Deep Genetic Relations

1. Disputed Families

- *Altaic* (with or without Japanese and Korean)
- *Ural-Altaic*
- *Yukagir-Uralic*
- *Indo-Pacific* (Papuan, Adamenese, and Tasmanian)
- *Austro-Tai* (Tai & Austronesian)
- *Austric* (Austro-Asiatic & Austronesian)
- *Amerind* (all languages of N. & S. America, except Na-Dene and Eskimo-Aleut)
- *Na-Dene* (Eyak-Athabaskan, Tlingit & Haida)
- *Eurasiatc* (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)

- Merritt Ruhlen argues against the idea that sound correspondences are the only way to establish genetic relationships and defends Greeberg’s Mass Comparison in *On the Origin of Languages: Studies in Linguistic Taxonomy* (1994)
- Ruhlen considers archeological and genetic evidence (working with Renfew 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:
  o Altaic, Inuit-Yupik, and Chukchi-Kamchatkan
  o Kartvelian and Dravidian
  o Indo-European and Uralic
• Based on the hypothesis age of Dravidian, yields an age of -15,000 years for Proto-Eurasiatic – around the end of the last Ice Age.
• Ultra-conservative words include:
  o I, ye, mother, male, fire, hand, and hear
• David Brown (Washington Post):
  o “You, hear me! Give this fire to that old man.”
  o “Pull the black worm off the bark and give it to the mother.”
  o “And no spitting in the ashes!”
  o “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:*
  o Indo-European
  o Uralic
  o Altaic
  o Kartvelian
  o Dravidian
  o Afro-Asiatic
  o sometimes
    ▪ Chukchi-Kamchatkan
    ▪ Eskimo-Aleut
    ▪ Sumerian
    ▪ Gilyak

5. Issues

• Issues lexical similarities:
  o Borrowings
  o Onomatopoeia
  o Nursery forms
  o Short forms
  o 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