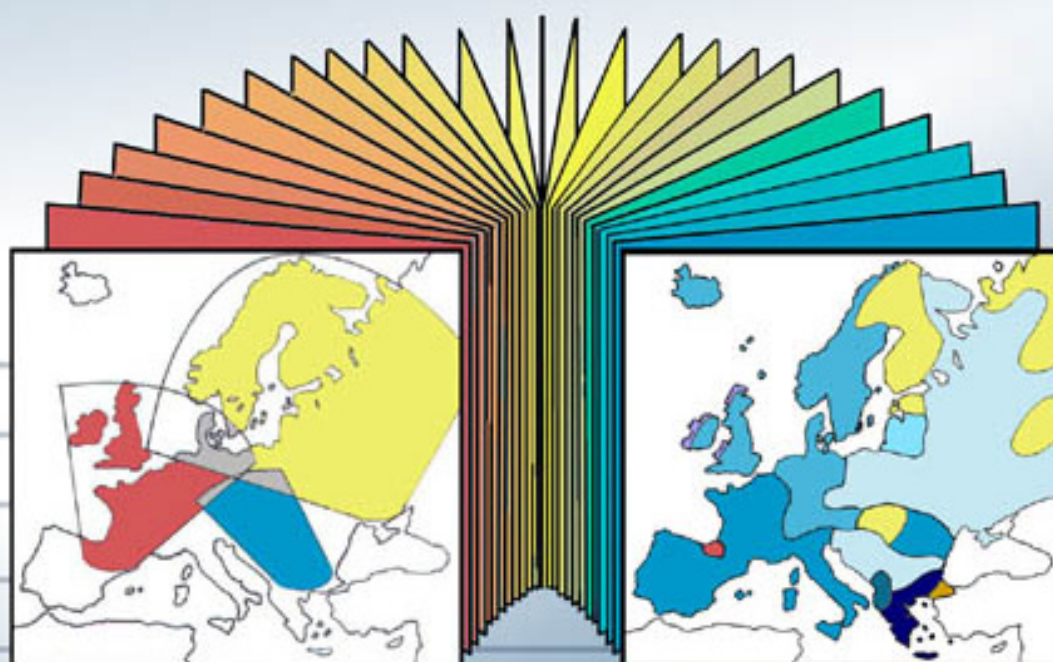


Kalevi Wiik

A NEW ATLAS

**on the Origins
and Early History
of the Europeans**

Section I General Questions



April 2003

"A NEW ATLAS on the Origins and Early History of the Europeans"
consists of seven Sections:

Section I: General Questions

Section II: Germanic Peoples and Languages

Section III: Baltic Peoples and Languages

Section IV: Slavic Peoples and Languages

Section V: Celtic, Italic, Albanian, and Greek Peoples and Languages

Section VI: Finno-Ugric Peoples and Languages

Section VII: Other (Basque, Iranian, Turkish, Mongolian, Arabic, Jewish, and Roma) Peoples and Languages

The present section is **Section I**. It consists of 34 questions or groups of questions; the answers are given as maps and their verbal explanations.

Click the question to get to the relevant answer (a map and its legend). Click **BACK** to get back to the beginning of the list of questions.

General Questions

[Question 1.](#) What **languages** do Europeans speak today? See Map 1.

[Question 2.](#) **When** was modern man born? **Where** was he born? **What routes** did he use when he spread all over the globe? See Map 2.

An addition to question 2. Who were the **ancestors** of the modern Europeans? Are the Europeans descendants of the **Neanderthals**? See the Appendix of Map 2.

[Question 3.](#) Was Europe **empty** when the first Modern Europeans came to Europe about 40.000 years ago? See Map 3.

[Question 4.](#) **Where** did the Modern Europeans come from? **When** did they come to Europe?
See Maps 4a, 4b, and 4c.

[Question 5.](#) Did the Modern Europeans ever live side by side with the **Neanderthals**? If they did, **when** was it? See Map 5.

[Question 6.](#) Is anything known about the genetics of the people of the **Gravettian culture** about 30.000-20.000 years ago?
See Maps 6a and 6b for paternal lineages (men) and Map 6c for maternal lineages (women).

[Question 7.](#) Did the Europeans have a **common culture** during the **Ice Age**? Did they have any **artistic activities**? See Map 7.

[Question 8.](#) Can the arrival of the **oldest Europeans** of the Palaeolithic period (more than 10.000 years ago) and that of the **first farmers** about 8-9 thousand years ago be seen in the gene pool of Modern Europeans? See Map 8.

[Question 9.](#) Why did the Europeans some times move **to the south** and other times **to the north**?

Where did the Europeans live during the **cold and warm periods** of the Ice Age? See Map 9.

An addition to question 9. What has the **temperature** been in Europe during the time the Modern Europeans have lived in Europe? See Appendices A and B of Map 9.

[Question 10.](#) What were the **vegetation zones** of Europe during the LGM (the Last Glacial Maximum)? See Map 10.

[Question 11](#). From where did the **northern zone** (recently freed of the ice) obtain its inhabitants? In what way did the Europeans populate this zone? See Maps 11a and 11b.

[Question 12](#). Where did the **brown bear** live during the cold periods of the LGM? From where did the brown bear come to **the northern parts of Europe**? **Why** are the students of the early history of the Europeans interested in the living areas of the brown bear (and other animals)? See Map 12.

[Question 13](#). Does the gene pool of Modern Europeans give any hints of the original living areas and movements of the ancient **western Europeans**? See maps 13a and 13b for the paternal lineages (men), maps 13c and 13d for the maternal lineages (women), and maps 13e, 13f, and 13g for the nuclear DNA (men and women).

[Question 14](#). Does the gene pool of Modern Europeans give any hints of the original living areas and movements of the ancient **eastern Europeans**? See maps 14a, 14b, and 14c for the paternal lineages (men), and map 14d for the nuclear DNA (men and women).

[Question 15](#). Where did the western populations of the **Ukrainian refugium** live during the beginning recolonization of Northern Europe? See Map 15.

[Question 16](#). From where did the **hybrid area** of the Iberian and Ukrainian refugia obtain its population during the recolonization of northern Europe? See Maps 16a, 16b, and 16c.

[Question 17](#). What did the **Ukrainian refugium** and its spreading area look like about ten or eleven thousand years ago? See Map 17.

[Question 18](#). What does it mean to say that the North Europeans emerged as a **mixture** of two different populations? See Map 18.

[Question 19](#). Is there any genetic or anthropological indication of the fact that the Modern **North Europeans** form a rather homogenous population? See Maps 19a, 19b, and 19c.

[Question 20](#). What were the **cultures of Northern Europe** about nine thousand years ago? See Map 20.

[Question 21](#). Is there any genetic indication of the ancient north Eurasian 'mammoth hunters'? See Maps 21a, 21b, and 21c.

[Question 22](#). Where are the original areas of **agriculture** in the world? See Map 22.

[Question 23](#). Where did **agriculture** spread from the Middle East? What were the **languages** spoken by the farmers originating from the Middle East area? See Map 23.

[Question 24](#). What are the areas of the **Indo-European languages** in Europe and Asia? See Map 24.

[Question 25](#). How did **agriculture** spread in Europe? See Maps 25a, 25b , and 25c.

[Question 26](#). Is there any genetic evidence to show that the farmers came to Europe from **Anatolia and the Middle East**? See Map 26.

[Question 27](#). What were the three **main areas** of the Europeans that to some extent still in 5500 bc reflected the three refugia of the LGM? See Map 27.

[Question 28](#). Where and when were the **contacts** between the farmers and hunters of Central Europe the most intense? See Map 28.

[Question 29](#). Where was the **contact zone** between the farmers and hunters at the time agriculture started to spread to Northern Europe? See Map 29.

[Question 30](#). How did the **Indo-European languages of Northern European** (the GBS languages) emerge? See Map 30.

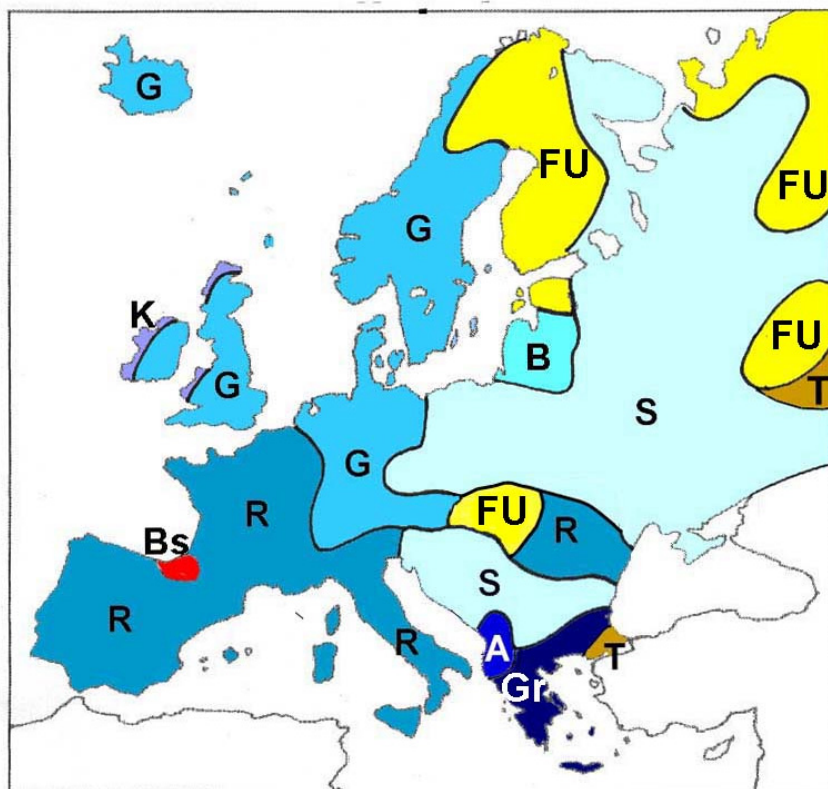
[Question 31](#). What languages were presumably spoken in the **TRB and Michelsberg cultures**? See Map 31.

[Question 32](#). Where in Europe did the Basque speaking hunters of Western Europe and the Finno-Ugric speaking hunters of Central and Eastern Europe first get in close contact with the **food producers** of Central and South-eastern Europe? What **languages** of the food producers were used as *lingua francas* by the hunters, and what **new dialects/languages** emerged in the areas where the hunters accepted agriculture or pastoralism as their new subsistence system? See Maps 32a, 32b, 32c, and 32d.

[Question 33](#). What are the **four "linguistic corridors"** of Northern Europe? See Map 33.

[Question 34](#). Where is the traditional **homeland** of the Indo-European languages? See Map 34.

Question 1. What languages do the Europeans speak today?

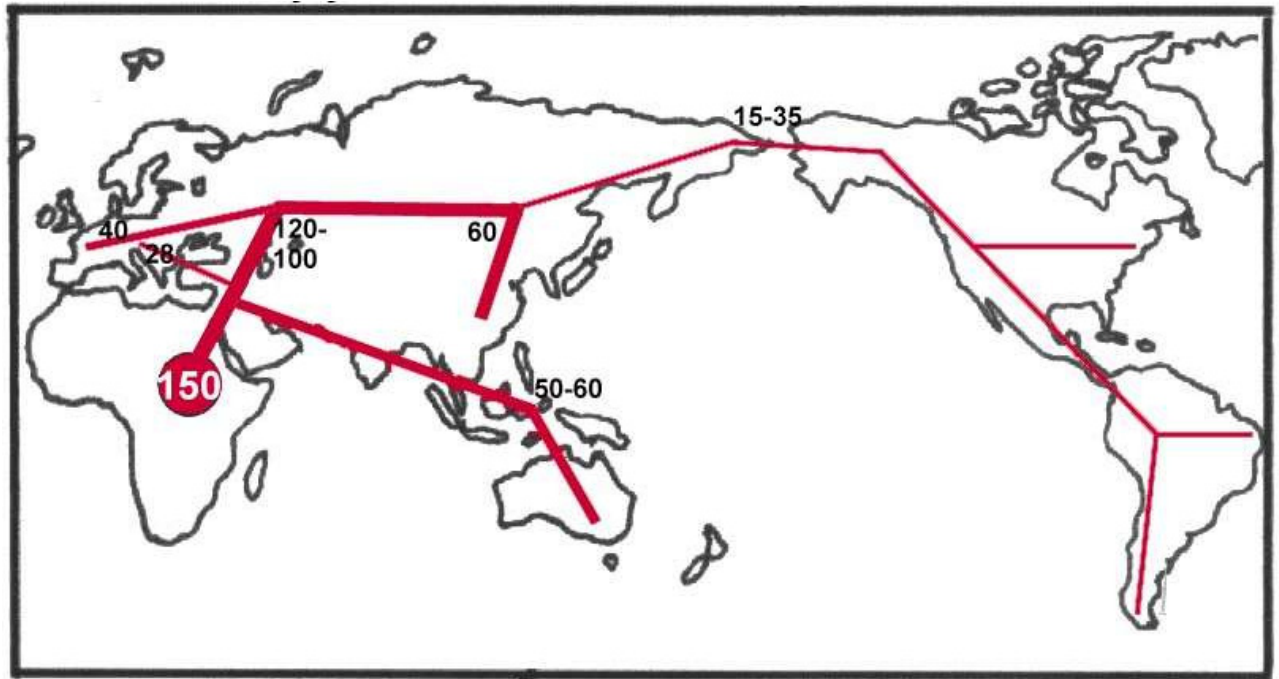


Map 1. The areas of the languages of four phyla in Europe. About 96 percent of Modern Europeans speak Indo-European (IE) languages (the shades of blue in the map), about 3 per cent of them speak Finno-Ugric (FU) languages (yellow in the map), about 1 per cent of them speak Turkish (T) languages (brown), and about 0.1 per cent of them speak Basque (Bs and red). The subgroups of the IE languages: K = Celtic, G = Germanic, R = Romance, B = Baltic, S = Slavic, A = Albanian, and Gr = Greek.

Of the four groups of languages, the Basque and Finno-Ugric (traditionally Uralic) groups were in Europe as early as the Late Glacial Maximum (LGM). It is possible that also the IE languages were there during the LGM, but according to the other alternative, they arrived in Europe with the first farmers about 7000 bc. – The Turkish languages (T) arrived in Europe quite recently.

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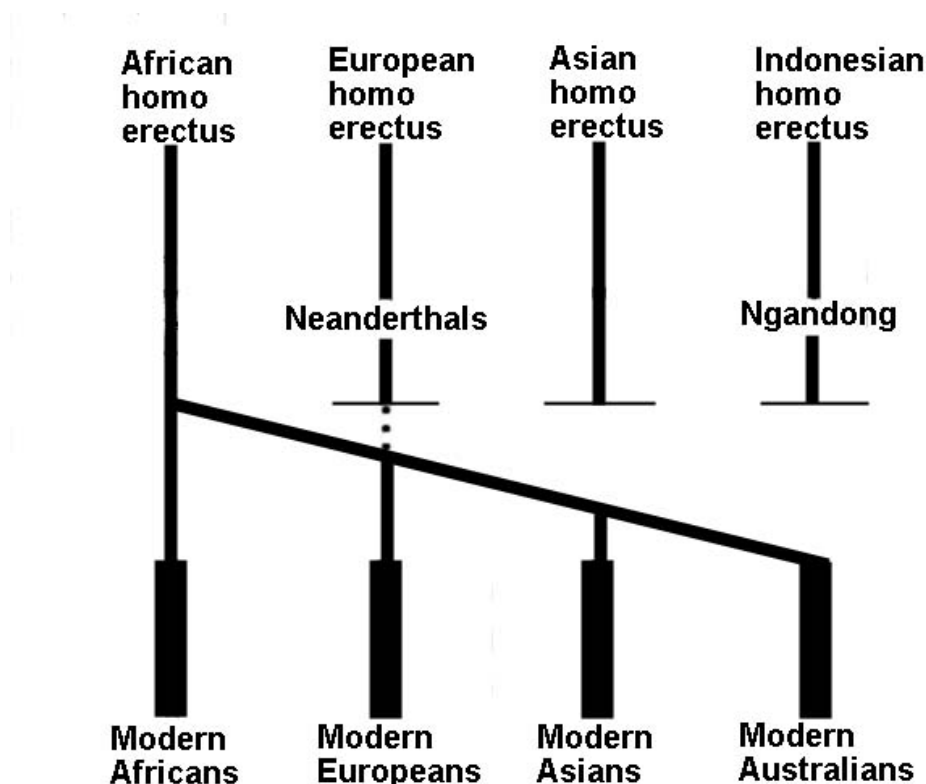
Question 2. When was modern man born? Where was he born? Where did he go and what routes did he use?



Map 2. The spread of *Homo Sapiens Sapiens* from Africa to other parts of the globe. The figures refer to thousands of years. Modern man was born in Africa 150.000 years ago; he went to the Middle East 120 000-100 000 years ago. About 60 000 years ago he continued to Asia along two routes, an inland one and a coastal one. Modern man arrived in Australia 50 000-60 000 years ago and he came to Europe 40 000 and 28 000 years ago. He arrived in the Americas 15 000-35 000 years ago.

The thickness of the routes in the map reflects temporal order: the thicker the line the earlier the route. The map is based on the map in Cavalli-Sforza *et al.* 1994, p. 154.

An addition to question 2: Who were the ancestors of the modern Europeans?
Are the Europeans descendants of the Neanderthals?



Appendix to Map 2. The development of the four types of modern human beings. According to most geneticists, modern Europeans did not develop from the Neanderthals (cf. the broken line in the diagram). The European, Asian, and Indonesian *homo erectus* became extinct (cf. the horizontal lines of the diagram), and the modern Europeans, Africans, and Australians developed on the basis of the African *homo erectus* (that emerged about 1.8 million years ago). The *homo sapiens* that followed *homo erectus* is not shown in the diagram. The Neanderthals lived in Europe from about 200 000 years ago to about 30 000 years ago. The diagram is based on the two diagrams in Cavalli-Sforza *et al.* 1994, p. 62.

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Question 3. Was Europe empty when the first Modern Europeans came to Europe about 40.000 years ago?

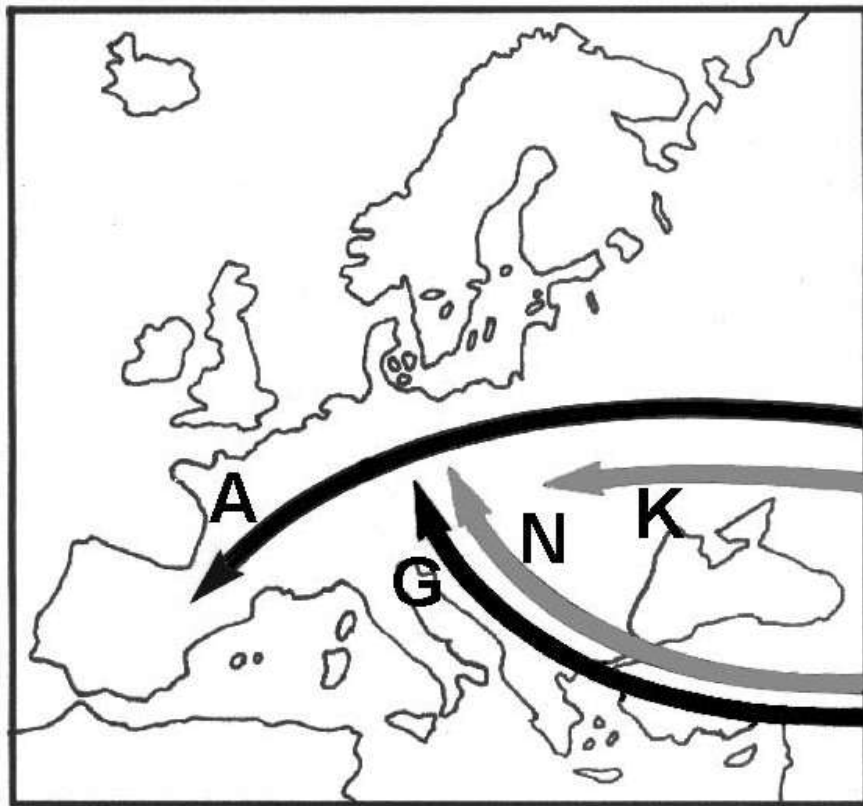


Map 3. The living areas of the Neanderthals. Before the arrival of the first modern Europeans about 40 000 years ago, Europe was inhabited by Neanderthals only. The map is based on the map in Cavalli-Sforza *et al.* 1994, p. 62. Southern Finland and southern Scandinavia (the lighter areas) were added to the map because of the possible Neanderthals of the 'Wolf Cave' (*Susiluola*) in southern Finland. As seen in the map, the living areas of the Neanderthals covered practically entire Europe and parts of the Middle East. The northernmost areas were inhabited, of course, only during the warm (interstadial) periods of the LGM.

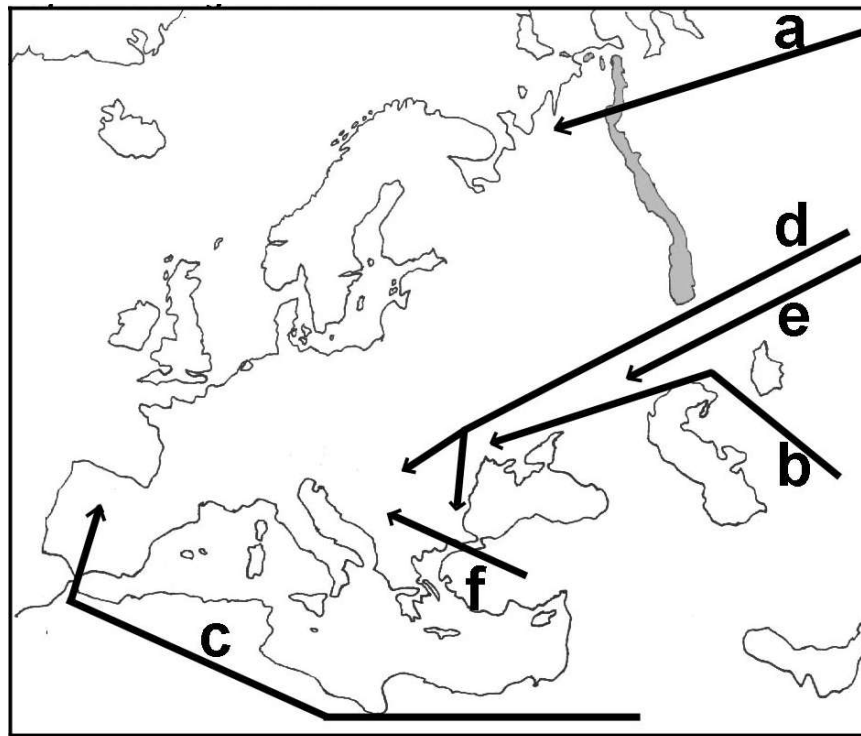
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Question 4. Where did the Modern Europeans come from? When did they come to Europe?

See Maps 4a, 4b, and 4c.

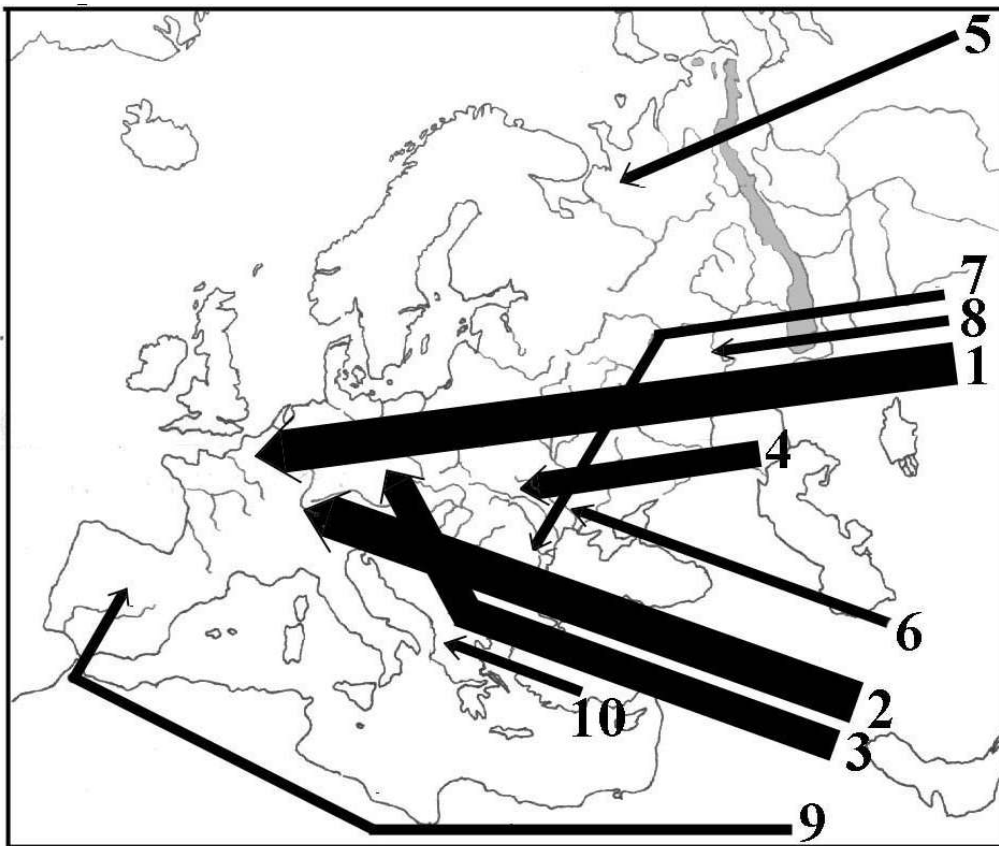


Map 4a. Four early migrations to Europe. A = the 'Aurignacian migrations' 40 000-28 000 years ago; G = the 'Gravettian migrations' 28 000-20 000 years ago; N = the Neolithic migration in 7000-5500 bc; and K = the Kurgan migrations 4500-3000 bc. About 80 per cent of the modern European population is based on the two oldest groups of migrations (arrows A and G in the map); Semino *et al.* 2000. Perhaps about five per cent of them is based on the Neolithic migration. The share of the Kurgan migrations is smaller.



Map 4b. Six late migrations to Europe. During the last three thousand years, Europe has experienced the following groups of essential migrations: (a) the Samoyed migration (perhaps soon after 2000 bc), (b) the Iranian migrations (1000 bc – 400 ad), (c) the Arabic migration (700-1000 ad), (d) the Turkish migrations (400-1000 bc), (e) the Mongolian migration (1200-1300 ad), and (f) the Ottoman migration (1000-1500 ad). The timing of the Samoyed migration is uncertain; see Zerjal *et al.* 2001: 1179.

The migrations of the Jews and Roma (Gypsies) are not shown in the map. The Jews began to spread to Europe about 70 ad. The Roma spread from India to Europe about 1000 ad, and they spread within Europe in 1000-1600 ad.

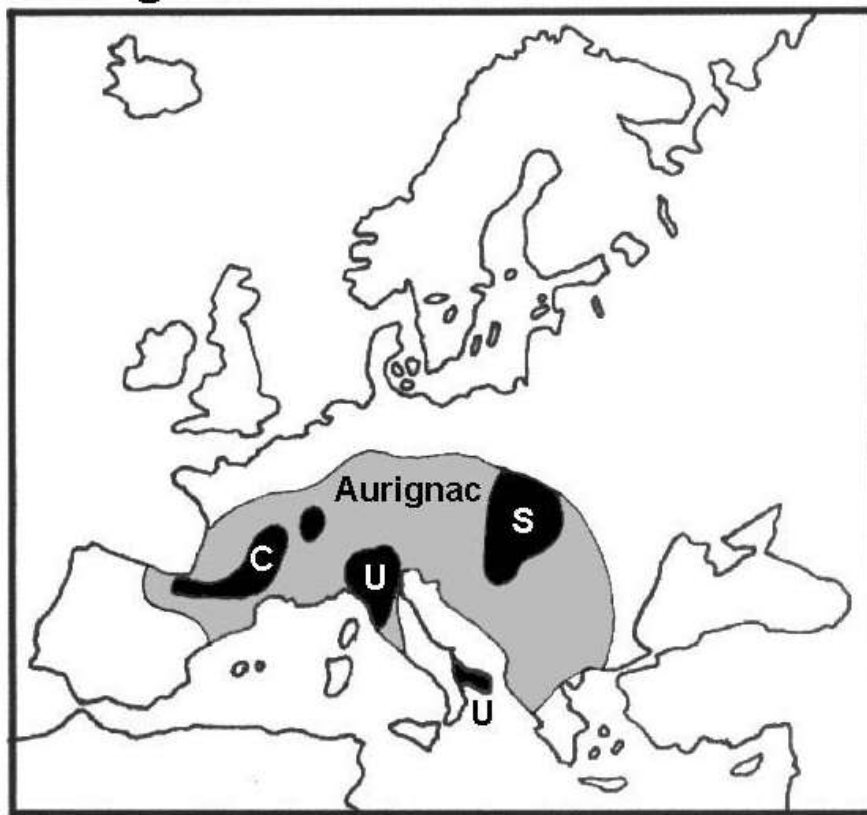


Map 4c. Ten migrations to Europe. The migrations of the map consist of the four 'early migrations' and the 'six late migrations' above. The arrows of the map refer to the following migrations or groups of migrations:

- 1 'Aurignacian migrations' 40 000-28 000 years ago;
- 2 'Gravettian migrations' 28 000-20 000 years ago;
- 3 Neolithic migration 7000-5500 bc;
- 4 Kurgan migrations 4500-3000 bc;
- 5 Samoyed migration perhaps soon after 2000 bc;
- 6 Iranian migrations 1000 bc-400 ad;
- 7 Hunnish and Turkish migrations 350-600 ad;
- 8 Mongolian migration 1200-1300 ad;
- 9 Arabic and Berber migration 700-1000 ad; and
- 10 Ottoman migration 1300-1500 ad.

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Question 5. Did the Modern Europeans ever live side by side with the Neanderthals? If they did, when was it?



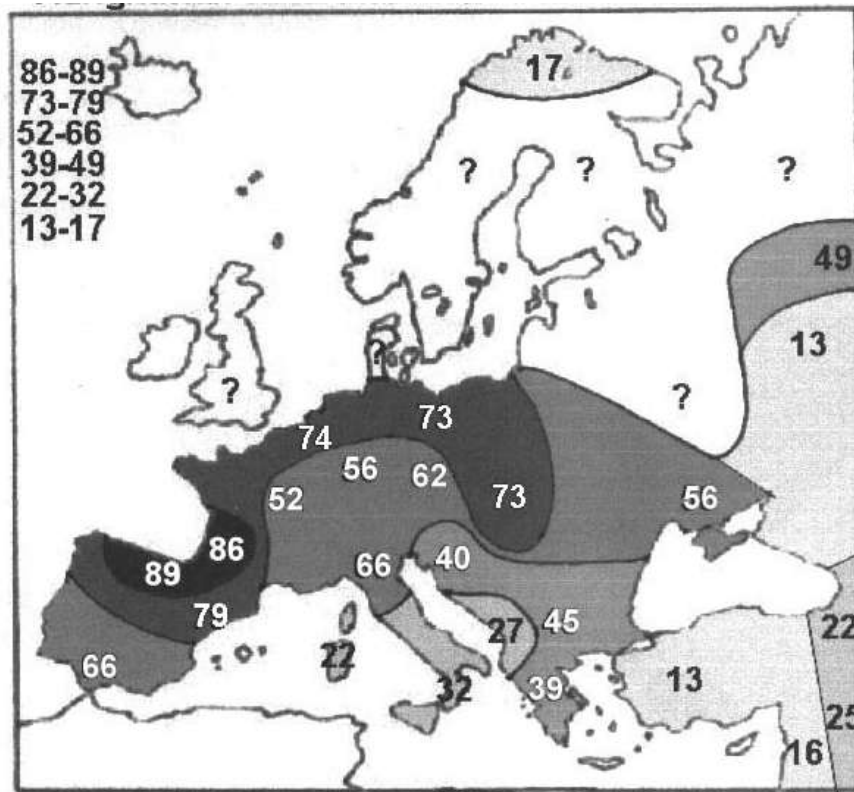
Map 5. The Aurignacian culture and three presumably Neanderthal cultures. C = Chipelperronian, U = Uluzzian, and S = Szeletian. The map belongs to the period about 40 000-35 000 years ago when modern man and Neanderthal man still lived side by side in Europe. In reality, the area of the Aurignacian culture reached further to the east.

Purpose: to show that there are archaeological grounds to believe that the older and younger Europeans (the Neanderthals and Modern Europeans) for some time lived side by side in Europe.

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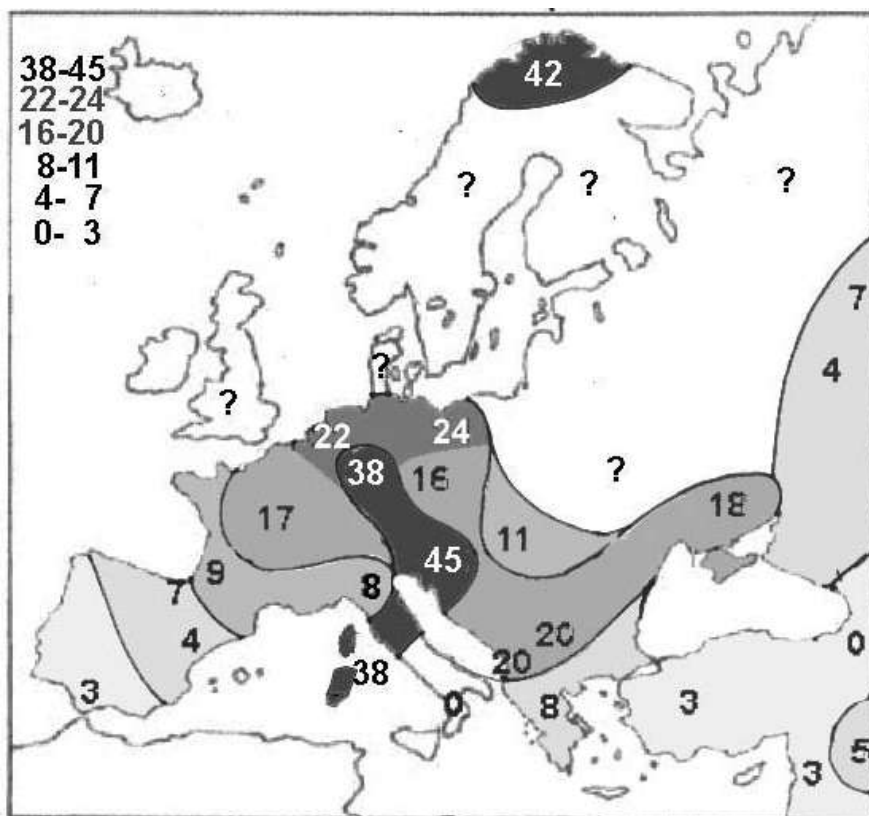
Question 6. Is anything known about the genetics of the people of the Gravettian culture about 28 000-20 000 years ago?

See maps 6a and 6b for paternal lineages (men) and map 6c for maternal lineages (women).



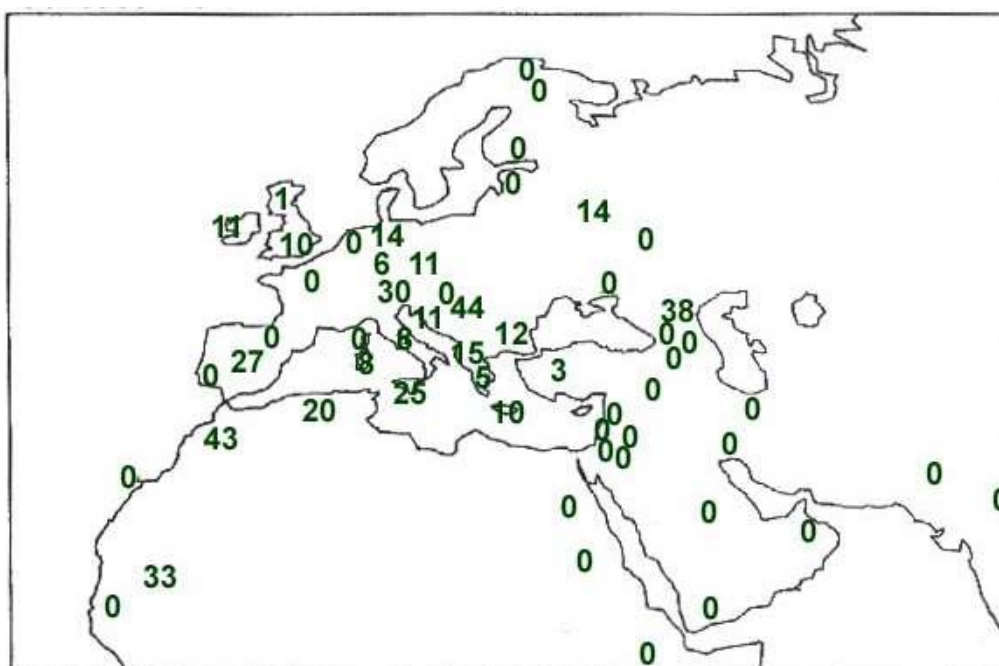
Map 6a. The joint frequencies of Y chromosome markers M173 (= Ue18) and M17 (= Eu19). The frequencies are based on Semino *et al.* 2000. No data is given in the study of the areas marked with a question mark.

The high frequencies may reflect the areas of the Gravettian population.



Map 6b. The joint frequencies of Y chromosome markers Ue7 and Uu8. The frequencies are based on Semino *et al.* 2000. No data is given in the study about the areas marked with a question mark.

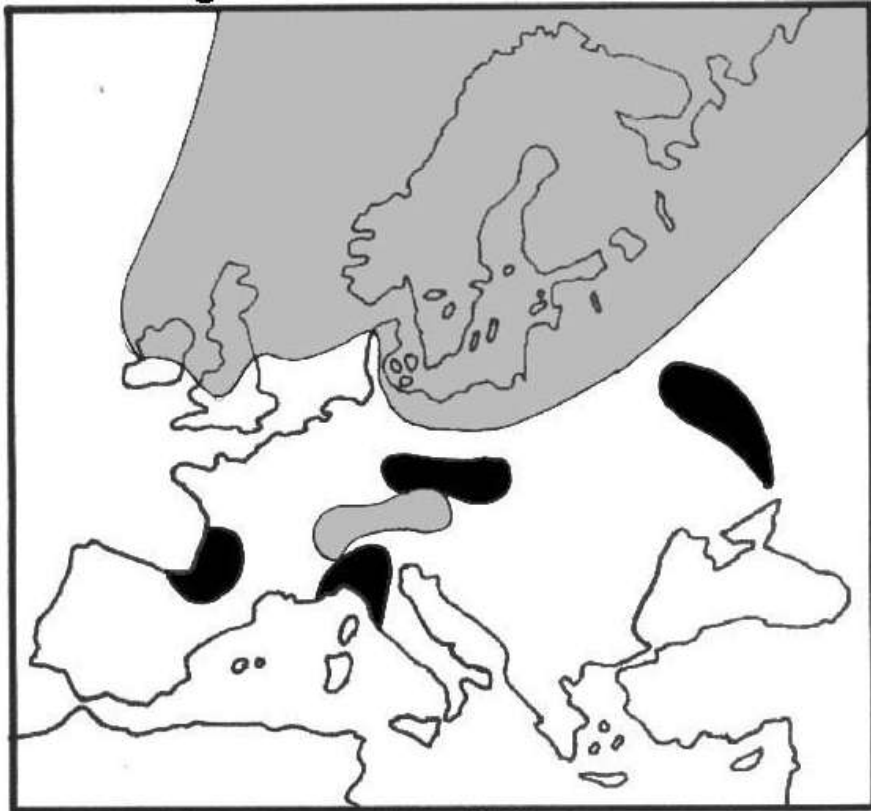
The high frequencies may reflect the areas of the Gravettian population.



Map 6c. The frequencies of mtDNA haplogroup Pre*V in Europe and surrounding regions. The values are per mil and are based on Torroni *et al.* 2001. According to the authors, the haplotype perhaps arrived in southern Europe from the east (cf. the relatively high value 38 between the Black Sea and the Kaspian Sea) and it may reflect the area of the Palaeolithic Gravettian culture.

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Question 7. Did the Europeans have a common culture during the Ice Age? Did they have any artistic activities?

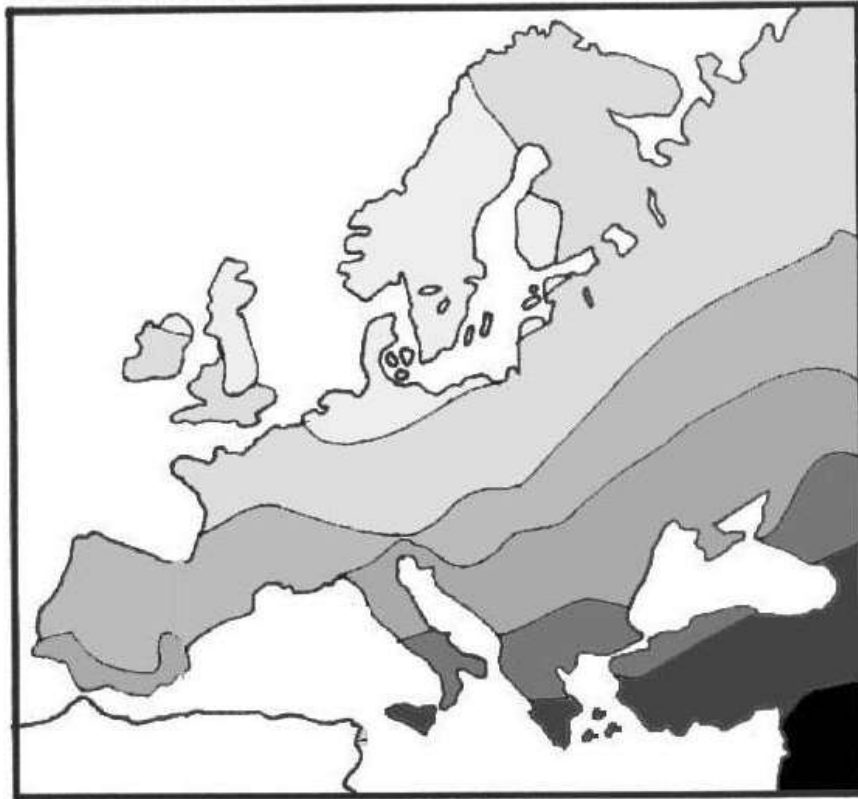


Map 7. Some European core areas of Venus figurines. Black = Venus figurines; grey = glacier.

Purpose: to show that during the LGM there existed a more or less homogenous archaeological culture in Europe, and that people already at that time spent time in artistic activities. This map can be interpreted as referring to the **culture** of the Europeans, while the preceding three maps refer to the **Europeans themselves** (their genetics) of the same period.

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Question 8. Can the arrival of the oldest Europeans of the Palaeolithic period (more than 10 000 years ago) and that of the first farmers about 8-9 thousand years ago be seen in the gene pool of the Modern Europeans?



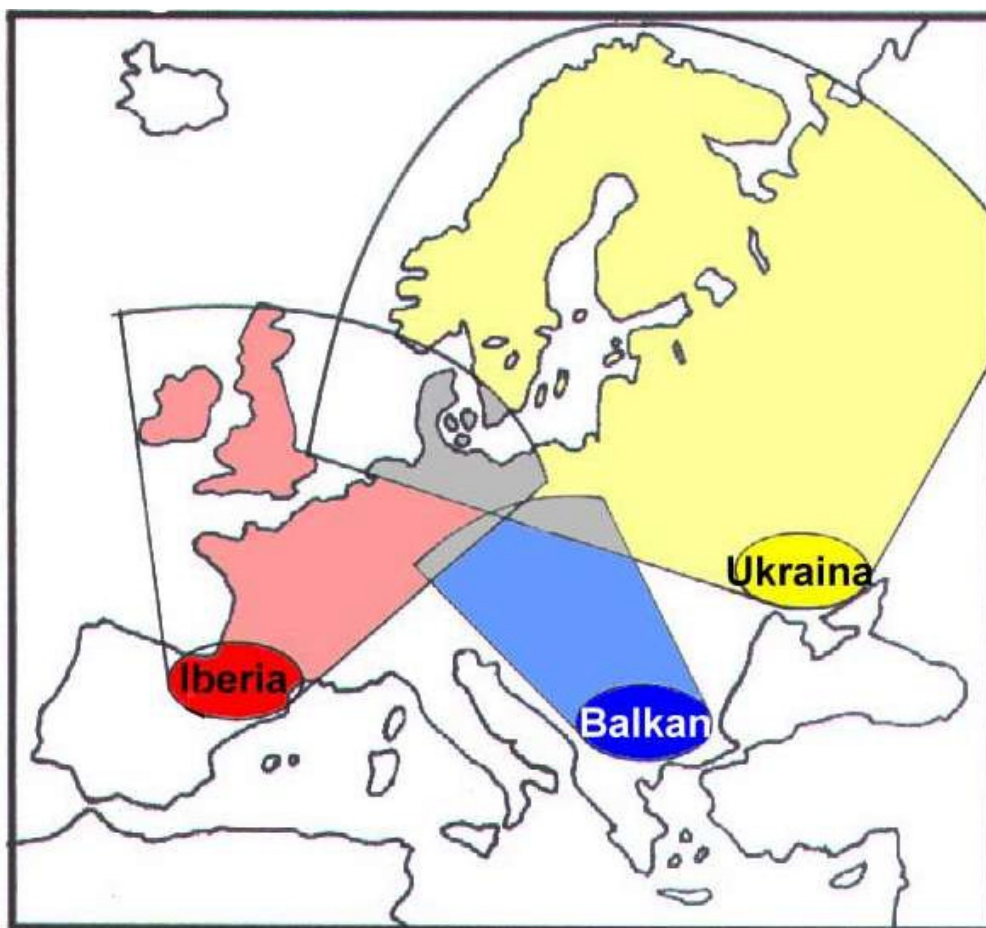
Map 8. The first principal component. Possible joint influence of the Aurignacian and Gravettian cultures on the Europeans. According to the authors of the original map (Cavalli-Sforza *et al.* 1994), the map reflects the arrival of the early farmers in Europe. A more likely guess is, however, that the map reflects the joint influence of the two Palaeolithic groups of migrations and the Neolithic migration (of the first farmers of Europe). Accordingly, the potential time depths of the map are 40 000-28 000 years ago, 28 000-20 000 years ago, and 7000-5500 bc (see arrows A, G and N in map 4a).

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Question 9. Where did the Europeans live during the cold and warm periods of the Ice Age?

Why did the Europeans some times move to the south and other times to the north?

See Map 9.



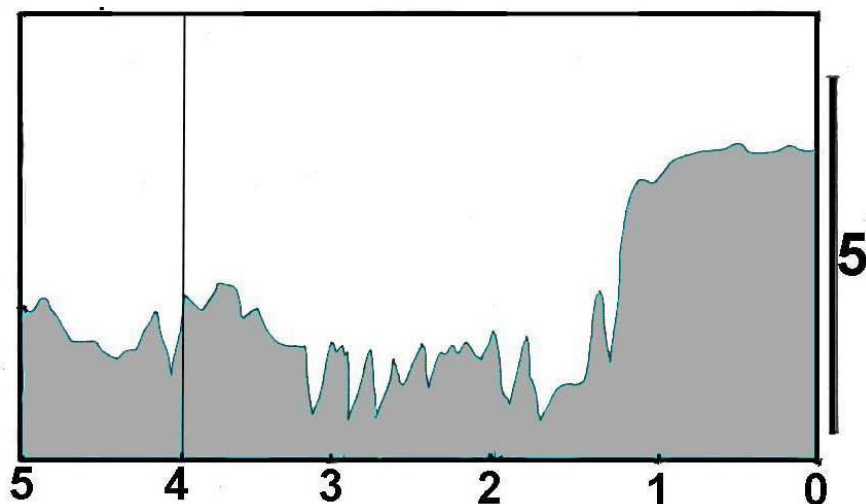
Map 9. Three European refugia and their spreading areas. During cold periods people lived in the refugia in the south; during warm periods they lived in the spreading areas of the refugia further in the north.

The colours refer to assumed languages or language groups: red = Basque; blue = Indo-European; and yellow = Finno-Ugric (traditionally Uralic). The hybrid areas between the refugia are marked grey.

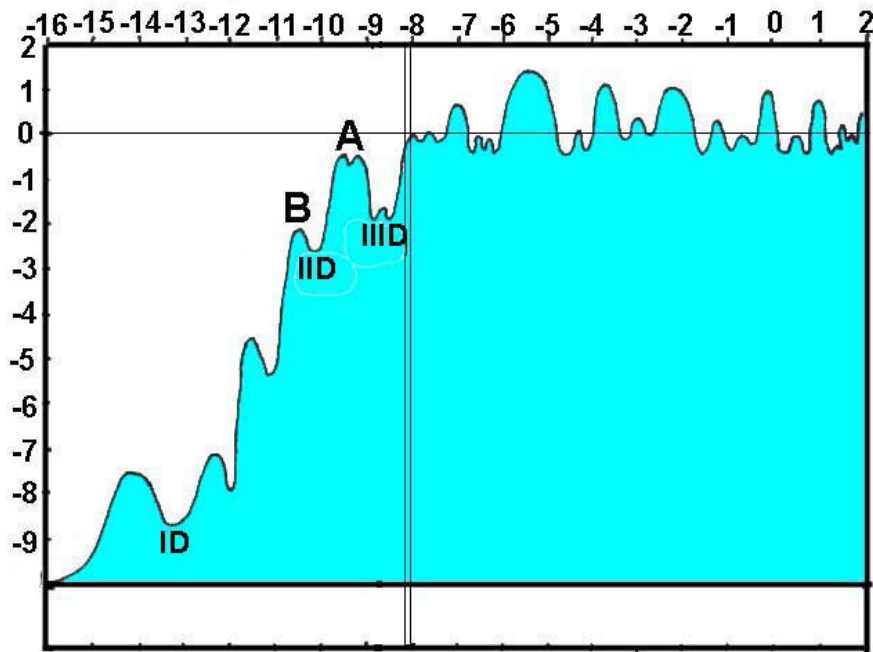
Purpose: to remind the reader of the fact that, during the Ice Age, the temperature in Europe varied and the Europeans moved several times back and forth. Eventually, Northern Europe was first populated by the people from two refugia, that of Iberia and the Ukraine.

An addition to question 9: What has the temperature been in Europe during the time the Modern Europeans have lived in Europe?

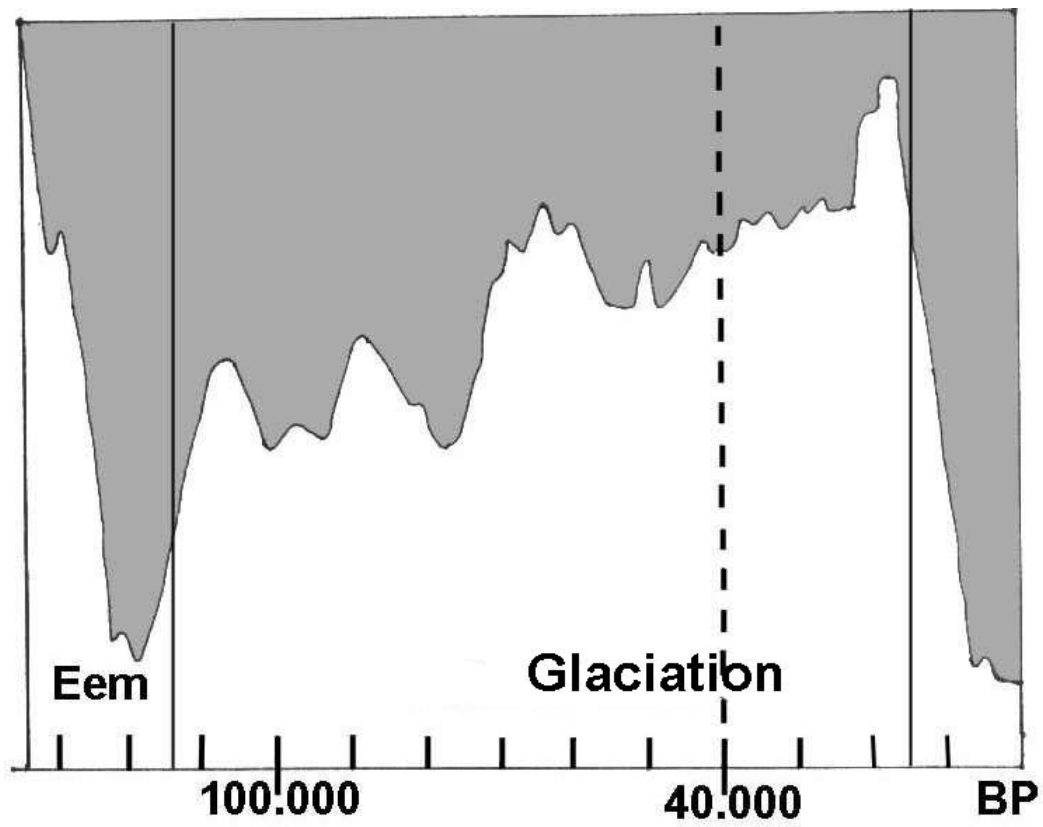
See Appendices A, B, and C to Map 9.



Appendix A to Map 9. The temperatures in northern Europe during the last 50 000 years. The figures of the X axis refer to 50 000, 40 000 etc. years ago; the line with figure 5 on the right shows the extent of five degrees centigrade. The diagram is based on Eronen 1991, p. 235. According to the curve, temperature has varied rather systematically between the low and high values about ten times during the 40 000 years *homo sapien sapiens* has lived in Europe.



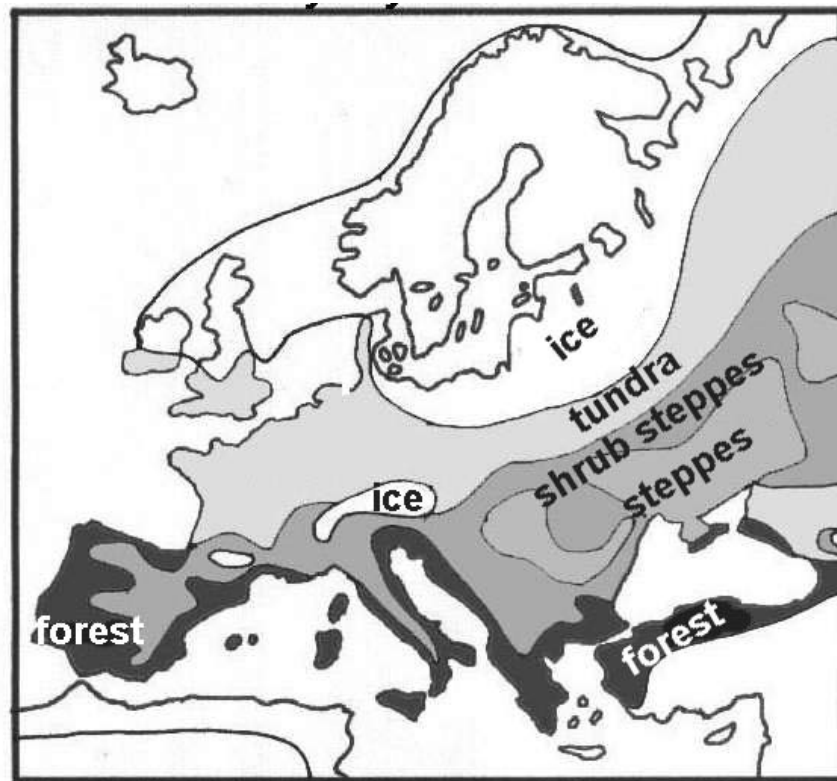
Appendix B to Map 9. Temperatures in the post glacial period. The horizontal axis refers to time from 16 000 bc to 2000 ad. The vertical axis represents temperatures. ID = first or Oldest Dryas, IID = second Dryas or Older Dryas, IIID = third or Youngest Dryas, B = Bölling Interstadial, and A = Allerød Interstadial. The curve is based on Küster 1996.



Appendix C to Map 9. The volume of the glaciers during the LGM.

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Question 10. What were the vegetation zones of Europe during the Last Glacial Maximum (LGM)?

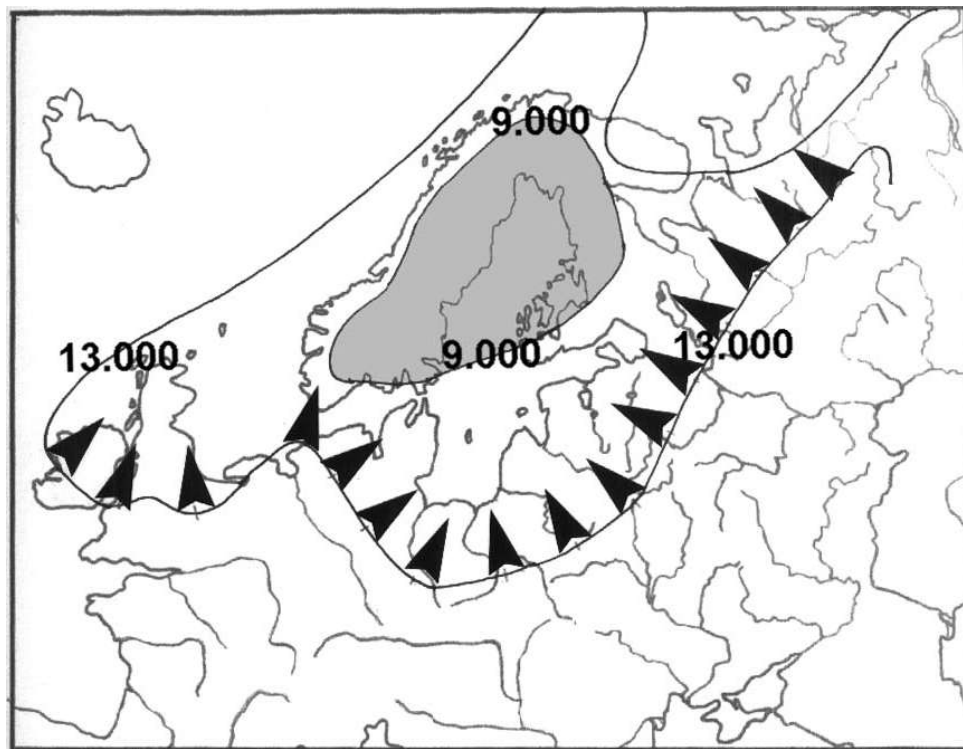


Map 10. Vegetation zones in Europe during the LGM. The Europeans lived in at least four different vegetation zones: forests, steppes, shrub steppes, and tundra.

Purpose: to remind the reader of the fact that all the vegetation zones of Europe were far in the south during the cold periods of the LGM; for example, the forest zone then covered only the southernmost areas. If we assume that the livelihood of a population relied on the prey of the forests, it had to move to the north during the warmer periods to be able to continue its traditional ways of living.

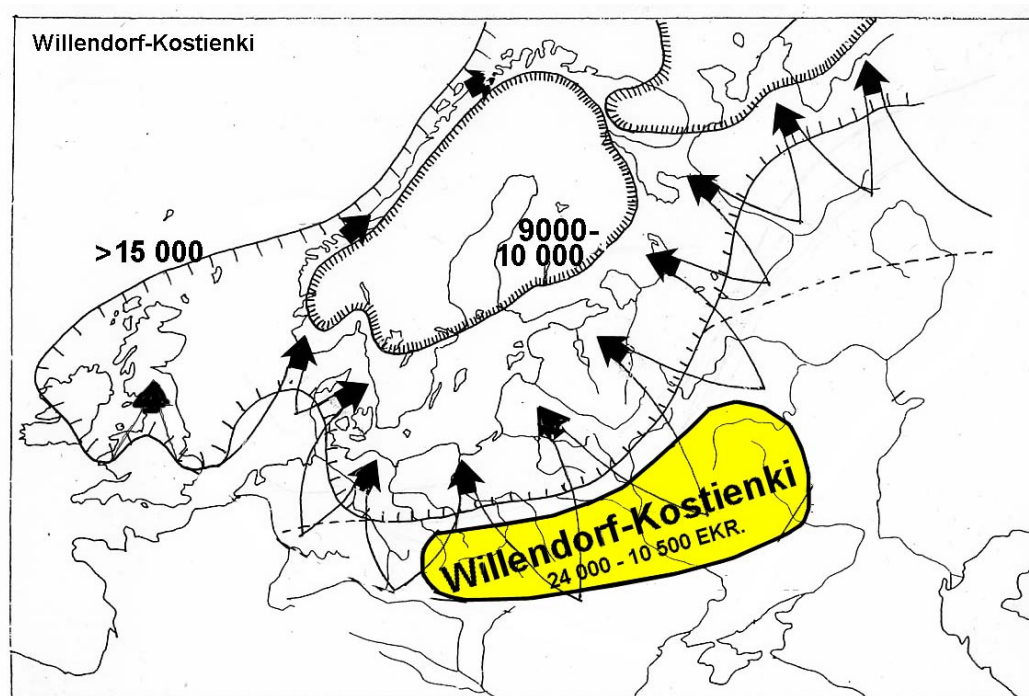
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Question 11. From where did the northern zone (recently freed of the ice) obtain its inhabitants? Did the Europeans move to this zone in great migrations? See Maps 11a and 11b.



Map 11a. Populating the areas freed of ice. The areas were populated gradually (about 100 metres a year) by two kinds of people: the 'western' Europeans whose ancestors were originally from the Iberian refugium and the 'eastern' Europeans whose ancestors were originally from the Ukrainian refugium. The eastern part of the map is based mainly on the map in Nuñez 1987.

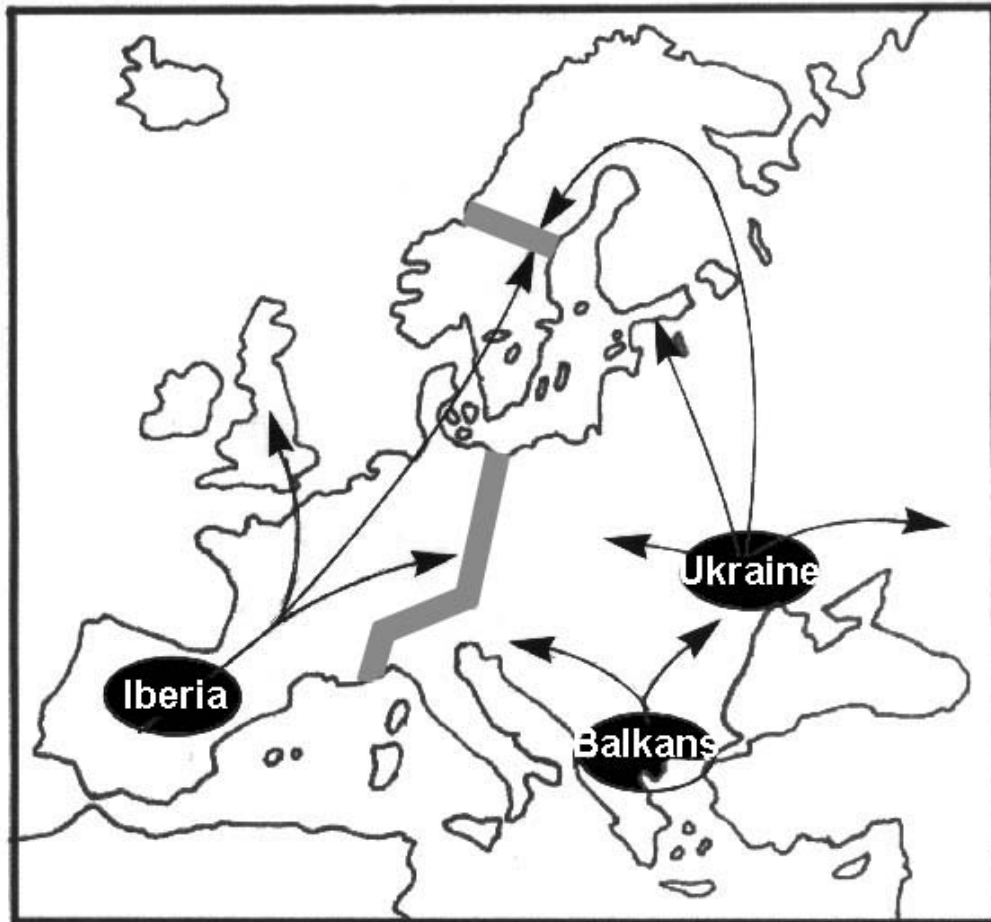
Purpose: to indicate that the populations living closest to the edge of the glacier (and the glacial lake south of it) followed the retreat of the ice very gradually being hardly even aware of the fact that they were moving; the movement was about 2.5 kilometres during one generation.



Map 11b. The Willendorf-Kostienki culture. The population of the Willendorf-Kostienki culture was based on that of the Ukrainian refugium, and it later developed into the population of the Swidry culture. The people of the Willendorf-Kostienki culture presumably spoke Finno-Ugric languages/dialects and formed the linguistic and genetic basis for the western Finno-Ugrians (Baltic-Finns and the Finns proper).

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Question 12. Where did the brown bear live during the cold periods of the LGM? From where did the brown bear come to the northern parts of Europe? Why are the students of the early history of the Europeans interested in the living areas of the brown bear (and other animals)?



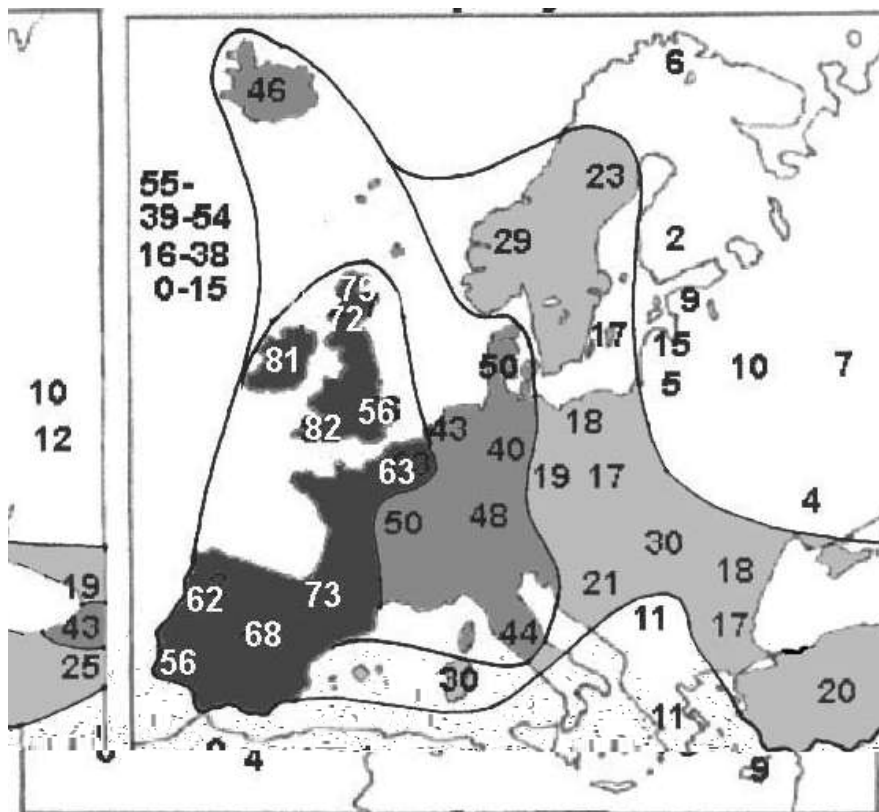
Map 12. The spread of the brown bear after the LGM. The European brown bear originates from the three refugia of the Ice Age. The brown bear of northern Europe, however, originates from two refugia only, those of Iberia and the Ukraine. The hybrid areas of the brown bears (and some other animals and plants) originating from the three refugia are seen to lie in central Scandinavia and Central Europe. The map is based on two maps in Hewitt 2000.

Purpose: to suggest that the spread of the brown bear may have been similar to that of the human being. Perhaps the Europeans followed the bear?

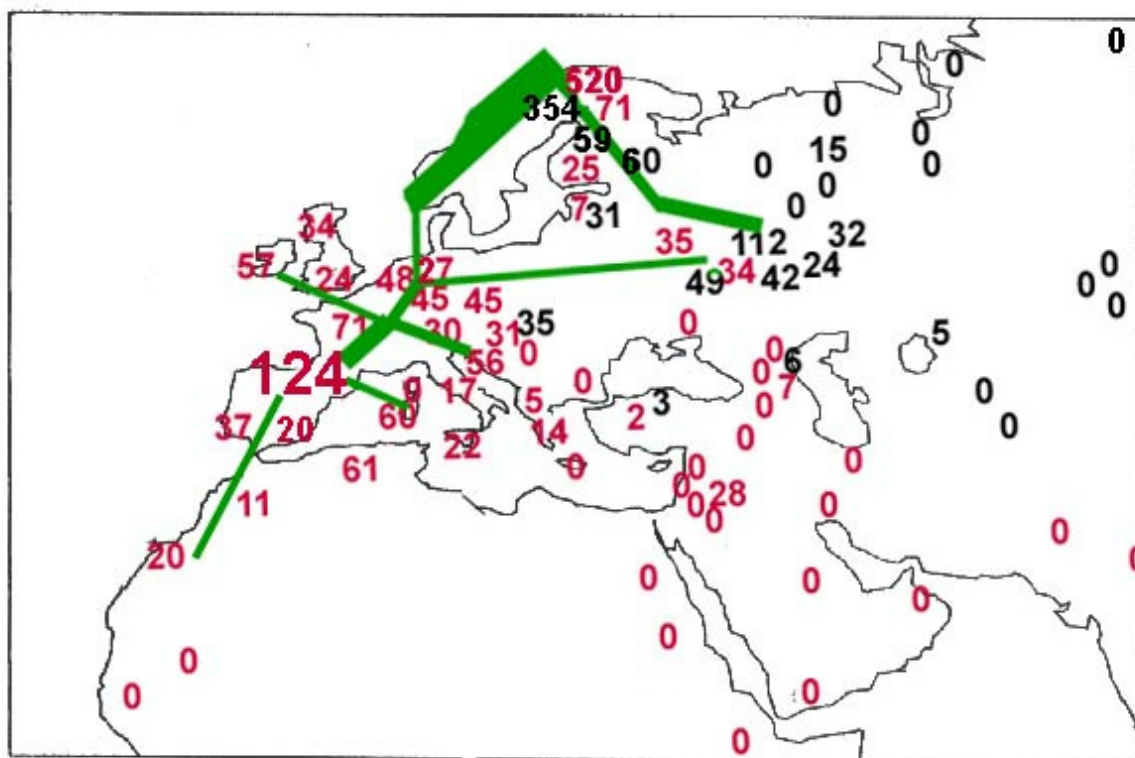
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Question 13. Does the gene pool of Modern Europeans give any hints of the original living areas and movements of the ancient western Europeans? See maps 13a and 13b for the paternal lineages (men), maps 13c and 13d for the maternal lineages (women), and maps 13e, 13f, and 13g for the nuclear DNA (men and women).

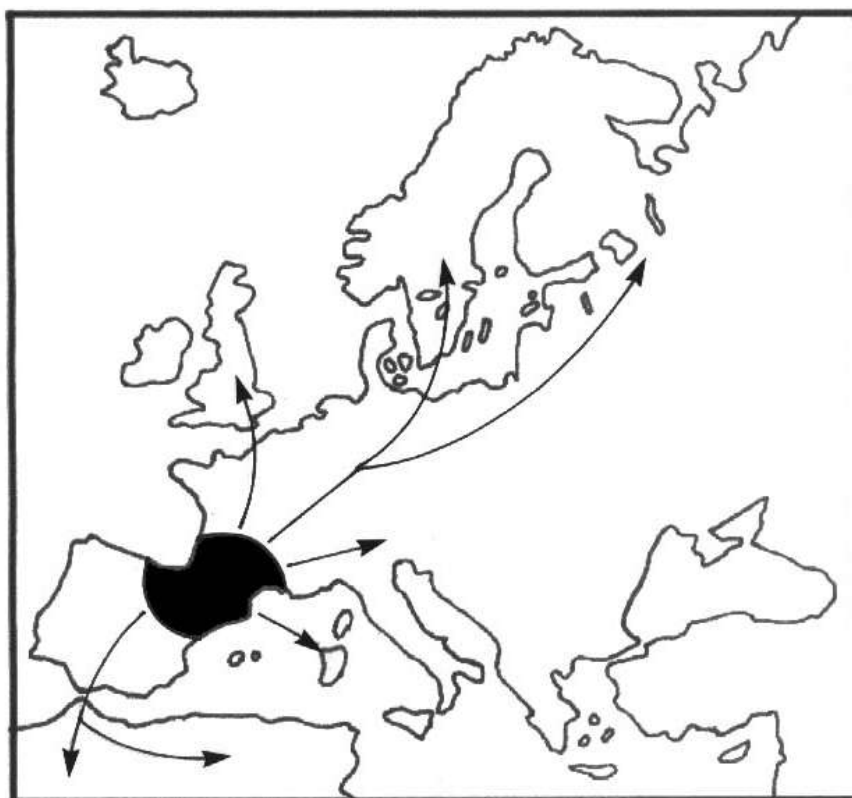
Purpose of maps 13a-13g: to indicate that some genetic features of the people who lived in the Iberian refugium during the LGM are still today represented in that area and in the spreading areas of the refugium. The most informative in this respect is map 13c.



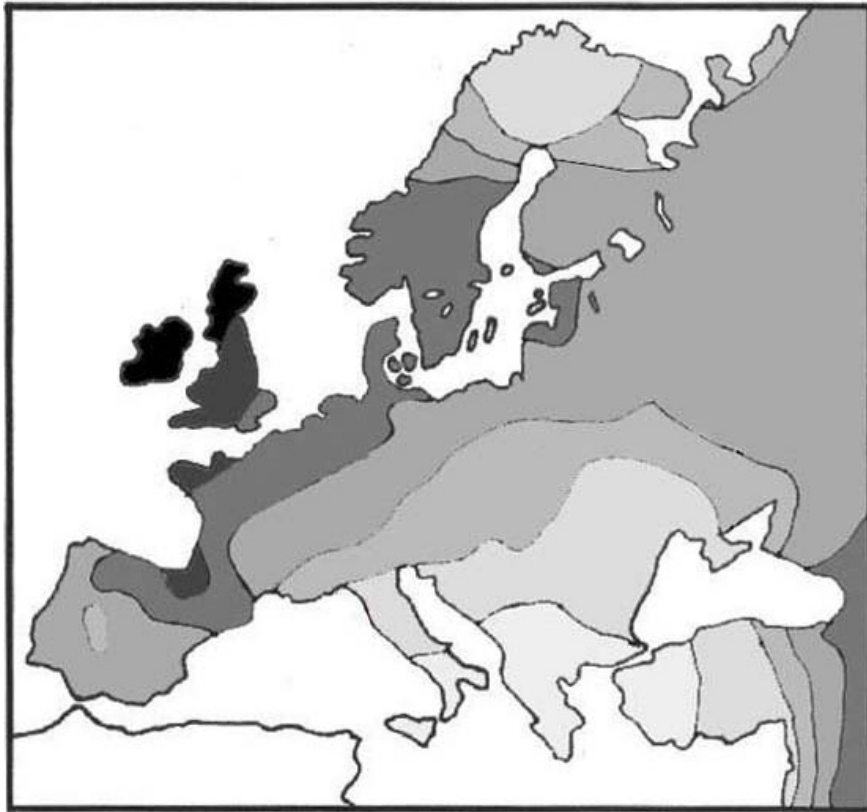
Map 13a. The frequencies of Y chromosome haplogroup 1 in various parts of Europe. The frequencies may reflect the Iberian refugium and the recolonization of some other parts of Europe from there. The map is based on a table in Rosser *et al.* 2000.



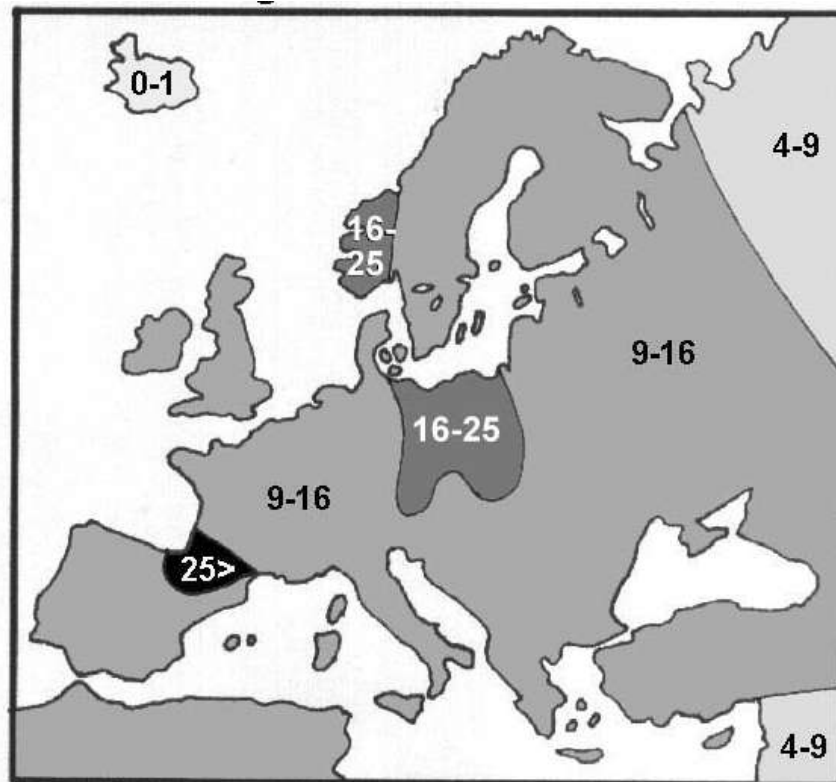
Map 13c. The frequencies per mil of the haplogroup V of mtDNA. The red figures are from Torroni *et al.* 2001; the black figures are based on the results obtained by Richard Villems and his group at Tartu. The green lines were added by the present writer. The lines represent the spreading of the populations from the Iberian refugium (value 124 in the map) after the LGM; the thickness of the lines represents roughly the strength of the genetic feature in question or (at least to some extent) the amount of people moving along the lines. The exceptionally high values (520 and 354) in northern Fennoscandia is perhaps a result of *founder effect*. The same (to a lesser extent) is perhaps true of the relatively high values in Russia (where the value for the Mari is 112) and the Middle east (where the value for the Syrians is 28). Apart from the three regions mentioned, the haplogroup V values regularly decrease as the distance from Iberia increases. Time depths suggested by Torroni *et al.* 2001: In the west (Africa + Iberia + France + Italy + Netherlands + Britain) 16 300 years ago; in the east (other than the Saami) 8500 years ago. The time depths indicate that the direction of population movement in question really was from the west to the east.



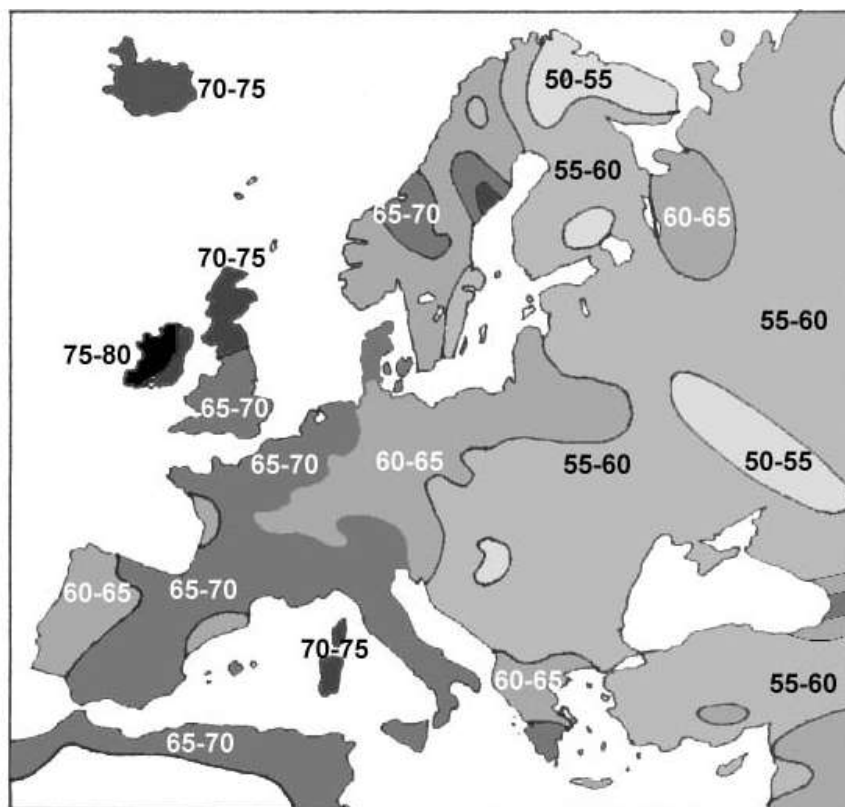
Map 13d. The spread of the maternal lineages of haplotype V from the Iberian refugium 10 000-15 000 years ago; Torroni *et al.* 1998: 1148. The map is an early simple version of the preceding map.



Map 13e. The fourth principal component. The map is based on an equivalent map in Cavalli-Sforza *et al.* 1994. The fourth principal component perhaps reflects the Iberian refugium and the recolonization of northern Europe from there. The alternative is that it reflects the Megalithic culture of the fourth and third millennia bc. The relatively high values in the Middle East may indicate that the genetic elements in question first occurred in that area about 40 000-20 000 years ago.

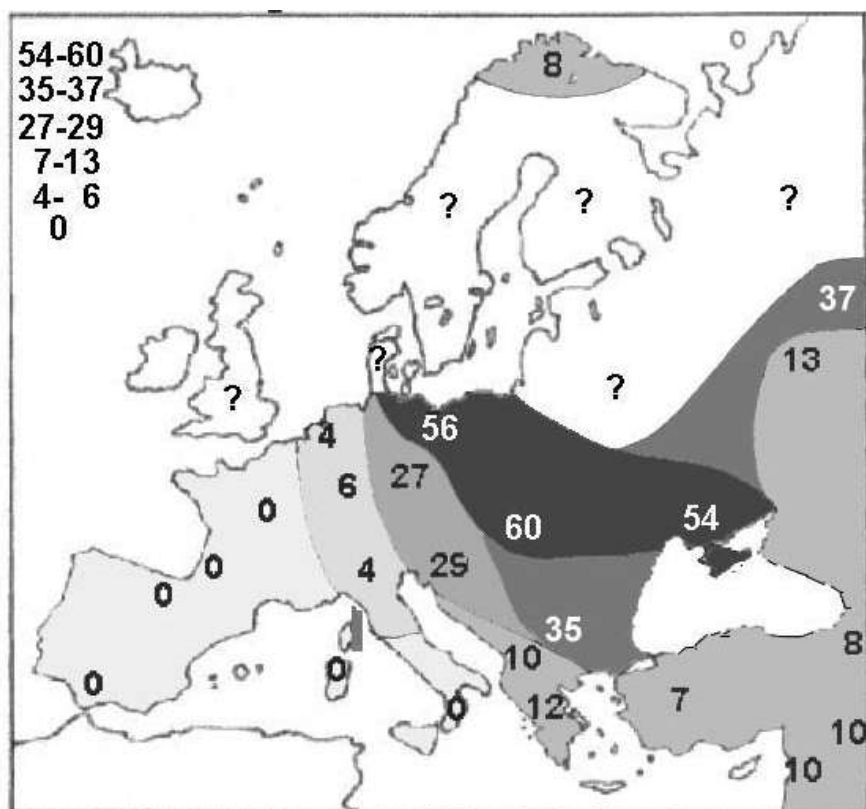


Map 13f. The frequency of *Rhesus Negative* in European populations. The map is based on Renfrew-Bahn 1996, p. 436.

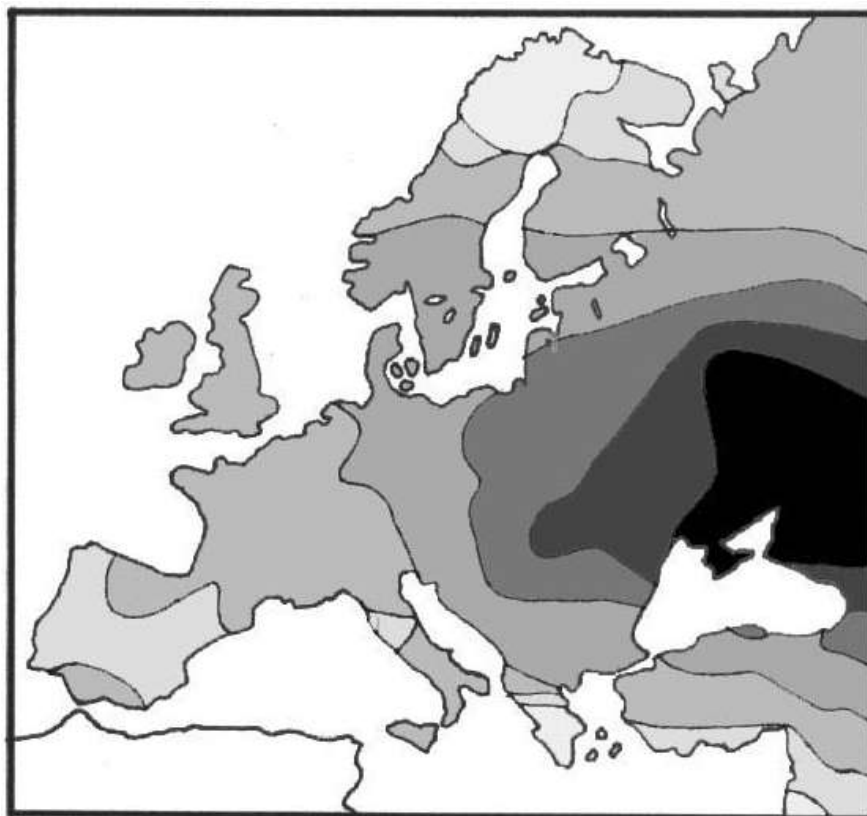


Map 13g. The frequency of blood group O. The highest frequencies (75-80 %) are found in western Ireland. Rather high frequencies (70-75 %) are also found in the northern and western parts of the British Isles, Iceland, eastern Norrland and Sardinia-Corsica. The frequencies are lowest (50-55 %) in northern Fennoscandia, south-eastern Finland, the Dnepr region, north-western Siberia and the northern Balkans. The map is based on the map of Mourant *et al.* 1976, p. 3. The blood group has a western bias and may reflect the influence of the Iberian refugium.

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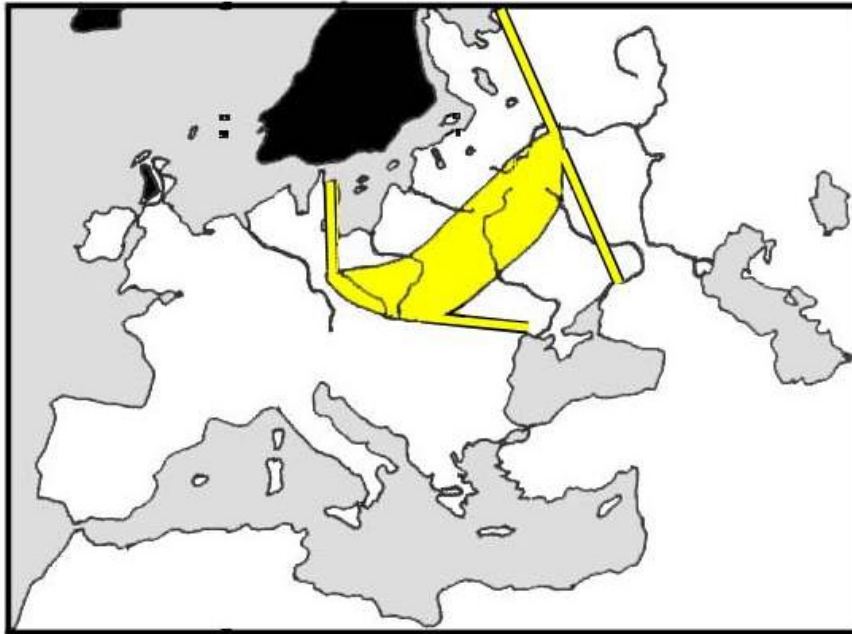
Map 14b. The frequencies of Y chromosome marker M17 (= Eu 19) in various parts of Europe. The values of the map are based on the table in Semino *et al.* 2000. In addition to the influence of the Ukrainian refugium, the map may reflect that of the Kurgan migrations (about 4500-3000 bc).



Map 14c. The third principal component. The map is based on an equivalent map in Cavalli-Sforza *et al.* 1994. The third principal component perhaps reflects the Ukrainian refugium and the recolonization of northern Europe from there. It may also reflect the much later Kurgan migrations of about 4500-3000 bc.

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Question 15. Where did the western populations of the Ukrainian refugium live during the beginning recolonization of Northern Europe?

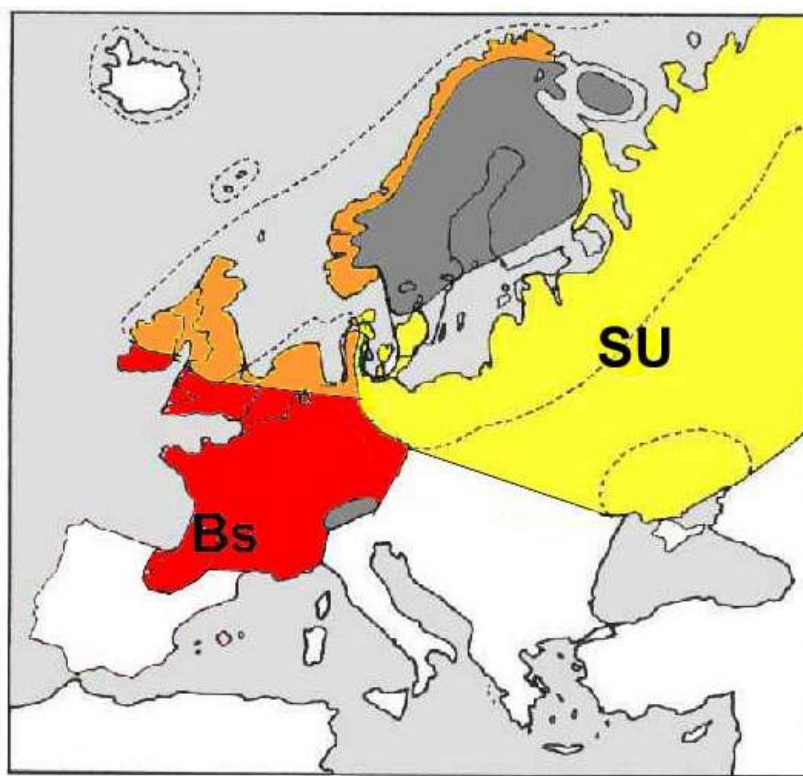


Map 15. The area of the Swiderian culture. Yellow = the Swiderian culture, black = glacier, grey = water. Source: The Penguin Atlas, p. 19 (the four yellow bars added by KW).

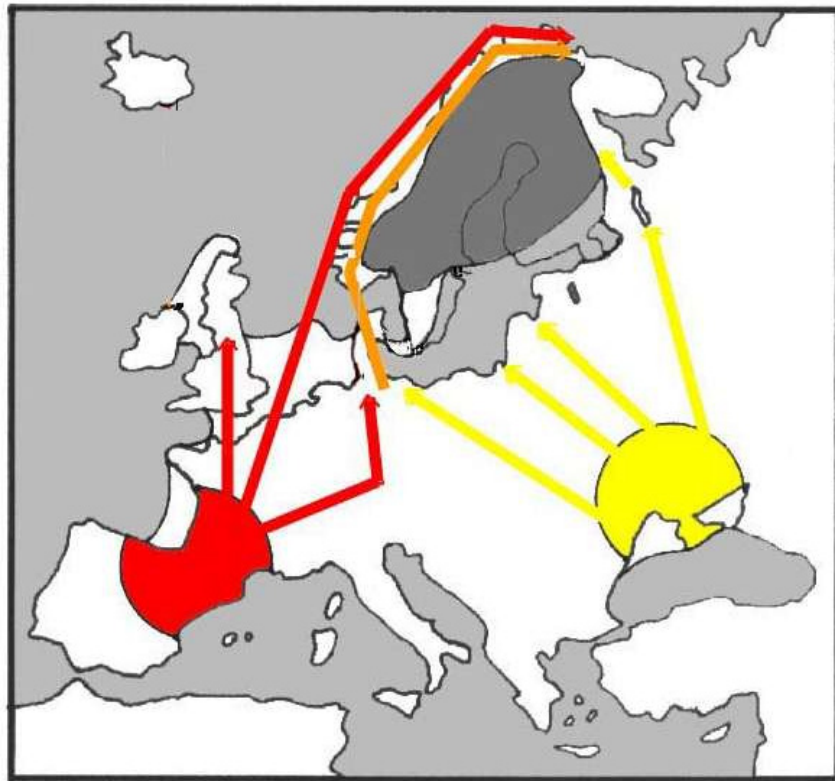
Purpose of the map: to show that the Swiderian culture was one of the most essential reflections of the Ukrainian refugium in eastern Central Europe during the recolonization of Northern Europe. The population of the Swiderian culture was based mainly on that of the earlier Willendorf-Kostienki culture; cf. Map 11b.

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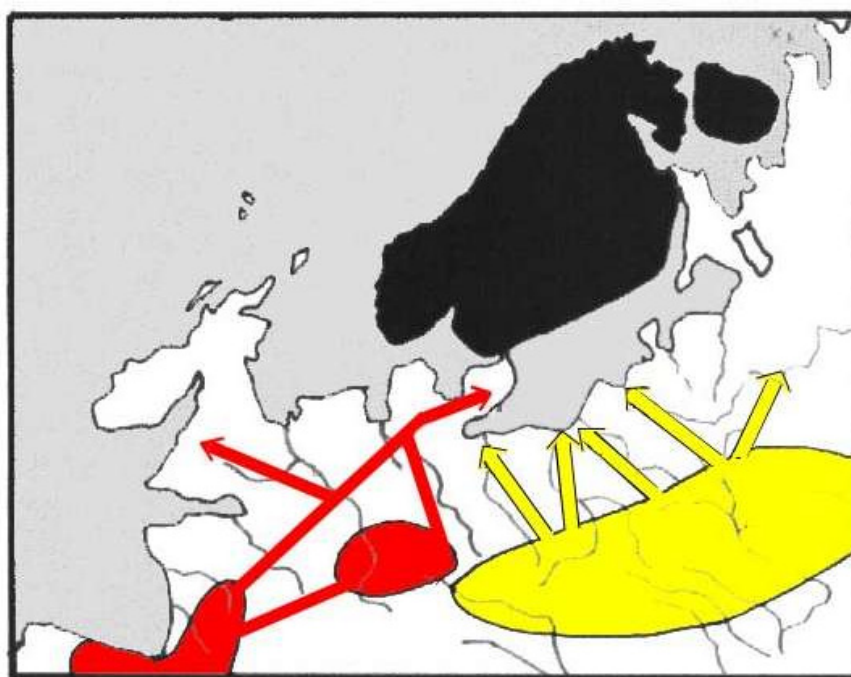
Question 16. From where did the hybrid area of the Iberian and Ukrainian refugia obtain its population during the recolonization of Northern Europe? See Maps 16a, 16b, and 16c.



Map 16a. Mixture of two types of people and languages. The red area represents the Iberian refugium and its spreading area; the language of this area is assumed to have been Basque. The yellow area represents the Ukrainian refugium and its spreading area; the language of this area is assumed to have been Finno-Ugric (Uralic). The brown area represents the hybrid area of the two refugia where the language was a 'mixture' of the two languages; more precisely, a Finno-Ugric language with Basque substratum. The 'Basque contaminated' dialect of the Finno-Ugric language was perhaps an early beginning for the Saami language.



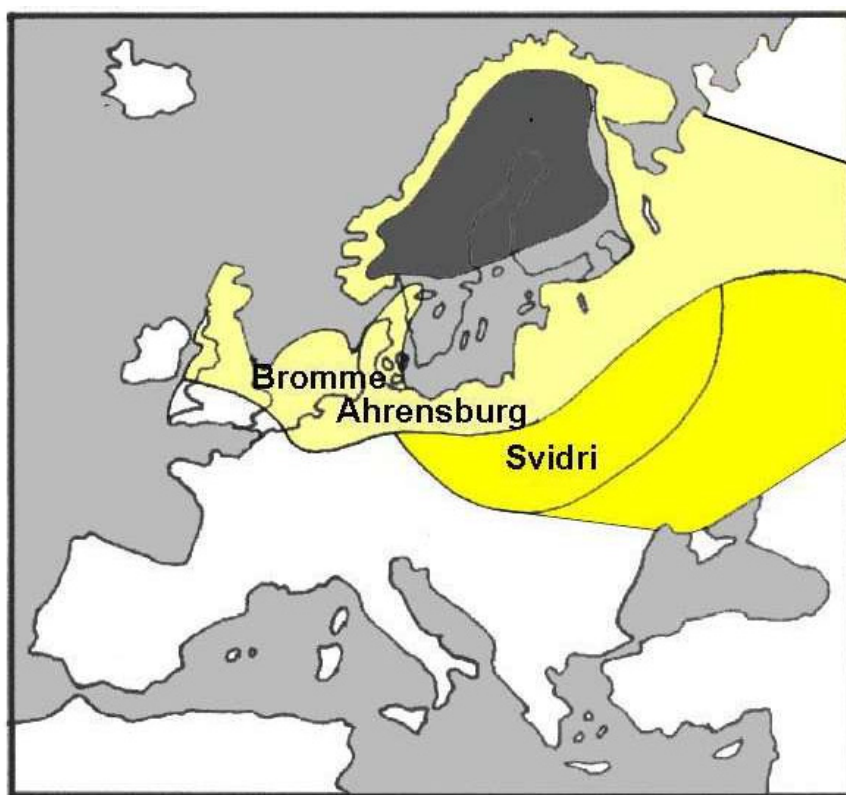
Map 16b. Shares of the two refugia in the recolonization of Northern Europe. The map is based mainly on Zvelebil 2001, p. 37. According to the arrows of the map, northern Germany was populated from both refugia; this is, to a lesser extent, also true of the northern Saami who later moved to northern Fennoscandia. Colours: red = Iberian refugium; yellow = Ukrainian refugium; and brown = mixture of Iberian and Ukrainian refugia.



Map 16c. Shares of the two refugia in the recolonization of Northern Europe. The map is based mainly on Pavel Dolukhanov's maps. According to the arrows, the dividing line between the western and eastern north Europeans was between the Odra and Elbe rivers. Colours: red = Iberian refugium and yellow = Dolukhanov's 'Periglacial zone'.

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Question 17. What did the Ukrainian refugium and its spreading area look like about ten or eleven thousand years ago?



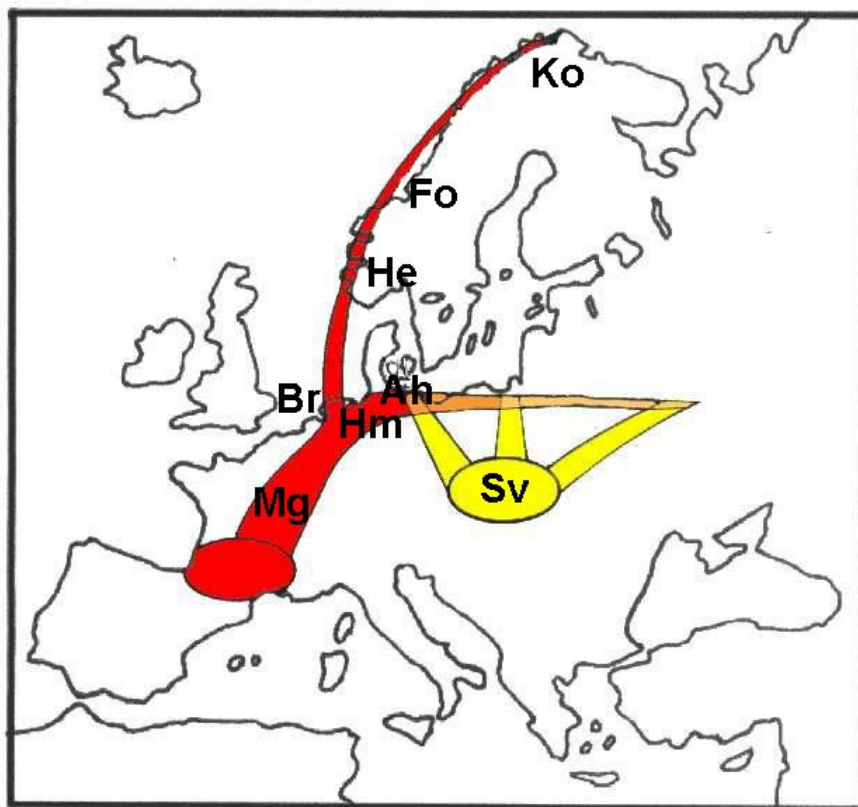
Map 17. Three cultures of the assumed Finno-Ugric area about 8500 bc. Yellow = the assumed Finno-Ugric area in 10 000-8500 bc, when the British Isles, North Sea continent, the western and northern coasts of Norway, Balticum, and Karelia already were free of ice. The cultures in northern Europe were the Brommian, Ahrensburgian, and Swiderian cultures. Black = ice, grey = sea.

Purpose: to remind the reader of the assumption of the present writer that the north Europeans living within the Brommian, Ahrensburgian, and Swiderian cultures spoke Finno-Ugric (Uralic) languages; cf. the yellow colour.

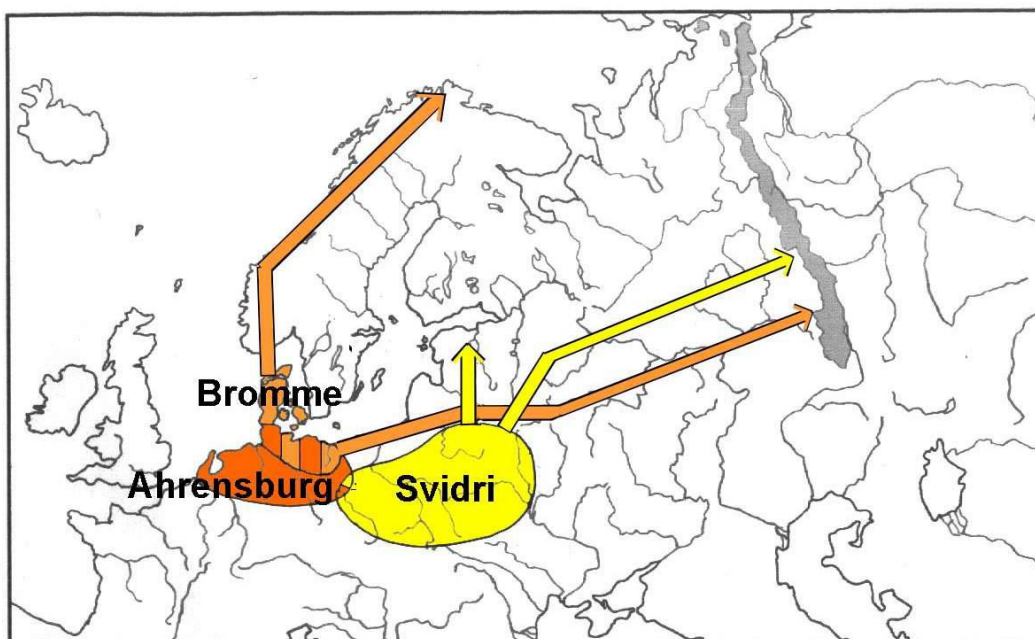
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Question 18. What does it mean to say that the North Europeans emerged as a mixture of two different populations?

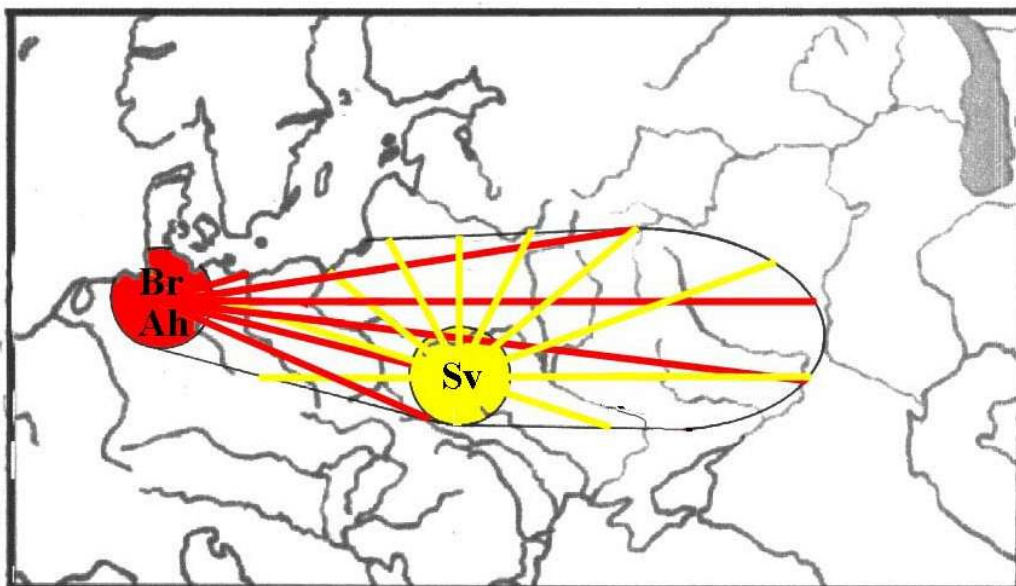
See Maps 18a, 18b, and 18c.



Map 18a. The development of the North European population. The people of the Magdalenian culture (Mg) moved to the north, and the Brommian (Br) and Hamburgian (Hm) cultures emerged in northern Central Europe. Later, the Hamburgian culture developed into the Ahrensburgian culture. The people of the Brommian culture moved to northern Scandinavia and to the east; the people of the Ahrensburgian culture moved to Eastern Europe; and the people of the Swiderian culture (Sv) moved to northern Central Europe and to Eastern Europe. In Northern Europe, a northern type of Europeans emerged as a mixture of the Brommian, Ahrensburgian, and Swiderian people. The north European population formed a west-east continuum in which the portion of the Brommian, Hamburgian, and Ahrensburgian was greater in the west and that of the Swiderian people in the east.



Map 18b. The spread of the populations of the Brommian, Ahrensburgian, and Swiderian cultures. The influence of the peoples of the three cultures reached as far east as the Ural mountains. The Map is based on the maps by Leonid Zaliznyk (pages 210 and 233).

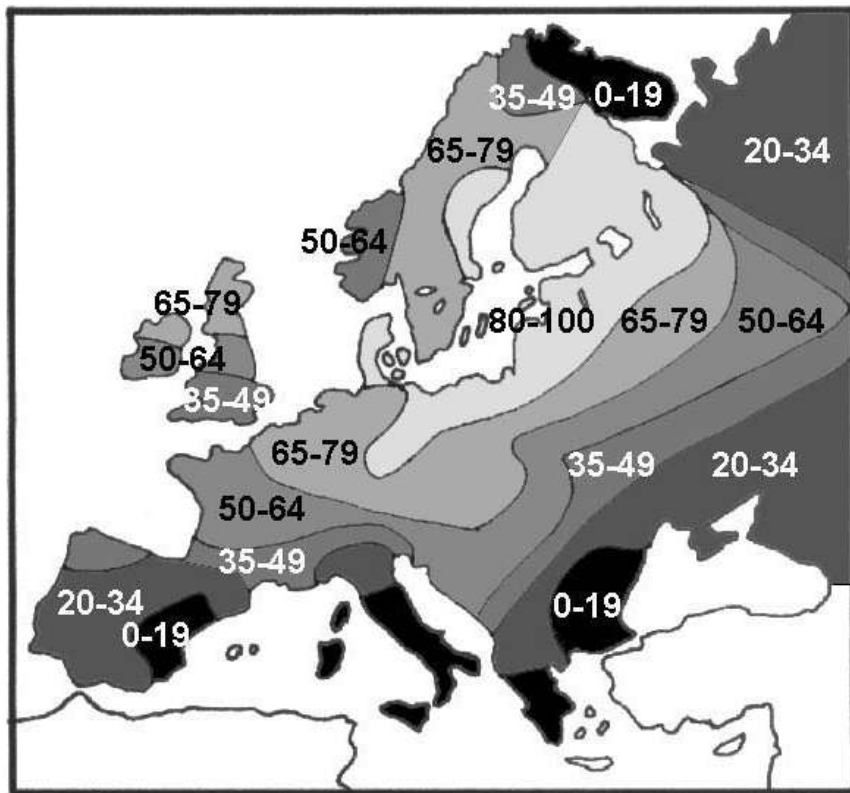


Map 18c. The Two Centre Model of northern Europe. The influence of the Brommian and Ahrensburgian cultures (Br and Ah) expanded to the natural spreading area of the Swiderian culture in eastern Europe. As a result, the cultures and to some extent the populations of the Brommian and Ahrensburgian cultures mixed with the culture and population of the Swiderian culture; the influence of the Brommian and Ahrensburgian cultures was stronger in the west than in the east (cf. the density of the radiating lines): the Swiderian culture dominated in the east while the Brommian and Ahrensburgian cultures dominated in the west (notice that the radiating lines are on different 'levels' in the west and east).

Purpose: to show that the western (originally Iberian) and eastern (originally Ukrainian) populations mixed and the result was the emergence of the 'north Europeans'.

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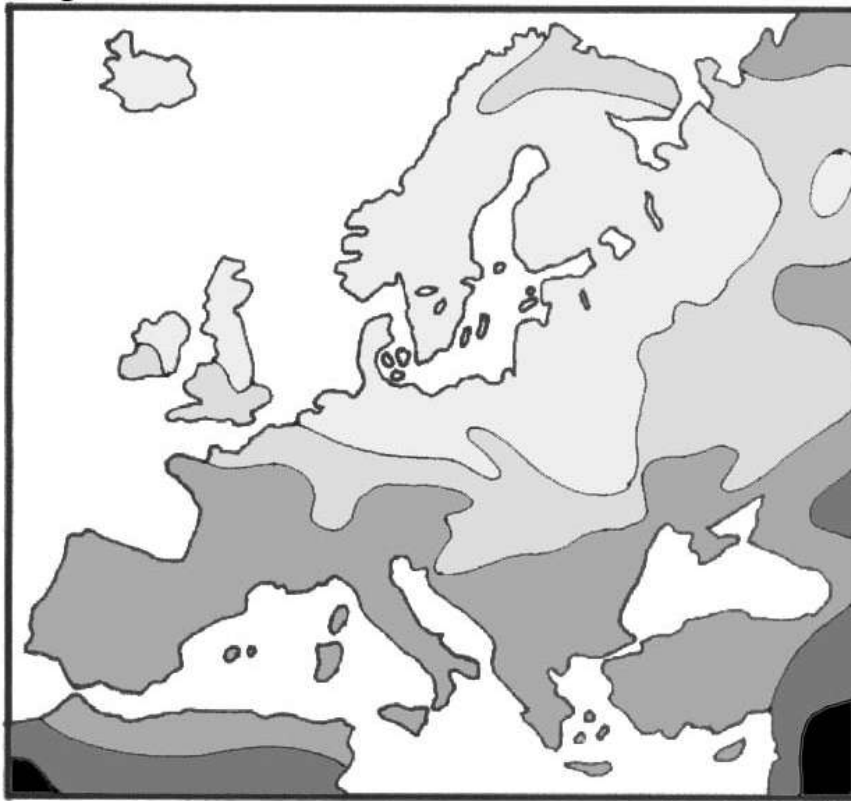
Question 19. Is there any genetic or anthropological indication of the fact that the Modern North Europeans form a rather homogenous population? See Maps 19a, 19b, and 19c.



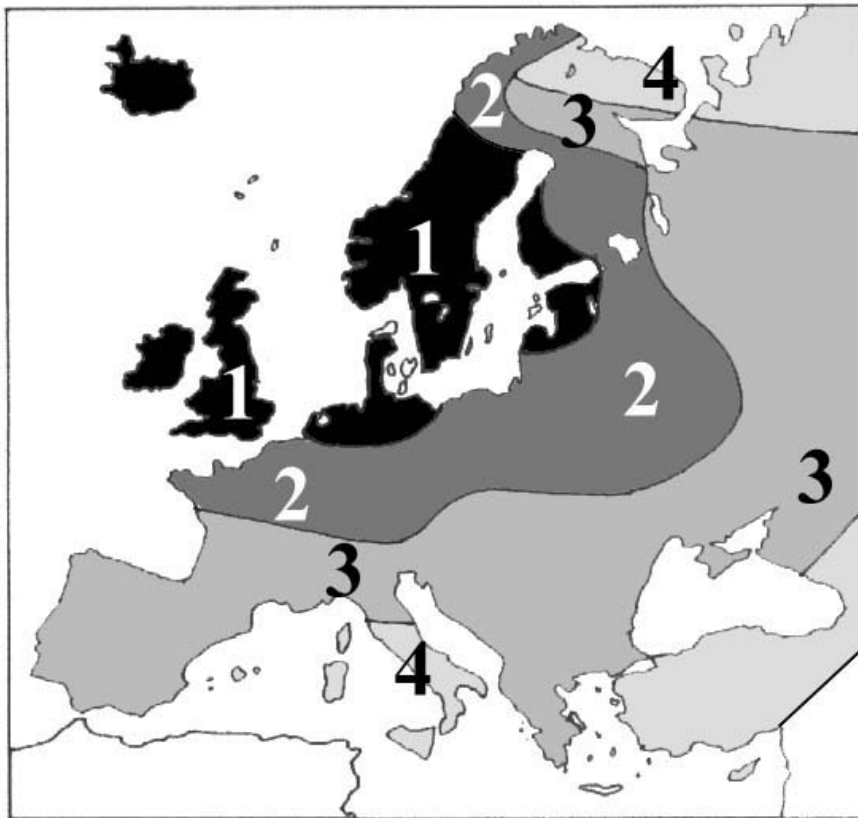
Map 19a. The colour of the eyes of the Europeans. The figures show the percentage of light-coloured eyes.

Purpose of this map and the one immediately following: to give an example of an anthropological feature (based on genetics) of the 'north European' population. It is possible that the people of the Ukrainian refugium already represented the blond people of maps 19a and 19b. Another alternative is that the blond people developed in the Baltic Sea region as a result of certain biological and natural circumstances (the type of food and amount of sunlight).

Warning: The map has nothing to do with racism. Its purpose is not to say that one colour of eyes or complexion is better than others.



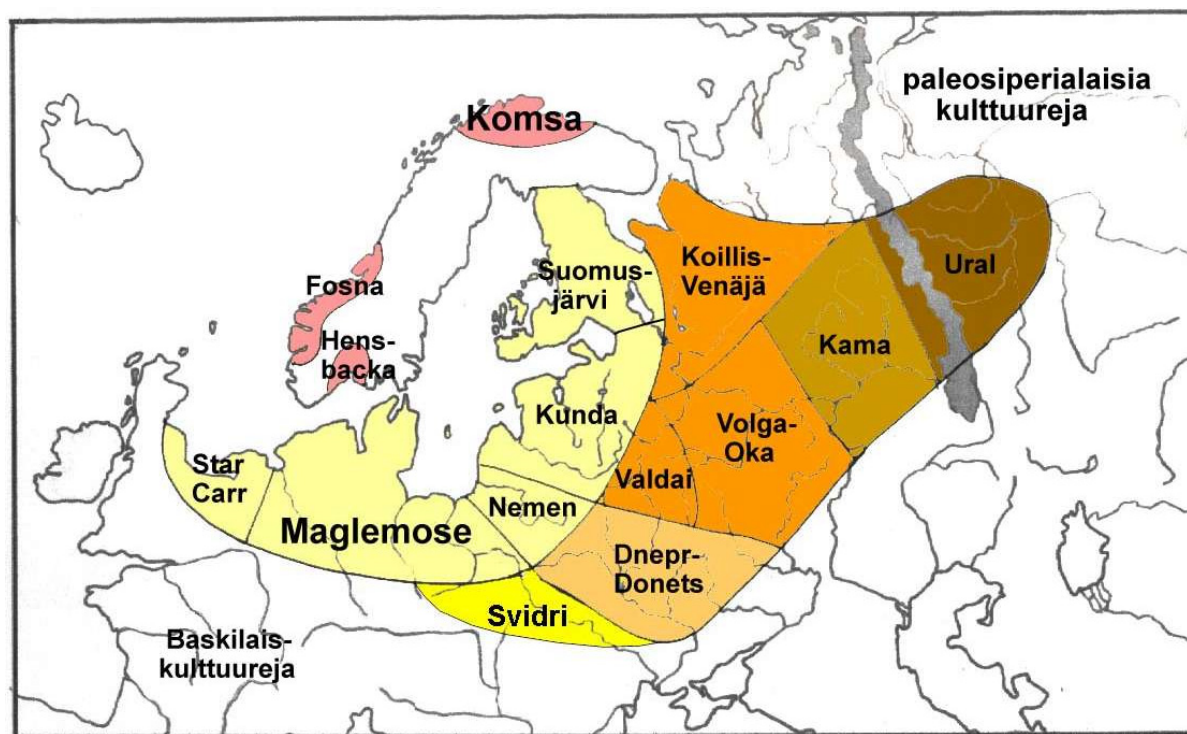
Map 19b. The amount of pigmentation. The area of low pigmentation is surprisingly similar to that of the maximal extent of the glacier during the LGM.



Map 19c. The percentages of 'norht-westernness' in European populations. The four zones of the map are based on the four anthropological features of Coon 1939: stature, blondness, cephalic index, and cranial index. The darker the area, the taller, more blond, with more rounded heads, and bigger heads is the population; and conversely, the lighter the area, the shorter, darker, with less rounded heads and smaller heads is the population. Source: Wiik 1995 C: 39.

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Question 20. Is there any indication of the fact that the **cultures** of the ancient North Europeans were related?



Map 20. The areas of the cultures of the "Maglemose group" about 7000 bc. The mother culture of the Baltic Sea area was Maglemose (later Kongemose); there was a group of four cultures (Star Carr, Nemen, Kunda, and Suomusjärvi) under the influence of this mother culture. The people of the areas marked yellow also formed genetically (anthropologically) a more or less homogenous group. In addition, they presumably spoke Finno-Ugric languages. These languages were presumably spoken also by the peoples of the other cultures marked with colour in the map.

Until about 6000 bc, the British isles were still a peninsula (there was no English Channel yet), and the Star Carr culture of the peninsula was a natural projection of the Maglemose culture.

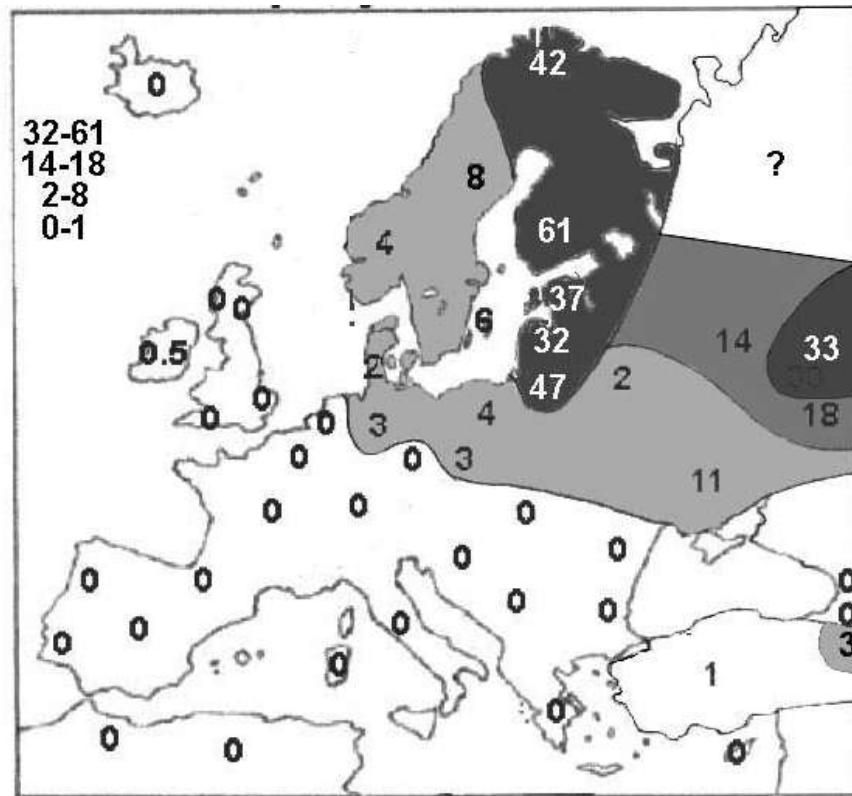
Notice the similarity of the areas of the people with light eyes, light complexion and 'north-westernness' (of the three maps preceding) on one hand and the areas of the cultures of the "Maglemose group" on the other.

The people looked alike and their cultures were alike; were their languages also alike? The assumption of the present writer is: perhaps they all spoke the Finno-Ugric languages originating from the Ukrainian refugium.

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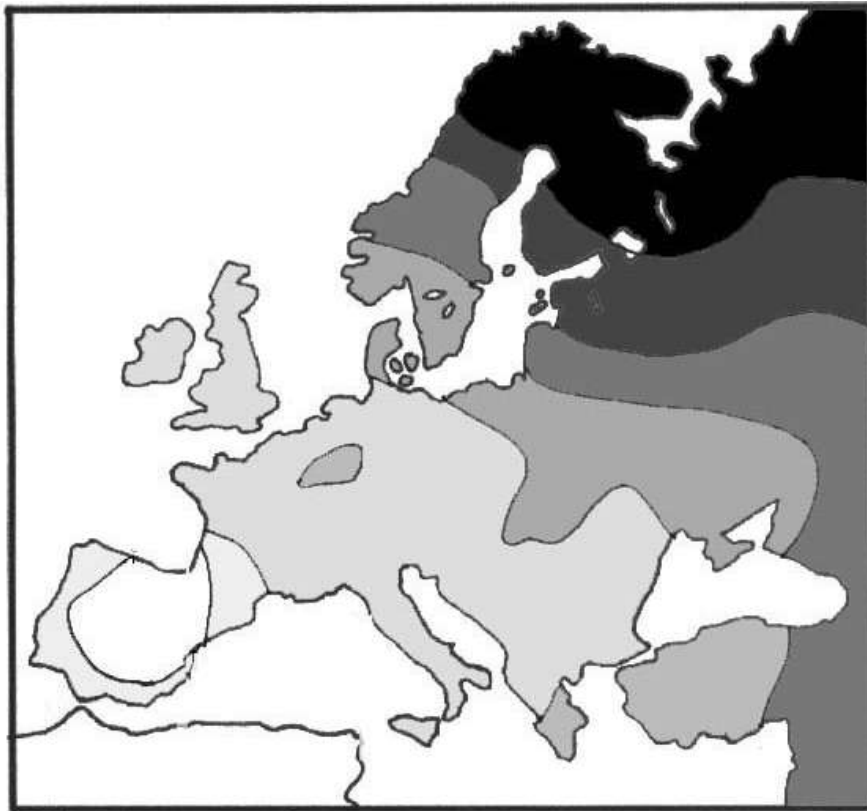
Question 21. Is there any genetic indication of the ancient north Eurasian 'mammoth hunters'?

See Maps 21a, 21b, and 21c.

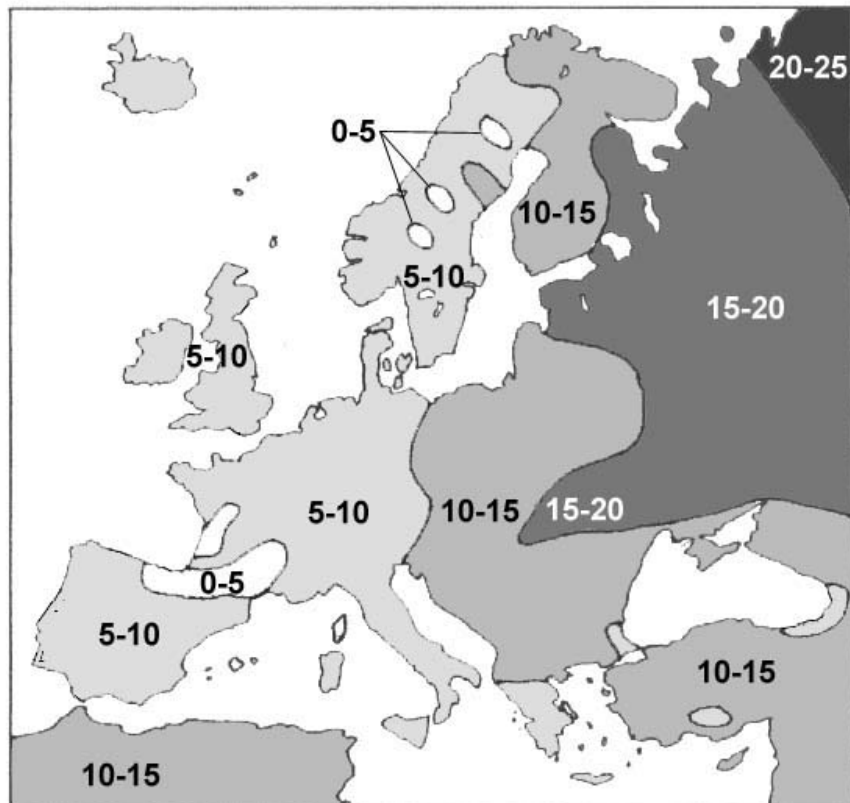


Map 21a. The frequencies of Y chromosome haplogroup 16 (Tat C, N3) in various parts of Europe. The frequencies may show that Lapland, Finland, and Balticum belonged to a broad zone of big game hunters that reached to northern and north-eastern Siberia. For example, the equivalent value for the Buryats in Mongolia is 58 and that for the Yakuts in north-eastern Siberia is 86.

Purpose of this and the two maps immediately following: to indicate that during the LGM there was a vast **periglacial zone** in north-eastern Europe and northern Asia occupied by big prey hunters ('mammoth hunters').



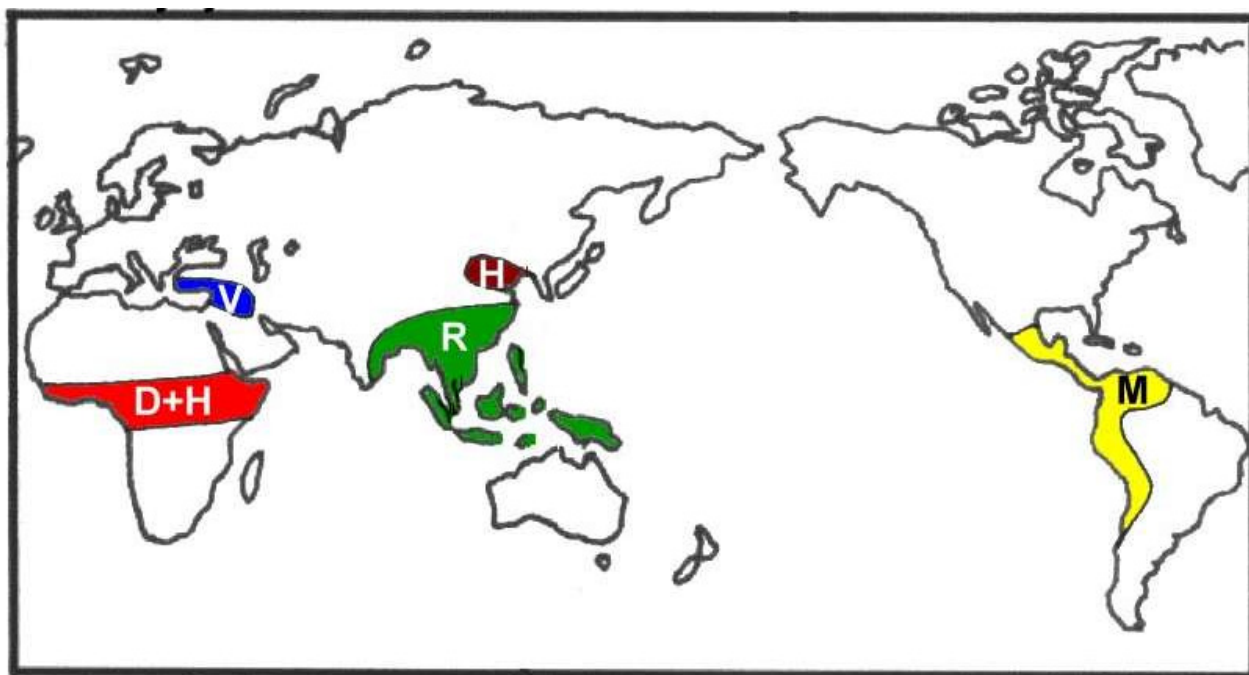
Map 21b. The second principal component. The map is based on an equivalent map in Cavalli-Sforza *et al.* 1994. The second component may reflect the genetic heritage left by the ancient populations of the periglacial zone. According to Cavalli-Sforza *et al.* 1994, the second component may originate from 'a climatic effect' or it may be of 'an ethnic origin' (Saami) or it may be based on 'the Uralic languages'. The second principal component explains 22.2 per cent of the gene pool of the present Europeans.



Map 21c. Frequency of blood group B. The map is based on map 2 in Mourant *et al.* 1976. The frequency of blood group B forms an east – west gradient with the highest frequencies in the north-east.

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Question 22. Where are the original areas of agriculture in the world?

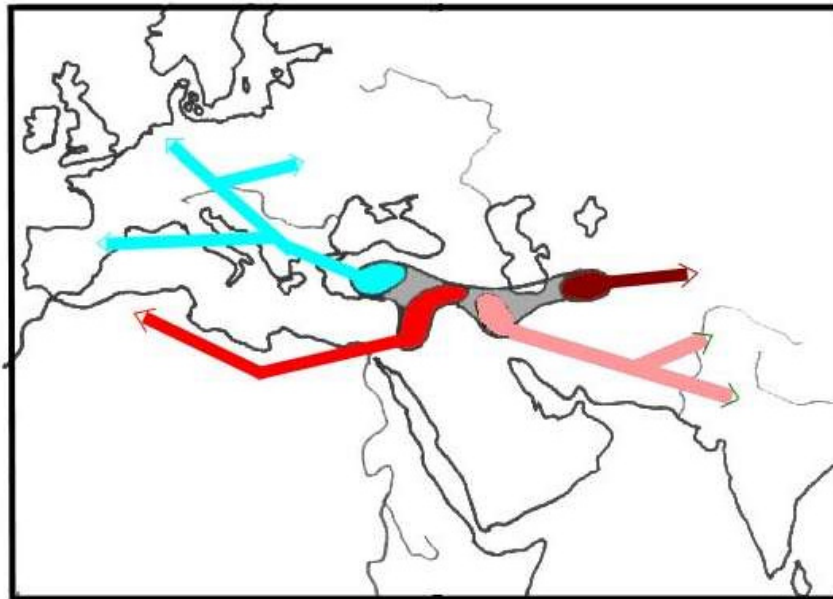


Map 22. Agriculture in the world. Agriculture emerged independently in five separate regions. In each region, the essential grain plant was different: V = wheat and barley, H = millet, R = rice and others, D+H = durra, millet and others, and M = maize. The map is based on the map in Harla 1971, p. 13.

Purpose: One of the premises of this Atlas is that the spread of the people and particularly that of the languages of Modern Europe was heavily influence by the spread of agriculture from the Middle East (the blue area marked V in the map). The four other centres of agriculture were, likewise, potential starting areas for demic and linguistic dispersals.

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Question 23. Where did agriculture spread from the Middle East? What were the languages spoken by the farmers originating from the Middle East area?

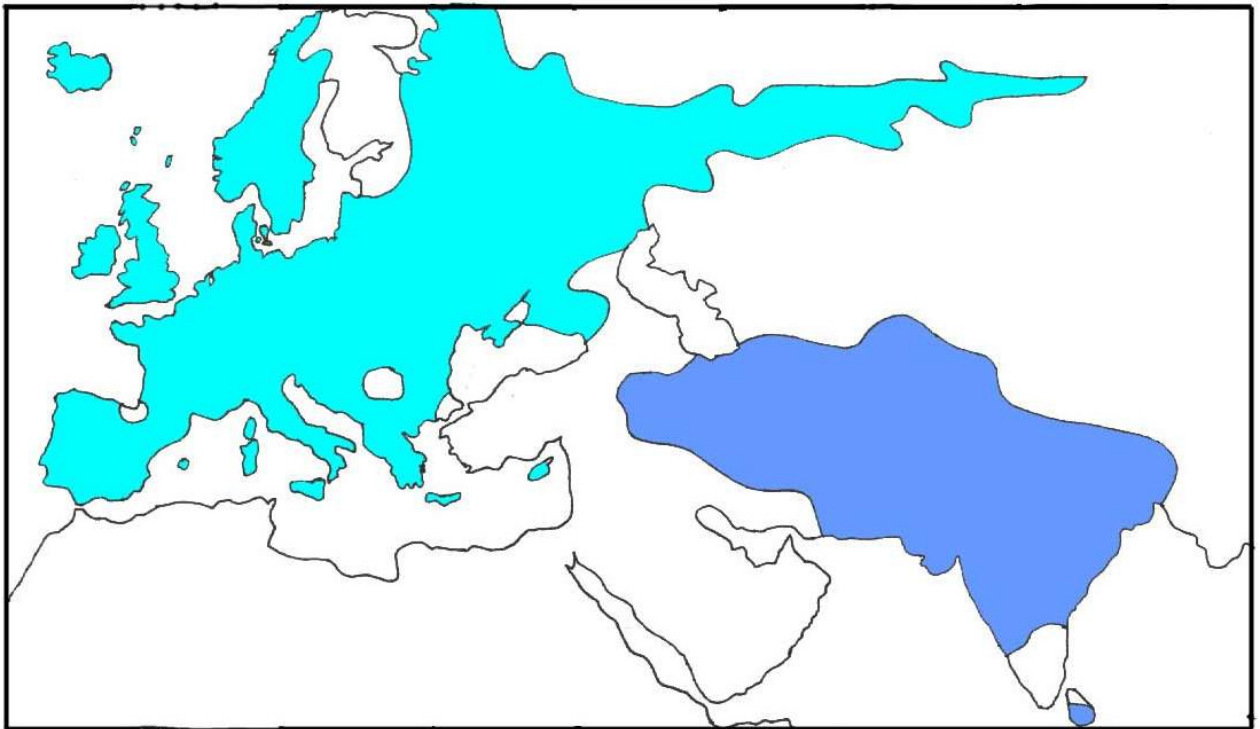


Map 23. Agriculture in the Middle East. Colours: blue = Indo-European languages, red = Afro-Asiatic languages, light brown = Dravidian languages, and dark brown = Altaic languages. The map is based on the map in Renfrew 1996, p. 80. In a later publication, Renfrew did not interpret the spread of the Altaic languages to depend on agriculture.

Purpose: to interpret the spread of several different types of populations and languages as reflections of a similar process, that of the spread of agriculture.

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Question 24. What are the areas of the Indo-European languages in Europe and Asia?

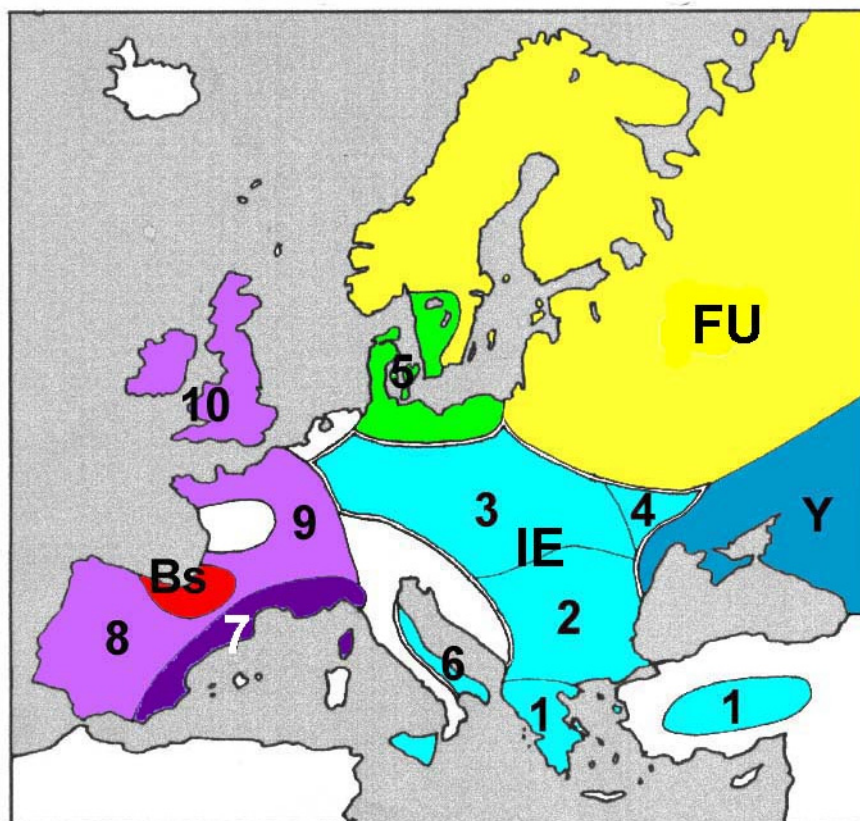


Map 24. The areas of the Indo-European languages in Europe and Asia. The map is based on the map in König 1978, p. 38.

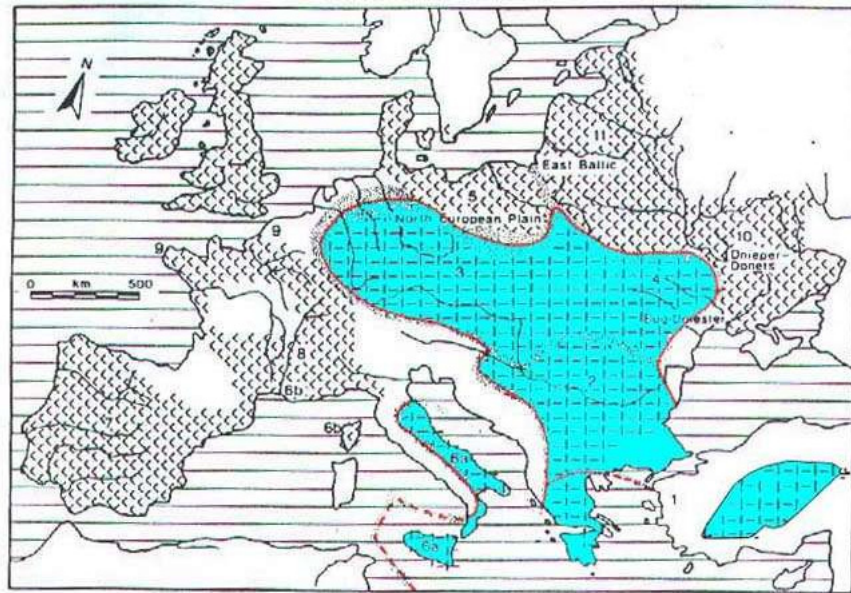
According to the agriculture assumption, the IE languages spread from the Middle East in the wake of agriculture in two main directions.

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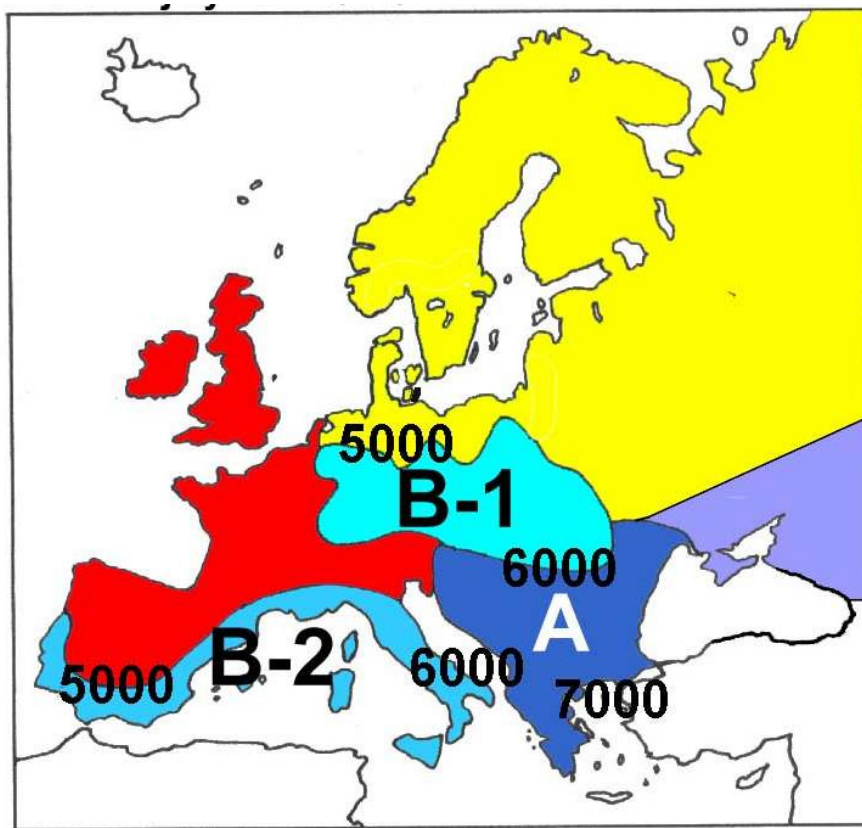
Question 25. How did agriculture spread in Europe?
See Maps 25a, 25b, 25c, and 25d.



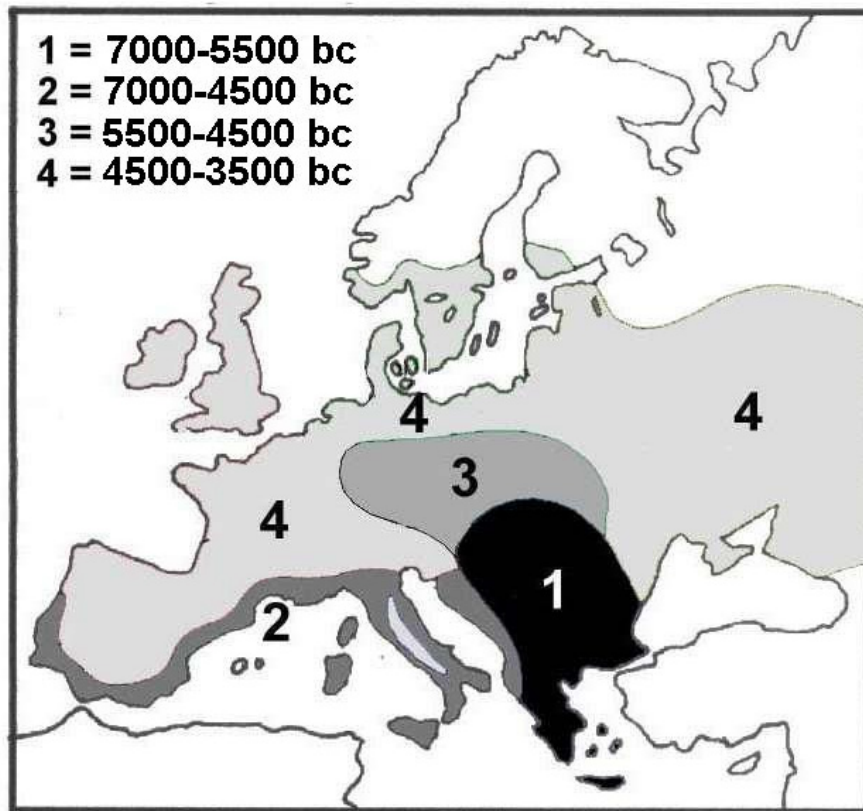
Map 25a. The spread of agriculture in Europe. The spread of agriculture in Europe is presented as ten phases. The blue areas 1, 2, 3, 4, and 6 represent the zone where agriculture (according to the view of among others Renfrew and Zvelebil) spread mainly as demic diffusion. The maps represents a phase in which agriculture and the IE language have already spread to area 5 (yellow + blue > green) and areas 7, 8, 9, and 10 (red + blue > violet). Yellow and FU = Finno-Ugric hunters, red and Bs = the Basque area, and Y = the area of the pastoral Kurgan/Yamnaya cultures and Indo-Iranian languages. The map is based mainly on Renfrew 1999 and Zvelebil 1996.



Map 25b. Two ways for agriculture to spread in Europe. Agriculture spread more as a demic diffusion to the blue areas of the map, and more as cultural diffusion to the other hatched areas of the map; Zvelebil 1996. According to another view, agriculture spread as demic diffusion also to the coasts of the Western Mediterranean; cf. the following map.



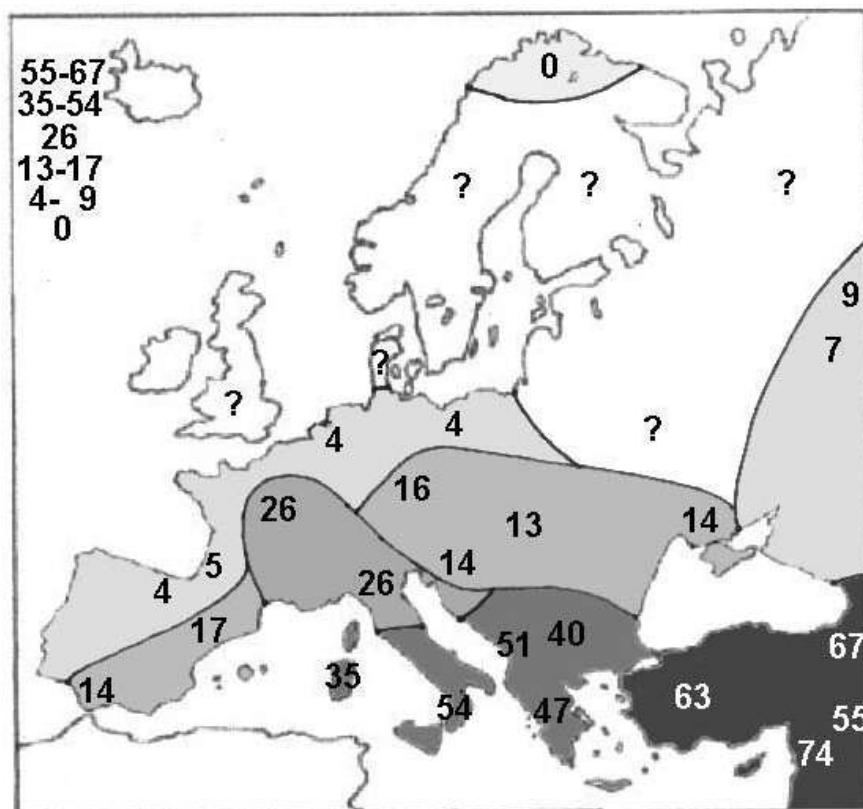
Map 25c. Another view on the spread of agriculture as demic diffusion in Europe. A = Greece and the Balkans, B-1 = Central Europe, and B-2 = the Western Mediterranean area. Agriculture spread mainly as demic diffusion to the three areas mentioned and as cultural diffusion to the Basque and Finno-Ugric areas (marked red and yellow in the map). The map is a simplification of the map in Zilhão 1993.



Map 25d. Four phases of the spread of agriculture in Europe. In phases 1, 2, and 3, agriculture spread mainly as demic diffusion but in phase 4 as cultural diffusion. This view is a simplification of the map in Philip's Atlas of World History (O'Brien 1999, p. 20).

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Question 26. Is there any genetic evidence to show that the farmers came to Europe from Anatolia and the Middle East?



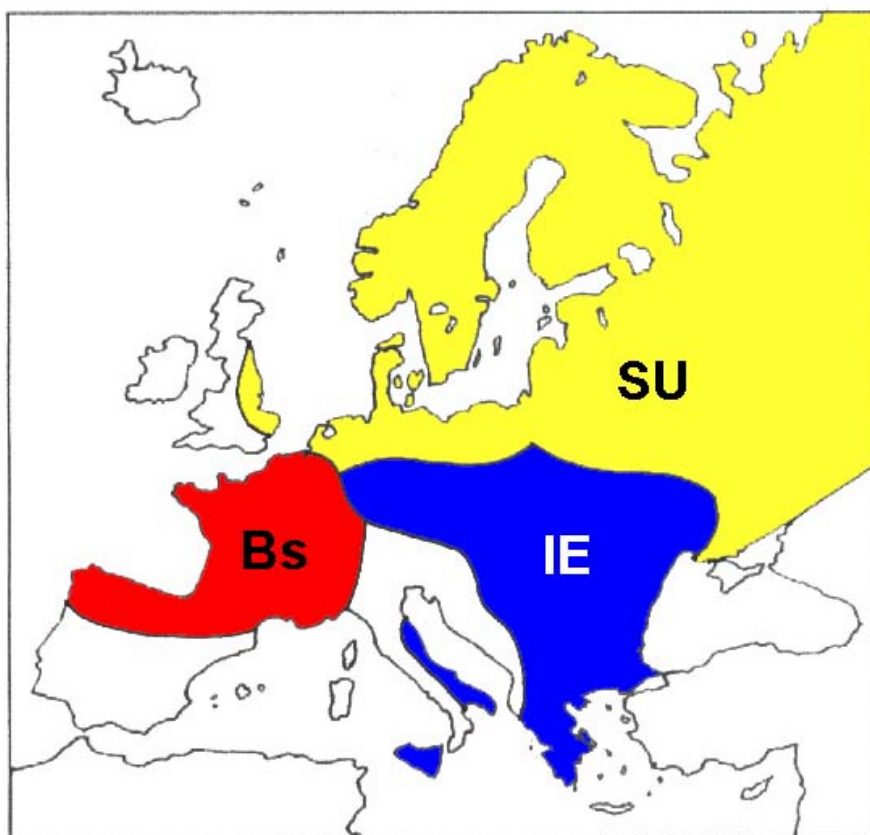
Map 26. The sum of the frequencies of Y chromosome markers Eu4, Eu9, Eu10, and Eu11. The frequencies are perhaps based on the Neolithic migrations about 9000-5000 years ago, but its European part may also represent the Balkan refugium during the cold periods of the LGM. The map is based on Semino *et al.* 2000. See also map 8 (the first principal component of Cavalli-Sforza *et al.* 1994).

Purpose: to give a genetic basis for the spread of the Europeans from the Balkans. The Balkans was one of the three main refugia during the LGM and it was the spreading centre of farmers about eight thousand years ago.

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Question 27. What were the three main areas of the Europeans that to some extent still in 5500 bc reflected the three refugia of the LGM?

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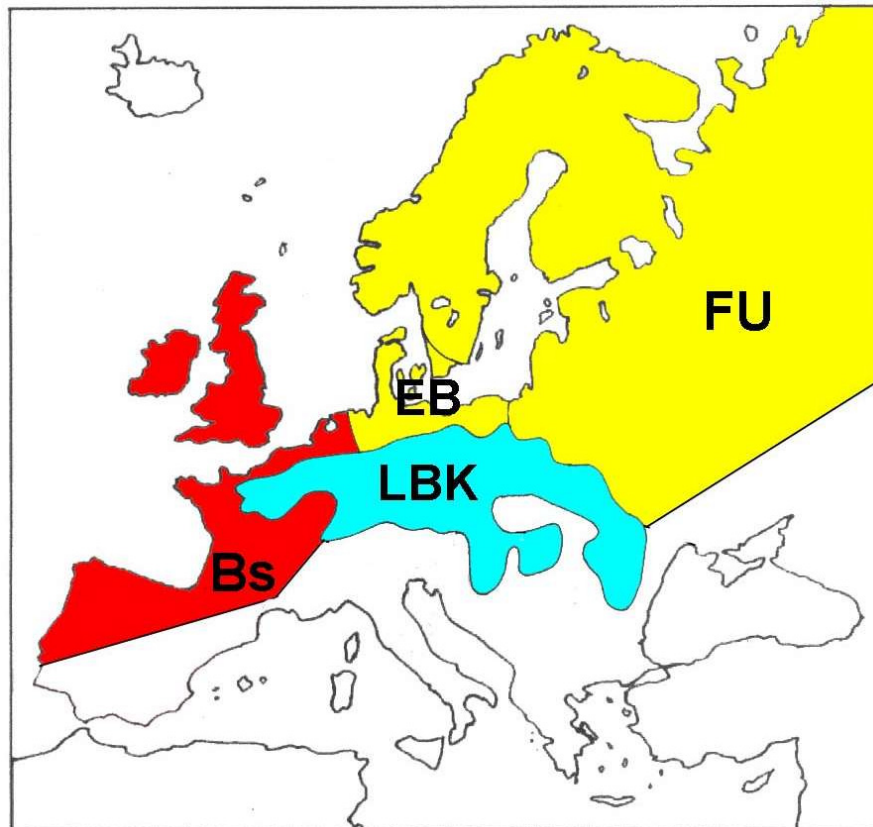


Map 27. Europe about 5500 bc. The map represents the critical phase in the early history of the Europeans: The Indo-European speaking farmers (blue) have just arrived at the southern boundary of the northern Finno-Ugric speaking hunters (yellow) and at the eastern boundary of the western Basque speaking hunters (red). The farmers represented food producers; the hunters were food appropriators. The population density was 100-150 times higher among the food producers than among the food appropriators.

In about 5500 bc, the spread of agriculture stopped for almost a thousand years, and when it later continued to spread its way of spreading was different: the spread was less of the demic type and more of the cultural type.

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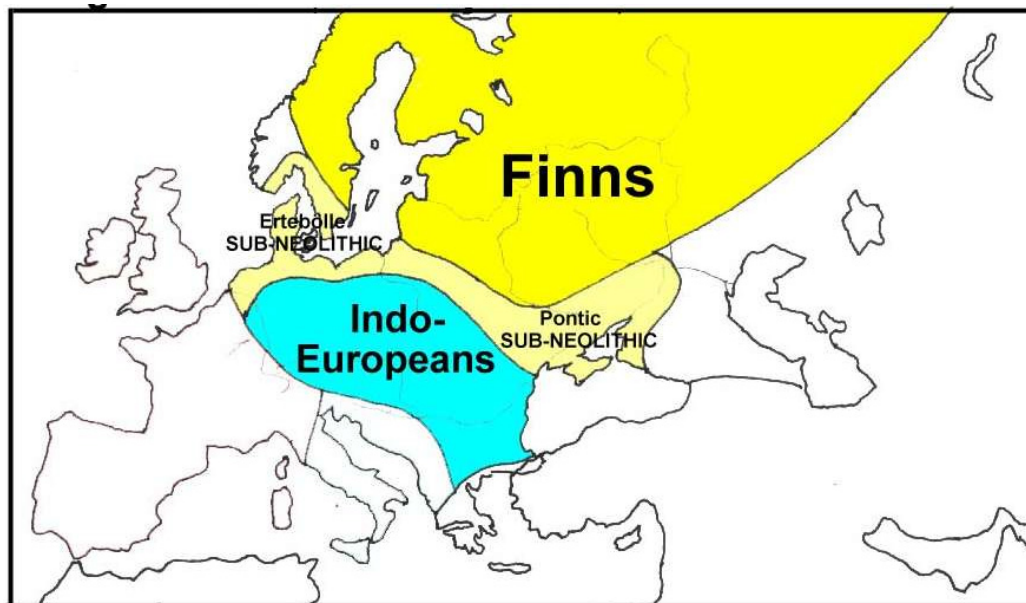
Question 28. Where and when were the contacts between the farmers and hunters of Central Europe the most intense?



Map 28. The most effective contact in Central Europe. When agriculture after a halt began to spread again the most effective contact surface between the farmers and hunters was between the Linear Pottery (*Linearbandkeramik*) culture (LBK) and the Ertebølle culture (EB) in Northern Central Europe. When farming, the LBK culture, and the Indo-European language spread to the Ertebølle area, a new culture and dialect emerged; the culture was the TRB culture and the language was 'Early Germanic' (or alternatively the 'Germano-Balto-Slavic language').

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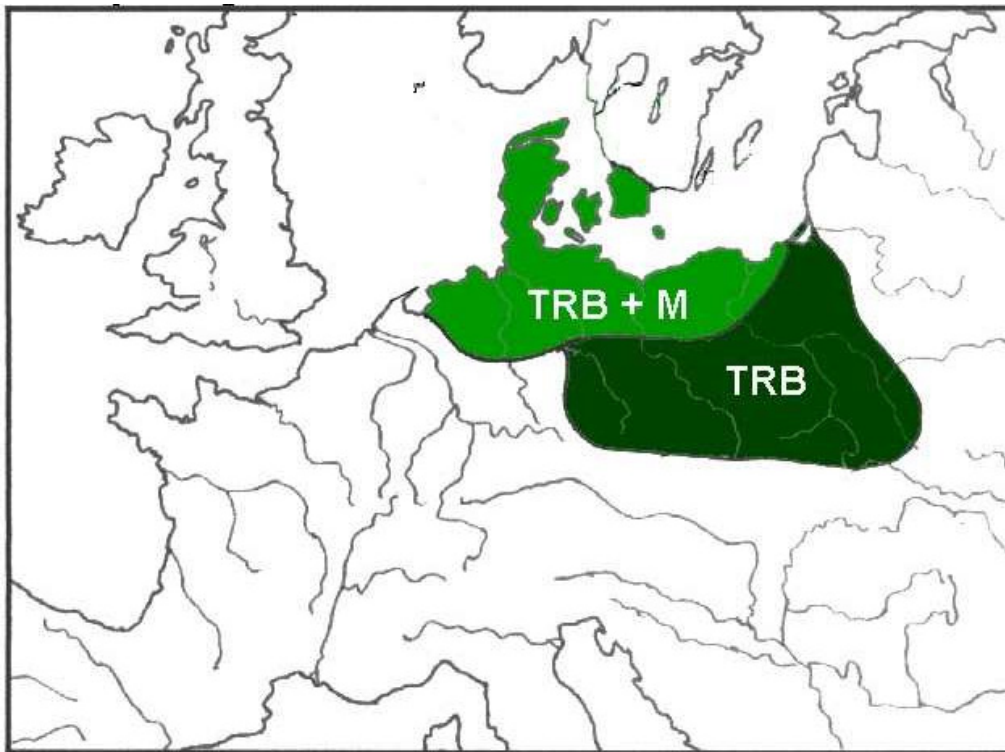
Question 29. Where was the contact zone between the farmers and hunters at the time when agriculture started to spread to Northern Europe?



Map 29. The farmers and hunters of Northern Europe in 4500 bc. When agriculture during the fifth millennium began to spread to the north, a 'sub-neolithic' zone or a 'substitution zone' was formed in the southernmost areas of the hunters. The areas of the map are based on those of a map in Penguin Atlas (McEvedy 1967, p. 21); the colours were chosen by KW. The 'Finns' of the Penguin Atlas refer to the Finno-Ugric speakers (not only to the Finns of Finland).

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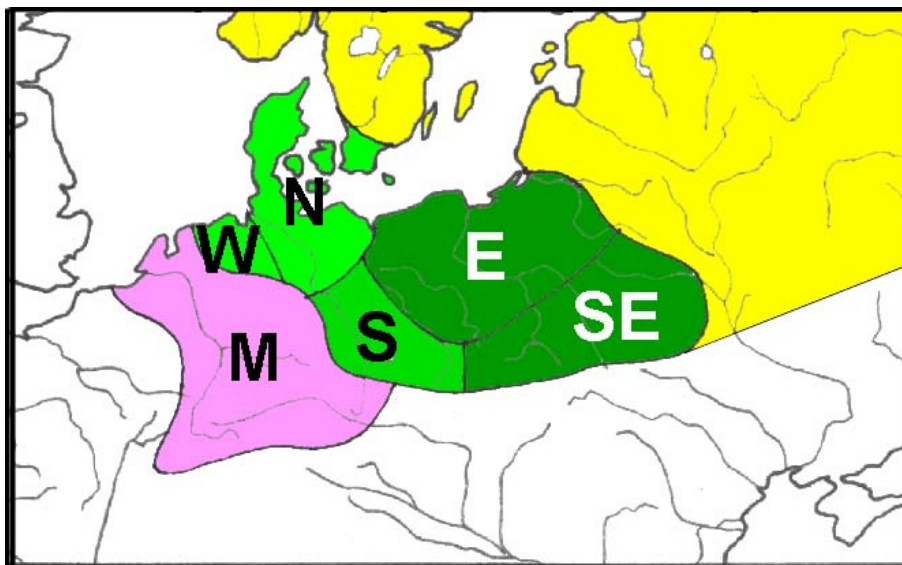
Question 30. How did the Indo-European languages of Northern European (the GBS language) emerge? See Map 30.



Map 30. The areas of the TRB culture and the Megalithic culture in Central Europe. The coloured area of the map presumably represented the GBS language. The north-western area (TRB + M) of the GBS language was under the influence of the Megalithic culture and its (presumably) Semito-Hamitic language, while the south-eastern part was not under the immediate influence of the Megalithic culture and the Semito-Hamitic language. The result was that the GBS language was split into two dialects: a Germanic dialect emerged in the north-west and a Balto-Slavic dialect in the south-east.

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Question 31. What languages were presumably spoken in the TRB and Michelsberg cultures? See Map 31.

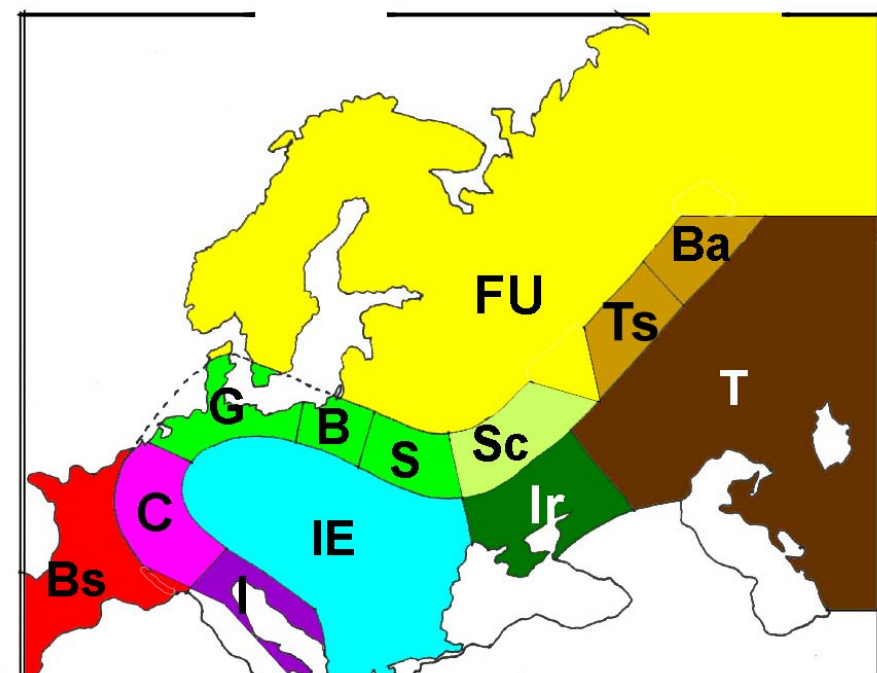


Map 31. The TRB culture. The first culture of the farmers in Northern Europe was the Funnel-Necked Beaker culture (TRB). It resulted mainly from cultural (not so much demic) diffusion, which implies language shift Finno-Ugric > Indo-European within this culture. The resulting new Indo-European dialect could be called 'Early Germanic' or 'Germano-Balto-Slavic'.

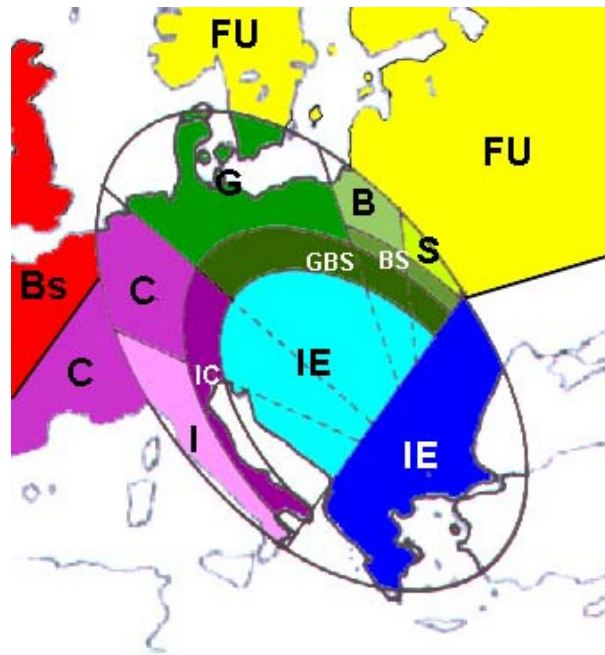
The TRB culture consisted of five sub-areas: W = western, N = northern, E = eastern, S = southern, and SE = south-eastern. The neighbouring Michelsbergian (M) culture was closely related the TRB culture. The areas of the map are based on Gimbutas 1991. The map does not include the areas of southern Scandinavia that consisted of islands of the TRB culture and reached to *limes norrlandicus* in the north (approximately to the line between Oslo and Stockholm). The colours were chosen by KW and they refer to the assumed languages of the areas: green = Early Germanic/Germano-Balto-Slavic, violet = the Celtic of Central Europe, and yellow = Finno-Ugric. Green is a result of the mixture of 'Indo-European blue' with 'Finno-Ugric yellow', and violet is a result of the mixture of 'Indo-European blue' with 'Basque red'.

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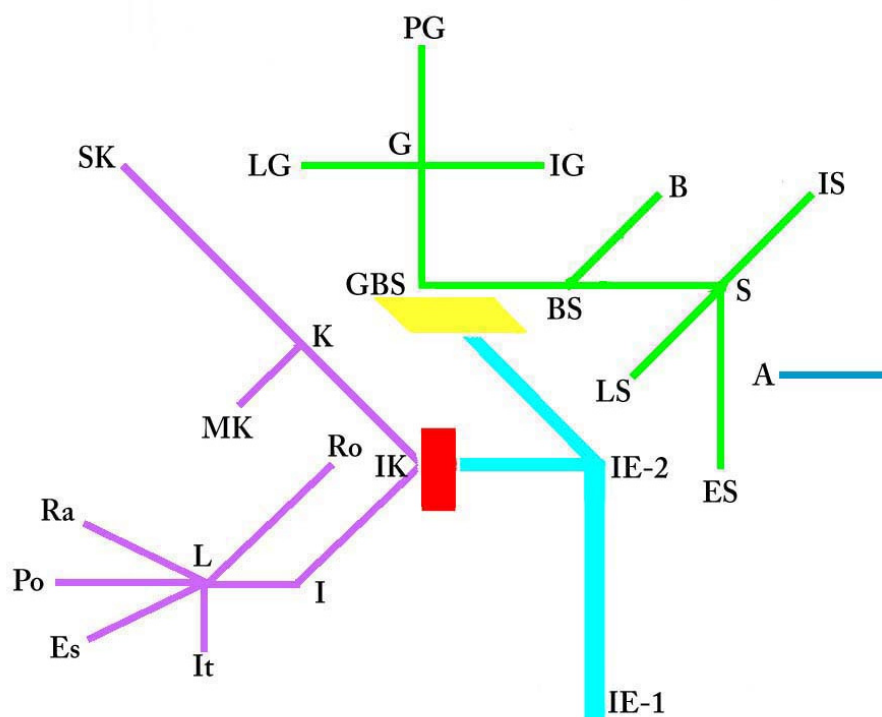
Question 32. Where in Europe did the Basque speaking hunters of Western Europe and the Finno-Ugric speaking hunters of Central and Eastern Europe first get in close contact with the food producers of Central and South-eastern Europe? What languages of the food producers were used as *lingua francas* by the hunters, and what **new dialects/languages** emerged in the areas where the hunters accepted agriculture or pastoralism as their new subsistence system? See Maps 32a, 32b, 32c, and 32d.



Map 32a. In Europe, there existed a more or less continuous zone (reaching from Italy to the Ural Mountains) where the Basque (Bs) speaking hunters of Western Europe and the Finno-Ugric (FU) speaking hunters of Central and Eastern Europe accepted agriculture or pastoralism as their new subsistence system. At the same time, they started using the languages of the food producers as *lingua francas*: The Indo-European language (IE) in Western and Central Europe, Indo-Iranian (Ir) in the Pontic area, and Turkish (T) in the east. When their broken *lingua franca* became their natural language, a series of new dialects of the languages of the food producers emerged: Italic (I), Celtic (C), Germanic (G), Baltic (B), and Slavic (S) were the new dialects of the IE language, Sythian (Sc) was a new dialect of the Indo-Iranian language, and Chuvash (Ts) and Bashkir (Ba) were the new dialects of the Turkish language. The language shifts of the eastern areas are younger than those of the western areas.

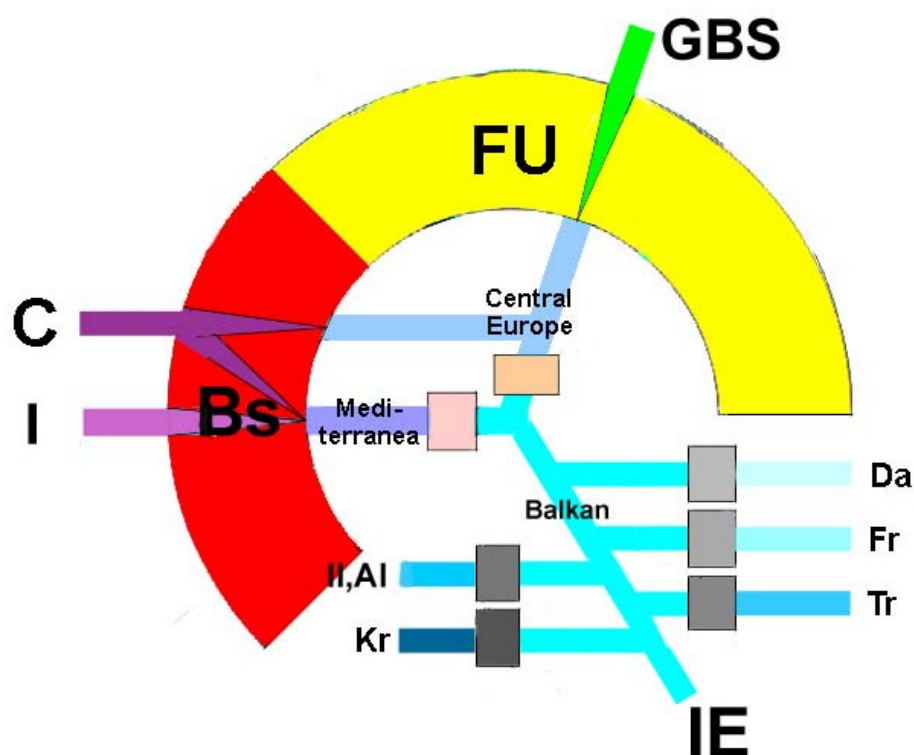


Map 32b. An illustration of the emergence of the Italic (I), Celtic (C), Germanic (G), Baltic (B), and Slavic (S) languages through Basque (Bs) and Finno-Ugric (FU) substrata. IC = Italo-Celtic, GBS = Germano-Balto-Slavic, BS = Balto-Slavic.



Map 32c. A family tree with filters illustrating the emergence of the Italo-Celtic (IK) and Germano-Balto-Slavic (GBS) languages. The red and yellow boxes represent, respectively, the filters of the Basque and Finno-Ugric languages. The later filters causing the splitting of the IK and GBS languages or the earlier ones causing the development IE-1 > IE-2 are not included in the diagram.

IE-1 = earlier Indo-European; IE-2 = later Indo-European; IK = Italo-Celtic; I = Italic; L = Latin; Ro = Romanian; Ra = French; Po = Portuguese; Es = Spanish; It = Italian; K = Celtic; MK = Continental Celtic; SK = Insular Celtic; GBS = Germano-Balto-Slavic; G = Germanic; LG = Western Germanic; PG = Northern Germanic; IG = Eastern Germanic; BS = Balto-Slavic; B = Baltic; S = Slavic; LS = Western Slavic; ES = Southern Slavic; IS = Eastern Slavic; A = Indo-Iranian.



Map 32d. Another family tree illustrating the emergence of the Indo-European languages spoken in Europe. The 'blue' IE language was the native language of the first farmers of the southern Balkans. Their language was used as the *lingua franca* in the interactions between the farmers and the aboriginal hunters speaking various non-IE languages. Each linguistic group of the aboriginals spoke the IE *lingua franca* with a different accent and a number of different IE dialects emerged.

(1) The grey boxes in the diagram illustrate the five different sets of substratum through which the IE had to go. The result was five new IE dialects/languages: Illyrian or early Albanian (Il,Al), Greek (Kr), Dacian (Da), Phrygian (Fr), and Thracian (Tr).

(2) The Balkan IE language spread to Central Europe and the western Mediterranean coasts; in both cases the IE went through two different filters and two different IE dialects (two different shades of blue) emerged.

(3) In western Europe, the 'blue' IE language acquired a 'red' Basque substratum and the result was the 'violet' Italo-Celtic language. (In the case of Italic, also other filters may have been involved.)

(4) In northern Europe, the 'blue' IE languages acquired a 'yellow' Finno-Ugric substratum, and the result was a 'green' Germano-Balto-Slavic (or alternatively 'Early Germanic') language.

Bs = Basque; I = Italic; C = Celtic; FU = Finno-Ugric; GBS = Germano-Balto-Slavic.

Purpose of Maps 32a, 32b, 32c, and 32d: to show how the Indo-European languages of Europe emerged if the basic idea of the present Atlas is followed (according to which the European IE language was split into several dialects/languages when used as *lingua franca* by the speakers of different Old European languages). When the 'blue' IE language was used as *lingua franca* by the native speakers of the 'yellow' FU languages, the result was a 'green' dialect of the IE language; and when the same 'blue' IE language was used as *lingua franca* by the native speakers of the 'red' Basque language, the result was a 'violet' dialect of the IE language. The 'green' dialects were Germanic, Baltic, and Slavic, and the 'violet' ones Italic and Celtic.

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Question 33. What are the four "linguistic corridors" of Northern Europe? See Map 33.

Four 'corridors' in Northern Europe

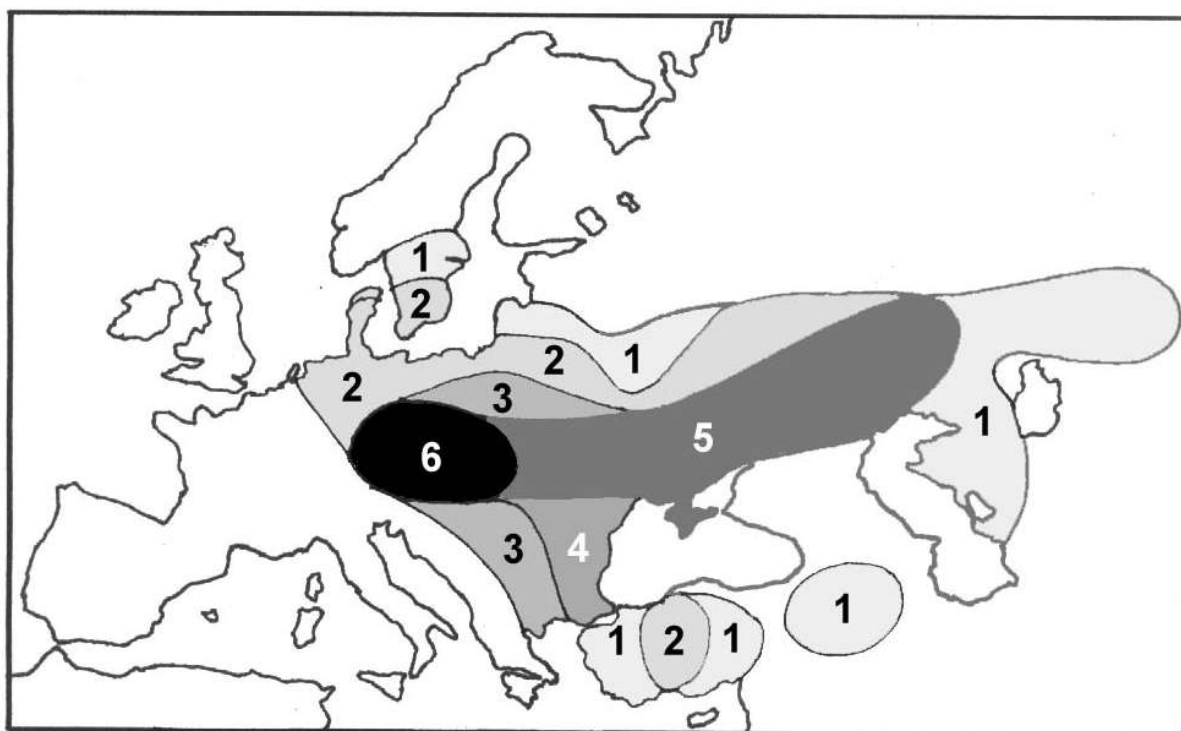


Map 33. Four linguistic corridors in Northern Europe. A typical feature of the four corridors is the spread of the IE languages mainly through cultural diffusion and language shift and to a lesser extent through demic diffusion.

The language shifts of the corridors were: Basque (?) > Celtic and Celtic > Germanic in the British corridor; Saami/Finnic > Germanic in the Scandinavian corridor; Livonian/Estonian > Baltic in the Baltic corridor; and eastern Finno-Ugric > Slavic in the Slavic corridor.

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Question 34. Where is the traditional homeland of the Indo-European languages? See Map 34.



Map 34. Traditional home land of the Indo-European languages. The darkness of the areas show how many of the fifteen linguists concerned support the area as the home land of the Indo-European languages. The map is based mainly on the map in Mallory 1989, p. 144.

According to the solution followed in the present Atlas, the homeland of the Indo-European languages is either in the south-eastern corner of the map (Anatolia and the Middle East) or in the southern parts of the Balkans.

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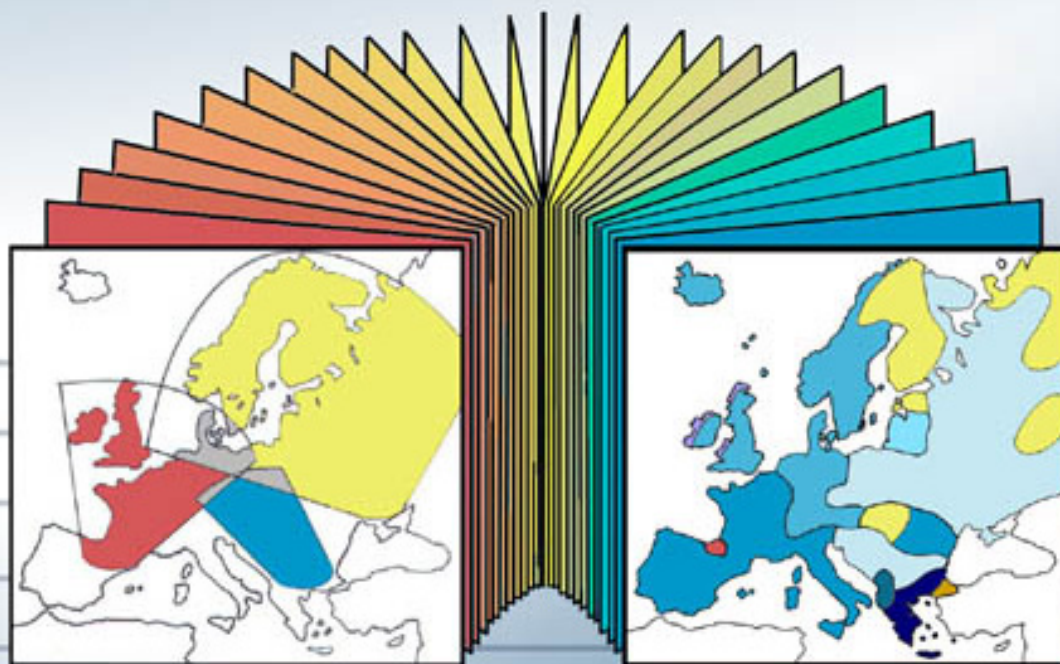
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Kalevi Wiik

A NEW ATLAS

**on the Origins
and Early History
of the Europeans**

Section II Germanic Peoples and Languages



April 2003

"A NEW ATLAS on the Origins and Early History of the Europeans" consists of seven Sections:

Section I: General Questions

Section II: Germanic Peoples and Languages

Section III: Baltic Peoples and Languages

Section IV: Slavic Peoples and Languages

Section V: Celtic, Italic, Albanian, and Greek Peoples and Languages

Section VI: Finno-Ugric Peoples and Languages

Section VII: Other (Basque, Iranian, Turkish, Mongolian, Arabic, Jewish, and Roma)
Peoples and Languages

The present section is **Section II**. It consists of twenty-four questions or groups of questions; these continue the numbering in Section I and are numbered from 35 to 58. The answers are given as maps and their verbal explanations.

Click the question to get to the relevant answer (a map and its legend). Click **BACK** to get back to the beginning of the list of questions.

Questions about the Germanic peoples and languages

[Question 35](#). How did the **first Germanic language(s)** emerge? See Map 35.

[Question 36](#). Is it a new idea to say that the first Germanic people emerged as a **mixture** of the Indo-Europeans and Finno-Ugrians? See Map 36.

[Question 37](#). What languages/dialects were spoken by the peoples of the **Corded Ware culture**? What was the **linguistic effect** of the languages of this culture in Northern and Eastern Europe? See Map 37.

[Question 38](#). How did the Germanic language emerge and what caused its splitting into **three main dialects**? See Map 38.

[Question 39](#). What were the main languages of Central and Western Europe during the **Bronze Age**? See Map 39.

[Question 40](#). Where did the German speaking areas expand during the **late Bronze Age**? See Map 40.

[Question 41](#). Where in Central Europe and the surrounding areas was of the German language spoken during the **Pre-Roman (Celtic) Iron Age**? See Maps 41a and 41b.

[Question 42](#). What were the dialects of the Germanic language during the **first centuries of the Christian Era** and where were they spoken? See Maps 42a and 42b.

[Question 43](#). Where did the German speaking areas expand in **western and eastern Central Europe**? When did the expansions take place? See maps 43a and 43b.

[Question 44](#). Is there any archaeological or linguistic evidence to show that the various areas of the British Isles represent different degrees of '**Celticism**'? See Map 44.

[Question 45](#). From where did the **Vikings** come to Britain? See Map 45.

[Question 46](#). Where did the **Goths** move in Europe? See Map 46.

[Question 47](#). Where are there **Megalithic tombs** in Scandinavia? See Map 47.

[Question 48](#). What is ***limes norrlandicus***? See maps 48a and 48b.

[Question 49](#). In what phases did **agriculture** spread in Scandinavia? See maps 49a, 49b, and 49c.

[Question 50](#). In what phases have the **cultural (and presumably linguistic) boundaries** moved from the south to the north in Scandinavia? See Map 50.

[Question 51](#). What is the most general **geographical direction** of the linguistic boundaries in Scandinavia? Are the boundaries mostly vertical or horizontal? See Maps 51a and 51b.

[Question 52](#). Where was, presumably, the Germanic – Finno-Ugric language boundary in Scandinavia during the **Bronze Age**? See Map 52.

[Question 53](#). Where was the main language boundary in Scandinavia about **a thousand years ago**? See Maps 53a and 53b.

[Question 54](#). Has the **area of the Saami** in Scandinavia always reduced? Has it not ever expanded to the south? See Map 54.

[Question 55](#). How does the strength of **Finno-Ugric (Saami/Finnic) substratum** vary in various parts of Scandinavia? See Map 55.

[Question 56](#). What **phonetic phenomena** are there in the dialects of the Scandinavian languages that can be considered Finno-Ugric (Saami/Finnic) substratum? See Maps 56a, 56b, 56c, 56d, and 56e.

[Question 57](#). What were the destinations of the **Norwegian, Danish, and Swedish Vikings**? See Map 57.

[Question 58](#). Does the frequency of **blood group A** show any regular gradient in Fennoscandia? See Map 58.

Question 35. How did the first Germanic language(s) emerge?

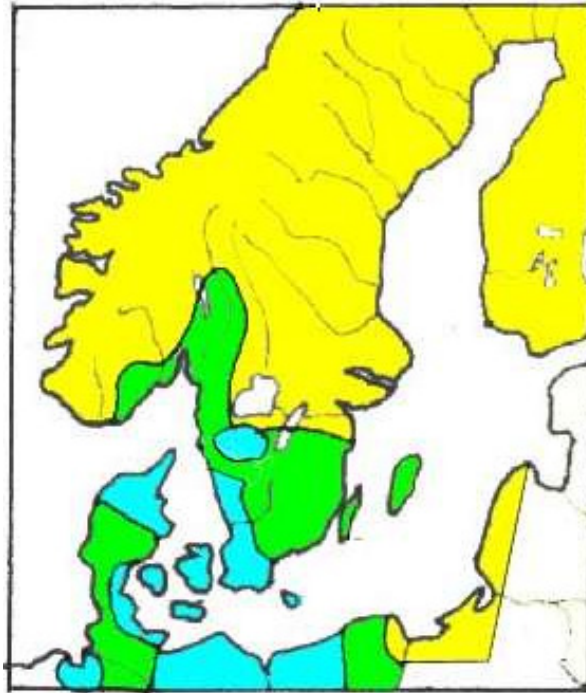


Map 35. The light green area of the map indicates the Megalithic cultural area with no *menhirs*. The area is similar to (even if not identical with) the area of the TRB culture and 'Early Germanic'. Presumably, this is the area where 'Early Germanic' (G1) (alternatively the 'Germano-Balto-Slavic language') acquired a Basque or Semito-Hamitic superstratum and developed into the language here called 'Late Germanic' (G2). The dark areas of the map indicate the Megalithic areas with *menhirs* and, presumably, with different linguistic developments.

There now follows a series of maps concerning the origins and early history of the **Germanic** languages.

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Question 36. Is it a new idea that the first Germanic people emerged as a mixture of the Indo-Europeans and Finno-Ugrians? See Map 36.

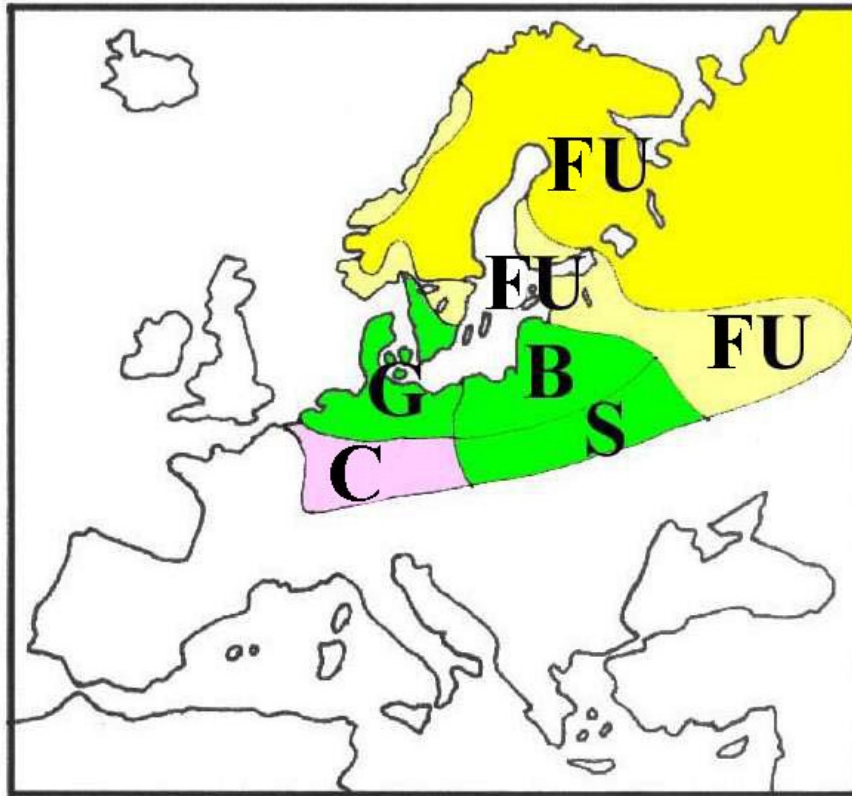


Map 36. Kossina's three cultures. Blue areas = Megalithic Indo-Germanic people, yellow areas = early Finns (Finno-Ugrians), green areas = mixture of Finno-Ugric and Indo-Germanic populations. According to Kossina, the Finno Indo-Germanic people emerged through the mixture of the Megalithic Indo-Germanic and Finno-Ugric peoples. The map is based basically on the map in Kossinna 1928 (p. 226). The colours (blue + yellow > green) were added by the present writer.

Purpose: to remind the reader of the fact that the idea of interpreting the emergence of the Germanic people and language as a mixture of an Indo-European and Finno-Ugric people and language is not new.

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Question 37. What languages/dialects were spoken by the peoples of the Corded Ware culture? What was the linguistic effect of the languages of this culture in Northern and Eastern Europe?

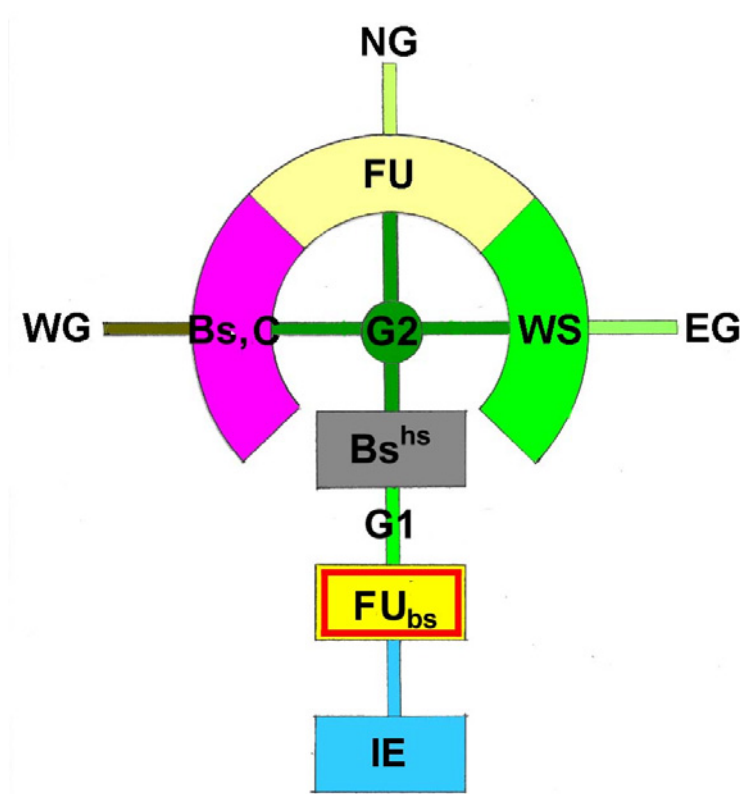


Map 37. The dialects/languages of the Corded Ware culture. The main dialects/languages of the Corded Ware culture were Germanic (G), Baltic (B) and Slavic (S). In addition, there was probably at least one other north-IE language now extinct (Venetic/Vendic?) between the Germanic and Baltic dialects/languages.

The violet area refers to the area based on the Michelsberg culture and its (presumably) Celtic language. The light yellow zone refers to the Finno-Ugric (FU) zone that was under strong Corded Ware influence and where the local languages acquired an IE superstratum (e.g. loanwords). The dark yellow area refers to the Finno-Ugric areas that did not receive Corded Ware influence (or where this influence was weak).

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Question 38. How did the Germanic language emerge and what caused its splitting into three main dialects?

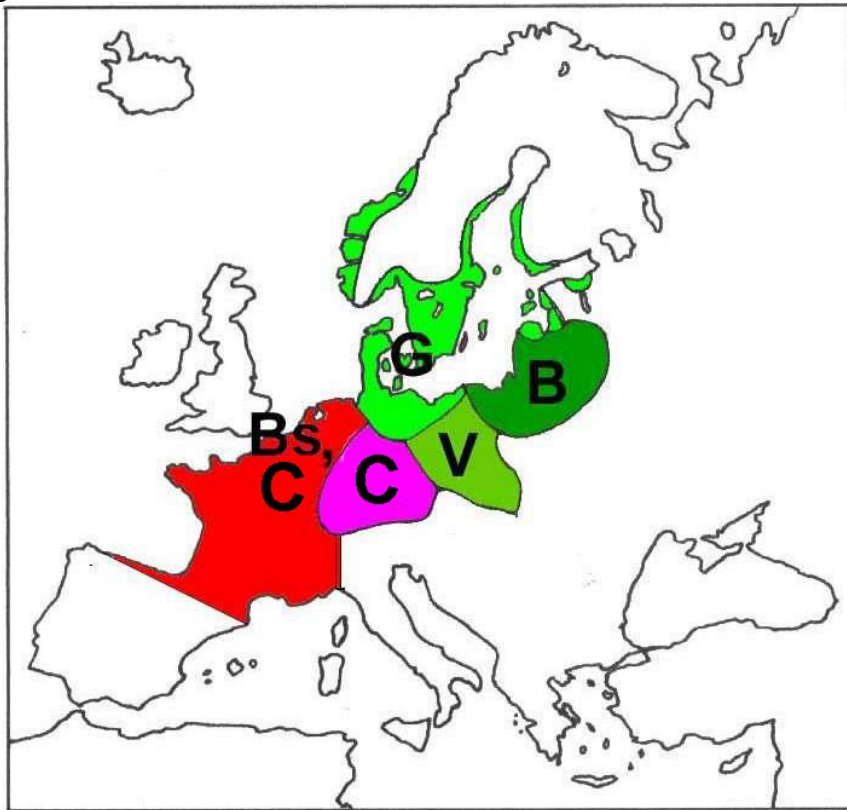


Map 38. A family tree illustrating the development of the Germanic languages/dialects. The 'blue' IE language spoken within the LBK culture in Central Europe first acquired a substratum of a Finno-Ugric dialect with a Basque substratum (the yellow box with a red frame). The result was 'Early Germanic' or G1 (blue + yellow > green). This language acquired a Basque superstratum and developed into 'Late Germanic' or G2 (green + grey > dark green); (the Basque dialect in question had a Hamito-Semitic superstratum hs).

Late Germanic acquired three different substrata: Basque and Celtic (Bs, C) in the west, Finno-Ugric (FU) in the north, and Western Slavic (or Venedic/Vendic?) (WS) in the east. The result was the split of the Germanic language into three dialects: Western Germanic (WG), Northern Germanic (NG), and Eastern Germanic (EG).

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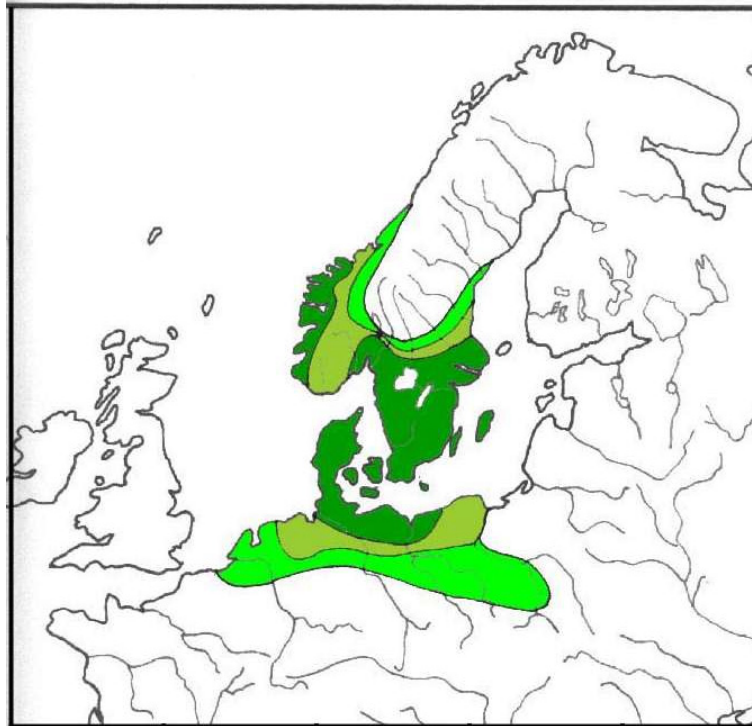
Question 39. What were the main languages of Central and Western Europe during the Bronze Age?



Map 39. Some northern and western linguistic areas during the Bronze Age. G = Germanic, B = Baltic, V = assumed Vedic/Venedic, C = Celtic, Bs = Basque. The area marked Germanic is that of the Scandinavian (or Northern) Bronze culture; the area marked Baltic is that of the Scratched Pottery culture. The map is based on Huurre 1995 (p. 93) and Kilian 1988 (Abb. 1).

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Question 40. Where did the German speaking areas expand during the late Bronze Age?



Map 40. Expansion of the Germanic areas during the late Bronze Age about 1000-500 bc. By about 1000 bc, the Germanic areas (darkest green in the map) already reached quite far in the north. In about 750 bc (the middle zones in the map) the expansion was moderate in both main areas; and in 500 bc (the lightest zones) the expansion was strong in the south but weak in the north.

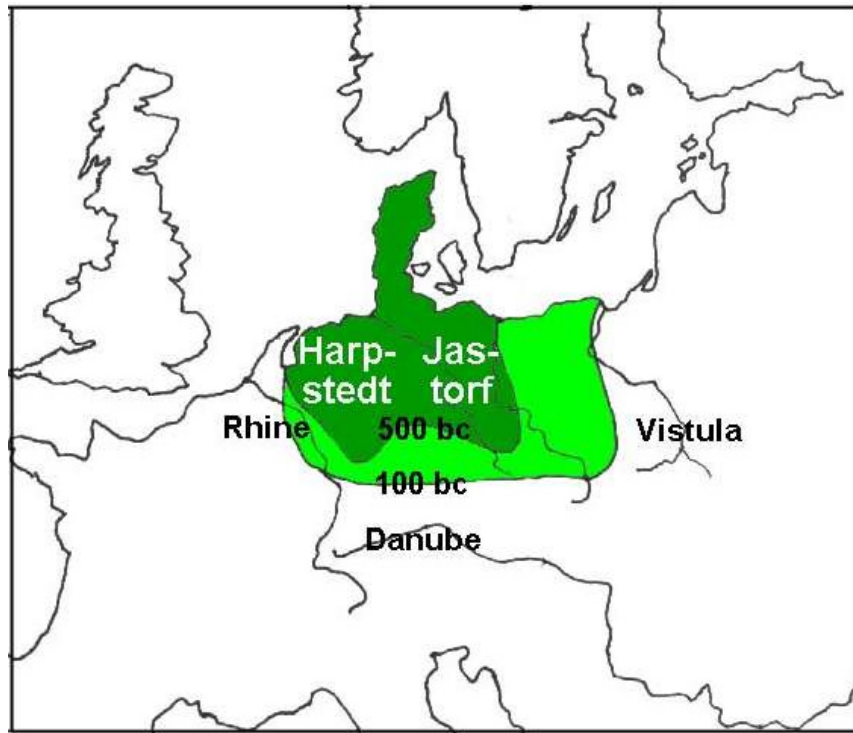
The Germanic expansion in Central Europe meant two things: the Germanic speaking people moved to the Celtic and West Slavic (Vendic/Venedic) linguistic areas, and the Celts and western Slavs (Vendic-Venedic speakers) shifted their language to Germanic.

The areas of the Germanic-speaking immigrants to the Finnish, Estonian, and Livonian coasts are not indicated in the map.

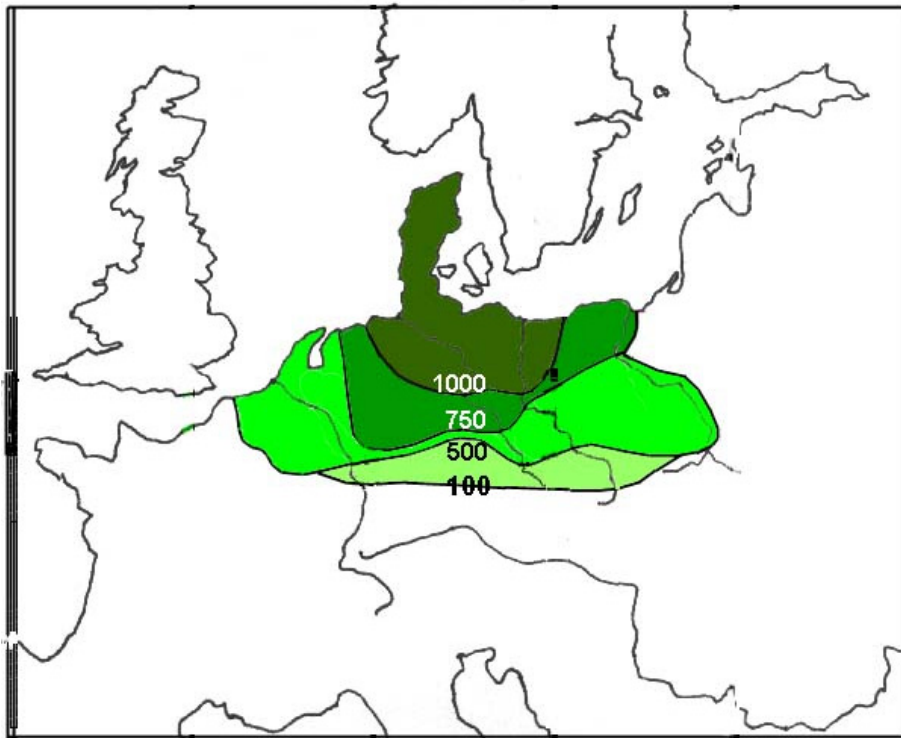
The continental areas of the map are based on the map in Haugen 1976, p. 101.

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Question 41. Where in Central Europe and the surrounding areas was the German language spoken during the Pre-Roman (Celtic) Iron Age (about 600-1 bc)? See Maps 41a and 41b.



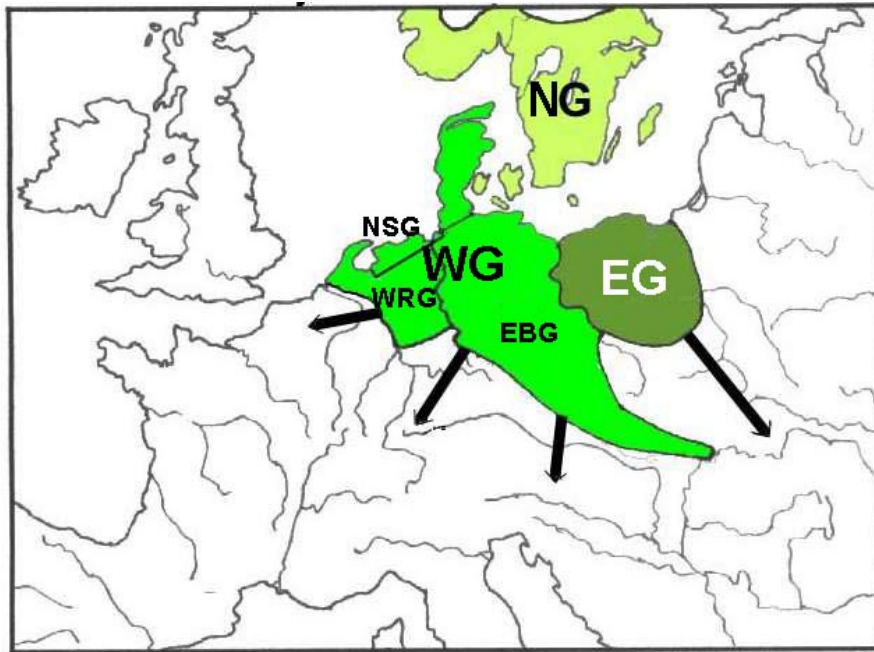
Map 41a. The Germans in 500-100 bc. During the Pre-Roman (Celtic) Iron Age, the continental Germanic linguistic area reached from the Rhine to the Vistula. In the south, their southern boundary was about 200 kilometres from the Danube. The core area of the Germanic speaking people consisted of the Harpstedt and Jastorf cultures. The map is based on Mallory 1989, p. 87. According to another interpretation (see, for example, the preceding map based on Haugen 1976), the Germanic-speaking area was somewhat broader in the Rhine and Vistula regions.



Map 41b. The expansion of the continental Germanic languages 1000-100 bc. The map is a combination of Haugen 1976 (p. 101) and Mallory 1989 (p. 87).

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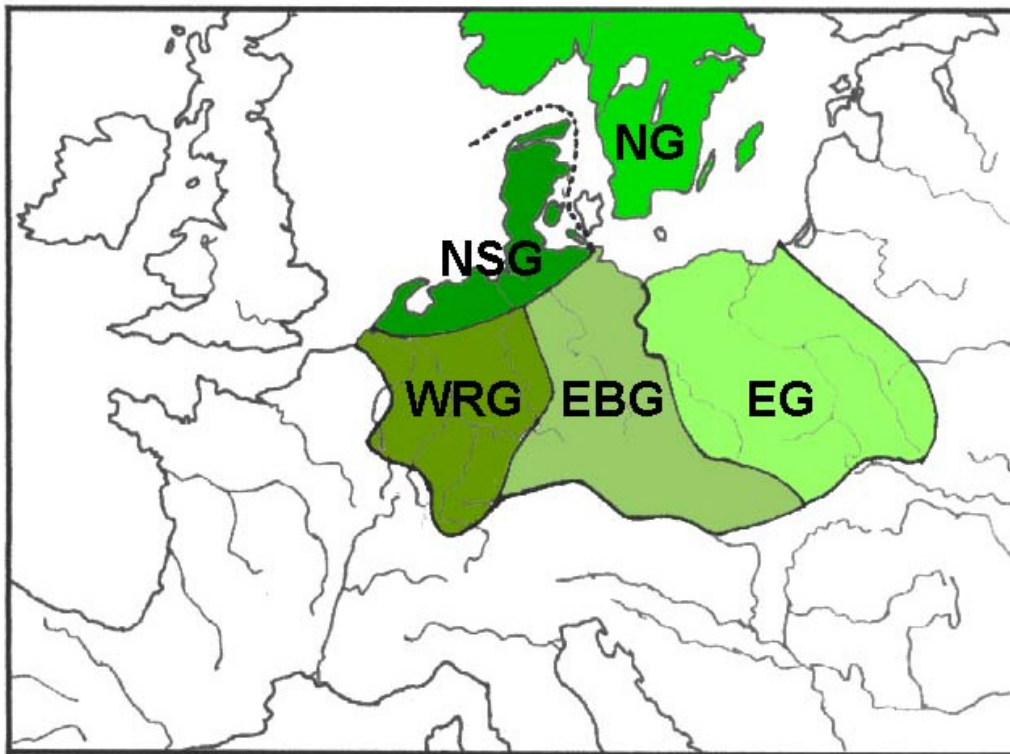
Question 42. What were the dialects of the Germanic language during the first centuries of the Christian Era and where were they spoken? See Maps 42a and 42b.



Map 42a. The areas of the three Germanic tribes in 200 ad. During the first centuries of the Christian Era, the Germanic population consisted of three tribes, and at the same time the Germanic language, presumably, consisted of three main dialects, a western (WG), northern (NG) and eastern (EG) dialect. In addition, the western tribe and perhaps also the western dialect was already split into three sub-units: one was in the North Sea area (NSG), another in the Weser-Rhine area (WRG), and the third in the Elbe area (ELG).

The arrows in the map show the directions of expansion of the western and eastern Germanic people, culture, and language during the centuries after 200 bc.

The map is based on the map in Keller 1978, p. 55.



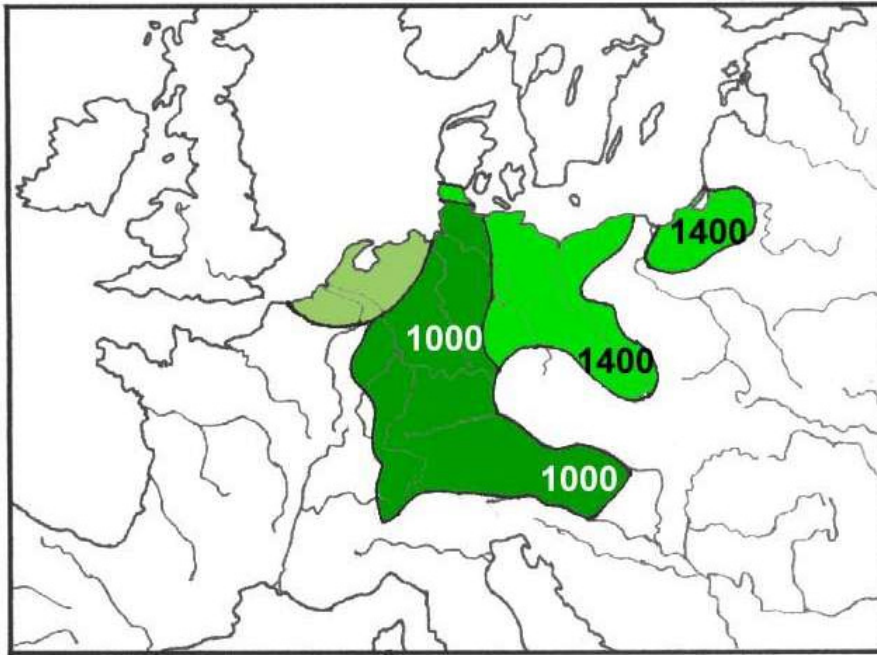
Map 42b. An alternative grouping of the Germanic dialects during the first centuries of the Christian Era. According to Mauer (1942), the Germanic population consisted of five tribes in 0-300 ad: (1) the North Sea Germans (NSG), (2) the Weser-Rhine Germans (WRG), (3) the Elbe-Germans (EBG), (4) the East Germans (EG), and (5) the North Germans or Scandinavians (NG).

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Question 43. How far did the areas of the German-speaking people expand during the twelve hundred years between 200 and 1400 ad? See maps 43a and 43b.



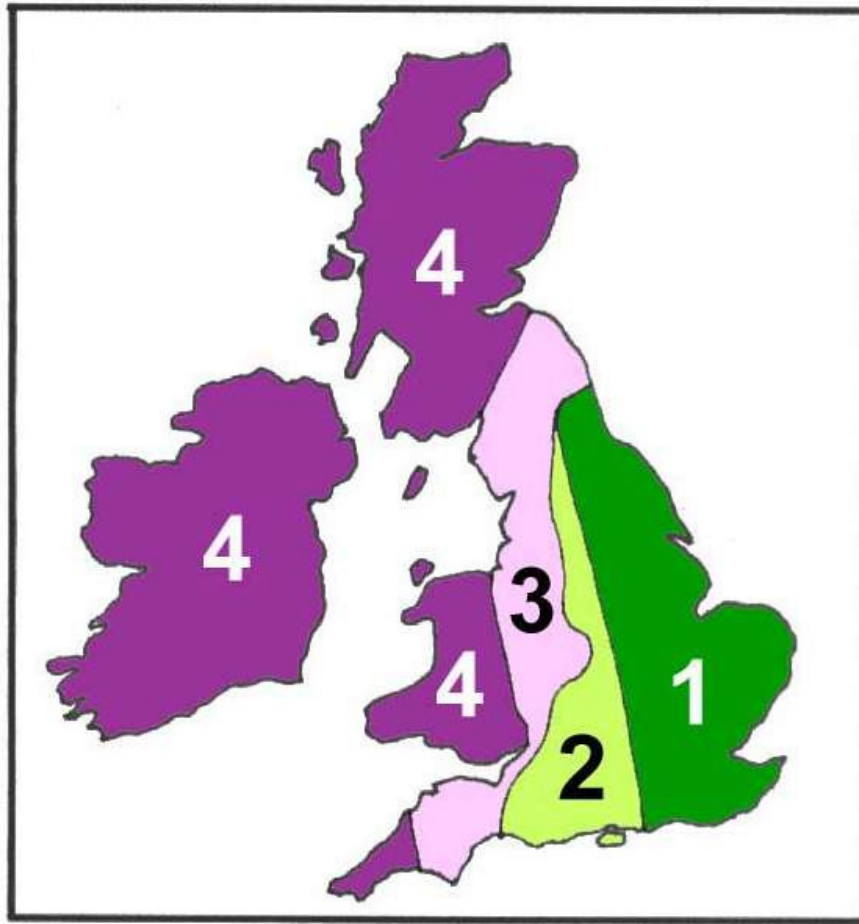
Map 43a. Expansion of the West Germans. In the map, the expansion of the West Germans, their culture and language in 200-900 ad toward the west and south is shown in four steps. The steps took place in (1) 200-320 ad, (2) 320-400 ad, (3) 400-520 ad, and (4) 520-900 ad. The map is a simplification of the map in König 1978: 58. As seen in the map, the areas east of the West Germans were inhabited by Western Slavs: the Abodrites, Witzis, Sorbs, and Czechs.



Map 43b. The East Colonization of the Germans. In the map, no isolated language islands (that existed to the east of the uniform area) are shown. The map is a simplification of the map in König 1978: 74.

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Question 44. Is there any archaeological or linguistic evidence to show that the various areas of the British Isles represent different degrees of 'Celticity'?



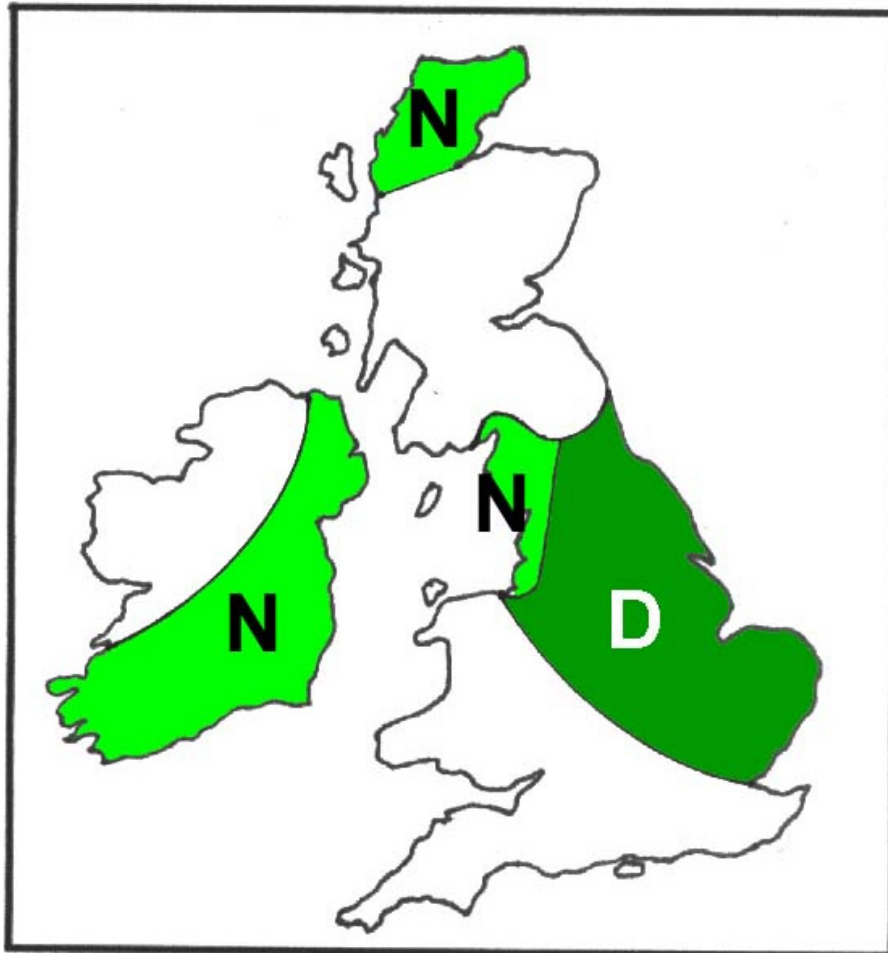
Map 44. Zones of 'Celticity'. The four zones of the map refer to (1) the area of Saxon graves where only the names of bigger rivers are Celtic; (2) the area of Saxon graves where even the names of smaller rivers can be Celtic; (3) the area that has no Saxon graves but may have Celtic names even for smaller rivers; (4) the area that does not have Saxon graves but may have Celtic names for any kind of places.

The colours (violet and green) remind the reader of the fact the Celtic and Anglo-Saxon languages are related: both of them are based on the 'blue' colour of the Indo-European language; the original blue has become violet in Celtic because of the 'red' Basque substratum (blue + red > violet), and the blue has become green in Anglo-Saxon because of the 'yellow' Finno-Ugric substratum (blue + yellow > green). The shades of darkness in both colours symbolise the amount of the Celtic and Anglo-Saxon elements.

The map is based on the data given in Hayes 1993; the colours were chosen by KW. The map reflects the movement of (1) the Celtic > Anglo-Saxon language shift zone and (2) the Anglo-Saxon-speaking people from the east to the west.

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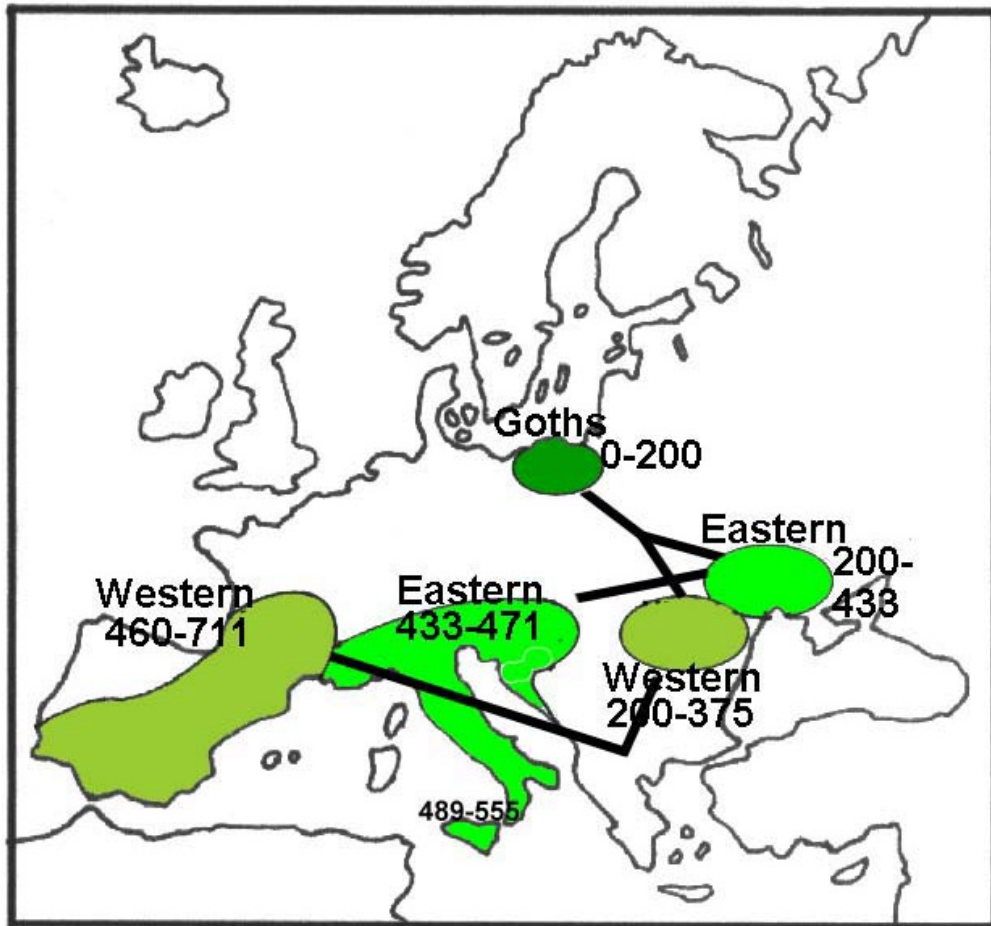
Question 45. From where did the Vikings come to Britain?



Map 45. The Vikings in Britain. The Vikings in Britain originated from two areas: the Vikings of the Danelag (D) were from Denmark, and those of the western and northern areas from Norway (N); Haugen 1978: 136.

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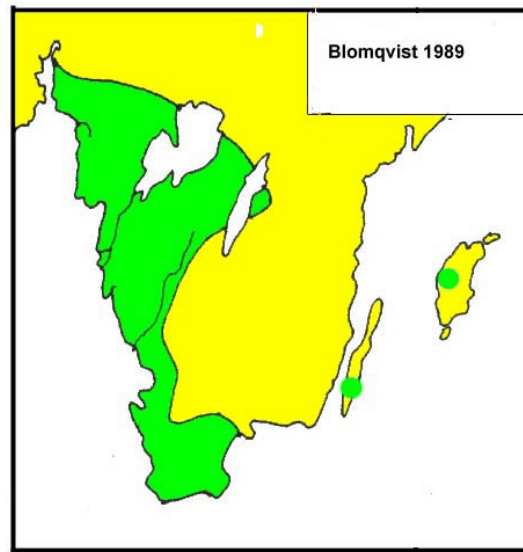
Question 46. Where did the Goths move in Europe?



Map 46. The Goths. The green areas in southern Europe refer to the areas with Gothic elite whose language was presumably used as *lingua franca* by the original local populations. The Goths lived in modern Poland until about 200 ad; until about 400 ad, they lived in two territories north of the Black Sea and were split into two sub-groups, the Western and Eastern Goths. Later, both moved towards the west, and all the Goths were eventually assimilated (genetically and linguistically) to various local populations. The Map is based on König 1978: 54.

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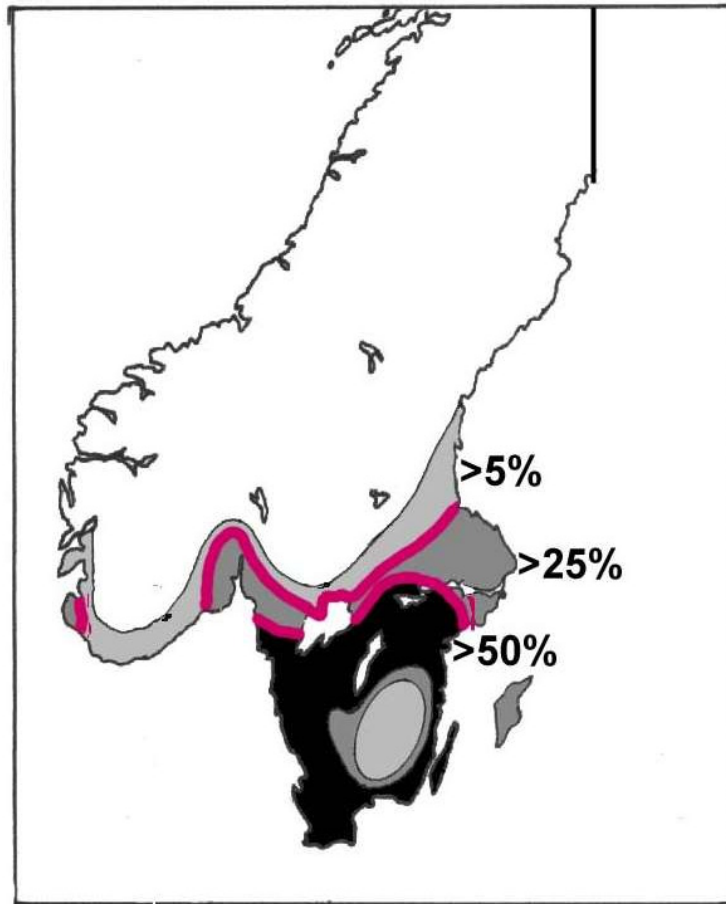
Question 47. Where are there Megalithic tombs in Scandinavia?



Map 47. The Megalithic tombs in Scandinavia. The Megalithic area is marked green. The map is based on Blomqvist 1989. According to the assumption of the writer, the Megalithic area represents the Scandinavian part of the 'Late Germanic' language G2.

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Question 48. What is *limes norrlandicus*? See maps 48a and 48b.



Map 48a. *Limes norrlandicus*. The typical border zone called *limes norrlandicus* is here interpreted as the zone where during the Early Neolithic period the portion of leaf trees was 25-50 per cent. To the south of this zone, the percentage was more than 50 and to the north of it was less than 25. The farming of the beginning of the third millennium was able to penetrate leaf tree forests, but did not succeed in the cold climate and sour soil of coniferous forests. The map is based on Hulthén-Welinder's map (1981).

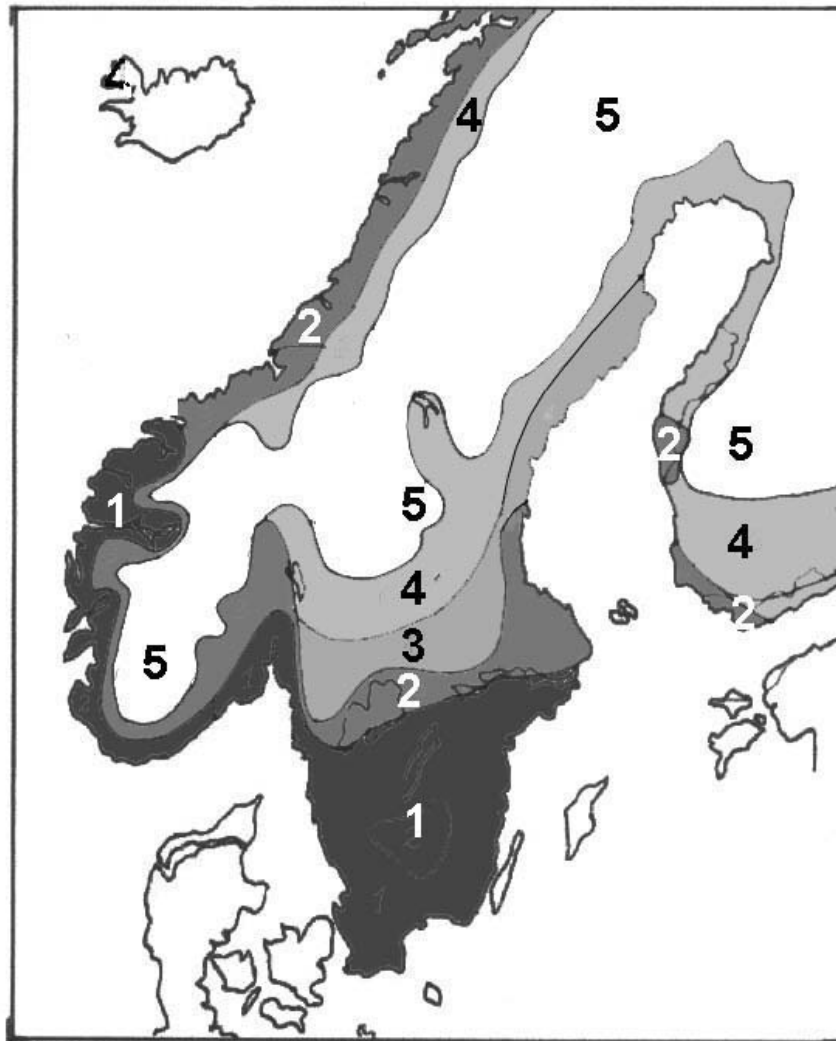


Map 48b. The northern boundary of certain axes. Certain types of flint axes (Swedish *tunnackiga flintyxor*) and war axes (Swedish *mångkantiga stridyxor*) were typical to the south of the boundary. The boundary perhaps shows the northern extent of farming about 2500 bc (= 3200 bc cal); the regions north of the boundary were still occupied by hunter-gatherers. The boundary largely coincides with *limes norrlandicus*. The map is based on the maps in Hulthén-Welinder 1981.

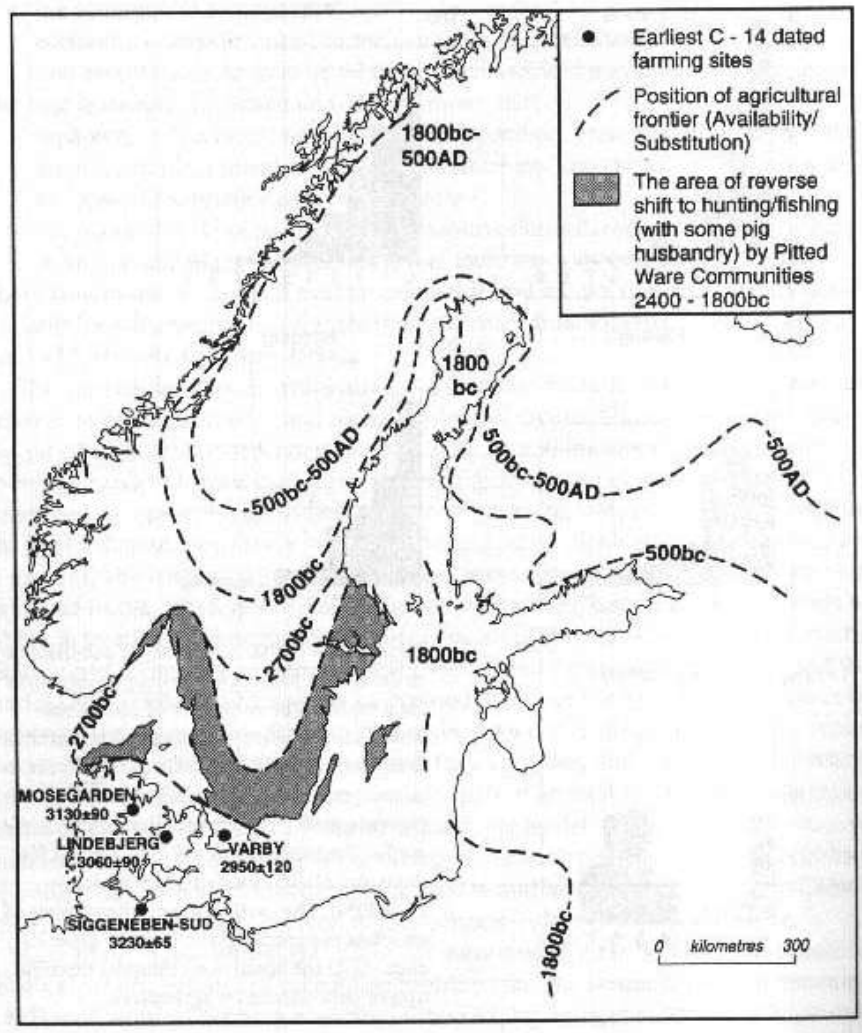
Thus, *limes norrlandicus* is a natural boundary (see Map 48a) and simultaneously an archaeological one (see Maps 48b, 49a, 49c, 50,); in addition, it has, most likely, been a linguistic boundary (see Maps 51a, 51b, 52, 53a, 53b, and 55).

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Question 49. In what phases did agriculture spread in Scandinavia? Se maps 49a, 49b, and 49c.



Map 49a. The spread of agriculture in Fennoscandia in four phases. The four timedepths of 3000 bc, 2000 bc, 1000 bc - 0, and 1000 ad are very rough estimates by KW. The map is based mainly on Welinder *et al.* 1998, p. 196 and 322.



Map 49b. The spread of farming in Scandinavia and the Baltic Sea region according to Zvelebil 1996: 328. The boundaries signify the northern boundary of agriculture. The dark area shows the area of Scandinavian Pit Pottery where in 2400-1800 bc a mixed subsistence system of fishing, seal hunting, and pig breeding prevailed.

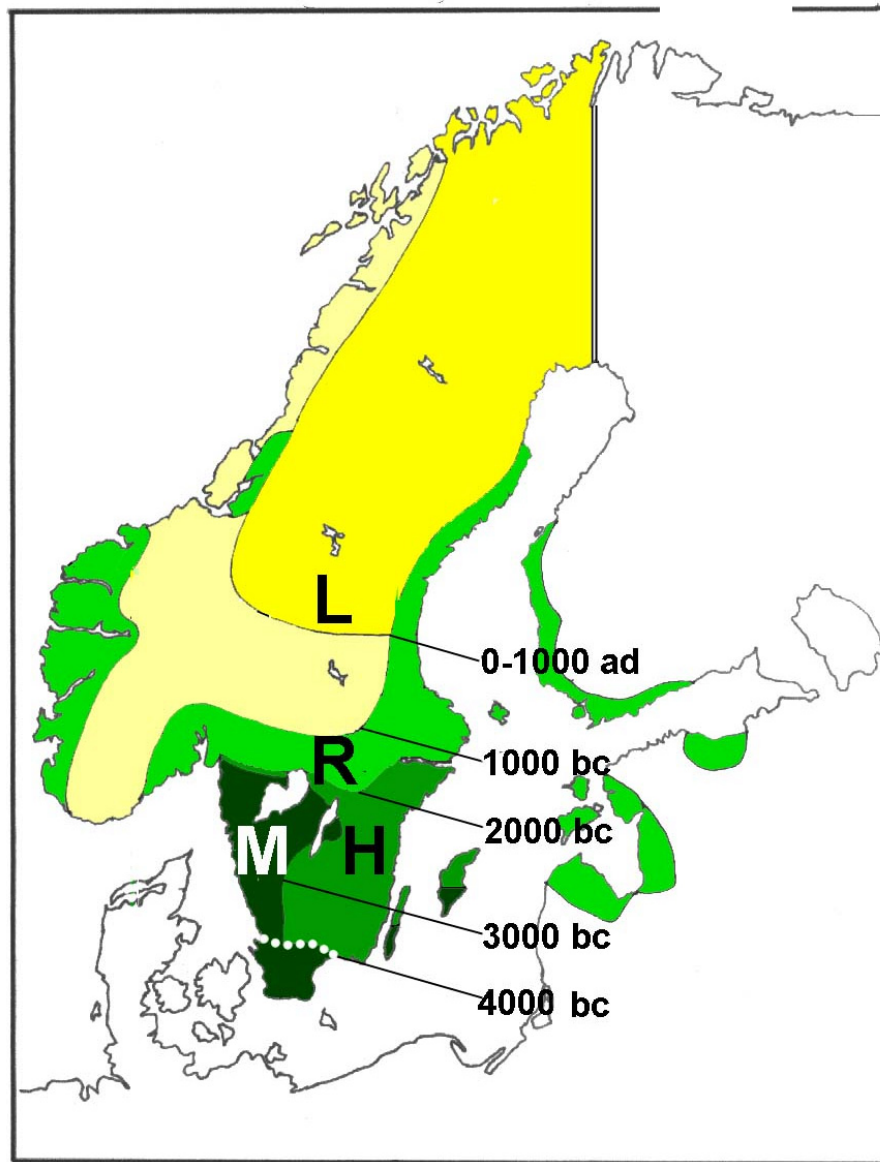


Map 49c. Four different subsistence areas in Southern Scandinavia. Agriculture spread first from area 1 to *limes norlandicus* (area 2+3+4), but after about 2400 bc (3000 bc cal), agriculture was largely displaced in area 1+2+4 by a mixed subsistence system and in area 3 by cattle breeding. In area 4, the Typical Comb Ceramics culture of the eastern coast of the Baltic Sea had stronger influence than elsewhere; this was perhaps also true of the influence of the Finno-Ugric and Baltic languages on the Germanic language of Southern Scandinavia. Area 4 (the eastern part of the Scandinavian Pit Pottery culture) remained, presumably, Finno-Ugric longer than the other areas.

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Question 50. In what phases have the cultural (and presumably linguistic) boundaries moved from the south to the north?

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Map 50. The types of graves in Scandinavia.

- (1) The area south of the broken line = Ertebølle culture; the broken line may represent the northern boundary of 'Early Germanic' or G1.
- (2) M and dark green = the megalithic graves of the early Neolithic period (*äldre bondesåldern*) 4200-2800 bc cal (Blomqvist 1989); possibly the northern part of 'Late Germanic' or G2.
- (3) H = *hällkista* type graves of the late Neolithic period 2300-1800 bc cal (Burenhult 1988: 102); possibly the area of the emergence of the Scandinavian language.

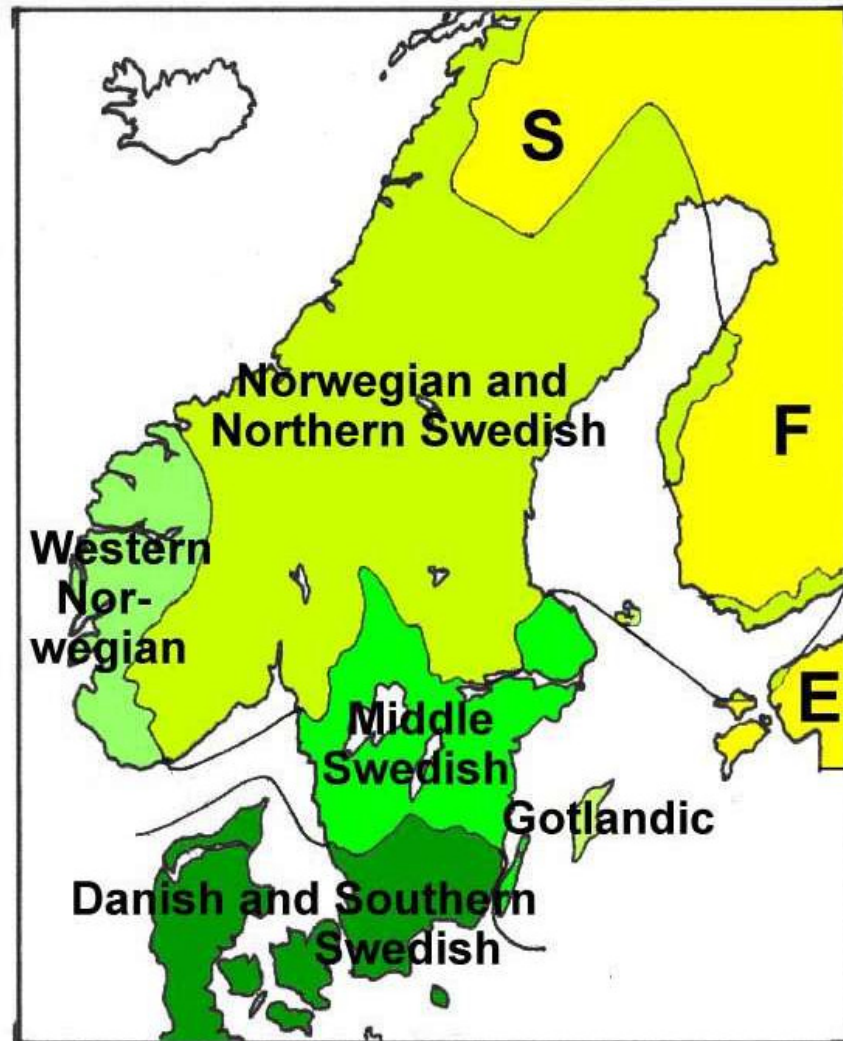
(4) R = the Scandinavian Bronze culture (Huurre 1995: 93) and the *rösen* type graves typical of this culture in the older Bronze Age 1800-1100 bc (Burenhult 1988: 107 and Hyenstrand 1979).

(5) L = Lake graves (*insjögravar*) of the first Christian millennium (Zachrisson 1987) typical of the Saami.

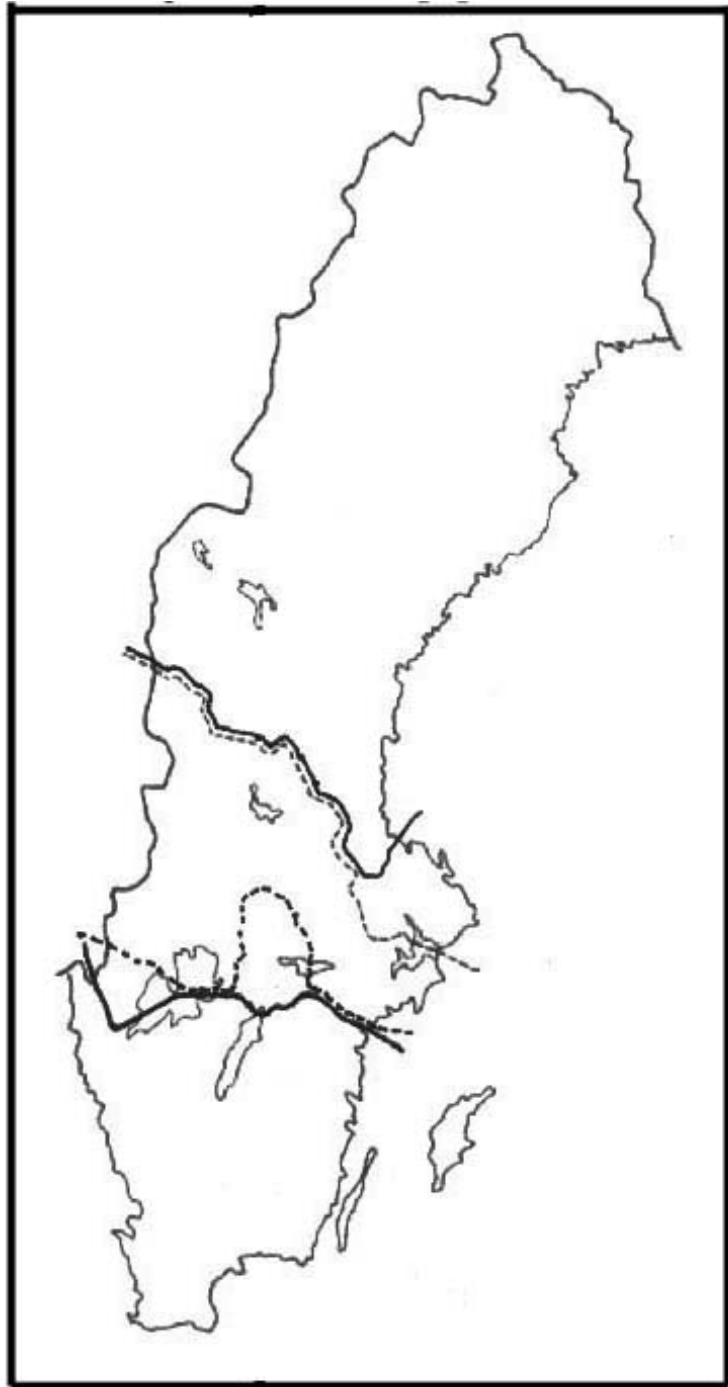
The timedepths of the map are very rough estimates by KW.

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Question 51. What is the most general geographical direction of the linguistic boundaries in Scandinavia? Are the boundaries mostly vertical or horizontal? See Maps 51a and 51b.



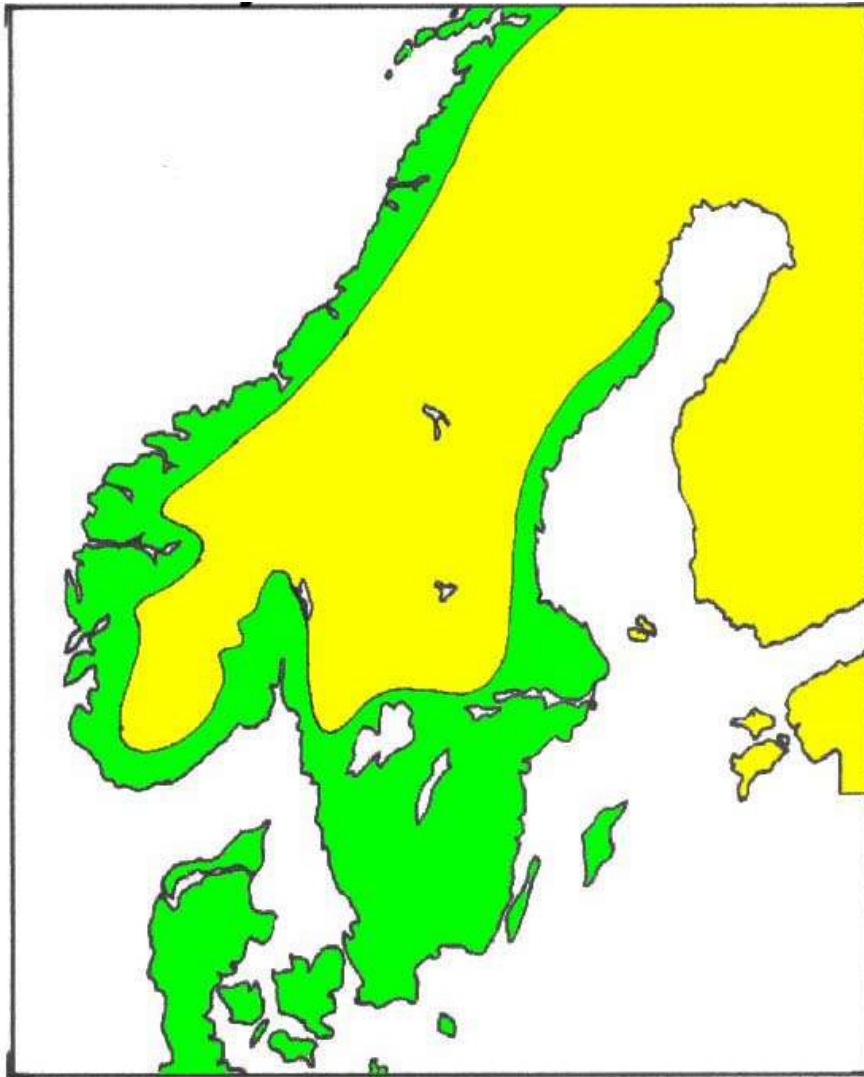
Map 51a. The main dialect areas of the Scandinavian languages. The area of the Middle Swedish dialect may be seen as the area of the emergence of the Scandinavian language. It is situated roughly between Scania and *limes norrlandicus*. The map is based on Lundell 1880.



Map 51b. Some syntactic isoglosses in the Swedish dialects. The map has four boundaries: (a) the southern continuous line shows how far north **most** of the typically southern Swedish features reach; (b) the northern broken line shows how far north **some** southern Swedish features reach; (c) the northern continuous line shows how far south **most** of the typically northern Swedish features reach; and (d) the southern broken lines shows how far south **some** of the typically northern Swedish features reach. The map is based on Pettersson-Platzack 1976.

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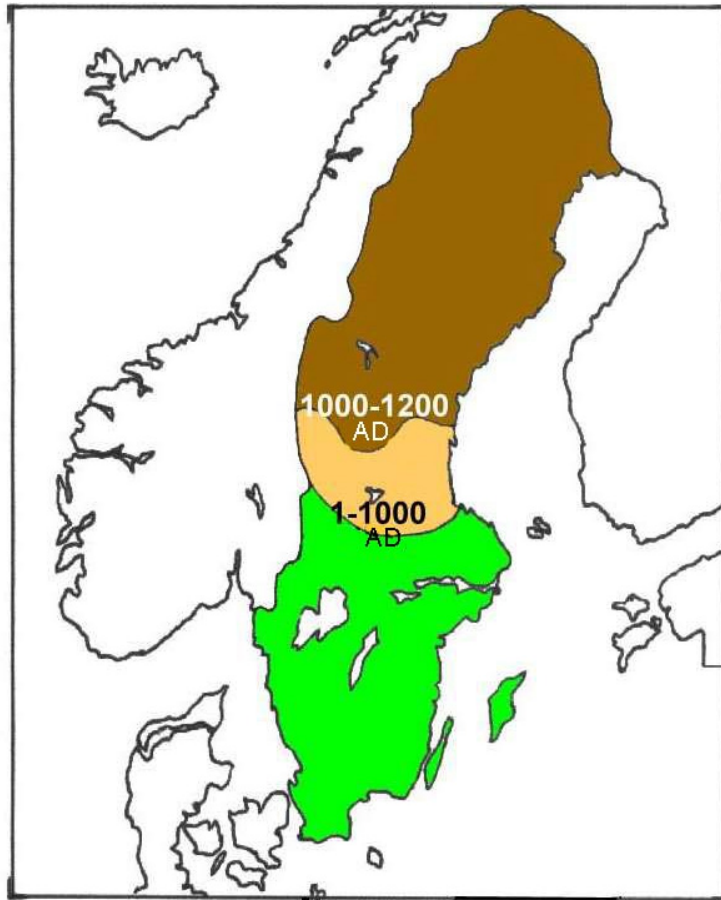
Question 52. Where was, presumably, the Germanic – Finno-Ugric language boundary in Scandinavia during the Bronze Age and beginning of Iron Age? See Map 52.



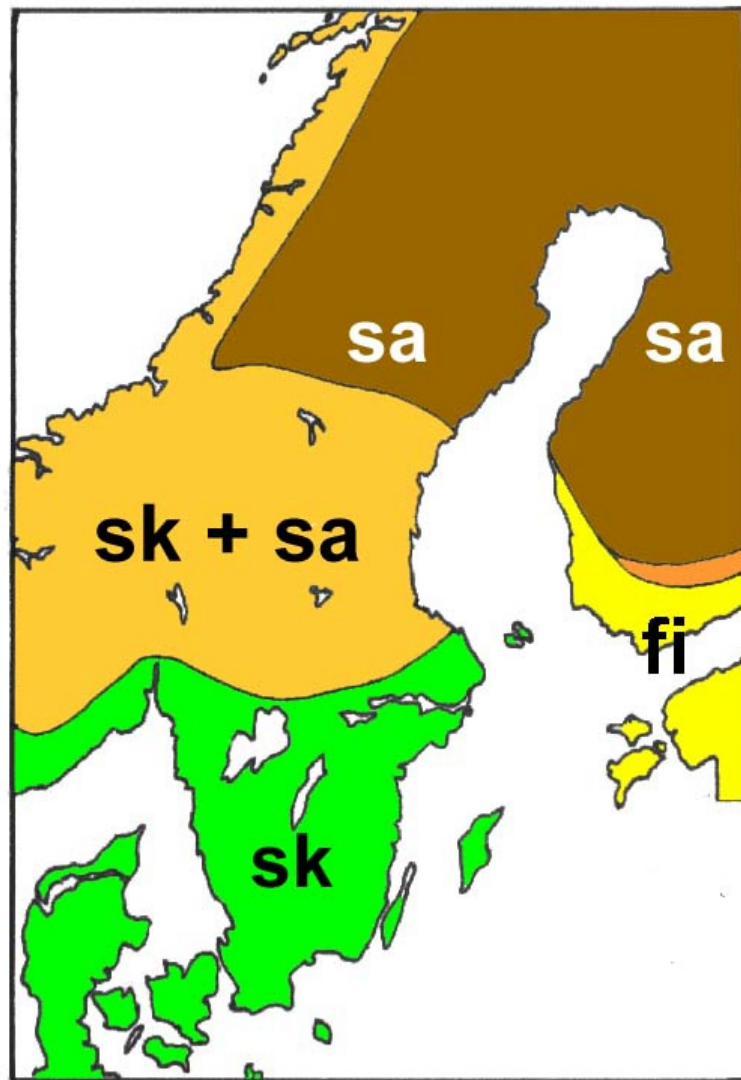
Map 52. The assumed language boundary in 200 bc. The earliest point of time for agriculture and probably the Germanic/Scandinavian language to reach the northern boundary of the green area is 2000 bc; the latest point of time is 200 bc.

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Question 53. Where was the main language boundary in Scandinavia about a thousand years ago? See Maps 53a and 53b.



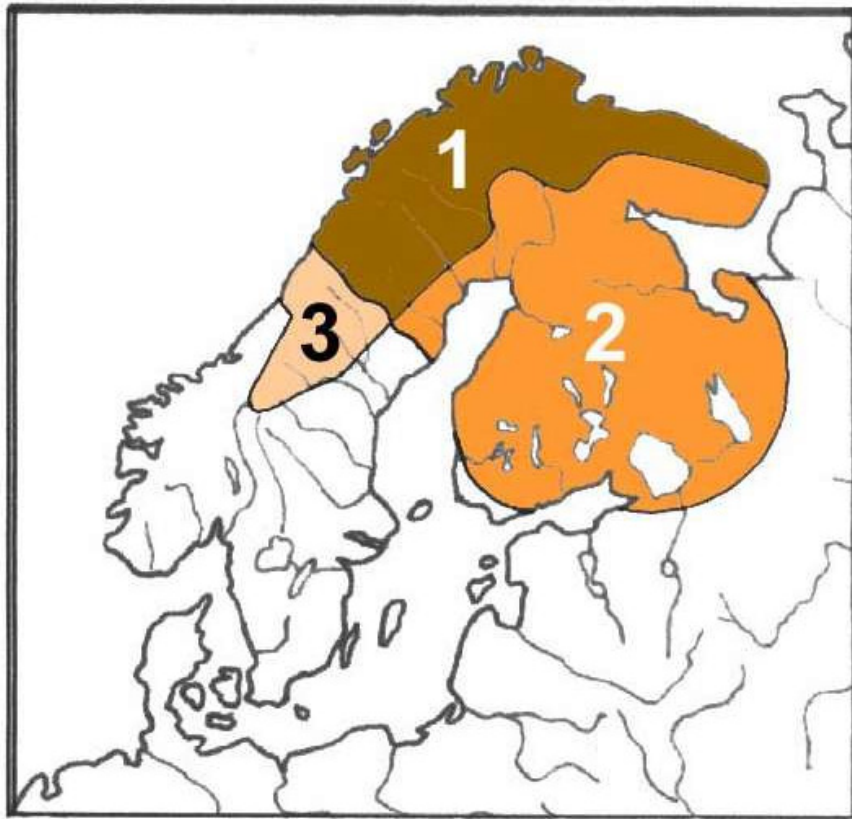
Map 53a. The areas of the Saami and Scandinavian people about a thousand years ago. The southern boundary (1-1200 AD) represents the southern extent of the Saami type Lake Graves (Swedish *insjögravar*); the northern boundary (1000-1200 AD) shows the southern extent of the Saami type arrow heads. The light brown area represents the mixing area of the two cultures; dark brown = Saami and Finnish, green = Scandinavian. The southern boundary is seen to be close to Gävle and the northern one close to Sundsvall. The boundaries are based on the maps in Zachrisson 1987, p. 25 and 29.



Map 53b. The Fennoscandian populations in 1000 ad: sk = Scandinavians; sa = Saami; sk + sa = Scandinavians and Saami; fi = Finnic populations (Finns and Estonians). The map is based on Zachrisson 1987.

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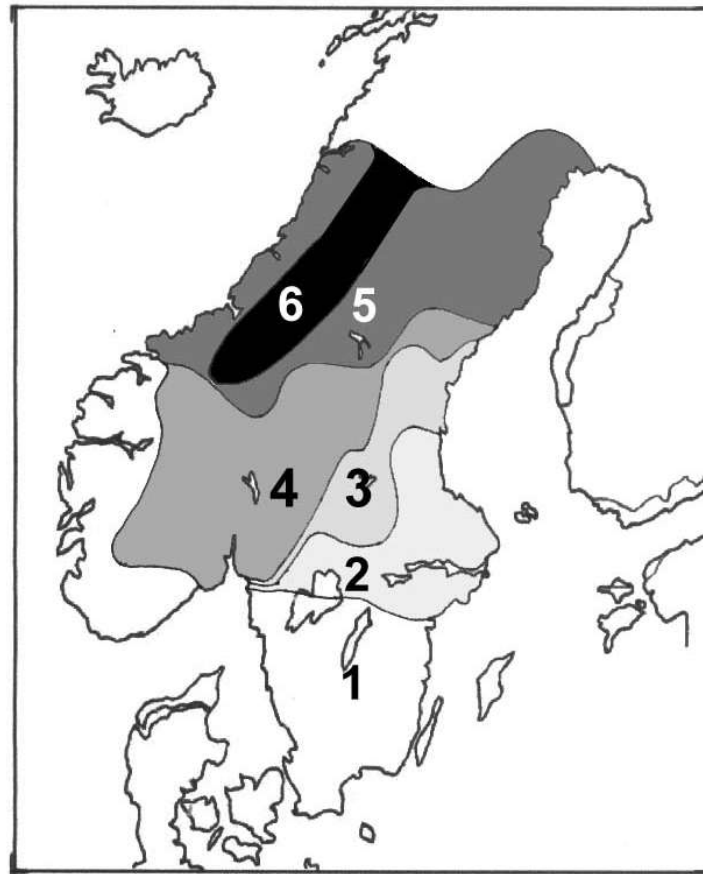
Question 54. Has the area of the Saami in Scandinavia always reduced? Has it not ever expanded? See map 54.



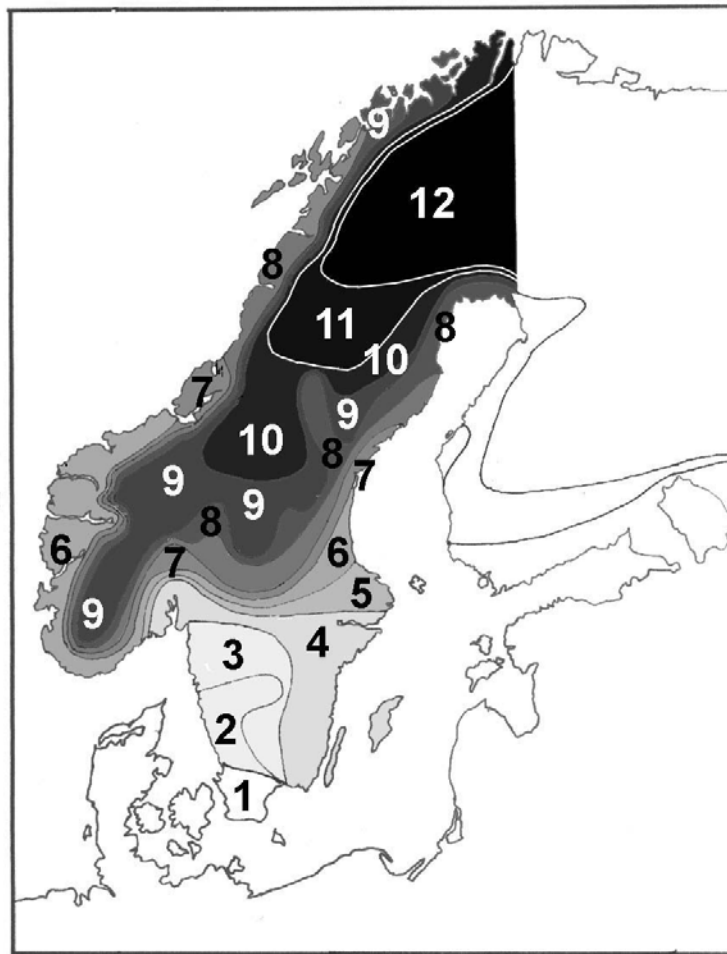
Map 54. The Saami in Fennoscandia. The area of the Saami at the beginning of the Christian Era was 1 + 2; today it is (or about a hundred years ago was) 1 + 3. In area 2, language shift Saami > Finnish took place. The Saami came back to area 3 after the Black Death towards the end of the 14th century and during the 15th century. The areas are based basically on Collinder 1953.

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Question 55. How does the strength of Finno-Ugric (Saami/Finnic) substratum vary in various parts of Scandinavia? See Maps 55a and 55b.



Map 55a. Escalation of Finno-Ugric substratum in the Scandinavian languages. The map is a combination of five maps in Haugen 1978. The five dialect features concerned are (a) Vowel Balance, (b) Apocope, (c) Metaphony, (d) Short Stressed Syllables, and (e) Word Medial Palatalization. All of the features are of Finno-Ugric (more precisely Saami-Finnic) origin that were originally left in the Scandinavian languages as learning mistakes by the Saami and Finnic speakers learning the Germanic language of the newcomers (used as *lingua franca*). Figures 1 to 6 refer to the number of features present in various areas: for example, in area 2 only one feature is present, in area 6 all five features are present.



Map 55b. The south-north gradient in Scandinavia. The boundaries and areas reflect the decrease of southern features and the corresponding increase of the northern features from the south to the north. The boundaries are based mostly on archaeological facts (the spread of agriculture and various types of graves) and to a lesser extent on dialectal features. The boundaries may also, to some extent, reflect the spread of Saami/Finnic place names. Not enough genetic material is available, but the map may, in addition, reflect the variation in the gene pool of the Scandinavian populations.

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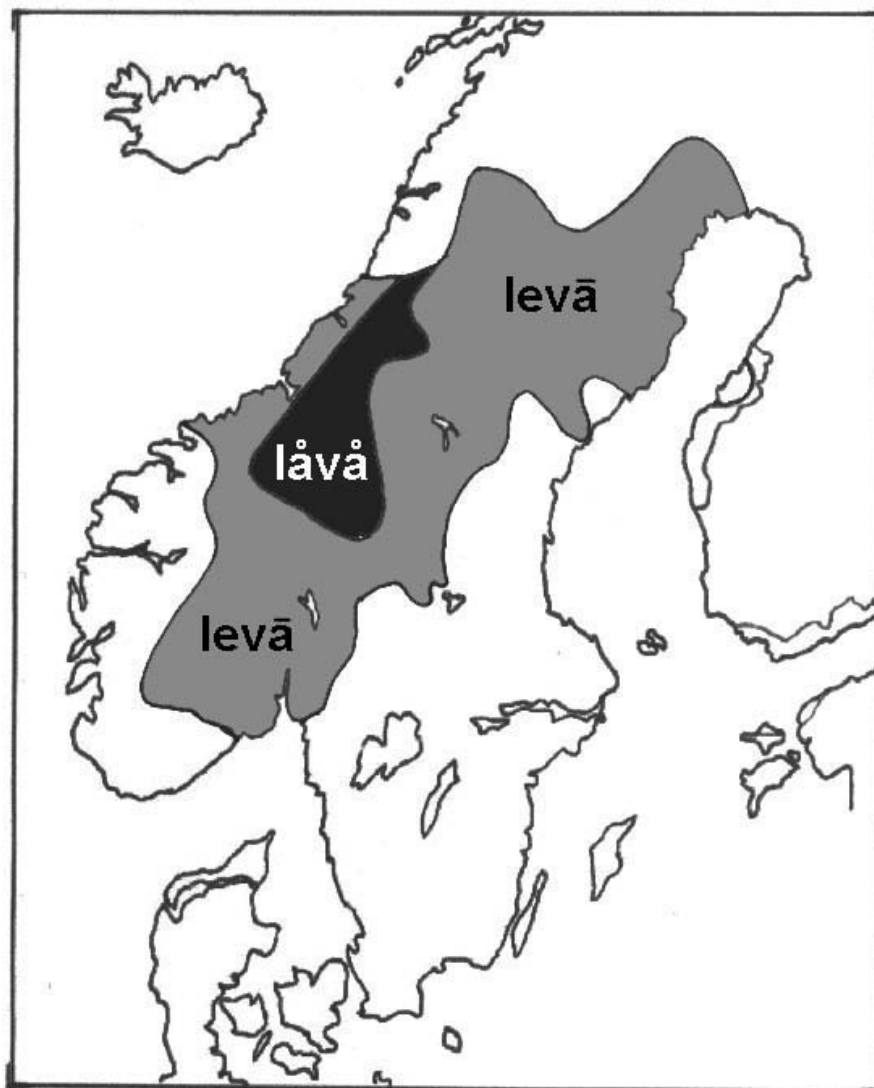
Question 56. Which **phonetic phenomena** in the dialects of the Scandinavian languages can be considered Finno-Ugric (Saami/Finnic) substrata? See Maps 56a, 56b, 56c, 56d, and 56 e. These maps are all simplifications of the maps in Haugen 1976.



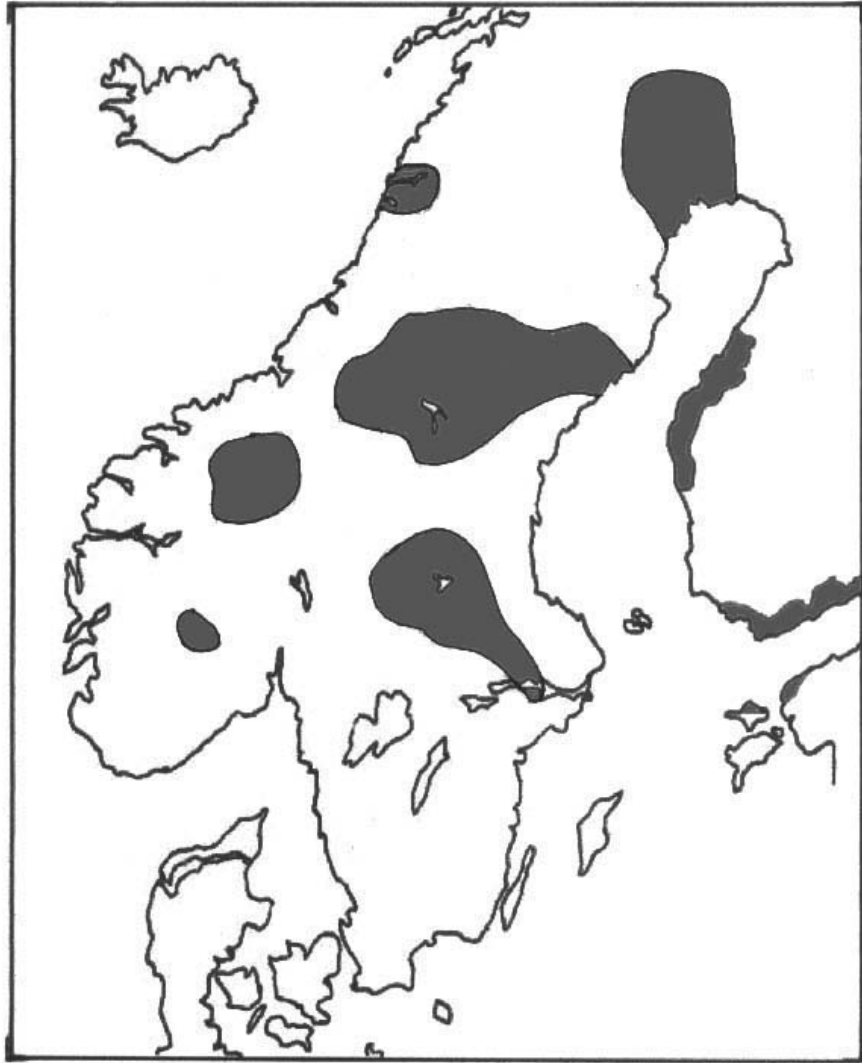
Map 56a. Scandinavian Vowel Balance. The phonetic phenomenon called 'Vowel Balance' in the Scandinavian languages refers to the fact that the second syllable vowel used to be relatively long after a short first syllable and relatively short after a long first syllable; e.g. *livà* 'to live' vs. *bristǎ* 'to break'. Later, the phenomenon began to concern vowel qualities; e.g. *livå* vs. *briste*.



Map 56b. Split of the Vowel Balance area into two sub-areas. The short vowel of the second syllable (occurring after a long first syllable) was either centralised (*bristǣ* > *briste*) or it disappeared (*bristǣ* > *brist*). In both areas, the vowel occurring after a short first syllable was originally relatively long (first *liva* > *livā* and then > *livā*), which means that the areas were under the influence of Vowel Balance.



Map 56c. Scandinavian Metaphony. Metaphony is total in the black area and partial in the grey area. In total metaphony, the second syllable vowel assimilates the first syllable vowel completely and the two vowels are eventually identical; in partial metaphony, the two vowels remain qualitatively different. The map is a simplification of the map in Haugen 1976, p. 12.



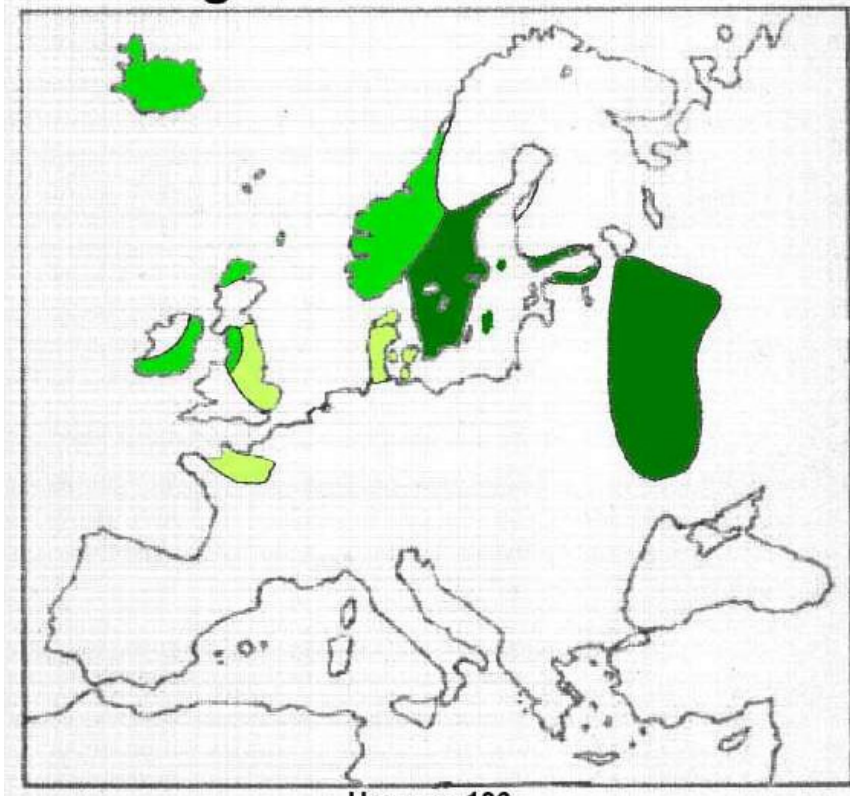
Map 56d. Scandinavian short stressed syllables. The black areas show the areas where the stressed short syllables remained short; in the other areas the short syllables became long either by vowel lengthening or consonant gemination; e.g. *honom* > *hōnom* or *honnom*.



Map 56e. Scandinavian Medial Palatalization. In the black areas, the affrication of stops in word initial position (e.g. *köra* > *tšöra* 'to drive') was generalized to word medial positions (e.g. *stycke* > [*styttje/styççe*] 'a piece') .

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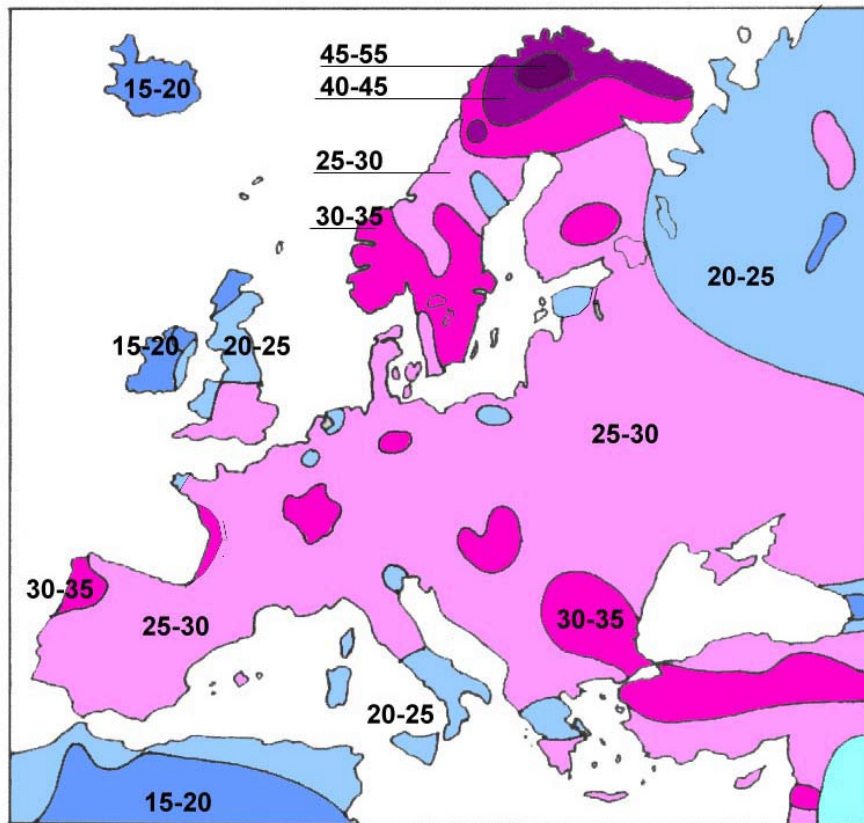
Question 57. What were the destinations of the Norwegian, Danish, and Swedish Vikings?



Map 57. The Vikings. The Vikings originated from three areas: Norway, Denmark, and Sweden. The areas of destination of the Norwegian Vikings were in Iceland and the northern and western parts of the British Isles; those of the Danish Vikings were in eastern England and northern France; and those of the Swedish Vikings were mainly in Russia.

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Question 58. Does the frequency of blood group A show any regular gradient in Fennoscandia?



Map 58. The frequency of blood group A. The strongest peak of blood group A is in Northern Fennoscandia. The map is based on Mourant *et al.* 1976.

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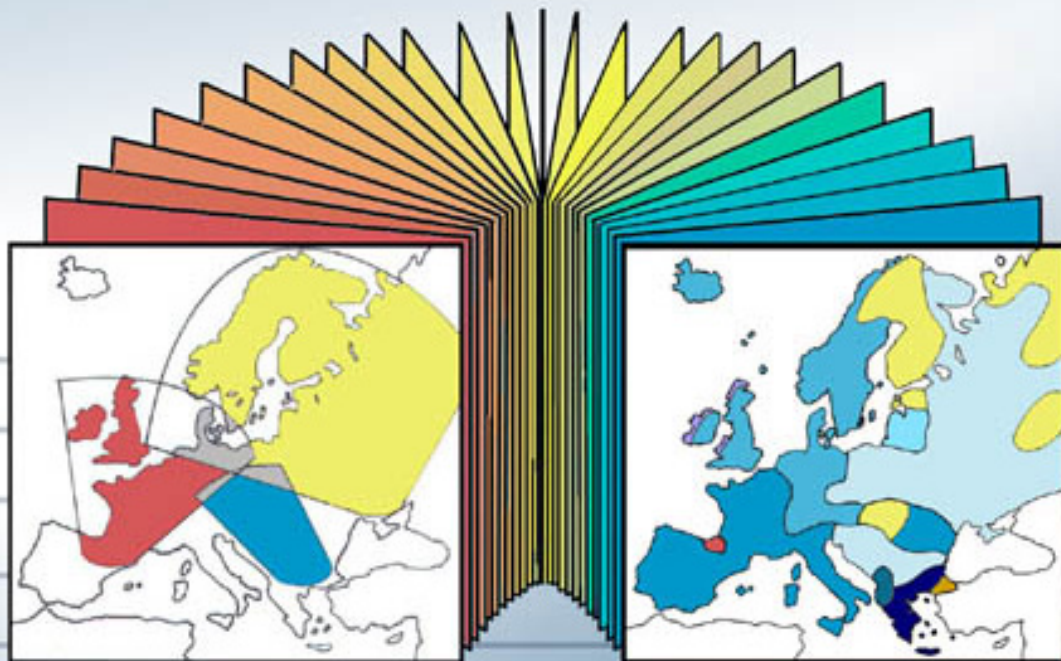
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Kalevi Wiik

A NEW ATLAS

**on the Origins
and Early History
of the Europeans**

Section III Baltic Peoples and Languages



April 2003

"A NEW ATLAS on the Origins and Early History of the Europeans" consists of seven Sections:

Section I: General Questions

Section II: Germanic Peoples and Languages

Section III: Baltic Peoples and Languages

Section IV: Slavic Peoples and Languages

Section V: Celtic, Italic, Albanian, and Greek Peoples and Languages

Section VI: Finno-Ugric Peoples and Languages

Section VII: Other (Basque, Iranian, Turkish, Mongolian, Arabic, Jewish, and Roma)
Peoples and Languages

The section in hand is **Section III**. It consists of twelve questions or groups of questions; these continue the numbering in Section II and are numbered from 59 to 70. The answers are given as maps and their verbal explanations.

Click the question of the following list to get to the answer (the map and its legend).
Click **BACK** to get back to the questions.

Questions about the Baltic peoples and languages

[Question 59](#). What caused the split of the Balto-Slavic mother language into **three daughter languages**? See Map 59.

[Question 60](#). What was originally the most essential **geographic difference** between the Balts and Slavs? See Map 60.

[Question 61](#). What were the three essential cultures and languages of the Pontic area in **4500 bc**? See Map 61.

[Question 62](#). What was the influence of the **Corded Ware culture** of northern Central Europe on the surrounding cultures and languages in Eastern Europe? See Maps 62a and 62b.

[Question 63](#). Where has the language boundary between the Baltic and Finnic languages been situated during the **last five thousand years**? See Map 63.

[Question 64](#). Where was the language boundary of the Baltic and Finno-Ugric languages at the **end of the Bronze Age**? See Map 64.

[Question 65](#). Where was the language boundary of the Latvians and Livonians/Estonians about **two thousand years ago**? See Map 65.

[Question 66](#). How broad was the Baltic speaking area at the **beginning of the Iron Age**? See Map 66.

[Question 67](#). What were the **main tribes** of the Balts? See Map 67.

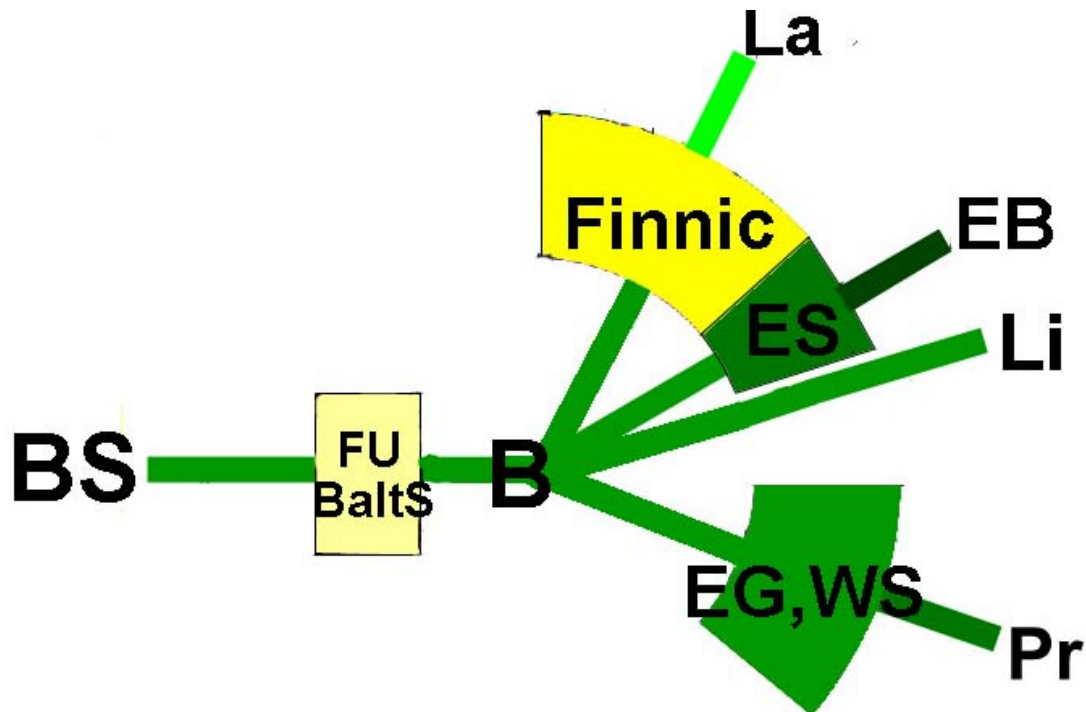
[Question 68](#). The Baltic speaking areas reduced considerably about **1000-1300 years ago**. Why and where? See Map 68.

[Question 69](#). Do the **types of teeth** show anything about the early history of the Balts and Belorussians? See Map 69.

An addition to question 69: What is the explanation for the following facts: (a) The Latvians and Lithuanians are **genetic** relatives of the Estonians and Mari but they are not **linguistic** relatives of these peoples, and (b) the Latvians and Lithuanians are **linguistic** relatives of the Russians, Belorussians, and Poles but they are not very close **genetic** relatives of these peoples? See the Appendix to Map 69.

[Question 70](#). What does the linguistic source of the **place names** in the Baltic area show about the language of the ancient inhabitants of these regions? See Maps 70a, 70b, 70c, 70d, and 70e.

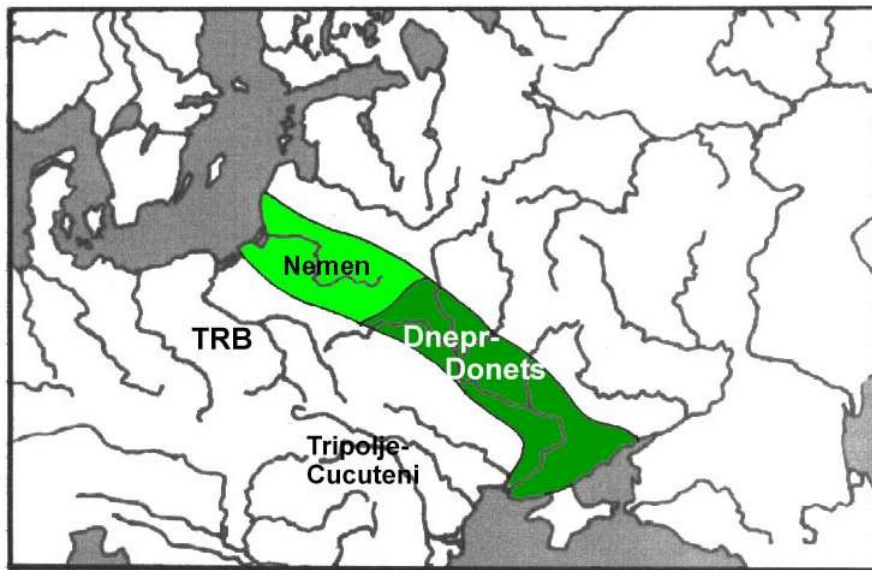
Question 59. What caused the split of the Balto-Slavic mother language into three daughter languages?



Map 59. A tree visualising the emergence of the Baltic languages. A Balto-Slavic (BS) language was used as *lingua franca* by the native speakers of a Finno-Ugric language of the Baltic Sea basin (FU BaltS). The Balto-Slavic language acquired a Finno-Ugric substratum ('it went through a Finno-Ugric filter'), and it became Baltic (B). The Baltic language experienced four different developments: (1) It was used as *lingua franca* by the native speakers of Finnic and it acquired a Finnic substratum ('it went through a Finnic filter'), and the result was the Latvian language (La); (2) it was used as *lingua franca* by the native speakers of Eastern Slavic and it acquired an Eastern Slavic substratum and became Eastern Baltic (EB); (3) it remained unchanged, and the language is called Lithuanian (Li); and (4) it was used as *lingua franca* by the native speakers of Eastern Germanic (EG) and Western Slavic (WS) and it acquired an Eastern Germanic and Western Slavic substratum and became Prussian (Pr).

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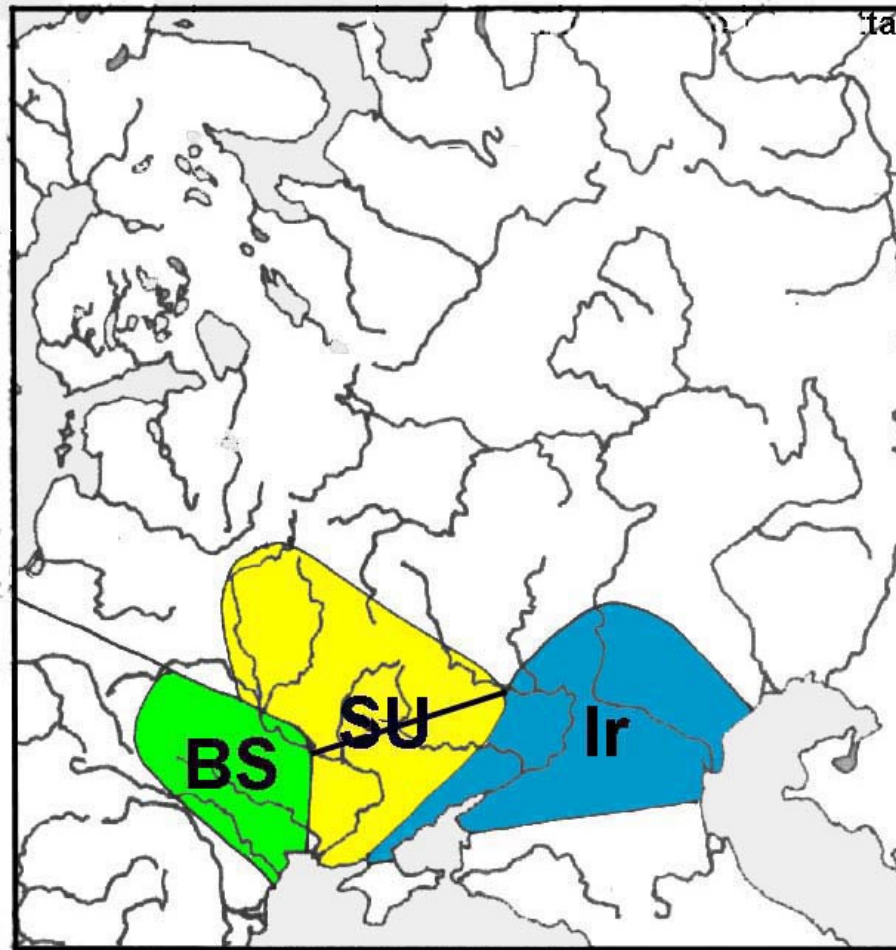
Question 60. What was originally the most essential geographic difference between the Balts and Slavs?



Map 60. The areas of the Nemen and Dnepr-Donets cultures. The boundary between the cultures was at the watershed between the Baltic Sea and Black Sea basins. The Nemen culture belonged to the early Balts and the Dnepr-Donets culture to the early Slavs. The areas in the map are based on the map in Gimbutas 1991, p. 112.

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Question 61. What were the three essential cultures and languages of the Pontic area in the middle of the fifth millennium?



Map 61. Confrontation of three languages in the Pontic area. In the area north of the Black Sea, there existed in 4500 bc three areas different in respect to their cultures, subsistence systems and languages:

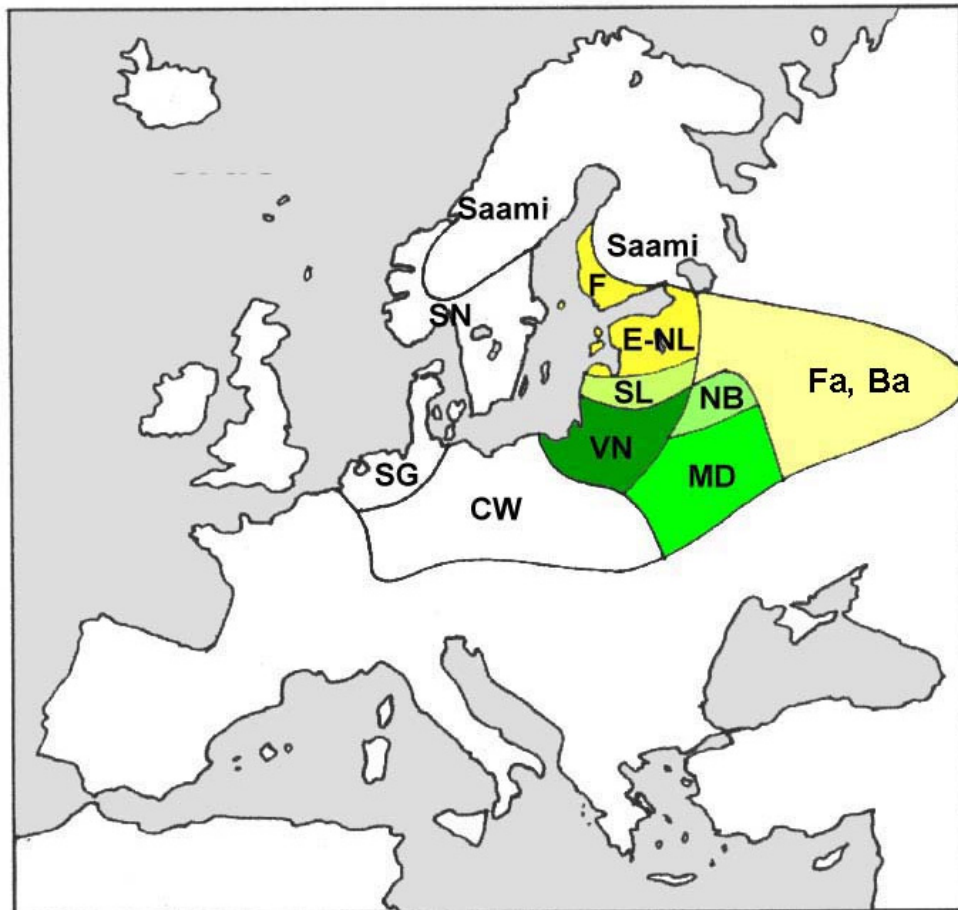
the green area = Tripolye-Cucuteni culture + agriculture + Balto-Slavic language;

the yellow area = Dnepr-Donetz culture + hunting + Finno-Ugric language; and

the blue area = Kurgan cultures (Sredni-Stog) + pastoralism + Indo-Iranian language.

The boundary crossing the yellow area signifies a later split of this area: its northern part became green and its southern part blue; in other words, one part of the original Finno-Ugric-speaking area began to belong to the Balto-Slavic speakers and the other part to the Indo-Iranian speakers; the division may to some extent reflect the difference between the Agricultural Scythians (who eventually spoke a Slavic language) and the Royal Scythians (who eventually spoke an Iranian language). [Back](#)

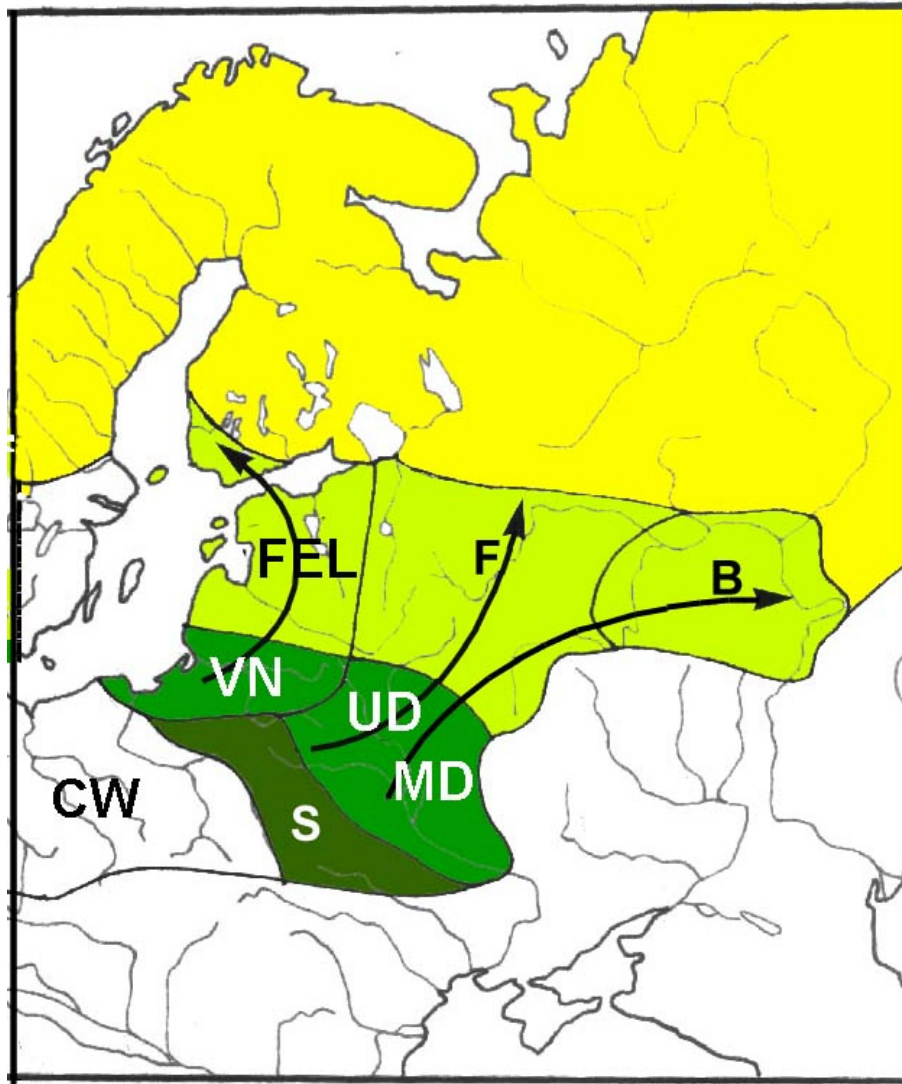
Question 62. What was the influence of the Corded Ware culture of northern Central Europe on the surrounding cultures and languages in Eastern Europe? See Maps 62a and 62b.



Map 62a. Corded Ware cultures. The cultural areas of the map: VN = Vistula-Nemen; SL = the Battle Axe culture of Southern Latvia; NB = culture of Northern Belarus; MD = the culture of Middle Dnepr; E-NL = the Battle Axe culture of Estonia and Northern Latvia; F = the Battle Axe culture of Finland; Fa, Ba = Fatyanovo and Balanovo; CW = the core area of the Corded Ware cultures; SG = the Single Grave culture; SN = Swedish and Norwegian Battle Axe cultures.

The colours of the map: (1) dark green = the core area of the Battle Axe culture of Eastern Balticum where a more or less "pure" Baltic language or Lithuanian was spoken; (2) the light green area SL where the Latvian language emerged as the Baltic language acquired a Finnic (Livonian and Estonian) substratum; (3) the light green areas NB and MD where the Eastern Baltic dialect emerged as the Baltic language acquired an Eastern Slavic substratum; (4) the darker yellow areas F and E-NL

represent the outer zone of the periphery where no language shift took place but where the Baltic superstratal influence was strong; and (5) the lighter yellow area Fa,Ba which also represent the outer zone of the periphery and where no language shift took place and where the Baltic substratal influence was only weak.

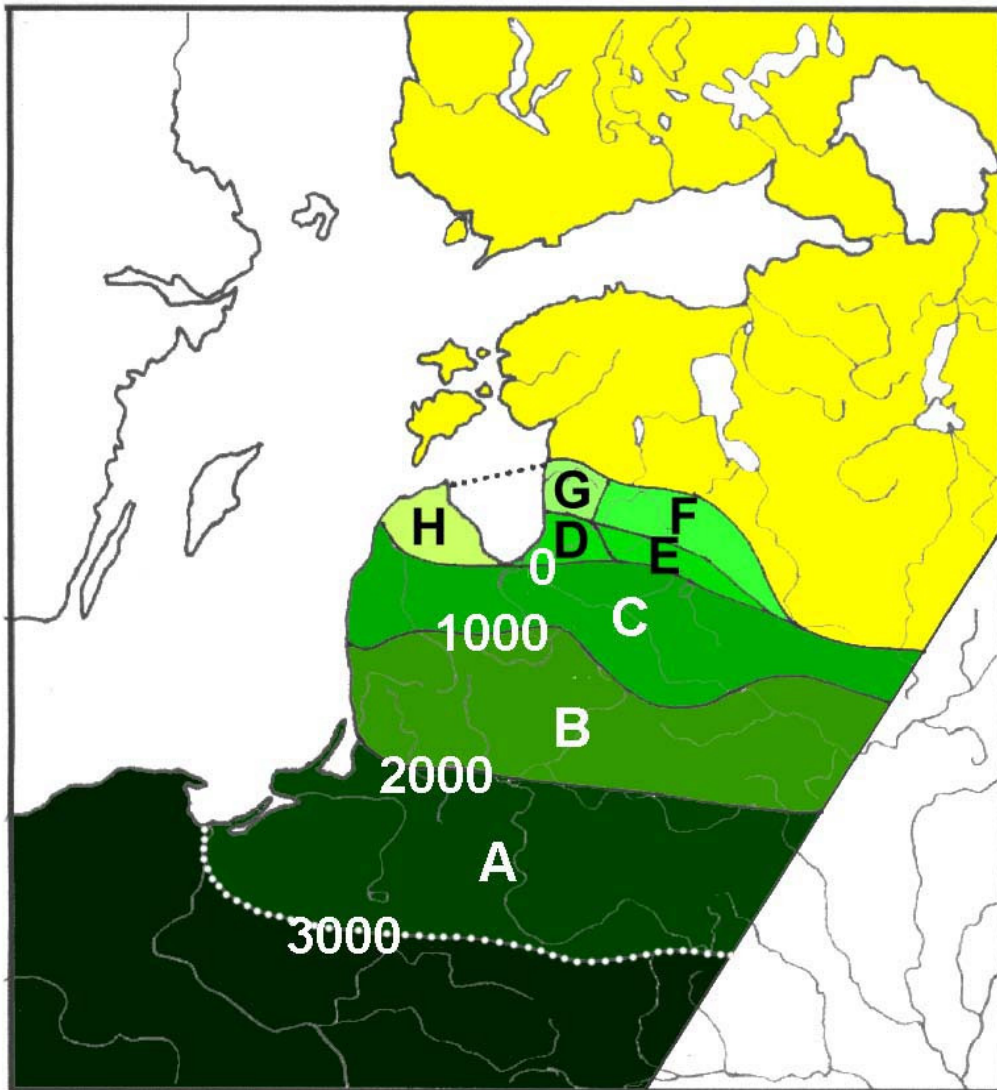


Map 62b. The Corded Ware cultures of Eastern Europe. The map is based on the map in Gimbutiene 1994, p. 55. CW = the core area of the Corded Ware culture; VN = Vistula-Nemen culture; UD = Upper-Dnepr culture; and MD = Middle Dnepr culture; S = the Corded Ware culture of the Slavs; F = Fatyanovo culture; B = Balanovo culture; FEL = the Battle Axe cultures of Finland, Estonia, and Latvia based on the cultural substratum of the Narva culture and the Typical Comb Ceramics culture. The three arrows show the routes of the Corded Ware influence and to a lesser extent the routes of the Corded Ware people moving to the north and east. The colours reflect linguistic areas as follows: yellow = the northern area of the Finno-Ugric speakers where the Corded Ware cultures did not reach or where their

influence was weak; greenish yellow (zone SVL+F+B) = the areas of those Finno-Ugric languages, where the influence of the Corded Ware culture was stronger and where the elite was Baltic and the Baltic language was used as *lingua franca*; the shades of green = Baltic (VN+YD+KD) and Slavic (S) areas.

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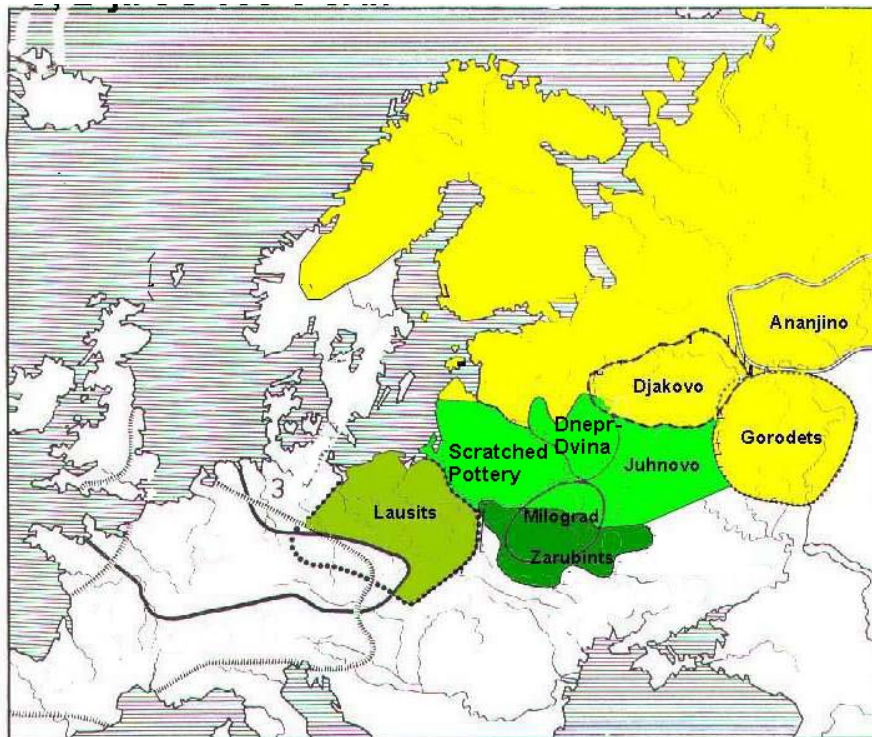
Question 63. Where has the language boundary between the Baltic and Finnic languages been during the last five thousand years?



Map 63. The advance of the language shift zone Finno-Ugric > Baltic from south to north during the last five thousand years. The times for the northern areas are approximately as follows: D = 0-500 ad, E = 500-1000 ad, and F,D,H = 1000-2000 ad. The Slavic/Russian areas are not marked in the map.

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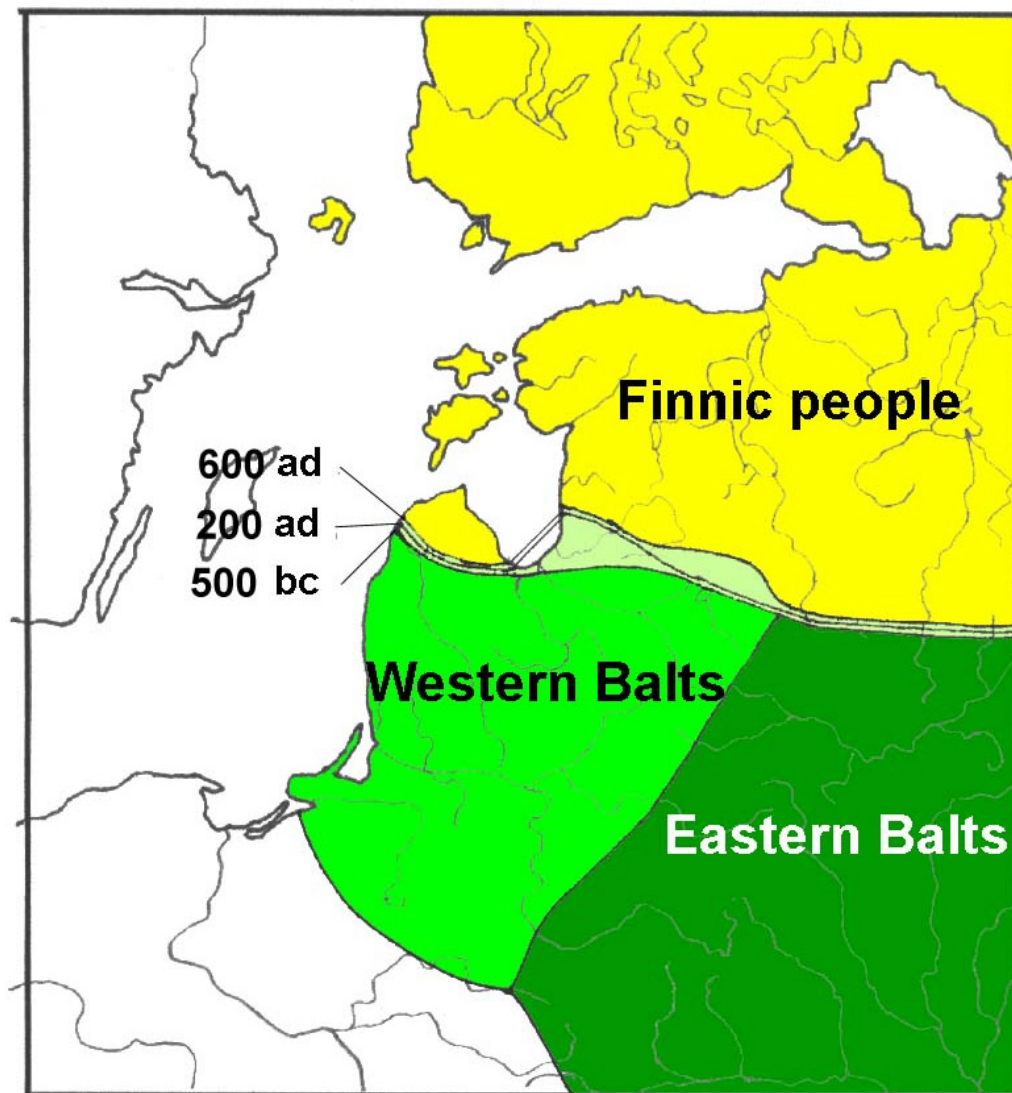
Question 64. Where was the language boundary of the Baltic and Finno-Ugric languages at the end of the Bronze Age?



Map 64. The Finno-Ugric, Baltic, and Slavic areas about 600-1 bc. The areas of the cultures are from Jaanits *et al.* 1982. According to the map, the Finno-Ugric languages (yellow) were in contact with the Baltic languages (light green), but not yet with the Slavic languages (dark green).

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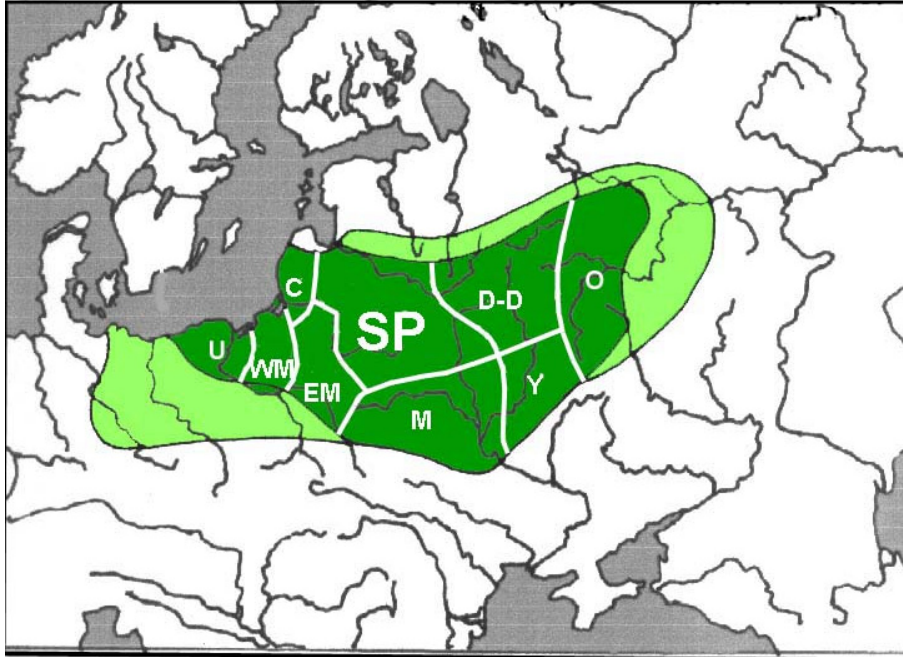
Question 65. Where was the language boundary of the Latvians and Livonians/Estonians about two thousand years ago?



Map 65. The language boundary between the Balts and Livonians/Estonians in 500 bc – 600 ad. During the about one thousand years in question, the language boundary moved only about 50-100 kilometres. The boundary moved earlier (500 bc – 200 ad) near the Gulf of Riga and later (200-600 ad) in the inland areas.

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Question 66. How broad was the Baltic-speaking area at the beginning of the Iron Age?



Map 66. The areas of the Balts about 500 bc.

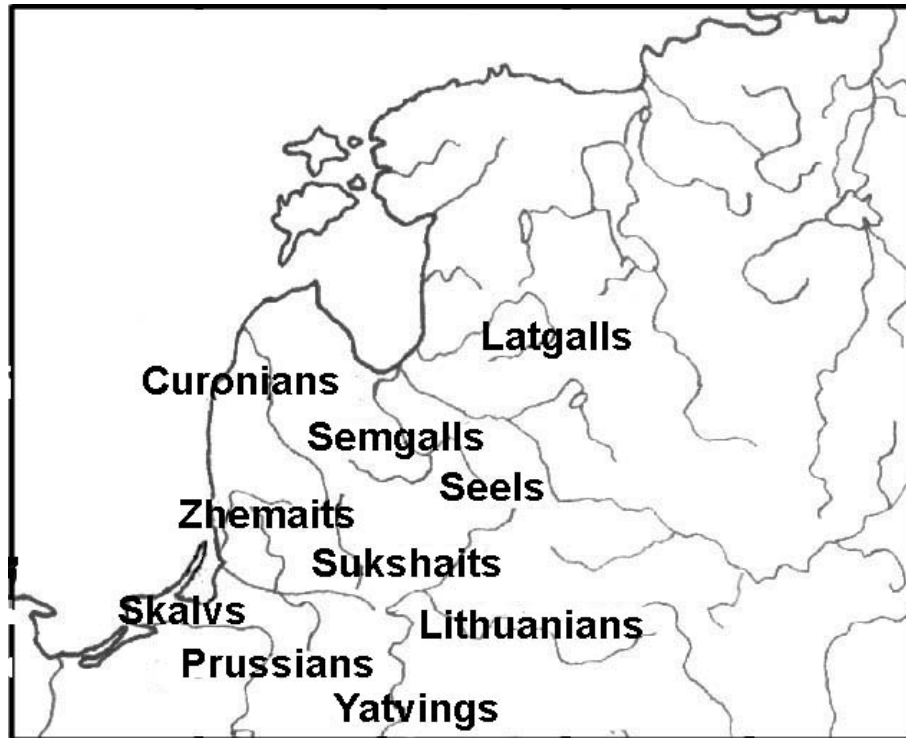
Darker green = Baltic-speaking cultural areas: C = Curonians, SP = Scratched Pottery, D-D = Dnepr-Dvina, O = Oka, M = Milograd, Y = Yuhново, EM = Eastern Mazurs, WM = Western Mazurs, U = the Urnfield area.

Lighter green = the areas of the Baltic river and lake names that in 500 bc did not belong to the cultural areas mentioned above.

The map is based on the maps in Gimbutiene 1994.

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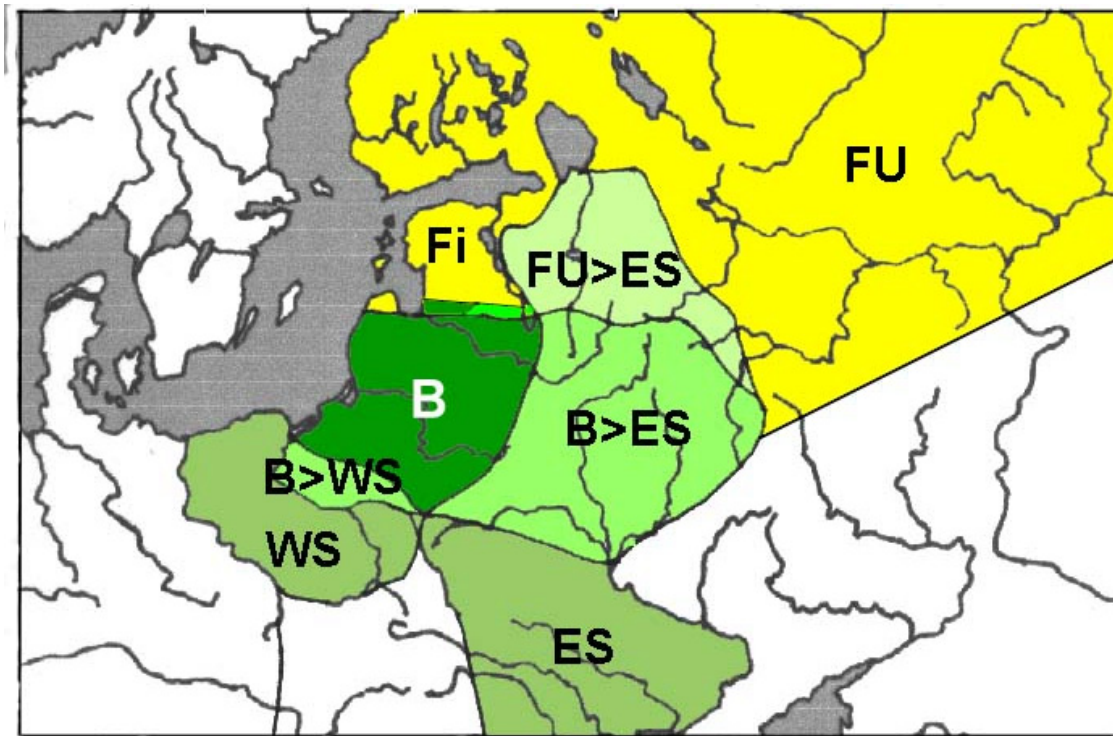
Question 67. What were the main tribes of the Balts?



Map 67. Ten Baltic tribes.

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Question 68. The Baltic speaking areas reduced considerably about 1000-1300 years ago. Why and where?



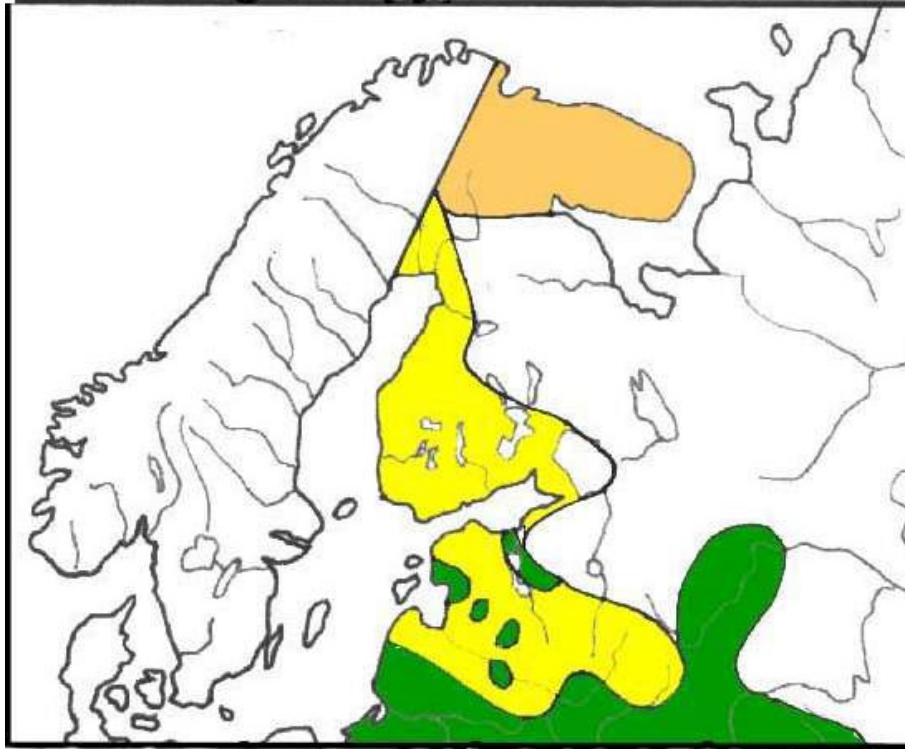
Map 68. The Slavic Expansion. Before 1000 bc, the Baltic language area was reduced because of the slavicization of areas $B > IS$ and $B > LS$. Simultaneously, however, the Baltic area expanded to the north as the narrow strip in Northern Latvia was balticized.

B = Baltic, IS = eastern Slav, LS = western Slav, IMS = Finnic, SU = other Finno-Ugric languages.

The map is based on Wiik 1997c.

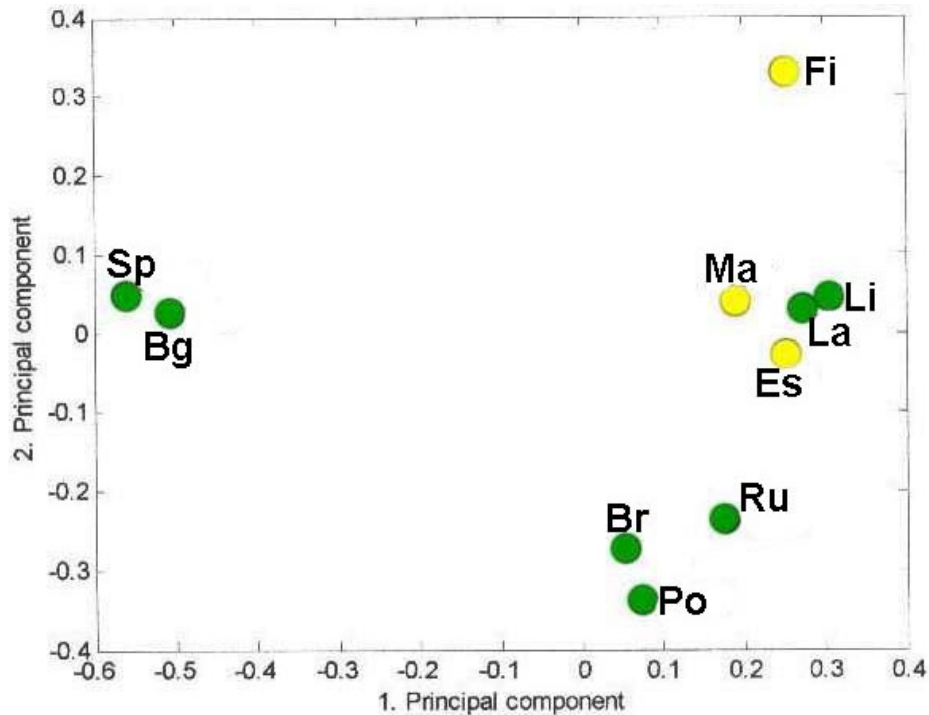
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Question 69. Do the types of teeth show anything about the early history of the Balts and Belorussians? See Map 69.



Map 69. The odontological types of some eastern European populations. Colours used: green = Central European type; yellow = gracile northern type; brown = relic North European type; white = other types or areas not analysed. The map is a simplified version of the map in Gravere 1987.

An addition to question 69: What is the simplest explanation for the following facts: (a) The Latvians and Lithuanians are **genetic** relatives of the Estonians and Mari but they are not **linguistic** relatives of these peoples, and (b) the Latvians and Lithuanians are **linguistic** relatives of the Russians, Belorussians, and Poles but they are not very close **genetic** relatives of these peoples? See Appendix to Map 69.



Appendix to Map 69. A genetic comparison of three Finno-Ugric speaking (yellow) and seven Indo-European speaking (green) populations. The genetic feature used is the Tat C of the mitochondrial DNA. The populations involved: Fi = Finns, Ma = Mari, Es = Estonians; Sp = Spaniards, Bg = Belgians, Br = Belorussians, Po = Poles, Ru = Russians, La = Latvians, and Li = Lithuanians.

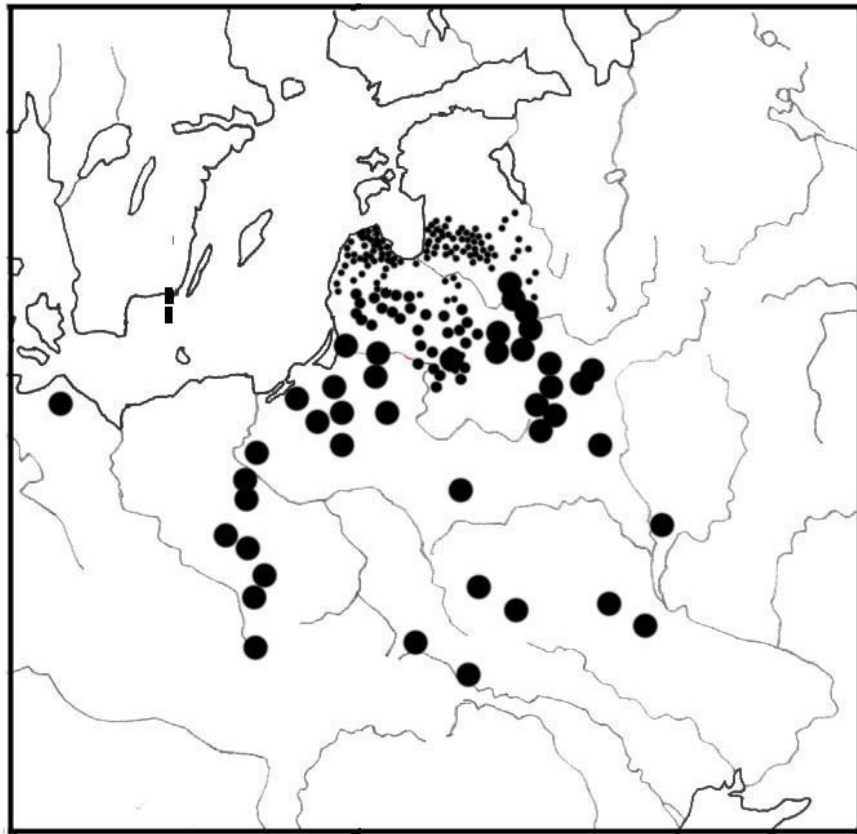
A possible solution to the dilemma: The Latvians and Lithuanians once spoke a Finno-Ugric language.

The data is based on Laitinen *et al.* 2001.

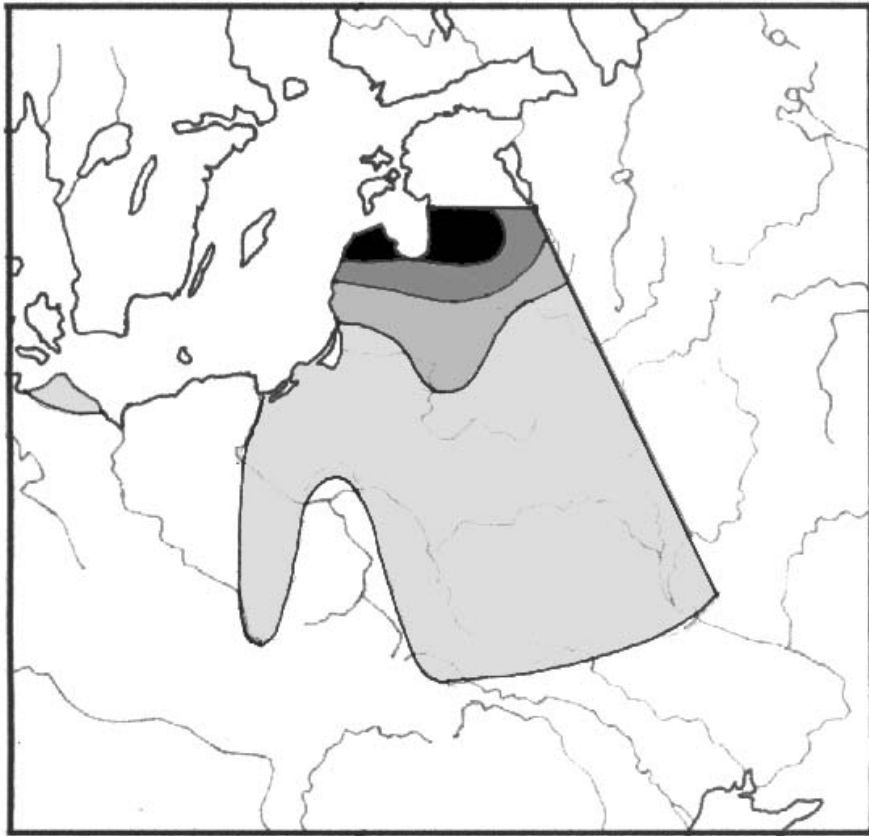
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Question 70. What does the linguistic source of the place names in the Baltic area show about the language of the ancients inhabitants of these regions?

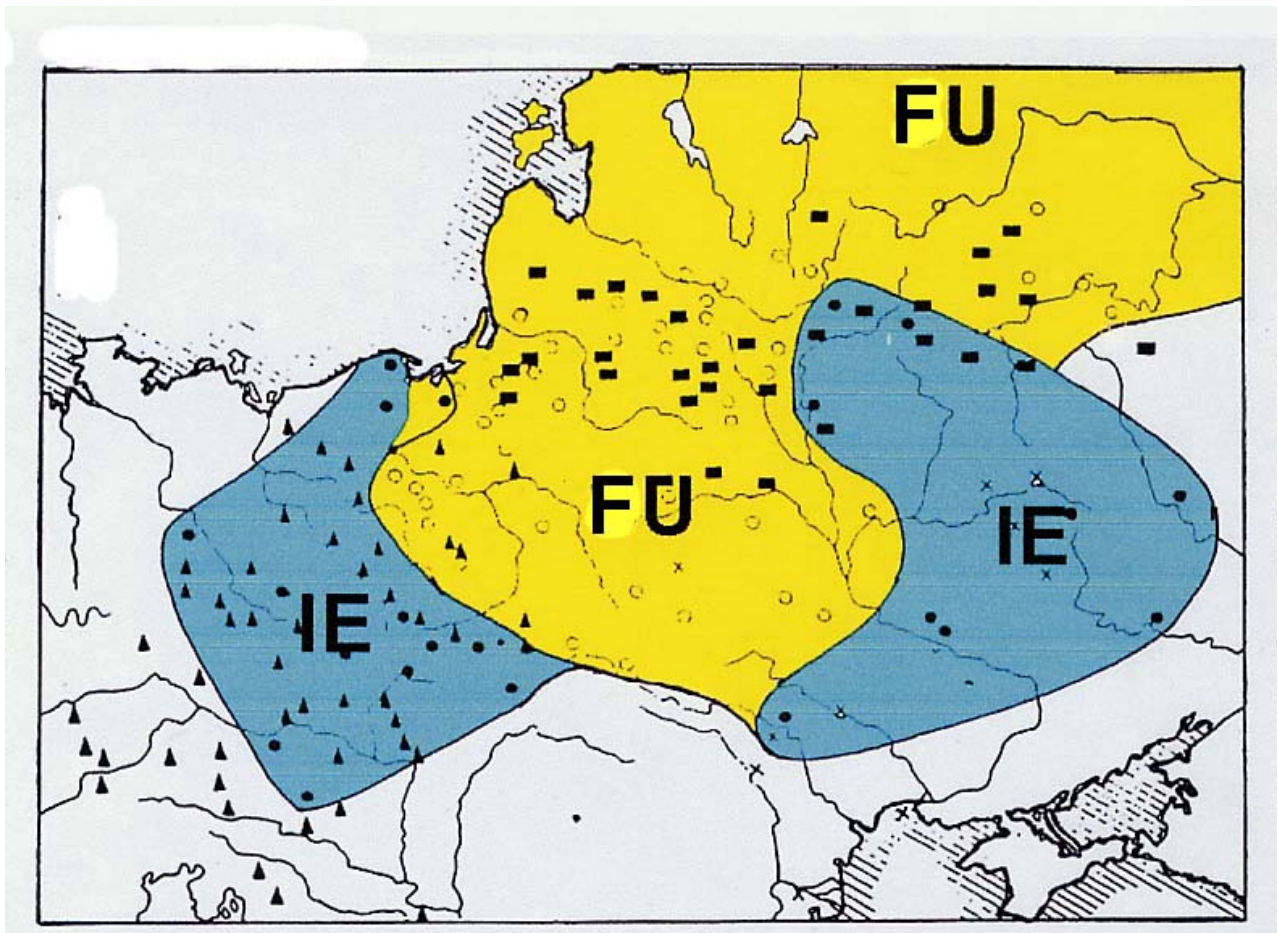
See Maps 70a, 70b, 70c, 70d, 70e, 70f, and 70g.



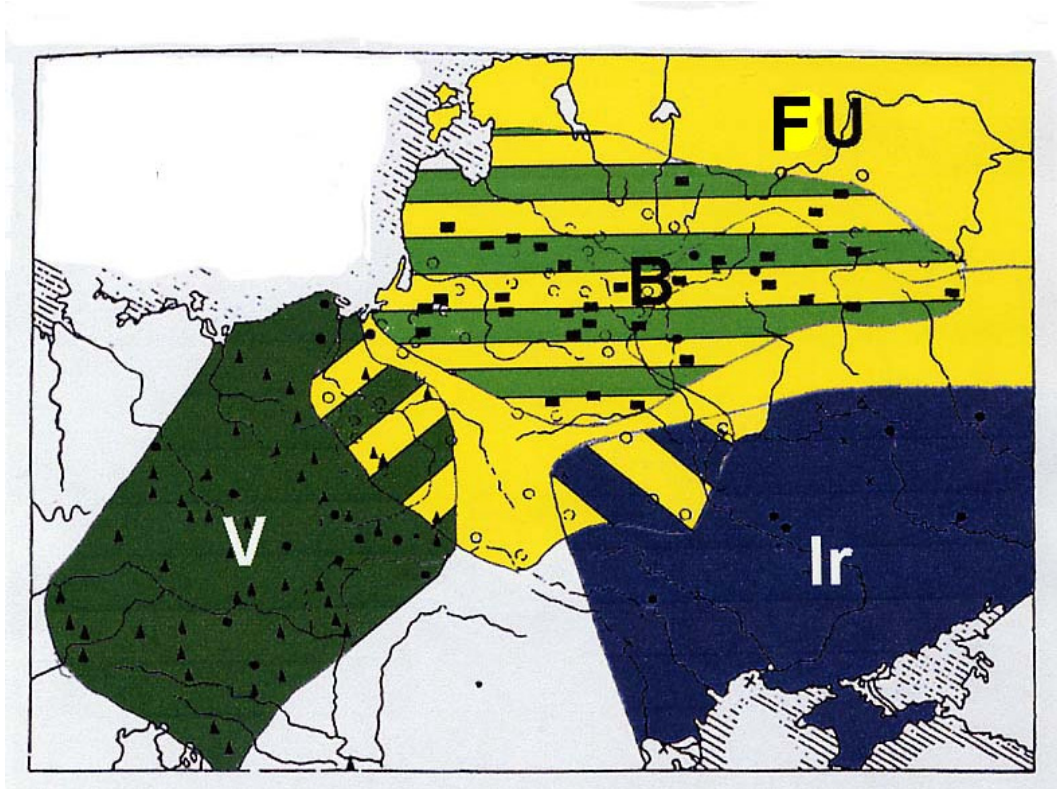
Map 70a. Finno-Ugric river and lake names in Eastern Balticum and surrounding areas. The three sizes of the circles refer to three different sources: largest = Lehr-Splawinski 1946, middle size = Vanagas 1981, and smallest = Rudzite 1968.



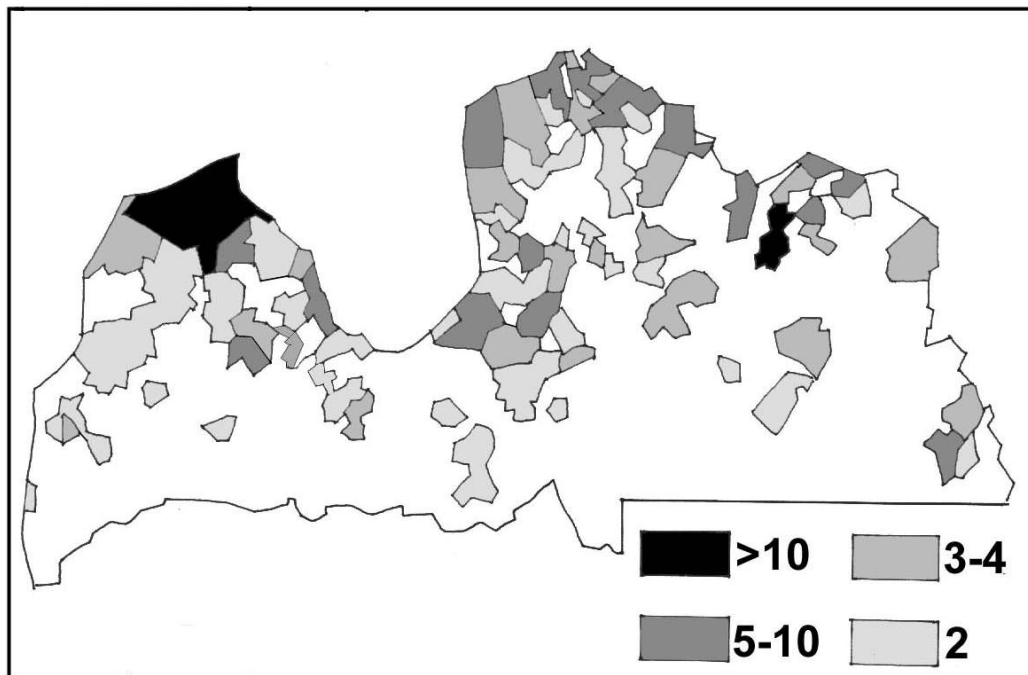
Map 70b. Four zones of Finno-Ugric river and lake names in Eastern Balticum and surrounding areas. The shades of grey from the darkest to the lightest refer to three things: (a) the number of river and lake names (the darker the zone, the more there are Finno-Ugric names); (b) the time of the disappearance of the Finno-Ugric language (the darker the zone, the later the FU language has disappeared); and (c) reliability (the darker the zone, the more reliably Finno-Ugric the names of the area).



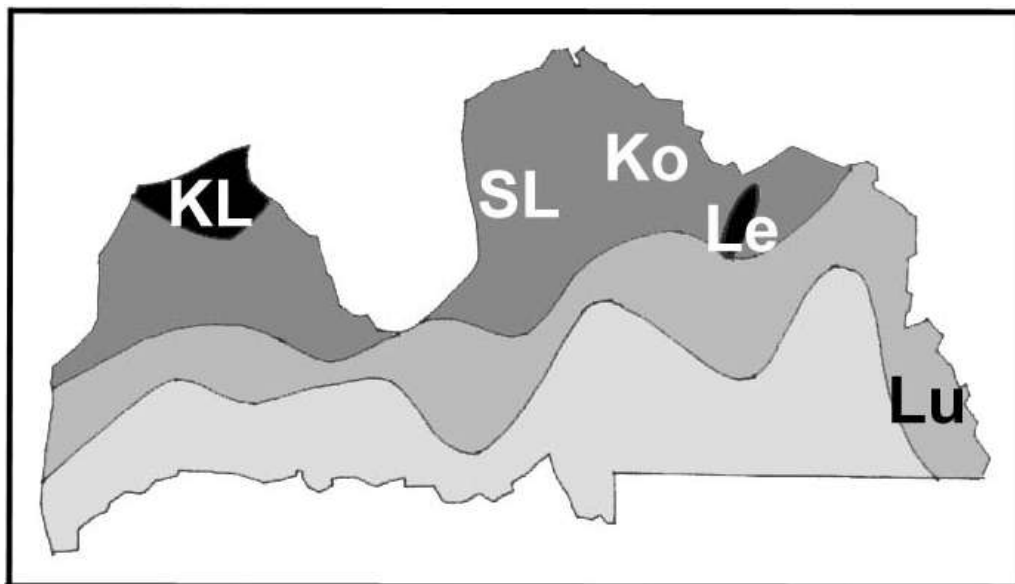
Map 70 c. Finno-Ugric (FU) and Indo-European (IE) place names in Eastern Europe. Source: V. Polák: *Vznik a počá Slovanu* 1, 1956: 24. The yellow and blue areas presumably represent the linguistic areas of the ancient Finno-Ugric and Indo-European languages (possibly protolanguages).



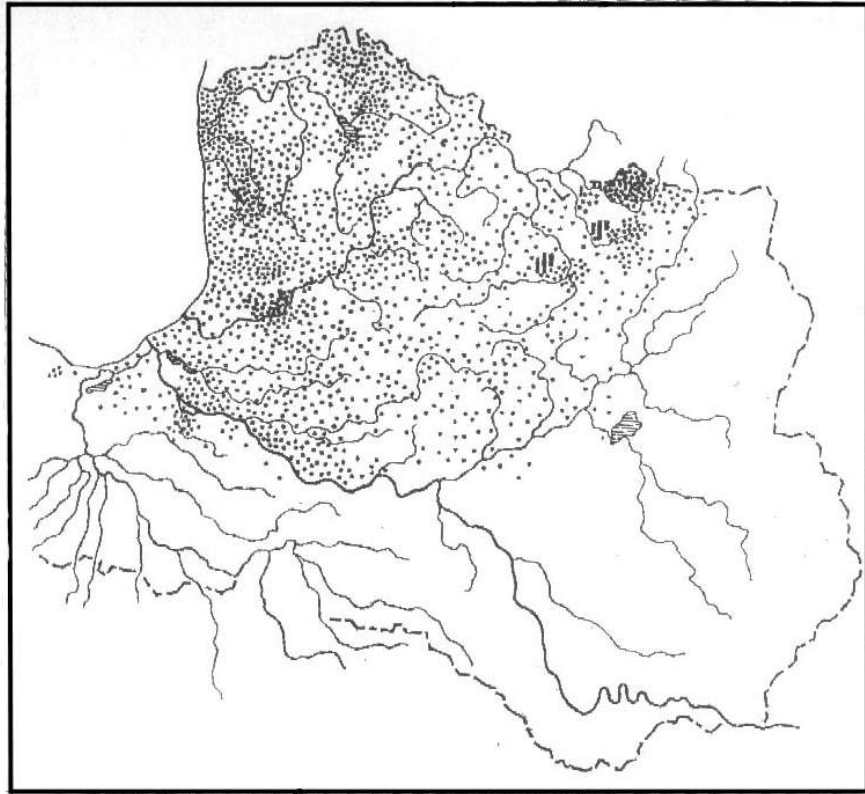
Map 70 d. Venetic (V), Baltic (B), Iranian (Ir), and Finno-Ugric (FU) place names in Eastern Europe. Source: V. Polák: *Vznik a počá Slovanu* 1, 1956: 24. The four areas and the intersection zones between them presumably represent the areas of four ancient languages. The Venetic language of the map may refer to a Proto Slavic or a Proto Western Slavic language. The area of the Baltic language (light green in the map) is seen to lie completely inside the area of the Finno-Ugric language (yellow in the map), which may perhaps be used as an indication of the fact that the Baltic language arrived in the area of the Finno-Ugric languages through language shift.



Map 70e. The number of Finnic place names in various Latvian districts. The numbers show how many Finnic place names was found in each individual parish. The map was drawn by KW on the basis of the map in Boiko 1993.



Map 70f. Three zones of Finnic place names in Latvia. The darker the zone, the more Finnic place names it has. KL = the Livonians of Curonia, SL = the Livonians of Salats, Ko = the Estonians of Koiva, Le = the Estonians of Leivu, and Lu = the Estonians of Luts. The zones are based on the data in the preceding map.



Map 70g. The Finnic place names in Vidzeme. Vidzeme is a northern province of Latvia. The map shows that northern Latvia is 'full' of Finnic place names. The densest areas, no doubt, represent relatively recent Finnic speaking linguistic islands. The map is based on Ancītis – Jansons 1963.

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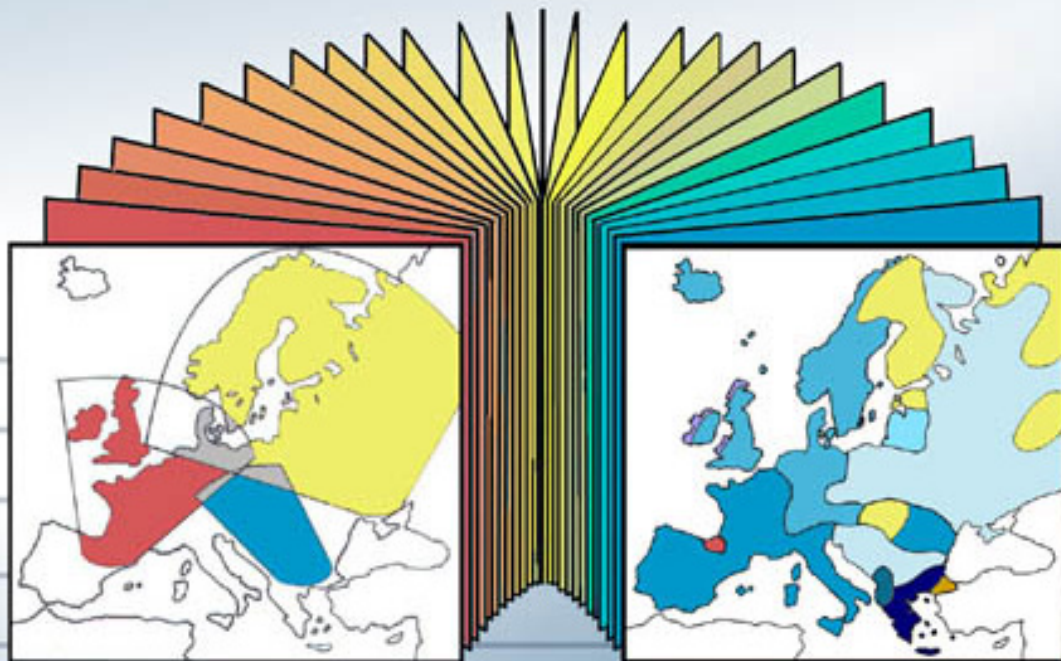
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Kalevi Wiik

A NEW ATLAS

**on the Origins
and Early History
of the Europeans**

**Section IV
Slavic Peoples and Languages**



April 2003

"A NEW ATLAS on the Origins and Early History of the Europeans" consists of seven Sections:

Section I: General Questions

Section II: Germanic Peoples and Languages

Section III: Baltic Peoples and Languages

Section IV: Slavic Peoples and Languages

Section V: Celtic, Italic, Albanian, and Greek Peoples and Languages

Section VI: Finno-Ugric Peoples and Languages

Section VII: Other (Basque, Iranian, Turkish, Mongolian, Arabic, Jewish, and Roma)
Peoples and Languages

The present section is **Section IV**. It consists of ten questions or groups of questions; these continue the numbering in Section III and are numbered from 71 to 80. The answers are given as maps and their verbal explanations.

Click the question of the following list to get to the answer (the map and its legend).
Click **BACK** to get back to the questions.

Questions about the Slavic peoples and languages

[Question 71](#). How many million **Slavic speakers** are there in the various countries of Eastern Europe? See Map 71.

An addition to question 71: What are the most essential **periods and cultures** of the early history of the Slavs? See Diagram I.

[Question 72](#). Where was the more or less uniform Slavic language spoken in **the early history of the Slavs**? See maps 72a, 72b, 72c, 72d, and 72e.

[Question 73](#). Where did the Slavic language spit first into two and later into **three separate dialects**? About when and within what cultures did the split-ups take place? See Maps 73a and 73b.

An addition to question 73: What are the **essential periods** of the three Slavic cultures in question and when did the **Goths** and **Huns** come to the Slavic area? See Diagram II.

[Question 74](#). Where were the Slavic languages spoken **a thousand years ago**? See Maps 74a and 74b.

[Question 75](#). What were the six most important cultural areas of the Slavs about **fifteen hundred years ago**? See Map 75.

[Question 76](#). What are the old tribes of **the Eastern Slavs**? See Map 76.

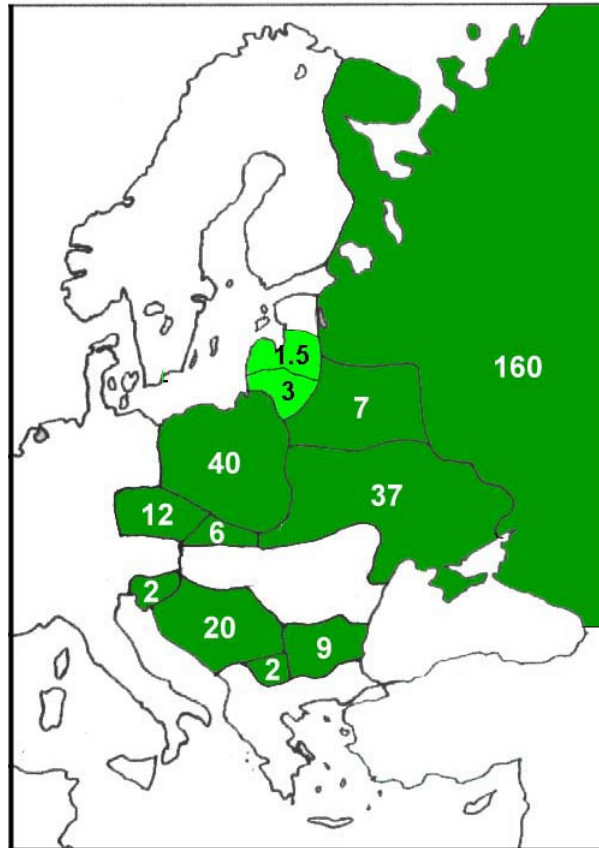
[Question 77](#). What are the **main linguistic boundaries** in the Eastern Slavic territory? What is the **main direction** of the boundaries? See Map 77.

[Question 78](#). How far to the west did the Slavic areas reach about **twelve hundred years ago**? See Map 78.

[Question 79](#). When did the Slavs, their culture and language come **to the Balkans**? See Map 79.

[Question 80](#). What made the Slavic mother language split into **three daughter languages**? See Map 80.

Question 71. How many million Slavic speakers are there in the various countries of Eastern Europe?



Map 71. The numbers of Slavic speakers. The figures refer to millions. The Slavic languages represented in the map are: Russian (160), Belorussian (7), Ukrainian (37); Polish (40), Czech (12), Slovak (6); Slovene (2), Serbo-Croatian (20), Macedonian (2), and Bulgarian (9). The total number of the speakers of the Slavic languages is about 294 millions; the approximate numbers of the eastern, western and southern Slavic speakers are respectively 204, 58 and 32 millions. The light green area is that of the Balts.

An addition to question 71. What are the most essential periods and cultures of the early history of the Slavs? See Diagram I.

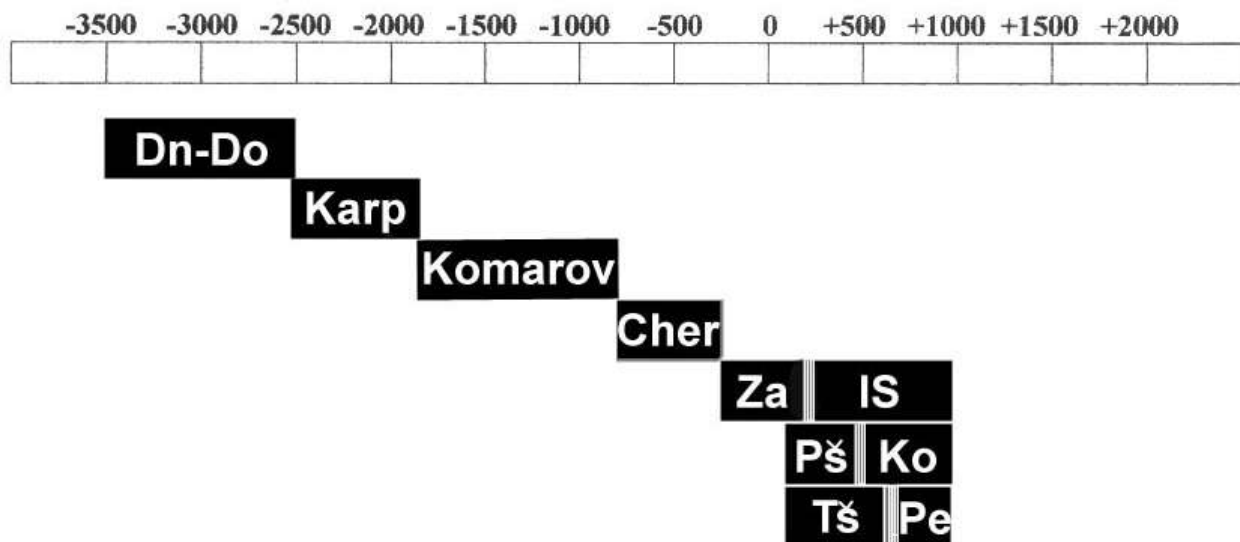
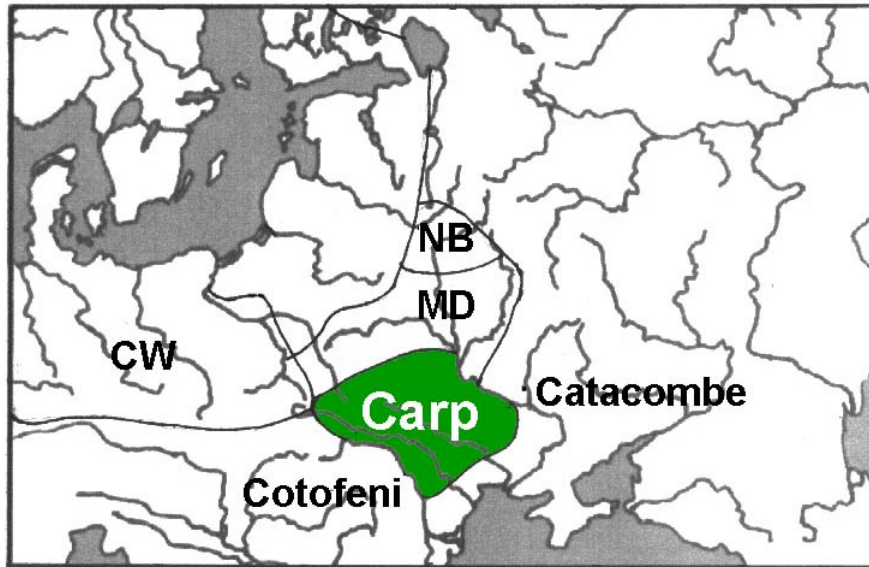


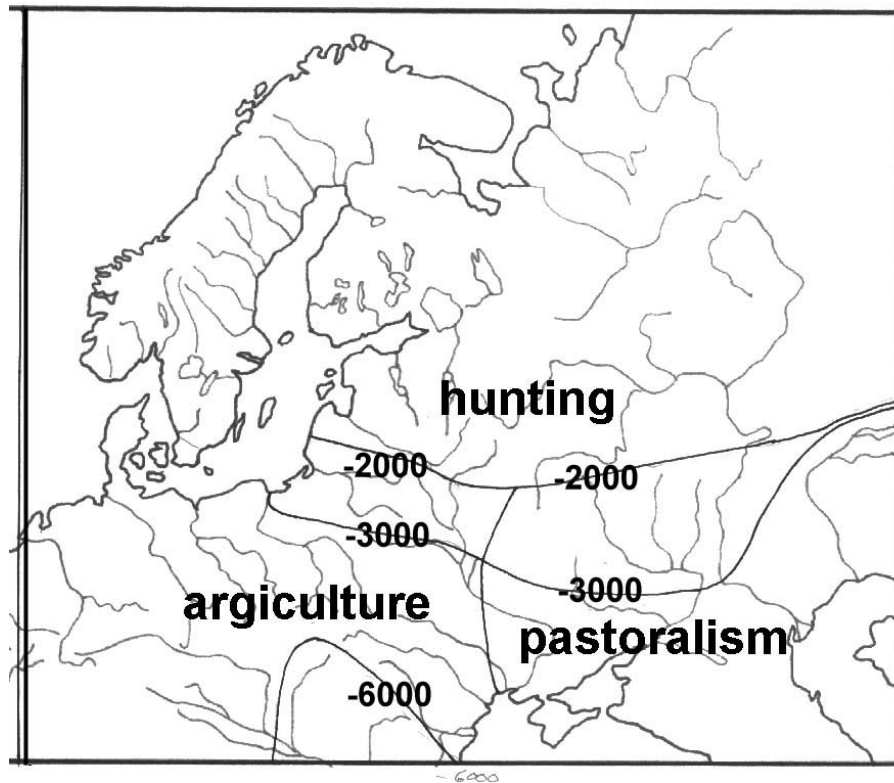
Diagram I. The periods of the Slavs. The history of the Slavs is here divided into six consecutive periods: (1) Dn-Do = the Dnepr-Donets culture; (2) Karp = the Carpathian culture; (3) Komarov = the Komarovian culture; (4) Cher = the Chernoles culture; (5) Za = the Zarubintsy (Zarubинets) culture, Pš = the Pševorsk (Przeworsk) culture and Tš = the Chernyakhovian culture; (6) IS = the cultures of the Eastern Slavs (Tušemja-Bancerovšina, Mošim, long barrows and *sopkis*); Ko = the Korchak type of Prague Pottery; Pe = the Pen'kovka type of Prague Pottery.

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Question 72. Where was the more or less uniform Slavic language spoken in the early history of the Slavs? See maps 72a, 72b, 72c, 72d, and 72e.



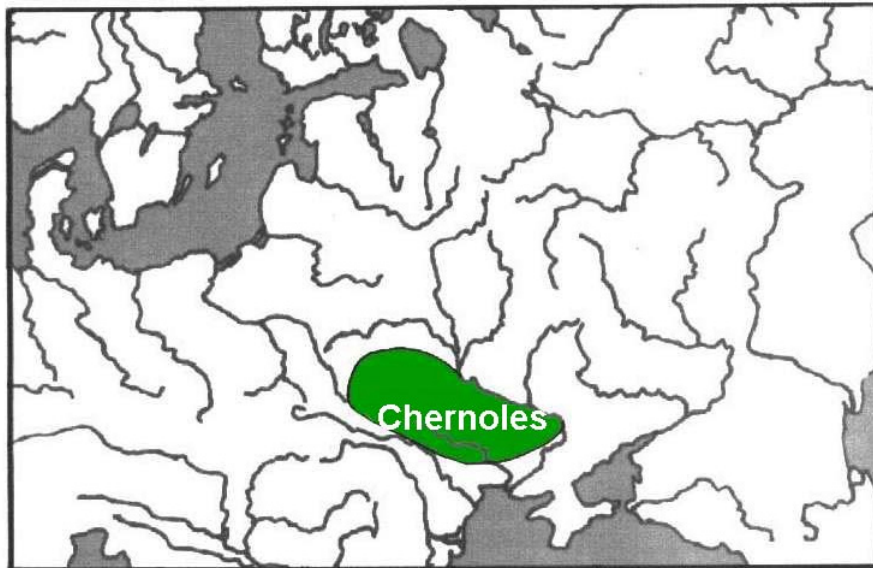
Map 72a. The Slavs in the Corded Ware period. The most probable area of the early Slavs of the Corded Ware period was the area of the Carpathian culture and the agricultural regions to the east of this culture (Carp). The Slavs were surrounded by Central European Corded Ware (CW) in the west, by the Baltic Battle Axe cultures of Middle Dnepr (MD) and Northern Belarus (NB) in the north, by the Iranian pastoral (nomad) culture of Catacombe in the east, and by the agricultural Cotofeni culture in the south. The map is a simplification of the map in Dolukhanov 1996, p. 83.



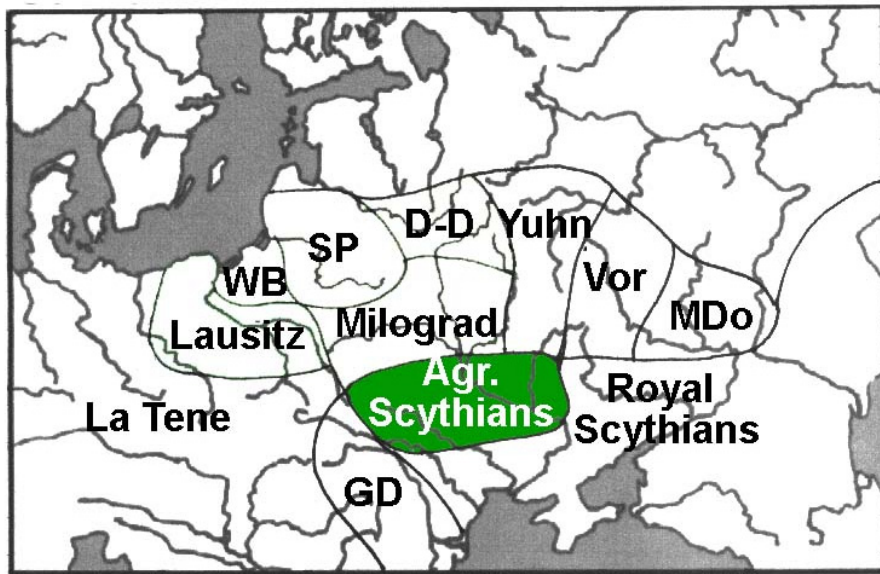
Map 72b. Agriculture, pastoralism, and hunting in Eastern Europe in 6000-2000 bc. The map is based mainly on Dolukhanov 1996. Agriculture arrived in the area of present Romania in about 6000 bc. It arrived in the Middle Dnepr area in about 3000 bc and in the Upper Dnepr area in about 2000 bc. Pastoralism spread to the Middle Don area in about 3000 bc and to the Upper Don and Upper Oka area in about 2000 bc. The boundary between the food producers (farmers and pastoralists) and food appropriators was soon followed by the language boundary between the IE languages (Slavic and Baltic languages in the west and Iranian languages in the east) and the FU languages.



Map 72c. The Slavs in the early Bronze Age. The language of the Komarov culture was Slavic; the language of the Trzciniec culture was perhaps Balto-Slavic or Vendic/Venetic. The areas of the map are based on Mallory 1989, p. 80.



Map 72d. The Slavs in the late Bronze Age. The Chernoles culture of 750-200 bc corresponds to large extent to that of the agricultural Scythians of Herodotos. According to Mallory (1989: 81), the Chernoles culture could have belonged to the 'Iron Age Slavs'. The area represents also a concentration of old Slavic river names.



Map 72e. The Slavs in the Early Iron Age. The green area = the Agricultural Scythians (whose language was Slavic). Other areas: the Royal Scythians (whose language was Iranian), GD = Getean-Dacia, Milograd culture, La Tene culture, Lausitzian culture, WB = Western Balticum, SP = Scratched Pottery, D-D = Dnepr-Dvina culture, Yuhn = Yuhново culture, Vor = Voronezh culture, MDo = Middle-Don culture. The green area consisted of several Slavic-speaking agricultural cultures; these were from the west to the east West Podilia, East Podilia, Sula, Kiev, Vorksla, and North Donets; Dolukhanov 1996: 135.

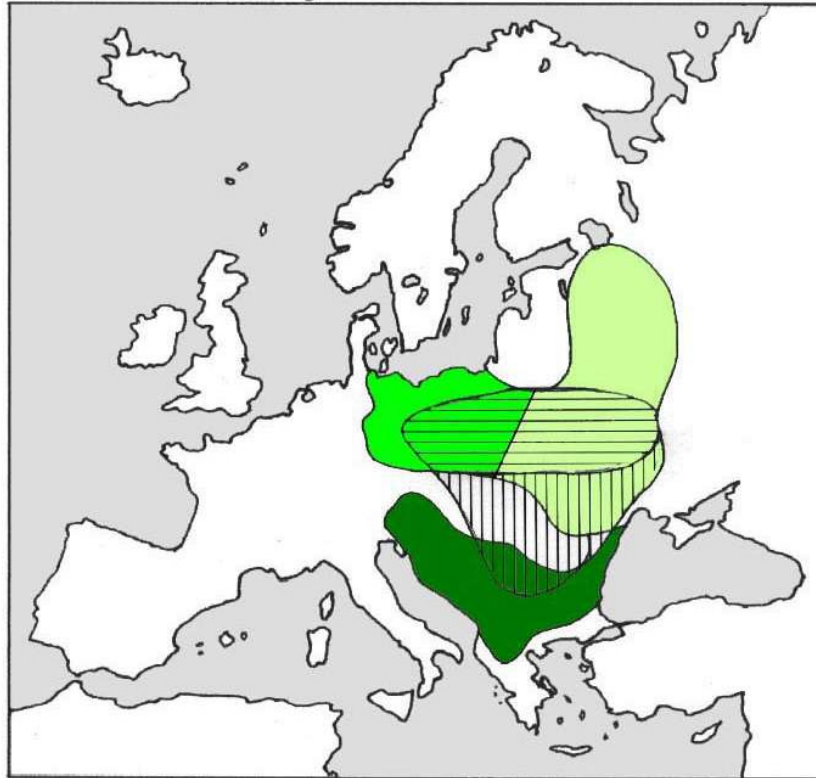
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Question 73. Where did the Slavic language spit first into two and later into three separate dialects? About when and within what cultures did the split-ups take place? See Maps 73a and 73b.

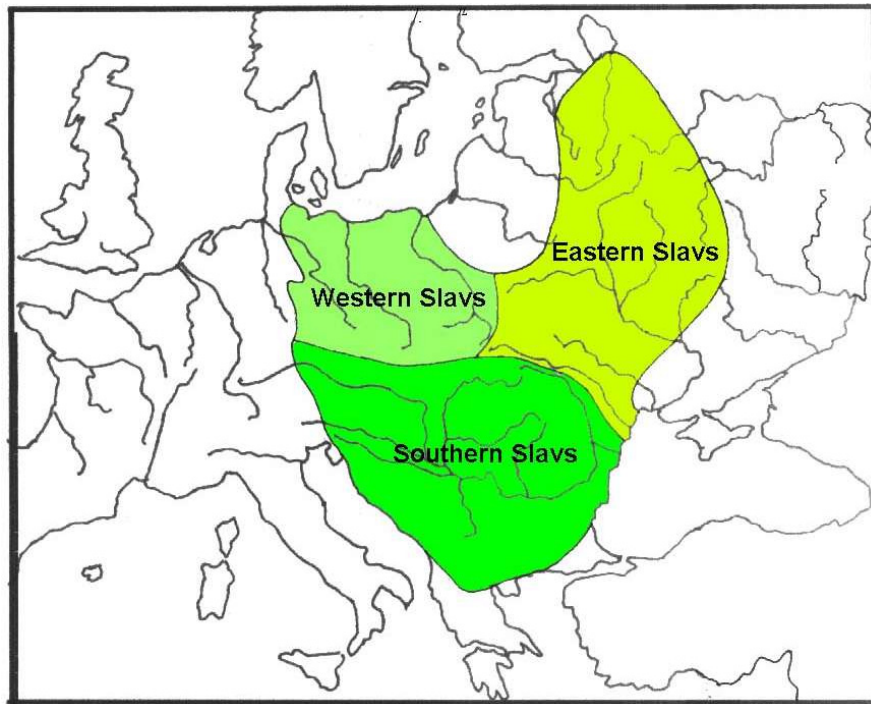


Map 73a. Split of the Slavic territory in two during the last centuries bc. The core area of the agricultural Scythians (the darkest green area) expanded to the north of the Pripet river and resulted in the emergence of the Zarubintsy (Zarubinets) culture. This culture expanded to the south giving rise to the Chernyakhovo (Tšernjahov) culture. The map is based on the maps of Tretyakov as given in Patrushov 2000.

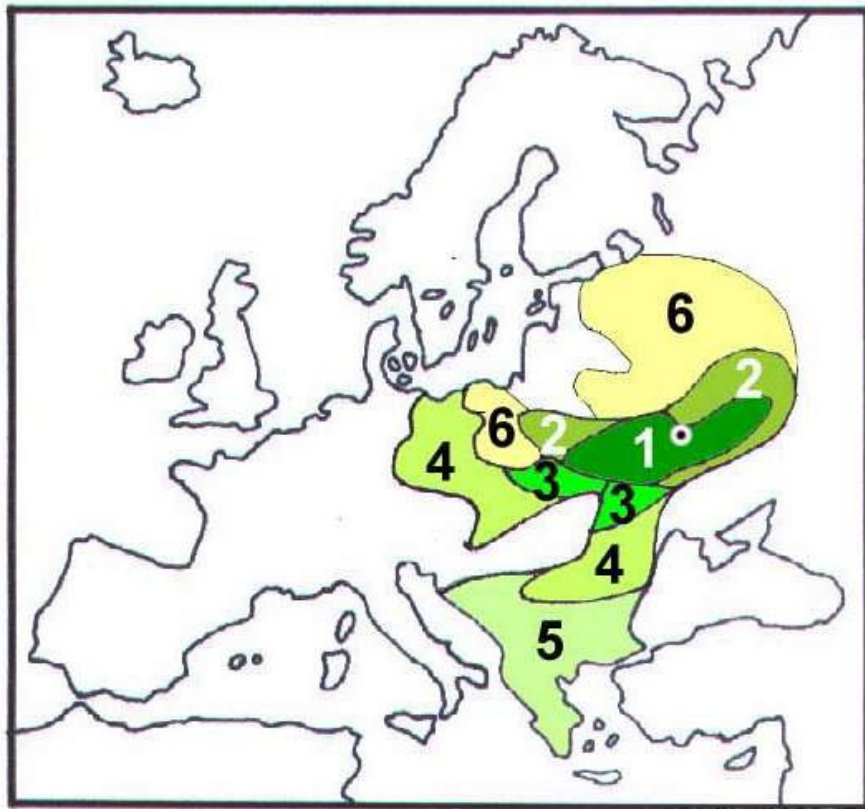
Question 74. Where were the Slavic languages spoken a thousand years ago? See Maps 74a, 74b, and 74c.



Map 74a. The Slavic languages about 1000 ad. The approximate areas of the three Slavic languages/dialects about a thousand years ago; cf. the green areas. Hatching refers to the approximate areas of the preceding Zarubintsy (horizontal) and Chernyakhov (vertical) cultures.



Map 74b. The Slavic areas in the 9th century ad. The boundaries of the areas of the three Slavic groups coincide almost completely with the boundaries between three water systems: those of the Baltic Sea (the Elbe-Odra-Vistula region), the Dnepr (the Bug and Dnestr included), and the Danube.



Map 74c. Broadening of the Slavic areas in six phases from 300 ad to 1000 ad.

(1) In 300 ad, the core area of the Slavs was in the Middle Dnepr; its centre was in Kiev (the circle in the map).

(2-3) In 300-500 ad, the Slavic area was broadened by about 100-200 kilometres to the west, east, and south.

(4) In 500-600 ad, the broadening continued in the western and southern directions.

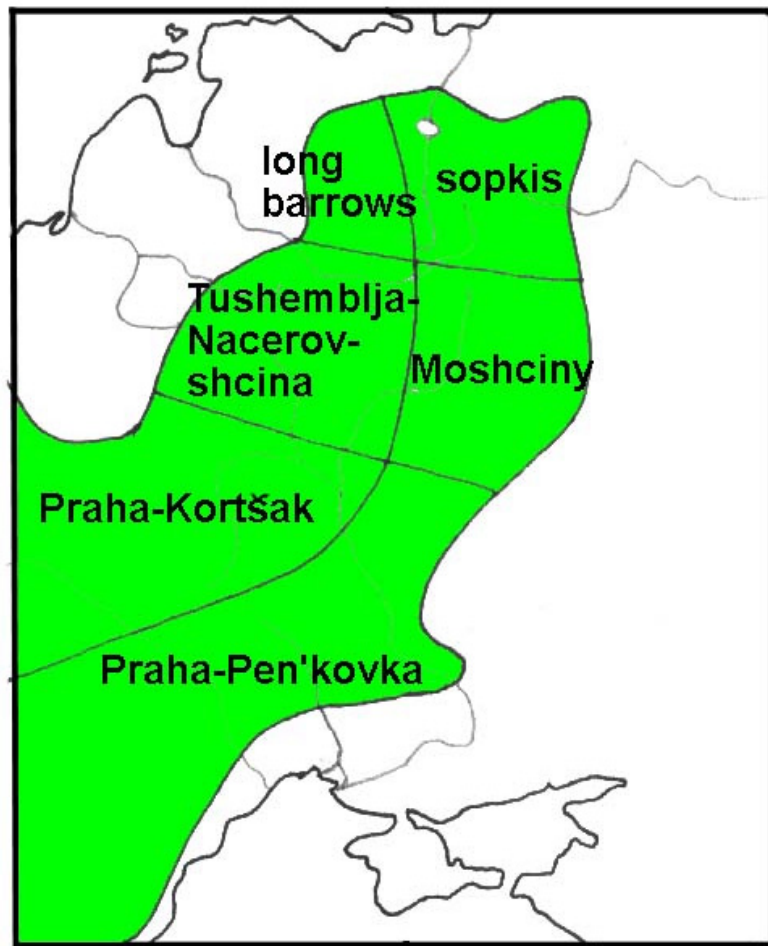
(5) In 580-660 ad, the Slavs arrived in the Balkans.

(6) Before 1000 ad, the Slavic area spread to the Polish area and to many Russian areas.

Source: Philip's *Atlas of World History* 1999: 70-71 (O'Brien 1999).

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Question 75. What were the six most important cultural areas of the Slavs about fifteen hundred years ago?



Map 75. The six cultural groups of the Slavs about 500-800 ad. Dolukhanov 1996, p. 161.

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Question 76. What are the old tribes of the Eastern Slavs?



Map 76. The Eastern Slavs about 850 ad. The total area of the Eastern Slavs extended from the Black Sea to the Ladoga and Gulf of Finland. The Eastern Slavs consisted of fifteen tribes. The map is based on the map in Pilipenko-Kasjanov 1997, p. 254.

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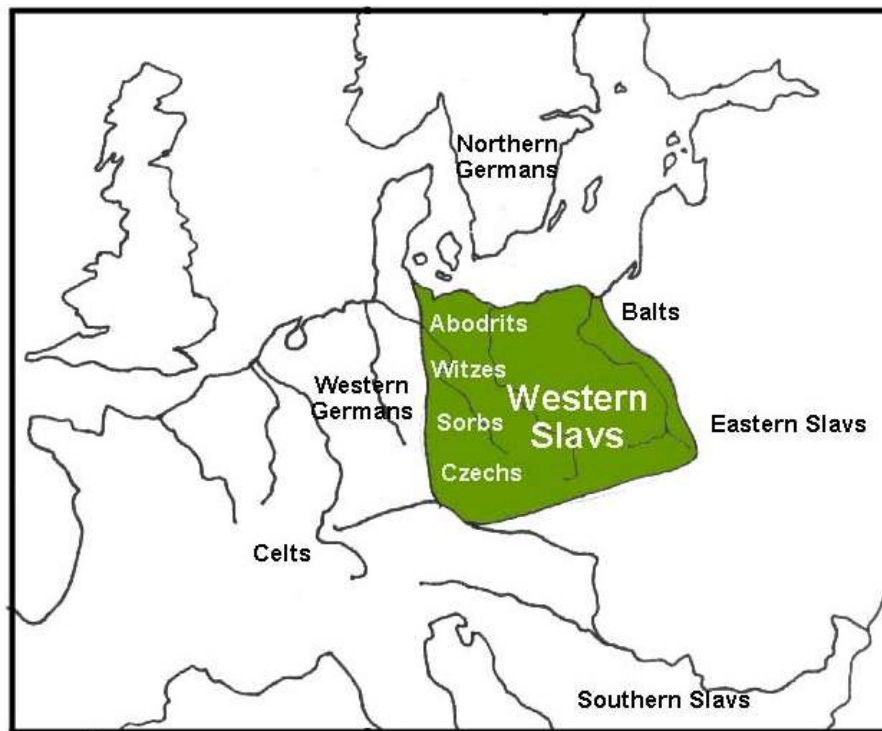
Question 77. What are the main linguistic boundaries in the Eastern Slavic territory?
What is the main direction of the boundaries?



Map 77. The language and dialect boundaries of the Eastern Slavic territory. The most essential linguistic boundaries are horizontal, and they probably reflect the strength of the Finno-Ugric substratum: the substratum is stronger and younger in the north and weaker and older in the south. The areas of the three independent languages are marked with different shades of green.

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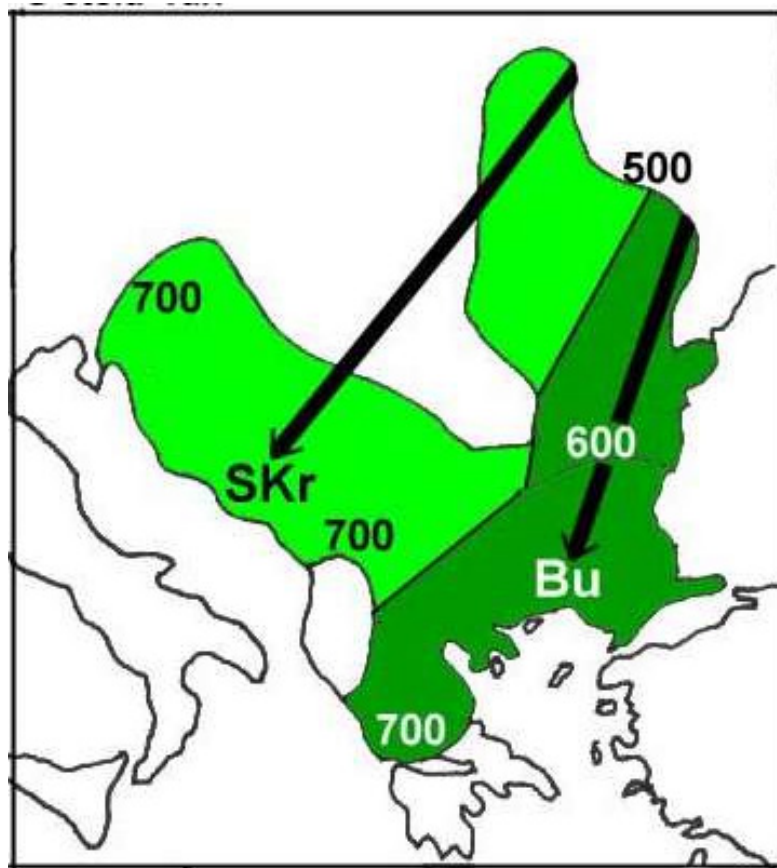
Question 78. How far to the west did the Western Slavic areas expand about twelve hundred years ago?



Map 78. The Western Slavs in 800-900 ad. Towards the end of the millennium, the areas of the Western Slavs reached Hamburg, Magdeburg, Erfurt, Hallstadt, and the Danube.

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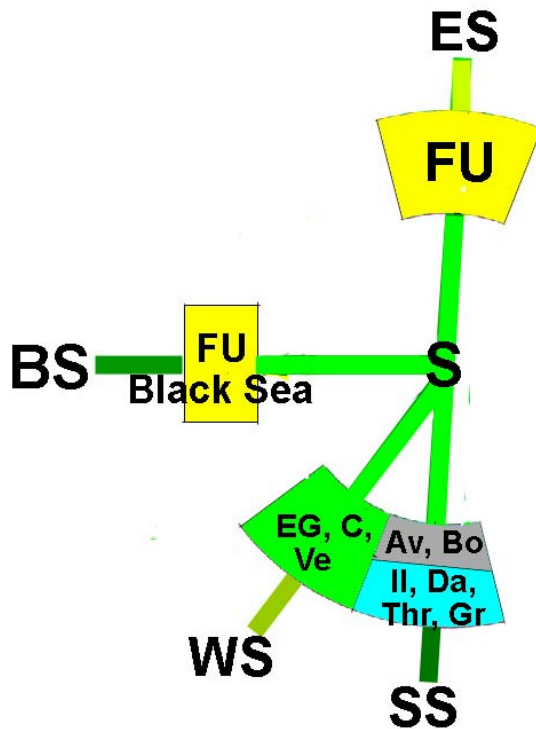
Question 79. When did the Slavs, their culture and language come to the Balkans?



Map 79. The expansion of the Southern Slavs in 500-700 ad. The Slavs arriving in the Balkans represented two main types: (a) the western type (the light green in the map) had been in close contact with the Avars and they developed into the Serbo-Croats (SKr), and (b) the eastern type (dark green in the map) had been in close contact with the Bulgars and they developed into the Bulgars (Bu) of Bulgaria. The map is based on Váňa 1983, p. 40, and O'Brien 1999, p. 70.

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Question 80. What made the Slavic mother language split into three daughter languages?



Map 80. A family tree with filters visualising the emergence of the Slavic languages. The Baltic-Slavic (BS) language was used as *lingua franca* by the native speakers of the Finno-Ugric language of the Black Sea basin (FU Black Sea). The Baltic-Slavic language acquired a Finno-Ugric substratum ('it went through a Finno-Ugric filter'), and it became Slavic (S). The Slavic language experienced three different developments: (1) It was used as *lingua franca* by the native speakers of the Finno-Ugric languages (FU) of Eastern Europe, and it acquired a Finno-Ugric substratum ('it went through a Finno-Ugric filter'), and the result was the East Slavic dialect/language (ES); (2) it used as *lingua franca* by people speaking an East Germanic (EG), Celtic (C) and Vendic/Venetic (Ve) language in Central Europe, and the result was the West Slavic dialect/language (WS); and (3) it was used as *lingua franca* by a number of people speaking different languages in the Balkans (e.g. Avar (Av), Bolgar (Bo), Illyrian (Il), Dacian (Da), Thracian (Thr), and Greek (Gr)), and the result was the South Slavic dialect/language (SS).

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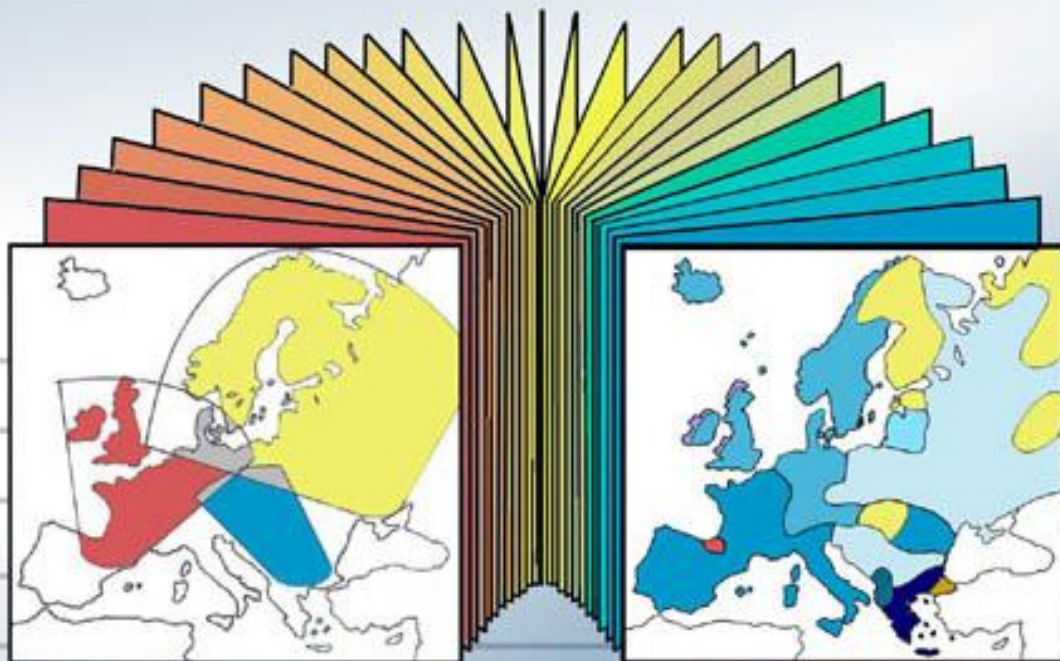
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Kalevi Wiik

A NEW ATLAS

**on the Origins
and Early History
of the Europeans**

**Section V
Celtic, Italic, Albanian, and Greek
Peoples and Languages**



April 2003

"A NEW ATLAS on the Origins and Early History of the Europeans" consists of seven Sections:

Section I: General Questions

Section II: Germanic Peoples and Languages

Section III: Baltic Peoples and Languages

Section IV: Slavic Peoples and Languages

Section V: Celtic, Italic, Albanian, and Greek Peoples and Languages

Section VI: Finno-Ugric Peoples and Languages

Section VII: Other (Basque, Iranian, Turkish, Mongolian, Arabic, Jewish, and Roma)
Peoples and Languages

The present section is **Section V**. It consists of eight questions or groups of questions; these continue the numbering in Section IV and are numbered from 81 to 88. The answers are given as maps following the list of questions.

Click the question to get to the answer (the relevant map and its legend). Click **BACK** to get to the questions.

Questions about the Celtic peoples and languages

[Question 81](#). What was the area of the **Bell Beaker culture**? See Map 81.

[Question 82](#). What were the **Celtic cultures** in Central Europe? What were their areas and what was the core area of these cultures? See Maps 82a and 82b.
An addition to question 82: What are the time depths of the Celtic cultures? See Diagram III.

[Question 83](#). What was the beginning of the **Celtic language in Central Europe** (according to the view of the present writer)? See Map 83.

[Question 84](#). How far did the **Celtic substratum** spread? See Map 84.

Questions about the Italic peoples and languages

[Question 85](#). What are the **languages/dialects in Italy**? See Map 85.

[Question 86](#). What was the expansion of the **Roman Empire** and Latin *lingua franca*? See Maps 86a and 86b.

[Question 87](#). How did the **Romance languages** emerge? See Map 87.

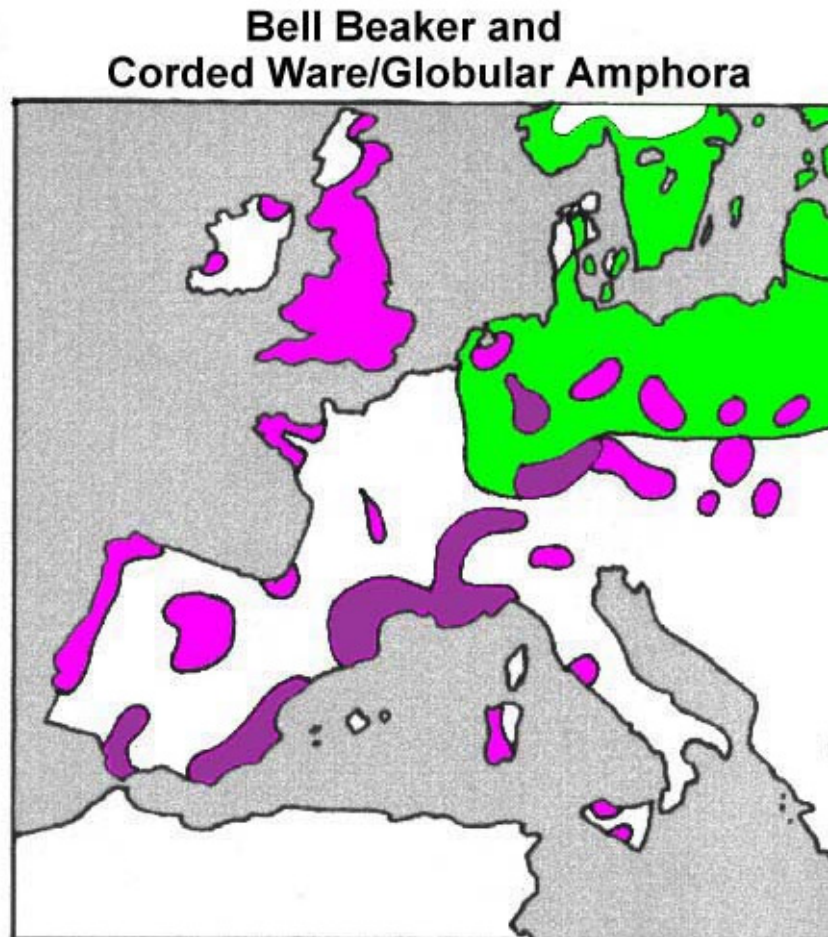
[Question 88](#). How did the **Italic languages** emerge and what are the main groups of these languages? See Map 88.

Questions about the Albanian and Greek peoples and languages

[Question 89](#). What is the historical relationship between the Illyrians and the Albanians?

[Question 90](#). Where did the Greeks have their colonies?

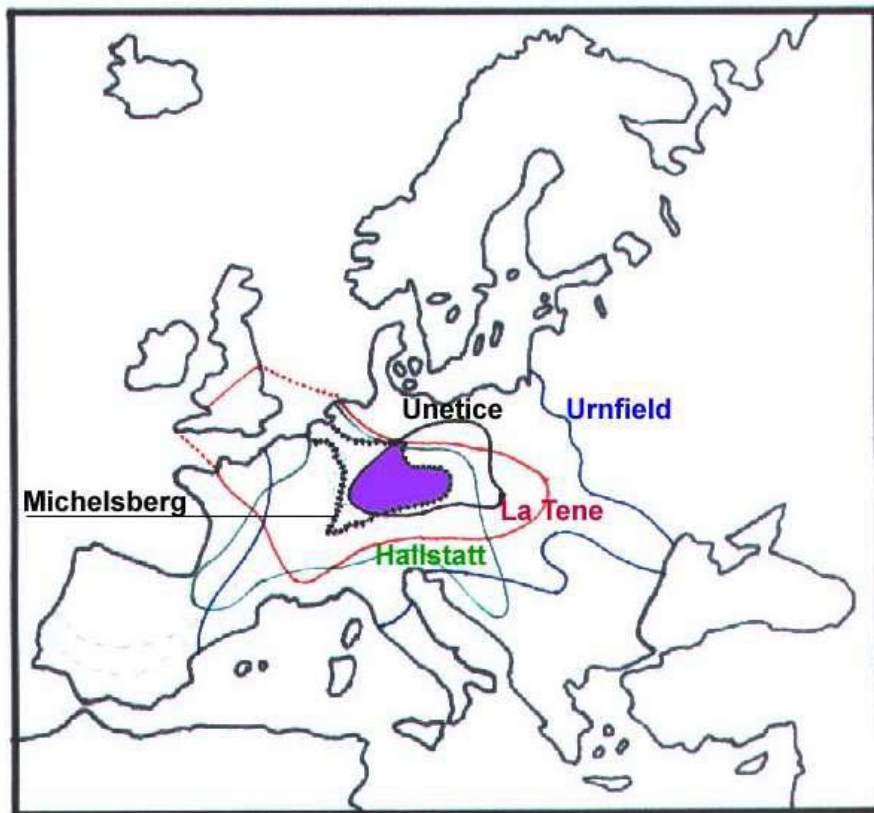
Question 81. What was the area of the Bell Beaker culture?



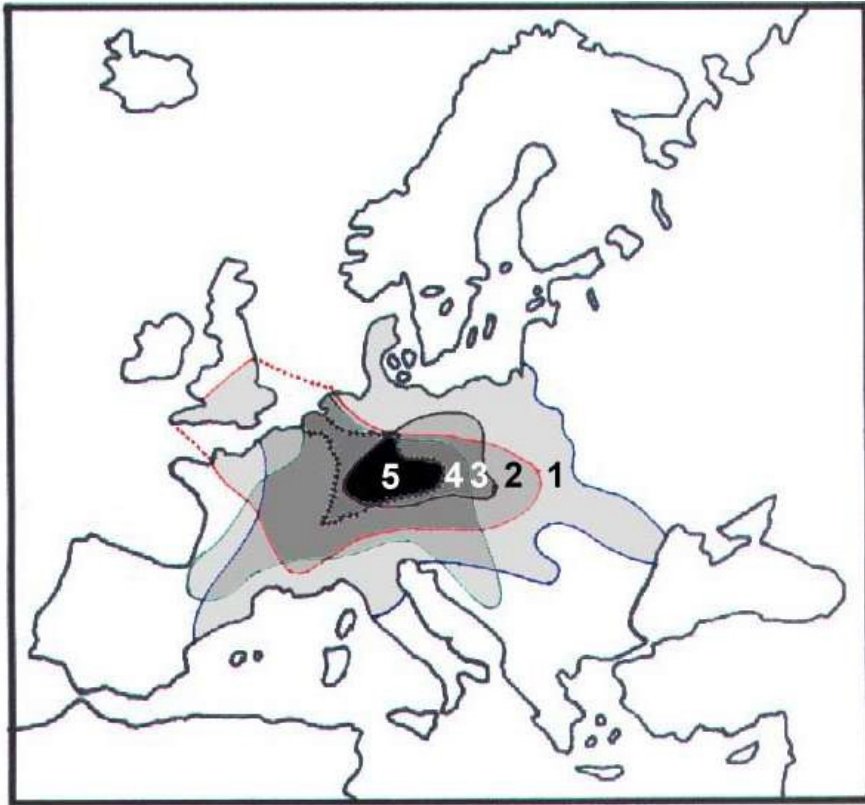
Map 81. Two related European cultures of the third millennium bc: Bell Beaker and Corded Ware/Globular Amphora. Violet = Bell Beaker and green = Corded Ware. The darker violet areas represent the assumed Celtic dialect/language chain reaching from Central Europe to the Iberian peninsula. The lighter violet areas represent the periphery of the Celtic *lingua franca*, where the *lingua franca* either displaced the local original languages or at least gave them Celtic superstratum.

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Question 82. What were the Celtic cultures in Central Europe? What were their areas and what was the core area of these cultures? See Maps 82a and 82b.

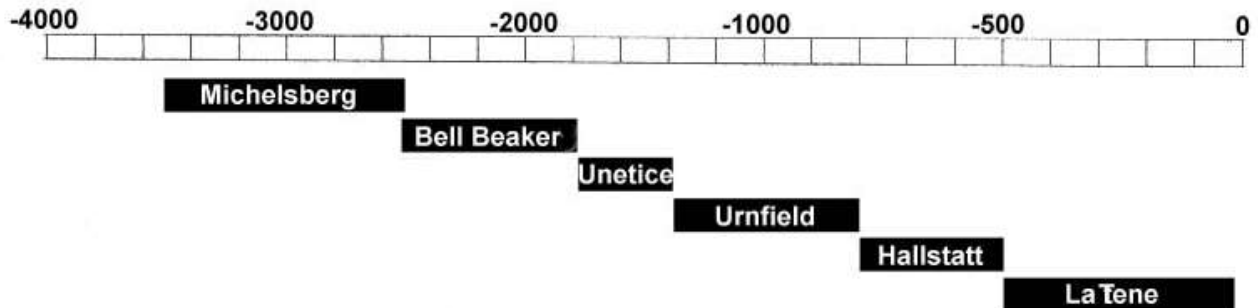


Map 82a. The areas of five Celtic cultures. The boundaries and names of the cultures are marked with different colours and, in addition, the boundaries of the Michelsberg culture area is marked with a broken line. All the cultures are here assumed to be Celtic. The common area of the five cultures is marked violet. The boundaries are based on Schutz 1983 and (in respect to those of the Michelsberg culture) on Gimbutas 1991.



Map 82b. The common areas of five Celtic cultures. The figures 5 through 1 and darkness show how many of the five cultures was represented in various parts of Europe. Central Europe is like a dartboard whose centre represent the Celtic core area.

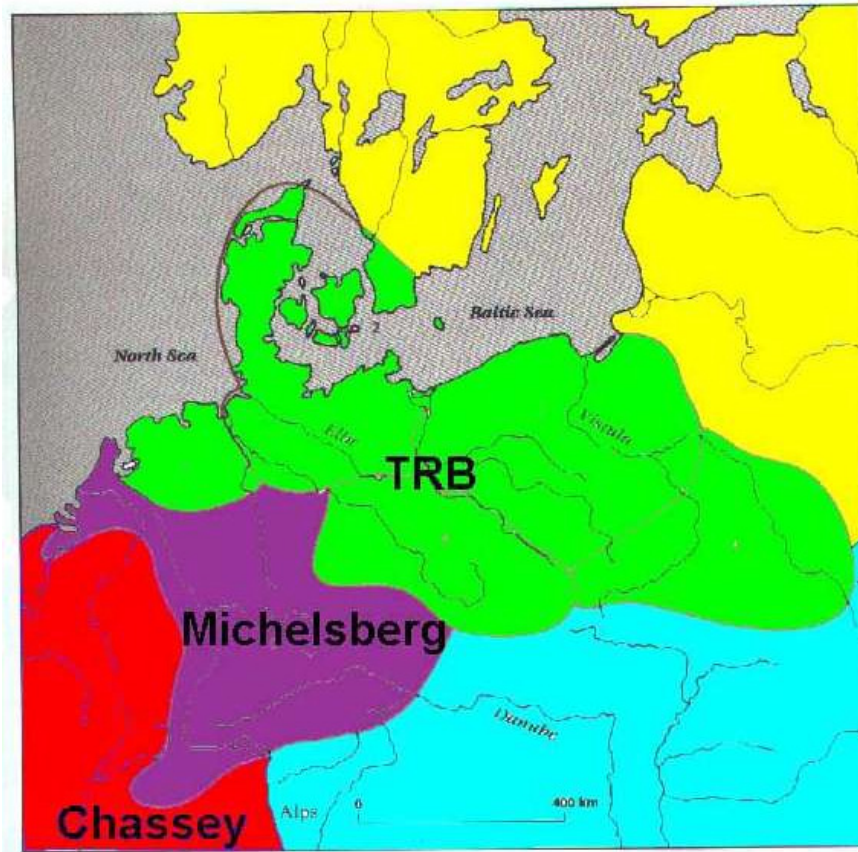
An addition to question 82: What are the timedepths of the Celtic cultures? See Diagram III.



⌘ **Diagram III.** The timedepths of six potential Celtic cultures.

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Question 83. What was the beginning of the Celtic language in Central Europe (according to the view of the present writer)?



Map 83. The Michelsberg culture and its neighbours. The mixing of colours in the map symbolize the 'mixture' of three groups of languages, Indo-European (blue), Finno-Ugric (yellow), and Basque (red). The mixtures are as follows:
 blue + yellow > green (= the GBS language of the TRB culture);
 blue + red > violet (= the Celtic language of the Michelsberg culture).
 The areas (not the colours) are based on the map in Gimbutas 1991, p. 127.

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Question 84. How far did the Celtic substratum spread?



Map 84. The areas of Celtic substratum. In the violet areas, (a) at one time Celtic languages were spoken, (b) the Celts learned another language and (when communicating with other people) used it as *lingua franca*, and (c) the *lingua franca* in question displaced (in most cases) the Celtic language. The areas are based on Kidd 1980 (according to Cavalli-Sforza 1994: 262).

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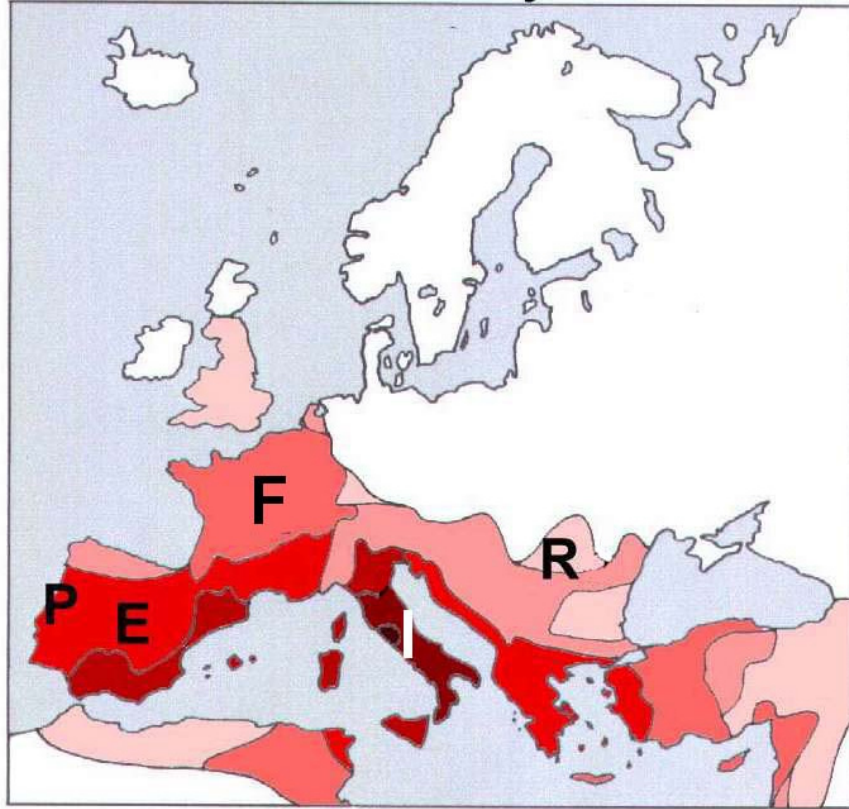
Question 85. What are the languages/dialects in Italy?



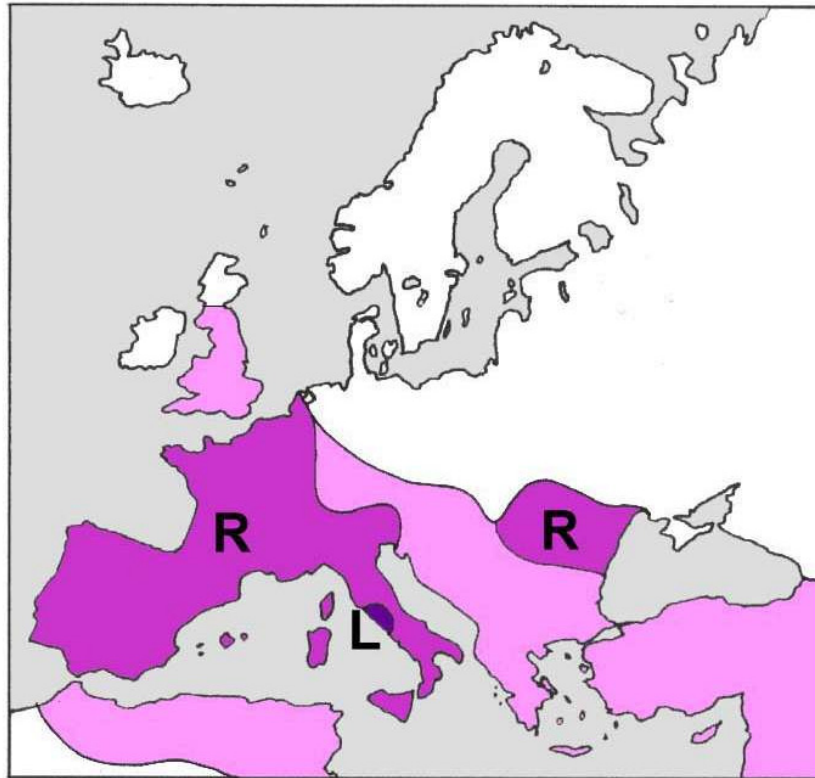
Map 85. The linguistic situation in Italy and its neighbouring areas after indo-europeanization. The map is based on Anghava 1998, p. 72.

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Question 86. What was the expansion of the Roman Empire and Latin *lingua franca*? See Maps 86a and 86b.



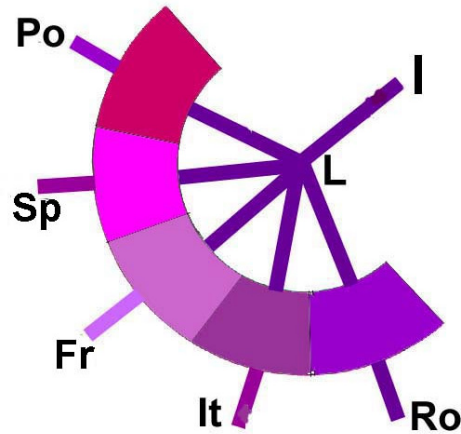
Map 86a. Six phases of the expansion of the Roman Empire. The areas (from dark to light) represent the following years: 264 bc, 201 bc, 133 bc, 44 bc, 14 ad, and 117 ad. The darkest area = the province of Latium. The Romance languages based on the Latin *lingua franca*: P = Portuguese, E = Spanish, F = French, I = Italian, and R = Romanian.



Map 86b. The Latin *lingua franca*. The map shows three different linguistic zones of the Latin *lingua franca*: (a) the core area L of the *lingua franca* (the darkest area in the map), (b) the inner zone of the periphery or the areas where the *lingua franca* became the natural language of the local people (R and dark violet in the map), and (c) the outer zone of the periphery or the area where Latin exerted strong superstratic influence but did not displace the local languages (the lightest shade of violet in the map). The white areas of the map = the areas that did not belong to the Roman Empire (but which, nevertheless, may have obtained superstratic influence from Latin).

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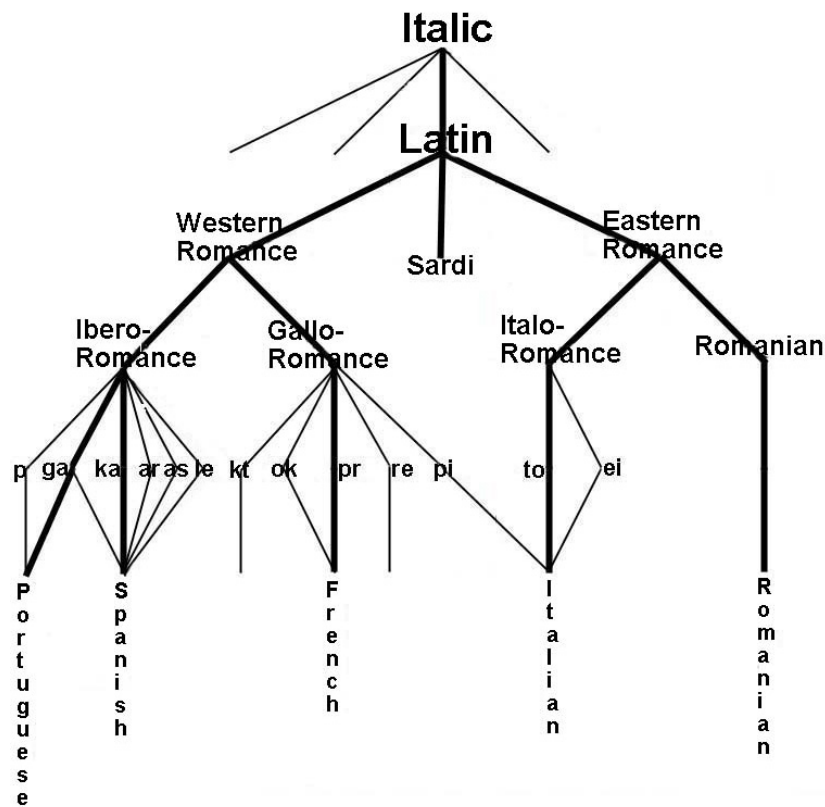
Question 87. How did the Romance languages emerge?



Map 87. A family tree with filters illustrating the emergence of the Romance languages. Latin (L) which was a dialect of the Italic language (I) obtained different substrata in the areas of different native languages and developed into modern Portuguese (Po), Spanish (Sp), French (Fr), Italian (It), and Romanian (Ro).

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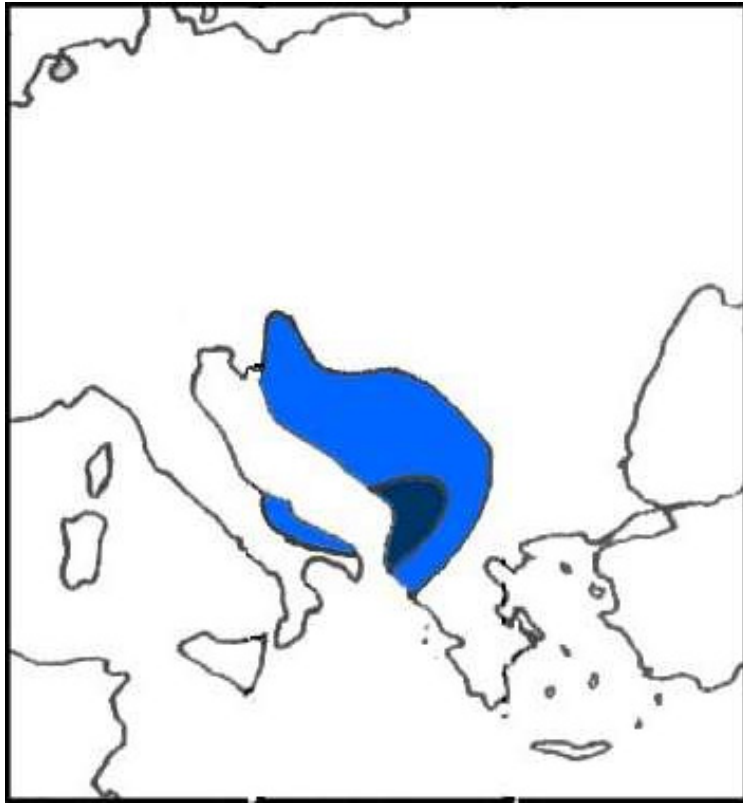
Question 88. How did the Italic languages emerge and what are the main groups of these languages?



Map 88. The Italic languages. The thicker lines represent the elite languages/dialects that were used as *linga francas*. Letter symbols used: p = Portuguese, ga = Galician, ka = Kastilian, ar = Aragonian, as = Asturian, le = Leon, kt = Catalanian, ok = Ocsitanian, pr = Provencal, re = Rhaeto-Romance, pi = North Italian, To = Toscana, ans ei = South Italian.

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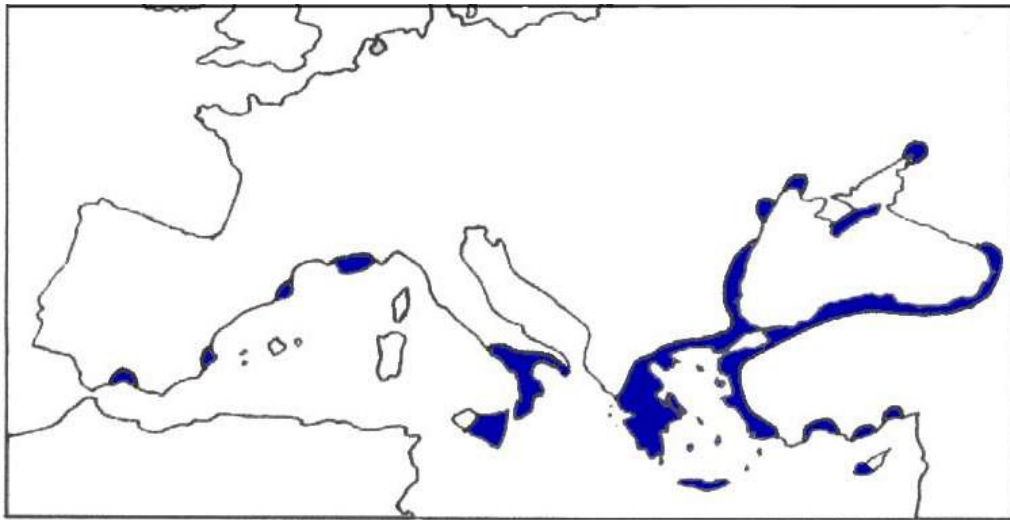
Question 89. What is the historical relationship between the Illyrians and the Albanians?



Map 89. The area of the Illyrians in 1000 bc and present Albania (dark blue). The area of the Illyrians is based on the map in Kilian 1988, Fig. 2. According to the assumption visualized in the map, the Illyrian area was reduced to that of the Albanian-speaking area. The Albanian language is used also in the areas east of present Albania.

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Question 90. Where did the Greeks have their colonies?



Map 90. The world of the Greeks.

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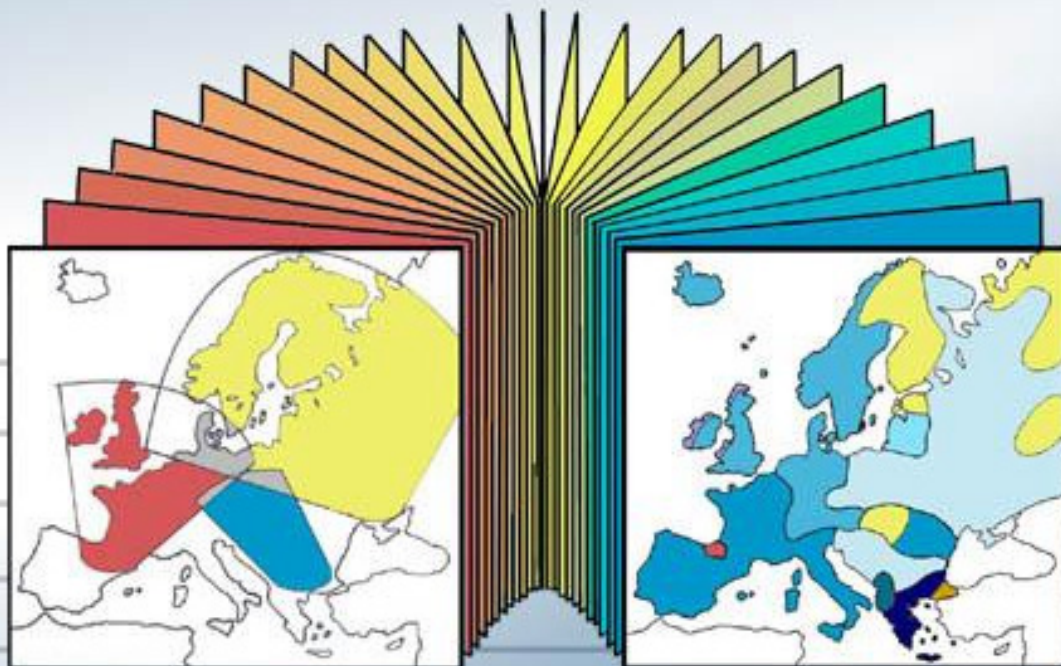
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Kalevi Wiik

A NEW ATLAS

**on the Origins
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Section VI Finno-Ugric Peoples and Languages



April 2003

"A NEW ATLAS on the Origins and Early History of the Europeans" consists of seven Sections:

Section I: General Questions

Section II: Germanic Peoples and Languages

Section III: Baltic Peoples and Languages

Section IV: Slavic Peoples and Languages

Section V: Celtic, Italic, Albanian, and Greek Peoples and Languages

Section VI: Finno-Ugric Peoples and Languages

Section VII: Other (Basque, Iranian, Turkish, Mongolian, Arabic, Jewish, and Roma)
Peoples and Languages

The section in hand is Section VI. It consists of thirty-two questions or groups of questions; these continue the numbering in Section VI and are numbered from 91 to 124. The answers are given as maps and their verbal explanations.

Click the question to get to the relevant answer (a map and its legend). Click **BACK** to get back to the beginning of the list of questions.

Questions about the Finno-Ugric (Uralic) peoples and languages

[Question 91](#). What are the main groups of the Finno-Ugric (traditional Uralic) languages defined by the geographic distribution of the **native words**? See Map 91 and its Appendix.

[Question 92](#). From where did Finnish obtain its **loanwords**? See Map 92.

[Question 93](#). Do the people speaking Finno-Ugric languages form a **homogeneous anthropological/genetic** group? See Map 93 and its Appendices A and B.

[Question 94](#). **Where** are the Finno-Ugric (traditionally Uralic) languages spoken? See Map 94.

[Question 95](#). Where is the **traditional home land** of the Finno-Ugrians or Uralians? See Map 95.

[Question 96](#). Where did the Finnic people 'come from' according to the **traditional view**. See Map 96.

[Question 97](#). Where was the **Ukrainian refugium** and its spreading area during the LGM? Are all the present populations speaking Finno-Ugric languages originally from the Ukrainian refugium? See Map 97 and its Appendix.

[Question 98](#). What did the Finno-Ugric world look like in **7000 bc**? See Map 98.

[Question 99](#). What did the Finno-Ugric world look like in **4000 bc**? See Map 99.

[Question 100](#). What did the Finno-Ugric world look like in **3000 bc**? See Map 100.

[Question 101](#). What did the eastern Finno-Ugric world look like in **3000-2500 bc**? See Map 101.

[Question 102](#). What did the Finno-Ugric world look like in **2500-2000 bc**? See Maps 102a and 102b.

[Question 103](#). What did the Finno-Ugric world look like in **2000 bc**? See Maps 103a and 103b.

[Question 104](#). What did the Finno-Ugric world look like in **2000-1500 bc**? See Maps 104a and 104b.

[Question 105](#). What did the Finno-Ugric world look like in **1500-500 bc**? See Maps 105a, 105b, 105c, and 105d.

[Question 106](#). What did the Finno-Ugric world look like in **500-600 bc**? See Maps 106a and 106b.

[Question 107](#). What did the Finno-Ugric world look like in **500-1 bc**? See Maps 107a and 107b.

[Question 108](#). What did the Finno-Ugric world look like in **1200 ad**? See Map 108.

[Question 109](#). How has the total area of the Finno-Ugric speaking people varied during the **last nine thousand years**? See map 109.

[Question 110](#). What are the present areas of the Finno-Ugrians of the **Volga-Kama region**? See Maps 110a and 110b.

[Question 111](#). How did the **Saami** emerge? See Maps 111a, 111b, 111c, 111d, and 111e.

[Question 112](#). What was the assumed language situation in North-western Europe at the **end of the IV millennium**? See Map 112.

[Question 113](#). What was the assumed language situation in North-western Europe **four thousand years ago**? See Map 113.

[Question 114](#). What languages and dialects were spoken in Finland in the **Pre-Roman (Celtic) Iron Age**? See Map 114.

[Question 115](#). How did the **Finnic language/dialects** emerge? See Maps 115a, 115b, 115c, and 115d.

[Question 116](#). Where has the Finnish-Saami language boundary been during the last eight hundred years? See Map 116.

[Question 117](#). Where has the Livonian-Latvian language boundary been during the last eight hundred years? See Map 117.

[Question 118](#). What were the main cultures of Eastern Europe at the **end of the Bronze Age**? See Map 118.

[Question 119](#). Where have the **Komi people** lived during the last thousand years? See Map 119.

[Question 120](#). What are the areas of the **Ob-Ugric and Samoyed peoples** of North-western Siberia? See Maps 120a, 120b, and 120c.

[Question 121](#). What are the main **vegetation zones** of North-western Siberia? See map 121.

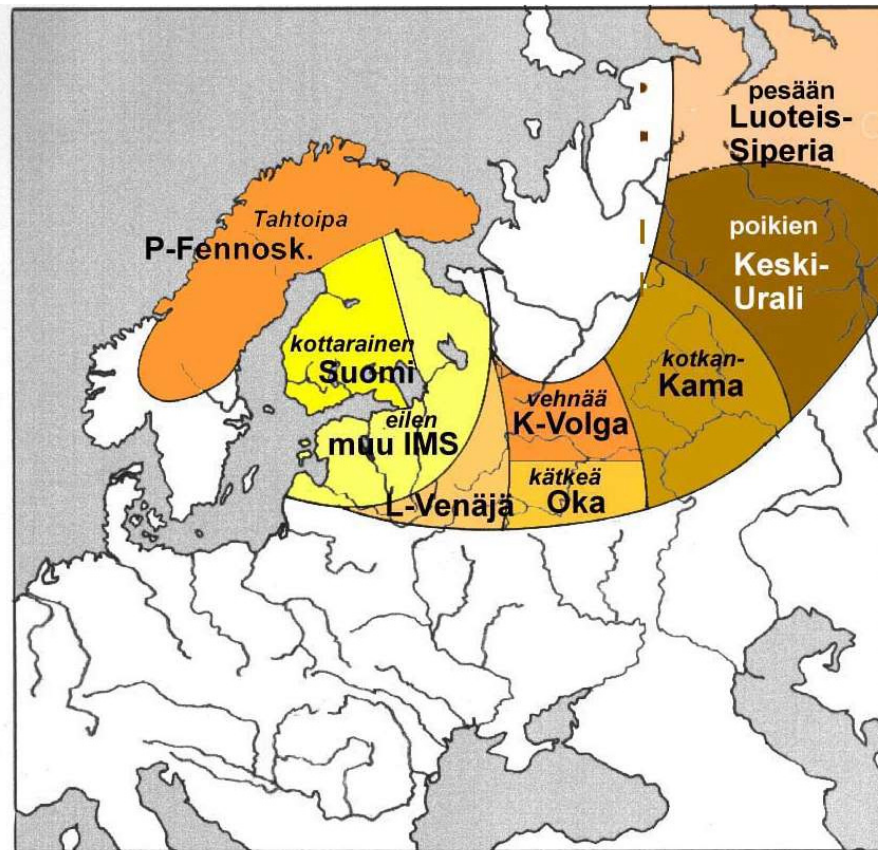
[Question 122](#). Where are the **Khanti and Mansi languages** spoken, and what are their dialects? See Map 122.

[Question 123](#). Where have the **Mansi people** lived during the last four hundred years? See Maps 123a and 123b.

[Question 124](#). Where did the **Hungarians** live before the Great Migrations? When did they come to Europe? What people did they have contacts with during their migration? See Map 124.

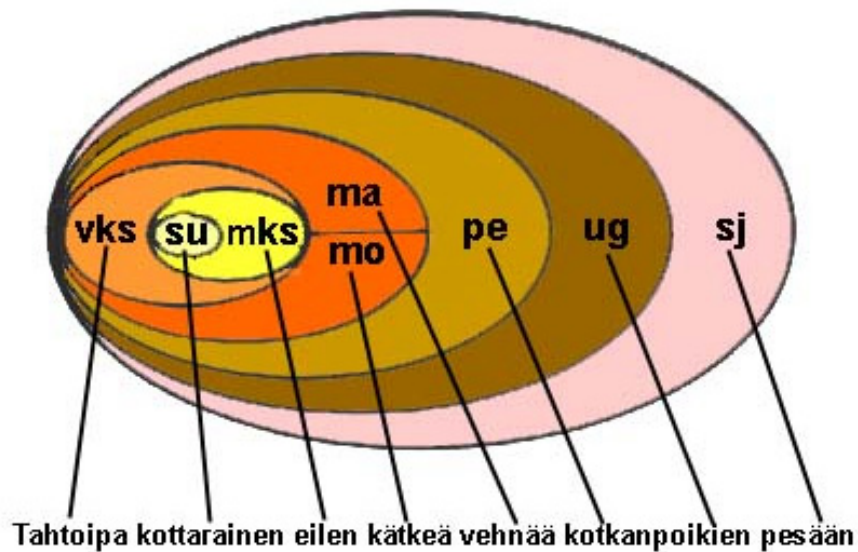
Question 91. What are the main groups of the Finno-Ugric (traditional Uralic) languages defined by the geographic distribution of the native words?

See Map 91 and its Appendix.



Map 91. Eight groups of native Finno-Ugric (Uralic) words of different geographic distributions. The map illustrates the fact that the eight words of sentence *Tahtoipa kottarainen eilen kätkeä vehnää kotkanpoikien pesään* have different geographic distributions. (Word by word translation: 'Wanted a starling yesterday to hide wheat in the eagle-fledglings' nest'.) The FU languages of Belarus and the western Ukraine have disappeared and example words representing the extinct FU languages of these areas can no more be found.

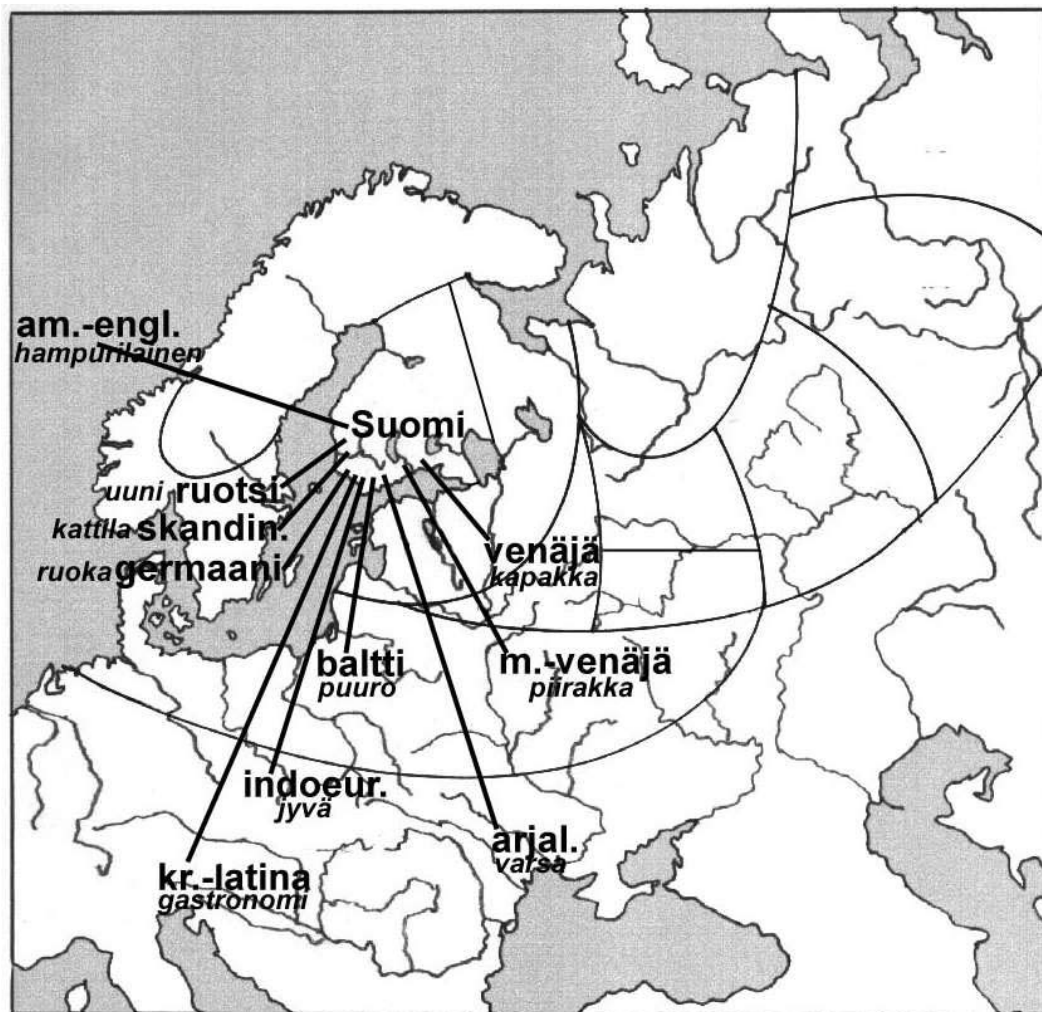
The translations of the names of the areas: *P-Fennosk.* = Northern Fennoscandia, *Suomi* = Finland, *muu IMS* = the rest of the Finnish area, *L-Venäjä* = Western Russia, *K-Volga* = Middle Volga, *Keski-Urali* = Middle Urals, *Luoteis-Siperia* = North-western Siberia.



Appendix to Map 91. An illustration of the eight groups of native words in the Finno-Ugric (Uralic) languages. The word for 'starling' (Finnish *kottarainen*) occurs only in Finnish (su); the word for 'yesterday' (Finnish *eilen*) occurs in Finnish and the other Finnic languages (mks); the word for 'want' (Finnish *tahto-*) occurs in Finnish, the other Finnic languages, and Saami (vks); the word for 'hide' (Finnish *kätke-*) occurs in addition to the three languages mentioned also in Mordvian (mo), and the word for 'wheat' (Finnish *vehnä*) occurs also in Mari (ma); the word for 'eagle' (Finnish *kotka*) occurs at least in principle in all the languages mentioned and in addition in the Permic languages (pe); the word for 'boy' (Finnish *poika*) occurs at least in principle in all the languages mentioned and in addition in the Ugric languages (ug); and the word for 'net' (Finnish *pesä*) occurs in principle in all the languages concerned, i.e. also in the Samoyed languages (sj).

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Question 92. From where did Finnish obtain its loanwords?



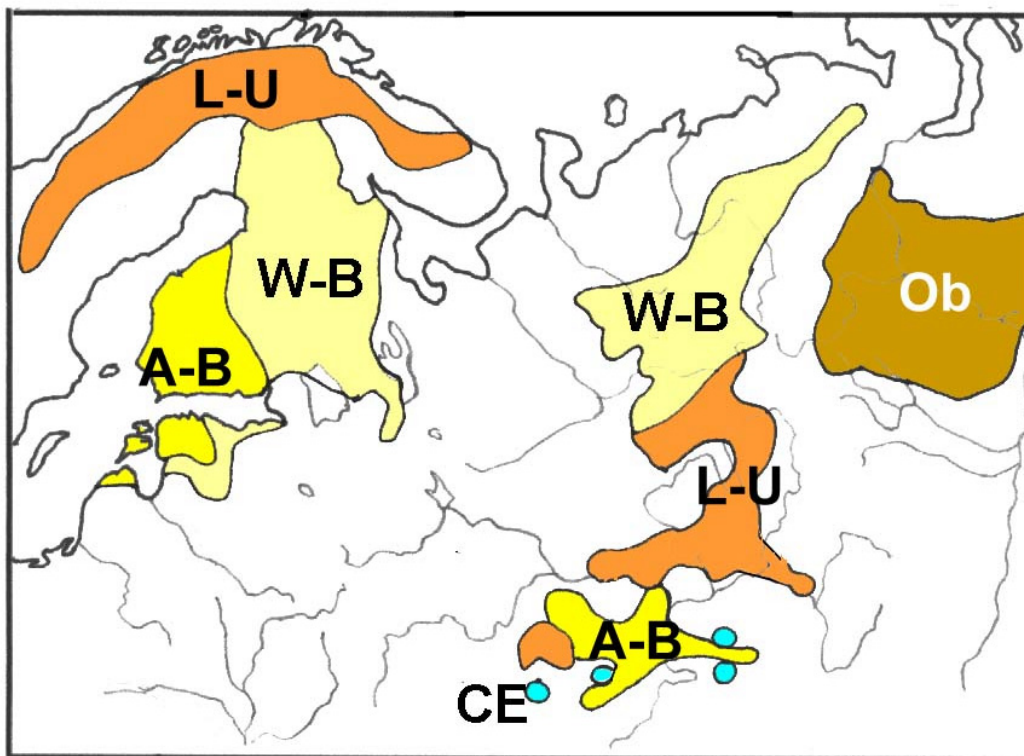
Map 92. The approximate starting areas of the Indo-European loanwords in Finnish. The relative time depths of the arrival of various groups of IE loanwords in Finnish is revealed by the order of words in the following 'food recipe': *Jyviä varsalle, puuroruokaa kattilaan, piirakka uuniin, kapakan gastronomille hampurilainen* ('Grain for the foal, porridge-food into the kettle, pasty in the oven, for the pub's gastronomist a hamburger'). The earlier a word occurs in the 'recipe' the earlier it came to the Finnish language.

Translations for the Finnish names of languages: *am. engl.* = American English, *ruotsi* = Swedish, *skandin.* = Scandinavian, *germaani* = Germanic, *baltti* = Baltic, *indoeur.* = Indo-European, *kr.-latina* = Greek and Latin, *Arjal.* = Aryan, *m.-venäjä* = Old Russian, *venäjä* = Russian.

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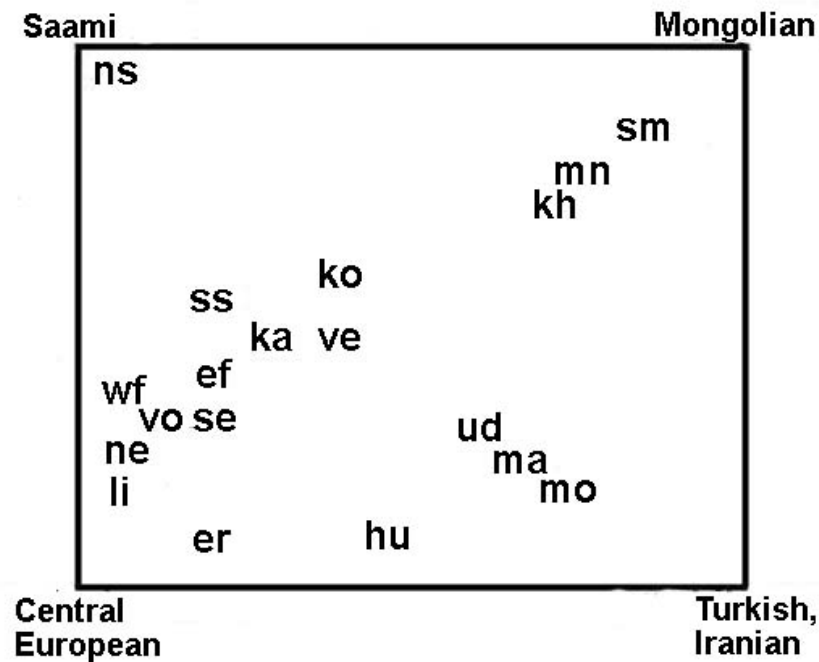
Question 93. Do the people speaking Finno-Ugric languages form a homogeneous anthropological/genetic group?

See Map 93 and its Appendices A and B.



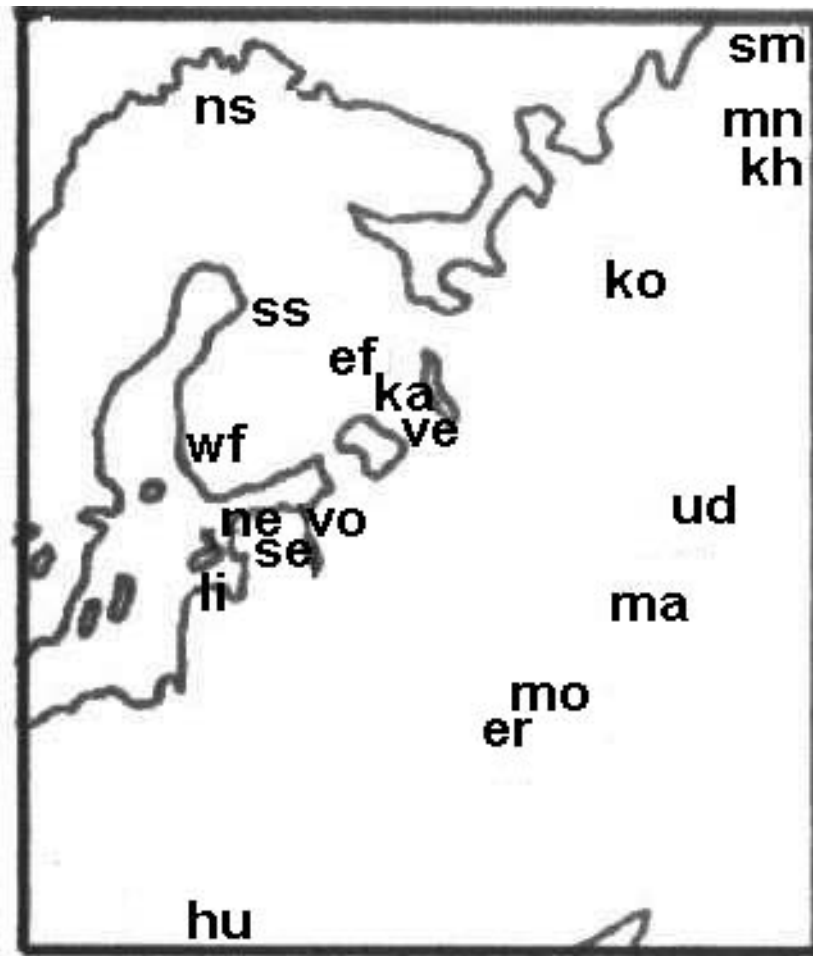
Map 93. The anthropological types of Finno-Ugric speaking populations according to Karin Mark (1970). L-U = the Lapponoid, Sub-Lapponoid and Sub-Uralic type; Ob = the Ob type of the Uralic race; V-B = the White Sea – Baltic type; A-B = the Atlanto-Baltic type; and CE = the Central European type.

The purpose of the map is to show that the populations speaking Finno-Ugric languages do not form a homogeneous anthropological type. The Samoyeds (who differ considerably from their FU linguistic relatives) are not included in the map. According to the view followed in this Atlas, the Samoyeds originally spoke Palaeo-Siberian languages and accepted the Finno-Ugric language only later. This is also the explanation for the fact that the phylum is called Finno-Ugric (rather than Uralic) in this Atlas.



Appendix A to Map 93. The anthropological types of the populations speaking Finno-Ugric (traditional Uralic) languages. The locations of the symbols of the populations in relation to the four corners reflect anthropological relations. The four 'pure types' represented by the corners are Saami, Mongolian, Central European, and Turkish-Iranian. Symbols of populations: ns = north Saami; ss = Finland Saami or Souther Saami; ka = Karelians; ve = Vepsians; ko = Komi; ef = Eastern Finns; wf = Western Finns; vo = Vots; ne = Northern Estonians; se = Southern Estonians; li = Livonians; er = Erza Mordvians; hu = Hungarians; ud = Udmurts; ma = Mari (Cheremis); mo = Moksha Mordvians; kh = Khanti; mn = Mansi; and sm = Samoyeds.

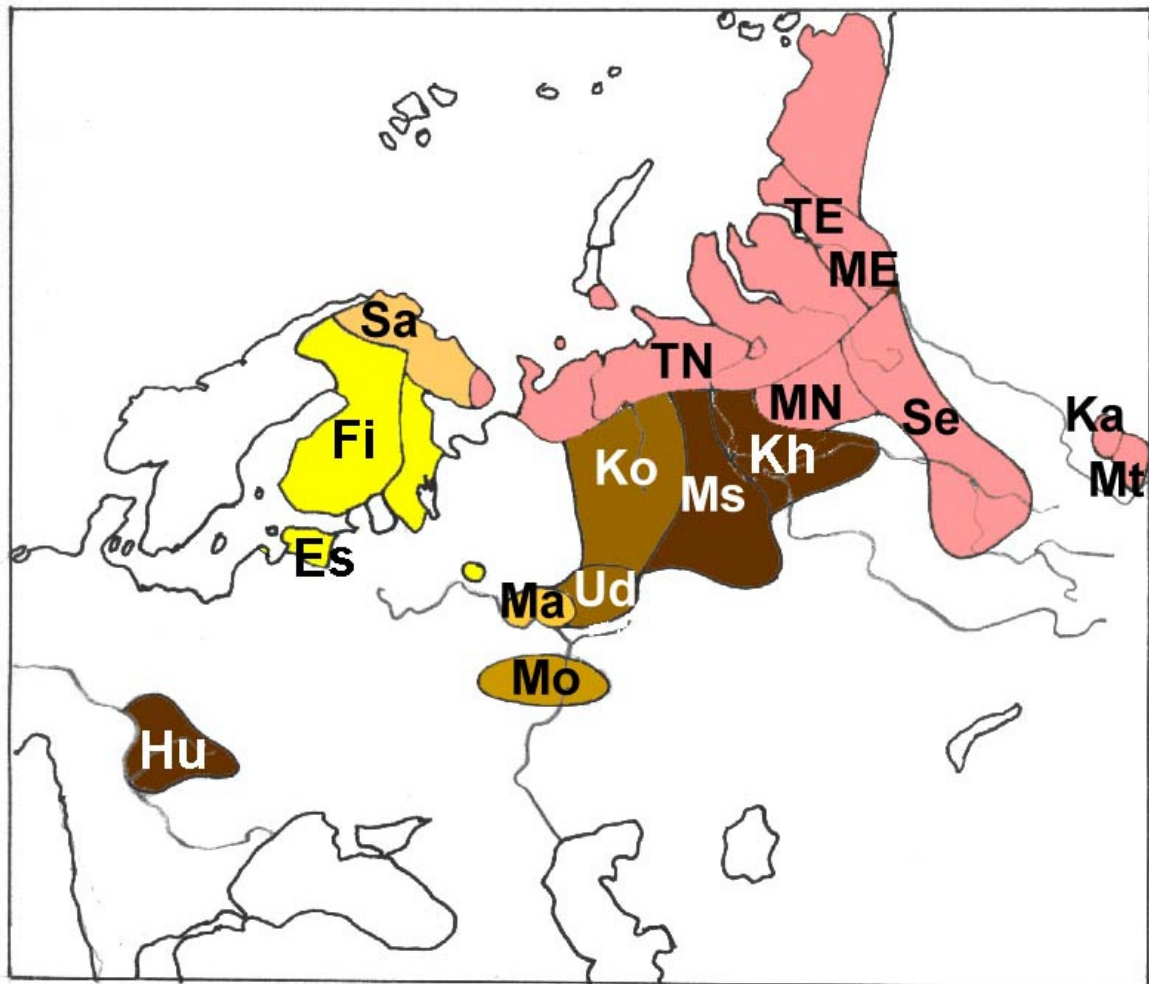
The diagram is subjective; it is not based on scientific analyses.



Appendix B to Map 93. The geographical distances between the FU populations in most cases correlate with the anthropological distances; compare Appendices A and B. The only clear exception are the Hungarians (hu).

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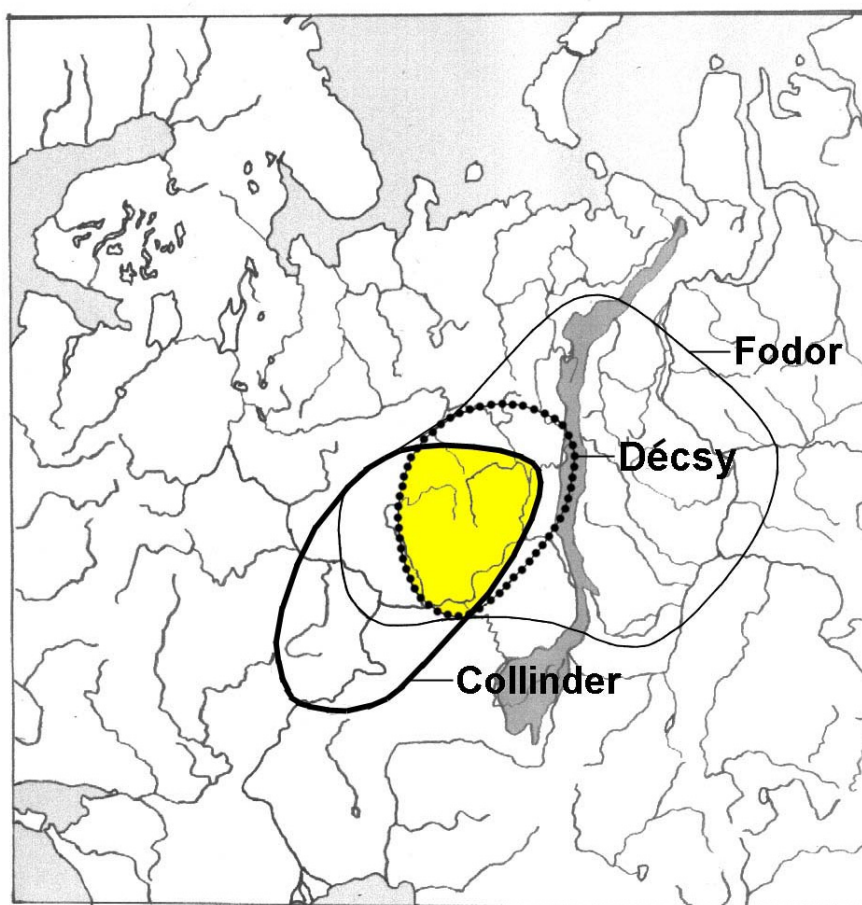
Question 94. Where are the Finno-Ugric (traditionally Uralic) languages spoken?



Map 94. The traditional areas of the Finno-Ugric (Uralic) languages. Symbols: Sa = Saami; Fi = Finns; Es = Estonians; Mo = Mordvians; Ma = Mari; Ud = Udmurts; Ko = Komi; Ms = Mansi; Kh = Khanti; Hu = Hungarians; TN = Tundra Nenets; MN = Forest Nenets; TE = Tundra Enets; ME = Forest Enets; Se = Selkups; Ka = Khamassians; and Mt = Matorians.

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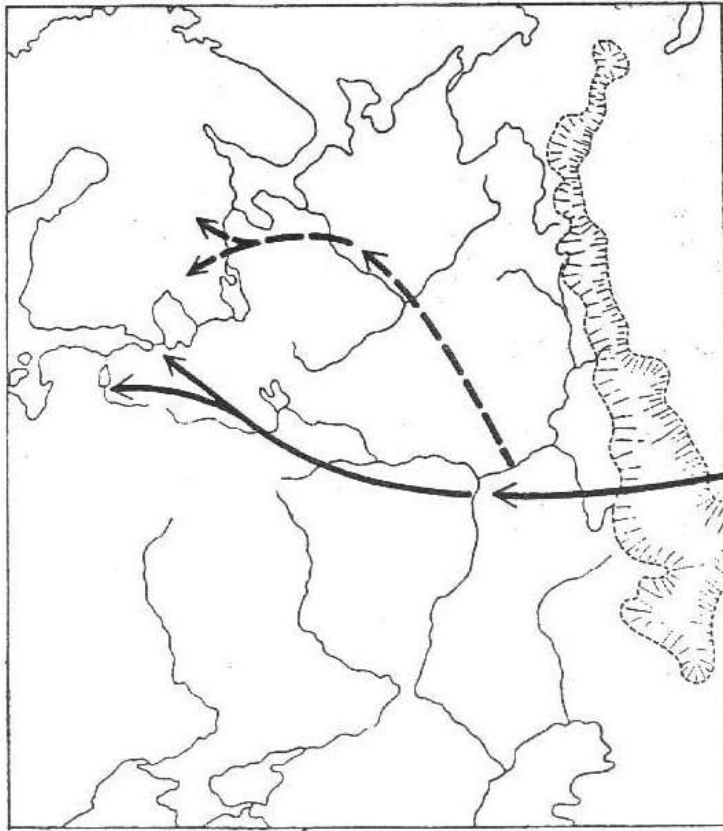
Question 95. Where is the traditional homeland of the Finno-Ugrians or Uralians?



Map 95. Three examples of the traditional homeland of the Finno-Ugrians (or Uralians). The areas are from Collinder 1962, Décsy 1965, and Fodor 1980. The yellow area represents the 'core area' that is common to all three.

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Question 96. Where did the Finnic people 'come from' according to the traditional view.



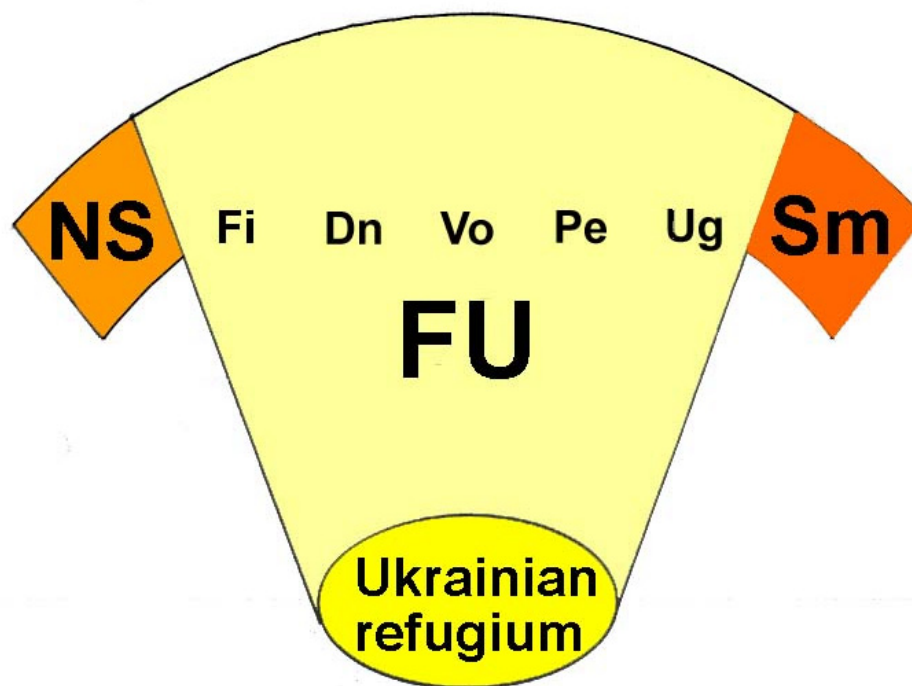
Map 96. The traditional view of the migration of the Finns (or more generally the Finnic people). The starting area of the migration was in the Ural Mountains and beyond, and the Finns were thought to be genetically close to the Mongols. Kaukonen 1983.

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Question 97. Where was the Ukrainian refugium and its spreading area during the Last Glacial Maximum (LGM)? Are all the present populations speaking Finno-Ugric languages originally from the Ukrainian refugium? See Map 97 and its Appendix.



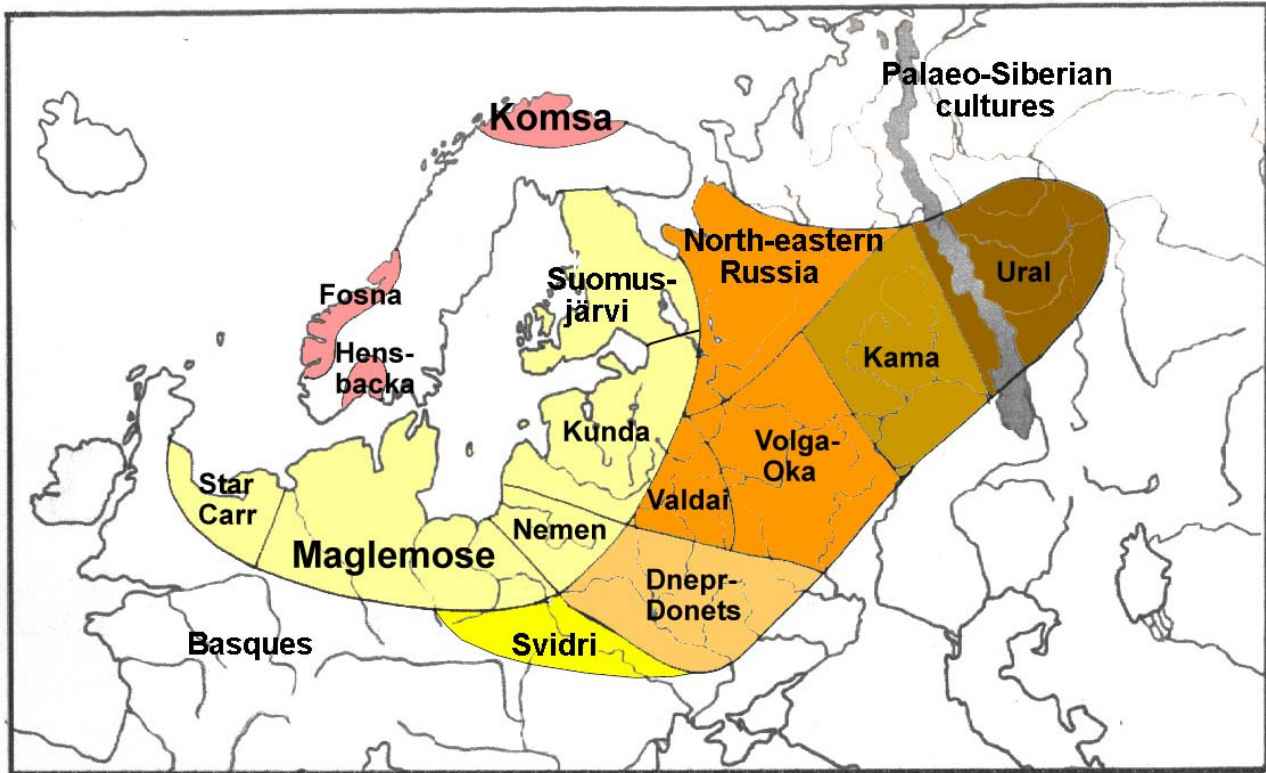
Map 97. The Ukrainian refugium of the Last Glacial Maximum. During the recolonization of northern Europe, the population of the Ukrainian refugium spread fanwise toward the north. The populations of the 'fan': Vi = the Vistula population, Fi = the Finnic population (often called the 'Baltic Finns'), Dn = the Dnepr population, Vo = the Volgaic population; Pe = the Permic population, and Ug = the Ugric population. The grey areas in the south-western corner of the fan represent the hybrid areas that belonged simultaneously to the spreading areas of two other refugia (those of Iberia and the Balkans). The Saami and Samoyeds did not originally belong to the Ukrainian refugium; the Saami originate mostly from the Iberian refugium and the Samoyeds from Siberia. The Indo-Europeans either belonged to the Balkan refugium or they arrived in Europe later from the Middle East. The Basques originate from the Iberian refugium.



Appendix to Map 97. The Finno-Ugric fan and its two appenda. The linguistic area of the Finno-Ugric speaking populations originating from the Ukrainian refugium expanded to the west and east as the northern Sami (NS) and Samoyeds (Sm) shifted their original languages to Finno-Ugric. The language shift of the Saami took place much earlier than that of the Samoyeds. As a result of the language shifts, the Finno-Ugric speaking populations no more formed a homogeneous genetic type (a 'race'): the ancestors of the Saami came originally (for the most part) from the Iberian refugium, and the those of the Samoyeds from Siberia. The populations and languages of the fan: Fi = Finnic (= Baltic Finns), Dn Dneprian, Vo = Volgaic, Pe = Permian, and Ug = Ugrian.

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Question 98. What did the Finno-Ugric world look like in 7000 bc?

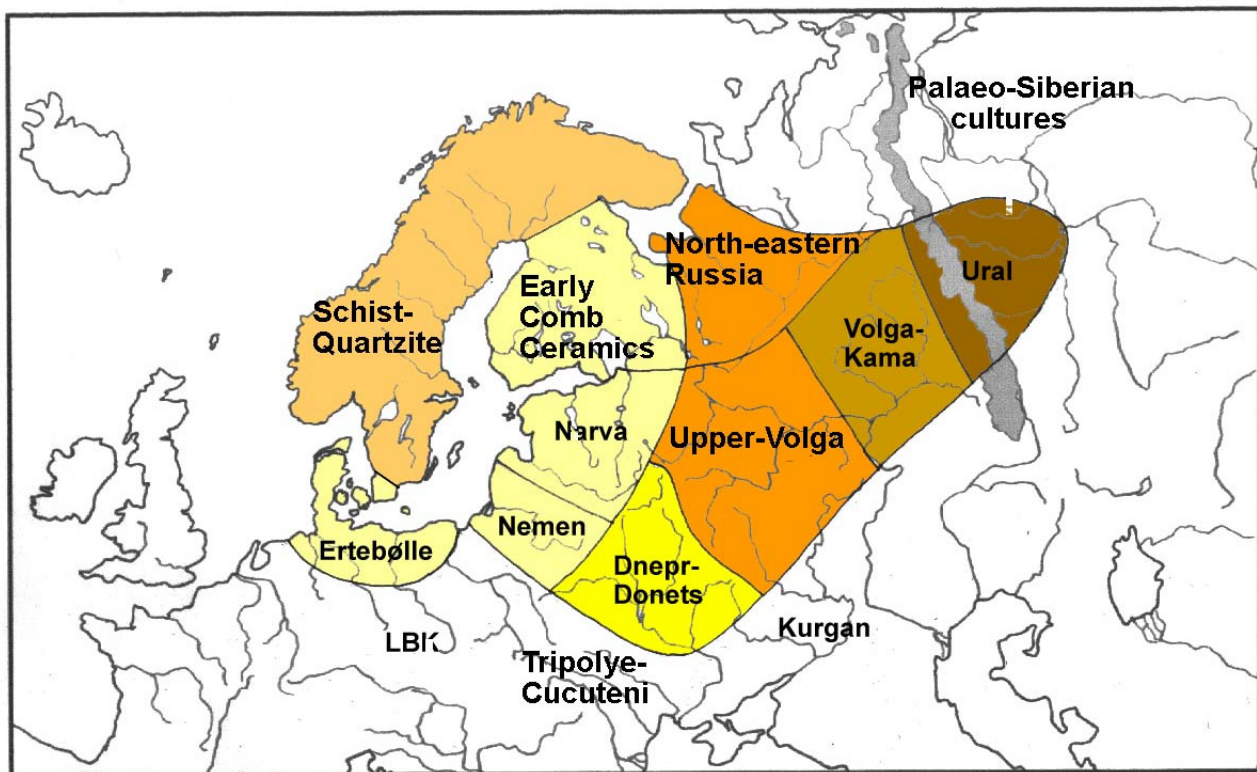


Map 98. The areas of the assumed Finno-Ugric speaking cultures about 7000 bc. The mother culture of the Baltic Sea area was Maglemose (later Kongemose), and that of Fennoscandia was Komsa. The cultures and probably also languages/dialects formed seven groups (cf. the seven shades of yellow and brown in the map): (1) the Komsa group (whose languages was pre-Saami), (2) the Maglemose group (whose language was pre-Finnic), (3) the Swiderian group (whose language was “Swiderian”), (4) the Dnepr-Donetz group (whose language was ‘pre-Dneprian’), (5) the Volgaic groups (whose language was pre-Volgaic), (6) the Kama group (whose language was pre-Permian), and (7) the Ural group (whose language was pre-Ugric). The Samoyeds lived still in Siberia and they, presumably, still spoke Palaeo-Siberian languages.

Until about 6000 bc, the British isles were still a peninsula (there was no English Channel yet), and the Star Carr culture of the peninsula was a natural projection of the Maglemose culture.

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Question 99. What did the Finno-Ugric world look like in 4000 bc uncal (4900 cal)?

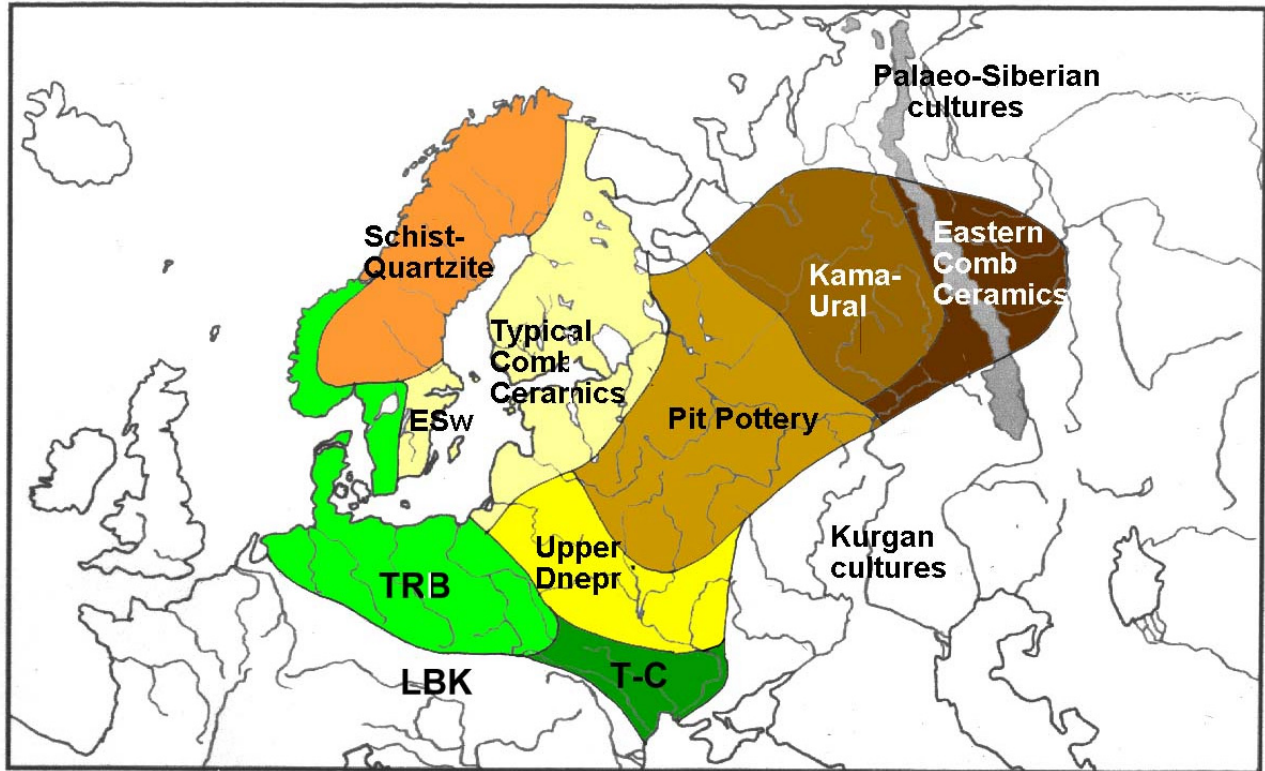


Map 99. The Finno-Ugric world of the Early Neolithic period. According to the assumption of the writer, in 4000 bc uncal, there were seven Finno-Ugric languages/dialects: (1) the Saami of the Schist-Quartzite culture, (2) the Ertebølle language/dialect (with strong Indo-European superstratum from the IE language of the LBK culture), (3) the pre-Finnic of the Nemen, Narva, and Early Comb Ceramics cultures, (4) the Dneprian language/dialect of the Dnepr-Donets culture, (5) the Volgaic language/dialect of the cultures of Upper-Volga and North-eastern Russia, (6) the Permian language/dialect of the Volga-Kama culture, and (7) the Ugric language/dialect of the Ural mountains and Western Siberia. According to the map, the Samoyeds still lived in Siberia; it is also possible, however, that the language shift Palaeo-Siberian > Finno-Ugric had already taken place and the Samoyeds spoke a Finno-Ugric language.

The LBK and Tripolye-Cucuteni cultures that belonged to farmers influenced strongly the Ertebølle, Nemen and Dnepr-Donets cultures of hunters. Agriculture and the Indo-European language were ready to start their expansion to the territory of hunters and the Finno-Ugric language. The expansion was mainly cultural, not demic.

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Question 100. What did the Finno-Ugric world look like in 3000 bc uncal (3500 cal)? See Map 100.



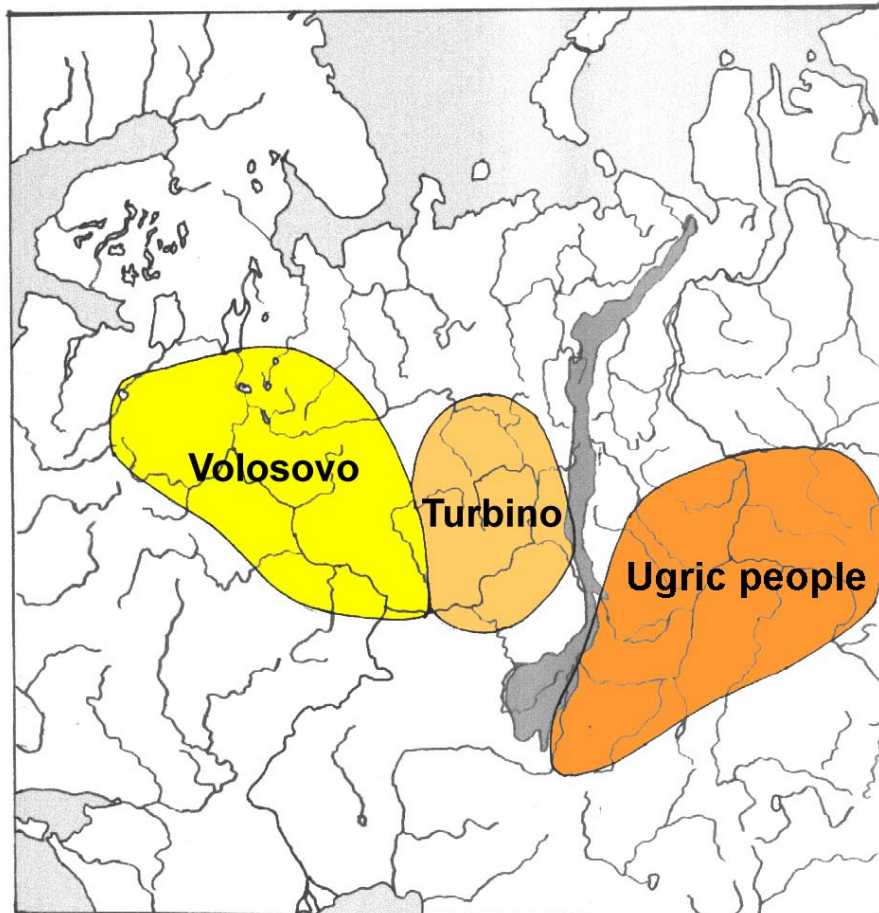
Map 100. The Finno-Ugric world of the Comb Ceramics period. In about 3000 bc uncal, the following six Finno-Ugric languages/dialects were presumably spoken in northern and eastern Europe:

- (1) North Saami in the Schist-Quartzite culture;
- (2) pre-Finnic (the common mother language of Finnic and Finland Saami) in the Typical Comb Ceramics culture and in the Eastern Swedish 'dwelling-place culture' (ESw) that formed the eastern part of the Scandinavian Pit Pottery culture;
- (3) the 'Dnepr language' in the Upper-Dnepr culture;
- (4) the Volgaic language(s) in the Pit Pottery culture;
- (5) the Permic language in the Kama-Ural area; and
- (6) the Ugric language in the Eastern Comb Ceramics culture.

According to the map, the Samoyeds still spoke Palaeo-Siberian languages; the other alternative is that they already had shifted their language to Finno-Ugric.

In the phase the map is referring to, the farming and Indo-European language of the LBK culture had already expanded to the north and a zone of new farmers and Indo-European speakers had emerged; cf. the cultures of the zone of the TRB and Tripolye-Cucuteni (T-C) cultures. The language of these cultures was an Indo-European dialect that formed the basis for the Germanic, Baltic, and Slavic languages. [Back](#)

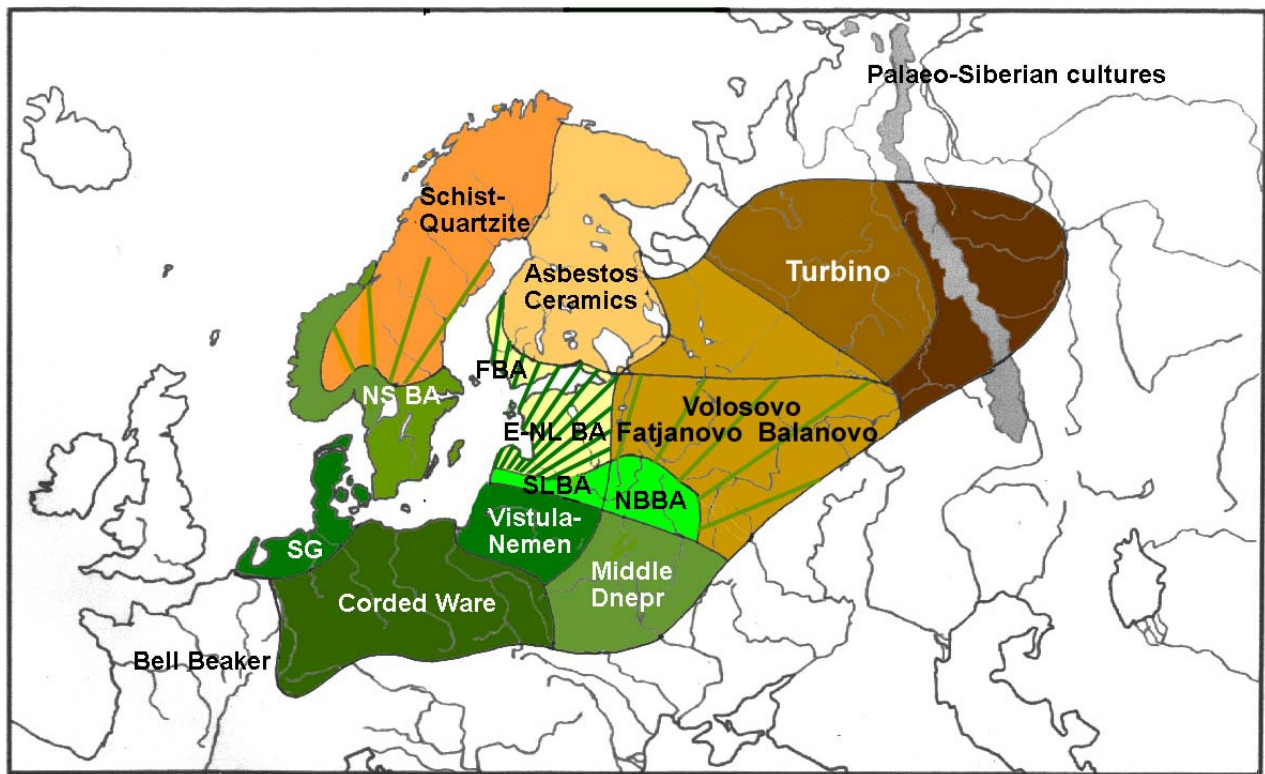
Question 101. What did the eastern Finno-Ugric world look like in 3000-2500 bc (uncalibrated)? See Map 101.



Map 101. Three eastern Finno-Ugric cultural areas in 3000-2500 bc uncal (3500-2900 cal). The areas are from Fodor 1999, and they represent the areas of the Volgaic, Permic, and Ugric peoples.

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Question 102. What did the Finno-Ugric world look like in 2500-2000 bc uncal (2900-2300 cal)? See Maps 102a and 102b.

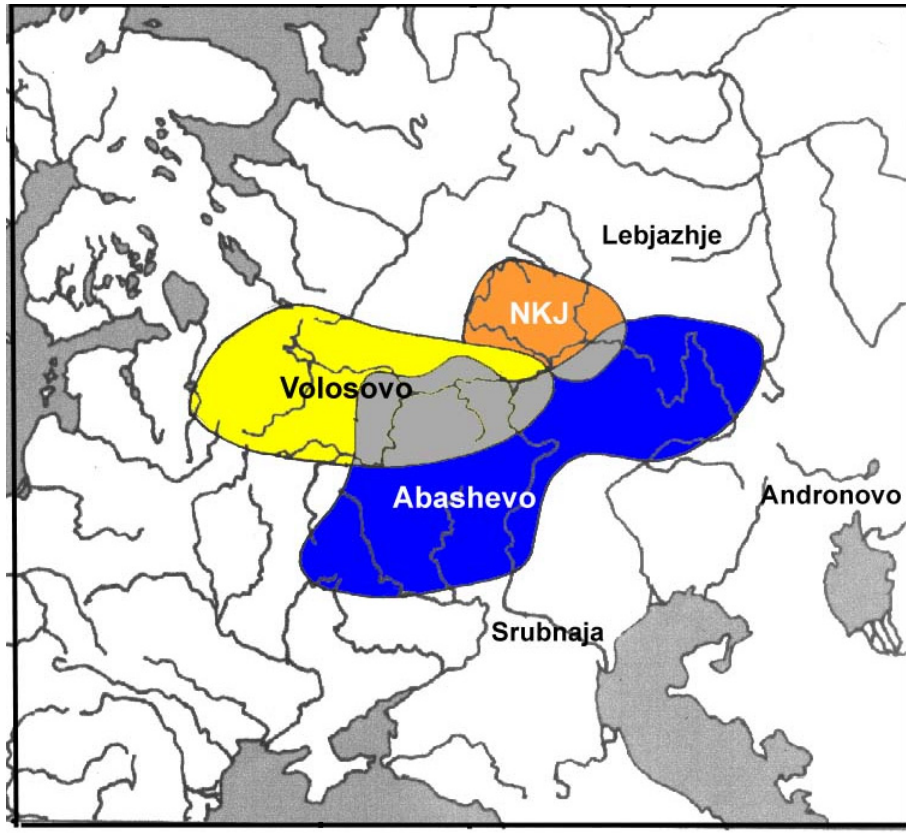


Map 102a. The influence of the Corded Ware culture on Northern and Eastern Europe.

Colours: green = the IE languages; yellow and brown = the FU languages. Letter symbols: NS BA = Norwegian and Swedish Battle Axe; SG = Single Grave; SL BA = South Latvian Battle Axe; NBBA = North Belarus Battle Axe; FBA = Finnish Battle Axe; E NL BA = Estonian and North Latvian Battle Axe.

The Baltic language spread from the Vistula-Nemen culture to the areas of the Battle Axe cultures of Southern Latvia, Northern Belarus, and Middle Dnepr. The density of the radiating green lines in the map reflects the strength of this influence. The lines also show the approximate locations of the core areas of the Battle Axe culture in Southern Scandinavia, on the south-eastern coast of the Baltic Sea, and in the inland of Southern Balticum.

The language of the Schist-Quartzite area was North Saami. In its southern sub-area marked with radiating green lines, a dialect of North Saami with strong Germanic superstratum emerged; the emergence of this dialect was analogous to that of the Finnic language with strong Baltic superstratum on the eastern side of the Baltic Sea.

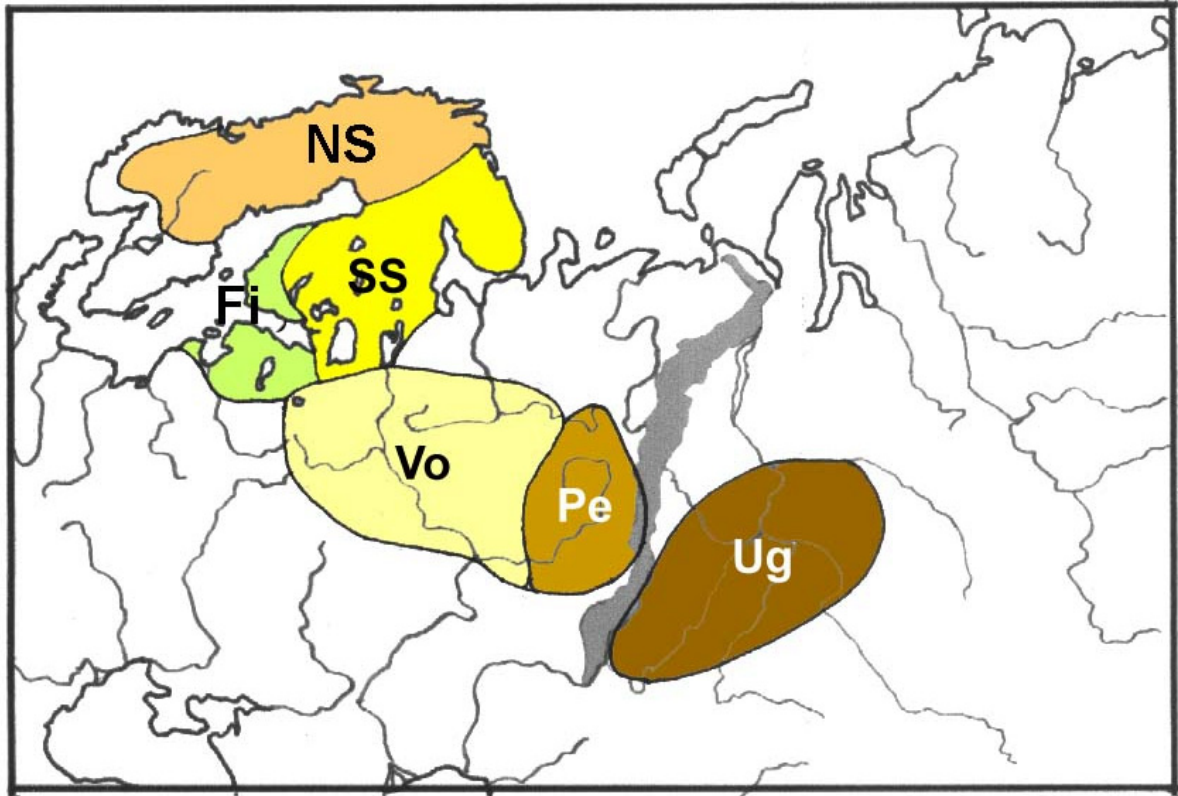


Map 102b. Three important cultural areas in Eastern Europe at the end of the Stone Age about 2500-2000 bc uncal (2900-2300 cal).

The areas were: (1) Volosovo+Fatyanovo+Balanovo; (2) Novoiyino+Kharino-Bor+Yurtikovo (NKJ in the map); and (3) Abashevo. Colours: yellow refers to the area where the language of the 'ordinary people' was Volgaic and that of the elite Baltic; brown = the Permic language; blue = Iranian; and grey = the cultural and linguistic hybrid areas between the cultures. Patrushov 2000.

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Question 103. What did the Finno-Ugric world look like in 2000 bc uncal (2300 cal)? See Maps 103a and 103b.



Map 103a. The Finno-Ugric world in 2000 bc uncal (2300 cal).

NS = the Schist-Quartzite culture of the Northern Saami;

SS = the Asbestos Ceramics culture of the Finland Saami (Southern Saami);

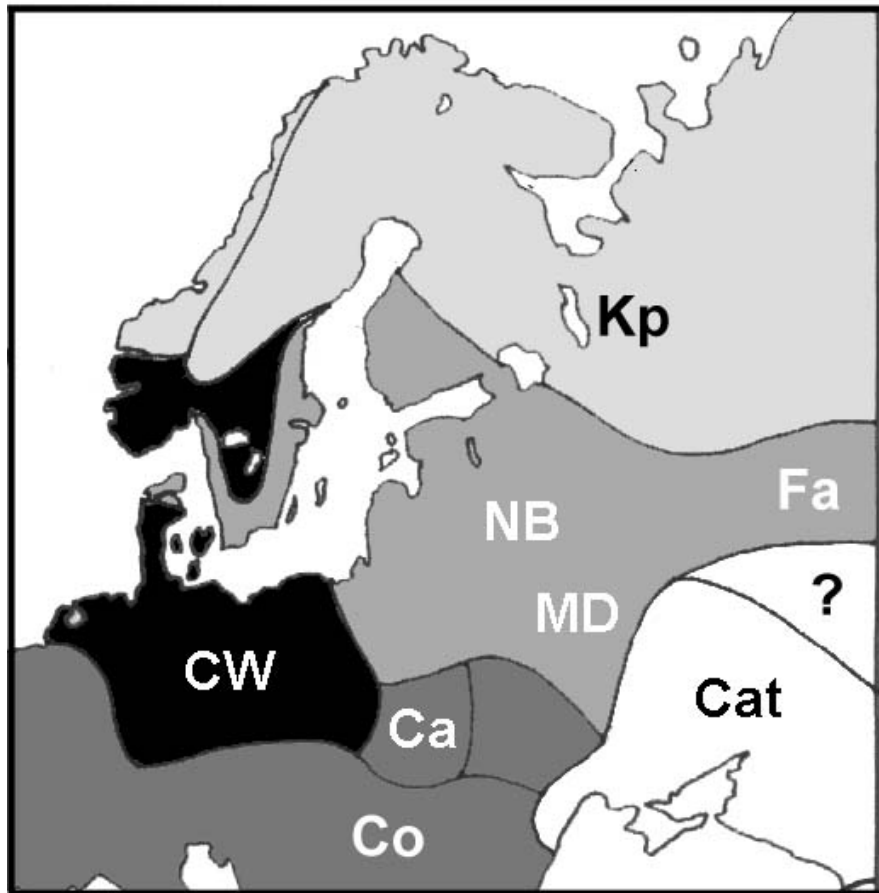
Fi = the Battle Axe culture of the Finnic people;

Vo = the Volosovo culture of the Volgaic people;

Pe = the Turbino culture of the Permian people;

Ug = the Ugric culture and language.

The map is a combination of the maps in Huurre 1995 (p. 73) and Fodor 1980 (p. 66-67).



Map 103b. Four different subsistence systems in Central and Eastern Europe in 2000 bc uncal (2300 cal).

black = secondary product farming;

darkest grey = farming and cattle breeding;

middle grey = 'intensive' hunting and cattle breeding;

lightest grey = hunting, fishing and gathering;

white = pastoralism etc.

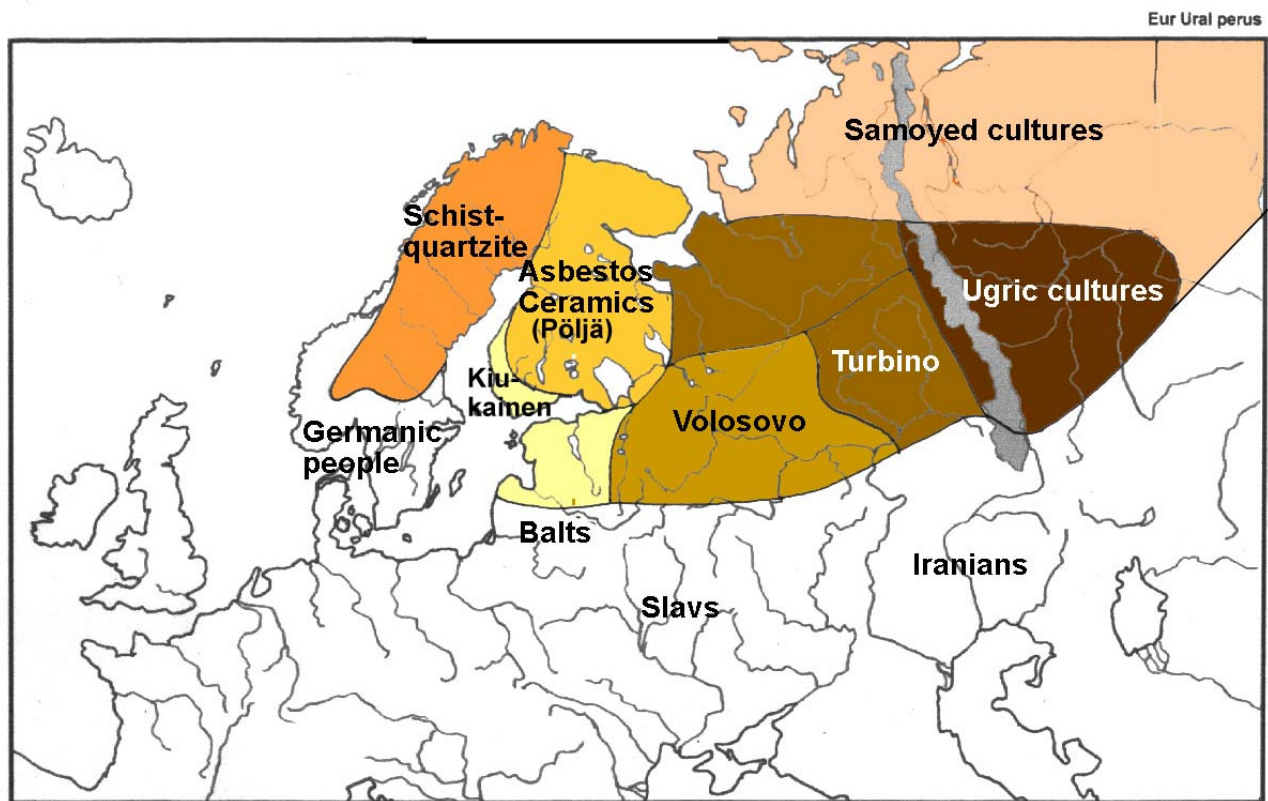
Examples of the cultures: CW = the Corded Ware of Central Europe; Co = Cotofeni; Ca = Carpathian culture; MD = Middle Dnepr; NB = Northern Belarus; Fa = Fatyanovo; Kp = Kargopolye; and Cat = Katacombe culture.

The map is based mainly on Dolukhanov 1996, p. 83.

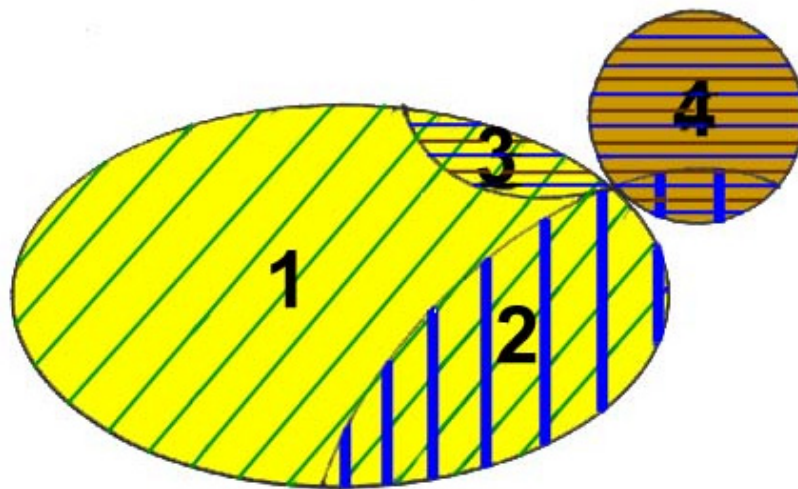
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Question 104. What did the Finno-Ugric world look like in 2000-1500 bc uncal (2300-1650 cal)?

See Maps 104a and 104b.



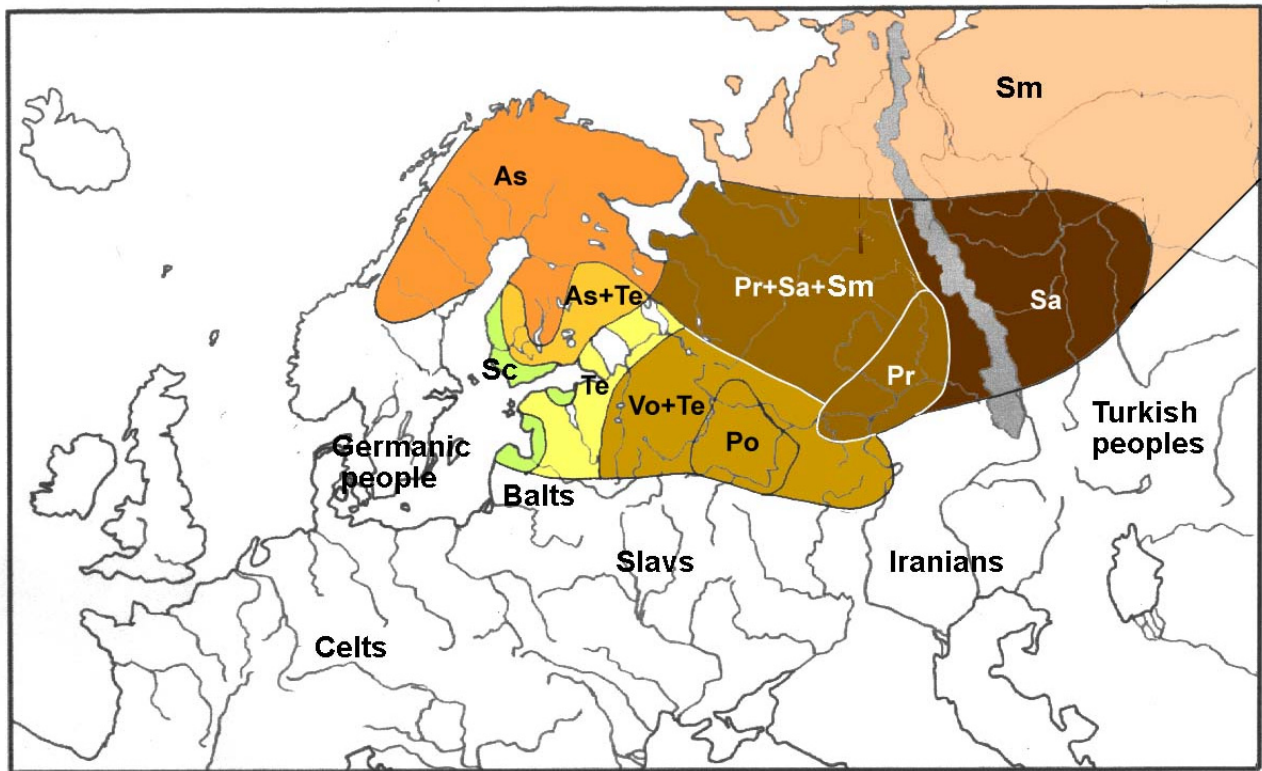
Map 104a. The areas of the Finno-Ugrians at the end of the Stone Age about 2000-1500 bc uncal (2300-1650 cal). The languages: (1) the Schist-Quartzite culture = North Saami; (2) the Asbestos Ceramics culture (the *Pöljä* type) = Finland Saami; the Kiukainen culture and Estonia + Livonia = Finnic; the Volosovo culture = the Volgaic language; the Turbino culture = the Permic language; the Ugric culture = the Ugric language; and the Samoyed cultures = the Samoyed languages.



Map 104b. An illustration of the cultures of the Volga-Kama region of the end of the Stone Age and beginning of the Bronze Age. Colours: yellow = Volsovo culture; brown = the three cultures of the Permian area (Novoiyino in the Kama region, Kharino-Bor in the region between the Kama and Vyatka, and Yurtikovo in the Vyatka region). The colours and directions of the lines: (a) green lines = the influence of the Baltic or Balto-Slavic cultures of Fatyanovo and Balanovo coming from the south-east; (b) blue vertical lines = the influence coming from the Iranian culture of Abashevo in the south; (c) blue (Iranian) and dark brown (Ugric) horizontal lines = the influence coming from the Ural region. The blue lines are thicker than others for the purpose of illustrating the fact that more immigrants came from the south than from elsewhere.

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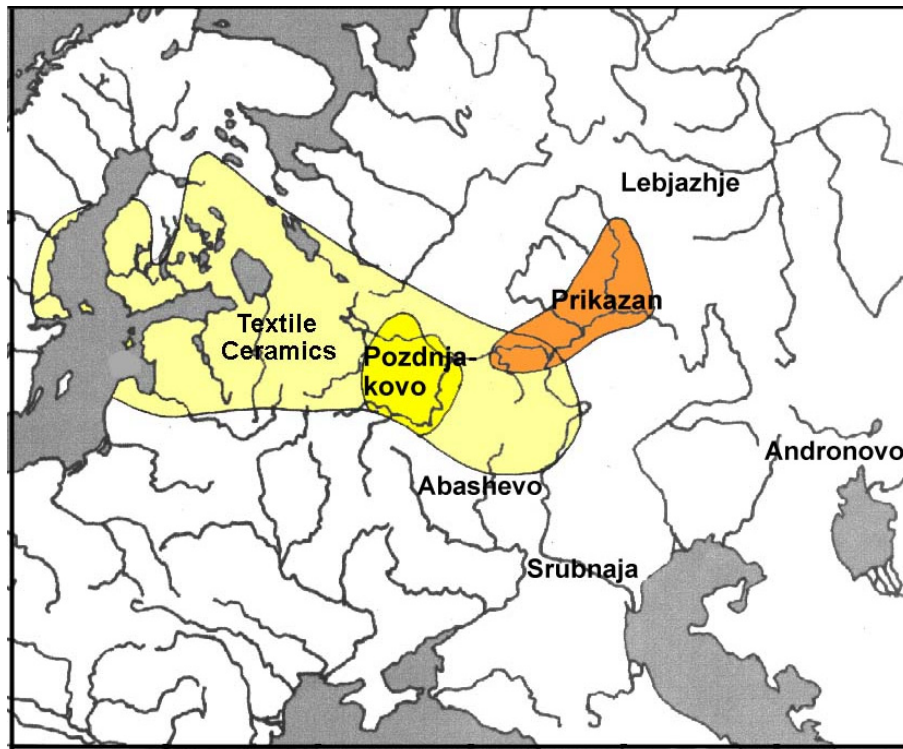
Question 105. What did the Finno-Ugric world look like in 1500-500 bc uncal (1650-500 cal)? See Maps 105a, 105b, 105c, and 105d.



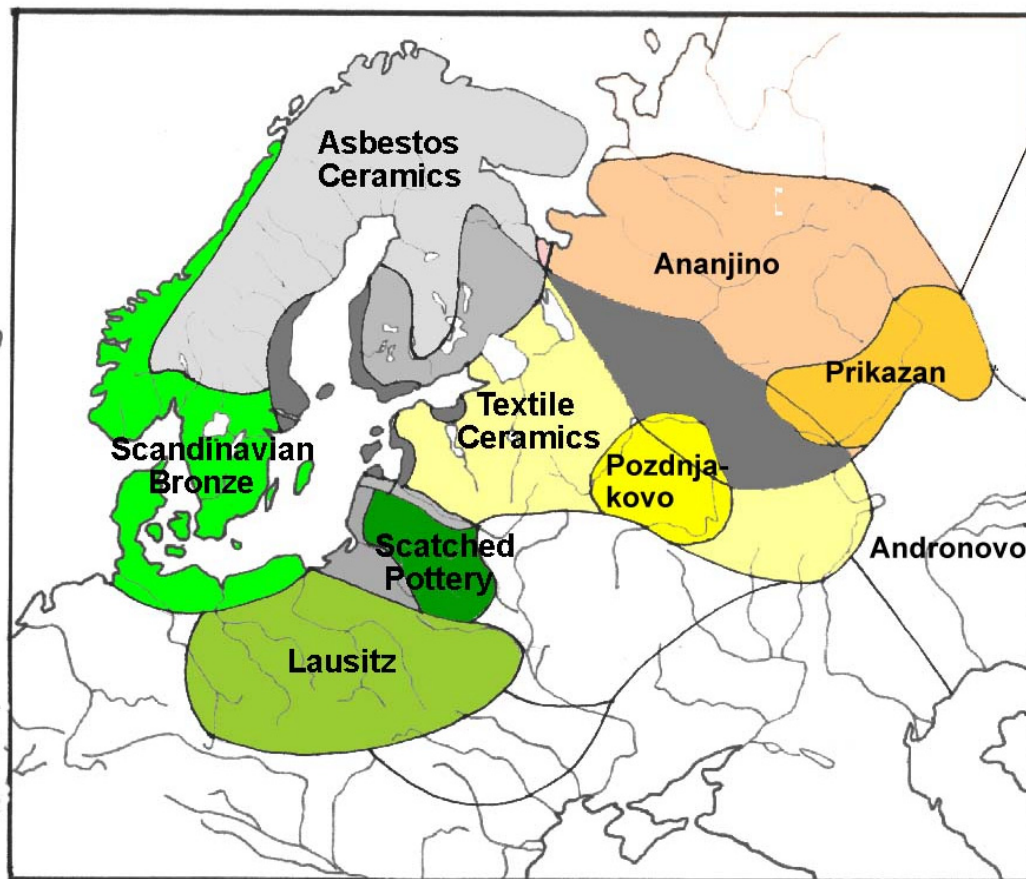
Map 105a. The Finno-Ugric world in the Bronze Age.

Cultures: As = Asbestos Ceramics; Sc = Skandinavian Bronze; Te = Textile Ceramics; Vo = Volosovo; Po = Pozdnyakovo; Pr = Prikazan; Sa = pre-Sargatka; and Sm = Samoyed cultures.

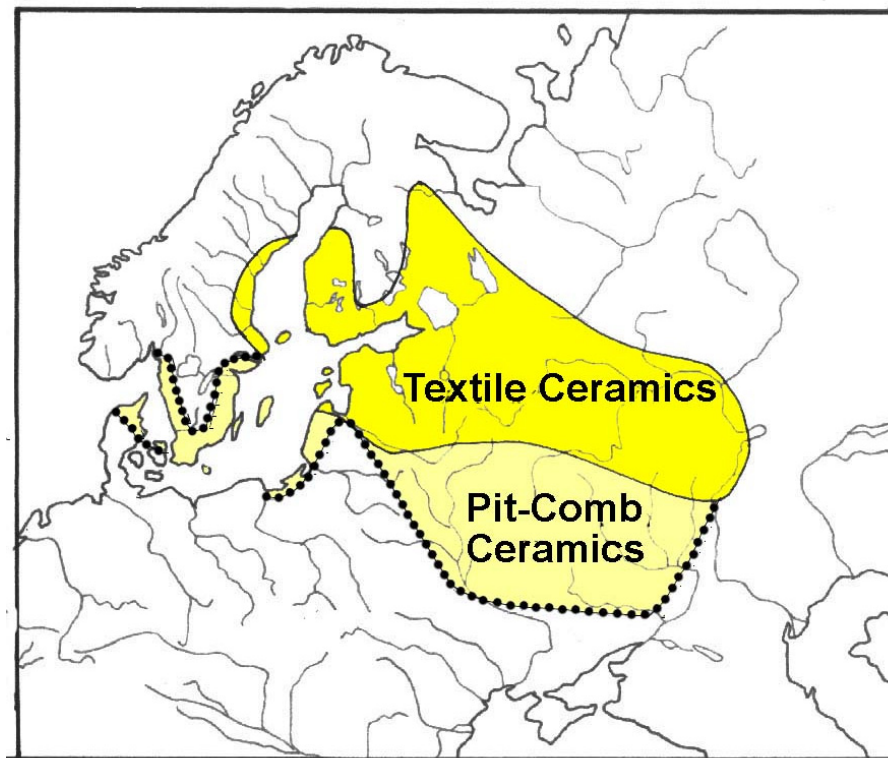
Assumed languages: As = North Saami; As+Te = Finland Saami; Sc = Western Finnic; Te = Eastern Finnic; Vo+Te and Po = Volgaic; Pr = Permic; Sa = Ugric; Sm = Samoyed languages; and Pr+Sa+Sm = the Permic languages (plus some areas of the Ugric language and the Samoyed languages).



Map 105b. Cultures of the Volga-Kama region in the middle of the Bronze Age (about 1000 bc). The Pozdnyakovo culture emerged in the Volga-Oka region and the Prikazan culture in the Kama-Vyatka region. The Pozdnyakovo culture formed the core area of the wide Textile Ceramics culture (*tekstiilikeramiikka*). The map is based on the map in Patrushov 2000, p. 74.



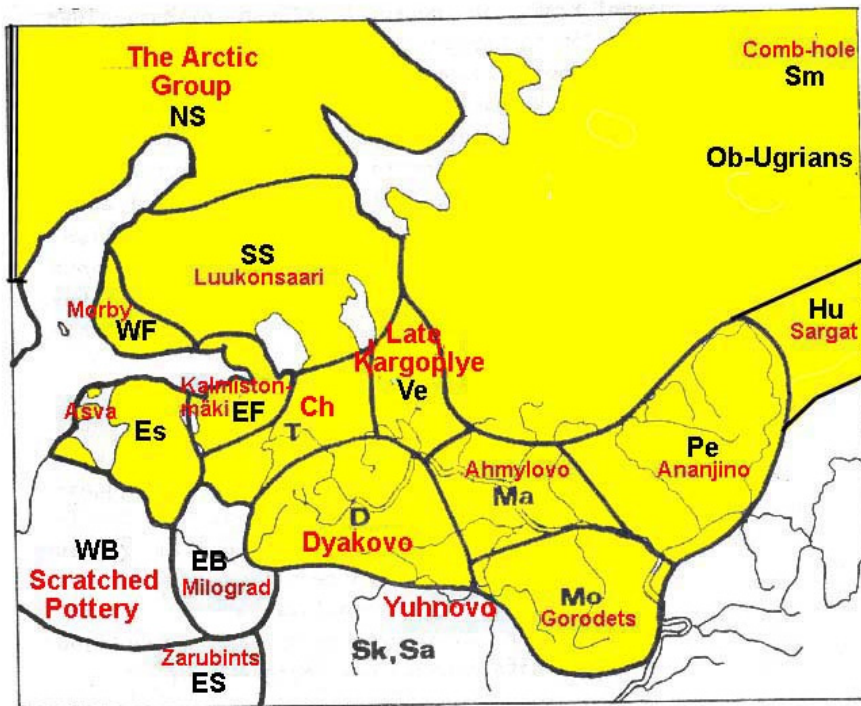
Map 105c. Some cultural centres in Northern and Eastern Europe during the Bronze Age. The Finno-Ugric speaking populations and their languages were strongly influenced by the Scandinavian Bronze culture and the culture of Scratched Ceramics; the language of the former was Germanic and that of the latter Baltic. The most influential centres within the Finno-Ugric area were the Pazdnyakovo and Prikazan cultures; the language of the former was Volgaic and that of the latter Permian. The areas interpreted to represent the hybrid areas between the centres are marked grey in the map.



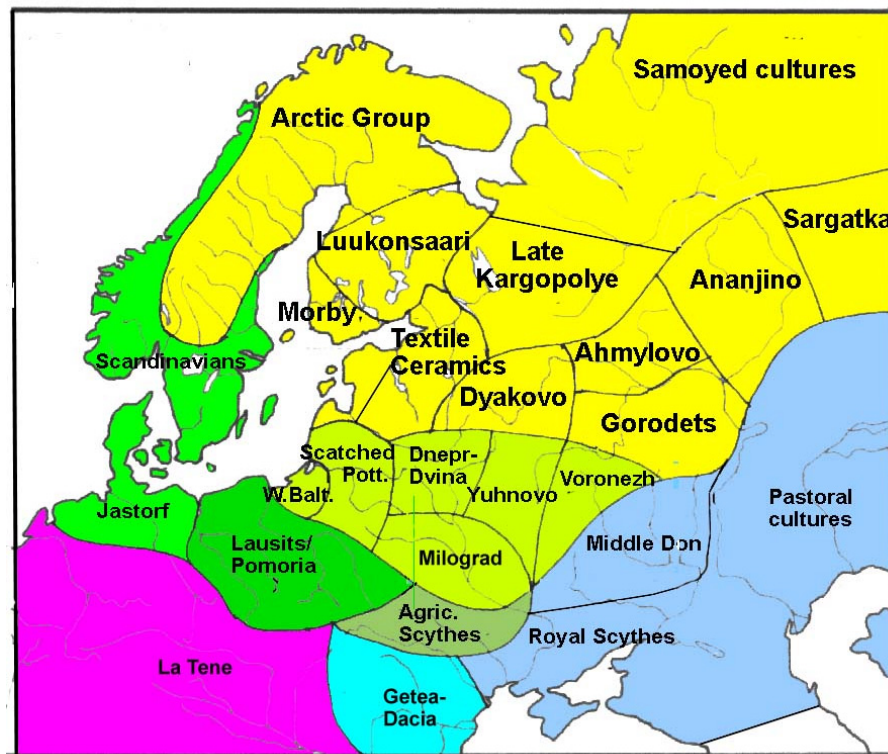
Map 105d. The areas of the Textile Ceramics (*tekstiilikeramiikka*) and Pit-Comb (*kuoppa-kampa –keramiikka*) cultures. The eastern areas are based on the maps in Patrushov 2000 and the western ones on those in Zvelebil 1996. The area of the Pit-Comb Ceramics culture presumably experienced the language shift at latest at the end of the Bronze Age. About three thousand years ago, a Finno-Ugric language was probably still spoken in the eastern area of the Scandinavian Pit Pottery culture (the broken line) on the eastern coast of Sweden.

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Question 106. What did the Finno-Ugric world look like in 500-600 bc? See Maps 106a, 106b, and 106c.



Map 106a. The linguistic situation in Eastern Europe about 600 bc. The Germanic areas on the western coasts of the Baltic Sea are not marked. The yellow areas of the map are supposed to have been linguistically Finno-Ugric. The people of the Morby and Asva cultures spoke the Western Finnic dialect and that of Kalmistonmäki Group (a sub-group of Textile Ceramics) spoke the Eastern Finnic dialect. The areas east of the Finnic (Finnish and Estonian) areas represent the areas of the 'Chudes' (Ch) and 'Dyakovians' (D). The 'Vepsians' (Ve) of the map refer to the people of the Late Kargopolye culture, the Finland Saami or Southern Saami (SS) refer to the people of the Luukonsaari Group, and the Northern Saami (NS) to the people of the Arctic Group. The Ahmylovo culture belonged to the Mari (Ma), the Gorodets culture to the Mordvians, the Ananjino culture to the Permians, and the Sargatka culture to the Ungarians (Mo). Scratched Pottery belonged to the Western Balts (WB) and the Milograd culture to the Eastern Balts (EB). The areas of the map are based on the equivalent maps in "Eesti esiajalugu" (Jaanits *et al.* 1982) and Wiik 1993.



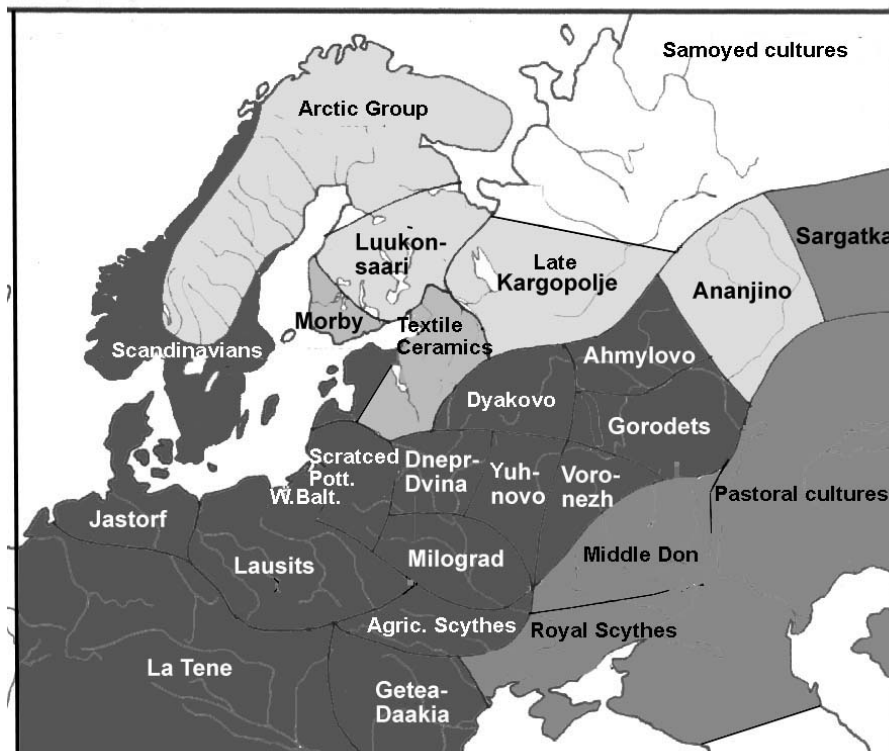
Map 106b. Cultures in Northern and Eastern Europe about 500 bc.

Colours: yellow = Finno-Ugric languages; the shades of green: Germano-Balto-Slavic languages; dark blue = Iranian languages; light blue = Illyrian and Dakian; violet = Celtic.

The Finno-Ugric languages: the Arctic Group = Northern Saami; Luukonsaari = Southern Saami; Morby+Estonia and Latvia = Western Finnic; Textile Ceramics (in South-eastern Finland the Group of Kalmistonmäki) = Eastern Finnic; Late Kargopolye = Early Vepsian; Dyakovo = the 'Dyakovian language'; Gorodets = Mordvian; Ahmylovo = Mari; Ananjino = Permian; Sargatka = Ugric/Hungarian; Samoyed cultures = Samoyed languages.

A comparison of this map with the map showing the distribution of **subsistence systems** reveals that three of the cultures (Dyakovo, Gorodets, and Ahmylovo) in Eastern Europe that spoke a Finno-Ugric language already exercised full-fledged (plough type) agriculture; in the Baltic Sea area, this type of agriculture was exercised by the Estonians and Livonians while the other speakers of Finnic still were 'novice' farmers who exercised swidden-type agriculture.

The areas of the map are based on the equivalent maps in Jaanits 1982 ("Eesti esiajalugu"), Wiik 1993 and Dolukhanov 1996: 134.



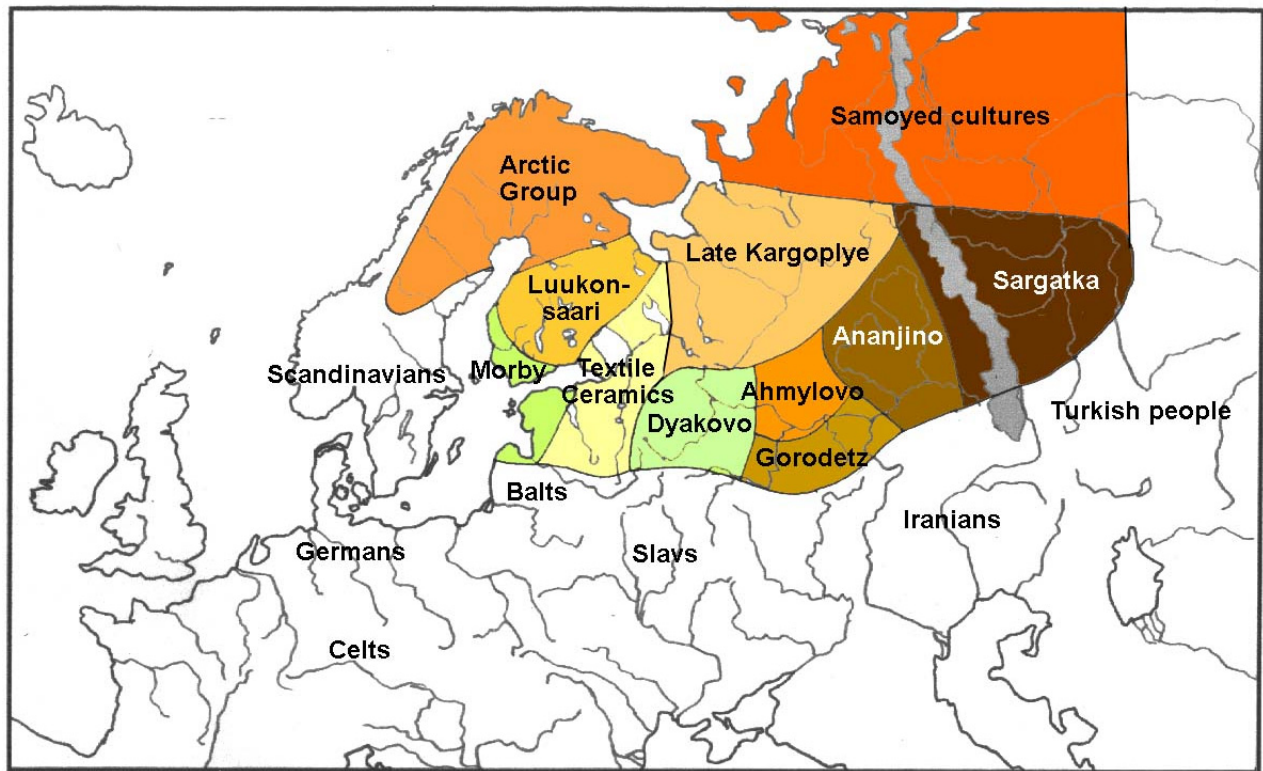
Map 106c. Five different subsistence systems in Northern and Eastern Europe in the late Bronze Age and early Iron Age. The degrees of darkness from the darkest to lightest refer to the following subsistence systems:

- (1) farming and stock-breeding,
- (2) pastoralism,
- (3) hunting-fishing-gathering with elements of swidden-type agriculture,
- (4) hunting-fishing-gathering with elements of stock-breeding,
- (5) only hunting-fishing-gathering.

The map is based mainly on the map in Dolukhanov 1996, p. 134.

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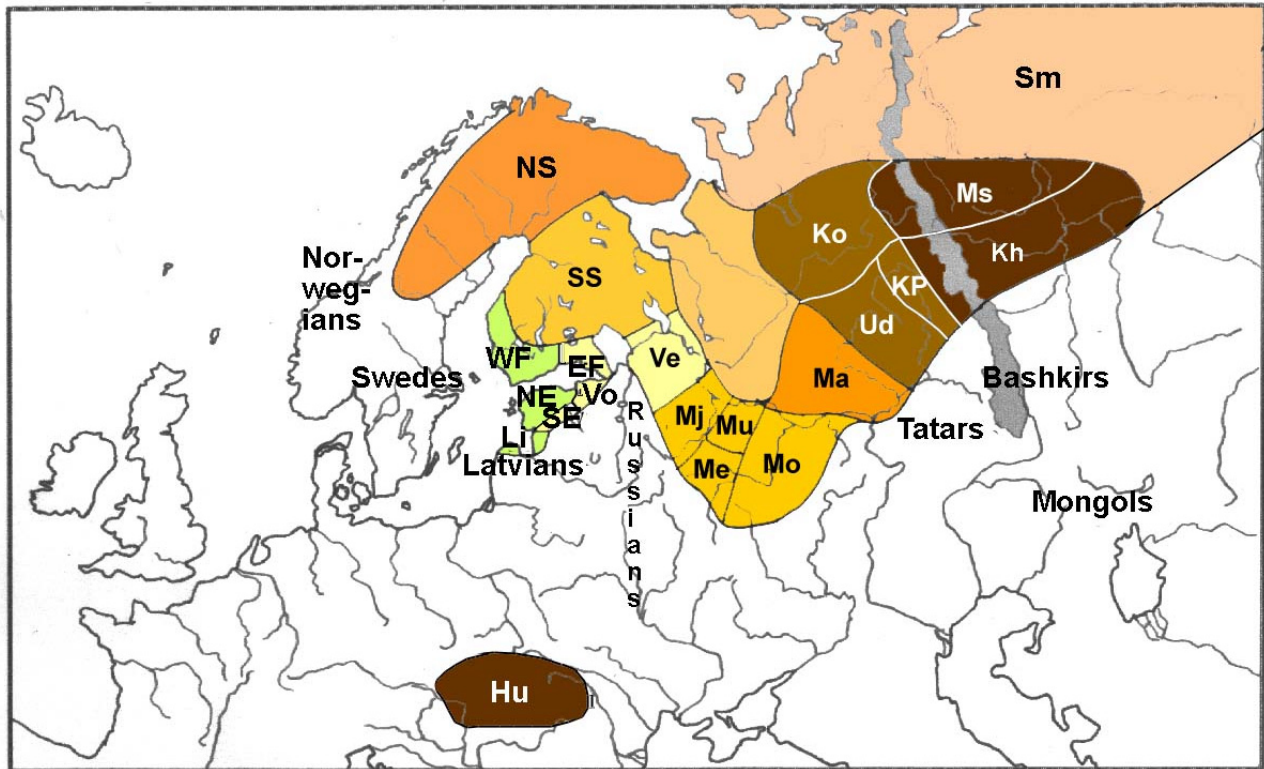
Question 107. What did the Finno-Ugric world look like in 500-1 bc?



Map 107. The Finno-Ugric world of the Pre-Roman (Celtic) Iron Age. The FU world consisted of eleven cultures and languages: (1) the Arctic Group = Northern Saami; (2) Luukonsaari = Finland Saami or South Saami; (3) Morby and the corresponding cultures in Estonia and Livonia = Western Finnic; (4) Textile Ceramics, a part of which was the Kalmistonmäki Group = Eastern Finnic; (5) Dyakovo = a Volgaic language with many Baltic elements; (6) Gorodetz = Mordvian; (7) Ahmylovo = Mari (Cheremis); (8) Late Kargoplye = Pre Vepsian; (9) Ananjino = Permic; (10) Sargatka = Ugric; and (11) the Samoyed cultures = the Samoyed languages.

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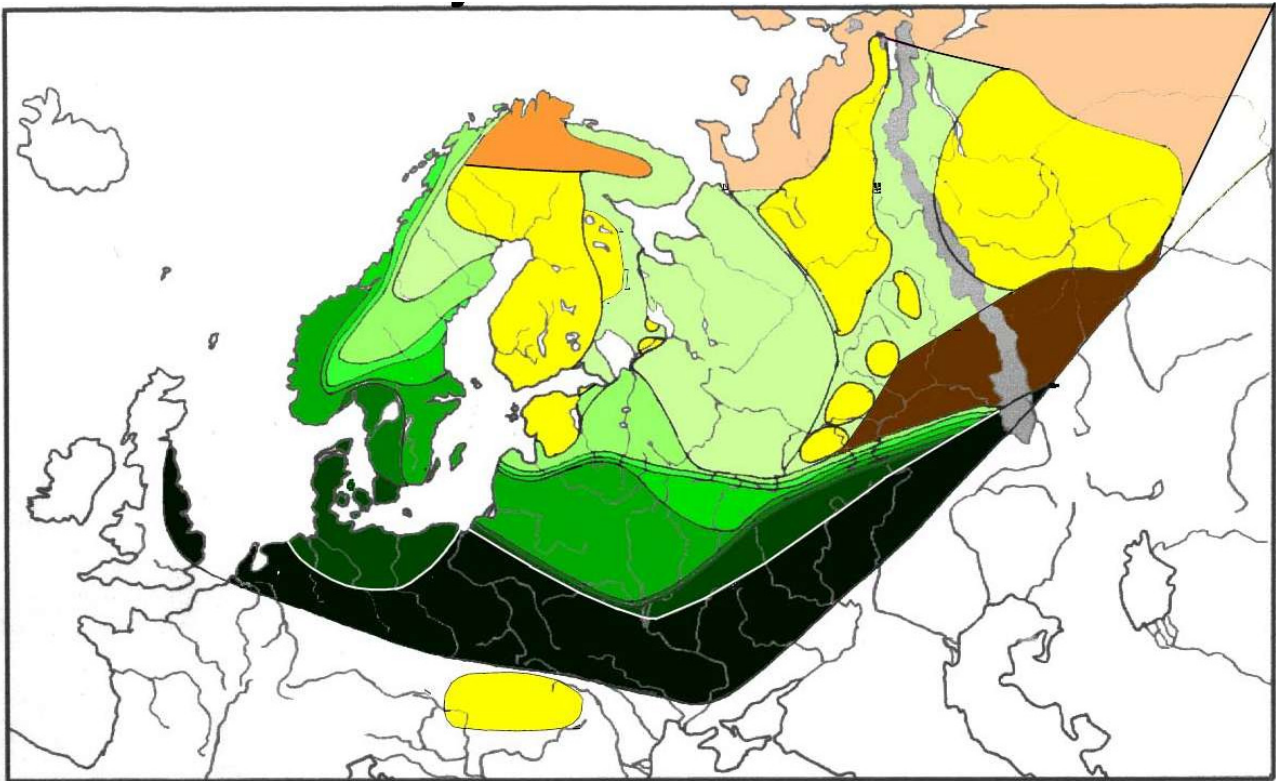
Question 108. What did the Finno-Ugric world look like in 1200 ad?



Map 108. The areas of the Finno-Ugric speaking people about 1200 ad. Letter symbols: NS = North Saami, SS = Finland Saami or South Saami; WF = Western Finns; EF = Eastern Finns; NE = Northern Estonians; SE = Southern Estonians; Li = Livonians; Vo = Votians; Ve = Veps; Mj = Meryas; Me = Mescheras; Mu = Muromas; Mo = Mordvians; Ma = Mari; Ud = Udmurts; KP = Komi-Permyaks; Ko = Komis; Ms = Mansis; Kh = Khanties and Sm = Samoyeds. The white areas belonged to people speaking other than Finno-Ugric languages. The map is based mainly on the map in Patrushov 2000, p. 173.

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Question 109. How has the total area of the Finno-Ugric speaking people varied during the last nine thousand years? See Map 109.

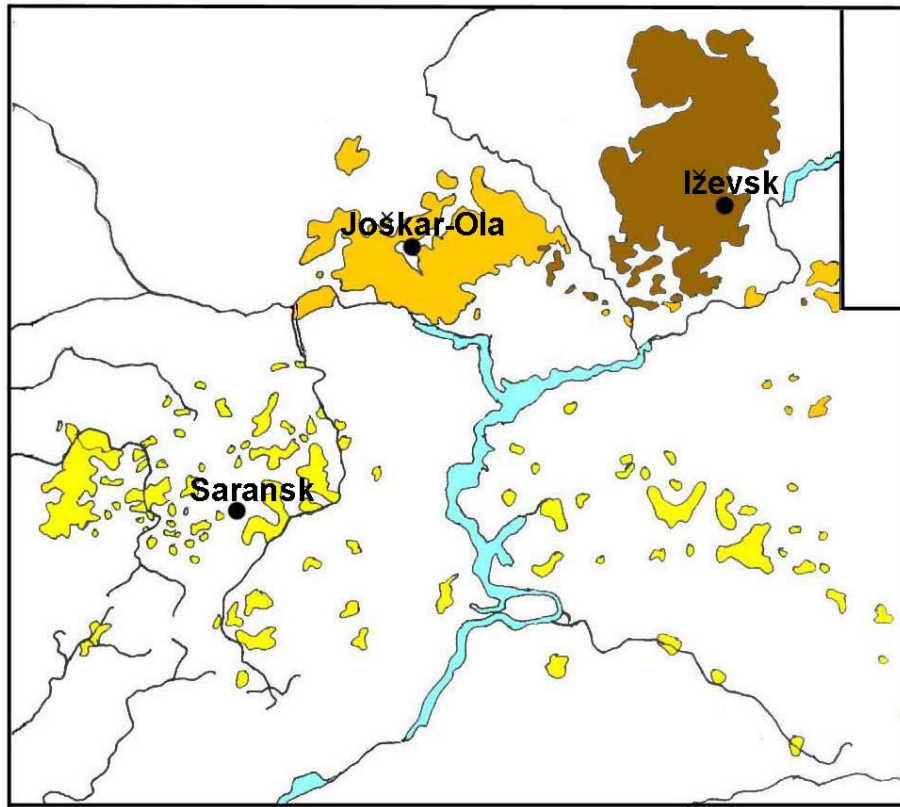


Map 109. A stylized and schematic presentation of the reduction of the Finno-Ugric total area during the last nine thousand years. The darker the green area, the earlier the Finno-Ugric language is assumed to have disappeared; the time depths of the green zones (from the darkest to the lightest) are approximately as follows: 9000 bc uncal (= 10 000 cal), 4000 bc uncal (= 4900 cal), 3000 bc uncal (= 3500 cal), 2000 bc uncal (= 2300 cal), 1000 bc, 0, 1000, and 2000 ad. Dark brown = the area where the Turkish languages have displaced the Finno-Ugric ones. Yellow = the FU areas today (other than the Saami and Samoyed areas); reddish brown = Saami; light brown = Samoyed.

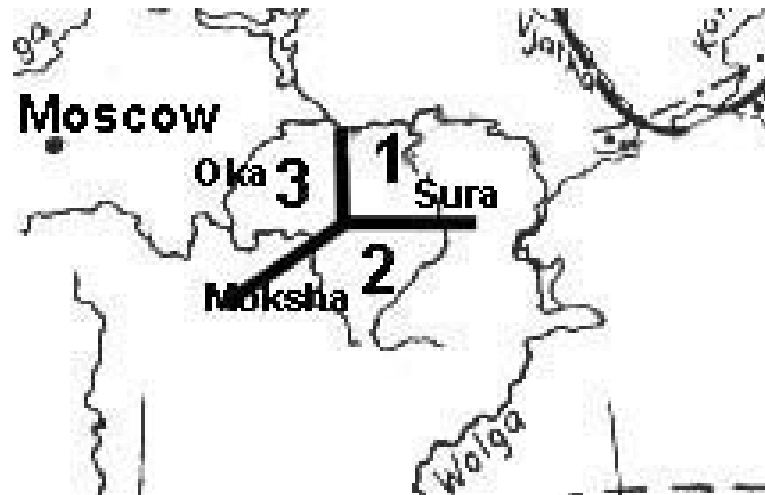
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Question 110. What are the present areas of the Finno-Ugrians of the Volga-Kama region?

See Maps 110a and 110b.



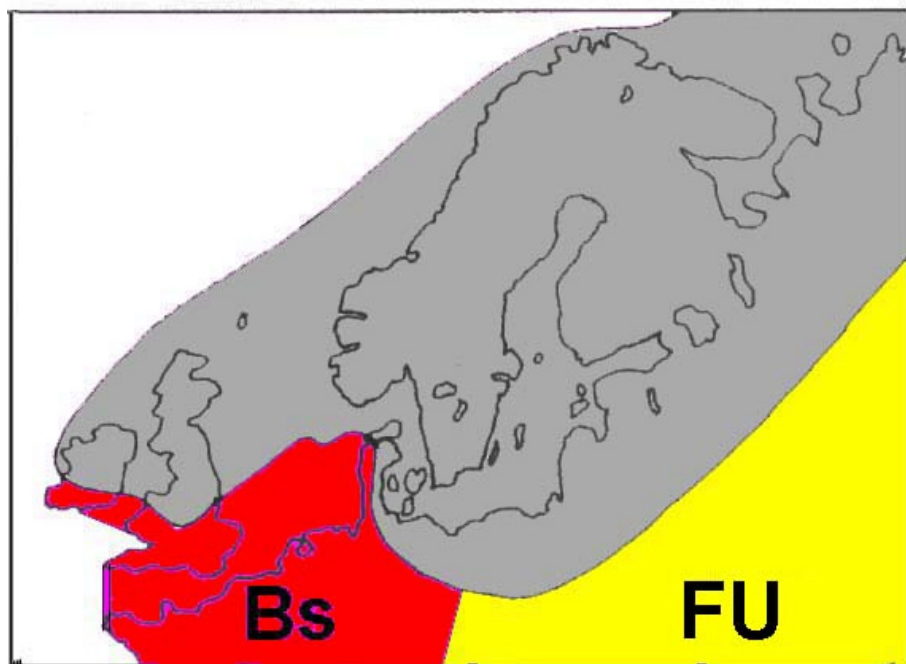
Map 110a. The present areas of the three languages of the Volga-Kama region. Yellow = Mordvian, light brown = Mari, and dark brown = Udmurtian. The black dots show the capitals of the respective areas: Saransk, Joškar-Ola, and Iževsk. The map is a combination of three maps in Haarmann 1974 (p. 183, 193, and 205).



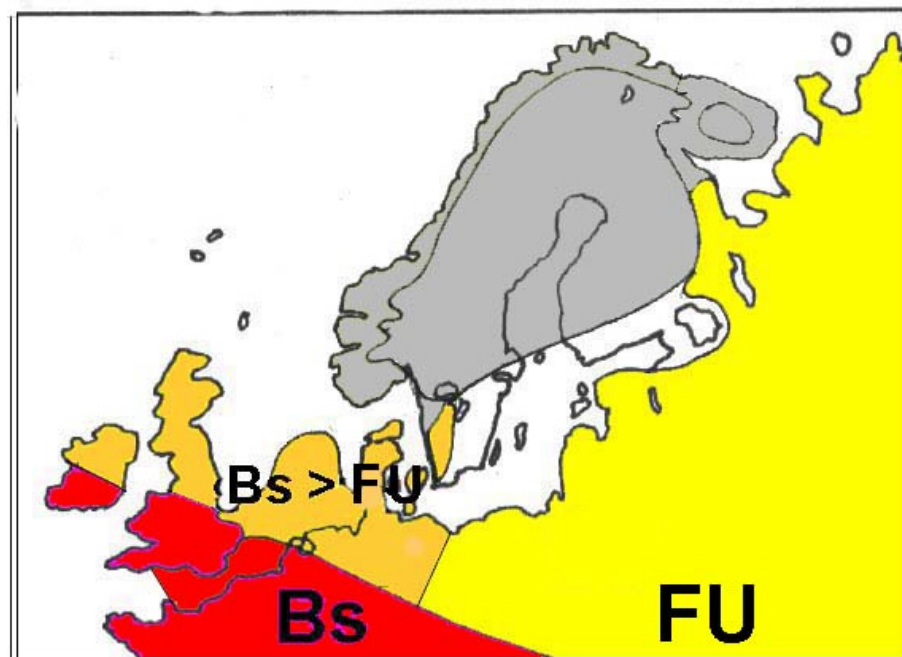
Map 110b. Three sub-areas of the Mordvian area. Three assumed sub-areas of the Morvians before the arrival of the Turkish people: (1) the area of the Chuvash, (2) the area of the Erza Mordvians and (3) the area of the Moksha Mordvians.

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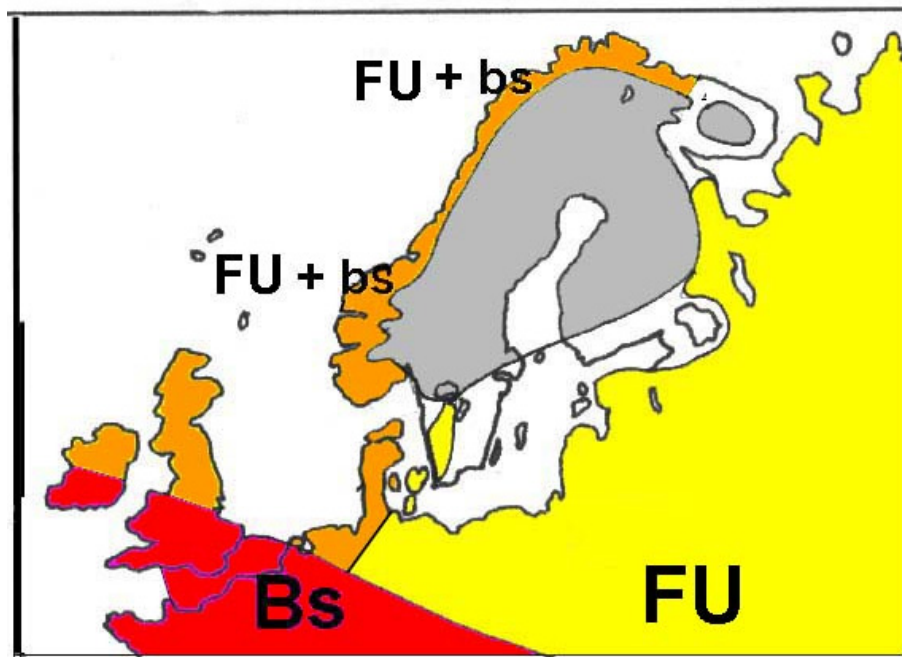
Question 111. How did the Saami emerge? See Maps 111a, 111b, 111c, and 111d.



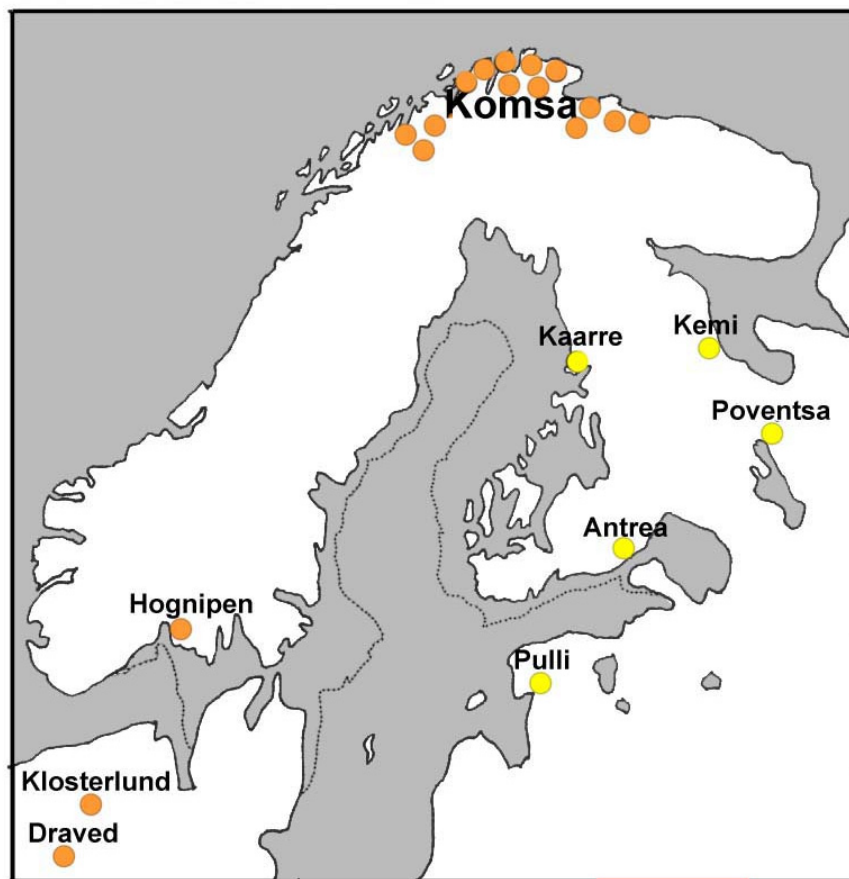
Map 111a. North-western Europe during the LGM. The western parts of the region belonged to the Iberian refugium while its eastern parts belonged to the Ukrainian refugium. The language in the west was presumably Basque (red) while that in the east was Finno-Ugric (yellow).



Map 111b. North-western Europe in the Post-Glacial Period. In northern Britain, North Sea continent, Holland, northern Germany, and Denmark, the Finno-Ugric language was presumably used as *lingua franca* and later a language shift Basque > Finno-Ugric took place; as a result, the Basque language was displaced by a dialect with Basque substratum of the Finno-Ugric language. The 'Basque dialect' of the FU language is here assumed to represent the earliest form of Saami.



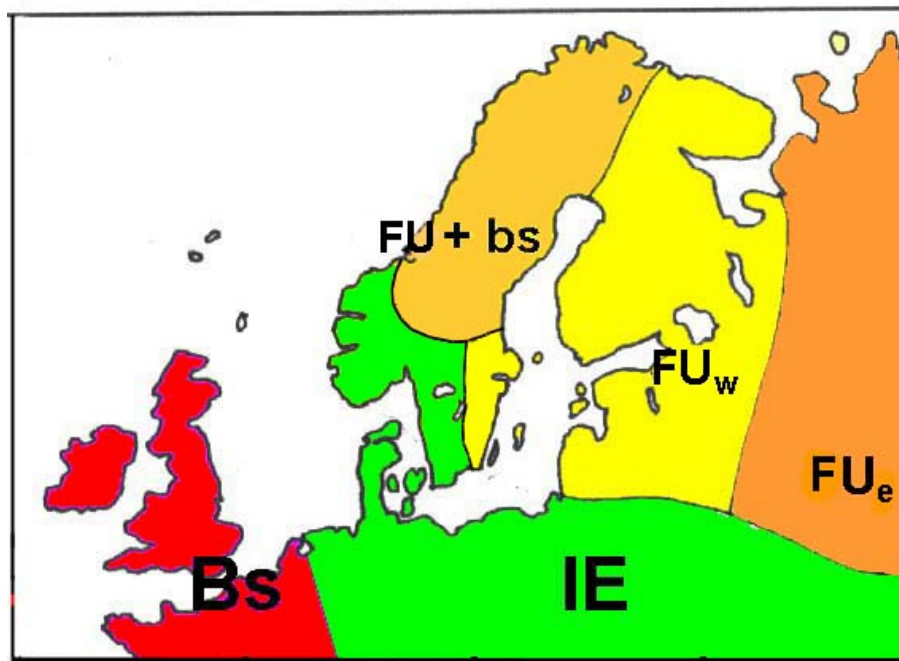
Map 111c. North-western Europe about 12.000-13.000 years ago. The North Saami people whose ancestors were mostly from the Iberian refugium and who spoke a Basque contaminated dialect of the Finno-Ugric language lived about 12.000-13.000 years ago on the coasts of Northern and Western Norway and perhaps also in Denmark, Holland and the British Isles (then a peninsula). In Karelia and Estonia, there already were those Finno-Ugrians whose ancestors were from the Ukrainian refugium and who spoke a 'pure' dialect of the FU language; these were ready to enter Finland as soon as the glacier retreated.



Map 111d. Living sites in Fenno-Scandia about 7000 bc uncal (8200 cal). Komsa represented the largest concentration of people. The populations of the area presumably represented two main genetic types and the people perhaps spoke two different languages (cf. the brown and yellow circles): The people of Komsa, Hognipen, Klosterlund, and Draved were probably genetic representatives of the (dark?) Iberian type who spoke a Basque contaminated (pre-Saami?) dialect of the FU language; the people of Finland, Estonia, and Karelia represented a (light?) genetic type that originated in the Ukrainian refugium and spoke a 'pure' dialect of the FU language (having no Basque substratum); the latter group represented the common ancestors of the Finland Saami and Finnic speakers. The areas of the map are based on the map in Meinander 1984, p. 24.

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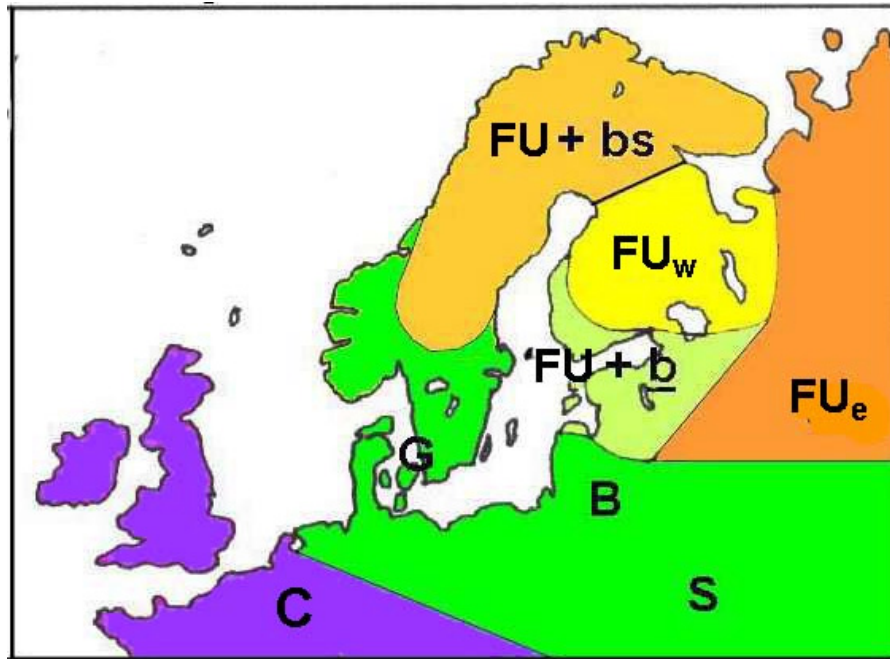
Question 112. What was the assumed language situation in North-western Europe at the end of the IV millennium uncal (the V millennium cal)?



Map 112. North-western Europe at the end of the IV millennium uncal (V millennium cal). Presumably, three Finno-Ugric languages/dialects (yellow and brown in the map) were spoken in the area: (1) North Saami (SU + bs), (2) a western FU language (SU_w), and an eastern FU language (SU_e). The areas south of these belonged to the Indo-European and Basque languages (cf. the green and red areas).

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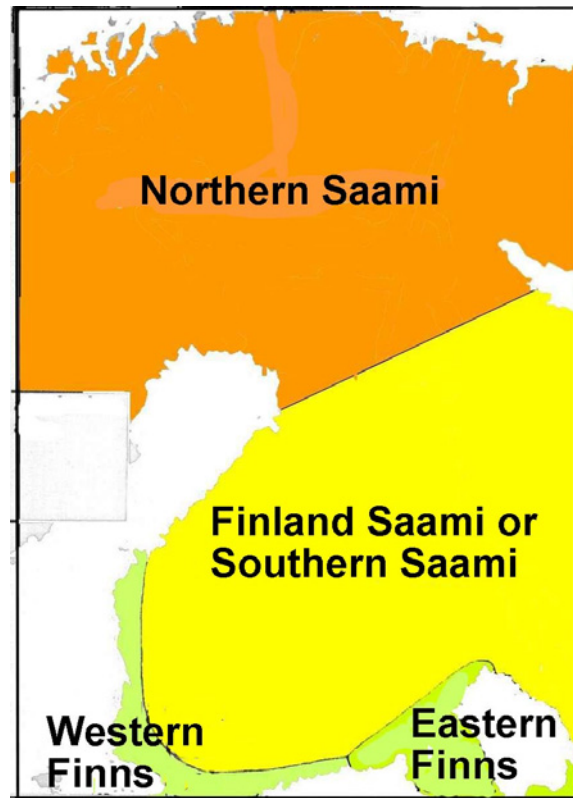
Question 113. What was the assumed language situation in North-western Europe about four thousand years ago?



Map 113. Northern Europe in 2000 bc uncal (2300 cal). The western FU language/dialect was split in two after the arrival of the Battle Axe (Corded Ware) culture and the Baltic language: The southern area (SU + b) obtained strong Baltic superstratum, but the northern part (SU_w) remained intact. As a result, the language of the northern area became 'Finnic' and that of the northern area 'Finland Saami' (a southern dialect of Saami). The map does not show the Baltic superstratal influence on the eastern FU language/dialect (SU_e). G = Germanic; B = Baltic; S = Slavic; and C = Celtic.

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Question 114. What languages and dialects were spoken in Finland in the Pre-Roman (Celtic) Iron Age?

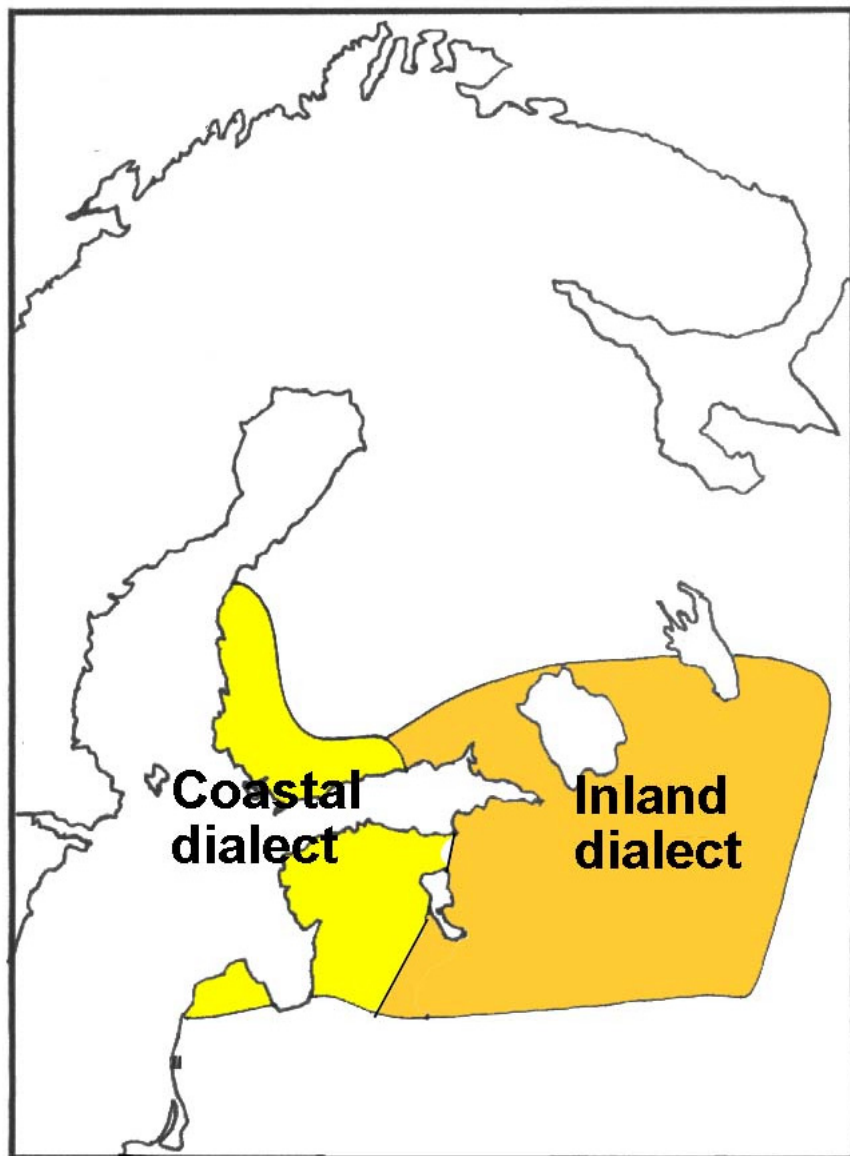


Map 114. The linguistic situation in Finland in 500 bc. Four languages/dialects were spoken in Finland and its neighbouring regions: (a) North Saami, (b) Finland Saami or Southern saami , (c) Western Finns, and (d) Eastern Finns.

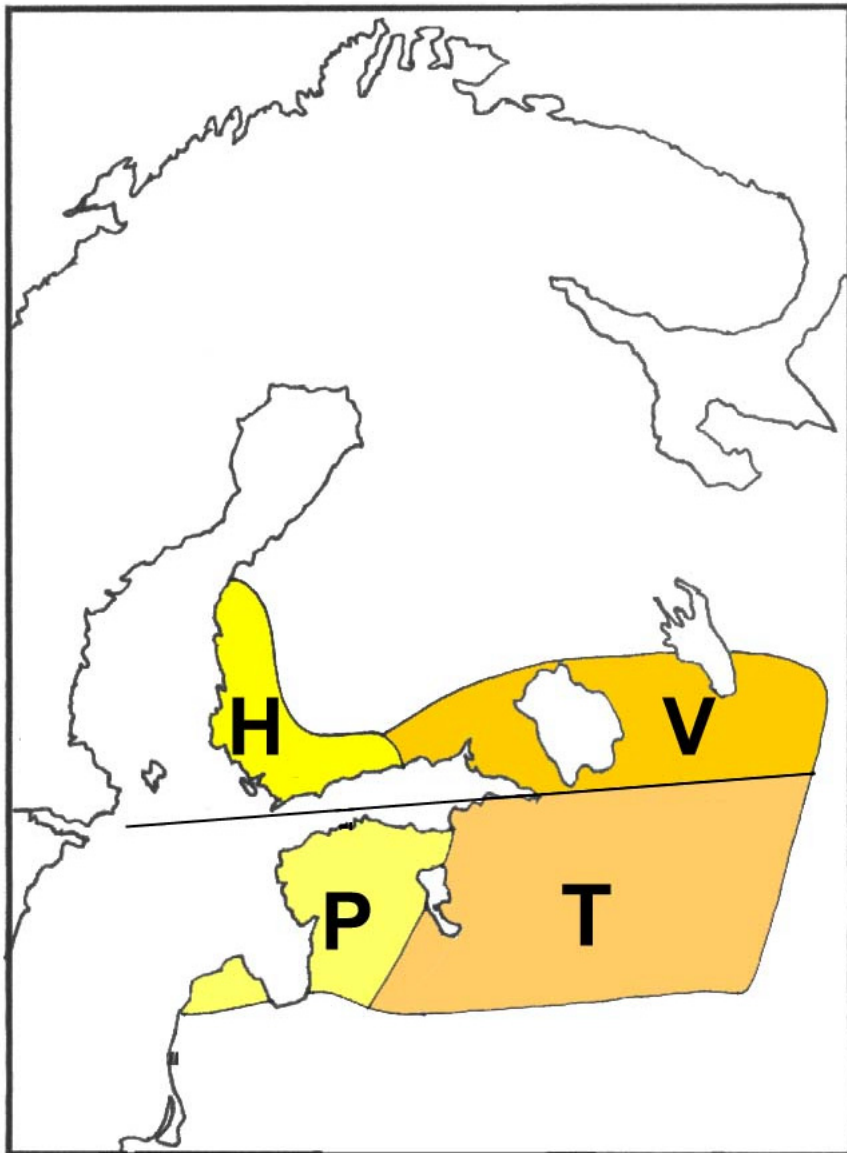
There was a deep genetic boundary between the North Saami and Finland Saami populations: The former were mainly from the Iberian refugium while the latter were mainly from the Ukrainian refugium. The genetic boundary between the Finland Saami and the two Finnic populations was not so deep: they all originated mainly from the Ukrainian refugium; the slight genetic difference between them was based on the fact that the Finland Saami had to some extent mixed with the North Saami and the Finnic people had mixed with the Baltic immigrants.

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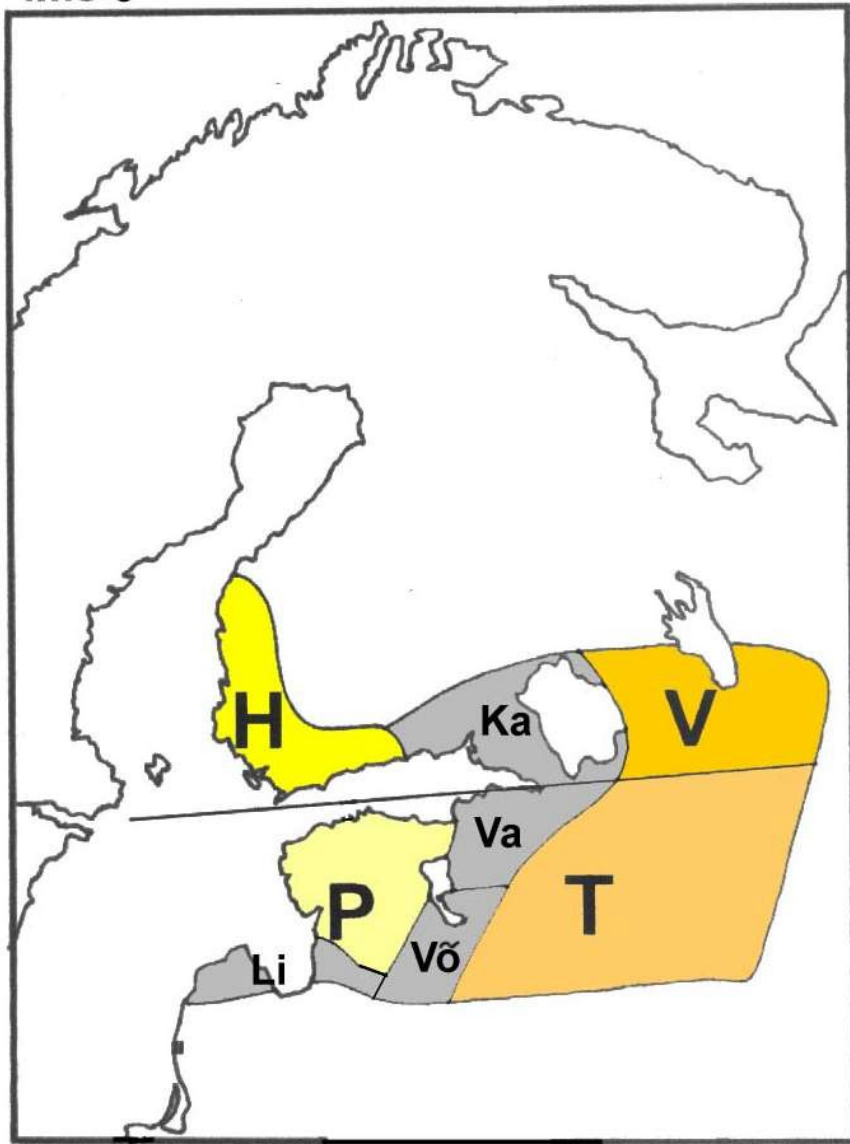
Question 115. How did the Finnic language/dialects emerge? See Maps 115a, 115b, 115c, and 115d.



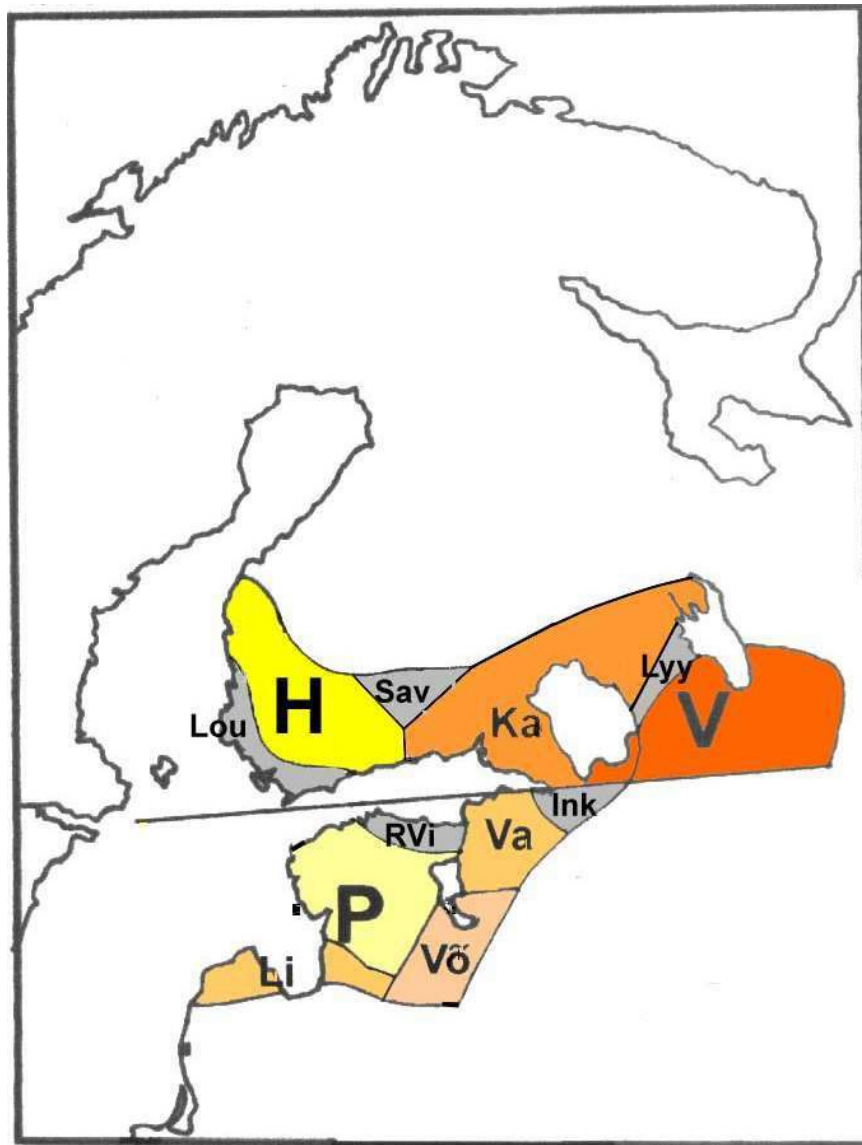
Map 115a. Two Finnic dialects. The coastal areas of the Finnic language obtained influences from the west through the Baltic Sea, while the inland areas obtained influences from the east.



Map 115b. Fours Finnic tribes and dialects of the 'first generation'. H = Häme or Tavastian; V = Vepsian; P = North Estonian; and T = Chudian.



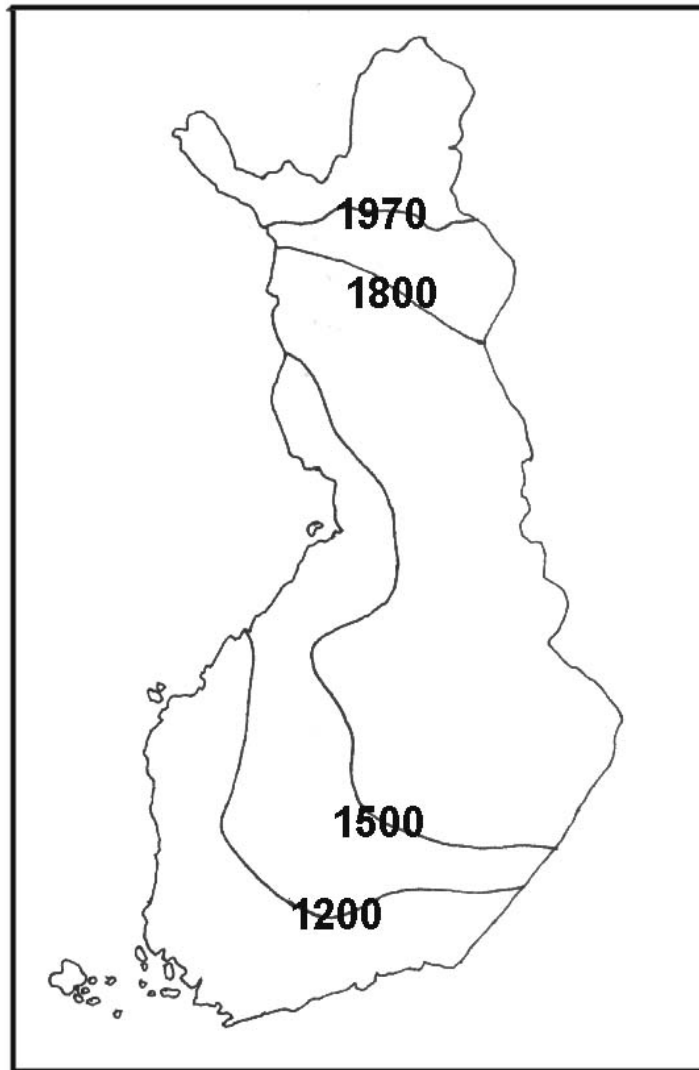
Map 115c. The 'second generation' dialects of the Finnic language in the first centuries of the Christian Era. Ka = Karelian, Va = Votic, Võ = Võru; Li = Livonian. The 'second generation' dialects and tribes are symbolized by two-letter symbols.



Map 115d. The Finnic area in 1000 ad. The new dialects of the ‘third generation’ are: South-western Finnish (Lou), Savo (Sav), Lydian (Lyy), Ingrian (Ink), and Coastal Estonian (RVi). The Chude dialect has disappeared (or it is disappearing) as a result of the Slavic Expansion. The ‘third generation’ dialects and tribes are symbolized by three-letter symbols.

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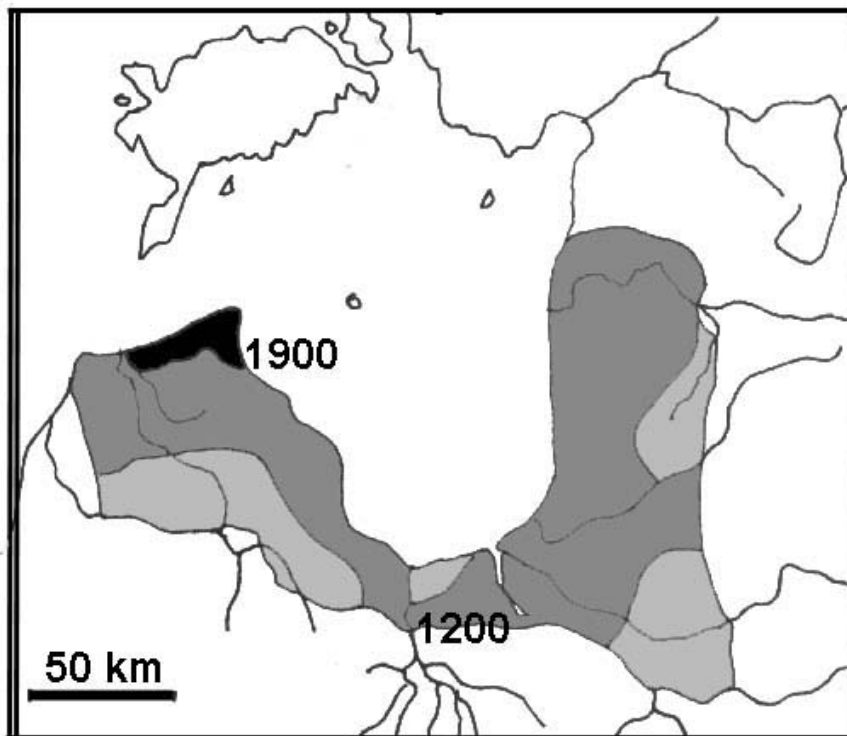
Question 116. Where has the Finnish-Saami language boundary been during the last eight hundred years?



Map 116. The boundary between the Saami and Finnish populations in Finland during the last 800 years. The Map is based on Itkonen 1947 and Itkonen 1973 (according to Haarmann 1974).

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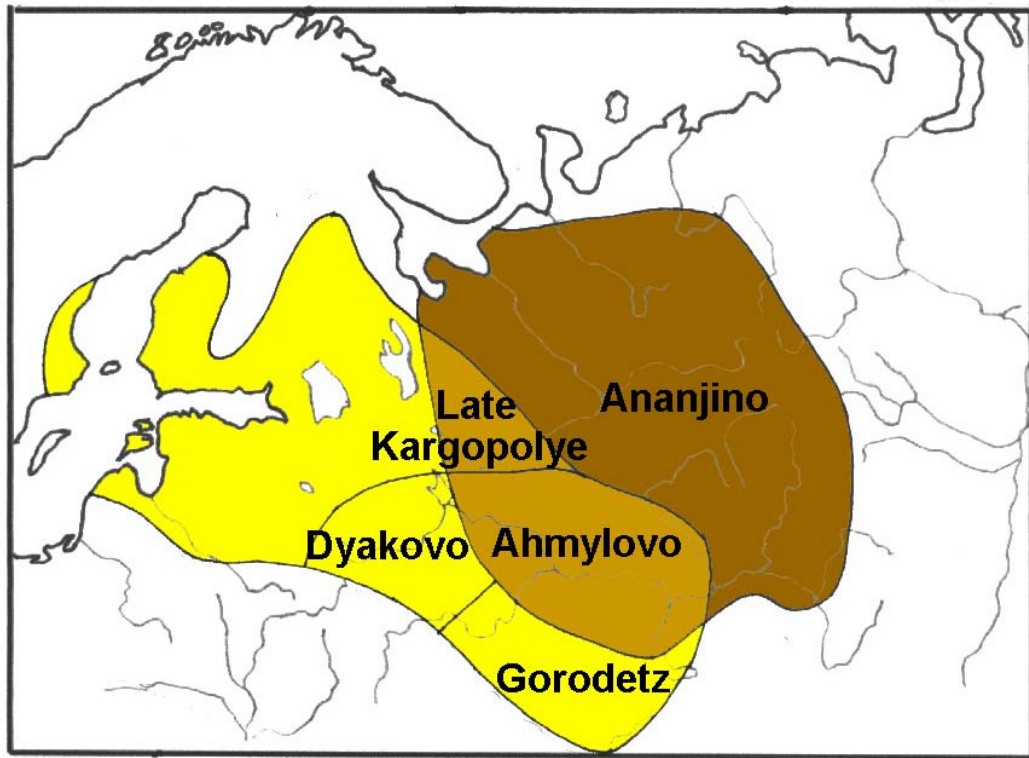
Question 117. Where has the Livonian-Latvian language boundary been during the last eight hundred years?



Map 117. The Livonians during the last 800 years. The lightest grey refers to the Livonian-Latvian mixture areas. The Map is based on Ariste 1954 (according to Haarmann 1974: 159).

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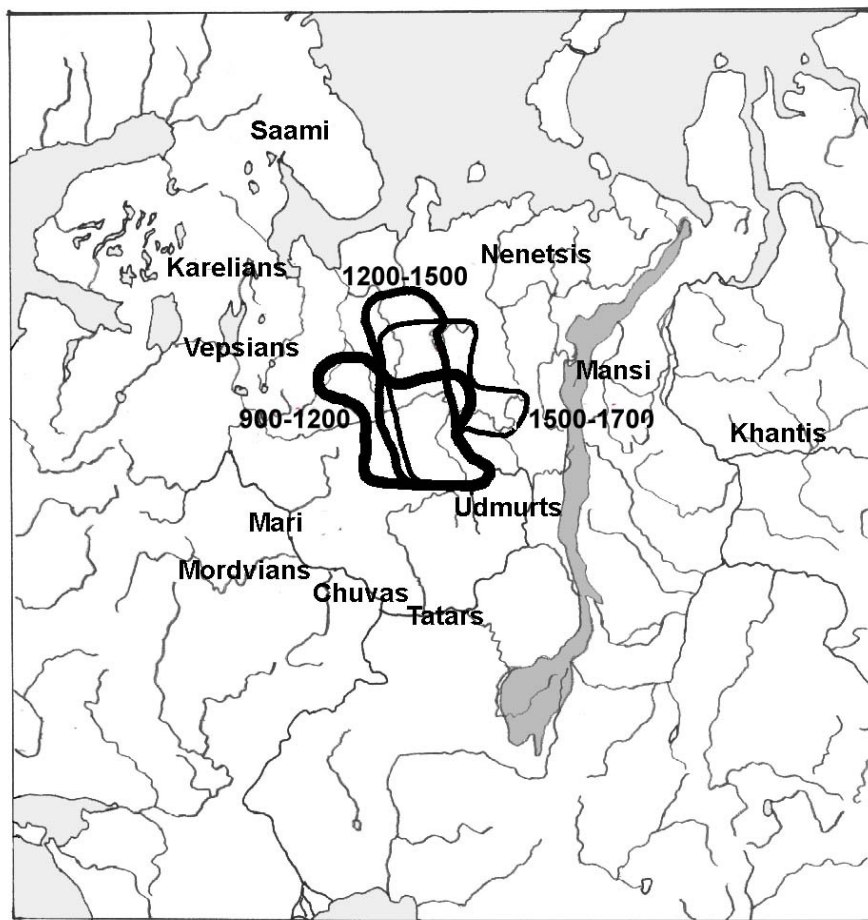
Question 118. What were the main cultures of Eastern Europe at the end of the Bronze Age?



Map 118. Some Finno-Ugric cultures in the early Iron Age. In ca. 800 bc, there were two vast cultural areas in Eastern Europe: the Textile Ceramics (yellow in the map) and the Ananyino culture (dark brown); between the two, there was a hybrid zone (light brown) that was formed by the Ahmylovo and Late Kargopolye cultures. The area of the Textile Ceramics culture in the map represent the maximal area of this culture (including areas often interpreted to belong to the Scandinavian Bronze culture or the Scratched Pottery culture).

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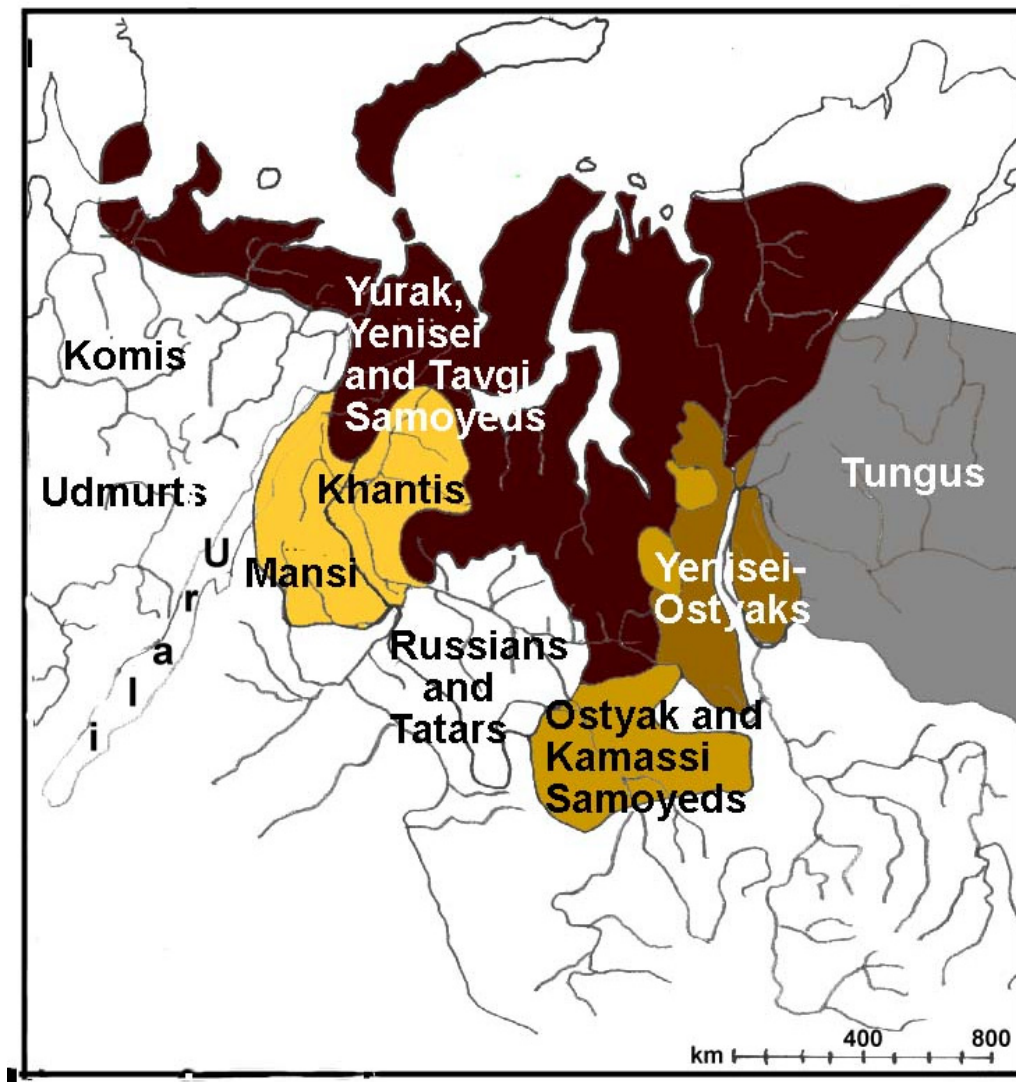
Question 119. Where have the Komi people lived during the last thousand years?



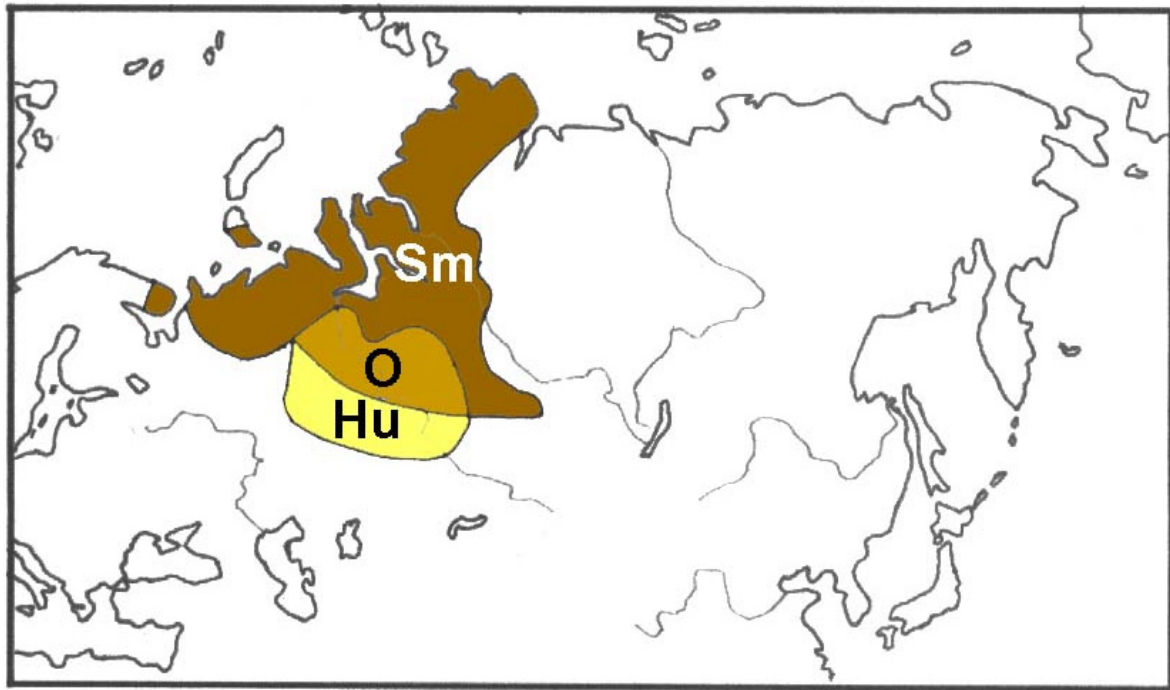
Map 119. The areas of the Komi in 900-1700 ad. The broadest boundary = 900-1200 ad; the middle broad boundary = 1200-1500 ad; and the narrowest boundary = 1500-1700 ad. The maps a simplification of the maps by L.N.Zerebcov (cf. Szij 1990: 348-349). On the basis of the map, two generalizations can be made: the Komi people moved first (1200-1500 ad) toward the north, and later (1500-1700 ad) to the east.

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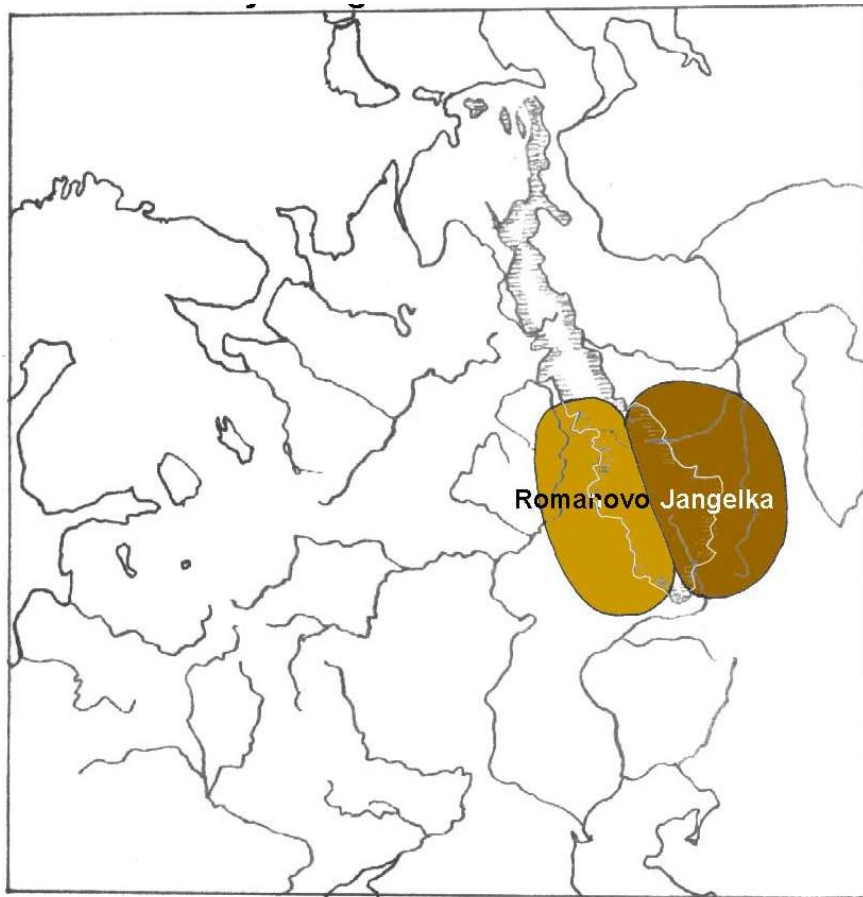
Question 120. What are the areas of the Ob-Ugric and Samoyed peoples of North-western Siberia? See Maps 120a, 120b, and 120c.



Map 120a. The language areas of the Ob-Ugric and Samoyed languages. The map is based on the in Donner 1933.



Map 120b. Ugric and Samoyed areas. Sm = the Samoyed languages; O = the Ob-Ugric languages (Khanty and Mansi); and Hu = Hungarian (the 'pre-Hungarian' that was spoken within the Sargatka culture in the Ural Mountains and western Siberia before the start of the Hungarian migration to the west). The Samoyed and Ob-Ugric part of the map is based on the map in Kulonen 1991, p. 304.

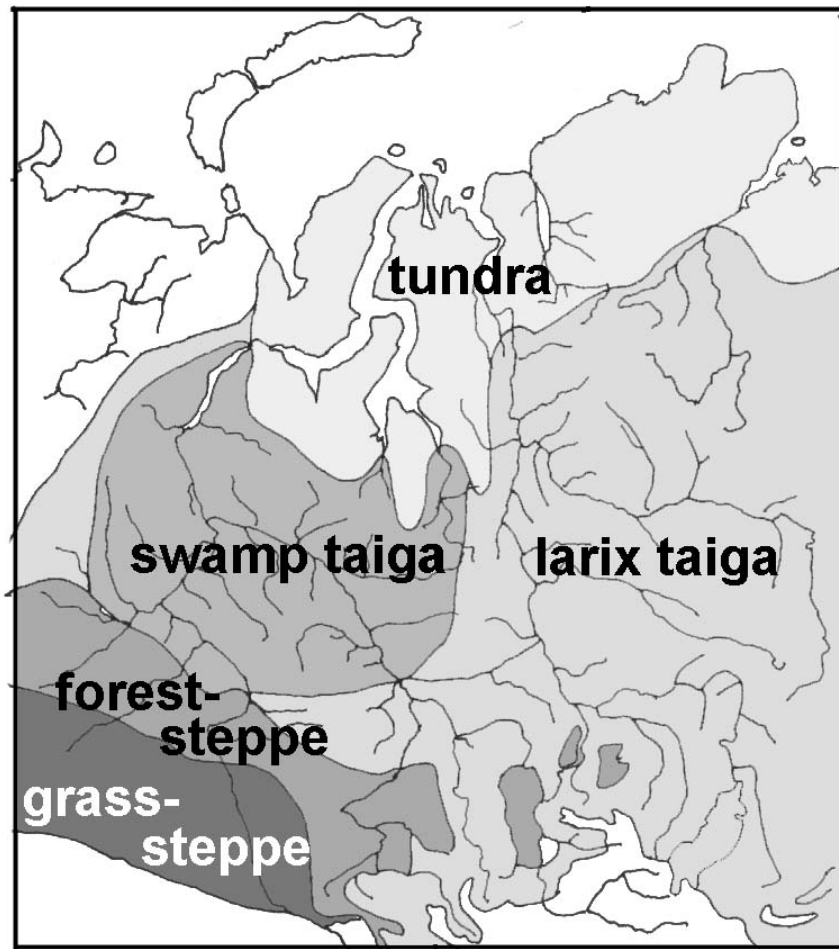


Map 120c. The Mesolithic cultures of Romanovo and Jangelka. The two cultures presumable belonged to the Ugric peoples. They were based an earlier culture of the same South Uralic area. The map is based on a map in Matjushin 1989 (p. 131).

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Question 121. What are the main vegetation zones of North-western Siberia?

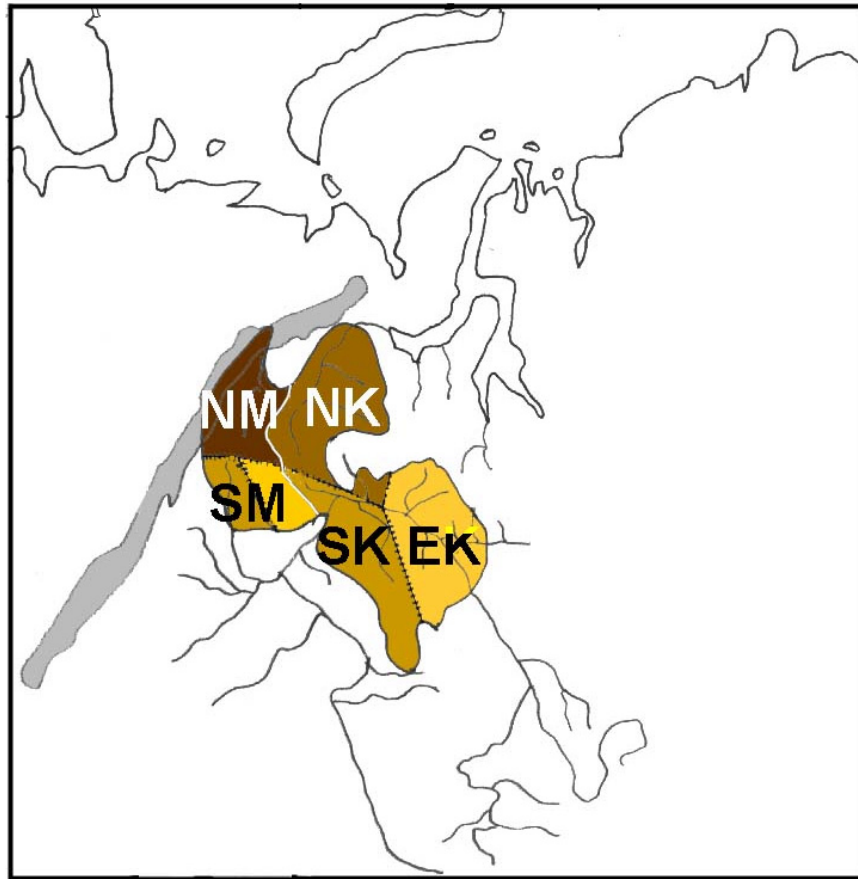
The question is relevant because the zones may have influenced the emergence of various Finno-Ugric peoples and languages of the area.



Map 121. The five vegetation zones of North-western Siberia. In an early phase, the vegetation zones probably corresponded to linguistic areas in that the populations of the *grass steppe* spoke a Southern Ugric dialect ('pre-Hungarian') and those of the *forest steppe* spoke a Northern Ugric dialect ('pre-Ob-Ugric'); the populations of the *swamp taiga*, *tundra* and perhaps at least partly also of *larix taiga* spoke Palaeo-Siberian and/or Samoyedic languages. In a later phase, the population of the *forest steppes* moved to the *swamp taiga* zone along the rivers in the map, and the Ob-Ugric languages emerged in that area. The map is based on the map in Donner 1933.

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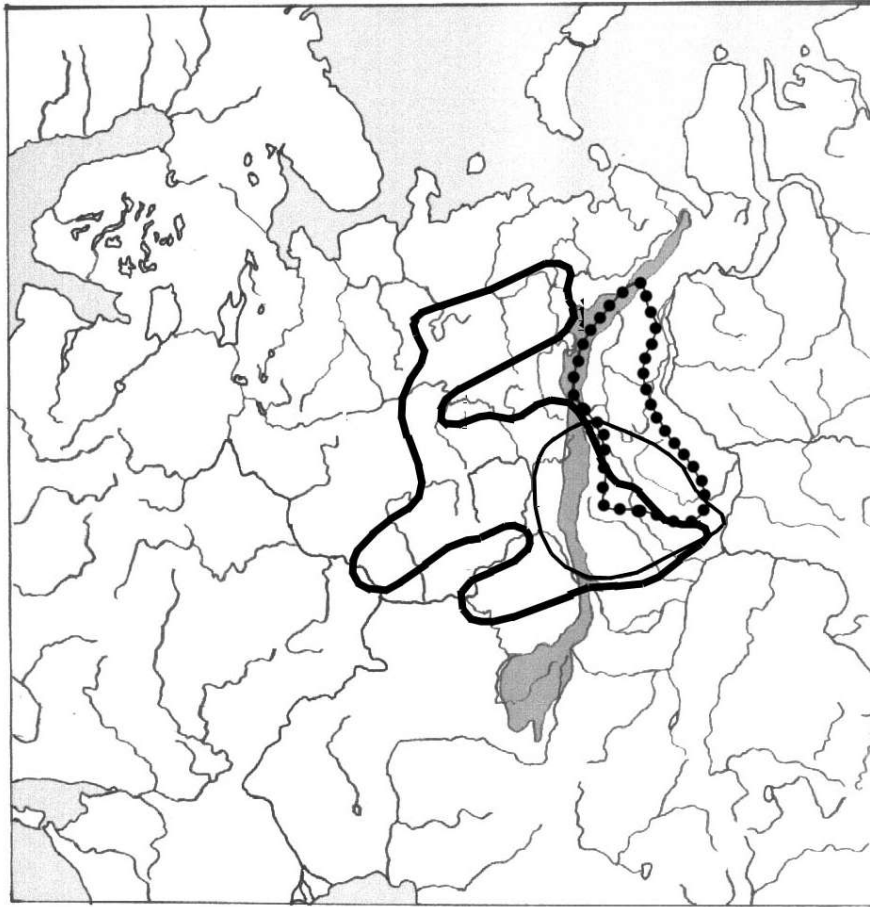
Question 122. Where are the Khanti and Mansi languages spoken, and what are their dialects?



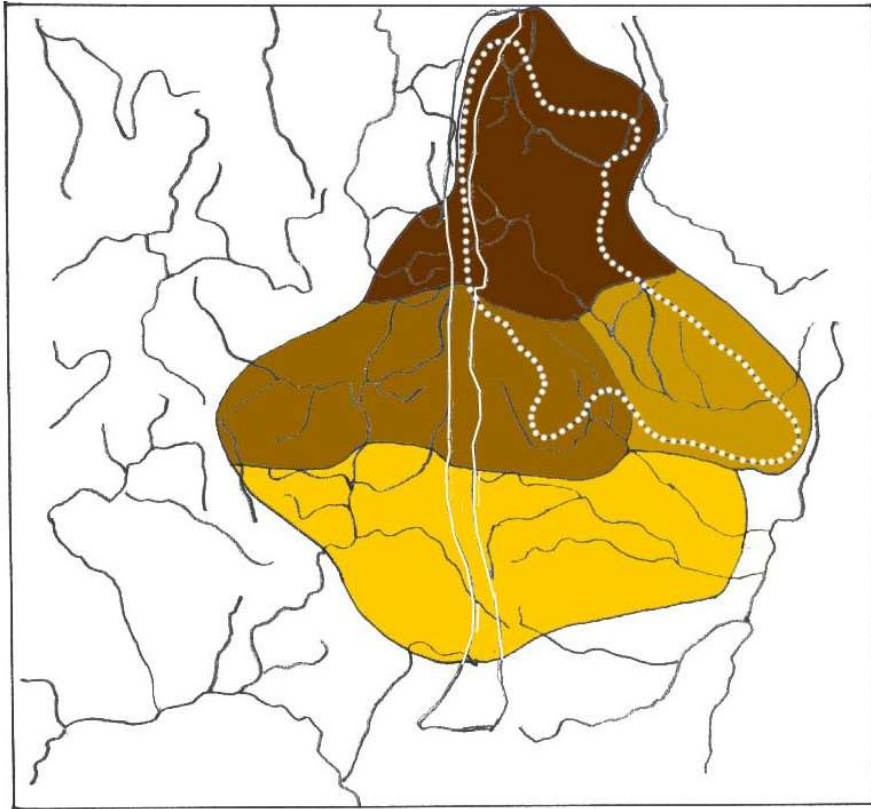
Map 122. The dialects of Khanty and Mansi. NM = Northern Mansi; SM = Southern Mansi (that today consists of the Eastern dialect and some remnants of the Western dialect); NK = Northern Khanty; SK = Southern Khanty; and EK = Eastern Khanty. The dialect boundaries of the map are based on the following sources: Gyula 1977: 119, Honti 1984: 16, Schmidt 1987, and Donner 1933: III.

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Question 123. Where have the Mansi people lived during the last four hundred years? See Maps 123a and 123b.



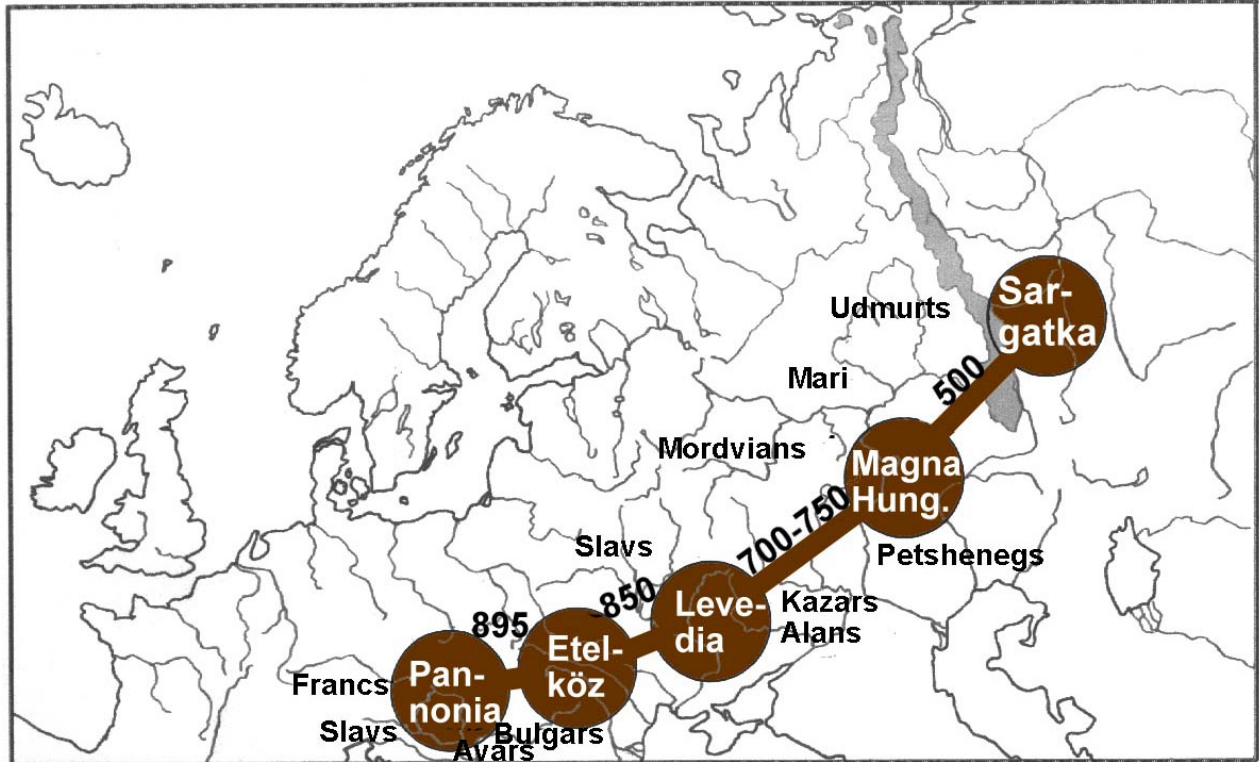
Map 123a. The Mansi areas in 1600-1700 ad. The broad continuous line gives the geographic distribution of the Mansi place names (the uncertain cases included). The narrow continuous line shows the living areas of the Mansi in 1600-1800 ad; the broken line shows their areas from 1900 to the present. The map is based on the map made by Sokolova in 1983 (Szij 1990: 368). The map tends to show that (a) the Mansi people first moved to the west, (b) they lived on both sides of the central parts of the Ural Mountains in 1600-1800 ad, and (c) they moved to the north to their present regions (mainly on the eastern side of the Urals) in 1800-1900 ad.



Map 123b. The total area of the Mansi people and the areas of the four dialects of their language in the 18th century. The Ural Mountains of the Mansi area are marked by a white continuous line, and the present area of the Mansi by a white broken line. The map is based on the map in Gyula 1977, p. 119. The map shows that (a) the total area of the Mansi people was divided by the Urals into two parts of approximately equal size, and (b) the present Mansi language is based on the three dialects of the 18th century.

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Question 124. Where did the Hungarians live before the Great Migrations? When did they come to Europe? What people did they have contacts with during their migration?



Map 124. The Hungarian migration. The map is based on Fodor 1999. The years of the map are ad. During their migration, the Hungarians were in contact with a large number of genetically and linguistically different populations.

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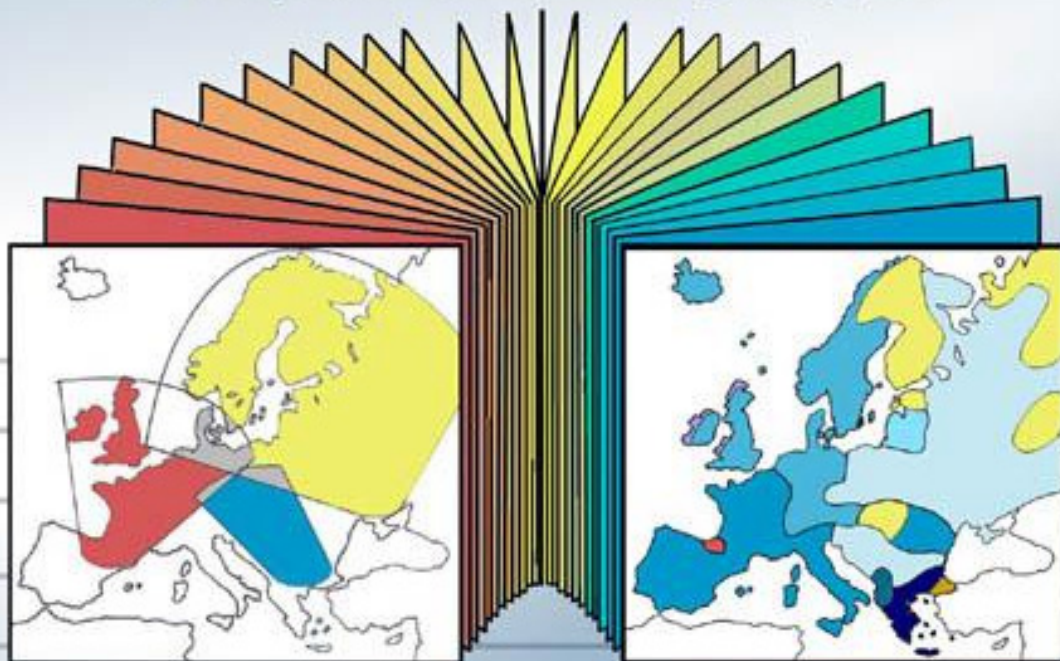
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Kalevi Wiik

A NEW ATLAS

**on the Origins
and Early History
of the Europeans**

**Section VII
Other (Basque, Iranian,
Turkish, Mongolian, Arabic,
Jewish, and Roma)
Peoples and Languages**



April 2003

"A NEW ATLAS on the Origins and Early History of the Europeans" consists of seven Sections:

Section I: General Questions

Section II: Germanic Peoples and Languages

Section III: Baltic Peoples and Languages

Section IV: Slavic Peoples and Languages

Section V: Celtic, Italic, Albanian, and Greek Peoples and Languages

Section VI: Finno-Ugric Peoples and Languages

Section VII: Other (Basque, Iranian, Turkish, Mongolian, Arabic, Jewish, and Roma) Peoples and Languages in Europe

The section in hand is **Section VII**. It consists of nineteen questions or groups of questions; these continue the numbering in Section VI and are numbered from 125 to 143. The answers are given as maps and their verbal explanations.

Click the question to get to the relevant answer (a map and its legend). Click **BACK** to get back to the beginning of the list of questions.

Questions about the Basque, Iranian, Turkish, Mongolian, Arabic, Jewish, and Roma peoples and languages in Europe

[Question 125](#). Do the modern languages of Europe bear any evidence of a **Basque substratum**?

See two potential cases: Maps 125a and 125b.

[Question 126](#). Who are the '**most eastern**' **Europeans** in respect to their gene pool?
See Map 126.

[Question 127](#). Where did the **(Indo)Iranian people** live before some of them moved to Europe? See Map 127.

[Question 128](#). Where is the **steppe zone**? See map 128.

[Question 129](#). Where are the **Turkish and Mongolian languages** spoken? See Map 129.

[Question 130](#). What are the relationships between the **Turkish languages**? Where are these languages spoken, and what is the numbers of the speakers of various Turkish languages? See Map 130.

[Question 131](#). What is the '**expansion of the Turks**'? See Map 131.

[Question 132](#). What was the **Ottoman Empire**, and how far did Turkish linguistic influence extend? See Maps 132a, 132b, 132c, and 132d.

[Question 133](#). What are the areas of the **Turks of the Volga and Ural regions**? See Map 133.

[Question 134](#). How far did the **Mongolian Empire** extend? See Maps 134a and 134b.

[Question 135](#). What was the **Arab or Berber migration** to Spain? See Map 135.

[Question 136](#). When did the **Jews** come to Europe? See Map 136.

[Question 137](#). What was the Jewish kingdom of **Khazaria**? See Map 137.

[Question 138](#). How did the **areas of the Jews** broaden in the eleventh century? See Map 138.

[Question 139](#). What were the most relevant **expulsions of the Jews** in 1000-1500 ad?
See Map 139.

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[Question 141](#). What are the most important phases in the **Jewish settlement of Europe**? See Map 141.

[Question 142](#). When did the **Jews arrive** in the various parts of Europe? See Map 142.

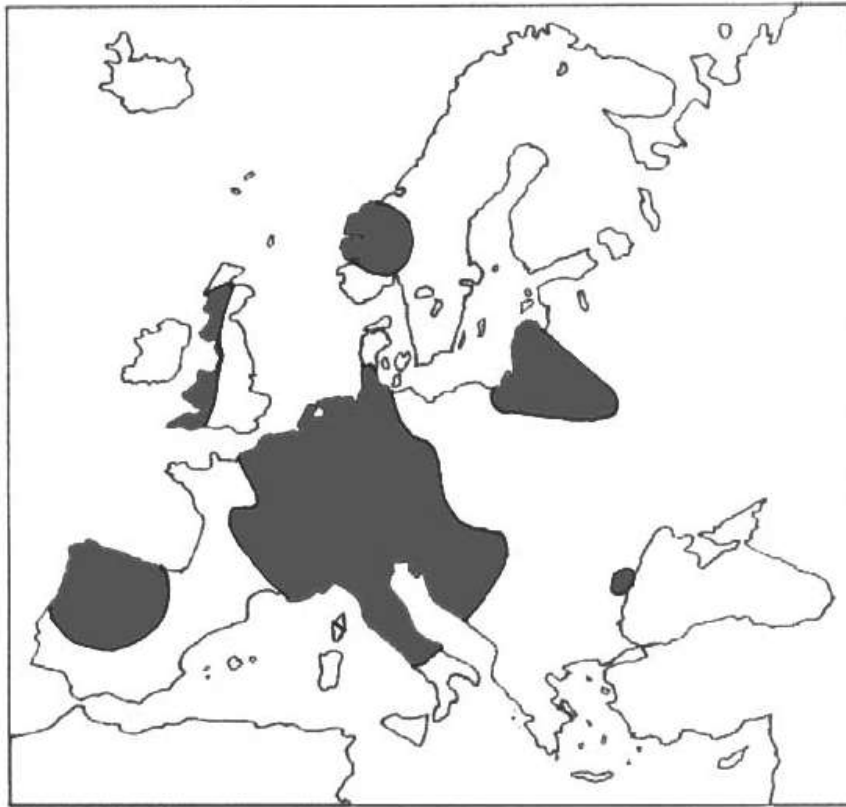
[Question 143](#). When did the **Roma (Gypsies) arrive** in the various parts of Europe?
See Map 143.

Question 125. Do the modern languages of Europe bear any evidence of a Basque substratum?

See two potential cases: Maps 125a and 125b.



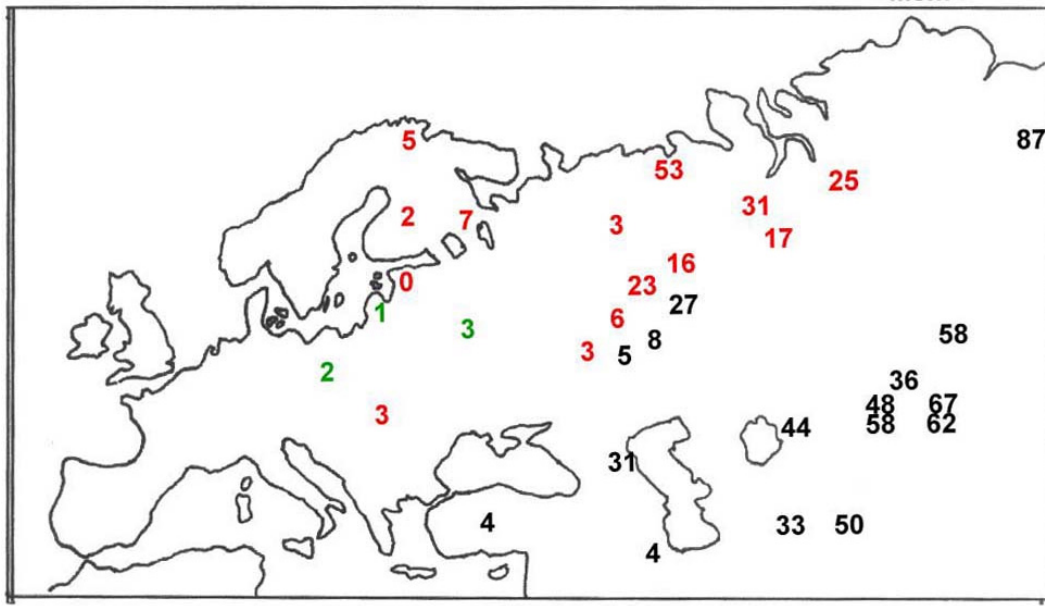
Map 125a. The languages/dialects using twenty as radix. Black areas = the countries with a standard language using twenty as radix; grey areas = the countries where a dialect exist with twenty as radix either in the numerals or other types of quantity expression. The map is based on the map in Venneman 2000, p. 22.



Map 125b. The geographic distribution of potential Basque place names with *Al-*, *Sal-* and *Var-*. The map is based on the map in Venneman 2000, p. 18 (which is based on the maps in Tovar 1977, p. 36, 38, and 39).

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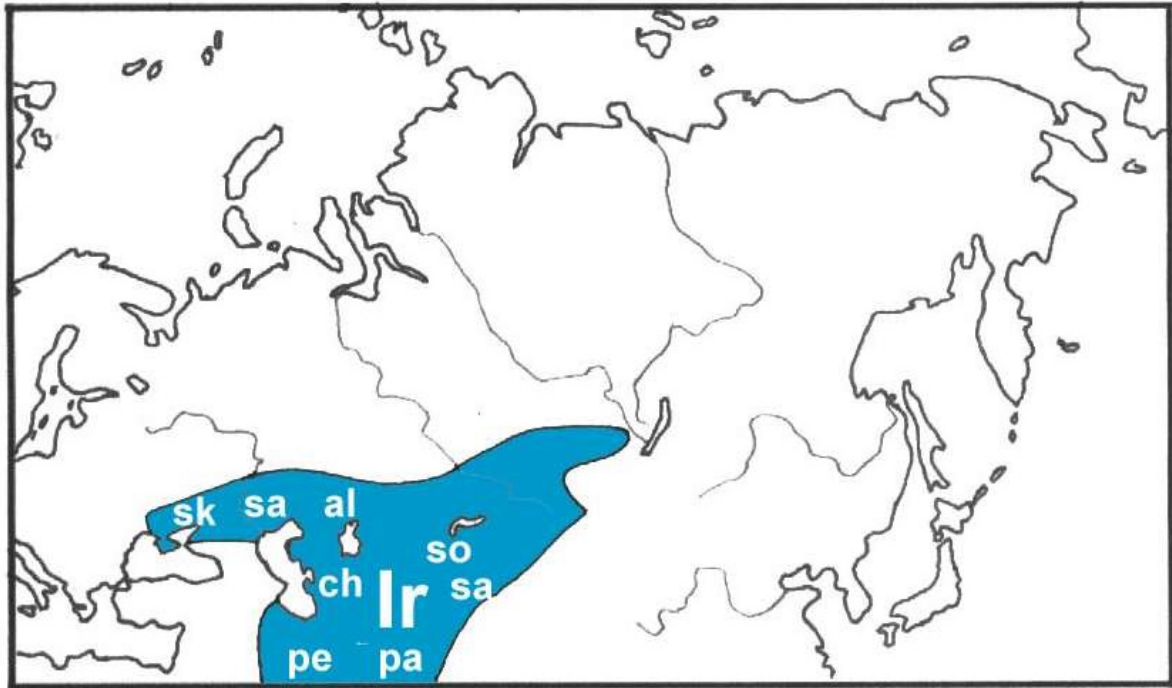
Question 126. Who are the 'most eastern' Europeans in respect to their gene pool?



Map 126. The frequency of the typically 'eastern' or 'Mongolian' haplogroup M of mtDNA. Colours: black = Altaic speakers; red = Finno-Ugric speakers; and green = Indo-European speakers. According to the map, the 'least eastern' populations are the Estonians (frequency = 0), Latvians (1), Poles-Czechs-Slovaks (2), Finns (2), Russians (3), Mordvians (3), and Komi (3). The highest M values belong to the following populations speaking Finno-Ugric (Uralic) languages: Nenets (53), Mansi (31), Selkups (25) and Udmurts (23). Among the Turkish-speaking populations, the Bashkirs have a relative high M value (28), but the values of the Chuvash (5) and Tatars (8) is much lower. The data is based on the material obtained from Richhard Villems.

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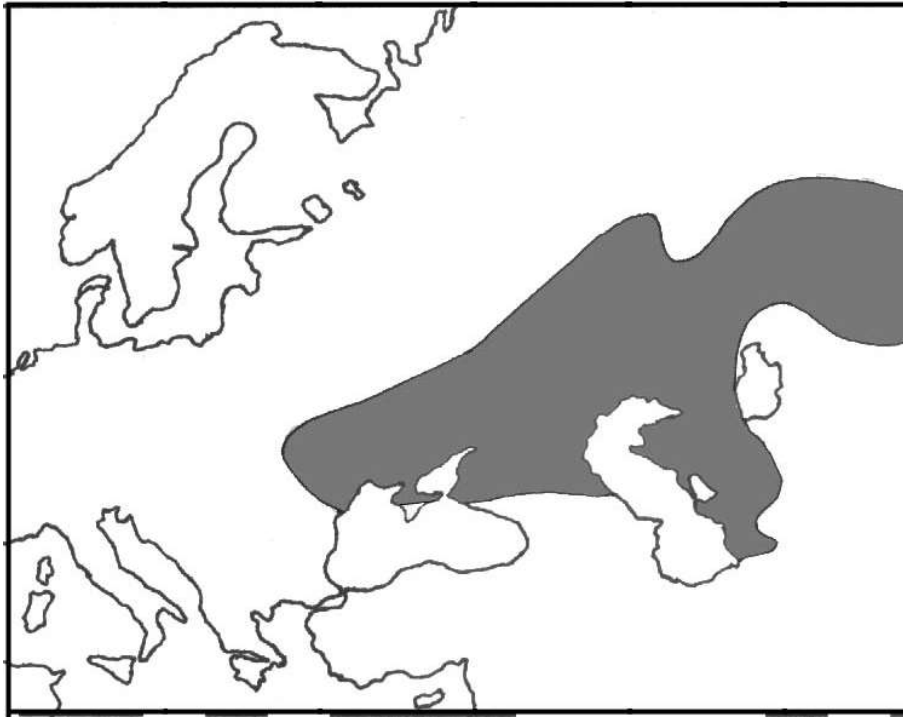
Question 127. Where did the (Indo)Iranian people live before some of them moved to Europe?



Map 127. Iranian tribes and languages/dialects. Letter symbols: Ir = the Iranian languages; sk = Scythian; sa = Sarmathian; al = Alan; ch = Cherosmian; so = Sogdian; sa = Saka; pe = Persian; and pa = Pashto. Source: Mallory 1989: 48. The Iranian tribes of the north-western area formed a 'queue' waiting for the entrance to Europe.

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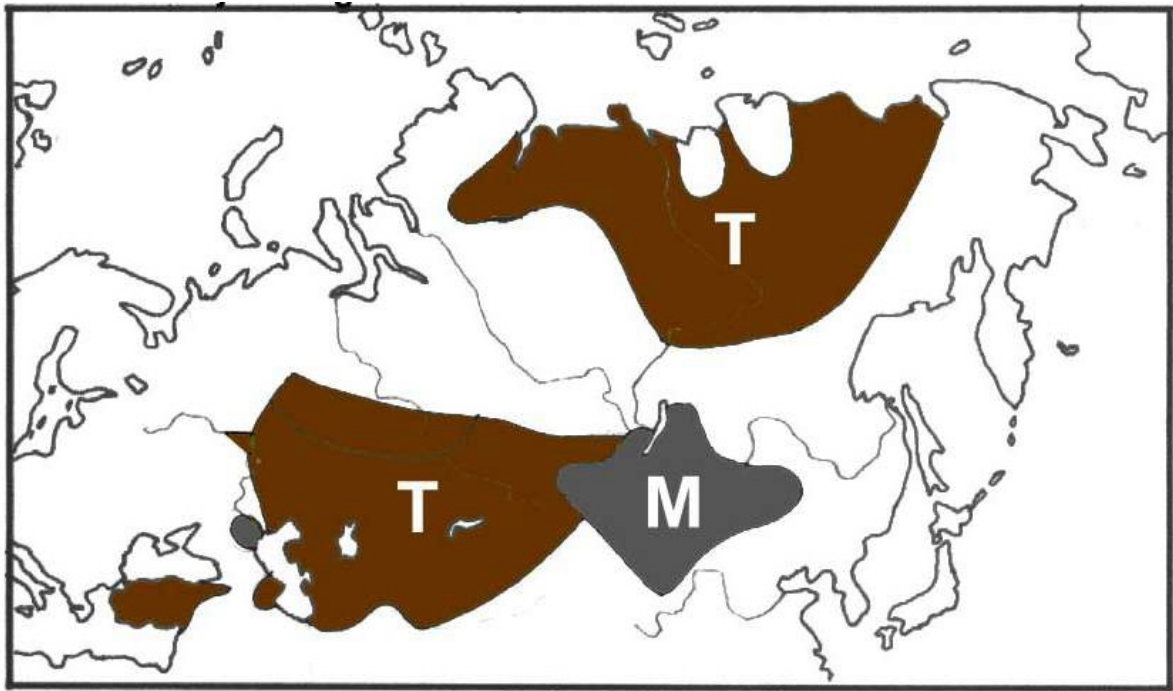
Question 128. Where is the steppe zone?



Map 128. The steppe zone. The steppe zone had a decisive significance as the starting area of the expansion of the horse cultures of the pastoral nomads to Europe.

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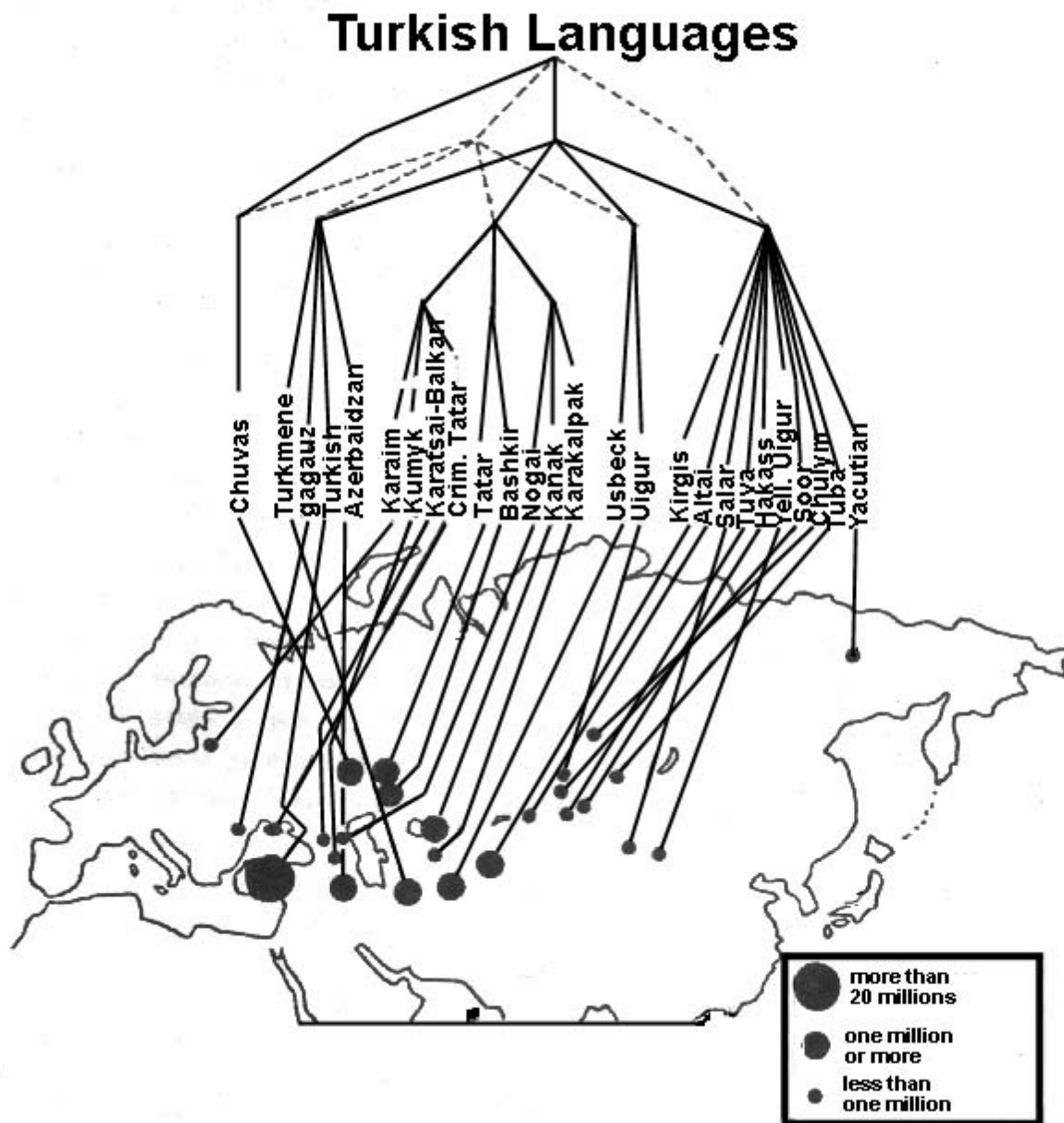
Question 129. Where are the Turkish and Mongolian languages spoken?



Map 129. The approximate areas of the Turkish (T) and Mongolian (M) languages today.

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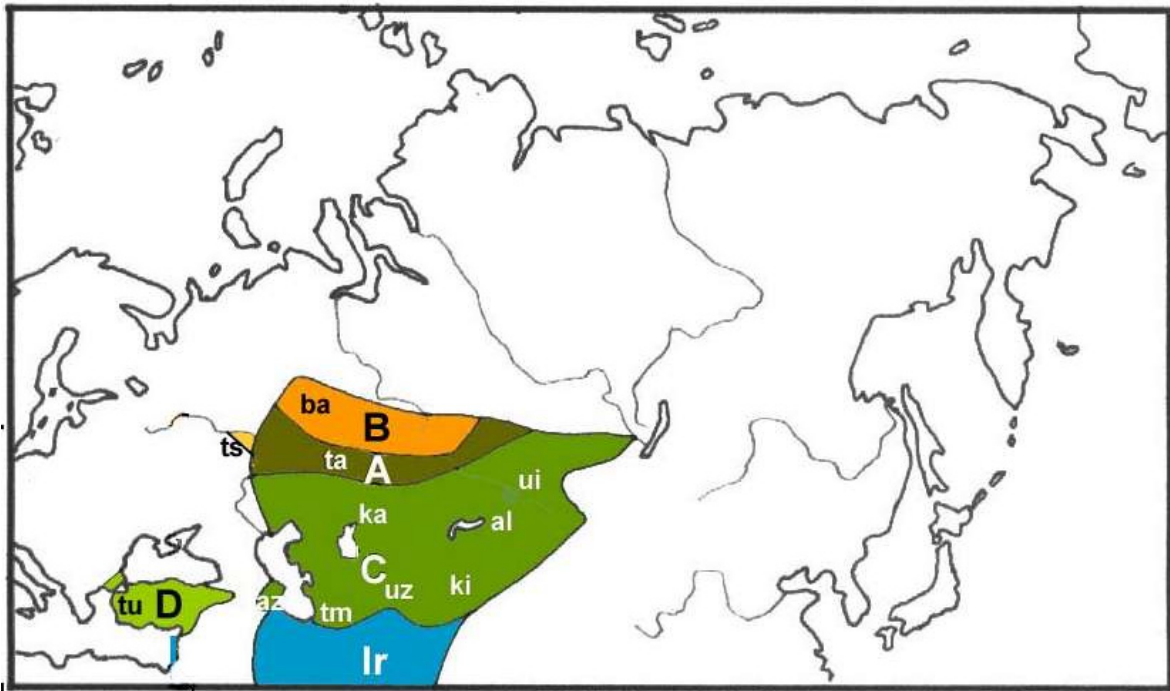
Question 130. What are the relationships between the Turkish languages? Where are these languages spoken, and what is the numbers of the speakers of various Turkish languages?



Map 130. The genetic relationships, approximate locations, and numbers of the speakers of the Turkish languages. Wiik 1983: 12.

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Question 131. What is the 'expansion of the Turks'?



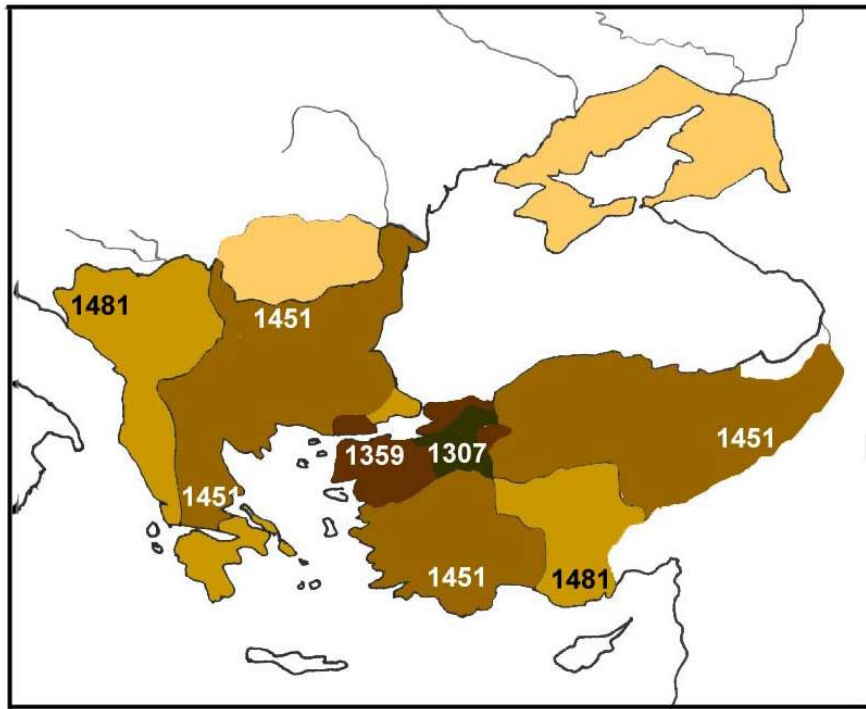
Map 131. The expansion of the Turks. Area A represents the Turkish language area where Tatar was spoken and from where these languages spread in various directions:

- (1) In the north, they expanded to the areas B that belonged to the Ugrians (Hungarians) and Permians (Udmurts), and the result was presumably the Bashkir language (ba);
- (2) In the west, they expanded to the areas of the Volgaic and Permic languages, and the result was Chuvash (ts);
- (3) In the south, they expanded to the area C that belonged to the Iranians, and the result was presumably Azerbaidzhan (az), Turkoman (tm), Uzbek (uz), Kazak (ka), Kirgiz (ki), and Uigur (ui);
- (4) In the north-west, they expanded amongst the populations in Anatolia (area D), and the result was the Turkish spoken in Turkey.

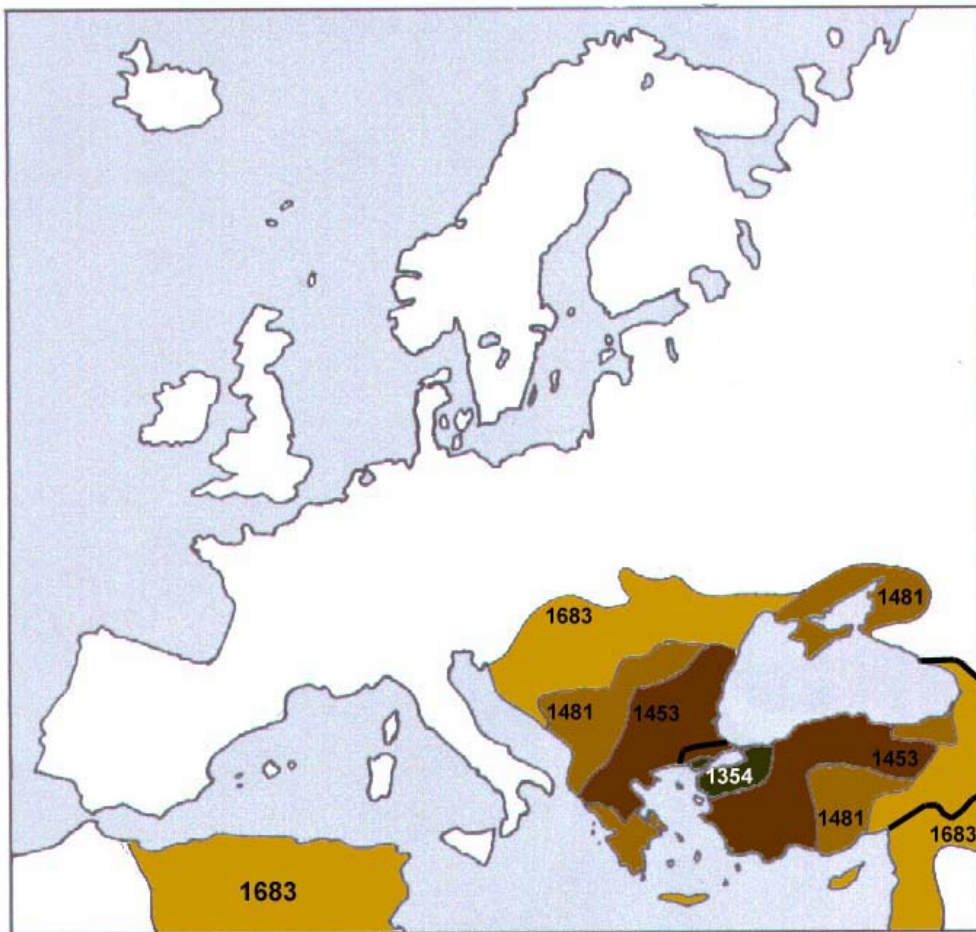
Ir = Iran.

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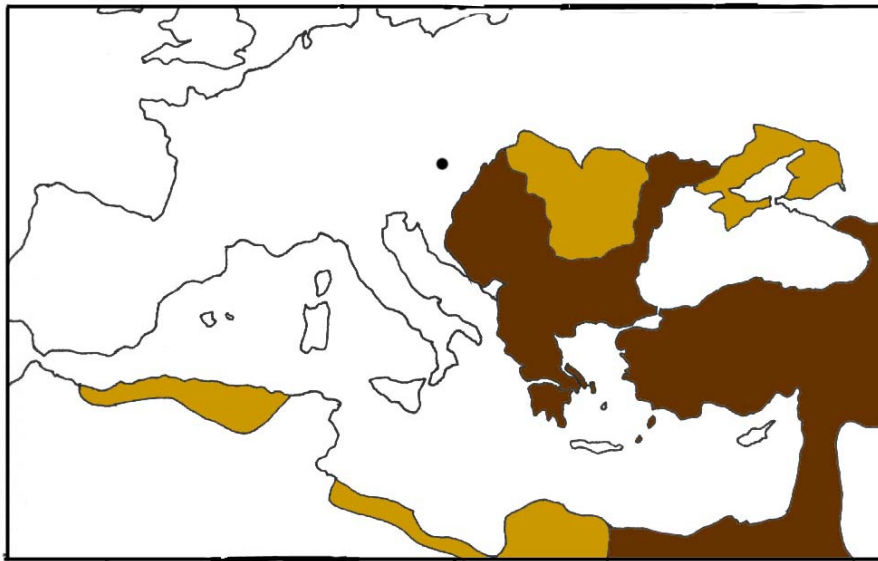
Question 132. What was the Ottoman Empire, and how far did Turkish linguistic influence extend? See Maps 132a, 132b, 132c, and 132d.



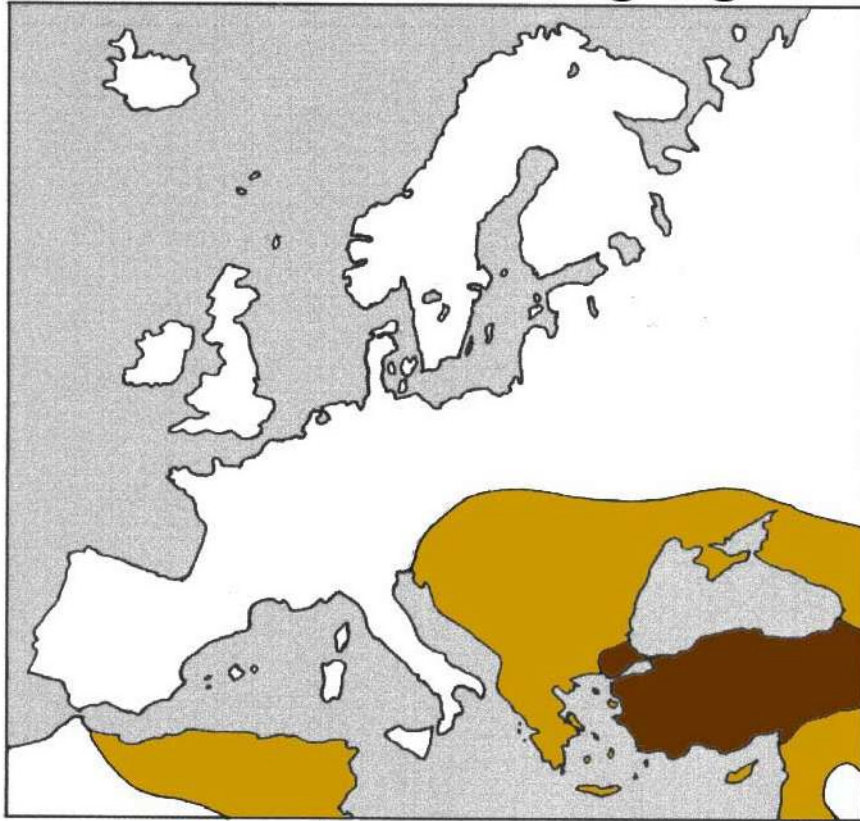
Map 132a. The expansion of the Ottoman Empire 1307-1481 ad. The two areas marked with lightest brown (and without a year) are the tributary states of the Empire.



Map 132b. The spread of the Ottoman (Osmanli) Empire.



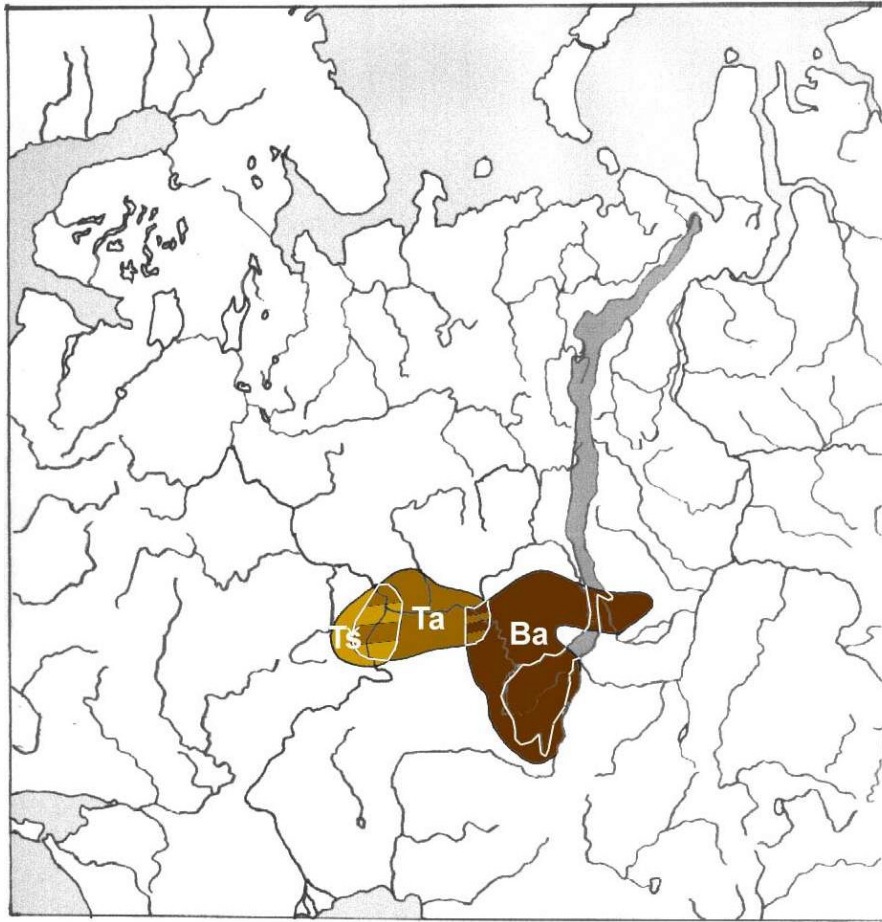
Map 132c. The Ottoman Empire. Dark brown = the area of the actual Ottoman Empire; light brown = the tributary states of the Ottoman Empire. The black circle = Vienna.



Map 132d. The influence of the Turks and their language. Dark brown = the core area of the Turkish language (where Turkish is spoken as a native language); light brown = the periphery of the Turkish language (where Turkish has had significant supstrate influence).

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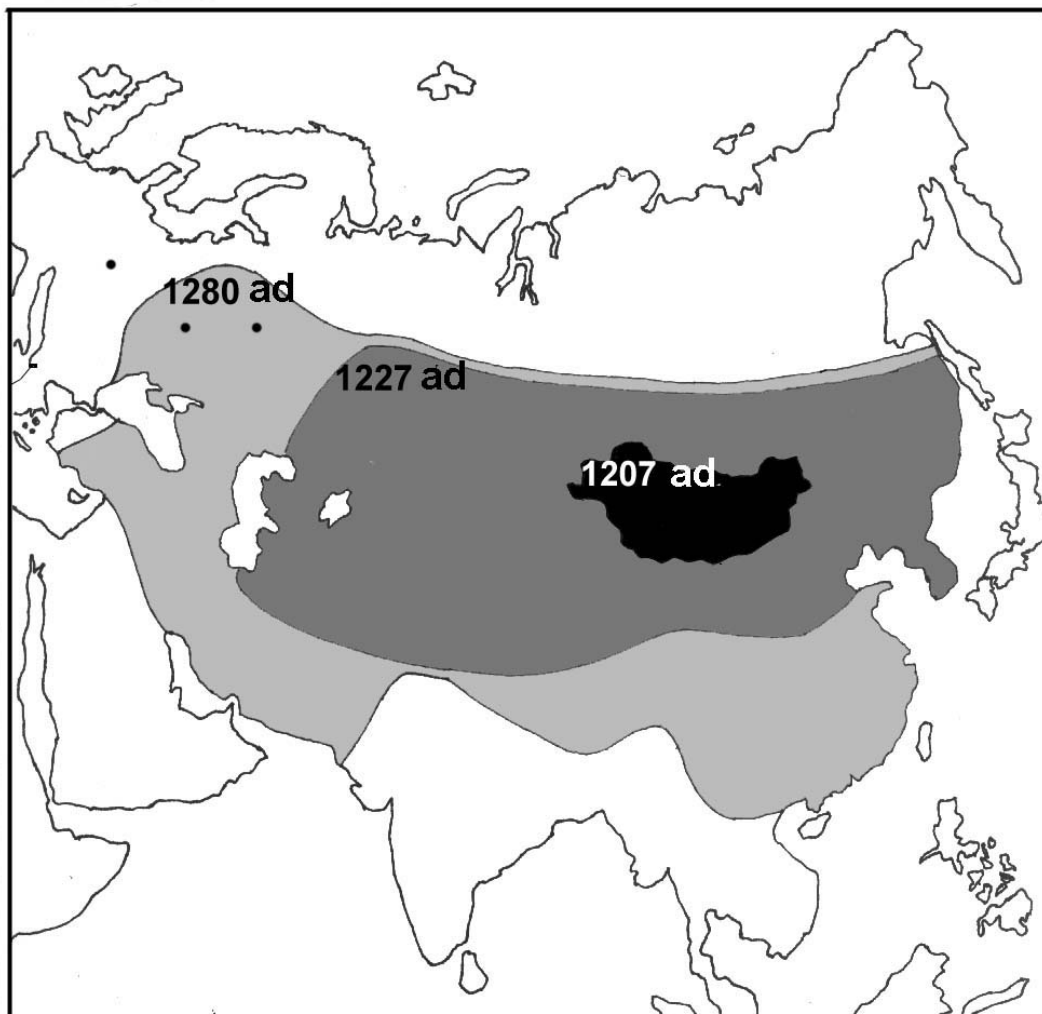
Question 133. What area areas of the Turks of the Volga and Ural regions?



Map 133. The approximate areas of three Turkish languages in the Volga-Ural region. Tš = Chuvash, Ta = Tatar, and Ba = Bashkir. There are two hybrid areas, one between the Chuvash and Tatars, the other between the Tatars and Bashkirs.

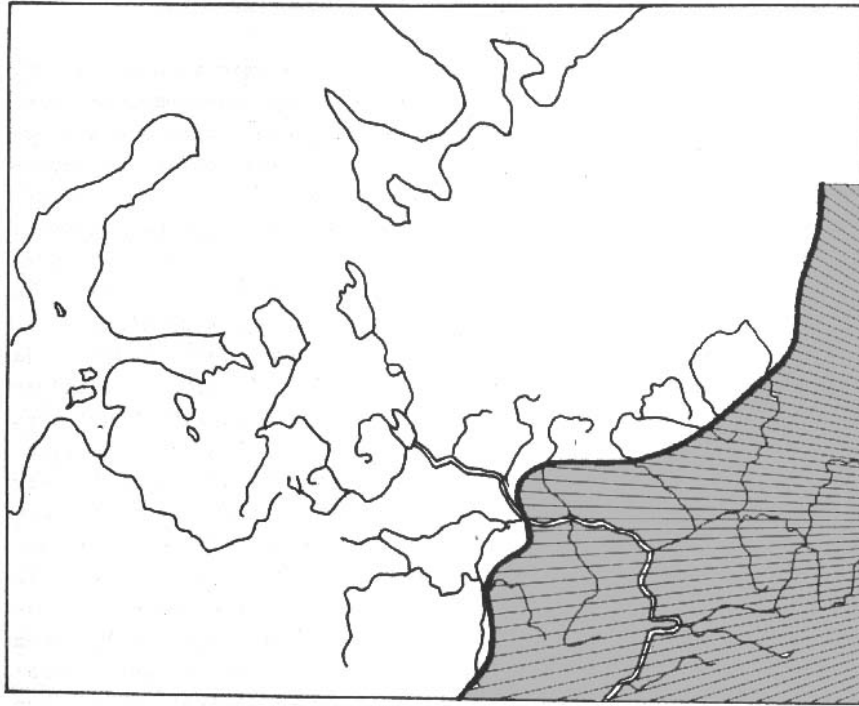
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Question 134. How far did the Mongolian Empire extend? See Maps 134a and 134b.



Map 134a. The areas under Mongolian power. The medieval Mongolian Empire was the largest empire that ever has existed. The black area shows the extent of the present Mongolian State; this was approximately the starting area of the medieval Mongolian Empire. The three black spots in Europe are (from west to east) Pest, Kiev, and Moscow. The defeat in Pest in 1241 signified the start of decline of the Mongolian Empire.

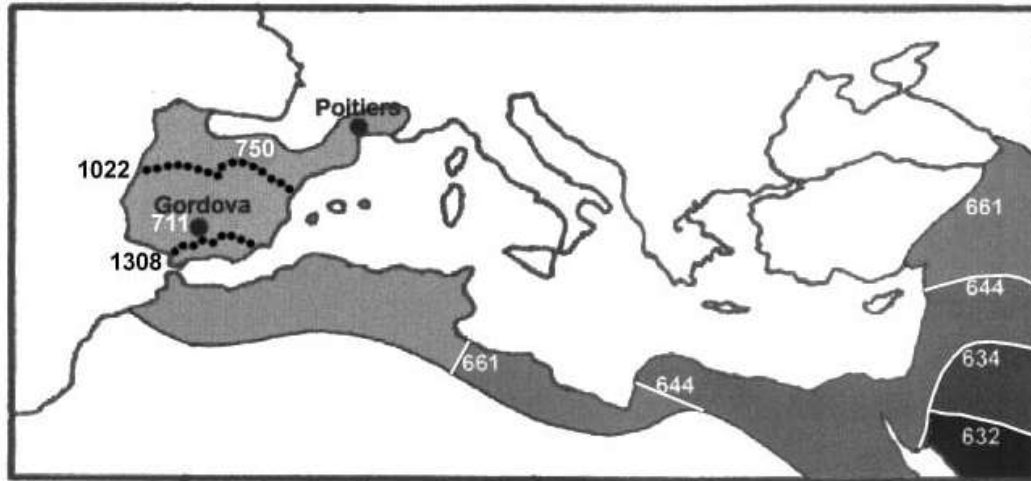
The map is based on the map in O'Brien 1999, p. 98.



Map 134b. The north-western frontier of the Mongolian Empire. Wiik 1993: 77.

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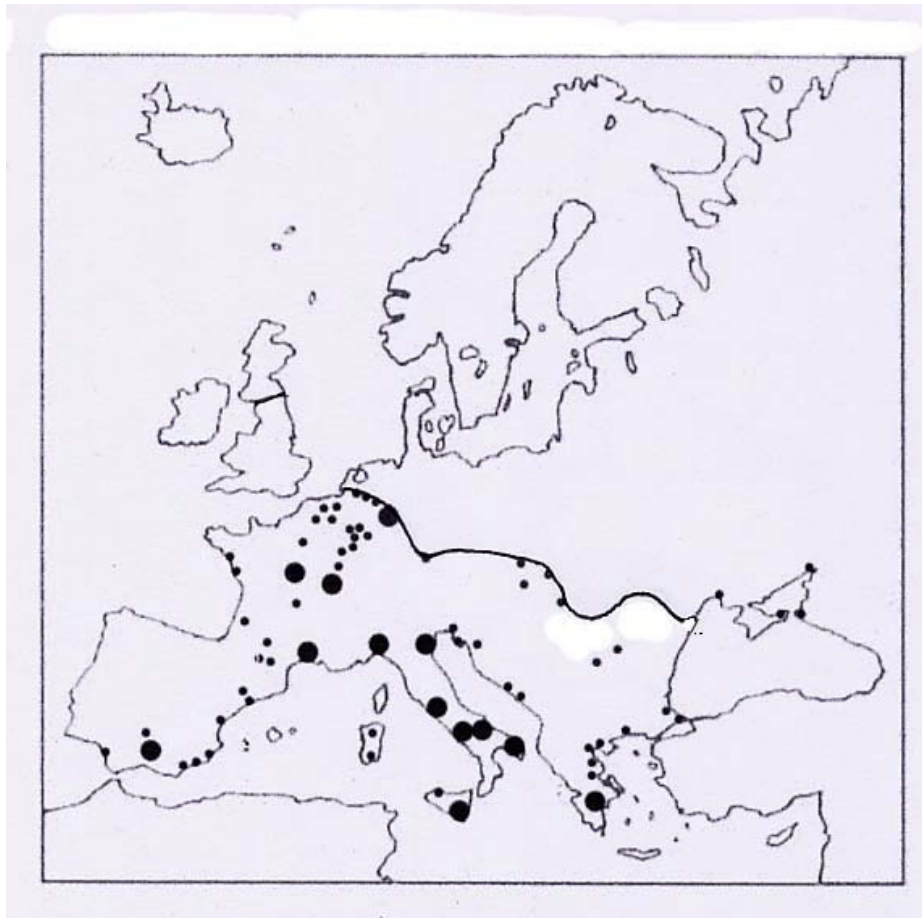
Question 135. What was the Arab or Berber migration to Spain?



Map 135. The expansion of the Muslim influence from Arabia and North Africa to Europe. The white years and continuous lines refer to the expanding phases of Muslim influence; the black years and broken lines refer to the reducing phases of Muslim influence. Muslim power lasted for almost 700 years in the Iberian peninsula. Source: O'Brien 1999: 68-69 and 88-89.

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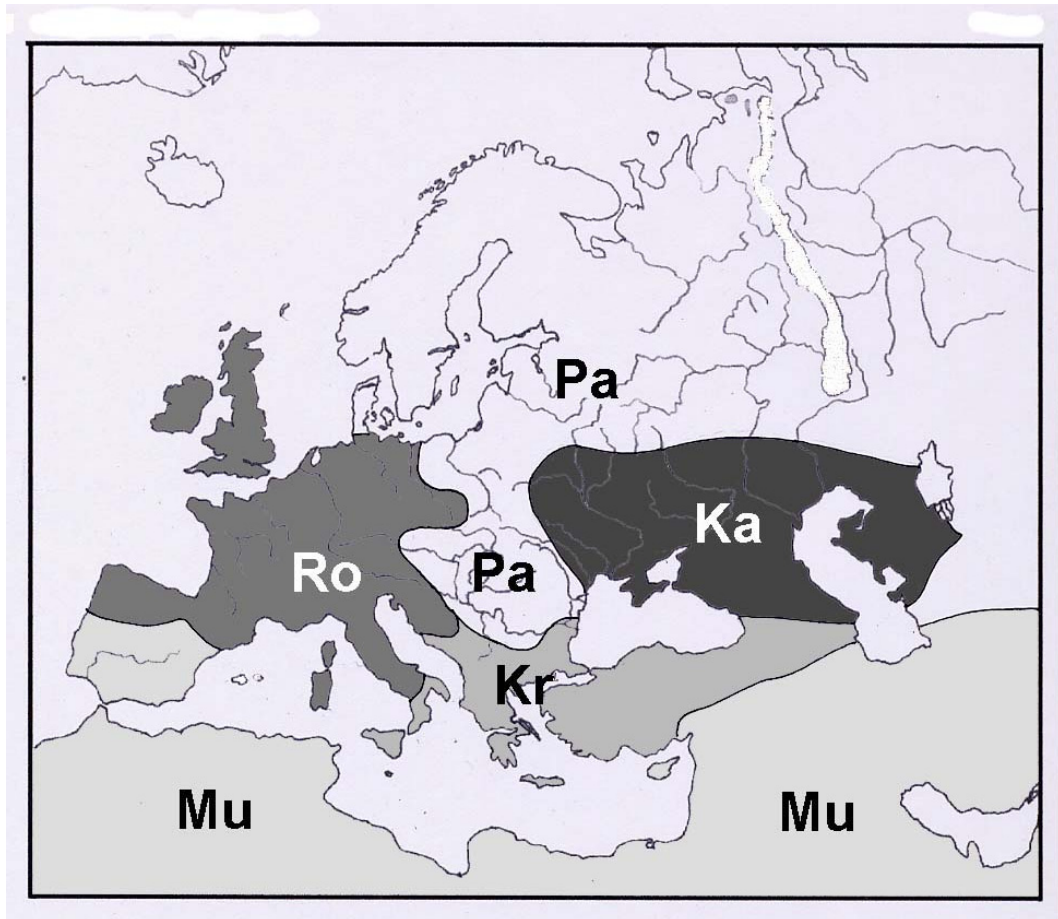
Question 136. When did the Jews come to Europe and how did they spread in Europe?



Map 136. Jew firsts arrived in Europe about 2000 years ago. By about 300 ad, they spread to most of the areas of the Roman Empire; however, they did not yet go to Britain, or Portugal and Central Spain, but they did go to the Crimean area (which was not part of the Roman Empire). Gilbert, Martin: Jewish History Atlas.

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Question 137. What was the Jewish kingdom of Khazaria?



Map 137. In about 700 ad, the kingdom of Khazaria converted to Judaism. The Khazars was originally a heathen nomadic tribe from Central Asia. The map shows the maximal area of Khazaria which existed from about 700 ad to 1014 ad. Ka = Khazaria, Ro = Roman Catholics, Kr = Greek Catholics, Mu = Muslims, and Pa = pagans.

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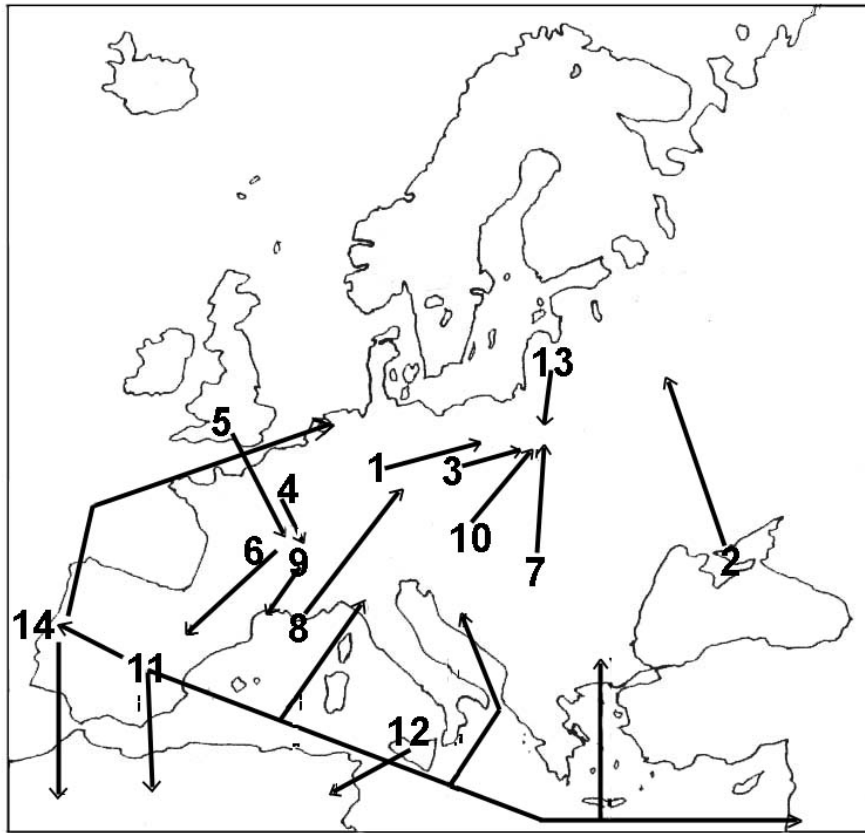
Question 138. How did the areas of the Jews broaden in the eleventh century?



Map 138. During the eleventh century, the Jew spread particularly in four areas: Spain-Portugal, Britain, Germany and Russia.

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Question 139. What were the most relevant expulsions of the Jews in 1000-1500 ad?



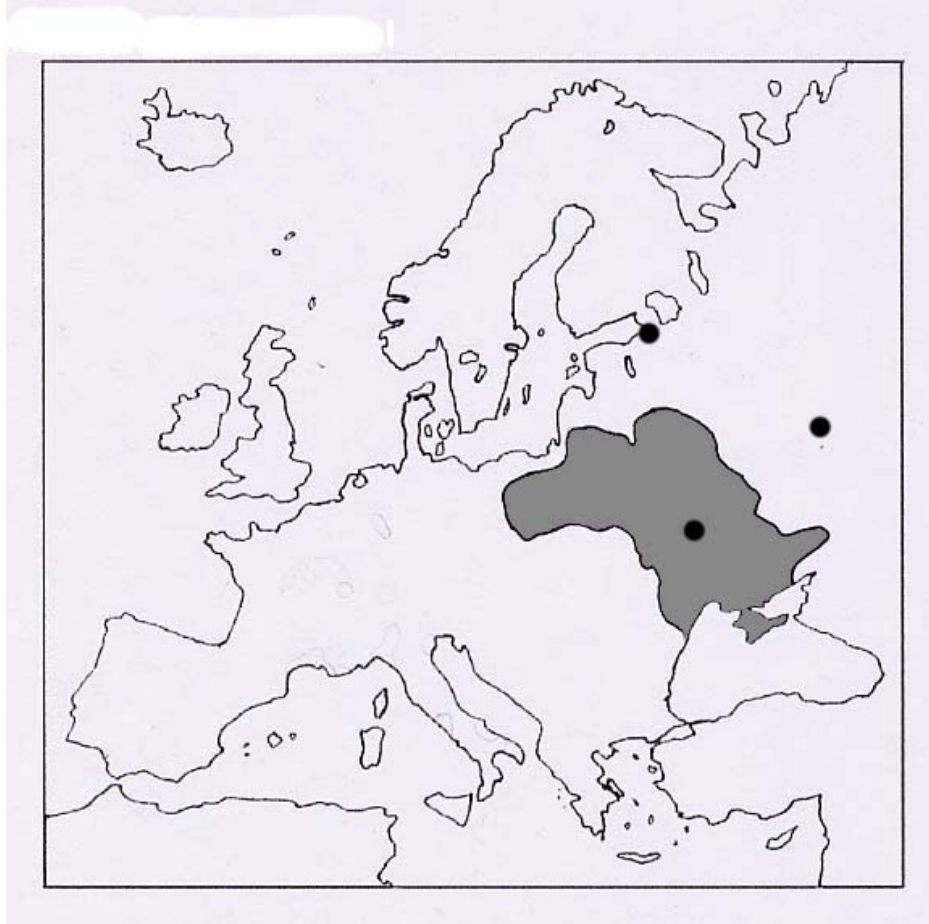
Map 139. Jewish expulsions.

Jews were expelled

- (1) from various parts of Germany in 1012, 1092-1192, 1248, 1348
- (2) from Crimea in 1016, 1350
- (3) from Silesia in 1159
- (4) from Paris in 1182
- (5) from England and Wales in 1290
- (6) from France in 1306
- (7) from Hungary in 1349-1360
- (8) from Provance in 1394
- (9) from Southern France in 1420
- (10) from Austria in 1421
- (11) from Spain in 1492
- (12) from Sicily in 1492
- (13) from Cracow in 1494
- (13) from Lithuania in 1495
- (14) from Portugal in 1497

The arrows of the map 139 show the approximate areas of destination of the expelled Jews. [Back](#)

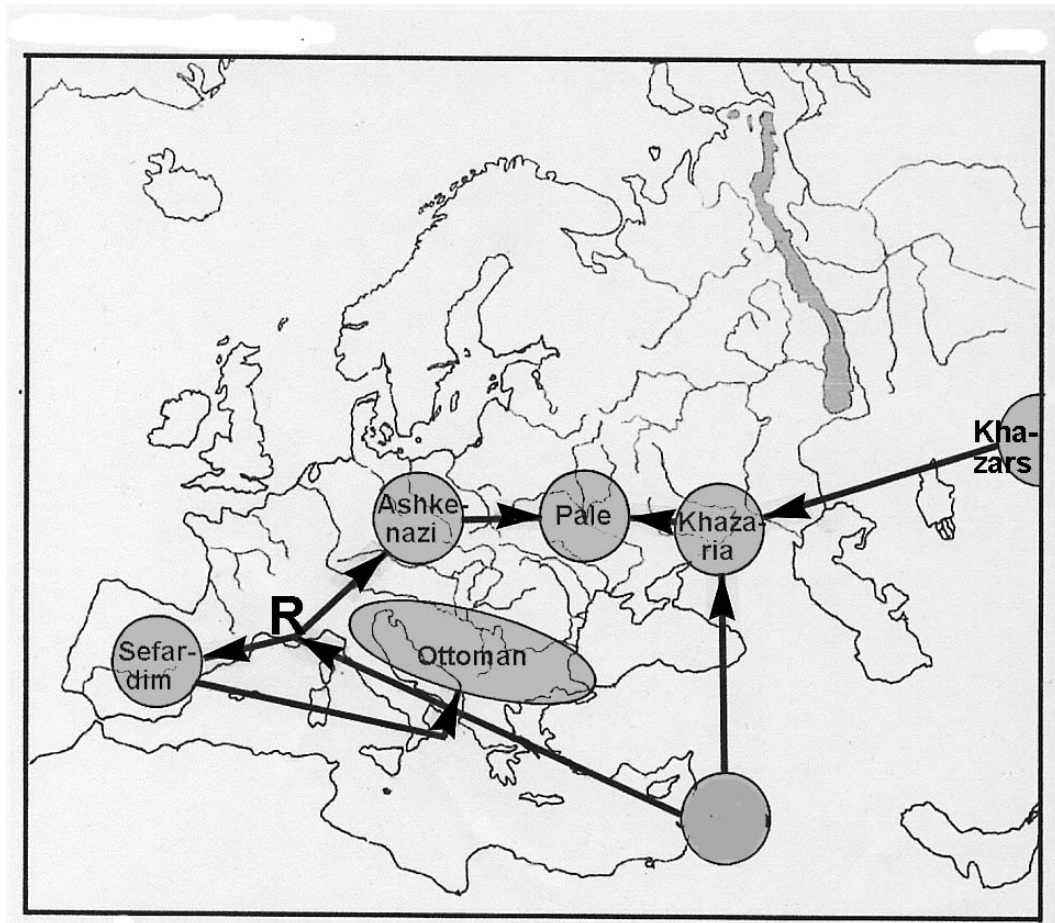
Question 140. What was the Russian *Pale*?



Map 140. The Russian Pale. According to the laws of 1795 and 1835, the Russian Jews were not allowed to live outside the pale.

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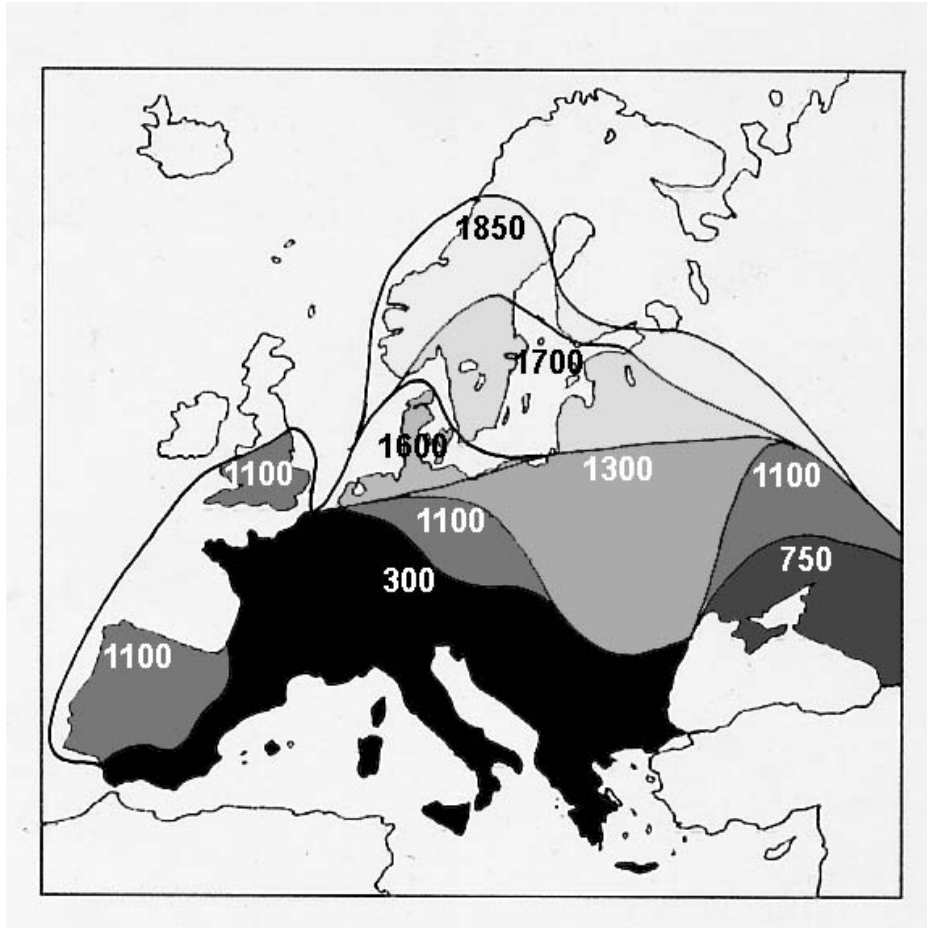
Question 141. What are the most important phases in the Jewish settlement of Europe?



Map 141. Jewish centres. Jews first began to escape from Judea in about 70 ad. By about 300 ad, they had spread to the most parts of the Roman Empire (R). The European Jews formed two main branches, the Sefardim Jews, who began to speak Spanish, and the Ashkenazi Jews, who began to speak German (Jiddish). In about 700-1074 ad, there existed the Jewish kingdom of Khazaria formed as a mixture of Jews and Khazars. The Russian Pale was formed as an area for the Jews. When expelled from Spain in 1492, many of the Sefardim Jews fled to the areas of the Ottoman Empire.

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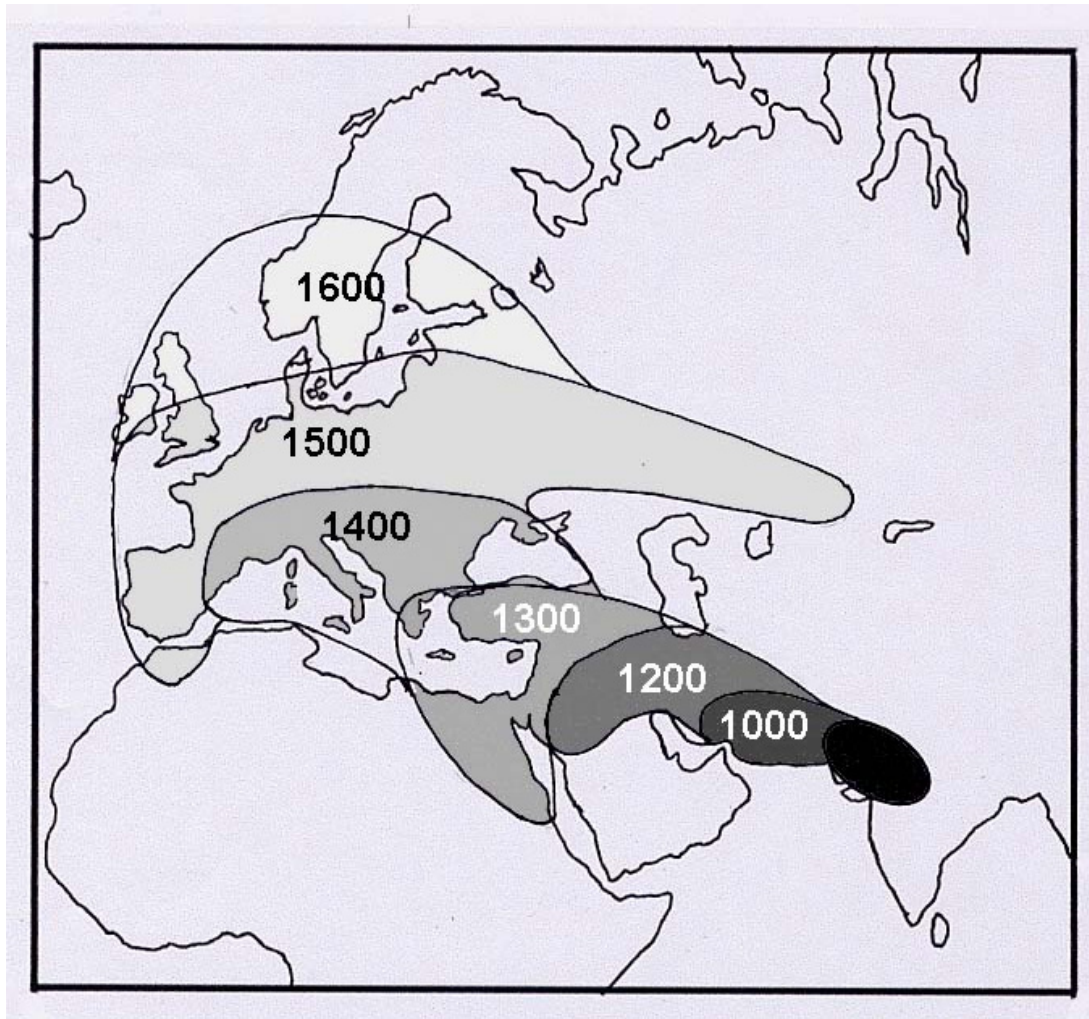
Question 142. When did the Jews arrive in the various parts of Europe?



Map 142. The approximate areas of Jewish expansion 70-1850 ad. The areas shown are only rough approximations. The Asian and African areas of the Jews are not shown in the map.

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Question 143. When did the Roma (Gypsies) arrive in the various parts of Europe?



Map 143. The spread of the Roma (Gypsies). The years of the map are very rough estimations only. The total number of the Roma today is estimated to be over twelve million. Perhaps about ten million of them live in Europe. The source area of the Roma is in the Panjab/Hindi region of western India and Pakistan. The first Roma arrived in Europe (Greece) about 1300 ad.

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