Vowel Shift continued

Linguistics 696b (Spring 2005)

(1) Newton [nútn] Newtonian [nútníən]
verbose [vrbós] verbosity [vrbúsəri]
profundity [profánderi] profound [profáwnd]

(2) į ū ĕ ŏ ā ĕ input
↓ ↓ ↓ ↓ ↓ ↓
īy úw ĕy ŏw āy ŏw diphthongization
↓ ↓ ↓ ↓ ↓ ↓
ēy ŏw īy úw n/a n/a vowel shift
↓ ↓ ↓ ↓ ↓ ↓
āy ŏw n/a n/a ēy ŏw vowel shift

(3) habit [hæbət] habitual [həbɪˈcuəl]
proverb [prəvɜr] proverbial [prəvɜˈbljəl]
sober [səbr] sobriety [səbrəˈriə]
proper [prəpr] propriety [prəprəˈriə]

(4) u → [↑tense
−round] /C₁V

(5) [u] blew, bloom, blue, blues, boo, boom, boon, boost, boot, booth, booths, zooze, brew, brood, broom, bruise, bruit, brute, butte, chew, choose, chute, clew, clue, coo, cool, coon, coop, coot, coup, crew, croon, croup, crude, cruel, crusie, cube, cute, deuce, dew, do, doom, douche, douse, drew, drool, droop, duke, duce, dune, dupe, eue, feud, few, flew, flu, flue, fluke, flume, flute, food, fool, fruit, fuel, fugue, fume, fuse, ghozl, gloom, glue, glu, gnu, go, goof, goose, grew, groom, groove, group, gruel, hew, hewn, hoop, hoot, hue, huge, juice, jute, knew, len, leu, lien, loom, loon, loop, loose, loot, lose, lute, mew, mews, moo, mood, moore, moote, move, mose, mule, muse, new, news, newt, noon, noose, nude, ooze, pew, plume, pool, poop, proof, prove, prude, prune, puke, pul, pule, q, queue, rheum, rood, roof, room, roost, root, roufe, route, rude, rue, rule, rane, rase, school, scoop, screw, shoe, shoot, shrew, shrewd, sleuth, slew, sloop, slough, slauce, smooth, snoop, snooze, soon, sooth, soup, spew, spoop, spoon, spurce, spume, stew, stooge, stool, stoop, strewn, sue, suit, swoon, swoop, thim, threw, through, to, tomb, too, tool, foot, toothed, troop, troupe, trace, true, truth, tube, tulle, tune, tuque, two, use, view, who, whom, whoop, whose, womb, woo, yew, you, youth, yule, zoom

(6) [u] book, boor, bourse, brook, bull, bush, cook, could, crook, cure, foot, full, good, gourd, hood, hoof, hook, hooves, look, lure, moor, nook, poor, pour, pull, pure, push, put, putsch, qursch, rook, shuck, should, soot, spoar, stood, sure, took, tour, wolf, wolves, wood, woods, woof, wool, would, your, yours
[a]  blood, bluff, blunt, blush, brunch, brunt, brush, brusque, buck, bud, badge, buff, bug, bulb, bulge, bulk, bun, bump, bun, bunch, bug, brunt, bus, buss, bust, but, butt, buzz, chuck, chug, chump, chunk, club, cluck, clump, clung, clutch, come, crumb, crunch, crush, crust, crutch, cruz, cub, cuv, cuff, cull, curl, cup, cusp, cut, does, done, drub, drudge, drug, drun, drunk, dub, duck, duct, dug, dull, dumb, dump, dumps, dan, dance, dung, dunk, dast, dutch, flood, fluffy, flung, flunk, flush, from, front, fudge, fan, fand, funk, fuss, flaw, glove, glum, glut, golf, grub, grudge, gruff, grunt, guile, gulf, gull, gulp, gum, gun, gust, gut, hub, huff, hug, hulk, hull, ham, hump, hunch, hung, hunk, hunt, hush, husk, hut, hatch, judge, jug, jump, junk, just, jut, love, luck, laugh, lug, lull, lump, lunch, lung, lunge, lish, last, monk, month, much, muck, mad, muff, mug, mulch, mule, null, mun, mumps, munch, muse, muss, must, mutt, none, rub, nudge, null, namb, nun, nut, nuts, once, one, pluck, plug, plum, plumb, plump, plunge, plunk, plus, plash, pub, puck, puff, pug, pulp, pulse, pump, pun, punch, punk, punt, pap, pus, putt, rough, rub, ruff, ruffled, rug, rum, rump, run, rung, runt, rush, rust, rut, scrub, scruff, scud, scull, scum, shave, shrub, shrug, shrunk, shuck, shun, shunt, shut, skulk, skull, skunk, sludge, slug, slum, slump, slung, slank, slash, slut, smudge, smug, smut, snotch, snub, snuff, snug, same, son, sponge, sprang, spad, span, spank, strick, strum, strung, strut, stub, stuck, stud, stuff, stump, stum, stung, stunk, stunt, sub, such, suck, suds, sulk, sum, sun, sung, sunk, sup, swum, swung, thrum, thrust, thud, thug, thump, thus, ton, tongue, tough, truck, trudge, tramp, trunk, truss, trust, tub, tuck, taft, tug, tan, tusk, tusked, up, us, won, wrung, young

[aw]  blouse, bough, bounce, bound, bout, brow, brown, browse, chiao, chow, cloud, clout, clown, couch, count, cow, cowl, crouch, crowd, crown, dhaw, doubt, dour, down, douse, droath, drow, drowse, flourance, flour, flout, foul, found, fowl, frown, gouge, goult, gown, grouch, ground, grouch, growl, hound, hour, house, how, howl, jounce, joult, jowl, krout, loud, lounge, lour, louse, lou, mound, mount, mouse, mouth, now, noun, now, ounce, our, ours, out, out, oul, plough, pouch, poune, pound, pout, proud, prow, prowlt, round, rouse, rout, scour, scout, scow, scowl, shout, shroud, slouch, snout, sough, sound, sour, soue, south, sow, spout, sprout, stout, thou, tout, town, trounce, trout, vouch, vow, wound, yowl, zounds
(9) [ɑ] alms, angst, arc, arch, are, ark, arm, art, ark, barn, barred, balm, bar, bard, barge, bark, barn, barred, blob, bloc, block, blonde, blot, blotch, bob, bock, bomb, bond, bosh, botch, box, bra, bronze, calm, car, card, carp, cart, care, char, chord, charge, charm, chart, check, chon, chop, chops, clock, clod, clog, clot, cob, cock, cod, cog, con, conch, conchs, conk, cop, copse, cot, crock, crop, crotch, czar, dark, darn, dart, dock, dodge, doff, doll, don, dot, drop, dress, far, farce, farm, flock, flop, fob, fond, font, fop, foz, foxed, frock, frond, garb, glob, gnarl, gob, god, got, groin, grot, guard, hard, hark, harp, harsh, heart, heartth, hof, hock, hod, hop, hot, job, jog, josh, joss, jot, khan, knob, knobbled, knock, knot, larch, large, lark, lob, loc, lock, lodge, loll, loo, lot, loz, ma, mar, march, marge, mark, marked, marl, marsh, mart, mob, mock, moll, mop, mosque, nard, nod, nonce, not, notch, odd, odds, opt, oz, pa, palm, par, parch, pard, park, parse, part, pas, phlox, plod, plop, plot, pock, pod, pomp, pond, pop, posh, pot, poz, pram, prod, prom, prompt, prop, psalm, quad, quaaff, qualm, quash, r, rob, rock, rod, romp, rot, scar, scarf, scarves, scoff, scot, scotch, shard, shark, sharp, shock, shod, shop, shot, slop, smart, smock, snack, sob, sock, sod, sop, sot, spa, spar, spark, sparse, splotch, spot, squab, squad, squash, squall, star, starch, stark, start, starve, stock, stop, stop, suave, swab, swamp, swamp, swash, swat, swath, swathe, tar, tarn, tart, throb, tog, tops, tongs, top, tot, tod, troil, tril, tsar, waft, wan, wane, wasp, watt, what, yacht, yard, yarn, yon

(10) [ɔ] all, aught, auk, auld, aue, awl, awn, bald, ball, bawl, bog, born, borscht, boss, bought, brawn, broad, broth, brought, call, call, caught, caulk, cause, cav, chalk, chaunt, chord, clause, claw, cloth, cord, cork, corn, corpse, cost, cough, crawl, cross, daub, daunt, dawn, dog, dorm, draw, drawer, drawl, drawn, dwarf, dwarves, fall, false, fault, faun, fawn, flaunt, flaw, floss, fog, fork, forked, form, fought, fraud, fraught, frog, frost, froth, gall, gaud, gaunt, gauze, gawk, ghat, gloss, gnaw, gone, gong, gorge, gorse, grosz, hall, halt, hawl, haunch, haunt, haw, hawk, hog, honk, horn, horse, jaunt, jaw, kral, laud, launch, law, lawn, loft, log, long, lord, lorn, loss, lost, mail, mall, mail, maw, maw, margue, morn, moss, moth, naught, nautch, nor, norm, north, oft, on, orb, ought, pall, paunch, peace, paw, paw, prawn, prong, quart, quartz, raw, salt, sauce, saw, scald, scorch, scorn, scrawl, shawl, short, slaw, sloth, small, smog, snort, soft, solve, song, sort, sought, swamp, sprawl, squall, squaw, squawk, stalk, stalked, stall, staunch, stork, storm, straw, strong, sward, swarm, swart, talk, tall, taught, taunt, taut, tow, thaw, thong, thorn, thorpe, thought, thrall, throng, thwart, long, tor, torch, torque, tort, toss, trawl, troth, trow, vault, vaunt, walk, wall, walls, want, war, ward, warm, warmth, warn, warp, wart, wash, watch, wharf, wharves, whort, won, wrong, wroth, wrought, yawl, yawn, yaws

alogous [ænələgas] analogize [ænələjəyz]
\[
\begin{align*}
\{ g \rightarrow j \\
\land k \rightarrow s \} / \begin{cases} 
- \text{low} \\
- \text{back} \\
V 
\end{cases}
\end{align*}
\]

(13) consonant type token

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>g</td>
<td>178</td>
<td>4429</td>
</tr>
<tr>
<td>j</td>
<td>352</td>
<td>2210</td>
</tr>
<tr>
<td>k</td>
<td>486</td>
<td>4890</td>
</tr>
<tr>
<td>s</td>
<td>1206</td>
<td>23154</td>
</tr>
</tbody>
</table>

(14) [y] [i] (a) rebellious punctillious
bilious* familial*
Pennsylvania Lithuania
(b) pavilion quaternion
battalion accordion
onion enchiridion
companion collodion
ganglion
colonial
testimonial
felonious ignominious
(d) religious criterion
admonition clarion
(e) partial cardial
officious invidious
Russian lithium
(f) invasion confession

(15) acrimonious 0 actinium 0 arsenious 0 atheneum 0 begonia 0 californium 0 calumnious 0 condominium 0 contemporaneous 0 cornea 0 cranium 0 cutaneous 0 deca
calcomania 0 delphinium 0 einsteinium 0 erroneous 4 euphonious 0 extemporaneous 0 extraneous 3 felonious 2 gadolinium 0 geranium 0 germanium 8 hafnium 0 harmonious 5 harmonium 0 hernia 0 heterogeneous 4 igneous 8 igneous 1 ignominious 0 insignia 0 insomnia 3 instantaneous 5 kleptomania 0 ligneous 0 mania 5 megalomania 1 millennium 4 miscellaneous 10 monomania 0 neptunium 0 neurasthenia 0 parsimonious 1 phtonium 0 polonium 0 proscenium 0 pyromania 0 rhenium 1 ruthenium 1 sanctimonious 2 schizophrenia 0 selenium 0 simultaneous 9 spontaneous 17 subcutaneous 0 subterranean 0 titanium 2 unceremonious 0 uranium 6 xenia 0 zinnia 0 zirconium 0
(16) ammonia 0  banyan 0  bunion 0  cabana 4
canyon 12  communion 11  companion 19  dominion 8
dona 0  gardenia 1  genius 23  impecunious 8
ingenious 10  minion 0  nonunion 0  onion 15
opinion 98  petunia 0  pinion 0  pneumonia 4
reunion 11

(17) \[ s \rightarrow [+\text{voice}] / \left\{ \begin{array}{l}
V = \text{___}V \\
\quad +\text{tense} \\
\quad V \\
\quad V_k \quad \text{___} \end{array} \right\} \]

(18) 
\begin{tabular}{lll}
\text{consonant} & \text{type} & \text{token} \\
\hline
s & 253 & 2059 \\
z & 133 & 1670 \\
\end{tabular}

(19) If the input is /d/, then spirantization occurs before the suffix -ive, e.g. in corrosive [kɔrəsɪv] and evasive [əvəsɪv].

(20) If the input is /t/, then spirantization occurs across a boundary before a single-segment front vowel or glide, e.g. in democracy [dəməkrəsi], residency [rəzədənsi], confidence [konfədəns], residence [rəzədəns].

(21) The rule also applies before the glide in suffixes like -ion, e.g. in contrition [kəntrɪʃən], or division [dəvɪʒən] (with subsequent palatalization).

(22) sociology [sɔsɪələji] [sɔsɪələji]
associate [əsəsiət] [əsəsiət]
perpetuity [pəpət(j)ʌəri] [pəpətʃərj]
fortuitous [fərt(j)ʊəəs] [fərˈtʃərəs]

References


