An OT account of typological variation in inflectional inventories

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With respect to the manifestation of grammatical distinctions expressed by inflectional categories, one observes three typological patterns:

(i) The grammatical distinction is maintained. This pattern is usually referred to as full or partial contrast and represents the most explicit case where a language displays designated (series of) morphology for the category at issue.

(ii) The distinction is not realized at all. This pattern is usually referred to as (total) neutralization.

(iii) The distinction is not realized by one designated exponent, but rather by combination of two others ("combinatorial exponence"). As far as our examplifying category gender is concerned, Romanian is a case in question with its realization of neuter.

In our talk, we are going to analyze each of the types by developing a constraint-based account that predicts the typological options. Much in line with phonological work in Optimality Theory, the basic question is this: what does it mean for the grammar of a language to either exhibit or to lack a certain category? We pursue the idea that the feature inventory of a language is to be explained as a consequence of its constraint ranking.

Typological background. As far as gender is concerned, there are on teh one hand those languages which use designated (series of) inflectional elements for neuter; e.g., Latin, German. On the other hand, many languages lack neuter gender (Afro-Asiatic, most contemporary Romance language), or even any gender distinction altogether (Turkish and other Altaic; Uralic). The third option, i.e. that of combinatorial exponence of neuter, is chosen by Romanian: the class of neuter nouns combines with masculine determiners and adjectives in the singular, while they combine with feminine in the plural. The realization of neuter is thus derived combinatorially of masculine and feminine gender agreement.

Similar patterns are found with certain number and person distinctions: apart from languages with either designated exponents of dual (Arabic, Upper Sorbian) or without any realization of dual (Modern English), we also encounter such languages as Hopi where dual is realized by the combination of a plural subject with a singular verb. Likewise, a first person inclusive contrast may be realized by a designated exponent (Ilocano), it may be totally absent (English), or it may be composed of the marker for first person and that for second person, as in Tok Pisin.

Analysis. According to the basic assumptions of Optimality Theory, the variation just described is not accounted for in terms of idiosyncratic lexical properties of the respective forms, but rather by language-specific rankings of universal constraints. This allows for inputs to be both universal and fully specified ("Richness Of The Base"). The typological variation is accounted for by the interaction of three constraints: *EXPONENT(F), which disprefers monofunctional exponents for a single feature; *AGREE, which penalizes overt agreement morphology; and HIERARCHY(Category), which requires neutralization to be minimal according to a conceptually motivated feature hierarchy (this latter constraint derives from a hierarchy of MAX constraints). Permutations of the relative order of these constraints characterize the above three typological options: undominated HIERARCHY leads to contrast, whereas its domination results in neutralization. Combinatorial exponence results from *AGREE "sandwiched" between *EXPONENT and HIERARCHY: under the ranking *EXPONENT » *AGREE » HIERARCHY, candidates maintain a contrast by combination of two different exponents, with no special exponent for this category. We exemplify this by analyses of the Hopi dual, Tok Pisin inclusive, and Romanian neuter.

Theoretical implications. The approach presents a novel way of dealing with various cases of neutralization and underdetermination in terms of representations exclusively at the level of grammar, and sets it apart from analyses that rely on the primacy of the language-specific rules or inventories.