

Some language spreads with likely important genetic consequences

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I describe a number of language spreads that are likely to have had important genetic consequences. All of them result from historical singularities and changed (or must have changed) the linguistic map considerably, and all had demographic components that should have resulted in gene spread. In reverse chronological order (approximate), they are:

19,000 bp (before present): The beginning of settled life and intensive grain gathering in Mesopotamia (Piperno et al. 2004). Language spread in part by population growth and migration must have begun; it is not inconceivable that this spread might have resembled the extensive Pama-Nyungan one in Australia.

12,000 bp or earlier: The Pacific Rim linguistic population enters the Americas and spreads coastally (Nichols & Peterson 1996), mixing with an earlier population at the latter's western periphery.

8000 bp: Proto East Caucasian disperses eventually to settle the eastern and central Caucasus foothills and highlands. First farmers and first permanent settlers in the Caucasus, they have never been linguistically displaced except for recent peripheral retreats.

6000 bp? Sino-Tibetan settlement of the eastern Himalayan foothills and highlands, also first farmers and first settlers.

4000 bp: Reindeer herding begins in southeastern Siberia.

3800 bp: Algonquian spread from the Columbia Plateau to the Great Plains as the Plateau enters a drought and the Plains recover from a long drought. The spread may have begun as recolonization of lands largely emptied by drought (Hill 2004).

542-549 Plague of Justinian (bubonic plague) depopulates North Africa, Mesopotamia, Anatolia, Mediterranean and Atlantic Europe (disproportionately striking Celtic Europe). Linguistic consequences include the spreads of Arabic, Slavic (into the Balkan peninsula), and Anglo-Saxon.

8th century CE: Development of the moldboard plow in northwestern Europe results in rapid recovery from the depopulation of the Plague of Justinian and especially Germanic linguistic and demographic spread.

1100 and/or 1350: Numic recolonization of the Great Basin after prolonged drought, resulting in linguistic discontinuity between Mono and Northern Paiute, Panamint and

Shoshoni, Kawaiisu and Chemehuevi/Ute/Southern Paiute. Also, Yokutsan recolonization of Central Valley of California after the same drought.

Middle ages: Bubonic plague decimates Mediterranean and Silk Road populations and results in the spread of Turkic languages in Central Asia and Anatolia and the rapid disappearance of Mongolian outside of Mongolia.

In contrast, some language spreads probably mediated by language spread and therefore probably without major genetic consequences include: the Indo-Europeanization of Europe beginning over 4000 bp; the first spread of Numic into the Great Basin, c. 2000 bp (Hill 2001); the spread of Ossetic into the central Caucasus; and the Slavicization of the Russian north and northern Central Europe.