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## ABSTRACT

## WHAT IT MEANS TO BE A LOSER: NON-OPTIMAL CANDIDATES IN OPTIMALITY THEORY SEPTEMBER 2004 ANDRIES W. COETZEE, B.A., POTCHEFSTROOM UNIVERSITY M.A., POTCHEFSTROOM UNIVERSITY M.A., UNIVERSITY OF MASSACHUSETTS AMHERST Ph.D., UNIVERSITY OF MASSACHUSETTS AMHERST Directed by: Professor John J. McCarthy

In this dissertation I propose a rank-ordering model of EVAL. This model differs from classic OT as follows: In classic OT, EVAL distinguishes the best candidate from the losers, but does not distinguish between different losers. I argue that EVAL imposes a harmonic rank-ordering on the complete candidate set, so that also the losers are ordered relative to each other. I show how this model of EVAL can account for non-categorical phenomena such as variation and phonological processing.

*Variation.* In variation there is more than one pronunciation for a single input. Grammar determines the possible variants and the relative frequency of the variants. I argue that EVAL imposes a harmonic rank-ordering on the entire candidate set, and that language users can access more than the best candidate from this rank-ordering. However, the accessibility of a candidate depends on its position in the rank-ordering. The higher a candidate appears, the more often it will be selected as output. The best candidate is then the most frequent variant, the second best candidate the second most frequent variant, etc. I apply this model to vowel deletion in Latvian and Portuguese, and to [t, d]-deletion in English.

*Phonological processing*. Language users rely on grammar in word-likeness judgments and lexical decision tasks. The more well-formed a non-word, the more wordlike language users will judge it to be. A more well-formed a non-word is considered more seriously as a possible word, and language users will be slower to reject it in a lexical decision task.

The rank-ordering model of EVAL accounts for this as follows: EVAL compares non-words and imposes a rank-ordering on them. The higher a non-word occurs in this rank-ordering, the more well-formed it is. Therefore, the higher a non-word occurs, the more word-like it will be judged to be, and the more slowly it will be rejected in lexical decision tasks.

I illustrate this by discussing two sets of experiments on how grammar influences phonological processing. The first set investigates the influence of the OCP on processing in Hebrew, and the second the influence of a constraint on [sCvC]-words in English.

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