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"BURNING PELTS" – BROWN BEAR SKINS IN THE IRON AGE AND EARLY MEDIEVAL (1–1300 AD) BURIALS IN SOUTH-EASTERN FENNOSCANDIA

This paper deals with the use of brown bear (*Ursus arctos*) skins in the Iron Age and Early Medieval death rituals in south-eastern Fennoscandia. In this area, the practice of wrapping bodies in bear skins endured for over 1,000 years, starting in the Roman Iron Age in south-western Finland and ending with the Medieval Age inhumation burials in the Karelian Isthmus. The wrapping of bodies in predator skins is hypothesized by the numbers of 3rd phalanges (i.e. claws) which have been found in burials, especially in cremation cemeteries under level ground (400/600–1000 AD).

Firstly, the role of the bear was studied by analysing bear skin remains, specifically the 3rd phalanges and bear hairs, which have been found in burials, and secondly finds and their find contexts were analysed in terms of references made to them in Finno-Karelian Kalevala-metric poetry. The results stress the role of bear skins in constructing the identity of the deceased as a warrior and as an ancestor. The concept of a warrior as a predator is widely known among Eurasian populations. In south-eastern Fennoscandia the distribution and find contexts indicate that this ritual was adopted mainly from the Germanic cultural sphere.

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Introduction

The practice of using animal skins in funeral rites as coverings or shrouds was a worldwide phenomenon that lasted for millennia in Eurasia (e.g., Douny & Harris 2014; Harris 2014; Koryakova & Epimakhov 2007, 100). In Finland, this ritual could have been part of some Neolithic inhumation burials, where the shape of some grave pits suggests the use of skins as stretchers or wrappings (Äyräpää 1931; Torvinen 1979). The best preserved archaeological evidence was deposited in the Late Iron Age inhumation burials, where cow, bear, and especially cervid skins were commonly used to wrap the body (Kirkinen 2015). In the Iron Age cremation burials, the remains of predator claws have been interpreted to indicate the cremating of skins along with the bodies (e.g., Mäntylä-Asplund & Storå 2010, 62; Petré 1980; Schönfelder 1994).

In this paper, the Iron Age tradition of cremating brown bear (*Ursus arctos*) skins has been analysed by combining archaeological data with folklore evidence and ethnographical sources. The aim is to identify the origins and meaning of the phenomenon. The studied zooarchaeological evidence, i.e. the 3rd phalanges and hairs of a bear, comes from the major Iron Age cemetery areas in south-eastern Fennoscandia: southern, eastern, and western Finland, and the Karelian Isthmus. In this area, the practice of wrapping bodies in bear skins extended over a 1,000-year period, starting in the Roman Iron Age in south-western Finland (Kivikoski 1965) and ending with the Medieval Age inhumation burials in the east (Kirkinen 2015).

The present archaeological material stresses the use of bear skins in Europe that originated in Scandinavia and in Central Europe, specifically in Germany and the Czech Republic in the east to the British Isles in the west, and which practice hypothetically spread first to the western parts of Finland from Scandinavia (Møhl 1978; Petré 1980; Schönfelder 1994; Gustavsson et al. 2014; for the Estonian material, see Jonuks 2009, 281). The wrapping of bodies in bear skins was, however, a wider phenomenon, as skin remains have been discovered, for instance, from North American shamanic burials (Russell 2012, 140, and cited literature) and from historical Sámi cemeteries (Holmberg 1915, 16; Korhonen 1982b, 109). The burning of skins, in any case, represented a new practice in an area in which the roots of the human-bear relationship were located in circumpolar bear ceremonialism. In this ancient tradition, the bear was considered to be the King of the Forest, a holy animal, and a kind of human being, the killing of which was strictly ritualized (Krohn 1915/2008, 146 ff.; Hallowell 1926; Pentikäinen 2007; Sarmela 2009, 80 ff.; Siikala 2012, 380 f.).

During the 1980s and 1990s, the presence of bear skin remains was first associated with wealth and status, as phalanges have been found, for example, in the Kings' mound in Uppsala, Sweden (Petré 1980, 8 f.), in the princely tomb near Varpelev on southern Seeland, Denmark, and in Welwyn Garden City, one of the wealthiest Iron Age burials found in Britain (Powers 1967; Schönfelder 1994, 217). Moreover, Bo Petré (1980) identified bear skins as a manifestation of the fur trade, based on the correlation between phalanges and continental imports, for example Roman vessels (see, e.g., Schönfelder 1994, 222, 224).

In recent Scandinavian research, the analysis of osteological data in dialogue with Old Norse mythologies has promoted the understanding of animals' roles in pre-Christian ritual practices (e.g., Andrén 2005; 2011; Andrén et al. 2006; Jennbert 2006; 2011). In this context, the remains of bear skins were linked to *berserkers* (etymologically *ber*, bear and *serker*, skin or clothe[1]), i.e. legendary soldiers who were dressed in bear skins. The bear was thus associated with the battlefield and martial elite identity, and with the predatory deity Odin, who could change his appearance into that of an animal (Ström 1980; Price 2002, 366 ff.; Gräslund 2006, 125; Pluskowski 2006, 120 f.; Back Danielsson 2007, 42 f.; Pentikäinen 2007, 24 f.; Wamers 2009; Hedeager 2011, 91 ff.).

[1] For other explanations, see Price 2002, 366.

In this paper, the role of bear skins in the Finno-Karelian cultural sphere is analysed by studying the zoo-archaeological assemblages[2] and by comparing the results with epic sources, such as the Kalevala-metric poetry that presumably incorporates the legacies of pre-Christian rituals and mythology. The work relies on animistic theory, in which the ritual use of animal skins has been interpreted to indicate the transforming identities between human and non-human (for animistic theory, see Harvey 2005; see also, Conneller 2004; Back Danielsson 2007; Willerslev 2007; Hedeager 2011, 82 ff.). This study is a part of the author's PhD project, which focuses on the use of animal skins as representatives of wild animals and wildness in Iron Age Fennoscandia.

In the following, the material remains that reflect the use of bear skins in Iron Age death rituals are investigated. The focus is on the 3rd phalanges found in cremation burials, which indicate the cremating of skins along with the bodies. In the second section, the references in Kalevala-metric poetry to this more than 1,000-year tradition are hypothesized. Finally, the use of animal skins has been interpreted by animistic theory, in which the ritual use of animal skins has been interpreted to indicate the transforming identities between human and non-human.

Bear skin remains in Iron Age contexts

Skinning and disarticulation of 3rd phalanges

In ethnographic sources, bears' canine teeth, claws, penis bones, nose rings, and entire feet were commonly reported to have been used for healing, for protecting cattle from predators, and for sharing the bears' strength and senses (Schwindt 1898, 9; Krohn 1915/2008, 150; Price 2002, 268 ff.; Pentikäinen 2007, 114 ff.; Siikala 2008, 175; Jennbert 2011, 111; see also Kairikko 1981, 166). In archaeological contexts, bear claws worn as pendants have been found for example in Rikala cemetery in SW Finland (see also Kivikoski 1965; Mäntylä-Asplund & Storå 2010, 62). The remains of a bear paw in the Myllymäki Middle Iron Age stone construction (Sarkamo 1970; 1984; see also Muhonen 2008, 297), and the two claws from a possible charm pouch in the Tursiannotko-Pirkkalankylä house remains (Bläuer 2013, 7 f.), can, according to their contexts, be hypothesized as building offerings (see, e.g., Herva & Ylimaunu 2009; Hukantaival 2007; Jennbert 2011, 92 f.; Russell 2012, 79 ff.).

The idea of interpreting the predator 3rd phalanges (Fig. 1) as remains of skins is based on the fact that, even today, especially when talking about bears and lynxes, the impressive claws are left attached to the skins (e.g., Andersson & Paulsson 1993, 92 ff.; Järvinen 1950, 190; Kairikko 1981, 161 f.). See also Fig. 2. This theory is supported by the evidence from some Swedish and Norwegian inhumation graves, in which the distribution of bear phalanges indicates the existence

[2] This study excludes the artefacts related to the bear cult in Finland, i.e. the bear tooth or phalanx used as pendants, as well as the bronze bear canine imitations (see Asplund 2005; Kivikoski 1965; Kivisalo 2008).

Fig. 1. An x-ray of a Khanty bear claw amulet (FU 3904: 837) from Siberia. The 3rd phalanx is seen in white, and the keratin claw can be seen around the phalanx in light grey. Photo: Conservation laboratory, the National Museum of Finland.

Fig. 2. The practice of leaving claws in skins can be observed also in ethnographic collections. An x-ray of an East Karelian skinned bear paw (SU 4986: 5) shows that the skin was separated from the paw with the 3rd phalanges attached to it. Photo: Conservation laboratory, the National Museum of Finland.

of a skin under the body (Petré 1980, 6 f., 11). In practice, the skinning procedure varies from species to species, mostly depending on the animal's size and skin quality and on the intended use of the skin (Suomen turkiseläinten kasvattajien liitto ry. 1983; Andersson & Paulsson 1993; Eskelinen & Franck 2011; see also Schönfelder 1994, 222, 224). In this process, the only reason for leaving the claws attached to the skins would be purely aesthetic or ritual, as the skinning and processing of pelts would be much easier without the claws (pers. comm. J. Eskelinen).

In archaeological assemblages, the absence of 2nd phalanges can be hypothesized to indicate a difference between Iron Age and present-day skinning techniques. According to modern skin processing textbooks (e.g., Andersson & Paulsson 1993, 93; Kairikko 1981, 162), the predator skin should be separated from the paw by cutting the 2nd phalanx in half and by leaving both the 3rd phalanx and the distal end of the 2nd phalanx attached to the skin (see Fig. 3). This kind of skin processing might have been practiced in Mikkeli Valkola, an eastern Finnish settlement site, where the proximal end of the 1st phalanx (Fig. 4)

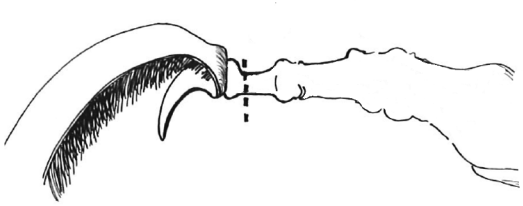

Fig. 3. In a textbook for skinning, the processing of a bear paw consists of the cutting of the 2nd phalanx so that only the outermost part of it will stay in a pelt (according to Andersson & Paulsson 1993, 93).

Fig. 4. 1st phalanx, the proximal end, found in the Early Medieval settlement site in Valkola, eastern Finland (right) and a modern bear 1st phalanx (left). Compare the cutting of the ancient bone with Fig. 2 that shows the processing of bear nail bones in the skinning process. Photo by Tuija Kirkinen.

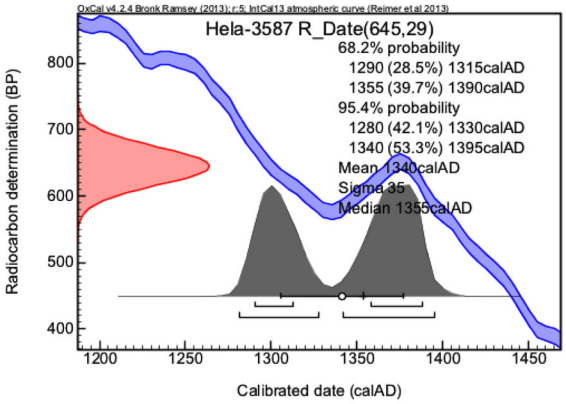

Fig. 5. The AMS-dating (Hela-3587) of a 1st phalanx from Valkola, eastern Finland.

probably indicates the cutting of the bone during skinning. This bone fragment was AMS-dated to 1280–1395 cal AD (Hela-3587; Fig. 5), thus being younger than the bones found in the cremation cemeteries.

Cremated bear skins

The osteological research material used in this study consists of bear phalanges which have been identified in the southern, western, and eastern Finnish Iron Age and Early Medieval burials (1–1300 AD; see Fig. 6). The data was collected from unpublished osteological reports in the Osteological Archive and Database, University of Helsinki, and the Archaeological Heritage Database of the National Board of Antiquities, and supplemented by excavation reports and literature. This material must be understood as a sample of the total number of bear bones in antiquarian collections, as only a minor part of the osteological assemblages have been analysed thus far. For this research, all the available phalanges were investigated, and one new radiocarbon dating was made (Hela-3587).

As a result, a total of 161[3] 3rd phalanges have been identified from 22 cremation cemeteries (see Table 1). The find material consisted of burned phalanges, or their proximal parts, as the fragile distal ends have often been fragmented by fire (see Fig. 7). The majority of the sites (86%) were so-called cremation cemeteries under level ground (400/600–1000 AD).[4] This supposedly indigenous cemetery type can be characterized as including both collective and individual cremations,

[3] In one bear skin the total number of claws is 20.

[4] According to A. Wessman (2010, 19, 34), cremation cemeteries under level ground (Fi. *polttokenttäkalmisto*) have been found in southern Finland, and in the neighboring countries in Estonia, Latvia, the Karelian Isthmus, and possibly also in central Sweden.

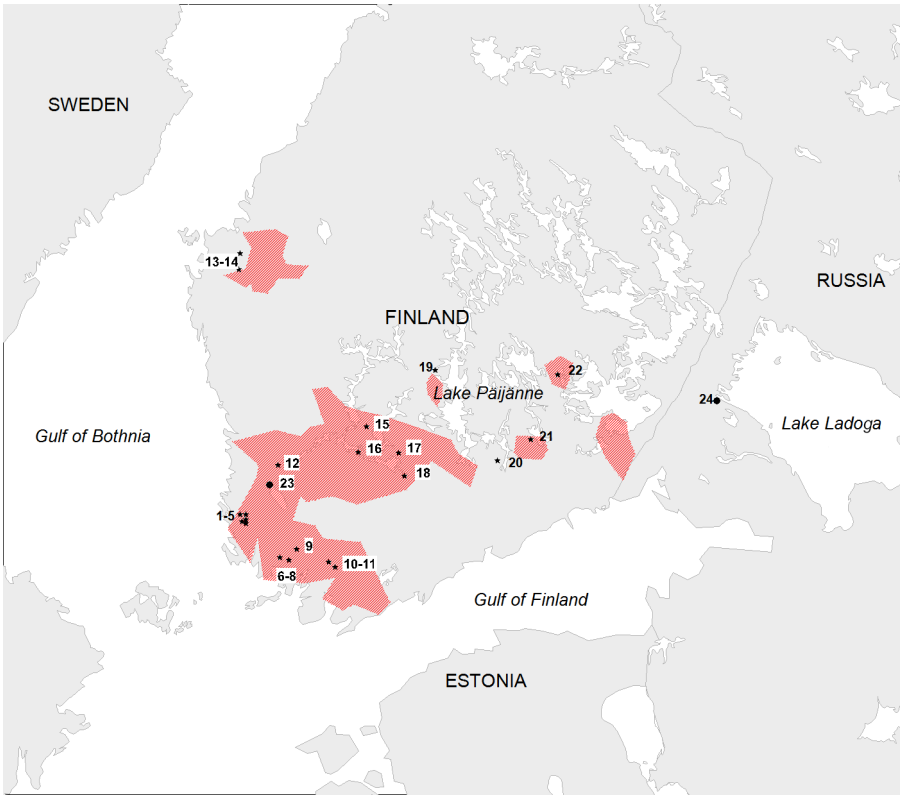

Fig. 6. The distribution of Iron Age sites with bear skin remains in Finland. ● = inhumation burials with bear hairs, * = cremation burials with bear phalanges. The major Iron Age cemetery area is marked with diagonal hatching according to Wessman (2010, 30). 1 Uusikaupunki Kalmumäki, 2 Laitila Vainionmäki A, 3 Laitila Vainionmäki B, 4 Laitila Kylämäki, 5 Laitila Rukoushuone-Kansakoulunmäki, 6 Turku Kärsämäki, 7 Turku Ristimäki, 8 Raisio Pappilanmäki, 9 Lieto Merola, 10 Salo Isoriihenmäki, 11 Salo Rikala, 12 Kokemäki Käräjämäki, 13 Laihia Mujanvainio, 14 Vaasa Kaavontönkkä, 15 Tampere Vilusenharju, 16 Lempäälä Päivääniemi, 17 Hämeenlinna Kalomäki, 18 Hämeenlinna Riihimäki, 19 Jämsä Hiidenmäki, 20 Nastola Skinnari, 21 Kouvola Pukkisaari, 22 Mikkeli Latokallio, 23 Eura Luistari, 24 Kaukola Kekomäki.

with no visible structures above ground (for the definition see Wessman 2010, 19–24 , 34). In the previous research on cremation cemeteries under level ground, the focus has been on individual as well as collective weapon graves which, together with horse gear and boat remains, have been interpreted as indicating a warrior cult and power (see Pihlman 1990; Raninen 2007; 2009b; Salmo 1938, 308 ff.; 1941; Schauman-Lönnqvist 1996a; 1996b; 1999; Wickholm & Raninen 2006; Wessman 2010, 62 ff.). More recent osteological analyses have, however, showed that an analysis based solely on artefacts does not provide an adequate explanation of the complexity of this burial tradition (see, e.g., Mäntylä-Asplund & Storå 2010; Wessman 2009, 31).

Table 1. *Ursus arctos* bones found in the Iron Age sites in the southern half of Finland. NM = The National Museum of Finland

Site	Function			Catalogue id [NM]	Anatomical part	No.	^{14}C-date	Analyst
	Dwelling site	Cremation cemetery	Inhumation cemetery					
Hattula Myllymäki	x			17291:941	phalanx 1 and II, prox fr	5		Kurtén, B. 1967, see Sarkamo 1970, 41
Hämeenlinna Kalomäki 2		x		?	phalanx III, indet	?		Lahtiperä 1975
Hämeenlinna Riihimäki	?	x		30304:459	phalanx III, prox fr	1		Söderholm, N. 1998
				30304:1387	phalanx III, prox fr	1		
Hämeenlinna Varikonniemi	x			23703:2086/2087	phalanx III, fr indet	1		From, S. & Jernvall, J. 1989
Janakkala Virala	x			26065:2259	calcaneum, dex	1		Nummela, S. 1991
Jämsä Hiidenmäki		x		33293:5	phalanx III	1		Söderholm, N. 2002
				33293:14	phalanx III, prox fr	1		
				33293:19	phalanx III, prox fr	1		
				33293:23	phalanx III, prox fr and phalanx III, dist fr	2		
				33293:34	phalanx III, prox fr	1		
				33293:36	phalanx III	1		
				33293:88	phalanx III, prox fr	2		
				33293:94, 111	phalanx III, fr	1		
				33293:116	phalanx III, prox fr	1		
				33293:126	phalanx III, prox fr	1		
				33293:127	phalanx III, prox fr	1		
				33293:131	phalanx III, prox fr	1		
Kokemäki Käräjämäki		x		32705:33	phalanx III, prox fr	1		Mannermaa, K. 2001
				32705:54	phalanx III, prox fr	2		
				32705:112	phalanx III, prox fr	1		
				32705:260	phalanx III, prox fr	1		
				32705:276	phalanx III, prox fr	2		
Kouvola Pukkisaari		x		30871:80	phalanx III (1), phalanx III, prox fr (1), and phalanx III, fr indet (3)	5		Salo, K. 2005
				29097:497	phalanx III, prox fr	1		
				29097:544	phalanx III, prox fr (4) and phalanx III, fr indet (3)	7		

Table 1. *Continued*

Site	Function			Catalogue id [NM]	Anatomical part	No.	^{14}C-date	Analyst
	Dwelling site	Cremation cemetery	Inhumation cemetery					
Laihia Mujanvainio		x		10856:18	phalanx III, prox fr	1		Nurminen, K. 2013
				10621:35	phalanx III, prox fr (1), phalanx III, fr indet (3)	4		
Laitila Kylämäki		x		?	phalanx III, indet	5		
Laitila Rukoushuone-Kansakoulunmäki		x		?	phalanx III, indet	?		Lahtiperä 1975
Laitila Vainionmäki A		x		27777:458	phalanx III	1		Formisto 1996
				27777:415	phalanx III	1		
				24389:213	phalanx III	1		
				see Formisto 1996, 84	phalanx III, indet	8		
Laitila Vainionmäki B		x		34726:150	phalanx III, prox fr	1		Salo, K. 2005
Lempäälä Päivääniemi		x		23749:139	phalanx III	1		Formisto, T. 1987
				23749:141	phalanx III, prox fr	2		
				23749:142	phalanx III, prox fr	1		
Lieto Merola		x		?	phalanx III, indet	?		Lahtiperä 1975
Mikkeli Latokallio		x		11070:34	phalanx III	1		Ukkonen, P. 1993
				11070:60	phalanx III, prox fr	1		
Mikkeli Valkola	x			14074:32	phalanx I, prox fr	1	1280-1395 cal AD (Hela-3587)	Ukkonen, P. 1993; Mannermaa, K. 2011
				14074:32	dens, I2 maxillare dex	1		
Nastola Skinnari		x		31607:22	phalanx III, prox fr	1		Formisto, T. 2002
				31607:45	phalanx III, prox fr	1		
Pirkkala Tursiannotko	x			39258:?	phalanx III, phalanx III, fr indet	2		Bläuer, A. 2013
				39258:?	(costa)	1		
				39258:227	phalanx III (artefact)	2		Bläuer, A. 2013
Raisio Mullin Eduspelto	x			TYA 642:2693b	dens, M2 mandibula	2		Tupala 1999, 50
				TYA 642:1674	metatarsus III	1		
Raisio Pappilanmäki		x		?	phalanx III, indet	?		Lahtiperä 1975
Salo Isoriihenmäki		x		18837:31	phalanx III, prox fr	2		Fortelius, M. 1980
				18837:273	phalanx III, prox fr	1		
				18837:562	phalanx III, fr indet	1		

Continued overleaf

Table 1. *Continued*

Site	Function			Catalogue id [NM]	Anatomical part	No.	^{14}C-date	Analyst
	Dwelling site	Cremation cemetery	Inhumation cemetery					
Salo Rikala		x		TYA 105	phalanx III, indet (19), phalanx III (artefact)	20	430-620 cal AD (Ua-36963)	Mäntylä-Asplund & Storå 2010
Sysmä Ihananiemi	x	?		32291:540	dens, C mandibula dex	1		Mannermaa, K. 2002
Tampere Vilusenharju		x	x	18556:95	phalanx III, prox fr	1		Lahtiperä 1978
				18556:112	phalanx III, prox fr	1		
				18556:125	phalanx III, prox fr	1		
				18556:162	phalanx III, prox fr	2		
				18556:129	phalanx III	1		
				18556:131	phalanx III, prox fr and phalanx III, fr	2		
				18556:169	phalanx III, prox fr	1		
				18556:135	phalanx III and phalanx III, prox fr	2		
				18556:159	phalanx III (2) and phalanx III, prox fr (2)	4		
				18556:188	phalanx III (3) and phalanx III, prox fr (4)	7		
				18556:196	phalanx III, prox fr	1		
				18556:218	phalanx III, prox fr	1		
				18556:154, see Lahtiperä 1978, 10, table 1	phalanx III, prox fr	1		
					phalanx III, indet	29		
Turku Ristimäki		x		?	phalanx III, indet	?		Lahtiperä 1975
Turku Kärsämäki		x		?	phalanx III, indet	5		Kivikoski 1965, 27
Uusikaupunki Kalmumäki		x		?	phalanx III	?		Lahtiperä, P. 1975
Vaasa Kaavontönkkä		x		9520:26	phalanx III, prox fr	3		Nurminen, K. 2013
				9520:37	phalanx III, prox fr	2		
				9520:63b	phalanx III	1		780-970 cal AD (Beta 358440)

In general, the earliest cemeteries under level ground in Finland date to the Migration period, and the latest ones to the Early Medieval Age, with most of them being dated to 600–1000 AD (Wessman 2010, 34). The bear-phalange finds, in fact, cover this time span, appearing as a wave from western Finland to the eastern parts of Finland. Thus far the earliest phalanges in Finland have been found at the Roman Iron Age Turku (Maaria) Kärsämäki cremation cemetery (Kivikoski 1965, 27) in south-western Finland. These so-called Kärsämäki-type cemeteries have been considered trailblazers for the Finnish weapon-burial tradition and thus an antecedent of the cremation cemeteries under level ground (Wickholm & Raninen 2006, 154; see also Pihlman 1990, 267 ff.). The exact dating of the use of bear skins in Kärsämäki, as well as in most of the other sites, is difficult to estimate, as only single bear bones have been radiocarbon-dated thus far. From the cemeteries, the 3rd phalanges have been radiocarbon dated only at Salo Rikala, in south-western Finland (430–620 cal AD [Ua-36963]; Mäntylä-Asplund & Storå 2010, 62 f.) and at Vaasa Kaavontönkkä, in western Finland (780–970 cal AD [Beta 358440]; Koivisto et al. [forthcoming]). In both cases, the results challenged the datings made solely on the basis of artefact typology. For the geographical distribution of finds, see Fig. 6.

Fig. 7. Burned and partly fragmented 3rd phalanges from Kaavontönkkä, western Finland. Photo by Tuija Kirkinen.

Before making any conclusions on the basis of the above-presented finds, the taphonomy of bones and the resulting source-critical problems must be taken into consideration. First, the handling of bear bones at Iron Age sites in general, and at the cremation cemeteries in particular, is of interest in estimating the accumulation of data. At the cremation cemeteries under level ground, the loss of osteological material, concluded on the exiguity of human bones, is due to the practice of separating the pyre site from the burial field. Thus, the find material from cemeteries consists of bones and artefacts which have been intentionally collected from the pyre site, while the rest of the material was left *in situ* (Wessman 2010, 49). So, it can reasonably be assumed that some claw remains, at least the fragmented ones, were left at the pyre site. This theory is supported

by the trial excavation at the pyre site at Jämsä Hiidenmäki, where a total of 14 phalanges were found (Vanhatalo 2008).

As a large mammal, the bones of a bear are also large, and they tend to have better chances of surviving in archaeological assemblages than smaller animal bones. However, the burnt phalanges and their fragments are only about 0.5–2 cm in size, and their recovery correlates with the use of sieving techniques. This, in turn, causes problems when analysing the results obtained in excavations where the sieving has been inadequate. On the other hand, phalanges themselves are easy to recognize in osteological assemblages even without osteological expertise, so they tend to be noticed at the excavations.

Finally, as in the cremation cemeteries under level ground most burials are collective by nature, and the burned bones and artefacts were scattered between the stones, the connection between phalanges and, for instance, a particular deceased individual's wealth, status, or gender is hard to prove. Even the find clusters of bones and artefacts, which have been traditionally interpreted as individual burials, need to be reconsidered. An example of this kind of problem comes from the Rikala cemetery, in which the find cluster of a "female burial" consisted, according to osteological analysis, of only sheep/goat bones and no human bones at all (Mäntylä-Asplund & Storå 2010, 60). All in all, the analysis of the accumulation of finds would need a detailed osteological study and dating of finds.

Bear hairs in the Late Iron Age inhumation burials

In Finland and the Karelian Isthmus, the remains of numerous animal skins and furs have been recovered from Late Iron Age (800–1300 AD) inhumation burials, in which organic material was preserved especially when attached to metal artefacts. The problem in this area for the preservation of furs and organic materials in general is the acidic condition (pH < 5) of most Finnish soils, which weakens the skins' collagens chemically (Hyyppä et al. 1990; Arponen 2008). Keratine hairs, however, endure acidic conditions better than, for example, cellulose based plant fibers (Hurcombe 2014, 92 f.; see also Bertrand et al. 2014).

In 2014–2015, animal hairs from 110 graves in 22 cemeteries were sampled and identified by the author (Kirkinen 2015). Fibers were identified with optical microscopes (Univ. of Helsinki, Dept. of Archaeology, and Aalto University, Nanomicroscopy Center) by the morphology of their longitudinal hair shafts. The key features for identification were the diameter of the hair, the shape of the root section, the structures of the medulla and cuticular scales, the width of the cortex, the presence of pigment granules, and the overall coloring of the hair (see Goodway 1987). The identification of fibers was based on the identification keys from Appleyard (1978), Teerink (2003), and Furskin Co (2011), and on website materials (Alaska Fur ID Project [not dated]). The reference material collected at the Finnish Museum of Natural History, University of Helsinki, was vital to the identification of Fennoscandian mammals.

In this material, about a third of the studied bodies were wrapped in large animal skins, mostly of cervid skins. Bear hairs were identified in only two graves: in Luistari (grave 377), western Finland, and in Kekomäki (grave 1), the Karelian Isthmus. Because of the poor preservation of bear skins, it is difficult to define whether the hairs originated from clothes or from wrappings. No remains of claws were found in these graves, which, however, might be due to the decaying of unburned bone in the acidic soils of Finland. With reference to clothes, all information about the uses of bear skins comes solely from historical sources. In general, bear skins were allegedly used for mittens, capes and for sled clothing, as the harshness of the skin hindered its use for clothes (Itkonen 1948a, 339; Järvinen 1950, 189 f.; Pylkkänen 1955, 96; 1970, 107).

In the following section, Finno-Karelian Kalevala-metric poetry is examined for references to the ritual use of bear skin. Special attention is paid to poems that literally refer to a burning pelt or a skin (Fi. *palava turkki*). First, the basic information on Kalevala-metric poetry as a source for the ancient bear cult will be presented.

"Burning pelts" in traditional Kalevala-metric poetry: wording the transforming identities between bears and humans

Finno-Karelian Kalevala-metric poetry

Finnish traditional Kalevala-metric poetry (*Suomen kansan vanhat runot* [*SKVR*], in English 'The Ancient Poems of the Finnish People'), widely known as Kalevalaic or Kalevala-metric poetry[5] after the national epic of *The Kalevala* (Lönnrot 1835), consists of 89,250 texts collected during the 18th–20th centuries. This originally oral poetic tradition has been common to almost all Balto-Finnic peoples. During the 1990s, the poems were digitized and published in a database (SKVR-database) by Suomalaisen Kirjallisuuden Seura (SKS, the Finnish Literature Society) (e.g., Saarinen 2013). In this research, the database was the foremost resource for searching and categorizing the data.

The origins and dating of the poems have been discussed since the publication of the *Kalevala.* As a result, the *long durée* linkages between language and the central elements of pre-Christian mythology have been recognized (e.g., Frog 2014; Siikala 1992, 29 ff.; 2012, 422–474). The oldest elements, such as the bear myth, have been connected to circumpolar hunting populations, and these verses hypothetically date back to the Stone Age. The latest ones, in turn, depict historical events from the Christian era (Siikala 1992, 272, 296 f.; 2012, 370, 381, 428–462; see also Conneller 2011, 365 f.).

The comparing of 19th century oral tradition with archaeological evidence which was deposited hundreds of years earlier is by no means unproblematic. The major reason for the imbalance between Kalevalaic poetry and archaeological

[5] Known also as runic songs.

assemblages rests on the fact that, even if a part of the poems could have been created during the Late Iron Age, they might have been transformed, forgotten, or even become taboo along with the Christianization and the overall transformation of society. Material and oral mnemonic techniques might also have differentiated from each other, so that rituals which can be seen in the archaeological record need not to have been verbalized (e.g., Andrén 2005; 2011, 853; Frog 2014; Price 2002; Jennbert 2011, 119 f.; see Frog & Lukin 2015).

Despite the above problems, the relationship between prehistoric material culture and Kalevala-metric poetry has been discussed by archaeologists since the beginning of the 20th century. Especially Leppäaho (1949; 1950), and Salo (2012b, 212 ff.) have dealt with poems which could be hypothesized as references to Iron Age cremations.

Circumpolar bear ceremonialism

The Finno-Karelian epic tradition and ethnographic sources are rich in references to bear. As the subject has been actively studied since the end of the 19th century by folklorists, ethnologists, anthropologists, historians and historians of religion, only a brief summary will be given in this context. (For more information in English, see, e.g., Sarmela 2009; Pentikäinen 2007.)

In brief, the Finnic bear rite had its roots in circumpolar bear ceremonialism, which has been documented widely in Northern America and Eurasia, for example among the Sámi and many Siberian peoples (Hallowell 1926; Äikäs et al. 2009, 118; Sarmela 2009, 80). Mentally, it was the creation of northern hunting populations, hypothetically dating back to the Palaeolithic Stone Age (Sarmela 2009, 80; Conneller 2011, 365 f.; Siikala 2012, 381). The core of the tradition was the idea of the bears' divine origin and its relationship to humans. Consequently, as the bear was revered as a divine forefather, its respectful treatment and killing needed to be controlled by a ceremony. However, in eastern and northern Finland the practicing of bear rituals and the burying of bear bones continued until the 17th–19th centuries (Krohn 1894/2008, 36 f.; 1915/2008, 146 ff.; Holmberg 1915, 43 ff.; Itkonen 1948b, 364 ff.; Haavio 1967, 15–41; Honko 1993; Tarkka 2005, 272 ff.; Pentikäinen 2007, 43–92; Sarmela 2009, 79 ff.; Russell 2012, 52 ff., 168 ff.; Salo 2012a, 33–73; Siikala 2012, 368–389).

The role of the skin in this ceremony has been studied in detail by ethnologist T. Korhonen (1982a; 1982b). According to Korhonen, poets describe the skinning of the bear, the carrying of the skin from forest to the village and, during the commemoration ritual for the bear, the placing of the skin at the feast table. After the ceremony, the skin was given to the man who was 'worth it,' or it was hung on a tree for deities or donated to the church. Essentially, the skin was seen to carry supranormal powers, or '*väki*' (e.g., Lehikoinen 2009, 171 ff.; Pentikäinen 2007, 121), and thus it needed to be treated with care and respect (Korhonen 1982b; see also Holmberg 1915, 50 f.). The separating of

the skin from the bear carcass was itself an act which was closely connected to the liminal stage of death. For example, this moment was honored by women who expressed mourning by singing dirges during the skinning (Tarkka 2005, 273; see also Pentikäinen 2007, 81). At this very moment the boundaries between the living and the dead, between human and non-human, were porous, and humans and bears were said to have changed their skins during the act of skinning (Tarkka 2005, 264).

To sum up, in the Finno-Karelian bear rite the bear was respected as a forefather, and its skin had a central place in the ceremony. However, in the research literature there were no references to the use of bear skins in human death ceremonies. Therefore, in the next section the references to the cremating of skins are explored.

"Bring me my father's Fiery Fur"

In order to find references to the use of bear skins in Iron Age cremation burials, a selection of hypothetically meaningful terms were pursued. The search concentrated on different expressions for a bear (e.g., *karhu, otso, mesikämmen*), a skin (e.g*., turkki, turkis, nahka, karva*), and fire (e.g., *tuli, tulinen, palava, nokinen*). After this, the resulting verses were analyzed in order to understand the contexts in which they were used.

As a result, a group of epic poems and chants which referred literally to a burning skin (Fi. *tulinen turkki*, Eng. *Fiery Fur*) was separated for closer study. In the research literature, K. Krohn (1915/2008, 64, 164) has interpreted these poems as influenced by the Catholic Church, as references to purgatory. However, M. Haavio (1967, 332) interprets *Fiery Fur* as the divine uniform of a *tietäjä* (Eng. *sage*[6]). A.-L. Siikala defines the *Fiery Fur* verses as a tietäjä's words, in which this magical garment was asked by the narrator's dead parents for protection in war, and before a dangerous journey (for furs in a tietäjä's costume, see Siikala 1992, 239 ff., 249; 2014). Parallel to a Fiery Fur, articles such as a fiery sword, an iron shirt, or an iron headgear were also asked to invoke supernatural powers (Haavio 1967, 331 ff.; Siikala 1992, 245 ff., 294 ff.; 2012, 309).

The references to a *Fiery Fur* can be found in epic poems which tell about a hero who is preparing himself for a trial, that is, for war or for a mythical journey to the land of the dead. Most often they can be found in chants which were used against witchcraft, jealous persons, diseases, and bees, and for protecting the bride and bridegroom or a woman in labour. A *Fiery Fur* can thus be understood both as the magical costume of a warrior-tietäjä, and as a chant, the tietäjä's words, which were the most powerful tool of a tietäjä (Siikala 2012, 304).

[6] For the definition of the Finnish tietäjä-institution, and for its relationship to shamanism, see, e.g., Siikala 2014.

A.-L. Siikala connects these themes to the pre-medieval cultural sphere, when the role of a warrior-tietäjä as an expert in rituals and the invoker of supernatural powers was growing (Siikala 1992, 294 ff.; 2014).

In the *Fiery Fur* poems, the skin was addressed by the narrator's father. However, in the selected poems there were several references to '(Grand)Father,' 'Golden King,' and 'God in Heaven,' which were common euphemisms for a bear. For example, during a hunt the bear was not mentioned by its Finnish name *karhu*,[7] which was a taboo (e.g., Pentikäinen 2007, 64, 93 ff.; Salo 2012a, 41 ff.). In the following, this hypothesis is discussed in detail by giving examples of *Fiery Fur* verses in which burning skins were used for protection 1) in war, 2) in proposals and weddings, and 3) against bees. For the distribution of *Fiery Fur* verses, see Fig. 8.

Fig. 8. The distribution of Fiery Fur verses in SKVR. In these poems the skins were used for protection ■ = in war, ∗ = in proposals and in weddings, and + = in chants, e.g. against deceases.

[7] The word *karhu* itself refers to bear's skin, as the word originates from the word '*karhea,*' in the meaning of *karkeakarvainen*, coarse-haired (Turunen 1979, 100; see also Salo 2012a, 42).

Protection in war

In the first group there are several versions of a poem in which the warrior calls out to his forefathers in the land of the dead, and asks them for a warhorse and fiery clothes for protection. For example,

"Tuo taattoni tulinen turkki,
maammoni panonen paita,
taattoni sotihevonen."

"Bring me my father's fiery fur,
my mother's burning blouse[8]
my father's war-horse."

The poem continues with verses in which the narrator discusses with his dead forefather:

"Mikäs siun Manalle saatto,
ilman tauin tappamata,
surman muun murottamata?"
"Tuli mi[u]n Manalle saatto."
"Kun tuli Manalle vie,
tuli vaattehis palaa,
hurmehin hyvät sopasi."

"What brought you to the land of the dead,
not being killed by a disease
broken by some cause of death?"
"Fire brought me to the land of the dead."
"When fire brings you to the land of the dead
your clothes burn in flames,
your garment all in blood."
(*Translation Lotte Tarkka*)

(SKVR I1, 30. Akonlaksi, 1832)

It is worth noticing that in the above quoted poem the fire was seen as a gate to the land of the dead, which might refer to the bodily transformation occurring at the stage of cremation.

Burning skins have also been paralleled with death in another context, by using the phrase as an attribute of the 'churchyard-people,' that is, supernatural death-related beings. For example, "*People of the churchyard are known by their smell, they smell like burning skins*" (SKVR 9, 4: 29, Moisio 1890 [Viitasaari]). Folklorist K. Koski relates churchyard-*väki* with other supernatural forces, such as iron, fire, and the forest together with its inhabitants (for the definition, see Koski 2011, 344 f.). According to Koski (2011, 190 ff.), the smell was an important attribute or indicator of the churchyard-people, so that the presence of these supernatural powers could be identified by their bad smell.

Protection in proposals and in weddings

In the second group of examples, either the spokesman or the groom asked the fiery furs to protect the act of proposing or wedding. The wedding was thus seen as a liminal stage in which the chanting words, that is, the tietäjä's words, were needed for protection (see Siikala 1992, 248).

[8] In their paper which was published in 1937, Leppäaho and Vilkuna dealt with descriptions of war clothing in epic poems, and compared these verses with archaeological finds and historical items. They also mentioned "a burning blouse" as an expression of war clothing, but they did not give any specific explanations for the term (Leppäaho & Vilkuna 1937, 175, 193).

…
“Tätä neittä naittaessa,
miestä viiessä vihille.
Nostin maasta miehiäni,
mannun aikusii urohii.”
…
“Ukko, taivoisen Jumala,”
…
“Tuoppa nyt tulinen turkki,
sulhasiksi suoritessa,
kanna rautarätsinässä,
vaimokseni varatessa!”

(SKVR VII5, 4907. Ilomantsi, 1845)

…
“When I wed this maiden
bring this man to wedlock.
I raised my men from the ground,
males as old as the earth.”
…
“Ukko, god of the sky,”
…
“Bring me a fiery fur,
as I prepare the groom,
carry in an iron dress,
as I protect my bride!”
(*Translation Lotte Tarkka*)

Protection against wasps and diseases

The last group of verses consists of chants in which the fiery furs were asked for protection against fire and diseases, for help during labour, and for stopping bleeding, to name but a few.

Ampiaisen lumous:

“Sinä, vanha Väinämöinen,”
…
“Kuss’ on kiviset kinttahani,
maan karvaset vanttuhuni?
Kuss’ on isäni tulinen turkki,
äitini pananen paita,
jolla ma puskuja puserran,
amputauteja tapasen?
Kytke siipes, taita nuoles,

ammuskele aikojas,
toukkele toisias!”

(SKVR XII2, 4703. Reisjärvi, 1852)

Enchantment of a wasp:

“You, old Väinämöinen,”
…
“Where are my stony mittens,
Knitted mittens, earth colored?
Where is my father’s fiery fur,
my mother’s burning blouse,
with which I squeeze the seizure,
catch the projectiles?
Leash your wings, break your arrows,
Shoot on your own,
offend the others!”
(*Translation Lotte Tarkka*)

Discussion

The references to the burning of pelts (here called *Fiery Fur* verses) in Kalevalaic poetry were in this study interpreted as allusions to cremation burials, where the deceased were wrapped in bear skins. This hypothesis was based on

the idea that the references to Father, *Ukko*, and Old man were most likely euphemisms for a bear, which was respected as a forefather and as an ancestor. Father or Grand Father might also refer directly to the idea that the storyteller was considered to be the son of a bear. It was believed that humans and bears could copulate with each other (e.g., Pentikäinen 2007, 65, 71; Siikala 2012, 389; Tarkka 2005, 272 ff.) and this, in turn, was said to be the origin of special men (heroes): their mothers were humans and their fathers were bears (see Frog 2014, 402; Siikala 2012, 389; see also Pentikäinen 2007, 25). In both cases, the father's fiery fur can be interpreted as a bear skin.

The references to a *Fiery Fur* were found in a group of epic poems which tell about a hero who is preparing himself for a trial – for a war or for a mythical journey to the underworld. This is in line with the idea of cremation cemeteries under level ground as a manifestation of manliness and martial identity (Salmo 1938, 308 ff.; 1941; Schauman-Lönnqvist 1996a; 1996b; 1999; Wickholm & Raninen 2006; Raninen 2007; 2009b; Wessman 2010, 62 ff.; see also Raninen 2009a). Bear itself, however, cannot be connected straightforwardly to manliness, as for example the bronze bear-tooth pendants are found from women graves (Asplund 2005; Kivisalo 2008). Also in Päivääniemi cremation cairn, central Finland, four phalanges have been found of a young (15–30 years) woman (Katiskoski 1987). So, this explanation is valid only when we are talking about the western influence which connects the occurrence of weapons in burials (see Raninen 2007; 2009a; 2009b; Salmo 1938, 308 ff.; 1941; Schauman-Lönnqvist 1996a; 1996b; 1999; Wickholm & Raninen 2006; Wessman 2010, 62 ff.), the origins of *Fiery Fur* verses (Siikala 1992, 248; 2014), and the distribution of phalanges in the cremation cemeteries under level ground.

The use of bear skins was thus associated with the battlefield and martial elite identity. The phenomenon in question can be interpreted as a zoomorphic transformation, of the warrior as a predator, which was manifested in material culture through the use of animal skins[9] and by iconographic human-animal representations. These expressions can be found for example on helmets, helmet plates, and stamps, foil figures, and even in textiles[10] (Pluskowski 2006, 120 f.; Back Danielsson 2007; Hedeager 2011; Jennbert 2011, 198). The process of

[9] In anthropology, the central role of animal parts, e.g. antlers, skins, and paws in the process of identity change has been recognized (e.g., Back Danielsson 2007; Ingold 2000, 111 ff.; Conneller 2004; Harvey 2005; Willerslev 2007; Groleau 2009; Losey 2010; Insoll 2011; Losey et al. 2013). For example, in Sámi and Siberian Yukaghir hunting rituals men dressed in reindeer skins in order to become a reindeer (Itkonen 1948b, 18 f.; Willerslev 2007). In Sámi mythology the skinning of a bear or a reindeer might also reveal its human shape (Itkonen 1948b, 364), and in Finnic tradition humans and bears were said to have changed their skins during the act of skinning (Tarkka 2005, 264).

[10] From this point of view, the artistic expressions of bears and bear-warriors in Swedish material are surprisingly rare (see Back Danielsson 2007, 113; Hedeager 2011, 94).

becoming-predator has been interpreted for instance in Deleuze & Guattari (1980/1987, 242 f.) by a mimetic sameness with animals, which on the battlefield and in the hunting grounds turned humans into bear-men or wolf-men (see also Baldick 2000, 33, 37).

The fuzziness of human and non-human classifications in non-western cultures has been related closely to shamanism and the animistic worldview as 'relational identity/consciousness,' which instead of fixed identities reflects the transformation from one class into another, that is, through partiality, dividuality, and metamorphosis (Harvey 2005, 99–114, 193 f.; Back Danielsson 2007; Willerslev 2007, 6; Alberti & Bray 2009; Watts 2013). The identification of shamanistic elements in the Old Norse religion, especially in Odin's cult, has been discussed in recent Scandinavian research (see, e.g., Andrén 2011; Jennbert 2011; Price 2002, 2006; Skogstrand 2010; Hedeager 2011). The phenomenon itself is worldwide, and within its sphere are some of the most *long-durée* cultural traditions, for example the northern hemisphere bear ceremonialism that ascribes humans and bears as relatives (e.g., Hallowell 1926; Itkonen 1948b, 364; Sarmela 2009, 91 ff.; Siikala 2012, 370, 381, 389).

In this light, the legend of the berserkers is simply an example of the phenomenon, which has been widely recorded among inner-Eurasian populations (Deleuze & Guattari 1980/1987; Baldick 2000). On a larger geographical scale, the importance of both weapons and animals, especially bears, has also been recorded among indigenous inner-Eurasian warrior-hunter religions (Baldick 2000, 1–37). L. Hedeager (2011), for example, has interestingly hypothesized the influence of Hunnic populations on northern European human-animal relationships, and the possibility cannot be disregarded that further research on these Eurasian contacts might impart new information about the origins of the Scandinavian bear-cult.

Conclusions

The use of bear skins in death rituals in south-eastern Fennoscandia endured for over 1,000 years, and was closely related to cremation burials, especially to cremation cemeteries under level ground. The gradual change in burial practices over this time, and the adoption of inhumation burial practice during the Late Iron Age, seemed to end the use of bear skins almost totally. From historical times, there are only a few references about the use of bear skins in burials, e.g. among the Sámi (Holmberg 1915, 16; Korhonen 1982b, 109). In Finland, the Catholic Church tended to Christianize bear skins by using them in the pulpit, and especially in front of the altar, as carpets from the 15th century onwards (Korhonen 1982a).

In this study, the phenomenon of cremating bear skins was interpreted as a western or Germanic influence on the basis of the distribution of phalanges, their context to weapon burials, and on the Germanic originated *Fiery Fur* verses

which were interpreted to reflect the Iron Age warrior-cult and the burning of bear skins. Tentatively, it was suggested that the study area formed at the junction of two bear cults, for instance that of circumpolar bear ceremonialism and that of a northern European, and hypothetically originally inner-Eurasian bear-warrior cult.

Moreover, it can be safely assumed that, although the Scandinavian and northern European bear-cults shared seeming similarities, they also exhibited local differences, or dialects in human-bear relationships. As an example of this, in previous Scandinavian research the role of bear skins was traditionally interpreted with the aid of associated find material, and this, in most cases, underlined the wealth and foreign contacts of the deceased. In recent studies, the use of skins and other animal remains has been approached from the points of view of shamanism and animism, taking anthropological and religion-historical theories into account.

However, these two hypotheses, skins as status symbols and as an indicator of an animistic worldview, need not be seen as exclusionary. Instead, according to Friedman & Rowlands's (1977/1982) famous theory of status, the object categories which were regarded as holy in their production areas were often elevated to the level of status symbols outside their production areas. In the latter case, this might refer to areas that lacked a local bear population (e.g., Gotland, Great Britain, and parts of Central Europe; see Bond 1996, 85; Petré 1980, 10; Pluskowski 2006, 119). For future research, it would be important to study the network of ideas in human-animal relationships more thoroughly.

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Tuija Kirkinen

"PÕLEVAD KARUSNAHAD" – PRUUNKARUNAHAD KAGU-FENNOSKANDIA RAUAAJA JA VARAKESKAJA (1–1300 PKR) MATUSTES

Resümee

Artiklis on analüüsitud, kuidas on kasutatud pruunkaru- (*Ursus arctos*) nahku rauaaja ja varakeskaja matuserituaalides Kagu-Fennoskandias (see tähendab Lõuna-, Ida- ja Lääne-Soomet ning Karjala kannast). Karunaha kasutamine surilinana on selles piirkonnas kestnud üle tuhande aasta, see algas rooma rauaajal Edela-Soomes ja lõppes keskaegsete laibamatustega Karjala kannasel. Surnukeha

mässimist kiskjanahkadesse on oletatud kalmetest leitud kolmandate varbalülide (see tähendab küüniste) põhjal, eriti on seda täheldatud maa-aluste põletusmatuste (soome *polttokenttäkalmisto*) ja karukarvade puhul, mida on leitud kolmest laibamatusega kalmistust.

Esmalt vaadeldi karu tähendust, uurides matustest leitud karunaha jäänuseid, eriti kolmandaid varbalülisid ja karukarvu. Teiseks analüüsiti leidudele ja leiukontekstidele vastavaid viiteid Soome-Karjala Kalevala-meetrilistes lauludes. Kokku identifitseeriti 161 kolmandat varbalüli, mis pärinevad 22 põletusmatustega kalmest. Enamik neist muististest (86%) on maa-alused põletusmatustega kivikalmed. Seda heterogeenset kalmistutüüpi iseloomustavad nii kollektiivsed kui ka individuaalsed põletusmatused, millel ei ole nähtavaid maapealseid konstruktsioone (täpsem definitsioon, Wessman 2010, 19–24, 34). Eelnevate uuringute fookuses on olnud nii individuaalsed kui ka kollektiivsed relvadega matused, mille esinemist koos hobuserakmete ja paadijäänustega on tõlgendatud kui märki sõdalasekultusest (vt Raninen 2007; 2009b; Salmo 1938, 308 ff.; 1941; Schauman-Lönnqvist 1996a; 1996b; 1999; Wickholm & Raninen 2006; Wessman 2010, 62 ff.).

Soome traditsioonilistes Kalevala-meetrilistes lauludes (*Suomen kansan vanhat runot [SKVR],* inglise *The Ancient Poems of the Finnish People*) uuriti lähemalt laule ja loitse, mis viitavad otseselt põlevale nahale (soome *tulinen turkki*, inglise *Fiery Fur*). Viiteid *tulisele kasukale* leiti eepilistest poeemidest, mis kirjeldavad kangelast, kes valmistub katsumuseks, see tähendab sõda või müstilist teekonda surnute maale. *Tulist kasukat* võib seega mõista kui sõdalase-*tietäjä* (inglise *warrior-sage*) maagilist rõivastust, aga ka kui loitsu, *tietäjä* sõnu, mis on tema kõige võimsam tööriist (Siikala 2012, 304). A.-L. Siikala seob need teemad keskajaeelse kultuuriruumiga, kui *warrior*'i-*tietäjä* tähtsus rituaalse eksperdi ja üleloomulike jõudude väljakutsujana suurenes.

Tulemused näitavad karunaha olulisust, konstrueerimaks surnu identiteeti nii sõdalase kui ka esivanemana. Kuigi sõdalase seostamine kiskjaga on Euraasia rahvaste seas laialdaselt tuntud, siis Kagu-Fennoskandias näitavad levik ja leiukontekstid, et karunaha rituaalne kasutamine oli läänepoolse germaani kultuuriruumi mõju. Samas: eriti karu austamine esivanemana *tulise kasuka* värssides viitab oletuslikult suuremale lähedusele polaaralade rahvaste karutseremooniatega. Esialgsete tulemuste põhjal võib väita, et uuritud piirkonnas puutusid kokku kaks karukultust: polaaralade karukultus ja Põhja-Euroopas levinud hüpoteetiliselt Kesk-Euroopast pärinev karu-sõdalasekultus.