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Branching onsets and syncope in English*

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handout available at http://budling.nytud.hu/˜szigetva/papers.html#Toulouse_handout

(1) goals

i. to deal with consonant clusters in strict CV/VC phonology

ii. to show that branching onsets and bogus clusters are the same category in English

(2) three types of consonant cluster identified in government phonology (GP)

i. onset cluster (i.e., branching onset ; I ignore sC clusters in this paper) occurs word initially (and medially) but not finally, consists of an obstruent and a non-nasal sonorant, i.e., sonority rises ; Cs skeletally adjacent

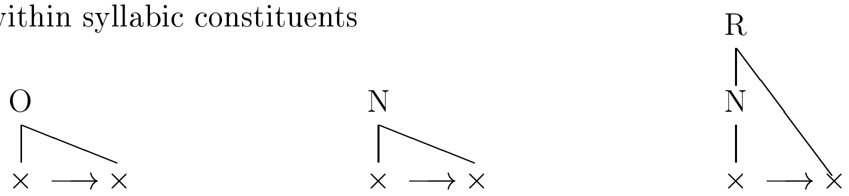
ii. bogus cluster only occurs word medially ; Cs skeletally nonadjacent

iii. coda cluster (i.e., coda–onset cluster) occurs word finally (and medially) but not initially (sonority "falls", but note *wives, fifth, Egypt, act* etc.) ; Cs adjacent

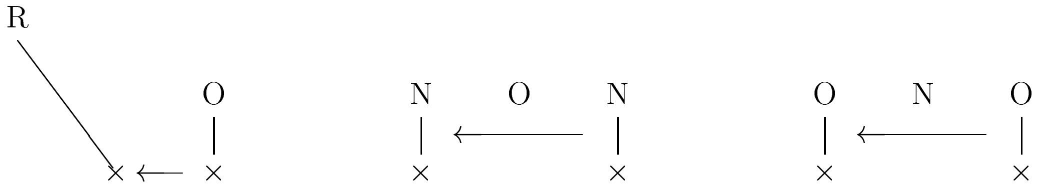
(3) syllable structure in GP

i. is encoded both by governing/licensing relations (shown by arrows) between skeletal slots and by syllabic constituents involving these slots

a. within syllabic constituents



b. between syllables



ii. either syllabic constituents or government/licensing relations are superfluous (cf. Takahashi 1993) ; since the latter are employed more extensively (cf. 3i*b*), syllabic constituents ought to be discarded (→ CV phonology/CVP)

(4) syllable structure in CVP

i. no syllabic constituent may branch (i.e., syllabic constituents are discarded), therefore the skeletal slots are best identified with the onset and the nucleus, or C and V (O/C and N/V are not dominating nodes, but the slots themselves)

ii. the members of consonant clusters (and vowel "clusters", i.e., long vowels and diphthongs) are never skeletally adjacent

iii. syllable structure/phonotactics to a large extent boils down to which V positions can be muted (Vs are inherently loud, cf. (11))

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iv. the differences between clusters is encoded by relations between skeletal slots

a. Scheer's (1998) proposal

α. infrasegmental licensing mutes the V within "branching onsets"

β. proper government mutes the V within both "coda–onset" and bogus clusters (with certain not fully elaborated later proposals to distinguish the two)

b. Dienes & Szigetvári's (1999) proposal (for details see the appendix)

α. C-to-C government mutes the V within coda clusters

β. V-to-V (i.e., proper) government mutes the V within bogus clusters

γ. problem : what mutes the V within onset clusters ("branching onsets") ; a desperate effort (Szigetvári 1999) : is that V mute at all ?

(5) differences in the behaviour of clusters

i. distribution (also cf. (2))

		#_	_#	_C	T_	R_	V̄_
a.	TR	✓	*	*	*	✓	✓
b.	TL	*	*	*	*	✓	✓
c.	RT	*	✓	✓	*	?	?

ii. closed syllable shortening effects do not occur before onset clusters (*mātrix*) or syncope-created bogus clusters (*trait⟨o⟩rous*), but they do before certain coda clusters (*V̄mp, *keep* ∼ *kept*) ;
N.B. in English closed syllable shortening is blurred by several historical developments, e.g., the remnants of OE precluster (*nd, ld, rd, mb, ng*) lengthening and the resistance to shortening before *st* (*chīld, mōld, fīnd, hound, ghōst, priest* etc.), Southern BrE æ lengthening to ɑː before fricatives and in some words before nC clusters (*āsk, stāff, pāth, dānce*), as well as after *r*-vocalization in rCC clusters (*absorption, arctic, excerpt, burst, world*) and pre-*l* lengthening (*fault*)

iii. syncope in C_1əC_2V regularly occurs (according to the data in Wells 1990)

a. if V is an unstressed vowel (i.e., ə ɪ/i) or a syllabic consonant :
Lancelot ˈlɑːns⟨ə⟩lət vs. ˈlɑːns*⟨ə⟩lɒt ; *national* ˈnæʃ⟨ə⟩n̩l

b. if C_2 is a sonorant and C_1 is less sonorous than C_2 :
family ˈfæm⟨ə⟩li vs. *felony* ˈfel*⟨ə⟩ni (*veg⟨e⟩table, med⟨i⟩cine* etc. are lexicalized)

c. if C_1 and C_2 are not homorganic (except if coronal) : *euphemy* ˈjuːf*⟨ə⟩mi

d. of clusters only after coda clusters (*silvery* ˈsɪlvəri, ˈsɪlvri, *company* ˈkʌmpəni, ˈkʌmpni), but not after onset clusters (*burglary* ˈbɜːgləri, *ˈbɜːglri) or bogus clusters (*cutlery* ˈkʌtləri, *ˈkʌtlri ; *ignorance* ˈɪgnərəns, *ˈɪgnrəns ; *admiral* ˈædmərəl, ˈædm̩rl̩, *?ˈædmrəl ; *rosemary* ˈrəʊzməri, ˈrəʊzm̩ri, *?ˈrəʊzmri)

(6) intermediate summary

i. if we want to reduce the number of cluster types, onset and bogus clusters seem to be the candidates for being merged

a. their distribution is near identical (with the exception of word-initial position)

b. neither induces closed syllable shortening (which, though, may not be an active process in PdE, at all)

c. neither allows syncope after (or before, for that matter) themselves

d. syncope always creates nonhomorganic rising sonority (bogus) clusters, a set very similar to, even if larger than that of onset clusters

ii. a problem: an onset cluster is often indistinguishable from a bogus cluster, e.g., *copra* ˈkɒprə, *opera* ˈɒprə (the fact that the latter alternates with -pər-, the former does not—in standard BrE at least—is surely irrelevant)

(7) so what distinguishes onset and bogus clusters?

i. lenition

a. the first member of an onset cluster does not lenite, the first member of a bogus cluster does: *symmetry* *?ˈsɪməʔri vs. *cemetery* ˈseməʔri; the data, however, are not obvious: *Cypriot* ˈsɪʔpriəʔt, *petrol* ˈpeʔtrəl, *macron* ˈmæʔkrɒn, like *atlas* ˈæʔtləs (Giegerich 1992: 221)

b. in fact, onset clusters are preferred before a stressed V (this follows from licensing inheritance; Harris 1997), where consonant lenition does not occur, while bogus clusters are preferred before an ustressed V (cf. (5iii*a*)), where consonant lenition is common; it must be admitted that there is lenition in a pretonic bogus cluster: *Atlantis* əʔˈlæntɪs

ii. stress

a. coda clusters are moraic (*agénda, catálpa*)

b. onset clusters held not to be moraic (*ádequate, Álcatraz, álgebra, áliquot, cólibri, cólloquy, ... vértebra*), but sometimes seem to be (*àbracadábra, allégro, Clèopátra, methéglin, Patróclus, pellágra, phỳsiátrist, podágra, triquétra*)

c. bogus clusters are also ambiguous: *bènefíci⟨a⟩ry, cadáv⟨e⟩rous, carnív⟨o⟩rous, ephém⟨e⟩ra, illít⟨e⟩rate* vs. *accúsat⟨o⟩ry, córon⟨a⟩ry, nécess⟨e⟩ry, sáliv⟨a⟩ry*

d. i.e., stress does not provide conclusive evidence

(8) word-final clusters ⊂ coda clusters, word-initial clusters ⊂ onset/bogus clusters

i. many coda clusters (lg, lz, mb, mn, ms, nv, ŋg, zb, zd, zʤ, sʧ, pʃ, pʧ, bz, gz, gʒ, kʃ, kʧ) do not occur word finally, yet these are not bogus clusters because syncope is possible after (many of) them (for others there's no potential input, cf. (5iii)): *slumberer* ˈslʌmbrə, *lingering* ˈlɪŋgrɪŋ, *raspberry* ˈrɑːzbri, *exceptional* ɪkˈsepʃnəl, *sculptural* ˈskʌlpʧrəl, *luxury* ˈlʌkʃri (/ˈlʌgʒri), *structural* ˈstrʌkʧrəl

ii. likewise: many onset/bogus clusters (tl, ʒr, ml, ...) do not occur word initially

(9) summary

I make an attempt to defeat the mainstream idea (e.g., Harris 1994: 184ff) that branching onsets are categorially different from bogus clusters by showing

i. that their distribution is very similar

a. must be followed by V or C̩

b. must be preceded by V or "true coda" C (also cf. (9iv))

c. syncope is impossible before or after them

ii. that syncope creates only rising sonority clusters whose second member is a sonorant and whose members must not be homorganic (except if coronal): characteristic properties of branching onsets

iii. that stress does not clearly distinguish branching onsets and bogus clusters

iv. that although only branching onsets occur word initially, a similar constraint holds word finally: a sizable set of coda–onset clusters fails to show up there

APPENDIX: THE BASIC TENETS OF VCP

(10) V and C positions constitute inseparable VC units; it follows that the skeleton is made up of strictly alternating V and C positions (as in CVP) and that skeletons uniformly begin with a V and end in a C position (unlike in CVP)

(11) V positions are inherently loud, i.e., are pronounced unless forced mute;
C positions are inherently mute, i.e., are not pronounced unless forced to
(cf. the sonority hierarchy)

(12) skeletal relations: government and licensing

i. their effects

a. government deteriorates the inherent properties of its target (i.e., mutes V positions and inhibits their governing/licensing capabilities and makes C positions louder, more sonorous)

b. licensing increases the ability of its target to maintain its melodic complexity (N.B. it is not the case that "every position (save one) must be licensed", cf. Ségéral & Scheer 1999)

ii. their properties

a. locality: for a skeletal position a located in a skeletal unit A to govern/license a skeletal position b of type q (V or C) located in a skeletal unit B, a must be distinct from b, A must be distinct from B, A must be adjacent to B and b must be the nearest position of type q to a

b. directionality: for a, b, A, B as above, A must be to the right of B

iii. an inventory of skeletal relations

a.	V-to-C licensing	any CV sequence
b.	V-to-C government	any VCV sequence (VCV́ is parametric)
c.	V-to-V licensing	long vowel, diphthong
d.	V-to-V government	bogus cluster
e.	C-to-C licensing	branching onset?
f.	C-to-C government	coda cluster
g.	C-to-V licensing	impossible, (12ii)
h.	C-to-V government	impossible, (12ii)

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