

Some sound changes in American English dialects

The vowel pronunciations shown in the chart represent the surface pronunciations at three stages in the history of certain American English dialects.

- (1) What is the **synchronic phonological grammar** like with respect to these three vowels at each stage? How many distinct phonemes are there among these vowels? Do any have multiple allophones? If so, what phonological rules are necessary?
 - What vowel phoneme should we propose for the word *taught*? For the word *tore*?
- (2) What **diachronic sound changes** have occurred between Stage 1 and Stage 2? Between Stage 2 and Stage 3? Write any necessary sound-change rules. Are the rules unconditioned, or do we need to state conditioning environments?

Stage 1

[a]	[ɔ]	[o]
pop	pauper	pope
rob	daub	robe
tot	taught	tote
odd	awed	owed
hock	hawk	oak
offal	awful	oaf
Oz	awes	owes
don	dawn	tone
pol	Paul	pole
tar	tor	tore
far	for	four

Stage 2

[a]	[ɔ]	[o]
pop	pauper	pope
rob	daub	robe
tot	taught	tote
odd	awed	owed
hock	hawk	oak
offal	awful	oaf
Oz	awes	owes
don	dawn	tone
pol	Paul	pole
tar	tor, tore	—
far	for, four	—

Stage 2 (repeated for convenience)

[a]	[ɔ]	[o]
pop	pauper	pope
rob	daub	robe
tot	taught	tote
odd	awed	owed
hock	hawk	oak
offal	awful	oaf
Oz	awes	owes
don	dawn	tone
pol	Paul	pole
tar	tor, tore	—
far	for, four	—

Stage 3

[a]	[ɔ]	[o]
pop, pauper	—	pope
rob, daub	—	robe
tot, taught	—	tote
odd, awed	—	owed
hock, hawk	—	oak
offal, awful	—	oaf
Oz, awes	—	owes
don, dawn	—	tone
pol, Paul	—	pole
tar	tor, tore	—
far	for, four	—