When is a form good enough? How we avoid producing forms with unintended meanings

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Interactive models of language production suggest that feedback from activated forms prior to articulation allows speakers to avoid speech errors (Dell 1985). Evidence for such prearticulatory editing comes from Motley et al. (1982), who found that speakers show sign of anxiety (the Galvanic Skin Response) when producing emotionally neutral stimuli like *hit shed* that are likely to result in a taboo utterance if mispronounced. This paper argues that prearticulatory feedback provides a mechanistic usage-based account for several forms of homonymy avoidance, as well as puzzling cases of degrammaticalization.

In connectionist models of production, the speaker's intended message activates semantic features, which activate associated forms, e.g., CAT+PLURAL activates *cat*, *cats* and *-s*. The form whose meaning perfectly matches the intended message, here *cats*, is advantaged because it is receiving more activation from semantics than other forms. However, when other forms are more frequent, e.g., *cat* vs. *cats*, they have higher resting activation levels and so could be erroneously produced, seeding paradigm leveling (Bybee & Brewer 1980; Harmon & Kapatsinski 2017).

The Negative Feedback Cycle (NFC) explains how paradigm leveling can sputter out. According to NFC, activated forms send inhibitory feedback back to semantic features they cue. Intended semantic features remain activated because they are receiving excitation from the message. In contrast, unintended semantic features (here, SINGULAR) are inhibited, and then send this inhibition back down to the associated forms (cat) in proportion to how strongly they cue these meanings. As a result, forms that activate unintended semantics (cat) are inhibited.

NFC inhibits taboo forms because they activate salient unintended meanings, accounting for pejoration, or 'bad meanings driving out good'. For example, once *intercourse* was intended to mean SEX, its production would be inhibited when SEX is not part of the message. Wordforms with unintended non-taboo meanings are also inhibited when the unintended meaning is more frequent than the intended meaning, accounting for some paradigm gaps. For example, the avoidance of *deržu* as the 1st person singular non-past of *derzit'* 'dare' in Russian can be explained this way, because it would be homophonous with the 1st person singular non-past of the more frequent *deržat'* 'hold'. In contrast, *vožu* can serve as 2nd person singular non-past of both *vodit'* 'lead' and *vozit'* 'drive' because both meanings are equally frequent.

NFC also provides a mechanistic account for the emergence of libfixation, a type of degrammaticalization (Norde & Sippach 2019), via blending. Degrammaticalization is usually thought operate via generalization over related words. However, libfixation is a counterexample. For example, -*holic* occurred in only one word, and yet was liberated from it, becoming a new affix. The NFC explains this development. A speaker who aims to produce the novel meaning ADDICTED.TO.WORK would activate the closest known form, *alcoholic*, with the meaning ADDICTED.TO.ALCOHOL. However, ALCOHOL is unintended, and so would be inhibited by NFC. This inhibition would then spread to the part of *alcoholic* that most strongly cues ALCOHOL, suppressing the triphone *alc-*, as a full 79% of words containing alc relate to ALCOHOL in COCA (Davies 2012), and retaining -*holic*.

References

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