'Spread' won't spread

Szigetvári, Péter (Eötvös Loránd University)

English has two sets of obstruents, but they are not voiceless vs voiced, but aspirated vs unaspirated (Harris 1994, Jansen 2004): not [±voiced] (or **L**), but [±spread (glottis)] (or **H**). The standard transcription of obstruents uses the same symbols as are used for the voiceless–voiced contrast in other languages. This is unfortunate because the sounds represented by **b**, **d**, **g**… are not voiced. Most current analyses of English pretend that the plosives preceded by a fortis fricative are fortis themselves (*spam* **spam**, *stab* **stab**, *scan* **skan**, *lieutenant* **lefténənt**). If so we must provide an explanation of why they are not aspirated. Positing a syllable boundary before a fricative+plosive cluster goes against the basic principles of syllabification. Alternative analyses are also available (eg Iverson & Salmons 1995), but the simplest assumption is that these plosives are lenis (*spam* **sbam**, *stab* **sdab**, *scan* **sgan**, *kaftan* **kafdán**). Twaddell (1935) claims that the only motivation for seeing these plosives as allophones of fortes is spelling. Davidsen-Nielsen (1969) introduces experimental evidence to show that they are in fact lenis. G. Kiss (2017) shows VOT measurements to prove the same.

When surrounded by vowels and/or sonorant consonants the lenis obstruents of English are passively voiced: eg *rubber, older, anger*. This is not a phonological effect, sonorants are not actively voiced, their voicing is spontaneous. However, lenis obstruents are not voiced when adjacent to a fortis obstruent. The plosives following a fortis fricative are lenis *and* voiceless. This extends to any position: *wasp* **wosb**, *pest* **pesd**, *risk* **risg**, *after* **a**:**fdə**. So contrary to the widespread assumption, the past tense morpheme of English has only two regular allomorphs: **d** (*raised* **rejzd**, *raced* **rejsd**) and **əd** (*raided* **rejdəd**).

We contend that it is a general phonotactic constraint in English that fortis obstruents never occur adjacent within a morpheme: [spread] won't spread. Fortis+fortis clusters are only available across a morpheme boundary: *passport* **pa**:**s#po:t**, *discount* **dis#kawnt**. There is no reason to assume that the final fricative in *box* or *lapse* are fortis: true, they are not voiced, but this is expected of an obstruent that is next to another fortis obstruent. That is, the nominal plural, genitive, and the verbal 3sg suffix can also be reduced to two regular allomorphs: **z** (*laps* **lapz**, *labs* **labz**) and **əz** (*crosses* **krosəz**). Note that English does not make use of [voiced], so no laryngeal property ever spreads in this language.

An obvious reason for transcribing many lenis obstruents with a fortis symbol in English is that speakers whose native language has true voiced obstruents would produce regressive voicing upon seeing a fortis+lenis (for them voiceless+voiced) sequence: *spam* **sbam** > ***zbam**, *laps* **lapz** > ***labz**. The current transcription practice is to avoid this. Nevertheless, we, phonologists, should know better and should not be misled by it.

References

Davidsen-Nielsen, Niels. 1969. English stops after initial /s/. English Studies 4: 321–338.

G. Kiss, Zoltán. 2017. Aspiration of stops after fricatives in English: Results from a pilot experiment. In Péter Szigetvári (ed.) 70 snippets to mark Ádám Nádasdy's 70th birthday. seas3.elte.hu/nadasdy70/gkiss.html

Harris, John. 1994. English sound structure. Oxford: Blackwell.

Iverson, Gregory K. and Joseph C. Salmons. 1995. Aspiration and laryngeal representation in Germanic. Phonology 12: 369–396.

Jansen, Wouter. 2004. Laryngeal contrast and phonetic voicing: A laboratory phonology approach to English, Hungarian, and Dutch. PhD diss., Rijksuniversiteit Groningen

Twaddell, W. Freeman. 1935. On defining the phoneme. Language 11: 5–62.