11th C.	61	80.3	6	7.9	10	13.2	76
m. 11th C.	27	42.2	24	37.5	13	20.3	64
l. 11th C.	1	1.8	42	76.4	12	21.8	55
e. 12th C.	0	–	94	93.1	6	5.9	101
Total	208	49.2	166	39.2	49	11.6	423

Tab. 1: Chronological distribution of single-sided composite combs (class 1) and simple combs in skeletal materials (class 2a) and wood (class 2b) on the evidence from the Troitsky site, trenches I–XII (1973–2000). A: Number of Combs; B: % of a total of contemporary combs.

Date	Non-cased class 1 combs		Cased class 1 combs		Σ
	A	B	A*	B	
m. 10th C.	57	77.0	17	23.0	74
l. 10th C.	50	45.9	59	54.1	109
e. 11th C.	28	32.2	59	67.8	87
m. 11th C.	6	11.3	47	88.7	53
l. 11th C.	3	42.9	4	57.1	7
Total	144	43.6	186	56.4	330

*Tab. 2: Chronological distribution of non-cased and cased combs from early Novgorod. A: Non-cased class 1 combs; B: Cased class 1 combs. – * Seven complete sets are treated as single objects.*

Date	Cased class 1 combs with two pairs of contiguous side plates		Cased class 1 combs with one pair of side plates		Σ*
	A	B	A	B	
m. 10th C.	10	71.4	4	28.6	14
l. 10th C.	21	36.8	36	63.2	57
e. 11th C.	9	16.4	46	83.6	55
m. 11th C.	7	15.2	39	84.8	46
l. 11th C.	1	33.3	2	66.7	3
Total	48	27.4	127	72.6	175

*Tab. 3: Chronological distribution of cased combs from Novgorod. A: Number of Objects; B: % of a total of contemporary cased combs. – * Poorly preserved eleven cased specimens are omitted in this table.*

These objects are not unknown in the towns further down the Dnieper in Kiev (Karger 1958) and Voinskaia Greblia (Dovzhenok/Goncharov/Iura 1966) and further east in Timerevo settlement in the Upper Volga (Dubov 1982) and south-east at Belaya Vezha (formerly known as Sarkel, the main fortress of the Khazars on the Lower Don, which was captured by the Rus some time in the 960s) (Flerova 2001). It is likely that they indicate the presence of military milieu.

Eleventh century non-cased combs from Novgorod, which are much fewer than their cased counterparts, are mainly 'winged' combs of especially elongated proportions (Fig. 3:1; 2). Parallels are found in Schleswig (Ulbricht 1984), Lund (Persson 1976), Wollin (Cnotliwy 1970), Gdansk (Hilczzerovna 1961), Gniezno (Hensel 1960), Kruszwica (Cnotliwy 1993), and on the Isle of Usedom (Mecklenburg) (Lampe 1981).

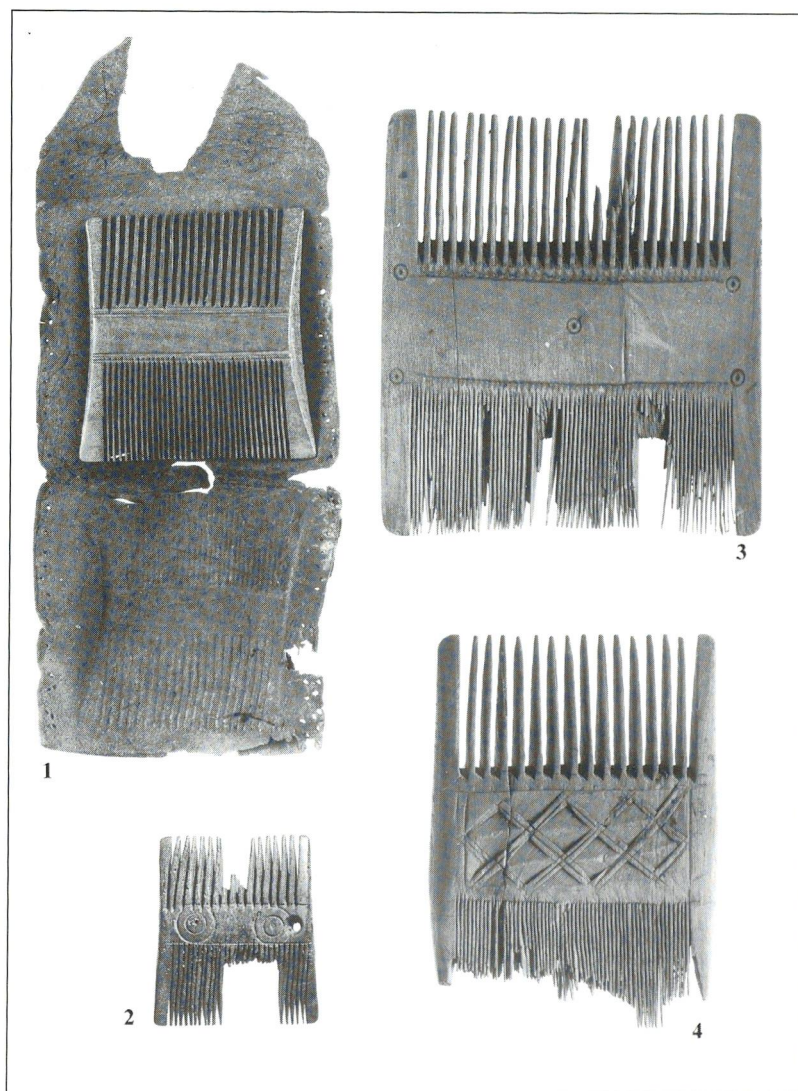
Contrasting to the system of riveting through the billets is a practice which can be seen on numerous combs appearing from the late 10th century. As a basic rule, iron rivets pass through both end plates; all the other billets may share one rivet between two, inserted either at every junction, or at every second junction (Fig. 3). Characteristically, the vast majority of these combs featuring commonly from five to six billets in the assembly, were identified as red deer antler (Smirnova 2002b).

The later fashion of riveting composite combs predominant on the 11th century combs from Novgorod can be named Baltic. In earlier times of 'the Northern European fraternity' it represents the most common Viking Age usage of rivets, originating probably in Frisia or the south-west Baltic region, but from around c. 900 it reveals itself with a marked consistency in the west of the Scandinavian world, in the British Isles and Southern Baltic (MacGregor et al. 1999; 1931; Tempel 1969, 66–68). Single-sided composite combs spatially are distributed unevenly within Novgorod (on the location of Novgorod sites within the town Ends see Brisbane/Gaimster 2002, x, Fig. 2). From the three oldest parts of Novgorod, namely the Nerevsky, Liudin and Slavensky Ends, only the former two demonstrate higher concentrations of combs as revealed through the comparison of indices of concentration per 100 sq.m unit of excavated area (Smirnova 2001a, section 3.4). Most striking is the very

low number of finds from the Slavensky End. There are only two combs found on the Trade side of the town in the 11th century deposits (Buyany and Fedorovsky sites). The materials from the Liudin End reveal the highest concentration of single-sided composite combs found in Novgorod, which is close to the degree of comb concentration in Staraja Ladoga.

The analysis of the comb concentrations within the excavated properties within the Troitsky site (Liudin End) has highlighted some interesting chronological patterns. The highest concentration of the earliest specimens of class 1 combs has been revealed on the properties Æ, È, P, K and E (we keep Cyrillic names of the properties) on both sides of Chernitsina Street to the west of Proboinaia Street (for the layout of the Troitsky and Nerevsky properties see Khoroshev 2001). In the 11th century deposits class 1 comb concentration remains higher

Fig. 4: Simple combs in boxwood (10th–11th century) and antler (11th century). (photos by S. Orlov).



than average at properties È, P and K. Properties Ì and M located further to the west from Proboinaia street also feature densities of combs above the average, the concentration of the combs at this stage, however, being at its highest at properties K and E to the south and west of property K.

In the Nerevsky site areas of properties A and Á in the north-east part of the excavated area, which in the 10th century belonged to the same property, the highest indices of concentration of single-sided composite combs of the earliest finds (10th century) are revealed. The density of the comb types common in the 11th century deposits, however, is at its highest at properties Ä, Å and Ê located to the west of Velikaia Street (on the layout of the Nerevsky properties see Kolchin 1989).

The distributional patterns of class 1 combs in Novgorod, the chronological restriction of these to the 10th to mid 11th century, and the alliance of the morphological features of these combs with the Balto-Scandinavian traditions of comb-making allows the conclusion that these objects came into town as personal belongings of the newcomers of Scandinavian and Southern Baltic descent (Varagians, as they were called in Rus) who appear to have been amongst the first dwellers of the town. To state this is at once to stir up controversy.

It is generally assumed in Soviet and Russian historiography that the Slavs of the Old Rus adopted single-sided composite combs from the peoples of the western part of Northern Europe (Scandinavians, Frisians) in the 8th–9th centuries, and by the late 9th–10th century these combs become commonly utilised and produced by the Eastern Slavonic peoples (Kondrateva 1995; Kondrateva 1997). This conclusion was made on the basis of the presence of the combs and debris of skeletal materials in a number of Russian towns and on the basis of the occurrence of the combs (which are believed to have been made in the nearest towns) in the burial mounds of Gnezdo and Sednevo (near Smolensk), Shestovitsy (near Kiev), Vladimir and Suzdal region and Iaroslavl Volga region (all referred to as rural sites) (Kondrateva 1997, 306; 307). The problem is, firstly, that waste elements from the towns referred to, were not necessarily comb-making waste, secondly, that the evidence for the manufacturing waste from the deposits earlier than the 12th century is pathetically

sparse and noticeable only in Staraia Ladoga (Davidan 1977), and, thirdly, that the so-called rural sites are precisely the burial grounds which, revealing the presence of Variagian men-at-arms, have acquired the name '*druzhi-na's mounts*' in archaeological literature.

The question of whether single-sided composite combs are indicative of their owners ethnic background needs some close investigation. Combs of class 1 are unknown on Slavonic settlements in the Novgorod region (Nosov 1990) or elsewhere (Liapushkin 1968; Sedov 1982). The Finno-Ugrians, who were supposedly among the medley of peoples who settled down in the area later known as Novgorod, used one-piece combs with an arched back and zoomorphic one-piece combs (Kondrateva 1981; Kondrateva 1986). Single-sided composite combs are, however, invariably present among the materials from the sites located along the main axes of trade in the lands to the east of the Baltic, which in the 9th–10th centuries lay south-eastwards (the Volga route to the Muslim world of the Middle East and Central Asia) and southwards (the Dnieper route to the Christian world of the East Mediterranean). Eleventh century combs occur almost exclusively in the urban contexts of Old Rus and reveal a striking similarity with their counterparts all over the Baltic.

The evidence from the analysis of manufacturing waste from Novgorod appears to confirm the assumption that single-sided composite combs were made outside the town. Among the notoriously small number of 82 antler debris pieces deriving from the 10th–11th century deposits of nearly 20,000 sq.m excavated area in the town elk antler dominates consistently throughout the period with 86%. The only small concentration of 12 antler off-cuts associated with single-sided composite comb making has been traced in the earliest context (dendrodate ca. 930s–950s) on property Ä in the Liudin End. It clearly demonstrates the itinerant mode of production, which can be judged from the small amount of elk antler comb-making debris and its spatial distribution in close proximity to one of the oldest dwellings in Novgorod with a life span of a maximum of 20 years.

There is no evidence for single-sided composite comb-making in Novgorod in the late 10th to mid 11th century. Combs found in the deposits of this period belong to cased types and

appear to be made more commonly in red deer antler (not available locally) and according to the Southern Baltic tradition of craftsmanship rather than the Eastern Scandinavian tradition revealed in earlier types. Southern Baltic links can be also traced throughout the stylistic analysis of the early simple combs in skeletal materials (Smirnova 2002a, section 4.3).

Discussion

The study of class 1 combs found in early Novgorod was aimed to try and see who were the people combing their hair and beards and whether these numerous objects scattered throughout the town and throughout the first few decades can shed any light on the social and political structure of early Novgorod. Throughout the whole academic debate in which artifactual evidence from the earliest combs has been virtually ignored, most scholars seem to agree on the following positions as to the precise status of early Novgorod, its social and political structure and the combination of ethnic groups:

The ethnic makeup of the Volkhov town was a mixture of Slavonic, Baltic, Scandinavian and Finno-Ugric elements, with the Slavs accounting for the majority of the population of Novgorod, the chieftains of Slavonic tribes forming the core of Novgorod aristocracy, the *boyars* (Yanin/Aleshkovsky 1971).

The Scandinavian component, although present constantly in the 10th–11th centuries was insignificant, being at its largest in the first half of the 11th century, when the transfer of the prince's residence from Rurik Gorodishche to Novgorod by Prince Iaroslav Vladimirovich (aka Iaroslav the Wise) turns Novgorod into the Princely town (Nosov 1990; Sedov 1999). Objects of Scandinavian origin (mainly metal objects) in Novgorod are considered to be indications of occasional individual contacts of the town dwellers with the Western Baltic lands (Jansson 1999; Pokrovskaia 1999).

The Princely period in Novgorod is believed to begin in the early 11th century, when the prince's court was set up and the properties of members of the *druzhina* (personal retinue, men-at-arms) were laid out on the no man's lands by the Slavensky Hill on the Trade side of the town. Prior to that time, the power of the prince in the town was nominal, which ensured the leading position of local aristocrats who possessed the right to collect state reve-

nue. During the 11th to early 12th century, these special privileges of the Novgorod *boyars* enabled them to struggle successfully to reduce the power of princes nominated from Kiev to little more than that of a hired defence contractor (Sedov 1999; Yanin 2002b).

In relation to the earliest history of the town, where material evidence is notoriously sparse, the assemblage of hundreds of combs cannot remain unnoticed. The typological and distributional analysis of the corpus of combs from the earliest deposits of Novgorod, as well as other artifactual evidence, has led to conclusions, which are contradictory to almost all conventional beliefs.

Firstly, that the groups of Varangians (Scandinavians), men and women alike, appear to have been amongst the first people who settled down in the mid 10th century on the left bank of the river Volkhov within two main clusters of properties later known as the Liudin and Nerevsky Ends. These sites reveal a higher than average concentration of combs of class 1 in the town. Characteristically, typical Scandinavian adornments such as an iron neck-ring made from a square-section rod twisted in several places (1), 'Thor hammer' pendants (3) and tortoise shell-shaped brooches of Petersen's type 51k (2) derive from the Nerevsky and Troitsky excavations (Pokrovskaia 1999).

Secondly, that early dwellers left few signs of activities other than straight forward arable farming, fishing and hunting, as well as trading honoured by princely credit. Three hoards of dirhams have been found on properties with the highest concentrations of early combs (Nerevsky Á and Ä and Lyudin Ä) (Yanina 1956; Yanina 1963; Gaidukov et al. 2000). It is probable that some of those first dwellers rendered certain services for a number of princes. A bone trapezoid pendant bearing princes' emblems on both sides was found in mid-late 10th century deposits on property Ä in the Liudin End (Yanin 1982, Fig. 8). Similar objects (normally metal, more often billon) showing emblems of the Rus princes (variants on the motifs of prongs or tridents) have been long recognised as being *tamgas*, symbol indicating that the holder acted with the authority of the prince (Molchanov 1986; Beletsky 1997).

Thirdly, that the late 10th century and the first two decades of the 11th century (in the reign of Princes Vladimir Sviatoslavich and Iaroslav Vladimirovich (the Wise)) were marked by the

growing numbers of cased combs, which for this period are believed to be a truly men's type. This appears to be indicative of the presence of the Varagian men-at-arms, who constituted the largest groups of the mercenaries in the *druzhinas* of both princes of Novgorod (Birnbaum 1978; Melnikova 1978). Prince Iaroslav Vladimirovich (d. 1054) was the last of the Russian princes who widely used Scandinavian mercenaries and, being born to a Swedish mother, promoted political and trade contacts with Scandinavian and Southern Baltic kingdoms. The Novgorod period in Iaroslav's life is considered to have lasted till 1026, but it is generally believed that even later (up until the death of his brother Mstislav Vladimirovich in 1036) he spent a fair amount of time in Novgorod, playing a host to many noble Scandinavians and technically, till his last days, Iaroslav remained the Prince of Kiev and Novgorod. It is hardly surprising, therefore, that single-sided composite combs from the deposits of post Iaroslav's time became so rare and are practically unknown in the last decades of the 11th century.

Later types of combs quite indicative of military milieu are clustered in the properties laid out next to the oldest group of properties. In the Liudin End they are most common on properties K and E (to the south and to the west of property K), as well as on properties M and Ī lying to the west of properties Ā, P and È. It is worth noting here that the only hoard of Western European and Byzantine silver coins in Novgorod was found in the deposits of the first half of the 11th century on property Ī. The hoard consists of 29 German denarii, 21 English pennies, seven Scandinavian (Swedish) imitations of the coin designs of the Anglo-Saxon kings and two Byzantine miliaresons (Gaidukov/Yanin 1995).

In the Nerevsky End properties Ā, Ä, E, and È reveal the highest concentrations of class 1 combs in the late 10th to mid 11th centuries. It seems plausible that these properties were occupied by members of Princes Vladimir' and Iaroslav' Varagian *druzhina*. Hardly surprising, therefore, is the occurrence of both Nerevsky metal *tamgas* on properties È and Ā. The oldest of these metal trapezoid pendants bearing the symbol of Prince Vladimir Sviatoslavich and a scratched inscription consisting of five runic letters (unreadable) was uncovered from early 11th century deposits (construction layer 25, 1000s–1020s) on property Ā (Sedova 1981, 36, Fig. 11,1). The other metal *tamga* featuring

Prince Iaroslav's emblem on one side and the emblem of his brother Mstislav on the other side was found on property È in the construction layer 24 dated to 1020s–1050s (Sedova 1981, 36, Fig. 11,2).

That people of Scandinavian stock were present in the quarters of the St. Sophia's part of the town is also evidenced by the finds of bone featuring runic alphabet inscription in its Danish 10th–11th century variant (Makaev 1962) in the Nerevsky deposits of the turn of the 11th century, a cast bronze open-work scabbard chape deriving from Troitsky site late 10th to early 11th century (Eniosova 1994) and two 11th century hemispherical gaming pieces of walrus ivory (Smirnova 2001, Fig. 3) relating to the playing of native Scandinavian games such as *knefetafl* or *halatafl*. A unique lead seal of Iaroslav the Wise deriving from the early 11th century deposits on property È of Troitsky site (Yanin et al. 1995), constitutes a pointer to the residence of top officials who received documents sealed with the prince's mark in the Liudin End of the town. In striking contrast, there is no evidence for the presence of the Varagians in the period when they supposedly accompanied their sovereign and settled down by the Slavensky Hill, in and around the area known later as Iaroslav's court.

A question mark also hangs over the location of the prince's residence on the Trade side when analysing the chronological and spatial distribution in Novgorod of one highly exclusive category of wooden objects. These were wooden cylinders deriving mainly from the late 10th–11th century layers, which served as locks tying up sacks containing the state revenue. They were also used as 'tally-sticks', markers showing that the sack belonged to the prince, to the Church or to the tax-collector himself, who, in accordance with the *Ruskaia Pravda*, received a specific percentage of the sums he collected (Yanin 1982). *Ruskaia Pravda* was the first written code of civil law credited to Iaroslav the Wise. According to *Ruskaia Pravda* the largest part of the taxes went to the prince, a tenth part went to the Church ('tithe') and a share went to the tax collector himself. One can naturally expect the cylinders as indicators that the revenues were collected and brought to a certain place, to be found in and around the court of the prince's residence. From a total of 51 wooden cylinder locks uncovered in Novgorod only three were found on

the Trade side of the town. With one unprovenanced object, the remaining 47 cylinders were found on the St. Sophia's side, of which only three derived from the Nerevsky End. The bulk of finds (44 specimens) come from the Troitsky site in the Lyudin End, 40 examples (78% of all finds) deriving from property K adjoining the cross roads of Proboinaia and Chernitsina Streets from the south-west (Yanin 2001c).

Of all excavated properties of the town, only property K fulfills the requirements to claim a truly special status. It features a big area, rather unusual structures, such as an open paved area of 7 x 12 m in the centre of the yard, and an absolutely unique collection of finds from the early – mid 11th century deposits. These include a unique Psalter wax book (Yanin 2001b), a number of ornaments in gold and other precious metals, worked elephant ivory, eight silver denarii, a selection of objects with prince's marks including cylinder wooden seals. The property is also marked by high numbers of weapons (spears, arrows) and horse harness (bits, spurs) (Yanin et al. 1998; 1999; 2000; 2001). An outstanding collection of over a hundred birch bark documents from the late 11th to early 13th centuries (ten rare late 11th century documents forming a third of all known in the town from 11th century deposits) has produced the evidence for a special public status of this area, where at that time a joint court of the prince and *Posadnic* (the elected head of Novgorod) was located (Yanin 2002). The textual analysis of the birch-bark documents from the property has revealed the highest concentration of collective appeals, as well as an incomparable number of references to the Prince, *druzhina* and the Varagians (A. A. Zalizniak and A. A. Gippius, personal communication March 2001, Göttingen).

With the evidence from the analysis of the spatial distribution of the early to mid 11th century single-sided composite combs, the hypothesis that Iaroslav's residence was transferred from Riuric Gorodishche to the Liudin End of the town receives additional support. The Varagian members of the Prince's *druzhina* most likely occupied the neighbouring properties to the west of Proboinaia Street.

In connection with the theory outlined above is the question on the origin of Novgorod *boyars*, most of whom appear to have been connected with a few generations of the Rus princes. The whole institution of *posadnics*, the elected governors of Novgorod in the later period, were originally no more than trustworthy agents appointed by the prince and acting on behalf of the prince during his absence. Quite a few of the owners of large properties, always referred to as *boyar* properties in the Liudin and Nerevsky Ends, have revealed a Scandinavian origin on the evidence of the artifact distributional analysis.

In connection with these conclusions, two recent genealogical researches are of special interest. Molchanov (1997) has traced the ancestry of the Novgorod and Ladoga *posadnic's* clan, the Giuriatiniches-Rogoviches, back to Norwegian Earl Rognvald Ulfsson, kinsman of Princess Ingigerd, wife of Iaroslav (the Wise) and daughter of Swedish *könung* Olaf (Skotkonung). Earl Rognvald, who was also a brother-in-law of Olaf Tryggvason of Norway, was appointed in charge of Staraia Ladoga (Aldeigjuborg in Scandinavian sagas), which Ingigerd demanded as her dowry, and settled down in the north of Rus for good. Molchanov conventionally places the clan on the Trade side of the town, however, Gippius (2001) convincingly argues the existence of at least two related branches of Rognvald's heirs, the boyar clans of Miroslaviches and Mikhalkoviches to which over a half of all known Novgorod *boyars* belonged. Furthermore, Gippius places the location of the former clan around Dobrynja Street in the Liudin End, just north of the area excavated within the Troitsky site, and the latter clan in Pruskaia Street further to the north-west on the same side of the town (for location of medieval streets in Novgorod see Yanin 2001a, Abb. 5).

In the light of all this new evidence, the statement of the First Novgorod Chronicle (in its younger version) that 'the people of Novgorod are of Varagian stock to this very day', seems to be far more than the generally believed literary exaggeration (Birnbäum 1978, 20).

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