# Lenisizing English 

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GPRT, 2017-11-18

## monomorphemic obstruent clusters: traditional view

- at word edges
- mostly fortis+fortis: spot, stop, scot; apse, quartz, ax, depth; wasp, cost, soft, mosque; apt, act
- rarely lenis+lenis adze, aux [o:gz]
- within foot: only
- fortis+fortis: aspen, aster, rascal; chapter, actor; asphalt, esthete
- lenis+lenis: husband, wisdom, Glasgow; observation, existential; abdomen, Ogden
- across foot boundary: also
- fortis+lenis: Afghan, anecdote
- lenis+fortis: Aztec, gazpacho


## type frequency of singleton obstruents in CUBE

|  |  | fortis | lenis | ratio |
| :---: | :--- | ---: | ---: | ---: |
| medial | plosive | 41,488 | 28,601 | 1.45 |
|  | fricative | 23,552 | 11,218 | 2.10 |
|  | all | 65,040 | 39,819 | 1.63 |
| initial | plosive | 23,730 | 17,694 | 1.34 |
|  | fricative | 14,546 | 2,154 | 6.75 |
|  | all | 38,276 | 19,848 | 1.93 |
| final | plosive | 10,953 | 9,321 | 1.18 |
|  | fricative | 6,885 | 16,617 | 0.41 |
|  | all | 17,838 | 25,938 | 0.69 |

type frequency of obstruent clusters: traditional view

|  |  | fortis | lenis | ratio |
| :---: | :---: | :---: | :---: | :---: |
|  | plos+plos | 2,360 | 376 | 6.28 |
|  | plos+fric | 2,787 | 479 | 5.82 |
| medial | fric+plos | 6,758 | 284 | 23.80 |
|  | fric+fric | 424 | 38 | 11.16 |
|  | all | 12,329 | 1,177 | 10.47 |
|  | plos+plos | 0 | 0 |  |
|  | plos+fric | 13 | 5 | 2.60 |
| initial | fric+plos | 4,143 | 0 | - |
|  | fric+fric | 29 | 0 | - |
|  | all | 4,185 | 5 | 837.00 |
|  | plos+plos | 954 | 301 | 3.17 |
|  | plos+fric | 4,990 | 1,616 | 3.09 |
| final | fric+plos | 2,606 | 596 | 4.37 |
|  | fric+fric | 313 | 370 | 0.85 |
|  | all | 8,863 | 2,883 | 3.07 |

fortis+lenis: 631; lenis+fortis: 886

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9. why is the number of fortis+lenis and lenis+fortis clusters so low, when there does not seem to be any assimilation rule

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lenis $=$ absence of excessive consonantalness a lenis obstruent may accommodate (some of) the Vness (spontaneous voicing) of adjacent sounds (sonorants)


## where fortis+fortis was first reanalysed


an explanation
mistique is not [mistíjk], but [misdíjk] (eg Twaddell 1935,
Davidsen-Nielsen 1969, Kaye \& Pöchtrager very soon)
plosives are not aspirated after a fortis fricative
because there are no fortis plosives after a fortis fricative (within a morpheme that is: cf mistime [misthájm])

## accessible types of fricative+plosive clusters

fortis+lenis $\checkmark$
star [sda:], spar [sbai], scar [sga:], stew [sdzuw], Afghan [afgan]
lenis+fortis $\checkmark$
Aztec [aztek], lieutenant [levtenənt], gazpatcho [gazpatfəw] (or [gasbatfəw])
lenis+lenis
wisdom [wizdəm], husband [həzbənd], Glasgow [glazgəw]
fortis+fortis $X$
only across a word boundary: mis\#time, kiss\#Pam, brief\#case

## hypothesis

*fortis+fortis extends to all clusters

## fortis+lenis vs lenis+fortis

## obstruent+plosive+sonorant

- no aspiration: anecdote [anəkdəwt], Macbeth [məkbe日]
- aspiration: September [sebtembə], October [ogtəwbə], electric [ilegtrik]
source of misanalysis
the assumption that any voiceless obstruent that does not contrast with a fortis is itself fortis
lenis obstruents
are voiceless except between two nonfortis segments: [g] is voiced in dagger, alga, anger, singular, language, angry, English, Magda, Pisgah, exam; but voiceless in god, dog, actor [agtə], action [agJən], Agfa, Afghan


## neutralization

apparently
word finally the fortis+lenis vs lenis+fortis contrast is neutralized:
tract [tragt] (cf tractate [tragtejt])
vs
tracked [trakd] (cf track [trak])
ie [tragt] and [trakd] are homonyms

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4. why is the number of fortis+lenis and lenis+fortis clusters so low, when there does not seem to be any assimilation rule $\Rightarrow$ most obstruent clusters are either fortis+lenis or lenis+fortis

## so why do we transcribe fortis+lenis as fortis+fortis?

speakers of voicing languages would notoriously misunderstand (and mispronounce) [sbort], [asbərgəz], [kisd], [likz], etc

I am grateful to George Soros.

