

## THE EARLIEST SUBSTRATA IN THE BALTIC-FINNIC LANGUAGES\*

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The first traces of the settlement of the East Baltic area after the last glacial period date back approximately to 8,000 B. C. Although we do not yet know which language was spoken by these early settlers, we can say more or less definitely where they came from and to which race they belonged. Basing their conclusions on the rich material at their disposal, archeologists have found a reliable explanation of the origin of the first settlers. The finds made in pre-historic settlements have enabled archeologists to compare the culture of the inhabitants of the East Baltic area with that of the settlers of other areas and to trace the relations between the early settlers of the East Baltic area with the population of other areas. It is not the aim of the present paper, however, to report on what archeologists have discovered as a result of their research work. We shall confine ourselves to rendering the views of those leading Estonian archeologists who have dealt with the problem most thoroughly and who have summed up in their research work also the views of other scholars. According to Harri Moora the first settlers of the East Baltic area came from the south. These settlers represented the so-called Kunda culture on the territory of the present-day Estonian, Latvian and Lithuanian Soviet Republics (partly also in the adjoining areas).<sup>1</sup> Richard Indreko believed that there existed a close relation between the Kunda culture and that of the southern part of Eastern Europe.<sup>2</sup> Lembit Jaanits expressed the view that the carriers of the Kunda culture consisted of various ethnic groups which came partly from the south and partly from the east.<sup>3</sup> In the south there extended the area of the so-called Swidry culture, which was related to the Kunda culture. In the late Palaeolithic period and in the Mesolithic period, for instance, large numbers of flints were introduced to the region of the Pärnu river from the south. On the other hand, the Suomusjärvi culture, which was wide-spread in Finland, was related to the culture characteristic of the middle reaches of the Volga and the Oka, the latter being closely related to the Swidry culture. Despite its exposure to new influences coming from the Dnieper basin, the Kunda culture retained its uniformity throughout the Neolithic period. A special form of Neolithic culture, the so-called comb-ceramic culture, which

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<sup>1</sup> H. MOORA, *Eesti rahva ja naaberrahvaste kujunemisest arheoloogia andmetel. — Eesti rahva etnilisest ajaloost*, Tallinn 1956, p. 94 ff.

<sup>2</sup> R. INDREKO, *Mesolithische und frühneolithische Kulturen in Osteuropa und Westsibirien — Kungliga Vitterhets, Historie och Antikvitets Akademiens Handlingar. Antikvariska Serien 13*, Stockholm 1964, p. 58 ff.

<sup>3</sup> Л. Яанитс, *Поселения эпохи неолита и раннего металла в приустье р. Эмайыги (Эстонская ССР)*, Таллин 1956, p. 327 ff. and his oral data.

spread from the slopes of the Urals and from the Kama region, was characteristic of the Finno-Ugrians and it coalesced with the culture that dominated earlier in the East Baltic area. Later, at about 2,000 B. C. the East Baltic area saw the spread of the boatax culture, which belonged to the ancestors of the Balts. The introduction of this culture to the Fenno-Ugric regions of the East Baltic area gave rise to the establishment of contacts between the ancestors of the Baltic Finns and of the Balts. These contacts have been thoroughly studied, but they will not, however, be more closely dealt with in the present paper.

The research work carried out by the anthropologist Karin Mark has shed much valuable light on the descent of the earliest settlers in the East Baltic area. This competent Estonian archeologist has, in fact, proved that the carriers of the Kunda culture came from the south and belonged to the Europoid parent race.<sup>4</sup> On the basis of archeological data, H. Moora pointed out that the Fenno-Ugrians came from the Urals to the western forest zone of North Europe as early as the 4th millenium B. C.<sup>5</sup> This point of view has now also been confirmed by K. Mark on the basis of anthropological data. In the 6th and 5th millenium B. C. a population of eastern origin appeared in this region. This population belonged to the Proto-Lappic type. In the 3rd millenium B. C. the Proto-Lappic type penetrated also into the East Baltic area. Before the arrival of the Proto-Lappic type it was an Europoid element belonging to the Proto-European type that dominated in the East Baltic area. The latter represented the Proto-European type that survived under the Finno-Ugrians, who had come from the east, and who may well have been the inheritors of the Kunda culture.<sup>6</sup>

According to the data of archeology and anthropology the tribes who had settled in the East Baltic area before the Finno-Ugrians were different in race from the latter and had a culture of their own. These settlers were mostly Europoids. Before being settled by the Europoids, the East Baltic area (at least its border regions) had also been inhabited by Mongoloids. Finds from Karelia serve as additional proof of this fact. When the settlers belonging to the Europoid type came to Karelia they found the Mongoloid inhabitants there already and coalesced with them.<sup>7</sup> Thus as early as during the Kunda culture the East Baltic area may have been inhabited by a population consisting of various races, who afterwards fused with the Finno-Ugrians, leaving their traces in the latter. Traces of the early settlers can be found also in the language from which the present Baltic-Finnic languages have developed. These traces left in the Baltic-Finnic languages by the earliest settlers can be regarded as a substratum. We shall now proceed to examine this substratum in greater detail.

In the Baltic-Finnic languages a very old Indo-European substratum can be found. There is a considerable amount of literature on ancient language contacts between the Finno-Ugric and Indo-European languages. The fact has been stated that in all the Finno-Ugric languages there are Indo-Iranian or Aryan loanwords, e.g. Est. *iva*, dial. *üvä*, *jüvä*, Finn. *jyvä* 'grain', Erza, Moksha *юв* 'chaff', Udm. *ю* 'corn, grain' etc. <Sansk. *java* - 'corn, barley'; Est. *sarv*, Finn. *sarvi*, NLapp.

<sup>4</sup> K. MARK, Zur Herkunft der finnisch-ugrischen Völker vom Standpunkt der Anthropologie, Tallinn 1970, p. 85 ff.

<sup>5</sup> H. MOORA, Eesti rahva ja naaberrahvaste kujunemisest arheoloogia andmetel, p. 47.

<sup>6</sup> K. MARK, op. cit., p. 88 ff.

<sup>7</sup> K. MARK, op. cit., p. 88 ff.

čoar<sup>1</sup>ve, Erza суро, Moksha сюра, Mari шур, Udm., Komi сюр, Hung. szarv, etc. 'horn' <Aryan śrwa — id.; Est. sada, Finn. sata, Erza сядо, Moksha сяда, Mari шүдö, Udm. сю, Komi сө, Hung. száz 'hundred' <Aryan śata-m id.; Est. vasar, Finn. vasara, Lapp. vaečcer 'hammer', Erza узере, узерь, Moskha узерь 'hatchet, axe' <Sansk. vajra 'belemnite'. In his work „Fenno-Ugric Vocabulary” (Stockholm 1955, p. 123 ff.)<sup>8</sup> Björn Collinder has given a complete survey of the old Indo-European words occurring in many Finno-Ugric languages. Part of the Indo-European loanwords were taken over by the Finno-Ugrians already at the time of the parent language, i.e. in the late Palaeolithic, when contacts between the Finno-Ugrians and Indo-Europeans were first established. According to the data of anthropology at that time part of the Indo-Europeans settled down in the North.<sup>9</sup> In addition to direct territorial contacts the Indo-Europeans and Finno-Ugrians could also have had trade relations and as a result some cultural loanwords could have passed from one people to another. A very old Indo-European loanword connected with trading is the Finn. and Kar. ola 'flint'; indeed, flints were among the oldest trading articles.<sup>10</sup> The very oldest Indo-European or so-called Aryan loanwords in the Finno-Ugric languages were borrowed from the Indo-Europeans who spoke a satem-language or satem -languages and lived in the easternmost regions occupied by the Indo-Europeans. In all probability the oldest Finno-Ugric and Indo-European language contacts were established in various areas between separate dialects of the parent language or between certain languages which originated from the parent language. When the Finno-Ugrians came to the East Baltic area there were undoubtedly also some Indo-Europeans among the Europoid settlers, living there in the epoch of the Kunda culture. We can assume this because in the Baltic-Finnic languages there are very old Indo-European loanwords which cannot be considered as old Aryan borrowings, although they are older than the Baltic loans which began to penetrate into Proto-Baltic-Finnic in the 2nd millennium B. C., to say nothing of later Germanic loans. The author is of the opinion that in the first place the animal names tarvas and kabris may belong to the Indo-European loans taken over probably in the East Baltic area. Tarvas originally denoted the aurochs (*Bos primigenius*). From the 5th—3rd millennium B. C. the aurochs was widely spread in the East Baltic area. For the representatives of the Kunda culture it was an important wild animal as is proved by sub-fossil finds.<sup>11</sup> The equivalents of tarvas occurring in different form and meaning in the modern Baltic-Finnic languages are generally considered to be Baltic loans; the corresponding word in Lithuanian is tauras 'aurochs' and in Prussian tauris 'bison'.<sup>12</sup> The word tarvas, however, which can be found in Estonian and other Baltic-Finnic languages, has doubtless been borrowed from the Indo-European languages (cf. Latin taurus, Gk. tauros 'bull'). Phonetic and logical difficulties arise, however, if we want to trace the Baltic-Finnic tarvas back to the above-mentioned words

<sup>8</sup> See also A.-M. UESSON, *On Linguistic Affinity. The Indo-Uralic Problem*, Malmö 1970, p. 124 ff.

<sup>9</sup> K. MARK, *op. cit.*, p. 94 ff.

<sup>10</sup> K. VILKUNA, *Ein früharisches Lehnwort, fi. ola 'Feuerstein, Kiesel'*. — FUF XXI 1933, p. 161 ff.

<sup>11</sup> К. Паавер, *Формирование териофауны и изменчивость млекопитающих Прибалтики в голоцене*, Таллин 1965, p. 292 ff., 308 ff.

<sup>12</sup> E. ITKONEN—A. J. JOKI, *Suomen kielen etymologinen sanakirja IV*, Helsinki 1969.

in the Baltic languages. The form *tarvas* presupposes the Indo-European form *\*tarwas*. The Finno-Ugrians, who had come from eastern areas where the aurochs was rare, could have adopted the word in a metathetic form from the Indo-European hunters who had hunted the aurochs in the East Baltic forests for thousands of years. It would be difficult to believe that the name of such a big animal as the aurochs was adopted only when the forefathers of the Balts began to invade the Finno-Ugrian areas. The aurochs was surely already earlier a generally known animal. The roe (*Capreolus capreolus*) is in Finn. *kauris* or *kapris*; Kar. *kabris*, Vot. and Izhor. *kabriz*. The word *kabris* occurred earlier also in Estonian as is evident from place-names. This Baltic-Finnic word is considered to be an old Germanic loan, cf. ONorw. *hafr*, Old English *haefer*.<sup>13</sup> It was generally believed that the Baltic-Finnic languages adopted the word from Proto-Germanic. *Capreolus capreolus*, however, occurred in the East Baltic area already during the period of the Kunda culture, as it is proved by sub-fossil finds.<sup>14</sup> *Kabris*, etc. is an Indo-European loan (cf. Latin *capra* 'goat') which, as far as the Finno-Ugric languages are concerned, can be found only in the Baltic-Finnic languages. *Capreolus capreolus* lived chiefly in the western regions of the North European mixed and deciduous forest zone. It is highly probable that when the Finno-Ugrians came to those parts they adopted this animal name from the Indo-Europeans living in the East Baltic area, i.e. already before they established any contacts with the Germanic peoples. There are also some other words which can be considered as elements of an Indo-European substratum in Proto-Baltic-Finnic. Such words are Est. *taevas*, Finn. *taivas*, Kar. *taivas*, *taivaš*, Veps., Izhor., Vot. *taivaz*, etc. 'sky, heaven'. These Baltic-Finnic words have sometimes been regarded as Baltic loans and they have been linked to Lith. *dievas*, Lett. *dievs*, Prussian *deiws*, *deywis* 'God'. In the Indo-European languages this word occurs not only in the Baltic languages (Latin *deus*, etc.). Recently, however, doubts have arisen as to the borrowing of the word *taivas* from the Baltic languages because of semantic difficulties in linking these words. It has been suggested that *taivas* may have originated from the Indo-Iranian or Aryan languages where the corresponding word has also the meaning of 'sky, heaven'. The Proto-Vedic *\*daiwas* has been constructed as the original form for Indo-Iranian, a form which corresponds closely to the Baltic-Finnic word *taivas*.<sup>15</sup> However, the ancestors of the Baltic-Finns are very unlikely to have had so close links with the far-away Indo-Iranians that they could borrow such an abstract notion as *taivas*. It is not a common word in trading relations which could have spread to remote countries. Thus it is likely that the word was also borrowed into the Baltic-Finnic parent language from the Indo-Europeans, who had settled in the eastern part of the East Baltic area before the Finno-Ugrians with whom they came into direct contact.

There are few common Indo-European loan-words in the Baltic-Finnic and Volgaic languages, such as Est. *sõsar*, Finn. *sisar* 'sister', Ers. *caзop* id., Moksh. *caзop* 'younger sister', Mari *мӱжап* 'younger sister'. These words of the Volgaic languages are regarded as old Indo-European loan-words which they unquestion-

<sup>13</sup> Y. H. TOIVONEN, Suomen kielen etymologinen sanakirja I, Helsinki 1955; P. ARISTE, *Kabrist ei võiks velmata?* — *Eesti Loodus* 1970, p. 459 ff.

<sup>14</sup> K. Пaabep, op. cit., p. 218 ff.

<sup>15</sup> E. I. ITKONEN—A. J. JOKI, op. cit.; S. K. CHATTERDJI, *Balts and Aryans in Their Indo-European Background*, Sinha 1968, p. 142.

ably are.<sup>16</sup> As there are corresponding words in Baltic-Finnic it has been believed that they may be Baltic loan-words, cf. Lith. *sesuo*, Gen. *sesers*.<sup>17</sup> However, Finn *sisar*, Vot. *sôzar*, Est. *sôsar*, Kar., Veps. *sizar* differ so much from the corresponding Baltic words that the question again arises whether the ancestors of the Baltic-Finns had not borrowed these names of kinship from the Indo-Europeans of the Kunda culture before they came in touch with the Baltic tribes. A thorough analysis of the old Indo-European loan-words common to Baltic-Finnic and Volgaic languages hardly reveals any which are of Baltic origin in both language groups. The Volgaic languages are likely to have borrowed these words from either the Iranian or Indo-Iranian languages, whereas in the Baltic-Finnic languages they should be regarded as the probable Indo-European substratum of the Baltic area. In comparison with the other Finno-Ugric languages the Baltic-Finnic languages have numerous Indo-European features. The influence of Indo-European is believed to have made itself felt through the Baltic or even Germanic languages.<sup>18</sup> The influence of Baltic and Germanic languages can be observed in Baltic-Finnic, being evident first and foremost in the vocabulary. However, as there are some old features in the sound system and the grammatical structure of the Baltic-Finnic languages which they share with the Indo-European languages, but which do not occur in the Finno-Ugric languages, there is every reason to believe that the Indo-European features found in all Baltic-Finnic languages were borrowed either from the pre-Finno-Ugric substratum or they are a result of prolonged contacts with the Indo-Europeans of the Kunda culture. It is highly probable that these Indo-Europeans spoke a satem language. In the opinion of the Estonian archeologist Lembit Jaanits, these Indo-Europeans came to the eastern part of the Baltic area from the Dnieper region during the early Neolithic period.

Research into the vocabulary of the Baltic-Finnic languages has revealed that there are words in these languages which are not of Finno-Ugric origin and which cannot be regarded as borrowed from an Indo-European language (or languages) known to us. Such words of unknown origin include somatic words, which are in general stable, but may be borrowed from another people in the course of close linguistic contact, especially in case of prolonged bilingualism. Words of unknown origin, common to the Baltic-Finnic languages, are, e.g. Finn. *hiki*, Est. *higi* 'sweat', huuli — huul 'lip', koipi — koib 'leg', kuve, Pl. *kupeet* — *kube*, Pl. *kubemed* 'groin', kylki — külg 'side', liha — liha 'meat', niska — dial. *nisk* 'back of the head', nenä — nina 'nose', etc. These Finnish and Estonian words can be found also in other Baltic-Finnic languages. In future it will perhaps be shown that some of the words of unknown origin given above are of Finno-Ugric origin; all of them, however, cannot be traced to Finno-Ugric. Other somatic words, which have not been mentioned here, may also have been borrowed from a language quite unknown to us. Of unknown origin are also numerous geographic notions among the Baltic-Finnic words. It is known that geographic terms sometimes continue in use although the corresponding community may have switched over to another language. This is because geographic terms are closely connected with place-names which often survive in case of a language change. Such Baltic-

<sup>16</sup> B. COLLINDER, *Fenno-Ugric Vocabulary*, Stockholm 1955, p. 136.

<sup>17</sup> J. KALIMA, *Itämerensuomalaisten kielten balttilaiset lainasanat*, Helsinki 1931, p. 162 ff.

<sup>18</sup> L. POSTI, *From Pre-Finnic to Late Proto-Finnic*. — FUF XXXI, 1953, p. 1 ff.

Finnic geographic words of unknown origin are, e.g., *niemi* — *neem* 'peninsula', 'cape', *nummi* — *nõmm* 'heath', *oja* — *oja* 'brook, stream', *orko* — *org* 'valley, lowland', *saari* — *saar* 'island', *sammal* — *sammal* 'moss', *suo* — *soo* 'marsh, swamp', etc. Special mention must be made of the Baltic-Finnic word *meri* 'sea'. This word has a corresponding one in several Indo-European languages (Lat. *mare*, Lith. *marės*, Russ. *more*, Germ. *Meer*, etc.). The corresponding Indo-European words are regarded as loans from some unknown pre-Indo-European language in Europe.<sup>19</sup> The stem *mere-* of the Baltic-Finnic *meri* cannot be phonetically connected with any of the known corresponding Indo-European words. Hence we can presume that also in the Baltic-Finnic languages this word stems from an unknown language whose speakers acquainted the ancestors of the Baltic-Finns with the sea, a great body of water, unknown to them in the East. This substratum people acquainted ancestors of the Baltic-Finns also with amber. In Liv the word *el'm* signifies 'amber' even today, the Estonian word *helm* has the same meaning in dialects. However, Finn. *helmi*, Est. *helmes* now usually means 'pearl'.<sup>20</sup> Objects and pieces of jewelry made of amber have been found on Estonian territory already in settlements dating from the 3rd millennium B. C., that is from the time when the Finno-Ugrians first moved into the region.

It has already been mentioned that as regards their content place-names stand close to geographical terms. The toponyms of the Estonian S.S.R. and Latvian S.S.R. as well as those of the regions of the Russian S.F.S.R. originally inhabited by Baltic-Finnic peoples have not yet been sufficiently studied. Hence it is not possible at present to give even an approximately precise account of whether there are any pre-Finno-Ugric substratal toponyms in the East Baltic area. The existence of such toponyms can, however, be assumed with a considerable degree of certainty. The biggest lake in the East Baltic area is known under the following names: Est. *Peipsi*, Vot. *Peipuz*, Izhor. *Peibuz*; Finn. *Peipus*. It is not possible to provide a Finno-Ugric etymology for this hydronym. In the western part of the Leningrad Region there is another lake whose Baltic-Finnic name has the same stem, viz. Vot. *Peipijä* and Izhor. *Peibijä*. It is possible that this hydronym *Peipsi-Peipijä* is a substratum word denoting a large body of water. An island name might also be mentioned in this connection as a possible substratal toponym. There is an island in the Gulf of Riga which is internationally known under the Swedish name of *Runö*. This Swedish name derives from the Estonian *Ruhnu*; the Latvian equivalent being *Ronu sala*, i.e. Seal Island. In Latvian the seal is called *ronis*, in Lithuanian *ruonis* or *ruinis*. This Baltic word is of unknown origin. It has been tentatively linked to Irish *rón* and Old English *hrán*.<sup>21</sup> The seal was an important game animal for the hunters of the Kunda culture and also later. It was hunted on the coast and in the vicinity of the islands, but was hardly more generally familiar to the Finno-Ugrians and the Baltic tribes before they settled on the shores of the Baltic. It may therefore be assumed that in the case of the toponym *Ruhnu* and in the corre-

<sup>19</sup> See F. KLUGE—W. MITZKA, *Etymologisches Wörterbuch der deutschen Sprache*, Berlin 1963, p. 469.

<sup>20</sup> P. ARISTE, *Läänemereelaste vanast merevaigu nimetusest*. — *Etnograafia Muuseumi Aasta-raamat XVI*, Tallinn 1959, p. 211 ff.

<sup>21</sup> K. BÜGA, *Rinktiniai raštai I*, Vilnius 1958, p. 302; II, Vilnius 1959, p. 304 ff.; K. MÜLENBACHS—J. ENDZELĪNS, *Latviešu valodas vārdnīca III*, Rīga 1927—1929, p. 581.

sponding words meaning seal in the Baltic languages we have another substratum word. Some fish names of unknown origin may also be substratum words, e.g. Finn. *ahven*, *ahvena*, Est. *ahven*, *ahun*, etc., Vot. *ahvakko* 'Perca fluviatilis'<sup>22</sup> and Finn. *hauki*, Est. *haug* 'pike', Finn. *siika*, Est. *siig* 'whitefish', etc. There are also some other words which might be regarded as substratum words. One of the future tasks facing researchers into the Baltic-Finnic languages should be the collection and description of all words of unknown origin. There are a fairly large number of words whose origin remains unaccounted for. The systematic analysis of this vocabulary will surely help to shed light on the form and content of the words concerned. It will also enable us to reach certain conclusions regarding the nature of the unknown substratum. Already at the present time one can say that as to its structure this substratum was a Euroasian language. If the grammatical structure of this substratum had been very different from that of the Finno-Ugric languages, it would have left more tangible traces in the Baltic-Finnic languages. The words of this unknown substratum were short. The hitherto unetymologized words of the Baltic-Finnic languages are for the most part disyllabic and they consist of C+V+C+V, C+V+CC+V or V+C+V and V+CC+V.

According to archeological evidence the speakers of the unknown substratum were more ancient than the settlers who came to the East Baltic area from somewhere in the region of the Dnieper, and who may be regarded as Indo-Europeans (oral data from L. Jaanits). Before the great dispersal of the Indo-Europeans, there were peoples in Europe who used languages about which we know little. Only Basque in the Pyrenees, the language of the descendants of the Iberians, is a living survivor of the European languages of the past. About some extinct languages, e.g. Etruscan, we know only so much that they were not Indo-European, Semitic-Hamitic nor Finno-Ugric. Pelasgian in Greece and Ligurian on the plain of the Po, in southern Switzerland, the Upper Rhineland and in the region of the Rhone, were pre-Indo-European languages. Of some other languages mentioned in the works of ancient authors we know likewise that they did not belong to any language family familiar to us. It is consequently highly probable that during the epoch of the Kunda culture — and even later — an unknown language (or languages) belonging to an apparently extinct language family was spoken in the East Baltic area.<sup>23</sup>

<sup>22</sup> According to A. Viikuna, however, this word is of Baltic-Finnic origin; see A. VIKUNA, *Kalanimistä kulttuurintutkimuksen lähteenä*, Helsinki 1965, p. 20.

<sup>23</sup> See also A.-M. UESSON, *On Linguistic Affinity*, p. 101 ff.