## Kalevi Wiik

## HOW FAR TO THE SOUTH IN EASTERN EUROPE DID THE FINNO-UGRIANS LIVE?

## Abstract

The author advances a theory on the movement of the language boundary between the Finno-Ugric and Indo-European languages in eastern Europe during approximately the last 8000 years. The language boundary was presumably "originally" on the Black Sea and has moved northwards ever since. It first followed the spread of the change in the subsistence system (the emergence of agriculture and stock-breeding) and later the spread of eastern trade and church. The Baltic and Slavic languages developed as the result of the aboriginal Finno-Ugric populations' shifting their language to Indo-European.

Keywords: subsistence boundary, language boundary, language shift, phonetic substratum.

Kalevi Wiik, Valpurintie 9 D, FIN-20300 Turku, Finland.

The southern limit of the Finnic peoples speaking western Finno-Ugric languages in the east-Baltic region is currently the border between eastern/ south-eastern Estonia and Russia and that between southern/south-western Estonia and Latvia. In considering in this article the question of where the Finnic languages (e.g. Finnish, Estonian, and Livonian/Livic) and their predecessors (Proto-Uralic, Proto-Finno-Ugric, and Proto-Finnic) were spoken in the past, I rely mostly on recent archaeological and linguistic research. I refer to those archaeologists and linguists who suggest that Indo-European (IE) languages (e.g. first Proto-Indo-European, then perhaps Proto-Balto-Slavic, later Proto-Baltic and Proto-Slavic, and later still Latvian, Lithuanian, Prussian, and the eastern Slavic languages of Russian, Belorussian, and Ukrainian) at one time spread to Finno-Ugric (FU) linguistic areas alongside agriculture, cattle-raising, and stock-breeding. The shift of the subsistence systems (hunting > farming) was often followed by the shift of languages (FU > IE).

1. 6000–5000 BC. During the 6<sup>th</sup> millennium Europe was divided into two basic subsistence zones, the inhabitants of northern Europe being food appropriators and those of southern Europe food pro-

ducers (Dolukhanov 1979:196-7). At this stage, the boundary between the two means of livelihood was also a language boundary: the lingua franca of the hunters, fishers and gatherers of northern Europe was made up of the dialects of the Uralic proto-language, while the lingua franca of the farmers, cattle-raisers, and stock-breeders of southern and eastern Europe was composed of the dialects of the Indo-European proto-language. The subsistence and language boundary ran from the Netherlands, through central Germany and along the southern border of Poland, to follow approximately the modern border of the Ukraine as far as the Black Sea. From there it continued north-eastwards to the southern Urals (Dolukhanov 1979:197; see Map 1, boundary -5500). Accordingly, about 7500 years ago the Uralic proto-language was probably spoken (when considering only the areas south of the eastern Baltic region) as far south as the Dnieper estuary and the Black Sea. According to Dolukhanov (1989:84), a Russian archaeologist, "one may imply that the Upper Palaeolithic Periglacial zone as a whole was populated by the direct predecessors of Proto-Uralian speakers." And according to Thomason and Kaufman (1988:238-9), two American linguists, the Baltic and Slavic spea-



Map 1. Boundaries -5500, -4000, -3000, -2000, +1000, and +1500 indicate the approximate position of the southern boundary of the FU languages at different times. The minus mark before the year = BC. On the map, the region of the emergence of Proto-Germanic is included, even if this area is not much touched upon in the text. Broken lines designate boundaries within a language group (e.g. Baltic vs. Slavic). G = proto-Germanic, B = proto-Baltic, S = proto-Slavic, and I = Indo-Iranian.

kers "expanded northward and eastward from their original homeland" and "they encountered speakers of non-IE languages, including (but probably not confined to) Uralic". In their book, Thomason and Kaufman then deal with about thirty pieces of linguistic evidence to show that the language shift Uralic/FU > IE really has taken place in the area.

The IE zone of the food producers reaching from western Europe to the south of the Ural mountains consisted of two halves: the western half belonged to the farmers and cattle-raisers of the central European loess lands, while the eastern one belonged to the stock-breeders of the Black Sea – Caspian steppes. The former had probably arrived in central Europe through the Balkans, while the latter had used the eastern route via the Caucasus/eastern Caspian to reach the Black Sea – Caspian steppes (Zvelebil 1995c:55). The first farming culture of central Europe was the Linear Pottery culture (*linearbandkeramik* or LBK), at its eastern extent (to the north-west of the Black Sea) linked to another important IE farming culture, the Tripolye-Cucuteni culture. The stock-breeding culture of the Black Sea – Caspian steppes was the Kurgan culture (in Russian archaeology "early Yamna", "Mikhailovka I" or "Maikop", and "late Yamna"). The nearest northern neighbours of the IE foodproducing cultures, those of the Uralic-speaking food-appropriators, were, from west to east, the cultures of Maglemose-Kongemose, Swidry-Niemen, Dniester-Bug, Dnieper-Donetz, Volga-Oka and Kama.

2. 5000-4000 BC. Three things essential from the point of view of the present article happened in eastern Europe during the latter half of the 5<sup>th</sup> millennium: (1) Agriculture spread to northern Europe reaching the southern shore of the Baltic Sea by 4200 BC. (2) Agriculture also spread to the north of the Black Sea from the Tripolye-Cucuteni cultural area to the Dniester-Bug and Dnieper-Donetz regions (Dolukhanov 1986:8, Zvelebil 1995b:122 and Gimbutas 1991:113). (3) Stock-breeding spread to the same area at the estuary of the Dnieper from the Kurgan culture in the east (Gimbutas 1991:358-9; cf. the two separate lines marked -4000 on Map 1).

It is, therefore, possible that towards the end of the 5<sup>th</sup> millennium BC, the Dnieper estuary (the southern part of the Dnieper-Donetz culture) was a trilingual area: within it, in addition to the Uralic language of the aboriginal inhabitants, two dialects of the IE proto-language (the western dialect of the Tripolye-Cucuteni culture and the eastern dialect of the Kurgan culture) were spoken.

**3. 4000–3000 BC**. During the 4<sup>th</sup> millennium, agriculture continued to spread in eastern Europe reaching now (1) the middle and upper Dnieper region (Zvelebil 1995:122) and (2) the entire area of the Niemen culture (Dolukhanov 1986:8; cf. boundary marked -3000 on Map 1). In western Europe, agriculture now spread to Northern Germany, Denmark and Scania.

Towards the end of the millennium, the subsistence system and (perhaps somewhat later) the language boundary ran along the southern border of the Narva culture and the Typical Combed Ware culture, or in a great sweep following the modern Polish and Memel-Lithuanian border. The populations of the middle and upper Dnieper and Niemen regions may conceivably have shifted their language from Finno-Ugric to Indo-European by 3000 BC. An equivalent language shift took place in the western area consisting of North Germany, Denmark, and southwestern Sweden as this area was indoeuropeanised.

The language shift FU>IE, which occurred in the middle and upper Dnieper and Niemen regions during the 4<sup>th</sup> millennium, may mark the birth of Proto-Balto-Slavic (Dolukhanov 1986:11, Zvelebil 1995c:55 and Wiik 1996:584-6). The mixed language of the lower Dnieper area (referred to as the area of three languages/dialects above) may designate the origin of the Indo-Iranian languages (cf. Zvelebil 1995c:55) or one of the dialects of these languages. The equivalent language shift in North

Germany, Denmark, and southwestern Sweden gave rise to Proto-Germanic.

Many achaeologists and linguists seem to have arrived at similar conclusions in respect of the origins of the Baltic and Slavic proto-languages. Both seem to agree in that the Balto-Slavic languages were formed under the substratal influence of the languages/dialects of the aboriginal populations, and many also maintain that the aboriginal populations in question spoke a Uralic/Finno-Ugric language/dialect (cf. e.g. Zvelebil 1995c:55 and Thomason & Kaufman 1988:43, 58, 97, 114, 119, 123, 238-251). I content myself here by giving two phonetic examples of the linguistic reflexes probably caused by the Finno-Ugrians shifting their language to an IE one. Both examples are true of the Germanic proto-language, as well, which suggests that these features were once common to the Germano-Balto-Slavic proto-language. As mentioned above, many other examples are given in Thomason & Kaufman (1988) and elsewhere.

(1) Merger of short and long a and o into an  $a^{\circ}$  (which later developed into an a-like vowel in the short series and into an o-like vowel in the long series in the Baltic (and Germanic) proto-language, and into an o-like vowel in the short series and into an a-like vowel in the long series in the Slavic proto-language). What is common to the Baltic and Slavic (and also the Germanic) proto-languages in this respect is that the opposition between the a-like and o-like vowels was neutralized. A probable cause for the neutralization was the labial or  $a^{\circ}$ -like pronunciation of the low back vowel in the FU proto-language (Janhunen 1981).

(2) Palatalization of consonants. There was no phonological palatalization in the consonants of the IE proto-language, while this pheneomenon was common in the (dental) consonants of the FU proto-language. The "soft" pronunciation remained as a FU substratal feature ("FU accent") in the Baltic and Slavic proto-languages. As a matter of fact, it probably also occured (as a non-phonological feature) in the Germanic proto-language. (In the daughter languages of Proto-Germanic, the feature was later one of the factors leading to the palatalization of the stressed vowels and giving rise to the umlauts in western and northern Germanic languages; cf. modern German Hand - Hände).

Extensive inventories of the FU substratum features in the Baltic and Slavic languages are found, for example, in the following publications: Pokorny 1936, Décsy 1967, Veenker 1967, Kiparsky 1969, Thomason & Kaufman 1988, Raukko & Östman 1994 and Künnap 1997.

In addition to the pieces of linguistic evidence hinted at above, there are several other types of indication to show that south-eastern and eastern Europe was once Finno-Ugric:

(a) The area of the **FU hydronyms** (names of rivers and lakes) comprises practically the entire area of eastern and south-eastern Europe under consideration. FU hydronyms have been found not only in the area from the Baltic Sea to the hinterland of Moscow and Kiev but also in the Ukraine and Poland (Lehr-Sptawin'ski 1946). In Latvia there are hundreds of Finnic hydronyms (Rudzīte 1968) and other place names (Ancītis & Jansons 1963 and Boiko 1993); in Lithuania the number of Finnic hydronyms is about 40 (Vanagas 1981:145).

(b) The vast FU linguistic area of the millennia and centuries of the past can in many instances be attested through the many FU language islands within the Baltic and Slavic languistic areas. Examples of small scale language island in Latvia (now extinct) are the Estonian language areas of Koiva, Lutsi, and Kraasna and the Livonian area of Salatsi. In Russia, there still were several FU language islands when such now extinct languages as Merya, Meshera, Muroma, and Zavolochkan Tshude still were spoken about a thousand years ago. It is a common feature of language shift areas that linguistic islands are left within the area of the winning languages.

(c) There is also **historical evidence** (early chronicles) that inevitably show that the FU linguistic area was considerably wider in the past (towards the end of the first millennium AD) than it is today. It is easy to imagine that the process of the assimilation of the FU populations by the IE speakers has been going on much earlier than even the end of the first millennium AD.

(d) Some weight may also be given to the anthropological homogeneity of the populations of the areas east of the Baltic Sea (see for example the map of Coon 1939 compiled on the basis of the pigmentation of hair and eyes; the map is included in Wiik 1995b). Unfortunately, a corresponding genetic homogeneity has not yet been attested.

4. 3500–2000 BC. Particularly in the latter part of the 3<sup>rd</sup> millennium the Baltic Sea area was influenced by the Corded-Ware/Battle-Axe culture. The language throughout most of this cultural area was an IE dialect, most probably Proto-Balto-Slavic or Proto-Baltic. Linguistically, the influence of these cultures was twofold: to the south (in the area best suited to agriculture) the area of Proto-Baltic cultures widened, while in the more northerly regions Proto-Baltic influenced local languages, without, however, changing them fundamentally into Baltic languages. It is difficult to know exactly how far to the north the Corded-Ware/Battle-Axe culture pushed the boundary between the Baltic and Finno-Ugric languages. I assume that it was pushed to near the present-day boundary between Latvia and Lithuania (a distance of about 150 kilometres from the Niemen), and also that during this period the whole area as far as Moscow and Kiev became at least partly Balticised: the many Baltic hydronyms are a testament to this (Gimbutiene 1995:55). Thus by 2000 BC, or somewhat later, the language boundary could be line -2000 on Map 1. Now also the distinction between Proto-Slavic (of the middle and upper Dnieper) and Proto-Baltic (of the Niemen basin) took place; cf. e.g. Zvelebil (1995c:55): "Balto-Slavic continued to develop in the middle Dnieper basin, the divergence between the two families occurring probably around 2000 bc or later with the adoption of farming in the eastern Baltic (KW: the Niemen basin) at the end of the Corded-Ware/Boat-Axe cultural horizon."

In various parts of the Lithuanian region the language shift FU>B may have occurred around 2000 BC. Indeed, in this area (and throughout the southern Baltic region) the numbers speaking the Proto-Finnic language of the Typical Combed Ware culture were small, so that late Proto-Finnic failed to leave a strong substratum in either the Lithuanian or Old Prussian languages (Jaanits et al 1982:124).

In Scandinavia, the area of Proto-Germanic was simultaneously widened to the approximate line between Oslo and Stockholm.

5. 2000-500 BC. During this period, which includes the Bronze Age (c.1500-500 BC), the Finnic southern boundary hardly moved. Pressure was undoubtedly felt in some areas from both east and west, but not so much from the south. From the west came influences from the Scandinavian Bronze culture (the centre of which was southern Scandinavia and Denmark) and eastern influences were derived from the Textile Pottery cultures centred in the Volga-Oka region (Huurre 1995:93). The language boundary had, however, already reached the Daugava (Väinäjoki) during the Bronze Age, and during the Roman Iron Age the Latvian area expanded further (perhaps by 50-150 kilometres) to the north of the Daugava (cf. boundary -1000 on Map 1; Gimbutiene 1995:109 and Jaanits et al 1982:206). This language shift left a powerful Finnic substratum in Latvian, as manifested, for instance, by the shift of word stress onto the first syllable. The area of initial stress today covers entire Latvia and, in addition, the northernmost dialect areas of Lithuania.

By the end of the Bronze Age at the latest, in both Baltic and Slavic areas, distinct western and eastern tribal areas began to emerge. The culture of the western Balts was that of Scratched Pottery, situated in the southern Baltic and western Belorussia, while the eastern Baltic culture was that of the Dnieper-Dvina, centred on the upper reaches of the Dnieper. The Slavic cultures were divided into the Lausitz culture of the Vistula basin in present-day Poland and the Milograd culture on the middle Dnieper (cf. Dolukhanov 1986:11). Here we have to assume that Proto-Slavic spread from the middle Dniepr to the Vistula basin (mixing there perhaps with a Finno-Ugric, Germanic, and/or Illyrian language and developing into a western Slavic dialect).

6. 500 BC-1000 AD. Finnic was still spoken in the northern part of Latvia in the middle of this period or approximately in 400 AD: the language of Courland and north-west Latvia (the Salatsi region) was Livonian (a Finnic language), and that of northern Latvia (central Vidzeme) and northeastern Latvia (Latgale) was a south Estonian dialect (see Jaanits et al 1982:166, 206, 244 and diagram XIV). The Slavic Expansion had still not begun. Soon after 400 AD, during the period 400-1000 AD, the language boundary moved significantly: (1) with the exception of a few Estonian language islands, northern Latvia was Lettified/Latvianised (Tõnisson 1974), and (2) the Slavic Expansion caused the Baltic Finns and their nearest eastern linguistic relatives (e.g the Meryas) to become Slavicised. The Slavicisation took place in the main because of the southern traders' and churchmen's arrival in the towns of the area. Under their influence, the towns became Slavicised, and the Slav language later spread into surrounding rural areas. The phenomenon in question here is thus one of a shift in the language of the native people, rather than any large influx of Slavic-speaking immigrants to the area (Ligi 1993). Exactly how far the Slavic Expansion extended in these areas can be seen from Map 1, boundary +1000 (the boundary line is based on Nestor's Chronicle dating from 1054 AD).

It is worth noting that the Slavic Expansion did not merely involve a language shift from Finno-Ugric to Slav, but also from Baltic to Slav: by 400 AD the area which extends from modern Latvia and Lithuania to Moscow and Kiev was at least partly Balticised (Gimbutiene 1994:109). When the Slavic expansion reached these regions, at least part of the population already spoke a Baltic language. The situation with regard to the Baltic area, its languages and linguistic changes is summed up roughly in Map 2. In all there are five types of linguistic areas on the map:

- **S** = the Slavic dialect area before the beginning of the Slavic Expansion.
- $\mathbf{B}$  = the maximal Baltic dialect area (the broken

line); the Baltic language of the more easterly situated regions of this area had recently been created as a result of the language shift U/FU>B.

- FU>B>S = the area of modern-day Slav (Russian), in which a language change FU>B occurred initially, followed by a shift B>S (perhaps also a shift FU>S, if we assume that the area was not completely Balticised before the Slav Expansion).
- FU>S = the present-day Russian dialect area, in which the language shift FU>S occurred; the FU language in question was Finnic in the north, and some other FU language (e.g., Merya) in the east.
- FU = the area which remained a wholly Finnic speaking area in 1000 AD.

7. 1000–1500 AD. Both the lettification and especially russification process continued in the Finnic area, so that the Salatsi Livs to the east of the Gulf of Riga were latvianised and the Votic people and the Chudes to the east of Lake Peipus were russianised by 1300 AD (Laul 1984). These relatively late changes are shown as line +1500 on Map 1.

8. 1500–2000 AD. The Slavic Expansion continued, the easternmost Võru becoming Russian and the Courland Livs almost completely latvianised. The language boundary settled approximately in its current position on the Latvian-Estonian and Russian-Estonian borders (admittedly so that the Setus or the inhabitants of the extreme south-eastern corner of the Estonian linguistic area currently live on the Russian side of the border).

I suggest above that the southern boundary between the Finnic languages and the Slavic-Baltic languages may have been far to the south, perhaps even extending to the northern shore of the Black Sea, and that the boundary may have moved stage by stage ever northwards to its present-day location. The movement of the boundary was about 1.300 kilometres, and it took about 7.000 years to complete it. Assuming the speed of the moving boundary was consistent throughout, it moved a little less than 20 km per century, or 200 metres per year. During the time-span of one generation (taking a generation to be 25 years) the boundary moved an average of about 4 km.

I assume the movement of the linguistic boundary was not so much a question of a demic migration from south to north; it was, rather, a result of a gradual extension of a subsistence and cultural system. The model of explanation I have adopted comprises two parts: (1) At different periods some degree of migration from south to north by the "pio-



Map 2. Linguistic areas in the east Baltic region: Broken line = the maximal extent of the Baltic linguistic area. Continuous lines = the starting area S of the Slavic Expansion and the extension of the Slavic Expansion about 1000 AD. Formulae FU>S and FU>B>S indicate language shifts.

neers" of a new cultural and subsistence system occurred. They merged with the original inhabitants but their language nevertheless became the dominant one in the region – this, for example, is what happened during the Slavic Expansion as interpreted by Priit Ligi, according to whom the Slav language spread to the Finno-Ugric area through the towns, trade and church, and only later to the surrounding rural areas. (2) Another possibility is that the linguistic boundary moved gradually through the slow assimilation of neighbouring populations in such a way that in intermarriage the southern people assumed a dominant linguistic position more often than the northern ones. The difference in language status was a reflection of the higher social and economic status of the southern people.

Language shift is essential to the model I have employed: the Finno-Ugric peoples of Eastern Europe (e.g. the Dnieper and Niemen areas) changed their Finno-Ugric language to Indo-European. As always in the events of this type, they did not learn their new IE language correctly but made several phonetic and syntactic errors in the new language. As a result of their incomplete learning, a new dialect, Proto-Balto-Slav of Proto-Indo-European emerged. Later this proto-language was split into two daughter-languages, Proto-Baltic and Proto-Slav. Typical of substratal features is that they are more evident the later the language shift has occurred – in this case the further north it has occurred (Thomason-Kaufman 1988:240). Exactly this appears to be the case concerning the Baltic and Slavic languages in the northern regions: the Finnic substratum is clearly stronger in Latvian than in Lithuanian, and stronger in the north Russian dialects than in the southern ones.

If the above statements are true, the next question is: Did an equivalent development also take place in western Europe, and is the emergence of Proto-Germanic, too, due to a substratal influence of the Finno-Ugric populations? This FU>IE language shift would have taken place in the tradiational area of the emergence of Proto-Germanic in northern Germany, Denmark, and south-western Sweden. I maintain that this really is the case (cf. e.g. Wilk 1996). Accordingly, all the north Indo-European languages (Baltic, Slavic, and Germanic) are based on the Proto-Indo-European spoken with a Finno-Ugric substratum, which, again, implies (supposing that no great migrations took place) that the populations of the three proto-languages in question originally (before the FU>IE language shift) spoke a Finno-Ugric (more precisely Uralic) language.

It seems to be a commonly accepted opinion among historical linguists today that the north IE languages in question originally emerged in the following way: The aboriginal populations learned to speak the IE protolanguage (or one of its dialects) and left a substratum of their own language to the new IE dialect. The traditional processes of the emergence of the Baltic (B), Slavic (S) and Germanic (G) protolanguages can be presented as the following formulae:

$$\frac{IE_{b} + x > B}{IE_{a} + y > S}$$
$$\frac{IE_{a} + z > G}{IE_{a} + z > G}$$

In the formulae, IE, IE, and IE denote respectively the "pre-Baltic", "pre-Slavic", and "pre-Germanic" dialects of the IE proto-language; x, y, and z denote the unknown languages of the aboriginal populations.

My main linguistic contention in this article is that no unknown languages are needed. The x, y, and z of the traditional formulae can be replaced by  $FU_n$ ,  $FU_d$ , and  $Fu_e$ , the three symbols denoting the proto-Finno-Ugric dialects spoken respectively in the Niemen, Dniepr, and Elbe areas.

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