The role of phonotactics in gender assignment in Polish

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Phonological criteria constitute, together with morphological ones, one of the two types of formal gender assignment criteria. The role of specific onset and coda phones and their sequences, syllabicity as well as suprasegmental features has been demonstrated in, e.g., Indo-European, Afro-Asiatic and Niger-Kordofanian. Gender systems traditionally regarded as opaque, particularly in Indo-European, have thus been shown to be highly motivated, e.g., French (Tucker, Lambert and Rigault 1977), and German (Köpcke and Zubin 1984). In Polish, however, the correlation between phonological structure and gender assignment has so far been neglected. Research has focused on determining either the ranking and frequency of occurrence of clusters in all word positions or morphological boundaries within consonantal sequences (Bargiełówna 1950; Dunaj 1985; Dobrogowska 1990, 1992).

In this paper we determine the relevance of selected phonological criteria in the assignment of gender in Polish, a language with a semantic and morphological assignment system. The following three criteria have been considered: cluster size (the number of segments in a coda position), cluster type (the type of coda segments in terms of manner of articulation), and cluster tokens (specific consonantal realizations of cluster types). In addition, we analyse correlations between phonological criteria and morphology (declension and derivation), as well as correlations between gender assignment, phonological shape and lexical information in native vs. borrowed vocabulary.

The corpus used for this study has been compiled from *Uniwersalny Słownik Języka Polskiego PWN* (Dubisz 2006). All nouns with final consonantal sequences of the length C, CC, and CCC have been extracted from the dictionary, as illustrated by the following masc. nouns: *bilet* 'ticket', *łotr* 'scoundrel', *filtr* 'filter'. The lexemes include borrowings, proper names, acronyms, and archaic forms. The first step of the analysis consisted in categorizing the lexemes into cluster types and their tokens. At this stage of the analysis both types and tokens were indexed for gender and declension. Next, the nouns were analysed in terms of their phonological and/or morphological conditioning. As a result, clusters were divided into consonant sequences that occur (a) within a morpheme and (b) across morpheme boundaries. Finally, the data were classified into native and borrowed vocabulary.

The goal of the presentation is, therefore, to show how phonological criteria motivate gender assignment, and what phonotactic patterns are specific for a given gender in Polish. The results point to a tendency analogous to the "consonant cluster principle" proposed for German by Köpcke and Zubin (1984), according to which monosyllabic nouns with more complex consonant clusters are more likely to be masc. Two notable exceptions can be observed in the application of this principle to our corpus: first, the presence of fem. nouns with the final sequence CC, as in *miłość* 'love', which constitute c. 15% of all fem. nouns, and second, the presence of masc. nouns inflected according to a fem. declension, as in *mężczyzna* 'man', which make up c. 4% of all nouns in fem. declensions. More generally, the study contributes to the discussion on the degree of regularity of grammatical gender and the complex interplay of individual assignment criteria.

References

Bargiełówna, M. 1950. "Grupy fonemów spółgłoskowych współczesnej polszczyzny kulturalnej", *Biuletyn Polskiego Towarzystwa Językoznawczego* 10: 1-25.

Dobrogowska, K. 1990. "Word internal consonant clusters in Polish artistic prose", *Studia Phonetica Posnaniensia* 2: 43-67.

Dobrogowska, K. 1992. "Word initial and word final consonant clusters in Polish popular science text and in artistic prose", *Studia Phonetica Posnaniensia* 3: 47-121.

Dubisz, S. 2006. *Uniwersalny Słownik Języka Polskiego*. Warszawa: PWN.

Dunaj, B. 1985. *Grupy spółgłoskowe współczesnej polszczyzny mówionej (w języku mieszkańców Krakowa)*. Kraków: PWN.

Köpcke, K.-M. and D.A. Zubin. 1984. "Sechs Prinzipien für die Genuszuweisung im Deutschen: Ein Beitrag zur natürlichen Klassifikation", *Linguistische Berichte* 93: 26-50.

Tucker, G.R., W.E. Lambert and A.A. Rigault. 1977. *The French speaker's skill with grammatical gender: An example of rule-governed behavior*. The Hague: Mouton.