Lenisizing English

szigetvari

@elte.hu

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 [oːgz]
- 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

		tortis	lenis	ratio
medial	plos+plos	2,360	376	6.28
	plos+fric	2,787	479	5.82
	fric+plos	6,758	284	23.80
	fric+fric	424	38	11.16
	all	12,329	1,177	10.47
initial	plos+plos	0	0	_
	plos+fric	13	5	2.60
	fric+plos	4,143	0	_
	fric+fric	29	0	_
	all	4,185	5	837.00
final	plos+plos	954	301	3.17
	plos+fric	4,990	1,616	3.09
	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

1. fortis is marked, yet fortis+fortis is the most common cluster; lenis is unmarked and rare(r)

- 1. fortis is marked, yet fortis+fortis is the most common cluster; lenis is unmarked and rare(r)
- 2. prevocalic fortis plosives are aspirated, but not after fortis fricative

- fortis is marked, yet fortis+fortis is the most common cluster; lenis is unmarked and rare(r)
- 2. prevocalic fortis plosives are aspirated, but not after fortis fricative
- 3. the past and plural/3sg suffixes show a unique assimilatory pattern: obligatory laryngeal assimilation across #

- 1. fortis is marked, yet fortis+fortis is the most common cluster; lenis is unmarked and rare(r)
- 2. prevocalic fortis plosives are aspirated, but not after fortis fricative
- the past and plural/3sg suffixes show a unique assimilatory pattern: obligatory laryngeal assimilation across #
- 4. why is the number of fortis+lenis and lenis+fortis clusters so low, when there does not seem to be any assimilation rule

interpreting fortis vs lenis

all obstruents are phonologically voiceless

interpreting fortis vs lenis

all obstruents are phonologically voiceless

fortis = excessive consonantalness

- a fortis obstruent may spread its Cness on adjacent sounds (Cness protrudes on the adjacent sonorant, making its voiced phase, Vness, shorter)
- a fortis obstruent resists the Vness (voicing) of its environment (pace flapping)

interpreting fortis vs lenis

all obstruents are phonologically voiceless

fortis = excessive consonantalness

- a fortis obstruent may spread its Cness on adjacent sounds (Cness protrudes on the adjacent sonorant, making its voiced phase, Vness, shorter)
- a fortis obstruent resists the Vness (voicing) of its environment (pace flapping)

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

```
a well-known pattern
batik [bəthíjk] Maltese [molthíjz]
boutique [buwthíjk] antique [anthíjk]
cartoon [kaːthúwn] mistique [mist*híjk]
```

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 ✓
star [sdaː], spar [sbaː], scar [sqaː], stew [sdʒuw], Afghan [afqan]
lenis+fortis ✓
Aztec [aztek], lieutenant [levtenant], gazpatcho [qazpat[aw] (or
[qasbat[əw])
lenis+lenis ✓
wisdom [wizdəm], husband [həzbənd], Glasgow [qlazqəw]
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 [məkbeθ]
- 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 [agʃən], 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
```

- 1. fortis is marked, yet fortis+fortis is the most common cluster; lenis is unmarked and rare(r)
 - ⇒ fortis+fortis is illicit

- fortis is marked, yet fortis+fortis is the most common cluster; lenis is unmarked and rare(r)
 - ⇒ fortis+fortis is illicit
- 2. prevocalic fortis plosives are aspirated, but not after fortis fricative
 - ⇒ because fortis plosives cannot occur after a fortis fricative

- fortis is marked, yet fortis+fortis is the most common cluster; lenis is unmarked and rare(r)
 - ⇒ fortis+fortis is illicit
- 2. prevocalic fortis plosives are aspirated, but not after fortis fricative
 - ⇒ because fortis plosives cannot occur after a fortis fricative
- 3. the past and plural/3sg suffixes show a unique assimilatory pattern
 - ⇒ these suffixes do not undergo assimilation at all banned [band], bagged [bagd], backed [bakd] bans [banz], bags [bagz], backs [bakz]

- fortis is marked, yet fortis+fortis is the most common cluster; lenis is unmarked and rare(r)
 - ⇒ fortis+fortis is illicit
- 2. prevocalic fortis plosives are aspirated, but not after fortis fricative
 - ⇒ because fortis plosives cannot occur after a fortis fricative
- the past and plural/3sg suffixes show a unique assimilatory pattern
 - ⇒ these suffixes do not undergo assimilation at all banned [band], bagged [bagd], backed [bakd] bans [banz], bags [bagz], backs [bakz]
- 4. why is the number of fortis+lenis and lenis+fortis clusters so low, when there does not seem to be any assimilation rule ⇒ most obstruent clusters are either fortis+lenis or lenis+fortis



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

