

## EARLY EMOTIONAL CONTACTS WITH THE INDO-EUROPEANS. LEXICAL EVIDENCE OF ESTONIAN AGAINST A BROADER BACKGROUND

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**Abstract.** The etymological origins of the Estonian emotion vocabulary reveal that they include prehistoric loanwords from different Indo-European languages. In this paper, the emotional loans are examined according to the estimated time and sequence of acquiring them. The timetable is complemented with information about the other main fields of loanwords and, as background, changes in climate, population and material culture. Each of the periods is described in detail and followed by discussion of the relevance of those particular emotions and the possible social contexts where they might have been negotiated. The results show that the sequence in which the emotion categories emerged and were borrowed does not exactly match the supposedly universal sequence predicted in literature. Instead, the development of emotion categories broadly matches the differentiation and increasing complexity in the material culture, social relations and ideologies.

**Keywords:** Uralic languages, Indo-European languages, Estonian, emotion categories, pre-historic period, loanwords

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### 1. Introduction

Human interactions involve emotions, which can be addressed in discourse. In order to be discussed, the emotional phenomena have to be conceptualised and lexicalised by a speaking community. These processes leave an observable trace in a language in the form of emotion vocabulary, e.g. *viha* ‘anger’, *kurbus* ‘sadness’, *rõõm* ‘joy’ etc. The class of literal emotion terms (as opposed to figurative expressions; see e.g. Kövecses 2000) consists of substantives, adjectives and verbs that are coined to designate emotional phenomena. The Estonian emotion vocabulary is currently a quite densely populated and well-structured semantic field (Vainik 2002, 2004).

However, what seems to be a close-knit conceptual system from the synchronic point of view might appear to be an eclectic set of terms, originating in different sources and historical strata, from a diachronic perspective. The emotion vocabulary is supposedly no different than the pool of Estonian stems in general (see Metsmägi et al. 2013, and Soosaar 2013 for an overview): it might have originated in inherited Uralic, Finno-Ugric or Finnic stems, as well as be borrowed from some Indo-European donor languages. On the other hand, it seems reasonable not to exclude the possibility that the contents of the emotion vocabulary in its earlier stages might not have been eclectic but have followed certain regularities.

Concepts, at least the abstract ones that concern human emotions and interactions, are double-faceted. On the one hand, they are culturally embedded (Kövecses 2006). Conceptual representation as mediated by language broadly reflects a naive understanding of the world of a particular culture and meets the needs of the society upholding it. The terms and concepts that are invented or borrowed during particular periods reveal something about the values and relations of the speaking community that needed to be expressed and negotiated. Cultural embeddedness also entails that such conceptions can change during the long-term course of cultural evolution, over several centuries or even millennia. Generally, the composition of a conceptual system follows the changing expressive needs of the speaking community. The gradual evolution of colour terms is a well-known example (Berlin and Kay 1969).

On the other hand, it has been demonstrated that emotion concepts are not totally determined by culture, i.e. there are also certain universal tendencies that have to be taken into consideration. For example, Anna Wierzbicka (1999) has proposed eleven cross-cultural universals in regard to emotion conceptualisation. These include claims about certain emotion-related elements that all languages possess (e.g. words for FEEL, cry and smile, categorizing into “good” and “bad” feelings and emotive interjections, as well as using facial expressions, bodily sensations and “symptoms” as indices of emotions). She also states that all languages have some emotion terms that match approximately the English categories of *afraid*, *angry* and *ashamed* (Wierzbicka 1999: 275–276).

In a large-scale analysis of over 60 languages, Ralph Hupka and his colleagues (Hupka et al. 1999) established a sequence through which emotion categories have evolved cross-lingually. Their methodology was modelled after a classic work by Berlin and Kay (1969),

who looked at which colour terms were central to vocabulary. In their paper, evidence is provided that emotion categories had been added in most languages in a relatively similar generalised sequence. Labelled first were the categories of anger and guilt, followed in Stage 2 by adoration, alarm, amusement and depression, in Stage 3 by alienation, arousal and agony, and ending with eagerness in Stage 4 (Hupka et al. 1999). If such a tendency exists, it predicts that when we look at the history of a language we will find that the labels for anger and guilt are the oldest ones, while the most probable successors would be terms for adoration, alarm, amusement, depression and so forth.

This paper aims to provide insight into the early evolution of the emotion terms that have made their way into Estonian. The stems of approximately 200 of the present-day emotion terms have been studied in respect to their etymology, with the help of the EED (2012). If a meaning shift has happened, the somewhat more conservative cognates registered in the material of the sister languages will reveal it. Besides the words whose meanings have changed, the group of words that have persisted in similar function from prehistoric times until today are of particular interest. With the help of this resistant-to-change part of the emotion vocabulary, it is possible to track whether the sequence of their emergence followed the stages postulated by Hupka et al. (1999). The group of emotion terms that have been borrowed are even more interesting because, due to the historical stratification of the loanwords, it is possible to draw inferences about the “whole package” of the cultural influences that the emotion concepts are part of.

Another goal is to find out what the early lexical predecessors of the present-day emotion words reveal about the “psychological culture” of our ancestors in terms of possible types of interactions and related emotions. The study is based on the assumption that the layers of borrowed emotion terms may reveal some aspects of the nature of the actual contacts between people from different tribes/communities in prehistoric times. The types of obviously recurrent emotion-related situations that have been conceptualised and communicated can be better understood when linguistic data is presented as a part of a bigger picture that contains background knowledge about the global time-scale, climate, population size, social organisation, religious beliefs etc. In the present paper, studies by archaeologists, anthropologists and ethnologists have been used as additional sources of information in order to construct a background for interpreting the results of linguistic evidence.

Theorising is not the main objective of the current paper. However, the questions asked and the kind of background information used for the interpretations inevitably bring about the need for theoretical positioning in respect to the prehistoric linguistic situation. Generally, there are two competing models as regards the origins of the Uralic languages (Künnap 2013). The proponents of the divergence model believe in the relatively stable stages of the linguistic development called protolanguages that have been spoken in real time by real people in their historical homelands (e.g. Kallio 2006, Häkkinen 2009). According to this model, the divergence of languages into daughter languages is mostly due to migration followed by the geographical isolation of the groups of a population. The proponents of the convergence model (e.g. Künnap 2000 and Marcantonio 2002) argue that there is no reason to speak of any particular homeland of the Uralic-speaking populations, nor of protolanguages as steady linguistic formations. According to this model, the processes of assimilation and convergence of locally spoken dialects are the main mechanisms behind the formation of languages as we know them today. Migration is not considered to be a necessary precondition for the transmission of language.

In this paper, I take the position that the constitutive characteristics of the two models are not mutually exclusive. The paper will focus on periods of relative linguistic stability (which can be seen as those of proto-languages). The paper does not address the issues of divergence or dissimilation, but focuses on contacts. The contacts are supposed to have occurred between people and not between languages in any abstract sense separate from its speakers. The focus is on flesh and blood people who lived in certain environments and socio-economic circumstances during longer periods of prehistoric time.

The structure of the paper is the following: first, the methodology and the basis for the periodisation are described. The main results are presented in Table 1. In the next section, the characterisation of each time period is given, using information from different disciplines. Emergent and/or borrowed emotion terms are presented against the socioeconomic background and discussed. In the last section, conclusions are presented and the validity of the universalistic tendency outlined in the introduction is discussed.

## 2. On periodisation and methodology

Historical periodisation plays a constitutive role in the present study. It is used as a framework that makes it possible to bring together information from archaeology, climatology, anthropology and linguistics. A study by Petri Kallio (2006) is an example of presenting a chronology of language history in absolute rather than in relative terms. However, the periodisation used in the present paper is based on another study by Finnish colleagues, namely a study by Terhi Honkela et al. (2013). They were able to establish a correspondence between changing climatic conditions on a time-scale of several millennia and periods of linguistic diversification of the Uralic languages. The general idea is that even a moderate change in climate can be a principal factor initiating processes (e.g. increase or decrease in primary production) leading to changes in population size, which further may lead to divergences of language (Honkela et al. 2013 and their references).

However, unlike in the original paper by Honkela et al. (2013), which focused on the processes and time estimates of linguistic divergence, the present paper focuses on periods of relative linguistic stability in between estimated points of divergence (as they have been calculated and presented in Figure 2 in the paper by Honkela et al. (2013: 1247)). There must have lived populations that transmitted earlier forms of language from generation to generation through the process of natural vertical transmission during those periods. In order to have a better understanding of the duration of these periods, their estimates are calculated both in years and generations (four generations per 100 years). A generation is a useful unit because it represents the number of successive occasions of copying the linguistic code, and the continuity of generations is the ultimate factor in population growth and survival.

As another deviation from the original paper, relative time estimates (Before Present, as in Figure 2 by Honkela et al. 2013: 1247) were recalculated into estimates of the absolute time scale (B.C. and A.D.). The end of the period under discussion is taken to be approximately 1200 instead of 1400 A.D., as in the paper by Honkela et al. (2013). This is due to the fact that, generally, the line between pre-historic and historical time in Estonia is drawn at about 1200 A.D. (Kriiska 2002).

As a next step, the tentative periods of relative linguistic stability were compared with the strata that are traditionally distinguished among

the most ancient loanwords in the Estonian language (EED, Metsmägi et al. 2013 and Soosaar 2013). These strata appear to be shared among genetically related languages to different degrees, revealing the relative time scale of their appearance. As a result, a match was found between periods of linguistic stability occurring under certain climatic conditions and the relative periods of loanword acquisition. Although certainly imprecise due to the long duration of the estimated periods, this reveals the chronology of linguistic contacts in absolute rather than in relative terms.

In addition to climatic and linguistic periodisation, the main aspects of material culture were taken into account as well. This information is used as background in order to understand what social relations might have been like in the given time periods.

In regard to linguistic analysis, the stems of approximately 200 of the present-day emotion terms have been examined in respect to their etymology. The most important question was whether they are inherited stems or ancient loanwords by their origin. The main source of the etymological information was the EED (2012), which provides information about the origins of the Estonian stems, as well as their cognates and their meanings in sister languages. In the case of loanwords and reconstructed forms, their presumed original meanings are mostly also presented. In the present paper, the original or older meanings of the stems are marked with asterisks (e.g. \*‘old meaning’).

The simple stems that have retained their original (emotion) meaning, the derivations from some simple stems and the stems whose meanings have changed from non-emotional to emotional were treated separately in the course of the analysis. In the present paper, only those approximately 20 loans are dealt with that were borrowed from some language of Indo-European origin during the prehistoric period. They are also compared to any genuine emotion terms coined in the same time period.

The EED assigns different status levels to proved, questionable and less likely etymologies (the latter is added in the section of commentaries). In the present study, these ratings are mostly ignored: wherever it is mentioned that a stem is or could have been borrowed from some Indo-European language, the case is considered worthwhile to include in the analysis. Moreover, comparing the emotional loans with the broader background of a given period (the main fields of other loanwords, climate, demographic and social conditions etc.) makes it possible to decide how well they fit into the overall picture. This kind

of knowledge can, perhaps, be used to support certain etymologies in the future.

The endeavour of constructing some fragments of the prehistoric “psychological culture” out of the available fragments of lexical, archaeological, climatological, ethnological and other evidence is, of course, not free from the author’s interpretations. As a methodological principle, the direction of the interpretations is always towards greater coherence with the broader background of a given prehistoric period.

### **3. Results**

Inspection of the etymology of the approx. 200 Estonian terms that designate emotion-related phenomena revealed that approx. 10% of them are actually prehistoric loanwords from Indo-European languages that seem to have designated similar meanings at the time of the assumed contacts. According to the periodisation obtained through the procedures described in the previous section, there are five larger periods of interest, during which the contacts between Indo-European- and Uralic-speaking populations seem to have taken place (see Table 1). In the following section, the periods and the possible related emotional aspects of the contacts between populations are described. The labels that are used to designate the hypothetical historical populations and the languages spoken by them are tentative and are not meant to match exactly the specific phases of proto-languages as defined by other authors.

**Table 1.** Periodisation and background information on the early (emotional) contacts with Indo-Europeans.

Period of relative linguistic stability	Duration (years/generations)	Climatic conditions as compared to today's average	Estimated tendencies in population size	People speaking a hypothetical language	People speaking another type of hypothetical language	Situation/changes in the material culture	Main fields of loanwords	Loans for emotion related categories (English glosses)
6000–3300 B.C.	2700/108	+3.5 degrees	Increasing	(Proto-) Uralic	Proto-Indo-European	Cultural frontier of Palaeolithics and Neolithics	Water, identification, trading, household, food production and cording	<i>Fear</i>
3300–1900 B.C.	1400/56	+2 degrees	Increase, stabilisation	(Post-) Uralic	(Proto-) Indo-Iranian	Cultural frontier of Neolithics and Early Bronze Age	Tools, husbandry, counting, religion and social dependency	<i>Desire, greed, anger and hate</i>
1900–900 B.C.	1000/40	-2 degrees, Arid!	Decreasing	(Pre-) Finnic	(Proto-) Baltic	Transcultural spread of bronze	Kinship, freshwater fishing, apiculture and transportation	<i>Care and mourning</i>
900 B.C.–800 A.D.	1700/68	+2 degrees At the end of the period, it became maritime.	Increase, followed by drop (536 A.D.) and new increase	Finnic	(Proto-) Germanic	Change from bronze to iron in weaponry and tools	Textile, leather, alcohol, warrior, metalurgy and trading	<i>Worry, trouble, pain, pleasure, honour, cowardice, shame and envy</i>
800–1200 A.D.	400/16	At the beginning maritime (+2.5), and later arid (+1.5)	Increase, stabilisation	Pre-Estonian	Old East-Slavic	Iron Age (Viking Age)	Tools, food, construction, slave trade and Christianity	<i>Sadness and grief</i>

### 3.1. Emotional contacts between (Proto-)Uralic and (Proto-)Indo-European-speaking populations

The duration of the first period of relative linguistic stability of the early predecessors of the Uralic-type languages is about 2700 years (108 generations), from approximately 6000–3300 B.C. The likely climatic factor that facilitated the growth in population and thus the propagation of the specific linguistic code was the period of milder weather (+3.5 °C as compared to the present-day average temperature) (Honkela et al. 2013 and their references).

The people speaking a (Proto-)Uralic language were apparently hunter-gatherers living in the forest zone of the Volga basin. As the climate was milder, the forest was of a temperate (coniferous) type. The people shared the Palaeolithic type of material culture: tools were made of flint, wood and bone. The social system was supposedly egalitarian, as the bands of hunter-gatherers had no big possessions or fixed territories to compete for. There was plenty of food in the forest, easily accessible by water. The following Estonian stems that have been dated back to Uralic origin (Metsmägi et al. 2013 and Soosaar 2013) reflect the recurrent topics of conversation in those ancient times. The list includes kinship terminology (*ema* ‘mother’, *isa* ‘father’, *nadu* ‘sister-in-law’, *väi* ‘son-in-law’, *käli* ‘sister-in-law’, and *minia* ‘daughter-in-law’), words for categorising flora (*kuusk* ‘spruce’, *kõiv* ‘birch’, and *murakas* ‘cloudberry’), fauna (*kala* ‘fish’, and *koer* ‘dog’), and body parts (*pea* ‘head’, *keel* ‘tongue’, *põlv* ‘knee’, *süda* ‘heart’, *maks* ‘liver’, and *luu* ‘bone’), conditions of the environment (*päev* ‘day, sun’, *pime* ‘dark’, *kuu* ‘moon’, and *lumi* ‘snow’), hunting and gathering (*pesa* ‘nest’, *nool* ‘arrow’, *suusk* ‘ski’, *kand-(ma)* ‘to carry’, and *kaks* ‘two’), food consumption (*ime-(ma)* ‘to suck’, *pure-(ma)* ‘to bite’, and *neela-(ma)* ‘to swallow’), spatial categorisation (*maa* ‘earth, land’, *ala* ‘area’ < \*‘under’, and *üle* ‘over’), forms of motion (*uju-(ma)* ‘to swim’, *tule-(ma)* ‘to come’, *mine-(ma)* ‘to go’, *pane-(ma)* ‘to put’, and *kadu-(ma)* ‘to disappear’) and aspects of understanding the cycle of life and death (*ela-(ma)* ‘to live’, and *kool-(ma)* ‘to die’), as well as the importance of mental reflection (*tundma* ‘to feel; to know’ < \*‘to notice, to recognize’).

These terms do not reveal much about social organisation, except the rather developed kinship terminology. There seems to have been a more elaborated system for categorising the husband’s female relatives, probably due to taboos, which is relevant in the case of

matrilocal residence. This is, however, a guess of the author of this paper and does not yet have any additional support<sup>1</sup>.

At some point during the first period of population growth, the Uralic-speaking community apparently lived in the neighbourhood of (or shared territories with) Proto-Indo-European speakers. This happened most likely during or slightly after the Proto-Indo-European language was formed, which, by combining linguistic and archaeological data, has been dated to 4000–3000 B.C. (Anthony 2007), i.e. basically the last third of the first period as presented here (see Table 1). The contact area has been located in the natural and cultural frontier of the forest zone and the Pontic-Caspian steppes (especially the forested river valleys cleaving far into the steppes) (Anthony 2007).

The speakers of Proto-Indo-European experienced the same climatic conditions, facilitating population growth, which was further enhanced around 4800 B.C., when they changed their economy from foraging to early agriculture and herding (Anthony 2007). They inhabited river valleys and shared an Eneolithic-type material culture: besides flint, wood and bone, copper was known and used for tools. They were tribal farmers who cultivated grain, herded cattle and sheep, collected honey, drove wagons, made wool or felt textiles, ploughed fields, and sacrificed sheep, cattle and horses to sky gods (Anthony 2007).

We know more about their social system, too. They lived in a world of tribal politics and social groups united through kinship and marriage. The household was male-centred, and rights and duties were inherited through the father's bloodline only; they probably had a custom of patrilocal residence. They had social stratification into priests, warriors and herders, and higher status among herders was attributed according to the size of herds. The higher status led to higher bride-prices for their daughters, which meant that cattle raiding was encouraged by their beliefs and the initiation rituals of young men. They recognised the authority of chiefs, who acted as patrons and providers of hospitality for clients (Anthony 2007).

The two communities were apparently economically self-sufficient, except that both needed access to the water (rivers), and they depended on each other to avoid in-breeding. The Indo-European loanwords detected in Estonian reveal that the following topics of conversation were initiated and maintained (EED and Soosaar 2013):

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<sup>1</sup> As an analogy, one can consider the custom that the 'groom' and his tribe uses to move to the territories of the 'bride's' tribe, which has been described in the case of the !Kung hunter gatherers (Shostak 1981).

water-related terminology (*vesi* ‘water’, *sõud-(ma)* ‘to row’, *õng* ‘fish-hook’, *pese-(ma)* ‘to wash’, and *mõsk-(ma)* ‘to wash’), identification (*nimi* ‘name’, and *sugu* ‘kin’), trading (*soovi-(ma)* ‘to wish’, *miüi-(ma)* ‘to sell’ < \*‘to give’, *os-(t-ma)* ‘to buy’, *veda-(ma)* ‘to draw’, *vii-(ma)* ‘to take, to lead’, *too-(ma)* ‘to bring’, and *aja-(ma)* ‘to drive’), household (*maja* ‘house’, *koda* ‘house’, *puhas* ‘clear, tidy’, *pada* ‘pot’, *sang* ‘handle’, and *sool* ‘salt’), food production (*vili* ‘grain, corn’, *iva* ‘grain’, *sõre* ‘of large grains’, *mesi* ‘honey’, *utt* ‘ewe’ < \*‘sheep’, *soon* ‘vein; sinew’, and *sool* ‘bowel’), and textile/cord making (*punu-(ma)* ‘to braid, to plait’, *sidu-(ma)* ‘to bind’, and *nidu-(ma)* ‘to connect’). The emotional nature of the contacts between populations are revealed by the two supposed loanwords *pelga-(ma)* ‘to fear’ and *tohti-(ma)* ‘to be allowed’ < \*‘to dare’. These feelings and most likely their behavioural expressions (e.g. an urge to escape and the need to overcome it) needed to be negotiated.

The semantic fields that the borrowed stems belong to and the nature of the emotion terms belonging to the same “cultural package” reveal that the contacts between the two populations were apparently not as brief as occasional encounters in forests or a result of the annual market day at the riverside<sup>2</sup>. Rather, the semantic composition of the set of loanwords suggests a situation of shared living space. Taking into consideration that there was a heightened demand for brides in the Proto-Indo-European-speaking community, one cannot exclude the possibility that the main articles of exchange included young women. Probably, the hunter-gatherers were introduced to a different type of economy and social relations mostly through intermarriage with the Proto-Indo-European-speaking people. According to some authors, the root \**näxi* ‘female’ is of Proto-Indo-European origin (Koivulehto 1991, referred via Häkkinen 2009).

The acceptance of patrilocal residence as a result of these contacts is reflected in the derivation of the term *minia* ‘daughter-in-law’ from the (Proto-)Uralic stem *mine-(ma)* ‘to go, to leave’ and the derivation of the term for ‘son-in-law’ *väi* from the Proto-Indo-European root \**wegh-e* ‘to drag, to marry’<sup>3</sup>. A suspicious attitude towards an unfamiliar environment, fear and the need to overcome it are natural parts of acclimatisation that needed to be negotiated.

<sup>2</sup> Conversation was/is not a necessary precondition for trading. “Silent trading” is a solution for people who want to exchange goods but can not (or do not want to, due to suspicion) speak each other’s language (Leete 1999).

<sup>3</sup> The interpretation does not fit the etymology of *väi* presented in the EED, which says that this is a genuine Uralic root.

### 3.2. Emotional contacts between (Post-)Uralic and (Indo)-Iranian (Aryan) populations

The duration of the second period of relative linguistic stability is about 1400 years (56 generations), from approximately 3300–1900 B.C. The average temperature continued to be approx. two degrees warmer than the present-day average, which still facilitated a growth in population, especially for those who changed to a herding economy.

Most of the people speaking Uralic-type languages were still sedentary foragers sharing an Eneolithic type of culture. This means that tools were made of flint, wood and bone; copper was known as a material but was not widespread. The historical settlement at Volosovo is an example of such a culture. The tribe living there built dwellings, exhibited status differences, and had a division of labour (primitive workshops where tools were mass-produced) and forms of artistic expression (figurines of hunted prey). They were also skilled in using water transport (Emel'yanov 2001).

As regards the topics of conversation among the Post-Uralic-speaking people, their vocabulary was enhanced with additional terms for body parts, kinship, environmental conditions, fauna, food, consumption etc. An innovation (as compared to the previous period) was that they needed more terms for numerals (*üks* 'one', *kolm* 'three', *neli* 'four' and *kuus* 'six') and for mental operations (*luge-(ma)* 'to read' < \*'to count', *õppima* 'to learn' < \*'to monitor', and *mõist-(ma)* 'to understand' < \*'to find').

The people speaking Indo-Iranian types of languages were nomadic herders and stock-breeders in the Pontic-Caspian steppes. Pastoralism produced plenty of food,<sup>4</sup> which was a great advantage over the other types of economies. Domestication of the horse and inventing horseback riding had given them control over their own herds and facilitated raiding. There were pronounced differences in wealth, and their social system was stratified and regulated. According to Anthony (2007), their two important integrative institutions were: the oath-bound relationship between patrons and clients, which regulated the reciprocal obligations between the strong and the weak, between male gods and humans, and the guest-host relationship, which extended these and other protections to people outside the ordinary social circle. The latter might have developed to regulate migrations into unregulated geographical and social space (Anthony 2007). Between 2100 and

<sup>4</sup> According to Anthony (2007), the average nomad probably ate better than the average agricultural peasant in Medieval China or Europe.

1800 B.C. they invented the chariot, organised themselves into stronghold-based chiefdoms, armed themselves with new kinds of weapons, created a new style of funeral rituals that involved spectacular public displays of wealth and generosity, and began to mine and produce metals. Later on, the metallurgists came to be the elite and lived in fortified settlements (e.g. Sintashta) (Anthony 2007).

Contacts with the people speaking a (Post-)Uralic language occurred at the frontier of the forest zone and steppes in the Volga-Oka region, which was also a cultural frontier between Eneolithics and the Bronze Age. However, at least some of the (Post-)Uralic-speaking people were also occupied in the herding economy. The Indo-Iranian loanwords detected in Estonian reveal that the following topics were discussed in a rather elaborate manner (EED, Soosaar 2013): animal husbandry and dairy production (*sündi-(ma)* ‘to be born’, *varss* ‘foal’, *vasi-(kas)* ‘calf’, *põrsas* ‘piglet’, *terve* ‘healthy, whole’, *paks* ‘fat’, *paras* ‘proper, fit’, *udar* ‘udder’, *ternes* ‘beast’, and *või* ‘butter’), specialised tools for producing handicrafts (*petkel* ‘pestle’, *keder* ‘disk, whorl’, *ora* ‘spike’, *vasar* ‘hammer’, and *suga* ‘coarse brush’), accounting of possessions/obligations (*sada* ‘hundred’, *osa* ‘part’, *era* ‘private’ < \*‘separate’, *aru* ‘reason’ < \*‘price’, *maks-(ma)* ‘to pay’ < \*‘to give’, and *ori* ‘slave’) and topics related to death (*marrask* ‘scarf-skin’ < \*‘dead’, and *peie-(d)* ‘funeral feast’) and religion (*tõo-(ta-ma)* ‘to promise’, *taevas* ‘sky’ < \*‘god-like’).

Mostly based on the loan stem (Proto)-Indo-Iranian \**arya* ‘Aryan’, whose meaning has developed into ‘slave’ in the Finno-Ugric languages, some scholars argue that the relations between the (Proto)-Indo-Iranian and the Post-Uralic/Finno-Ugric populations were hostile (Anthony 2007 refers to Koivulehto 2001, and Carpelan and Parpola 2001). This might easily have been the case, because two parallel emotion terms, *viha* ‘anger’ < (Proto)-Indo-Iranian \**viša-* ‘poison’ and *vihka-(ma)* < (Proto)-Indo-Iranian \**dviš-*<sup>5</sup> ‘to hate’, based on etymology originated in this stratum of the loanwords.

Hupka et al. argue that the primary cause of encoding anger is to achieve social control, to “[...] facilitate manipulation or coercion of individuals, perhaps to minimize antisocial behaviour [...] especially when generated or expressed by someone with power over the target individuals” (1999: 250). This rationale fits well with the background knowledge presented above (social stratification, raiding, potential

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<sup>5</sup> Alternatively, this may be a Finnic derivative from the Indo-Iranian loan stem *viha* ‘anger’ (EED, Soosaar 2013).

slavery etc.). As the Indo-Iranians had developed an oath-bound patron-client relationship with their gods, the emotion of anger could be easily attributed to those superior beings, too.

A couple of the terms, *iha* ‘lust, desire’ < \*‘to want’, and *ahne* ‘greedy’, apparently became salient in the context of rivalry in acquiring possessions (e.g. trading and cattle raiding). Two terms<sup>6</sup> (*abi* ‘help’, and *soe* ‘warm’ < \*‘shelter’) reveal that the contacts also included offering or asking for hospitality. Acquiring such terms reveals that the communication between Post-Uralic-speaking and Indo-Iranian populations included not only hostile aspects but also enjoying protection and the basics of the guest-host relationship.

Once again, it seems that the two populations intermingled to a certain extent. For example, the archaeological findings in Volosovo have revealed that their tradition of burial (the use of ochre) was influenced by the Indo-Iranians (Emel’yanov 2001). Possibly, social status was stronger as an isolator between populations than any linguistic or cultural factor. The emotion terms that were borrowed are reflections of (possibly somewhat reluctant) acceptance of social inequality and stratification.

### 3.3. Emotional contacts between (Pre-)Finnic and (Proto)-Baltic populations

The third period (1900–900 B.C.) was characterised by linguistic scattering rather than stability. This era of relatively lower average temperature lasted for approximately a thousand years (40 generations). The decreased temperature also meant that the climate was more arid. In addition to the worsened conditions for hunting/fishing, the accessibility of hunting grounds by water had diminished. Those who had changed their economy to agriculture and herding did somewhat better, but also experienced less favourable conditions and possibly faced starvation, at least occasionally. These factors together apparently affected population size, and the frequency of contacts between populations decreased. Possibly, some Post-Uralic-speaking communities found themselves in relative isolation from each other, and something

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<sup>6</sup> These are not exactly emotion terms but stems/meanings that the later Estonian emotion terms – *abitu* ‘helpless’ and *soojus* ‘affection’ (lit., ‘warmth’) – have been derived from.

like a linguistic bottleneck<sup>7</sup> took place. The scattering resulted in a set of more or less distinct local languages: the predecessors of the Ugric, Permic, Volgaic and Finnic languages.

The range of genuine vocabulary that originates from that period reveals that the (Pre-)Finnic<sup>8</sup> speakers talked about the body and its parts, and the system of numerals was increased up to ten. They had developed quite elaborate terminology for broad leaf trees, and they paid attention to insects, roots, berries and nuts. They coined several terms for lower temperature, seasons, wind and cardinal points. They were familiar with paths and crossing water obstacles, and they looked at stars and identified constellations. They also shared the basics of cultivation and dairy production. In addition, they supposedly coined terms for such abstract concepts as ‘god’ (*jumal*) and ‘mind’ (*meel*). However, new terms for emotional phenomena (in addition to those borrowed by their ancestors and kept in constant use) were not coined. At least there is no evidence of them in Estonian.

As regards the Indo-Europeans, their culture (called the Yamnaya horizon by archaeologists) had exploded across the Pontic-Caspian steppes by about 3300 B.C. Along with the culture probably went Proto-Indo-European, its dialects scattering as its speakers moved apart, and their migrations sowing the seeds of Germanic, Baltic, Slavic etc. (Anthony 2007). This wave of language and culture spread has been associated with the Late Stone Age Corded Ware Culture (Carpelan 2006). During the period discussed here, the culture of using bronze spread from east to west, carried by the *Sejma-Turbino transcultural network* (Parpola 2012).

Neither the exact period nor the place where the contact of the Pre-Finnic-speaking people and the Proto-Baltic speakers took place is yet known (Vaba 2011). It happened, most likely, somewhere south-east of the territory of present-day Estonia and before the 8th–9th centuries B.C. According to archaeologists, the Finnic-speaking people immigrated to the current Estonia from the east approximately 3000 years ago, i.e. in the late Bronze Age (Lang 2013). The presence of their material culture can be recognised by the remains of fortified settlements, metallurgy and the early *tarand* graves in Estonia (Lang 2013).

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<sup>7</sup> The concept of a bottleneck – a sharp reduction in size of a population due to environmental random events or human activities – is used in population genetics (e.g. Catton 2009).

<sup>8</sup> The term Pre-Finnic is used to cover the inherited stems that occur in Permic, Mari and Mordvinian, but do not occur in the genetically more distant languages.

The number of Baltic loanwords in Estonian (162–235, according Metsmägi et al. 2013) reveals that the predecessors of the Baltic- and Finnic-speaking language communities lived in a close, possibly even in a symbiotic relationship. Some scholars argue for bilingualism (Larsson 2001). The set of the loanwords reveals that the topics of their conversations included: cultivation (*seeme* ‘seed’, and *vagu* ‘furrow’) and animal husbandry (*härg* ‘ox’, *oinas* ‘ram’, and *kari* ‘flock’), as well as apiculture (*vaha* ‘wax’, *kärg* ‘honeycomb’, and *taru* ‘hive’) and fresh water fishing (*angerjas* ‘eel’, *kahv* ‘ladle’, *lõhi* ‘salmon’, *vähk* ‘crayfish’, and *ahing* ‘fishing spear’). The loanwords also reveal the acquisition of an important innovation: vehicles of land transport (*ratas* ‘wheel’, *sild* ‘bridge’, *vehmer* ‘shaft of a yoke’, *kaust* ‘upper beam of a sleigh’, and *aeg* ‘time’ < \*‘journey’). Kinship relations also were discussed, especially of the female side (*tütar* ‘daughter’, *sõsar* ‘sister’, and *mõrsja* ‘bride’), taking into account closer and more distant kin (*hõim* ‘kin, tribe’, *kaim* ‘a co-tribesman’ < \*‘villager’, *lang* ‘a husband’s/wife’s kinsman’, and *võõras* ‘stranger’ < \*‘man’). A couple of words seem to reflect that the stratum was connected with the Bronze Age (*kirves* ‘axe’ and *haljas* ‘shining, green’ < \*‘green’ (the colour of bronze oxidation)).

In respect to the emotion terms acquired from the Proto-Baltic speakers, the words *lein* ‘mourning’ < \*‘poor crop’ and *hool* ‘care’ < \*‘pity’ reveal that there seems to have been a kind of rise in “soft values” or the “feminine side” of emotions. These conceptions are possibly also reflections of the age of a cooler climate and the shortage of resources that the two symbiotic communities had both come through. Some other stems that later Estonian emotion words were derived from are also reminders of the tough times (*ahas* ‘tight’ > *ahastus* ‘despair’, *kitsas* ‘tight’ > *kitsikus* ‘embarrassment’, *tühi* ‘empty’ > *tühjus* ‘void’<sup>9</sup>). The culture where the emotions were experienced, expressed, noticed and negotiated in was obviously collectivist in nature (e.g. *talgud* ‘communal work’) and normative in respect to each person’s contribution (*ihne* ‘stingy, mean’, *laisk* ‘lazy’, and *tava* ‘custom’ < \*‘nature, character’).

The rise of collectivist values in the Bronze Age ideology has also been pointed out by the archaeologist Tõnno Jonuks, who claims that in the territory of Estonia it was reflected in collective burials in *tarand* graves, which were used generation after generation. The powerful ideological connection with ancestors was another characteristic feature

<sup>9</sup> I do not claim that the emotion terms were derived during the Bronze Age.

of a farming-oriented ideology. The connection was carried out by the elite in rituals (cremation of bodies, and manipulation of bones), which took place at graves located on hills and in areas with sweeping views (Jonuks 2009: 206–214). We do not know for sure what the language spoken at these ceremonies was. On the basis of emotional contacts, it can be concluded, however, that the borrowing of terms for emotions related to funerals (mourning and feeling pity) reveals that there was communication on these topics between the Finnic- and Baltic-speaking people wherever they were living at that time.

### 3.4. Emotional contacts between Finnic- and (Proto-)Germanic-speaking populations

The fourth period (900 B.C.–800 A.D.) of relative linguistic stability, which can be seen as the common Finnic, lasted for approximately 1700 years (68 generations). Although the average temperature might have been a couple of degrees warmer than today, there were unusual climatic fluctuations that influenced the size of the population. According to the investigators of climatic history, the climate (which had been cooler during the Bronze Age) began to warm up at a rapid rate in the Pre-Roman Iron Age, reaching a peak at about the beginning of the Christian era. A cooling process followed this, but a new period of warming began in about the 4th or 5th century. In the period from about the second half of the Roman Iron Age to the middle of the Viking Age, the climate was much more maritime (Tvauri 2012: 35–36).

Written sources reveal that in A.D. 536 a climatic catastrophe took place in the northern hemisphere, which was expressed in a reduction of sunlight and a significant cooling of air temperature<sup>10</sup>. This in turn led to serious famine and mass fatalities (Arjava 2005, referred via Tvauri 2012). It is likely that the climate event of 536 caused a population disaster. It struck more seriously those populations mainly engaged in cultivation. Populations at least partly engaged in hunting, fishing and gathering might have survived better.

An important cultural phenomenon originating probably in the Pre-Roman Iron Age (500 B.C.–50 A.D.) is the tradition of *runo* songs (Tedre 1998: 548). The songs are mostly of the lyric-epic genre and

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<sup>10</sup> The incident is also clearly traceable in tree rings in the northern hemisphere, where tree growth was hampered at that time or in subsequent years (Tvauri 2012 and his references).

mostly express the world-view of a female singer. The genesis of the runo songs is claimed to be a result of the mutual interactions between Baltic and Finnic populations (Tedre 1998: 554). Whatever the factors and conditions for the rise of singing, obviously many more conversations were about emotion-related topics. This is revealed by the fact that numerous genuine emotion terms in Estonian originate in the period of the common Finnic. These include several terms for fear (*hirm* ‘fear’, *kartma* ‘be afraid’, *õud* ‘horror’ < \*‘strange’, and *ehmatama* ‘frighten’) and admiration caused mostly by overcoming fear (*julge* ‘brave’, *vahva* ‘brave’ < \*‘powerful’, *vapper* ‘brave’ < \*‘rich’, and *uhke* ‘proud’ < \*‘gorgeous’). Specific words were coined for acts of expressive behaviour (*itkema* ‘cry’, *nutma* ‘cry’ < \*‘howl’, and *rõõm* ‘joy’ < \*‘row’), for descriptions of attachment (*lembima* ‘love’, and *hell* ‘tender’ < \*‘touchy’), pity (*hale* ‘pathetic’ < \*‘pale’), passion (*kirg* ‘passion’ < \*‘sparks’, and *äge* ‘hot-tempered’ < \*‘hot’) and apathy (*tuim* ‘insensitive’). Terms for socially oriented emotions include *vimm* ‘grudge’, *põlgama* ‘contempt’ < \*‘tread down’, *tänu* ‘gratitude’ < \*‘bewitchment’, and *naerma* ‘laugh’ < \*‘dishonour’). The array of the Finnic emotion terms that were added to the loanwords of the previous periods is quite rich.

The people speaking a (Proto-)Germanic-type language are thought to have lived around the Baltic Sea and also in the territory of Estonia beginning in approximately 1200 B.C. (Lang 2013). The material culture (netted-ware ceramics and stone cist graves) was similar to the southern Scandinavian. This culture disappeared in Estonia in a couple of centuries (Lang 2013).

The other wave of contacts with the Germanic-speaking population was possibly connected with the innovations in 600–1000 A.D. According to Jonuks (2009), a new “warrior-ideology” arose during that period (called the Middle Iron Age or Pre-Viking Age). The majority of studies on this subject emphasise the aggressive self-imposition of a single (smaller) societal group that, in contrast to the previous collectivity, was accompanied by a new ideology and religion that were more aggressive and oriented toward particular individuals. In the archaeological material, the warrior ideology is primarily reflected in single weapons or outstanding jewellery deposited in graves. In order to supply the dead with jewellery, luxury items and weapons were placed in the grave, with the aim of guaranteeing the soul of the deceased a similar mode of life. Together with the new concept of the after-world, the idea of a single soul probably began to develop, and the collectivity that had been predominant until that time

began to lose its position (Jonuks 2009). According to Priit Ligi, the long-time use of forts as living quarters alone can be regarded as direct proof of a complex and socially stratified society. The status of a ruler was handed down from generation to generation (Ligi 1995: 232, referred via Tvauri 2012). The nobility not only controlled iron production and weaponry ironworks, but may have in fact been engaged in them (Tvauri 2012).

There are plenty of Germanic loanwords in Estonian (300–400, according to Soosaar 2013) that reveal the main topics of conversation, which include, in addition to agriculture and animal husbandry, numerous terms for shipping and fishing, terms that reveal quite elaborate knowledge of and developed skills in textile and leather production, cooking and brewing of alcoholic beverages. There are also terms that reveal that the social system changed into a chiefdom, a system where the chief was accompanied by a group of armed guards (Diamond 2012) (*kuningas* ‘king’, *rikas* ‘rich, powerful’, *vardja* ‘guard’, *sadul* ‘saddle’, *mõõk* ‘sword’, and *ratsa* ‘by riding’). A set of terms reveal the rise of a trading economy (*raha* ‘money’, *kaup* ‘goods’, *tarvis* ‘needed’, *suur* ‘big’, *mõõt* ‘measure’, *tina* ‘lead’, *kuld* ‘gold’, and *vara* ‘hoard’). In relation to trading and social arrangements, the obligations of parties were discussed (*luna* ‘ransom’, *lõiv* ‘duty’, *laen* ‘loan’, *kihl* ‘surety’) and the violators of norms were labelled (*varas* ‘thief’). The role of the male side was obviously more discussed (*mees* ‘man, a male relative’, and *vend* ‘brother’) than in the previous period, when female values seemed to dominate. Certain terms are connected directly to burial traditions (*haud* ‘grave’, and *vare* ‘heap’) and the after-world (*Toone* < \**dawīni*- ‘death’). The essence of the Iron Age is reflected in the borrowing of such terms as *raud* ‘iron’ and *rooste* ‘rust’.

The emotion terms that originate in this stratum of lexical loans reveal that there was negotiating regarding values and emotions that can be attributed to warriors, either designating positive ideals (e.g. *au* ‘honour’, *ind* ‘ardour’ < \*‘feat’, and *hardus* ‘reverence’) or violating them (e.g. *arg* ‘cowardly’ < \*‘weak, timid’, *kade* ‘envious’ < \*‘harm’, and *häbi* ‘shame’ < \*‘jibe’). On the other hand, there are words that refer to the individual experience of displeasure (*vaev* ‘trouble’ < \*‘pain’, *valu* ‘pain’ < \*‘torment’, and *mure* ‘worry’) and pleasure (*õnn* ‘happiness’ < \*‘pleasure’, *lõbu* ‘fun’ < \*‘sleep’, and *armas* ‘beloved’ < \*‘miserable’). The lexical evidence seems to point directly to acquiring the “warrior” ideology, as described on the basis of the archaeological evidence (Jonuks 2009). Interestingly, the genuine Finnic terms coined

approximately in the same time period are partly complementary to the Germanic loanwords (see above). The relative prominence of terms for fear and admiration of those able to overcome it can be seen as reflections of the dominant “warrior ideology”. The elaboration of the domestic sphere of emotional life (attachment, pity, expressive behaviours, pleasure and displeasure), on the other hand, also reveals the rise of individualistic values and possibly also the concept of an individual soul, its well-being and destiny.

In conclusion, the period of the common Finnic and its speakers’ contacts with the speakers of the (Proto)-Germanic shows that, besides socially oriented emotions (shame, envy, honour and admiration), “ego-focused” emotions, such as lust and suffering, were discussed (Hupka et al. and their reference to Markus and Kitayama 1991: 235). Whatever the linguistic and demographic situation was like during the earlier phases of the Iron Age, after the climatic catastrophe and the population disaster in 536 A.D. only those were able to pass down their language who were flexible enough in their economy and in respect to adapting to the customs and values. The previous population level was not reached again until the end of the period (Tvauri 2012).

### **3.5. Emotional contacts between the populations speaking Pre-Estonian and Old East Slavic**

The last period to be described here (800–1200 A.D.) covers 400 years (16 generations), which is a considerably shorter period than those described in the previous sections. The temperature was a couple of degrees warmer than today’s average and the climate was much more maritime. In this humid climate, bogs began to develop, and many forests became swamps. The water level in lakes apparently rose, and flooding from rivers became more extensive (Tvauri 2012: 35–36). These climatic conditions favoured those populations who made use of transport on water: this facilitated fishing and gave better access to hunting grounds, as well as facilitating trading and forays. Part of the period (ca 900–1050 A.D.) is called the Viking Age due to the rise of their culture and geographical expansion. The archaeological evidence (an abundance of buried hoards) suggests that in the 860s and the 950s, the Nordic lands and the territory of present-day north-western Russia were also struck by a food shortage and loss of population (Tvauri 2012).

The descendants of those Finnic people who had survived the disaster in the middle of the sixth century (and at least partly mixed with the Germanic-speaking population) slowly recolonised empty territories. Similarly to the “cooling” period (1900–990 B.C.), the demographic and possibly linguistic “bottlenecks” in 536 A.D. and at the end of the first millennium might have resulted in a scattering of the Finnic-speaking people into linguistic communities located roughly in the territories that are considered to be their indigenous homelands. The people speaking the Pre-Estonian version of the language apparently found themselves on the southern coast of the Gulf of Finland. The following emotion terms are of Estonian origin: *ähm* ‘excitement’, *pabin* ‘jitters’, *jube* ‘awful’, *kõhe* ‘creepy’ < \*‘cold’, *õel* ‘mean’, and *jäle* ‘disgusting’. Again, there are several terms for distinguishing the nuances of fear.

There is no common view as to when the East Slavic tribes arrived in the area of the Finnic tribes in present north-western Russia. It must have happened between the fifth and the eighth centuries (Blokland 2009, referred via Metsmägi et al. 2013), in the time window of the maritime climate and the opportunities offered by mastering water transport. Lexical loans from people speaking Old East Slavic (later Old Russian) are much less numerous than are those from Baltic and Germanic languages (41–54, see Metsmägi et al. 2013). The loanwords reveal the topics of conversation between people, which included domestic matters, such as tools (*koonal* ‘bunch of tow’, *astel* ‘thorn’, *värten* ‘spindle’, *lusikas* ‘spoon’, and *sirp* ‘sickle’), clothing (*kalts* ‘rag’, and *saabas* ‘boot’), certain construction elements enabling opening and closure (*värav* ‘gate’, and *aken* ‘window’), and non-domestic matters, such as transport on water (*lodi* ‘small flat-bottomed boat’) and trading (*turg* ‘market’, and *määr* ‘amount’). Certain terms reveal that the trade might have been a slave trade (*ike* ‘yoke, slavery’, *piits* ‘whip’, *kari* ‘punishment’, *sundima* ‘to force’, and *vaba* ‘free’), which was carried out not on very friendly terms (*tapper* ‘battle-axe’, *vaen* ‘hostility’ < \*‘war’, and *raja* ‘border’). Finally, a set of Christianity-related terms in Estonian are also of Old Russian origin (*papp* ‘priest’, *pagan* ‘pagan’, *raamat* ‘book’, *rist* ‘cross’, *nädal* ‘week’, and *paast* ‘fast’). The latter could hardly have spread before the time when Christianity was accepted by the Rus from the East Roman Empire, in 988 A.D.

The emotional nature of the contacts between populations speaking Pre-Estonian and Old East Slavic is best described by the borrowed terms *vaen* ‘hostility’ < \*‘war’, *tusk* ‘grief’ and *kurb* ‘sad’ < \*‘mourning’.

It seems probable that being held in captivity or in slavery was a social context that made talking of these emotions necessary, and this explains the co-borrowing of both domestic vocabulary and terms related to slavery. It was also a suitable context for getting acquainted with the basic notions of Christianity and the concept of *raatsi-(ma)* ‘to have the heart to’ < \*‘to long, to yearn, to wish passionately’.

The archaeological evidence shows that people living in Estonia adopted a habit of wearing pendants (e.g. knife-, comb- and bird-shaped) during this period, which is considered to have been a “pagan” response to the Christian habit of wearing crosses (Jonuks 2009). It is possible that the heightened need for safety and protection made people cling to talismans. The insecurity of people was also reflected in the lexical diversity of the genuine Pre-Estonian terms that were coined for fear: an emotion which appears to have been highly salient during this period.

#### 4. Conclusion and general discussion

The current study has dealt with only a portion of the emotion terms that are present in Estonian today. It has focused on the earliest developmental stages of the emotion vocabulary that can be detected by relying on the etymology of terms. The purpose was to answer the following questions: a) Would the emergence/borrowing of emotion terms match the supposedly universalistic sequence of their emergence proposed by Hupka et al. (1999)? and b) What does the pre-history of emotion lexicon reveal about the “psychological culture” of our ancestors in terms of possible types of interactions and related emotions? In order to understand the circumstances of certain emerging concepts better, the available background knowledge from different disciplines (archaeology, climatology etc.) was included.

Examination of the material showed that, besides emotion terms which are the result of changes in meaning and derivation, there is a set of terms that have designated emotion-related phenomena (emotional states and personality traits) from the very beginning. Besides the group of genuine Finnic terms, there are also terms that are loanwords borrowed from the Indo-European languages in prehistoric times.

The sequence in which the borrowed emotion terms appear is presented in Table 1, in a compressed manner. The first emotion to be conceptualised, lexicalised and borrowed appears to be *fear* and its

opposite, *the ability to overcome it*, while according to Hupka et al. (1999) it should be the complementary pair of *anger/guilt*. In the second stage appear *desire* and *anger*, instead of *adoration*, *alarm*, *amusement* and *depression* as predicted by Hupka et al. (1999). Perhaps the third phase, *care* and *mourning* in the present study and the categories of *alienation*, *arousal* and *agony* as presented by Hupka et al., can be considered to be compatible to a certain extent. The fourth phase consists of a wider variety of terms for socially oriented (*honour*, *cowardly*, *shame* and *envy*) and ego-focused emotions (*worry*, *trouble*, *pleasure* and *pain*) in the present study, while according to Hupka et al. only *eagerness* should emerge. The fourth phase here is dominated by depression (*sadness* and *grief*), while according to the universalistic model it should be *anxiety*, *aggravation* and *pride*.

It is clear that the actual record of prehistoric emotional loanwords does not support the universalistic model as proposed by Hupka et al. (1999). The results of the current study match more closely some of the emotional universals as proposed by Wierzbicka (1999: 275–276). Namely, the word for the concept FEEL (*tundma* ‘to feel, to know’ < \*‘to notice, to recognise’) was present in the earliest stage of the Uralic stems, and the terms for *fear* and *anger* were the first ones to be borrowed.

These conclusions are problematic of course. One can argue that there might have once existed terms for all those categories in the Uralic proto-language, appearing precisely in the predicted sequence, but they have not been transmitted down to Estonian. If there were genuine terms for emotions in the languages spoken by Pre-, Proto- and Post-Uralic and Pre-Finnic communities (6000–900 B.C.), they seem to have become extinct in the course of millennia. Indeed, one cannot exclude this possibility. At the same time, however, the described set of emotional loanwords has persisted under the same conditions. Apparently, this is because they have been in use constantly, and were passed down from generation to generation (“use it or lose it”). These aspects of emotional life have been relevant to discuss throughout the millennia, while the others have not, or became extinct together with the speakers.

In addition to the borrowed terms, it appears that the first genuine terms<sup>11</sup> for emotions originated in the period of the common Finnic (900 B.C.–800 A.D.), which matches the period of transition from bronze to iron in weaponry and tools, and the period when the

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<sup>11</sup> They are considered genuine, as the opposite has not been proved yet.

tradition of *runo* singing is estimated to have originated. During that period a population disaster occurred (in 536 A.D.): a real bottleneck that must have reduced both genetic and linguistic variability for centuries and possibly caused at least a linguistic “founder effect”. By this I mean that present-day Estonian is a language that has its roots in a dialect or sociolect spoken by the survivors. Interestingly, reflecting an array of certain emotions seems to have been important enough not to disappear during difficult times.

It is remarkable that the emotion of fear seems to have been conceptualised and lexicalised at a number of different times. Apparently, this reflects a basic behavioural strategy (*fight* or *flight*) that generally pays off in the long run, but possibly does not do so in regards to the social norms of a given society (e.g. in the “warrior ideology”). Some other scholars have also noted that words in the fear category outnumber the other emotional categories in Estonian (Lotman 2009). In a synchronic account of language, the abundance of fear terms might be interpreted as hypercognition<sup>12</sup>, while in a diachronic account it definitely makes sense.

The increase in the number and variety of emotion terms seems to be largely in correlation with the frequency of contacts, which in turn is correlated with the growth of population due to climatic conditions and socioeconomic innovations (agriculture and herding)<sup>13</sup>. A factor facilitating the contacts was the availability of means of transport, which was also related to changing climatic conditions. Since the period of cooling and the climate becoming more arid during the Bronze Age (1900–900 B.C.), it seems that the groups relying on water transport only were in somewhat less favourable conditions than those making use of chariots, wagons, oxen and horses. During the period of maritime climate (ca 200–800 A.D.), on the other hand, water transport was an advantage, giving access to vast territories.

David Anthony claims that people did not migrate simply because of over-crowding or because of having the means of transport at hand. There were other kinds of “push” factors (negative conditions at home): war, disease, crop failure, climate change, institutionalised raiding for

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<sup>12</sup> The concepts of *hypercognition* and *hypocognition* come from Levy (1984), who explains them as certain normative ways for a culture to control feelings either by turning them into a prescriptive obsession rather inadequate to reality (hypercognition) or by establishing that it is better just “not to know” certain emotion concepts (hypocognition).

<sup>13</sup> According to J. Diamond (and his references to anthropologists), population size is related to the complexity of social organisation: bands → tribes → chiefdoms → states (Diamond 2012).

loot, high bride-prices, the laws of primogeniture, religious intolerance, banishment etc. (Anthony 2007). Although the migration theory of the (pre-)Finnic-speaking people seems to be out of fashion (Künnap 2013), it should be considered that some other forms of demic movements, such as infiltration, are also possible (Carpelan 2006).

It is obvious that the contacts between populations that resulted in borrowing emotion vocabulary must have been close and not very brief in nature. One has to share a space of living for quite a while before such a discourse can emerge in which emotions are discussed. Therefore, I would exclude the possibilities of occasional encounters with strangers in forests and annual trade negotiations. Long term slavery and military service are stronger possibilities. In addition, I believe that the borrowing of emotion terms was vertical (passed on from one generation to the next) rather than horizontal (passed on from person to person in daily interactions). One of the recurring situations where such transmission happens is intermarriage between different tribes. Due to the tradition of patrilocal residence, it also contributed to the geographical spread of cultural and possibly economic innovations.

Apparently, in different social settings, new kinds of socially determined ideologies emerged. The ideologies of hunter-gatherers, nomadic herders, agricultural peasants and warriors were different and so were the aspects of social behaviour that needed to be negotiated. The relevant emotion categories were conceptualised, lexicalised, conversed in and adopted by partners in interaction.

In summary, the lexical evidence, together with the background information of other disciplines, suggests two broad periods of the prehistoric development of emotion vocabulary:

- 1) A period of acquiring the first loan terms for emotions by the speakers of Uralic-type languages in recurring and close contacts with the Indo-European-speaking populations (6000–900 B.C.). The nature of the relevant emotions reflects interrelations dictated by the more elaborated social structure of herders and cultivators (as compared to hunters and gatherers), which was apparently adopted with distrust and reluctance, at least at first.
- 2) A period of generating genuine emotion terms by the speakers of the common Finnic, and adopting new terms from the Germanic and Slavic languages (900 B.C.–1200 A.D.). The collectivist and ancestor-oriented values of the previous period were replaced by the rise of a warrior ideology and, possibly, by the concept of an individual soul capable of bravery, suffering, attachment, passion and compassion.

Not matching exactly the sequence predicted by the literature does not mean that the development of the emotion vocabulary was illogical or that the borrowing was somehow eclectic. Differentiation within the prehistoric “psychological culture”, in terms of the development of emotion categories, broadly matches the differentiation and increasing complexity in the material culture and social relations.

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### **References**

- Anthony, David W. (2007) *The horse, the wheel, and language: How Bronze-Age riders from the Eurasian steppes shaped the modern world*. Princeton, Oxford: Princeton University Press.
- Arjava, Antti (2005) “The mystery cloud of 536 CE in the Mediterranean sources”. *Dumbarton Oaks Papers* 59, 73–94.
- Berlin, Brent and Paul Kay (1969) *Basic color terms: Their universality and evolution*. Berkeley: University of California Press.
- Blokländ, Rogier (2009) *The Russian loanwords in literary Estonian*. (Veröffentlichungen der Societas Uralo-Altaica, 78.) Wiesbaden: Harrassowitz Verlag.
- Carpelan, Christian (2006) “On archaeological aspects of Uralic, Finno-Ugric and Finnic societies before AD 800”. *Slavica Helsingiensia* 27, 78–91.
- Carpelan, Christian and Asko Pärpola (2001) “Emergence, contacts and dispersal of Proto-Indo-European, Proto-Uralic and Proto-Aryan in archaeological perspective”. In Christian Carpelan, Asko Pärpola and Petteri Koskikallio, eds. *Early contacts between Uralic and Indo-European. Linguistic and archaeological considerations*. (Suomalais-Ugrilaisen Seuran Toimituksia. Mémoires de la Société Finno-Ougrienne, 242.) 55–150. Helsinki: Suomalais-Ugrilainen Seura.

- Catton, William R., Jr (2009) *Bottleneck: Humanity's impending impasse*. Xlibris Corporation.
- Diamond, Jared (2012) *The world until yesterday: What can we learn from traditional societies?* Viking Press.
- EED = Metsmägi, Iris, Meeli Sedrik and Sven-Erik Soosaar (2012) *Eesti etümo- loogiasõnaraamat* [The etymological dictionary of Estonian]. Tallinn: Eesti Keele Sihtasutus.
- Emel'yanov, Alexander (2001) "Forest hunters of Eurasia". *Expedition Magazine* 43, 1, 29–37.
- Honkela, Terhi, Outi Vesakoski, Kalle Korhonen, Jyri Lehtinen, Kaj Syrjänen and Niklas Wahlberg (2013) "Evolutionary history of Uralic languages". *Journal of Evolutionary Biology* 26, 1244–1253.
- Hupka, Ralph B., Alison P. Lenton and Keith A. Hutchinson (1999) "Universal development of emotion categories in natural language". *Journal of Personality and Social Psychology* 77, 2, 247–278.
- Häkkinen, Jaakko (2009) "Kantauralin ajoitus ja paikannus: perustelut puntarissa". *Suomalais-Ugrilaisen Seuran Aikakauskirja* 92, 9–56.
- Jonuks, Tõnno (2009) *Eesti muinasusund* [Estonian prehistoric religions]. Tartu: Tartu ülikooli kirjastus.
- Kallio, Petri (2006) "Suomen kantakielten absoluuttista kronologiaa". *Virittäjä* 110, 2–25.
- Koivulehto, Jorma (1991) *Uralische Evidenz für die Laryngaltheorie*. (Veröffentlichungen der Kommission für Linguistik und Kommunikationsforschung, 24.) Wien: Österreichische Akademie der Wissenschaften.
- Koivulehto, Jorma (2001) "The earliest contacts between Indo-European and Uralic speakers in the light of lexical loans". In Christian Carpelan, Asko Parpola and Petteri Koskikallio, eds. *Early contacts between Uralic and Indo-European: Linguistic and archaeological considerations*. (Suomalais-Ugrilaisen Seuran Toimituksia. Mémoires de la Société Finno-Ougrienne, 242.) 235–264. Helsinki: Suomalais-Ugrilainen Seura.
- Kövecses, Zoltan (2000) *Metaphor and emotion. Language, culture and body in human feeling*. Cambridge: Cambridge University Press.
- Kövecses, Zoltan (2006) *Language, mind and culture. A practical introduction*. Oxford: Oxford University Press.
- Kriiska, Aivar (2002) *Eesti muinasaeg* [Estonian prehistory]. Tallinn: Avita.
- Künnap, Ago (2000) *Contact-induced perspectives in Uralic linguistics*. Munich: Lincom.
- Künnap, Ago (2013) *Eesti keele päritolu* [The origins of Estonian]. Tallinn: Eesti Keele Sihtasutus.
- Lang, Valter (2013) "Kuidas, miks ja millal said meist läänemeresoomlased?" [How, why and when did we become a Finnic people?]. A lecture given in Series of Estonian National Sciences in Tartu University (14.11.2013). Available online at

- <<http://www.postimees.ee/2595632/millal-said-estlastest-laanemeresoomlased-vaata-videoloengut>>. Accessed on 24.11.2013.
- Larsson, Lars-Gunnar (2001) "Baltic influence in Finnic languages". In Östen Dahl and Maria Koptjevskaja-Tamm, eds. *The Circum-Baltic Languages. Typology and Contact*. Vol. 1: Grammar and Typology, 237–255. Amsterdam, Philadelphia: Benjamins.
- Leete, Art (1999) "An outline of descriptions of Ob-Ugrians and Samoyeds in West-European and Russian sources from the 11th through the 17th centuries". *Pro Ethnologia. Publications of Estonian National Museum* 8 (Arctic Studies 3), 35–56.
- Levy, Robert (1984) "Emotion, knowing and culture". In R. A. Schweder and R. A. LeVine, eds. *Culture theory: Essays on mind, self and emotion*, 214–237. Cambridge: Cambridge University Press.
- Ligi, Priit (1995) "Ühiskondlikest oludest Eesti alal hilispronksi- ja rauaajal". In Valter Lang, ed. *Eesti arheoloogia historiograafilisi, teoreetilisi ja kultuuriajaloolisi aspekte*. (Muinasaja teadus, 3. Töid arheoloogia alalt, 3.) 182–270. Tallinn: Eesti Teaduste Akadeemia Ajaloo Instituut.
- Lotman, Mihhail (2009) "Hirmusemootika ja vene kultuuri tüpologia IV. Hirm ja selle kognitiivsed mudelid: eesti hirm saksa ja vene mudeli taustal". *Akadeemia* 21, 5, 1035–1064.
- Marcantonio, Angela (2002) *The Uralic language family: Facts, myths and statistics*. (Transactions of the Philological Society, 35.) Oxford, Boston: Blackwell.
- Markus, H. Rose and Shinobu Kitayama (1991) "Culture and the self: Implications for cognition, emotion, and motivation". *Psychological Review* 98, 224–253.
- Metsmägi, Iris, Meeli Sedrik and Sven-Erik Soosaar (2013) "Eesti kirjakeele tüvevara päritolu arvudes". *Keel ja Kirjandus* 5, 313–332.
- Parpola, Asko (2012) "The problem of Samoyed origins in the light of archaeology. On the formation and dispersal of East Uralic (Proto-Ugro-Samoyed)". In *Per Urales ad Orientem. Iter polyphonicum multilingue. Festschrift tillägnad Juha Janhunen på hans sextioårsdag den 12 februari 2012*. (Suomalais-Ugrilaisen Seuran Toimituksia. Mémoires de la Société Finno-Ougrienne, 264.) 287–298. Helsinki: Suomalais-Ugrilainen Seura.
- Shostak, Marjorie (1981) *Nisa, the life and words of a !Kung woman*. Cambridge, MA: Harvard University Press.
- Soosaar, Sven-Erik (2013) "The origins of stems of standard Estonian – A statistical overview". *Trames* 17 (67/62), 3, 273–300.
- Tedre, Ülo (1998) "Rahvalaulud". In *Eesti rahvakultuur*. Compiled and edited by Ants Viires and Elle Vunder, 548–564. Tallinn: Eesti Entsüklopeediakirjastus.
- Tvauri, Andres (2012) *The migration period, Pre-Viking Age, and Viking Age in Estonia*. Tartu: University of Tartu Press.
- Vaba, Lembit (2011) "Balti laenude uurimine avab meie kauget minevikku". [Baltic loanwords offering insights into our distant past.] *Keel ja Kirjandus* 10, 734–763.

- Vainik, Ene (2002) "Emotions, emotion terms and emotion concepts in an Estonian folk model". *Trames* 6, 4, 322–341.
- Vainik, Ene (2004) *Lexical knowledge of emotions: The structure, variability and semantics of the Estonian emotion vocabulary*. Tartu: Tartu University Press.
- Wierzbicka, Anna (1999) *Emotions across languages and cultures: Diversity and universals*. Cambridge: Cambridge University Press.

**Kokkuvõte. Ene Vainik: Emotsionaalsed kontaktid indoeurooplastega. Eesti keele laensõnad laiemal eelajaloolisel taustal.** Eesti keele emotsioonisõnade etümologiseeringud osutavad, et osa neist on päritolu poolest eelajaloolised laenud erinevatest indoeuroopa keeltest. Käesolevas uurimuses grupeeritakse laenatud emotsioonisõnad vastavalt nende arvatavale omandamise järjekorrale ning perioodile. Emotsioonisõnade jaotuvuse tabelit täiendatakse informatsiooniga teistest peamistest semantilistest laenurühmadest samal laenuperioodil ja kliima, rahvaarvu ning materiaalse kultuuri muutumisest. Artiklis iseloomustatakse iga perioodi täpsemalt ning arutletakse selle üle, mis suhtes on olnud esiplaanil just teatud emotsioonid ning millistes sotsiaalsetes kontekstides võis tekkida vajadus neid keeleliselt kajastada. Tulemused osutavad, et emotsioonikategoriate esiletulemise ning laenamise järjestus ei lange päris täpselt kokku kirjanduse põhjal ennustatuga. Emotsioonikategoriate evolutsioon vastab üldjoontes hoopis materiaalse kultuuri, sotsiaalsete suhete ning ideoloogiate kasvavale eristumisele ning kompleksusele.

**Märksõnad:** Uurali keeled, indoeuroopa keeled, eesti keel, emotsioonikategoriad, esiajalugu, laensõnad