

Deep Genetic Relations

1. Disputed Families

- *Altaic* (with or without Japanese and Korean)
- *Ural-Altaic*
- *Yukagir-Uralic*
- *Indo-Pacific* (Papuan, Adamanenese, and Tasmanian)
- *Austro-Tai* (Tai & Austronesian)
- *Austriac* (Austro-Asiatic & Austronesian)
- *Amerind* (all languages of N. & S. America, except Na-Dene and Eskimo-Aleut)
- *Na-Dene* (Eyak-Athabaskan, Tlingit & Haida)
- *Eurasiatic* (Indo-European, Uralic, Eskimo-Aleut, Aunu, and others)
- *Penutian*
- *Hokan*
- *Niger-Kordofanian*
- *Nilo-Saharan*
- *Proto-Australian*
- *Nostratic* (Indo-European, Uralic, Altaic, Kartvelian, Dravidian, & Afro-Asiatic, also sometimes Chukchi-Kamchatkan, Eskimo-Aleut, Sumerian, and Gilyak)

2. Mass Comparison (Multilateral Comparison)

- Pioneered by Joseph Greenberg in *The Languages of Africa* (1963), Later applied to *Amerid* in *Language in the Americas* (1987), and then *Eurasiatic* in *Indo-European and Its Closest Relatives: The Eurasiatic Language Family* (2000 & 2002). Suggests a *Eurasiatic-Amerid* family.
- Merritt Ruhlen argues against the idea that sound correspondences are the only way to establish genetic relationships and defends Greenberg's Mass Comparison in *On the Origin of Languages: Studies in Linguistic Taxonomy* (1994)
- Ruhlen considers archeological and genetic evidence (working with Renfrew and Cavalli-Sforza)
- More recent work has proposed a *Proto-Sapiens* family

3. Statistical Phylogenetics

- Pagel *et al.* (2013) used hypothesized reconstructions of proto-words from seven language families, and used a Markov chain Monte Carlo simulation to create a phylogenetic tree.
- Claimed that while many words have a half-life of 2000-4000 years, some words, such as pronouns, have half-lives of 10,000 to 20,000 years or more.

- Resulted in an un-rooted tree with three families:
 - Altaic, Inuit-Yupik, and Chukchi-Kamchatkan
 - Kartvelian and Dravidian
 - Indo-European and Uralic
- Based on the hypothesis age of Dravidian, yielded an age of -15,000 years for Proto-Eurasiatic – around the end of the last Ice Age.
- Ultra-conservative words include:
 - *I, ye, mother, male, fire, hand, and hear*
- David Brown (Washington Post):
 - *“You, hear me! Give this fire to that old man.”*
 - *“Pull the black worm off the bark and give it to the mother.”*
 - *“And no spitting in the ashes!”*
 - “if you went back 15,000 years and spoke these words to hunter-gatherers in Asia in any one of hundreds of modern languages, there is a chance they would understand at least some of what you were saying.”

4. Deep Comparative Method

- Several Soviet (e.g. Vladislav Illich-Svitych and Aharon Dolgopolsky), trained in Neogrammarian comparative linguistics, argue for deep genetic relationships based by applying the comparative method to reconstructed proto-languages.
- *Nostratic Hypothesis*:
 - Indo-European
 - Uralic
 - Altaic
 - Kartvelian
 - Dravidian
 - Afro-Asiatic
 - sometimes
 - Chukchi-Kamchatkan
 - Eskimo-Aleut
 - Sumerian
 - Gilyak

5. Issues

- Issues lexical similarities:
 - Borrowings
 - Onomatopoeia
 - Nursery forms
 - Short forms
 - Chance similarities
- Mis-segmented morphemes
- Semantic drift

- Methodological issues in reconstruction (citing forms not predicted by correspondences)
- Use of pairs of languages
- Cognates limited in daughter languages
- Similarities unexpected, given time depth