

Contrastiveness: the basis of identity avoidance

It is often claimed that identical objects should be preventing from coexisting side by side, and that this restriction should apply across various areas of the grammar. The idea is usually characterized as identity avoidance (cf. Yip 1998, references therein), which has been formalized in a number of ways but is most often stated as the Obligatory Contour Principle (OCP), a key structural principle in both phonology and morphology. In the literature (Yip 1998, Van Riemsdijk 2008), OCP is seen as a meta-principle/constraint which can be employed using a range of different arguments including ‘stem’, ‘affix’, ‘foot’, ‘syllable’, ‘segmental (C/V) position’ as well as individual phonological features. For example, many tone languages prevent morphological operations from creating sequences of adjacent identical tonal features. And in non-tonal languages we often see a ban on the same feature appearing more than once in a given prosodic or morphological domain, e.g. [voice] in Japanese Rendaku, [strident] ([cor][cont]) in the formation of English plural nouns, [spread glottis] or [tense] (i.e. aspiration) within the foot in languages such as English, Thai and Korean. These examples imply that OCP operations refer both to prosodic constituents and to melodic features; we never encounter any OCP effects that involve prosodic domains to the exclusion of melodic features, or vice versa.

Interestingly, we do not find any reference to OCP in phonological domains smaller than the segment — that is, in domains relating to intrasegmental structure such as those that occur in feature dependency or feature geometry. With a few notable exceptions (Schane 2005), feature theories usually assume — albeit without any explicit argument — that two or more identical features cannot appear in the same position, since there are no reported instances of OCP-related phenomena occurring at this level of structure. In other words, at intrasegmental levels such as the laryngeal and place nodes, the OCP is never violated within a single position. This begs the question why only intrasegmental structure always conforms to the OCP, and furthermore, whether we might gain a better understanding of the OCP by closely examining the role of features and their organisation in phonology.

In principle, features are seen as minimal structural units which are essential for creating phonological contrasts. Putting this another way, contrastiveness — one of the central notions of phonological (and more generally, linguistic) theory — is reliant on features. According to one monostratal approach to phonological derivation (Harris 2004, references therein), the use of privative features, as opposed to equipollent or multi-valued features, is needed in order to reduce representational redundancy and thereby improve generative capacity; for example, the contrast between *n* and *d* is represented by the presence versus the absence of the feature [nasal], while the contrast between *p^h* and *p* is captured by the presence/absence of [spread glottis]. And in contrastive terms, there is nothing to be gained by allowing a second [nasal] or [spread glottis] feature to appear in the same segment. Within a

single segment, a feature can contribute only once to a melodic contrast; the existence of two identical features is redundant and, in relation to contrastiveness, irrelevant. On this basis, we might say that melodic contrasts are maximally satisfied within a segment.

Turning to other domains of phonology and morphology, we can assume that the same mechanism driven by CONTRAST — a general principle covering constraints such as OCP and *REPEAT — is at work in other identity avoidance phenomena. The fact that identity avoidance phenomena are observed at various prosodic levels can be attributed to the way certain features are bound by certain prosodic domains. In Yamato Japanese, for example, because two identical tokens of [voice] are redundant for the purposes of contrastiveness, this feature is considered to be a morphemic property rather than a segmental one. And in languages such as English, Thai and Korean, two identical tokens of [spread glottis] are contrastively redundant within a foot domain. This feature is thus taken to be a foot-level property which is realized on the strongest position in that foot, typically the initial position (Harris 1997). One of our findings is that those features which display an affinity with the edges of prosodic domains (e.g. aspiration, true voicing, prenasality and glottalisation/tensing) tend to be the ones which are targeted by identity avoidance constraints at prosodically higher levels; by contrast, place properties are less frequently targeted by CONTRAST, and instead are more likely to function as harmonically active properties at higher prosodic levels. The difference between these two patterns of behaviour is straightforwardly captured by the division between non-resonance features (prosodic markers) and resonance features (segmental markers). This distinction is altogether simpler than one which refers to three or more different feature divisions of the kind proposed in some models of Feature Geometry (cf. McCarthy 1988, *et passim*).

Our paper includes additional examples of identity avoidance phenomena taken not only from the phonological and morphological domains but also from syntax (Van Riemsdijk 2008), again referring to the same CONTRAST-driven mechanism.

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