Linguistics 179, pp. 5-18

THE CONNECTEDNESS OF PHONOLOGICAL FEATURES AND THE STRUCTURE OF PHONOLOGICAL SEQUENCES[1]

M. I. LEKOMCEVA.

This article deals with a model of a generator which produces a phonologically correct text of indefinite length.

The article consists of five parts. The first part describes the concept of connectedness (predictability) of phonological features and defines the conditions under which these features are predictable. The second part of this article generalizes the concept of the phonological feature so that the derived abstract feature may correlated with both concrete paradigmatic contrasts and different syntagmatic positions. In the third part, on the basis of the predictability of generalized features, the concept of phonological branching – the fundamental structure of the phonological level – is derived. Phonological branching is the logical basis for the formation of syllables of different types (monosyllabic words) as well as for polysylabic words (part 4). In the last section, an idea is given of the device which generates phonological words, defined for a given language which form texts or indefinire length.

1. *The predictability of features, feature connectedness and quasi-logical relations.*

In the process of syllable synthesis, when some feature (or its negation, or some group of features or their negations) is selected from the i-th cell of the generator, it is possible at the same time to select another feature (or its negation, or a group of features) from the same cell or from subsequent cells.

We will say that a feature α (or its negation $\text{-}\alpha$ or a group of features and their negations) is predictable from some feature β (or correspondingly its negation or a group of features and their negations), if there is a unique correspondence between these features (or their negations, or between groups of features and their negations) which can be utilized in the process of synthesis.

We will speak of mutual predictability, if the correspondence between features (or between their negations or between groups of features) is bi-unique, i.e., not only does the single feature β correspond to the feature α, but also the single feature α corresponds to the feature β.

The concept of predictability can be investigated with the aid of the concept