

# A network analysis of the semantic evolution of ‘fruit’ and ‘stone’ in Tibeto-Burman languages

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In this study, we adopt a network-based approach to explore the semantic evolution of 3D-classifiers from ‘fruit’ and ‘stone’ in 58 + 68 Tibeto-Burman languages by examining their semantic colexification networks and evaluating the effectiveness of the colexification patterns of the two nouns in predicting the presence/absence of a classifier in a particular language.

Findings of the present study confirm that ‘fruit’ and ‘stone’ are frequent sources of the 3D-classifiers in Tibeto-Burman. The colexification networks of ‘fruit’ and ‘stone’ support the claim that compound nouns play a critical role in the grammaticalization of TB classifiers (DeLancey 1986, Bisang 1999, Vittrant & Allassonnière-Tang 2021, and Aikhenvald 2022). We postulate that numeral classifiers for small round objects in a substantial number of TB languages were originated from the noun roots such as ‘fruit’ and ‘stone’. They were then developed into class terms in compound nouns denoting varieties of fruits/stones and the shape class of small round objects. Finally, those noun roots lost their concrete meanings and derived into shape-based classifiers. The recurrent cline of semantic change ‘fruit > round > generic’ (Aikhenvald 2000) is attested in Tibeto-Burman languages, in which shape serves as a critical semantic basis in the semantic evolution of a classifier.

Nevertheless, ‘fruit’ and ‘stone’ differs significantly in their specific mode of semantic extension in Tibeto-Burman. The colexification pattern of ‘fruit’ but not that of ‘stone’ can effectively predict the occurrence of an 3D-classifier in a particular language, as the latter is more unstable. An implicational universal is proposed to predict the occurrence of a ‘fruit’-related classifier in Tibeto-Burman. The colexification network of ‘fruit’ represents a well-established cross-linguistic pattern that derives 3D-classifiers following the path ‘fruit-compounds for fruits-compounds for round body parts-CL’. This pattern is strongly associated with the subgroup of languages and is most prominent in Ngwi. To the contrary, the colexification network of ‘stone’ is somehow language-specific. No salient cross-linguistic semantic extension pattern can be generalized to account for the derivation of classifier from ‘stone’ in Tibeto-Burman languages.

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