LIBERAL ARTS

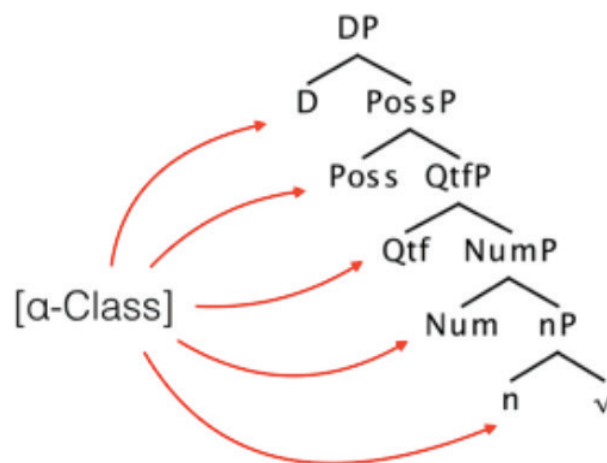### A Comparative Analysis of Classifiers Within the DP System

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This project examines the properties and functions of a category of words known as classifiers and how they interact with other constituents within the determiner phrase (DP) in a wide range of languages. Classifiers (CLSF), as its name suggests, are used to classify categories of words such as nouns and verbs. Morphemes are the smallest parts of language that carry meanings. CLSF morphemes generally carry information regarding α-class features, regarding physical characteristics of their referents, such as size, shape, and position.

Conventionally, the DP assigns features to other word categories; however, in Benedicto (2018), the evidence in American Sign Languages demonstrates that different values of verbal CLSF can be attached to the same DP indicating different properties of the referents. Utilizing a typological approach, we test the functional heads within the DP system, namely, possessives, quantifiers, numerals, and determiners. The examples of determiner classifiers are as follows. Determiners, functional words that specify the kind of reference a noun phrase has, like zhe/na 'this/that,' can be bundled with CLSF gen, tuan, and kun in Mandarin. These various CLSFs indicate different physical properties (shape, in this case) of the referent maoxian 'yarn.'

Determiner CLSF   [Mandarin]

zhe/na   gen   /tuan   /kun   maoxian

this/that   CL:long /CL:round /CL:hank yarn

"this/that (thread /ball/hank of) yarn"

The tree form of our hypothesis that a CLSF morpheme is a cluster of α-class features, which bundles up with a functional head within DP (syntax tree from Benedicto, 2018).

Other evidence predicted by the hypothesis can be found via examples of indigenous languages and minority languages, which include but are not limited to Yavapai, Yidiny, Bengali, and Nasioi. Much evidence demonstrates that it is the CLSF that assigns features to, and agrees with, the bundled functional heads, but not the conventional direction of more common agreement phenomena.

Research advisor Elena Benedicto writes: "Hu and Rodríguez evaluated the predictions of extending the classifier hypothesis in Benedicto (2018) to a new domain, the nominal phrase DP. They carefully and systematically examined a wide variety of linguistic data (unfortunately absent in the snippet), thus contributing to a sorely needed diversity of data in linguistic studies. They confirm the extended hypothesis."

Hu, X., & Monroy, P. R. (2020). A comparative analysis of classifiers within the DP system. *Journal of Purdue Undergraduate Research, 10,* 101–102.