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The dissolution of the Eurasiatic macrofamily

The disintegration of the Indo-European language family proceeded as follows (cf. Kortlandt 2018b and 2020):

Proto-Indo-European split into

Anatolian and other Indo-European, which split into

Tocharian and Classic Indo-European, which split into

Italo-Celtic and Central Indo-European, which split into

Central European languages (including Germanic) and

Nuclear Indo-European, which split into

Graeco-Phrygian and Satəm Indo-European.

The separation of Anatolian from the other languages can be dated around 4000 BC, the split between Tocharian and Classic Indo-European around 3500 BC, and the split between the Western languages and Nuclear Indo-European around 3000 BC. What happened before that?

Thanks to the meticulous analysis of the combined linguistic and archaeological data by James Mallory (1989) and David Anthony (2007) it has been established that the beginnings of Indo-European can be identified with the Khvalynsk culture on the Volga around 5000 BC. It now appears that the Indo-Uralic ancestors of the Indo-Europeans arrived in Europe from Siberia following the Ural and Samara rivers and that they encountered an offshoot of an East Caucasian culture when they reached the Volga (cf. Anthony 2019 and Kortlandt 2019). When the southern part of these people moved further toward the Dnepr, their language developed into Proto-Indo-European under heavy Caucasian influence. The northern part of the people moved further north to the confluence of the Volga and the Kama, which became the homeland of Finno-Ugric speakers. At a later stage, probably around 3000 BC at the thermal maximum, the ancestors of Ugric speakers returned to Siberia, perhaps following the Chusovaya and Iset' rivers.

Thus, it turns out that Indo-European is a sister of Finno-Ugric while Indo-Uralic is a sister of Samoyedic and a daughter of Uralic. The next question is: where did the Uralic languages come from? It is clear that looking for linguistic origins is quite different from looking for a common denominator. The experience with reconstructing Indo-European has produced three types of insight that have not yet become common knowledge among scholars in the field.

First, the fallacy of the lexicon. Words can easily be replaced, and there is no conclusive way of determining whether a word is inherited or borrowed in prehistoric times. In a sense, all words that are not invented are borrowed from another person. It is only *post factum* that a word is classified as a borrowing when it does not fit into the patterns of the inherited material. This is only possible when we have a large number of words revealing a pattern, which we do not normally have in the case of distant relationships. Things are different with morphological elements, which can only be taken over in combination with lexical units. A speaker can easily choose a word, but not a grammatical morpheme. As a consequence, morphology has priority over the lexicon in linguistic reconstruction. Note that the establishment of a pattern, such as a sound law, does not necessarily require a large number of examples. A case in point is the Russian loss of palatalization in word-final labials, of which I know only two

examples in the standard language, viz. *em* 'I eat' and *dam* 'I will give'. Palatalization was restored in all other instances, e.g. *sem*' 'seven' and *vosem*' 'eight', on the basis of the oblique cases *semí*, *vos'mí*.

Second, the fallacy of typology. There is no reason to assume that the reconstructed language should resemble its daughters from a typological point of view. The Romance languages resemble each other much more closely than any of them resembles Latin. Some languages develop rather slowly, e.g. Georgian, Finnish, Icelandic, whereas other languages change very fast, such as Armenian and Irish. From a typological point of view, Classical Armenian resembles Classical Greek while modern Armenian resembles modern Turkish. There are sound laws that yield unexpected results, such as the Classical Armenian plural suffix -k from Proto-Indo-European *-s, which has a perfect parallel in southern Polish dialects loc.pl. -k < Slavic -x < Indo-European *-s (cf. Dejna 1973: 130). Moreover, data in the typological literature are notoriously unreliable (see e.g. Kortlandt 2018a: 157). Typological resemblance is often the result of a foreign substratum and cannot therefore be used in linguistic reconstruction.

Third, the fallacy of motivation. The function of language is communication between members of a small group of people in contact. The massive population growth as a result of the agricultural revolution was accompanied by large-scale borrowing, but not by a major language shift because agriculture spread slowly from one small community to the next and limited the mobility of the people involved as they became tied to the land they occupied. Things were different with the arrival of the horseriders from the Russian steppe, which necessitated contact with people from far-away with a very different cultural background. While the newcomers had no reason to be interested in the local languages, contact with the invaders was of paramount importance to the local populations. As a result, the language of the horseriders became a kind of lingua franca in their new territories. The crucial factor was mobility, not population size, as it similarly was in the case of the European colonization of the world in recent centuries. Moreover, the invaders offered opportunities for social advancement and thereby attracted local people individually and in groups to join their society (cf. Mallory 1989: 260f.). This role of social mobility in language shift is equally manifest in modern times. What counts is not numbers of speakers but social advantages.

Returning to the relation between Indo-European and Uralic, we see that the two language families have few obvious lexemes in common but share a large number of grammatical morphemes (cf. Kortlandt 2010: 393f., the numbering is taken from Greenberg 2000):

- 1. first person *m,
- 4. second person *t,
- 8. demonstrative *i/e,
- 11. demonstrative t,
- 12. demonstrative *s,
- 14. dual *ki,
- 15. plural **t*,
- 16. plural **i*,
- 24. accusative *m,
- 25. genitive *n,
- 26. dative **ka*,

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29. locative *ru,
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- 30. locative *n,
- 31. locative **i*,
- 33. ablative **t*,
- 36. diminutive k,
- 38. nominalizer *i,
- 39. nominalizer *m,
- 42. participle *n,
- 43. participle *t,
- 44. participle *nt,
- 45. participle **l*,
- 46. verbal noun *s,
- 53. conative *sk,
- 54. reflexive u/w,
- 56. negative *n,
- 60. interrogative *k.

It is clear that the two language families are genetically related.

Michael Fortescue has demonstrated (1998) that Uralic is related to Yukagir, Chukotko-Kamchatkan and Eskimo-Aleut, constituting the Uralo-Siberian macrofamily, which also includes Nivkh, also known as Gilyak (cf. Kortlandt 2010: 405-408 and Fortescue 2011). Fortescue avoids the terms "language family" and "stock" for the Uralo-Siberian "mesh", as he calls it, because he is not convinced that all of these languages are genetically related. In view of the evidence he adduces I think that his reluctance, which is based on typological considerations, is not warranted. The real question is: how did the Uralo-Siberian expansion come about? Fortescue dates the dissolution of the Uralo-Siberian and the Uralo-Yukagir language families to 6000 and 4000 BC, respectively. Since the speakers of Indo-Uralic arrived in Europe around 5000 BC, they probably left the Uralo-Siberian homeland in the Sayan area around 6000 BC and perhaps followed the river Ob' to the northwest. At the same time, the ancestors of the Eskimo-Aleut speakers left the homeland and moved along the river Lena to the northeast, followed by the ancestors of the Yukagirs around 4000 BC, at the time when the Samoyeds started moving north along the Yenisei river. The Yukagirs and the Samoyeds were pushed further down the rivers around 3000 BC by the arrival of the Tocharians from the west (cf. Fortescue 1998: 196). This outburst of population movements was evidently conditioned by the change of climate after the last Ice Age. There was an abrupt climate change around 6200 BC, when severe cold struck the northern hemisphere for more than a century, largely eliminating human life from Northern Siberia. When the climate became warmer again, culminating in the thermal maximum around 3000 BC, the empty spaces were filled by Uralo-Siberian speakers who came down the big rivers. This explains the wide geographical distribution of their languages.

Chukotko-Kamchatkan and Nivkh also belong to the Uralo-Siberian macrofamily because the majority of the Indo-Uralic grammatical morphemes are also found in these languages. They probably left the homeland around 6000 BC and moved east along the river Amur to the Sea of Okhotsk. At a later stage, perhaps around 4000 BC, the Chukotko-Kamchatkans proceeded along the coast to the northeast, where they met with the Eskimo-Aleuts who had followed the Lena river. This scenario seems to account for all of the details (cf. Fortescue 1998: 221f. and 2011:

1374). Thus, I think that the Uralo-Siberian homeland was located between Lake Baikal and the upper Yenisei river and that the Indo-Uralic, Eskimo-Aleut and Chukotko-Kamchatkan-Nivkh branches moved away around 6000 BC, followed by the Yukagirs and the Samoyeds around 4000 BC. The crucial motivation for the expansion was the change of climate between 6000 and 3000 BC.

Martine Robbeets has demonstrated (2005 and 2015) that Turkic, Mongolic, Tungusic, Korean and Japanese are genetically related, constituting the Altaic or "Transeurasian" macrofamily. Since the Altaic macrofamily shares the majority of the Indo-Uralic grammatical morphemes (cf. Kortlandt 2010: 415-428), it is genetically related to the Uralo-Siberian macrofamily, together constituting the Eurasiatic macrofamily.2 The Altaic homeland can be located in Central Mongolia south of Lake Baikal about 6000 BC. This may also have been the Eurasiatic homeland. It appears that the Altaic people expanded eastwards along the river Kerulen toward the Khingan mountain range. The easternmost branch from which Korean and Japanese developed moved through Western Manchuria to the Sungari basin in Central Manchuria around 5000 BC. The next branch, from which Tungusic developed, moved through Western Manchuria southwards to the Liao basin in Southern Manchuria around 4000 BC. The split between Koreanic and Japanic may be dated about 3000 BC and the split between Turkic and Mongolic about 2000 BC (cf. in this connection the dates of Robbeets 2017: 98). In this conception, the speakers of Tungusic were a part of the Hongshan culture in the fourth millennium. The alternative theory that the dispersal of the Altaic languages was driven by agriculture (e.g. Robbeets 2017) cannot be correct because it does not explain why the Turkic and Mongolic speakers returned to Mongolia, where agriculture is practically impossible.

The split between Koreanic and Japanic speakers may have been conditioned by the eastward expansion of Tungusic speakers as a result of a climate change around 2800 BC (cf. Robbeets 2017: 99f.) that may have pushed the Koreans to the south while the Japanese remained in the north. These population movements may have spread millet agriculture to the east and to the south by Tungusic and Koreanic speakers, respectively. Around the same time, the arrival of the horse-breeding Tocharians in Western Mongolia changed the mobility of Turkic and Mongolic speakers dramatically. When the Mongolian horseriders entered Manchuria, perhaps around 2000 BC, they were in the same position as the Indo-Europeans when they entered Central Europe around a thousand years earlier. The ancestors of the Japanese in Central Manchuria, who unlike the Tungusic and Koreanic speakers to the east and to the south had not yet adopted agriculture, joined the Mongolian bands moving south toward Western Korea (cf. in this connection Janhunen 1996: 206-210 and Beckwith 2007). The trichotomy Xianbei-Fuyu-Yilou (Janhunen l.c.) corresponds nicely to the distribution of Mongolic, Japanic and Tungusic speakers. There appears to be a direct connection between Fuyu, Koguryo, Paekche, Kaya and Yamato.

The prehistory of Japan can be subdivided into the Jōmon period, well-known for its pottery, the Early Yayoi period (900–300 BC), when rice was introduced from

¹ I prefer the traditional terms Altaic and Sino-Tibetan rather than the neologisms "Transeurasian" and "Transhimalayan", which are awkward and inadequate because Latin *trans* means 'on the other side', as in *Gallia Transalpina* 'on the other (French) side of the Alps' versus *Gallia Cisalpina* 'on this (Italian) side of the Alps'.

 $^{^2}$ Contrary to Greenberg's view (2000), there is no reason to include Ainu or Etruscan here. These languages, like Yeniseian, belong to older strata.

the continent, the Late Yayoi or Bronze Yayoi period (300 BC – 300 AD), when millet was introduced, and the Iron or Tumulus period (300–600 AD). If rice was introduced by Austronesian seafarers, we expect large-scale borrowing in the language(s) of the Jōmon culture. This explains both the lexical borrowings and the shared typological features that link Japanese to Austronesian and distinguish it from Korean. There is no reason to assume substantial migration into the Japanese islands at this stage. The introduction of millet and bronze evidently came from the Korean peninsula. Now there was on the one side substantial interchange between Korea and Japan across the sea and on the other side close contact between the Japanic invaders and local Koreanic speakers in Western Korea, which accounts for the clear structural parallels between the two languages and for a number of loanwords (cf. Janhunen 1996: 199f.). There is no reason to assume that the distribution of languages in the Japanese islands changed in a fundamental way at this stage. Things were different when the Japanic horseriders arrived there in the fourth century AD. These people were extremely mobile, not tied to the land, familiar with hit-and-run tactics, and appreciative of personal courage and loyalty. As a result, a good command of their language became a prerequisite for social mobility. This scenario combines the stronger points of earlier theories into a coherent whole.³

The crucial factor in linguistic expansion is mobility, both physical and social. Linguistic dominance can change very fast, as is clear from the history of Britain, where the Celts became dominant in the second half of the first millennium BC, the Romans in the first half of the first millennium AD, and the English in the second half of the first millennium AD. The effect of mobility is stronger in islands such as Britain and Japan, where possibilities to escape the social structure are limited by the surrounding seas. There is a clear parallel between the expansion of the Indo-Europeans in the West and the expansion of Altaic peoples in East Asia.

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³ The Japanic invasion of the islands may be compared with the Altaic invasions of China, viz. the Turkic invasion around 600 AD that gave rise to the Tang dynasty, the Tungusic invasion around 900 AD that gave rise to the Liao dynasty, and the Mongolic invasion around 1200 AD that gave rise to the Yuan dynasty. The big difference is that Chinese had become a *lingua franca* in the area before the invasions already, so that the need for the local populations to learn the language of the invaders was strongly diminished. The invasions eventually strengthened the cohesion of the Chinese empire.

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Summary

Indo-European is a sister of Finno-Ugric and a daughter of Indo-Uralic, which is a sister of Samoyedic and a daughter of Uralo-Siberian, which is a sister of Altaic and a daughter of Eurasiatic. When the Mongols entered Manchuria, they were in the same position as the Indo-Europeans when they entered Central Europe. The crucial factor in linguistic expansion is mobility, both physical and social.