

## When blocking does not block: the case of Croatian double-gender nouns

Blocking (Aronoff 1976, 1994) refers to a situation in which the presence of a form or pattern in a language pre-empts the application of another form or pattern. However, recent studies on blocking have provided many examples that challenge the assumed discreteness of the notion, most often in derivational morphology (overview, Naghsguy-Kohan and Kuteva 2016). Using corpus data, we present this issue in the nominal inflectional morphology of the Croatian language.

There are 3 grammatical genders in Croatian, and the majority of nouns belongs to one gender and one of the three inflectional classes. This means that there is a clear correspondence between grammatical form and gender or, according to Corbett (1991), a considerable overlap between gender and declension type. However, some nouns appear with double gender and double inflectional class. Nouns that are the subject of this research end in a consonant in the nominative case and are attested both in the *-a* declension + masculine gender and in the *-i* declension + feminine gender (the types of declensions are named after their genitive singular form).

Example 1.

bol (engl. *pain*)

1. N.sg. *bol* (m); G.sg. *bola*; D.sg. *bolu*; A *bol*; L *bolu*; I.sg. *bolom* (and plural forms)

2. N.sg. *bol* (f); G.sg. *boli*; D.sg. *boli*; A.sg. *bol*; L.sg. *boli*; I.sg. *bolju/boli* (and plural forms)

This study focuses on four questions:

1. Is blocking in inflection absolute?
2. How fast is the change, i.e. do blocked patterns disappear rapidly?
3. Is there a constant ratio between the two inflection classes (and genders) through time?
4. Is there a difference in meaning between two paradigms of a single noun?

### Method

Six double-gender and double-paradigm nouns were selected (*bol* 'pain', *čar* 'magic', *glad* 'hunger', *trulež* 'rot', *varoš* 'town', *splav* 'raft'). Relevant historical documents (legal documents, literature) from the onset of Croatian literacy were analysed to describe the one-gender stage of the noun (if possible) and to pinpoint the appearance of the second paradigm. Two relevant corpora were used to determine the ratio between two paradigms: the Croatian Language Corpus (CLC) (Institute of Croatian Language and Linguistics) and the HrWaC Croatian Web Corpus (Ljubešić et al. 2011, Ljubešić and Klubička 2014). The CLC consists of literature and newspaper texts published across a long time period (the majority are texts from the 19<sup>th</sup> century and the first half of the 20<sup>th</sup> century). HrWaC consists of diverse texts from Croatian web sites. The relevant subcorpora of HrWaC were used to obtain samples of both edited (e.g. newspapers) and non-edited texts (e.g. message boards).

### Results

In most current texts, all six nouns appear in both genders in their respective declensions. Their usage is not restricted by corpus subtype (applicable for 5 out of 6 nouns, e.g. for a noun 1:  $t(118)=1.375$ ,  $p=.172$ ). They do, however, differ in respect to their ratio of two patterns. While some nouns have a very low percentage of usage in one of the patterns (1% and 4%), some have a percentage of usage of both forms that is almost equivalent (44% vs. 56%). Nouns that, according to some dictionaries, have two distinctive meanings are not restricted in their usage of two patterns, i.e. both patterns are used for both meanings. However, there is a preference toward the usage of one of the patterns with one meaning (e.g. for a noun 1:  $t(118)=3.354$ ,  $p=.001$ ).

Six double-gender nouns differ in their historical development. Five of them are attested in the oldest documents written in Croatian. Only one noun entered the Croatian language during the 19<sup>th</sup> century (*splav* 'raft'). Only two of the nouns are attested in both genders almost simultaneously (*trulež* 'rot' and *splav* 'raft'). However, the others obtained their alternative form early in the course of history, as far back as 1586 (*čar* 'magic') and 1768 (*trulež* 'rot'). Exceptionally, one of the nouns (*glad* 'hunger') gained its additional form by the end of the 19<sup>th</sup> century. The aerial distribution of the usage of the two forms show that alternative forms could be the result of language contact phenomena, whether through contact between Croatian dialects, which were still not part of a standardised system at the time, or through contact with typologically similar languages in close proximity.

During the course of history, the ratio of the two patterns changed for all six nouns. For some nouns, there seems to be a developmental shift from one form to another. For example *varoš* 'town' obtained its alternative feminine form in the 17<sup>th</sup> century. In the following centuries, the percentage of usage of the masculine form decreased by 38% from 1845 to 1945, by 22% from 1945 to 1990, and down to only 4% in current corpora (2005 to 2015). The opposite example is *trulež* ('rot'): it obtained its alternative feminine form in the 18<sup>th</sup> century, and in the following period, the percentage of the masculine form decreased (42% from 1845 to 2945, 14% from 1495 to 1999), but in current corpora, its usage in the masculine form is 25%.

**Conclusion** Detailed analysis of the developmental course of the usage of double-gender nouns shows that double forms, in most cases, do not disappear for centuries. While some nouns show a progression from the exclusive usage of one form to the exclusive usage of another, others do not. Where applicable, there seems to be a preference towards the usage of one paradigm with one meaning, but this is by no means exclusive. All of this supports a more relative approach to the blocking phenomenon in inflectional morphology.