

The Phonology of English: Exceptions and Conflict

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Data: English = relatively high number of exceptions and variants

Studied phenomena: • main stress placement
 • pronunciation of the stressed vowel

Explanation offered: not exceptions *per se* but manifestations of conflicts

3 phonological sets

⇒ **derivational** phonology (< Germanic):
preservation of deriving form

ex : *love* → *loving* → *lovingly*

⇒ **segmental** phonology (< Romance/Germanic merge):
determiners = number of syllables and segmental sequences

Stress rules:

Disyllable → /10/: *absence, follow, vigour...*

Prefinal C₂ → /-10/: *advantage, importance...*

> 2 syllables → /(-)100/: *attitude, elephant, origin...*

+

Prefixed words other than nouns: prefixal part overlooked (< Germanic):
a'muse, de'velop, appre'hend

⇒ **'exogenous'** phonology (< French + < Italian/Latin/Greek...):
preservation of original stress and vowel pronunciation

'Fr.' → /-1/ *pioneer, gazelle, brigade, Japanese, unique...*

'It./L./Gr...' → /(-)10/ *arteritis, conoidal... banana, mosquito...*

1. Derivational ~ segmental

1.1. Stress

1.1.1. Strong endings

Sometimes called ‘stress-imposing endings’: about 30 suffixes out of 200 (*-ic* for example)

⇒ segmental phonology, against derivation if need be

- C₂ + monosyllabic adjective suffix (*-al, -ine, -ous...*)

⇒ Prefinal C₂ → /-10/

tremendous / against derivation: *au'tumnal* (~ 'autumn)

12 exceptions out of ± 500 adjectives:

'*cavernous*, 'hazardous, 'infantile, 'mercantile, 'saturnine, 'serpentine, 'sinistral, 'vespertine

'*designate*, 'excellent, 'Levantine

⇒ All derivatives

⇒ However, last three stressed against their deriving form as well, which implies in turn that another influence is at play (→ see 4. below)

- *-ity/ety, -ify/efy, -acal, -ical, -inal, -inous, -ular, -ulous*

⇒ > 2 syllables → /(-)100/

'*enmity* / against derivation: *complexity* (~ 'complex)

⇒ Only exception, the derivative *clo'acal*

- $-\{i,e,u\} + V(C_0(e))$ (2 successive vowels: *-ia, -ion, -eous, -ual...*)
⇒ > 2 syllables → /(-)100/
de'licious / against derivation: *ma'licious* (~ 'malice)

Only exceptions in /(-)1000/ out of ± 3500 words: 'spiritual, 'spirituous

⇒ All derivatives

- $-Vte, -ence/-ent$ > 2 syllables
⇒ > 2 syllables → /(-)100/
'accident / against derivation: *'residence* (~ *re'side*)

± 50 exceptions out of ± 1000 words:

a'postate, 'peregrinate, 'tergiversate, margue'rite, attrib'ute (verb)

ad'herence/ent, ad'jacent, ante'cedence, ap'parent, co'herence/ent, com'placence/ent, com'ponent, con'dolence/ent, con'nivence, de'ponent, expon'ent, im'pedence, in'herence/ent, inter'ference, op'ponent, trans'lucence/ent, trans'parent, sub'jacent

'alienate, affection'ate, a'meliorate, com'panionate, com'passionate, de'teriorate, 'etiolate, ext'ortionate, 'matriarchate, 'orientate, 'passionate, 'patriarchate, prop'ortionate, 'variegate, 'meteorite, 'Midianite, Ve'suvianite

⇒ Mostly derivatives (+ other words of the same structure : cf *deponent, etiolate*)

1.1.2. Neutral suffixes

Large majority of suffixes \Rightarrow derivational phonology

Very few exceptions out of thousands of words:

'admirable, ad'vertisement, 'albinism, a'rabicize, 'canalize, ca'tholicize, 'comparable, con'cubinage, 'crematory, 'definite, 'divinize, e'xecutor, 'immunize, inter'rogative, i'rate, 'maintenance, 'narrative, negligible, 'opposite, 'orator, po'liticize, 'preferable, pyramidal, 'relative, 'reparable, sig'nificant, sustenance, tri'umphant, 'volcanism...

\Rightarrow except *i'rate*, all in accordance with segmental rules, essentially > 2 syllables $\rightarrow /(-)100/$

1.2. Pronunciation of the stressed vowel

1.2.1. Strong endings

- Luick's rule (ie stress antepenultimate or earlier) → short vowel

against derivation: *divinity* (~ *divine*)
ritual (~ *rite*)

Exceptions :

entirety, naivety, nicety, probity, rarity, codify, glorify, notify, rarefy / amenity

hyphenate, motivate, potentate / divagate, elongate, hibernate, isolate, sequestrate

⇒ Mostly derivatives in the case of *-ity/ety, -ify/efy*

⇒ 3 derivatives in the case of *-Vte*, to which add stress exceptions : *alienate, matriarchate, orientate, patriarchate, variegate, meteorite* (+ non derivatives of the same structure : *ameliorate, deteriorate, etiolate*)

- *-ic(s)* → short vowel

against derivation: *tonic* (~ *tone*)

⇒ All exceptions (93 long vowels; type: *basic* / 174 either long or short; type: *scenic*, among 2334 words) due to derivation – [independent study]

1.2.2. Neutral suffixes

- When stress is changed (cf 1.1.2.), the corresponding vowel in the deriving form is mostly reduced, thus preventing reference: *ad'mire* → '*admirable*:

⇒ only relevant case: *pro'test* → '*protestant* (in accordance with Luick's)

- When stress is not changed, the only two exceptional cases are *national* and *apparent*

2. Prefixed words other than nouns ~ conversion or 'Ø derivation'

2.1. Disyllables

- Monocategorical prefixed words

Prefixed words other than nouns are stressed /01/; 2% of exceptions out of ±1200 words:

vbs: *'conjure, 'injure, 'perjure, 'differ, 'proffer, 'suffer / 'conquer, 'destine, 'enter, 'prosper, 'sever, 'succour*

adjs: *'abject, 'common, 'perfect, 'proper*

Prefixed nouns are stressed /10/ in accordance with Disyllable → /10/; less than 10% of exceptions out of ±450 words:

affair, be'half, con'ceit, con'tempt, di'sease, es'tate, e'vent, re'course, re'morse...

- Multicategorical noun/verb-adjectives pairs

Prefixed words other than nouns: 10% of exceptions out of ±300 words:

vbs: *'preface, 'compass, 'prefix, 'detail, 'access, 'distance, 'comfort, 'contact, 'discount, 'exile, 'invoice, 'profit, 'rescue, 'summon...*

all adjs: *'distant, 'instant, 'complex, 'concrete, 'agnate, 'cognate, 'ingrate, 'oblate, 'absent, 'present, 'abstract, 'compound*

Prefixed nouns: 60% of exceptions out of ±300 words:

com'mand, a'ward, con'sent, con'trol, dis'play, di'vorce, re'main, re'prieve, col'lapse, es'cape, de'sign, dis'gust, re'treat, re'turn, sur'prise, re'volt, res'pect...

⇒ Ø derivation, ie preservation of the form, accounts for the sharp increase of exceptions in this group

2.1. Longer words

Monocategorical prefixed verbs: 13 exceptions out of ±300 words:

ac'company, 'advertise, 'circumcise, 'exorcise, 'improvise, 'juxtapose, 'multiply, 'occupy, 'recognize, 'reconcile / dis'comfit, inter'pret

⇒ All multicategorical verbs in noun/verb pairs align with the noun:

'compromise, 'exercise, 'interest, 'interview, 'recompense, 'register...

3. Exogenous ~ segmental ('endogenous')

3.1. Stress

3.1.1. Exogenous endings

⇒ exogenous phonology, against derivation if need be when the endings are suffixes

- Fr. endings → /-1/: $-\overline{V'V'}$ (C₀(e)), - C'C'e, - ade, - ese, - eur/se, - aire, - que, - sce

pio'neer, cig'a'rette, bri'gade, Chi'nese, dan'seur, millio'naire, u'nique, aqui'esce

± 40 exceptions out of ± 500 words:

'baboo, 'balaam, 'burgee, 'coffee, 'cuckoo, 'congee, 'igloo, 'koodoo, 'kursaal, 'levee, 'mongoose, 'mushroom, 'ogee, 'spondee, 'tepee, 'toffee, 'trochee, 'yankee, 'voodoo / 'bandicoot, cor'roboree, 'jubilee, 'mangosteen, 'pedigree, 'pharisee, 'puggaree, 'sadducee / com'mittee — 'grandeur / de'railleu — 'charlotte, 'palette / 'omelette — 'decade, 'tribade / 'marmalade, 'renegade

⇒ As evidence by words of more than 2 syllables, stress is in accordance with usual segmental rules: Disyllable → /10/ and > 2 syllables → /(-)100/

⇒ *com'mittee* and *de'railleu*: evidence derivational phonology plays some role as well

- 'Italian' words → /-10/: words ending with a prefinal alveolar ≠ [r,l](<r,l>), followed by a simple vowel ≠ <y>

armada, cicerone, iota, martini, nosferatu, tomato, virtuoso, volcano...

6 exceptions out of 130 words:

'domino, 'stamina, 'retina, 'taffeta, 'timpano, 'wapiti

⇒ All in accordance with the segmental rule: > 2 syllables → /(-)100/

3.1.2. Exogenous exceptions to segmental rules

(ie that do not form sub-classes with their own regularity)

- Exceptions to Disyllable → /10/:

affair, ci'gar, co'quet, ma'raud, me'ringue, na'ive, pa'nache, pe'tite, pres'tige...

⇒ Over 2/3 of the 230 exceptions (±5500 words)

- Exceptions to > 2 syllables → /(-)100/:

Stress on the final:

clari'net, maquil'lage, marti'net, minu'et, musi'cale, palan'quin, parme'san, person'nel, tambou'rine...

⇒ All exogenous

Stress on the penultimate:

abraca'dabra, al'legro, al'paca, a'moeba, an'gora, aure'ola, au'roral, ba'zooka, bo'lero, bra'vura, Ben'gali, candelabra'lum, ca'thedra, chi'mera, espres'sivo, eu'reka, fi'nale, Ge'neva, gorgon'zola, i'mago, ko'ala, la'vabo, lum'bago, mar'sala, mas'cara, o'kapi, pan'dora, pia'nola, pyjama, ro'coco, safari, sa'lami, sa'liva, som'brero, Swa'hili, tapi'oca, ti'ara, tom'bola, vi'ola, vi'rago...

affi'davit, appa'ratus, a'sylum, bore'alis, ca'daver, ca'rotid, cary'atid, de'corum, de'tritus, duo'denum, de'tritus, diapason, erratum, factotum, hi'atus, impe'rator, impri'matur, medi(a)eval, oxy'moron, pa'pyrus, prim(a)eval, simu'lacrum, ulti'matum, ver'batim...

ca'nary, ca'thedral, contrary, e'leven, ex'chequer, flam'boyant, ho'rizon, lieu'tenant, o'asis, Oc'tober, sol'licit, tri'bunal

⇒ All exogenous except the last 12

Stress on the penultimate with the strong ending $-\{i,e,u\} + V(C_0(e))$:

bara'thea, bo'hea, Coli'seum, ele'giacs, Fiji'an, hyme'neal, hyme'nean, i'dea (i'deal), Lata'kia, ly'ceum, mauso'leum, mes'siah, mu'seum, o'deum, (o)sopha'geal, pana'cea, perito'neum, peron'neal, pyg'mean, rata'fia, rup'iah – Caesa'rea, Chal'dea, Crimea, Cyrhe'tea, Gala'tea, Ju'dea, Kampu'chea, Ko'rea, Laodi'cea, Pan'gea... – Ara'mean, Damo'clean, Euro'pean, Gali'lean, Hebri'dean, Jaco'bean, Ju'dean, Ko'rean, Pythago'rean, Sisy'phean, Sopho'clean... – Elias, Go'liath, Heze'kiah, Jo'siah, Jere'miah, Zacha'riah...

⇒ All exogenous

⇒ Exceptional final and penultimate stress essentially due to exogenous phonology

3.2. Pronunciation of the stressed vowel

Preservation of original vowel, as in *fa, re, mi*

fa, re, au'berge, mi, e'mir, coup, bourse, dan'seuse, toile, beau promenade, im'passe, mous'tache, cou'lisse, artiste, po'lice, par'terre... sage, 'padre, 'Veda, 'peso, 'lira, 'cliché, to'mato, fi'nale, pe'seta, mar'tini...

⇒ All exogenous, mostly where stress is also exogenous

4. Conflicting rules within the segmental set? The case of Prefinal C₂

- C₂ + monosyllabic adjective suffix ⇒ Prefinal C₂ → /-10/

± 500 adjectives, 12 exceptions (see 1.1.1.)

+

75 nouns in *-ent/ence*, from adjective *-ent*; only exception: *'excellence*

- Prefinal C₂ → /-10/, other categories

± 400 words, ± 110 exceptions, all stressed on the antepenultimate:

- (1a) *adjutage, Protestant, discipline, exercise, adjective, abattoir, repertoire, reservoir, aperture, commissure* (10 words) + *provender* (cf 1c)
- (1b) *camouflage, pedestal, seneschal, Mussulman, sacristan, flagellant, calendar, commissar, taberdar, armistice, aubergine, Argentine, brigandine, celandine, celestine, clementine, eglantine, Florentine, gaberdine, galantine, molassine, philistine, quarantine, turpentine, valentine, ancestor, calenture, sepulture* (28 words)
- (1c) *baluster, banister, carpenter, caviller, character, colander, cucumber, cullender, cylinder, derringer, didapper, ganister, hamburger, harbinger, lavender, minister, porringer, provender, sinister, register* (20 words)
- (1d) *allergy, amnesty, burgundy, calumny, cavalry, champerty, chivalry, dynasty, dysentry, embassy, energy, faculty, frumenty, galaxy, guaranty, industry, infantry, jeopardy, lethargy, liberty, liturgy, majesty, organdy, panoply, poverty, property, puberty, sacristy, tapestry, theurgy, travesty* (31 words)
- (1e) *aspergil, badminton, camembert, capellet, champignon, circumstance, clarendon, counterpoise, damascene, escallop, intellect, interval, interview, orchestra, palimpsest, paraffin, parallax, parallel, pimpernel, recompense, retrospect, subaltern, talisman* (23 words)

⇒ Apparently, conflict with > 2 syllables → /(-)100/

Regular words:

(2a) *advantage, aberrance/t, importance, incessant, indignant, interpellant, reluctance/t, redundance/t, remonstrance, repugnance, surveillance, accomplice, apprentice, projectile, avertin, intestine, incentive, invective, perspective, subjunctive, impostor, precentor, preceptor, precursor, succentor, transistor, adventure, conjecture, conjuncture, debenture, embrasure, imposture, indenture* (36 words)

(2b) *triumphant, epaulment, amandine, Alexandrine, Benedictine, gerundive*

(2c) *December, November, September, alabaster, canaster, carburetter, coriander, disaster, germander, goosander, meander, merganser, oleander, oleaster, philander, piaster, pilaster, pomander, semester, trimester* (20 words)

(2d) (Ø)

(2e) *assassin, carillon, evangel, elixir, grimalkin, interstice, macassar, muezzin, tourbillon, utensil* (10 words)

(2f) *vanilla, anaconda, umbrella, siesta, extravaganza, andante, infante, vigilante, dilettante, chianti, spaghetti, libretti, banditti, tobacco, fiasco, diminuendo, hidalgo, flamingo, pimento, concerto, falsetto...*

(2g) *propaganda, amorphia, culumella, enigma, dilemma, antenna, placenta, aorta, memento, amalgam, referendum, momentum, asbestos, hibiscus, bacillus, alumnus, narcissus, colossus... + arachnid, accessit* (2f + 2g: ± 220 words)

⇒ (f) + (g): a perfectly regular exogenous rule

⇒ endogenous segmental rule actually applies with certain suffixes only:
adjective suffixes, substantive *-ence/ent, -ant, -ive...*

but never or rarely with others: *-y, -al, -an, -ine...*

⇒ uncertain status of prefinal C₂ in itself, which lays ground for conflict
+ similar regulation through suffixes/endings

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