

Toward a Multi-Level Theory of Slavic Nominal Morphology
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This paper reports on my research in the formal linguistic analysis of the Slavic languages. In particular, I develop an eclectic 'multi-level' theory of morphology (word structure) which stands in contrast to traditional, morpheme-based morphology. Drawing on work by Anderson (1992), Halle and Marantz (1993), and Chomsky (various recent papers on the Minimalist program) and earlier work of my own, I develop an explicit, empirically-robust theory of the inflectional paradigm of the Slavic noun. As I have been invited as a keynote speaker at the Sixth Meeting of Generative Linguistics in Poland, I will focus on contemporary Polish data, while contrasting it with the analogous, but simpler picture in Russian.

From Chomsky's Minimalism I take the idea that grammatical information can be rendered in the form of *features*. Features come in two types: *formal* and *referential*. All features by definition must be associated with a value. Formal features by definition constitute that information required for a word to acquire phonological form; referential features by definition constitute that information required for a word to be semantically (conceptually) coherent. The derivation 'crashes', or fails, if features are not valued: an unvalued formal feature cannot be interpreted by the phonological component, and an unvalued formal feature cannot be interpreted by the semantic component (*Logical Form*).

We focus here on formal features (*f-features*) of the Polish noun. The Polish noun must specify values for certain morphological categories: case, number, gender, animacy, and (what is awkwardly called) masculine personal. Each of these categories, then, represents a formal feature with a set of admissible values. In the spirit of Minimalism, the 'uninterpretable' formal features must be replaced by 'interpretable' phonological information in the form of *Spell-out* rules. The derivation crashes when there is no spell-out rule which replaces feature, when there IS such a spell-out rule which is not provided with a valued feature, either because the feature is present but has received no value or the feature is absent.

How, then, are features, valued? Here our approach departs radically from the traditional morpheme-based approach in that we propose that features can be valued at numerous points in the derivation: in the lexical representation itself (we call this an 'inherent' feature), on the basis of referential features (*r-features*), on the basis of other f-features, and in the syntax. R-features in turn can be either inherent (say, the sex reference of the word for 'brother') or facultative (say, the sex reference of the Russian or Polish word for 'physicist'). We also formalize syncretism in terms of feature valuation, in a way to capture the apparent paradox of such cases in which what performs one function at one level is expressed at another level in terms of what normally performs a different function (e.g., the form of the genitive appearing in the syntactic context of the accusative under known conditions).

Of many possible questions, we address two here. First, *declension class*, which is defined as the set of endings a noun takes. In Russian it can be easily demonstrated that something corresponding to declension class must be an f-feature, in order to enable desinence spell-out. The Polish situation is far more complicated, and raises the issue of defining nominal paradigms and their classification in a very different way, separating the singular from the plural and the core cases (nominative and genitive) from the others.

Second, what is the relationship between gender and declension class? While not neglected in the literature, we feel that the question has not yet been satisfactorily resolved. We distinguish cases in which gender (along with animacy and 'masculine personal') is semantically predictable (i.e., related to corresponding referential features) and those in which it is not. The ultimate solution will be to predict declension class from gender (the opposite of the traditional assumption).