Veloso, João - Assistant Lecturer, University of Porto (Faculty of Arts), FLUP, Via Panorâmica, s/n - 4150 PORTO, Portugal, THE EFFECTS OF HIGHER-LEVEL VARIABLES ON THE PROCESSING OF AN ALLOPHONIC CONTRAST IN EUROPEAN PORTUGUESE (Speech Comprehension and Production)

Most recent issues in the field of speech perception accept the role of higher-level variables (such as linguistic knowledge and phonetic training of listeners, for instance) on the categorical processing of phonetic stimuli. The processing of the allophonic (non-distinctive) contrasts of a specific language offers us good evidence of this, since *the same speech stimuli can be processed differently according to the knowledge background of listeners.* These will be able to discriminate only the phonemic (distinctive) contrasts of their mother-tongues, regardless of physical dissimilarities between phonetic stimuli.

In this paper, it is our aim to exemplify this effect through the study of the processing of an allophonic contrast in European Portuguese: in this language, /b d g/ can be produced either as [b d g] or, in certain contexts, as [β ð ɣ]. This is an allophonic contrast, since no phonological distinction exists between Portuguese [b d g] and [β ð ɣ].

Our hypotheses are the following: (1) listeners who have Portuguese as their mother-tongue will not discriminate [b d g] from [β ð ɣ], but listeners from other mother-tongues, where this allophonic contrast does not exist, will discriminate them; (2) among Portuguese subjects, listeners with phonetic training will discriminate between the two types of consonants more often than *naïve* listeners.

The results of the study seem to confirm these hypotheses. Significant ($p<0,05$) differences in the processing of these consonants have been found in comparisons between groups of subjects who differed in these variables only.

Vicente, Selene, Assist., Castro, São Luís, Assoc. Prof., University of Porto, Portugal & Morais, José, Professor, Free University of Brussels, Belgium, The effect of the uniqueness point in the shadowing of words spoken in European Portuguese (Speech Comprehension and Production)

Is it possible to predict the amount of time needed to recognize a spoken word? In this study, we examine the relevance of the uniqueness point in processing Portuguese spoken words using a word shadowing task. In our experiment, 16 females and 5 males in their early twenties were tested individually. A set of 230 words were presented through headphones to their right ear and they were asked to repeat each word as quickly and accurately as possible. Reaction times were measured from word onset to the start of repetition. These words were taken from a lexicon of basic European Portuguese and are a mixed sample of phonemic and syllabic length, syllabic-stress pattern, frequency of usage, and uniqueness point, hereafter UP, position.

A first stepwise multiple regression analysis, taking word length, UP and subjective frequency as factors, showed that word length was the most important predictor of reaction times; UP was also significant, but it explained a rather low proportion of the total variance. Subsequent more detailed analyses on particular subsets of words were conducted. A comparison of early vs late UP location in trisyllabic and quadrisyllabic words with UP coming after the stressed syllable (early position with UP around 562 ms, late position with UP at 776 ms) showed that the UP was a predictor of reaction times only if it occurred in the late position. A further analysis revealed that the UP is a very good predictor of reactions times when it comes after the stressed syllable; if the UP is located at the stressed syllable, its role in the latency of the shadowing response is negligible. The role of the UP in spoken word recognition will be discussed in the context of cross-linguistic comparisons and current models of word recognition.