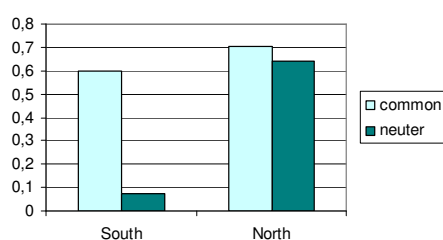


## Perceiving Dialects: A Magnitude Estimation Study

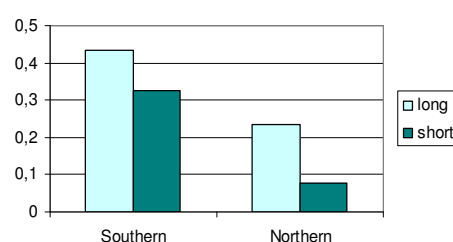
**Background:** Much research has been done on the phonological, lexical and syntactic differences between dialects. Particularly for syntactic differences, much of the research has been based on the observed production frequency in corpora. Much less research has centered on the perception of these differences. To gain more insight into the relationship between the two we carried out a magnitude estimation study with speakers of the Standard Dutch used in the Netherlands (Northern) and the Standard Dutch used in Belgium (Southern), focusing on four constructions which have been claimed to differ between the two variants on the basis of corpora frequency.

**Subjects and Method:** 56 speakers of Southern and 56 speakers of Northern Dutch participated in the experiment. The relevant structures were embedded in complete sentences for rating to distract attention from the syntactic aspect being tested and fillers with a large range of acceptability were included as well as the target items described below to further distract attention. Subjects were presented with a questionnaire in which they rated the acceptability of sentences on a personally generated scale. Each participant rated a normative sentence multiple times across the entire questionnaire and was asked to rate other sentences on a scale using the concept half as acceptable, twice as acceptable to generate further numeric ratings. The ratings were converted to Z-scores for analysis. All differences discussed below were statistically significant ( $p < .05$ ), with differences between groups producing statistical interactions.

**Nominal Inflection:** In Northern Dutch, adjectives are inflected with *-e* following a definite determiner. In Southern Dutch, this inflection can optionally be left off with neuter nouns. We included controls with common gender for which inflection is obligatory in each dialect. The results can be seen in **Figure 1**. The Southern speakers found the uninflected form nearly as good as the inflected form for the neuter, although they were clearly sensitive to the ungrammaticality in the common nouns. The Northern group found a clear decrease in grammaticality for both forms. Frequency of occurrence does not entirely explain these results. We used noun phrases in which Southern speakers would use the uninflected form more frequently than the inflected form, but they were not judged more acceptable than the inflected variant. This may be due to the written format, which might encourage use of the more formal variant.



**Figure 1:** Difference in mean Z-rating for inflected – for uninflected form for neuter and common nouns. A high number indicates that the uninflected was considered less acceptable.

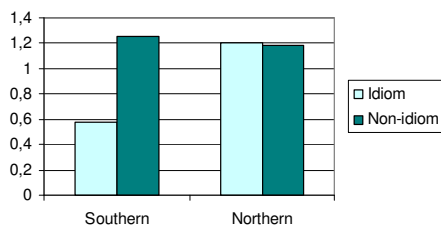


**Figure 2:** Difference in mean Z-rating for nonfronted particles – for particles over one or two auxiliaries. A high number indicates that fronting was considered less acceptable.

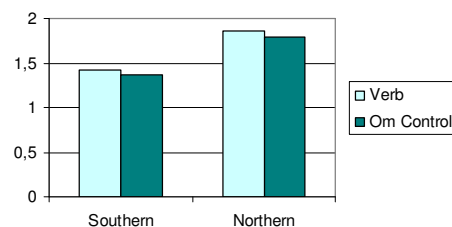
**Particle Fronting:** In Northern Dutch, particle verbs (e.g. equivalent to *pick ... up*) can either appear as a single combined form at the end of the embedded clause or can be fronted to the position before auxiliary and modal verbs; these forms are used about equally frequently. In Southern Dutch, on the other hand, the fronted version is much less common (1/10). We added in a factor of the number of auxiliary verbs intervening between fronted particle and main verb as

well (long vs. short). The results of the rating task for these sentences appears in *Figure 2*. Southern speakers clearly found the fronted version much less acceptable than the non-fronted version, while the Northern speakers found it nearly as acceptable with only one intervening element. The Northern speakers found two intervening elements less acceptable. In this case, acceptability mirrors production frequency more closely than in the nominal inflection sentences.

**Auxiliary Fronting:** In both modern Southern and Northern Dutch, using verb second order in embedded clauses is uncommon. However, in Southern Dutch it is much more common with auxiliary verbs in idiomatic verb phrases. The ratings shown in *Figure 3* reflect this difference, with increased acceptability of auxiliary fronting in idiomatic expressions for the Southern group. However, the construction remains relatively unacceptable (cf. relative differences seen in preceding constructions), which reflects its relatively low frequency of occurrence even in Southern Dutch.



**Figure 3:** Difference in mean Z-rating for nonfronted – for fronted auxiliaries in idiomatic and non-idiomatic expressions. A high number indicates that fronting was less acceptable.



**Figure 4:** Difference in mean Z-rating for infinitive *te* – for deleted *te* following verbs and *om*. A high number indicates that deletion was considered less acceptable.

**Infinitival *te* Deletion:** It is frequently claimed on the basis of production data that the deletion of the infinitival marker *te* following verbs like *proberen* (*try*) is more acceptable in Southern than in Northern Dutch. We compared deleted and non-deleted versions with this class of verbs and following *om* which is used to introduce an infinitival phrase. Following *om* deletion is not acceptable in either dialect. As can be seen in *Figure 4*, frequency in production and in perception do not align at all for this construction. Southern speakers find *te* deletion after these verbs as unacceptable as after *om*, just as the Northern group does. As with the nominal inflection cases discussed above, this may be partially due to the written modality, and there may be some contribution of school instruction as well. If so, the effects are very extreme, as even the relatively rare idiomatic auxiliary verb fronting led to induced an increase in rated acceptability.

**Conclusions:** The results of this study suggest that naïve subject ratings can give insight into the extent to which syntactic constructions are perceived differently between dialect groups. Further, it provides an source of information complementary to that available from production frequency, since frequency did not entirely predict the degree to which the dialect groups differed in their judgments. Some of these differences may be due to the use of written modality or to the use of conscious judgments. Further investigation of these issues using auditorily presented materials and methods which are sensitive to on-line detection of ungrammaticality or of non-preferred structures, such as event-related potentials, can provide additional insight.