

# **Linguistic evidence relates languages, archeological evidence relates cultures, genetic evidence relates populations: implications for STAN and related hypotheses**

*Zev Handel*

*University of Washington*

Proposals for higher-order genetic affiliations among the five recognized major language families of Southeast Asia (Sino-Tibetan aka Tibeto-Burman, Hmong-Mien, Tai-Kadai, Austronesian, Austroasiatic) remain highly contested (van Driem 2008). Because of the time depths and complex migration histories involved, proving higher-order affiliations based on traditional methods of linguistic comparison is methodologically fraught. Recent attempts to integrate genetic and archeological evidence have raised intriguing new hypotheses, but these must be viewed skeptically. Linguistic spread and divergence are not necessarily correlated with cultural and genetic dispersal patterns. While hypotheses about the historical relationship among languages must be rejected if they are incompatible with other historical evidence, it is conversely true that linguistic evidence must be primary in evaluating such hypotheses. Yet the existence of fundamental weaknesses in the accepted methodologies of historical linguistics (e.g. the difficulty of distinguishing early layers of borrowed vocabulary from commonly inherited cognates), combined with challenges inherent in the typologies of many of the languages involved (e.g. scarcity of inflectional paradigms), makes evaluation of the linguistic evidence inherently problematic. This paper evaluates the Sino-Tibetan-Austronesian [STAN] hypothesis of Laurent Sagart (2004, 2005, 2008) within this challenging methodological context.

Sagart's STAN hypothesis makes the claims that (a) Sino-Tibetan and Austronesian are genetically related to as two major branches of a larger family; (b) Tai-Kadai is a branch within Austronesian. Sagart further proposes that the Proto-Austronesians of Taiwan arrived there through a series of coastal migrations originating from the Dàwènkǒu culture of modern-day Shāndōng, while Proto-Sino-Tibetan speakers may be commensurate with the Middle Yǎngsháo culture of modern-day Hénán. These two cultural areas are located approximately 1000 km apart in northern China, close enough that a split from a single linguistic/cultural population some time before 8000 BP is plausible. The Proto-STAN speakers are identified with the Císhān-Péilígāng culture of modern-day Héběi and Hénán. Their initial expansion is hypothesized to have been stimulated by successful cultivation of rice and foxtail millet.

The primary linguistic evidence adduced by Sagart (2005) is a set of proposed cognates, including basic vocabulary, argued to exhibit regular sound correspondences and to reflect some shared derivational morphology. This data is further buttressed by proposed cognates referring to the two major cereals that were cultivated by the Proto-STAN speakers. The strengths of Sagart's hypothesis are balanced by a number of weaknesses: the absence of pronouns and numerals among proposed cognates, an over-reliance on Chinese (as opposed to Tibeto-Burman) data, and contested claims concerning morphological affixes and processes. Moreover, Sagart's hypothesis fails to grapple with potentially

crucial questions concerning the internal structure and homeland of Sino-Tibetan, such as those raised by Blench and Post (2010).

While this paper does not seek to definitively affirm or refute the STAN hypothesis, it will clarify the methodological issues involved and their implications for the plausibility of the hypothesis. These methodological questions have broader implications for other questions of language affinity in the region, including the internal subgrouping of Sino-Tibetan and other macro-phylum hypotheses such as Austric and Proto-East Asian.