Partial overlap priming of the Semitic lexicon of Maltese Adam Ussishkin, University of Arizona

Prior work in both the visual and auditory modalities reveals a consistent effect of morphological priming in Semitic languages. In general, target words are faster to be recognized when primed by a word sharing the same triconsonantal root (Hebrew: Frost et al. 1997 et seg; Arabic: Boudelaa and Marslen-Wilson 2001 et seg; Maltese: Ussishkin et al. 2015). While these studies have typically been taken as clear evidence for a level of morphological structure in lexical representations, they have also left open alternative interpretations based either on semantic or form-based factors. Here, I explore the form-based alternative in a series of four experiments on Maltese, exploiting the fact that roughly half of the Maltese lexicon is comprised of Semitic words, while the other half is comprised of non-Semitic words. All four of the experiments use some version of partial overlap priming. In Experiment 1 I show using the auditory masked priming technique that no facilitation effects are observed when Semitic words of Maltese are primed by non-Semitic words sharing the same consonants, and vice versa. In Experiments 2-4 the prime always consists of three consonant root letters, which never occurs in isolation in written (or spoken) Maltese. In Experiment 2, recognition of Semitic words of Maltese is facilitated by primes consisting of just the three root letters of the target, but no such effect is observed when the same three letters are used to prime non-Semitic words. In Experiment 3, I show that when the prime shares two of the target's three root letters, priming is observed when the second or third, but not the first, root consonant is not shared with the target. Finally, in Experiment 4, I show that when the prime consists of any permutation of the target's three root consonants, priming is observed. These results are all consistent with models that posit a level of morphological representation for Semitic roots in Maltese.