

Form priming

Form priming has yielded different results in different studies. In studies that used visual stimuli, many studies report non-significant form priming both in masked (Rastle et al., 2000; Crepaldi et al., 2016; Dunabeitia et al., 2008; Giraudo and Voga, 2013; Lazarao et al., 2016) and unmasked paradigms (Dominguez et al., 2006). However, these studies recruited a relatively small number of participants (less than 80), with Rastle et al. (2000) having the largest number of participants, which is 72.

A study with larger population (Feldman, 2000; N=96) reported a facilitative effect of form priming (e.g. vowel-VOW) in the masked paradigm (18 ms; SOA = 66 ms) and an inhibitive effect in the unmasked paradigm (18 ms; SOA= 300 ms). The currently run experiment yielded similar results with 120 participants, when the prime and the target share the last phoneme (e.g. travel-COMPEL) (facilitative 9 ms in the masked paradigm, inhibitory 15 ms in the unmasked paradigm).

In studies that used auditory paradigm, a substantial amount of form overlap was necessary for any priming effect to be observed. These studies are based on fairly large population (Dumay et al., 2001: N=96, Goodwin Davies and Embick, 2020: N=228) except for Slowiaczek et al. (2000). When the prime and the target share only the last phoneme (e.g., lusoge-TIRAGE), the priming effect is not reliable (Dumay et al., 2001: facilitative 5 ms), but when they rhyme (e.g., lubage-TIRAGE), a reliable facilitative effect was observed (Dumay et al., 2001: 28ms).

Affix priming

Crepaldi et al. (2016), Dunabeitia et al. (2008), and Lazaro et al. (2016) report reliable facilitative effects of derivational suffix priming in the masked paradigm, which is on average 30 ms and is independent from form priming (reported to be not significant). This effect is also ignorant to how the non-word stimuli are constructed. Marjanovic and Crepaldi (2020), however, found a facilitative effect (14 ms) in one study but not in another (2 ms), suggesting that inflectional priming may be unstable.

Studies using auditory paradigm (Goodwin Davies and Embick, 2020) and unmasked paradigm (Dominguez et al., 2006) report a reliable facilitative effect of affixes (e.g., crimes-TREES; reaccion-REFORMA), while form priming is not reliable.

On the other hand, the current experiment found a reliable facilitative effect only in the masked paradigm when the affixes in the prime and the target shared the same form (e.g. turned-CALLED). When the affixes had different forms (e.g., evitaste-COMIÓ), there was no priming effect.

Stem priming

Stem priming is consistently evident across different studies (Rastle et al., 2000; Feldman, 2000; Giraudo and Voga, 2013). That is, primes that share the same stem as targets facilitate the target word processing, regardless of affixes. The priming effect is about 32 ms on average in the masked paradigm, and about 37 ms in the unmasked paradigm. When the prime and the target are semantically different (e.g., apartment-APART), the priming effect is not significant in the

unmasked paradigm (Rastle et al., 2000).

Reference

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