Answer Key to the Exercises of

Applied English Phonology

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CHAPTER 1: PHONETICS

ANSWER KEY

1. Examine the following transcriptions. If you agree, do nothing; if the transcription is erroneous, correct it.

injured [Indexed] gelatin [gelatin] [daglatin] measure [meshuɪ] [measure [intfəs] inches [intfəs] [Intfəz] topical [topikəl] [topikəl] telephone [teləphon] [teləfon] syllable [sələbəl] [sıləbəl]

2. How many segments are there in each of the following words?

homophone	7	equestrian	10
broach	4	writer	4
thatched	4	middle	4
knack	3	photographer	9
lesson	5	imagination	10

3. State if the place of articulation is same (S) or different (D) in the *initial consonants* of each pair. In either case, state the place of articulation.

Ex	ample now – pneumonia	Same; alveolar
	sun – sugar	Different; alveolar vs. palato-alveolar
	<u> </u>	•
(a)	goose – gerrymander	Different; velar vs. palato-alveolar
(b)	simple – shackle	Different; alveolar vs. palato-alveolar
(c)	curious – cereal	Different; velar vs. alveolar
(d)	phonetic – fictional	Same; labio-dental
(e)	manners – wicker	Different; bilabial vs. labio-velar
(f)	normal – location	Same; alveolar
(g)	wander – yesterday	Different; labio-velar vs. palatal
(h)	those – Thursday	Same; interdental
(i)	scissors – zipper	Same; alveolar
(j)	temperate – chestnut	Different; alveolar vs. palato-alveolar
(k)	chromosome – chief	Different; velar vs. palato-alveolar
(1)	baker – delegate	Different; bilabial vs. alveolar
(m)	happened – usual	Different; glottal vs. palatal
(n)	neuron – market	Different; alveolar vs. bilabial
(o)	painting – broccoli	Same; bilabial

4. State if the manner of articulation is same (S) or different (D) in the *final consonants* of each pair. In either case, state the manner of articulation.

Ex	ample bomb – ten	Same; nasal		
	rough – zip	Different; fricative vs. stop		
	•	-		
(a)	album – broken	Same; nasal		
(b)	ideal – keepsake	Different; liquid vs. stop		
(c)	prologue – confine	Different; stop vs. nasal		
(d)	aqueous – sociable	Different; fricative vs. liquid		
(e)	variable – watch	Different; liquid vs. affricate		
(f)	waste – adage	Different; stop vs. affricate		
(g)	barometer – finish	Different; liquid vs. fricative		
(h)	inch – gauge	Same; affricate		
(i)	fiord – equip	Same; stop		
(j)	barb – relief	Different; stop vs. fricative		
(k)	alive – fiftieth	Same; fricative		
(1)	laughing – hydraulic	Different; nasal vs. stop		
(m)	opulence – paramedic	Different; fricative vs. stop		
(n)	outrage – swivel	Different; affricate vs. liquid		
(o)	dominion – eminent	Different; nasal vs. stop		

5. State if the *vowels in the underlined portions* are same or different in the following words. In either case, state the phonetic description of the vowels, together with the phonetic symbols.

Ex	•	mple $k\underline{ee}l - city$ Same; /i/ high, front, tense $m\underline{ess} - m\underline{ass}$ Different; $/\epsilon/mid$, front $-/\epsilon/low$, front					
		_					
(a)	prim <u>a</u> ry – n <u>ı</u>	<u>a</u> trition	Different; ϵ mid, front, lax – μ high, back, round, tense				
(b)	h <u>ea</u> l – electr <u>i</u>	icity	Different; /i/ high, front, tense - /ɪ/				
(c)	b <u>eau</u> – <u>a</u> pert	ure	high, front, lax Different; /o/ mid, back, round, tense –				
(d)	an <u>y</u> where – ph <u>a</u> ntasm		/æ/ low, front, lax Different; /i/ high, front, tense – /æ/				
, ,	≠	1 –	low, front, lax				
(e)	exposure – c	<u>oa</u> ster	Same; /o/ mid, back, round, tense				
(f)	expl <u>i</u> cable –	expl <u>i</u> cate	Same; /1/ high, front, lax				
(g)	wave - irriga	ate	Same; /e/ mid, front, tense				
(h)	m <u>ea</u> sure – f <u>i</u> nger		Different; $/\epsilon/$ mid, front, lax – $/I/$ high, front, lax				
(i)	b <u>u</u> tter – t <u>ou</u> g	gh	Same; / \(\lambda \) low central				
(j)	cholesterol -	•	Different; $/a/mid central - /a/low back$				
(k)	n <u>y</u> mph – <u>ju</u> n	np	Different; $/I/$ high, front, lax $ /\Lambda/$ low central				
(1)	ab <u>a</u> te – c <u>aug</u>	ht	Different; /e/ mid, front, tense – /ɔ/ mid, back, round				

ANSWER KEY

- (m) hydrogen hydrolysis Different; /ə/ mid central /a/ low back
- (n) $p\underline{a}wn h\underline{a}rsh$ Different; /ɔ/ mid back round /a/ low back
- 6. Circle the words that:
 - (a) start with a fricative foreign, theater, tidings, hospital, cassette, shroud
 - (b) end in a sibilant wishes, twelfth, clutch, indicates, admonish, furtive
 - (c) have an approximant winter, university, captive, ripe, little, mute
 - (d) contain a back vowel putter, boost, roast, fraud, matter, hospital
 - (e) start with a voiced obstruent government, pottery, taxonomy, jury, phonograph, sister
 - (f) contain a lax vowel auction, redeem, ledger, cram, boat, loom
 - (g) end in an alveolar went, atom, rigor, column, multiple, garnish
- 7. Give the phonetic symbols for the following English sounds.

(a)	voiceless stops	/p, t, k/
(b)	voiced fricatives	/v, ð, z, ʒ/
(c)	approximants	/l, ɪ, j, w/
(d)	alveolar obstruents	/t, d, s, z/
(e)	nasals	/m, n, ŋ/
(f)	voiced obstruents	/b, d, g, v, ð, z, ʒ, dʒ/

Now give the phonetic symbols for the following sounds that are not found in English.

(g)	alveolar affricates	$/t^{s}$, $d^{z}/$
(h)	voiceless velar and uvular fricatives	$/x, \chi/$
(i)	bilabial and palatal fricatives	/φ, β, ç, j/
(j)	non-lateral liquids	/r, r, R/
(k)	palatal and uvular stops	/c, ₁ , q, G/

8. The sounds in the italicized portions of the following pairs of words share some phonetic properties and are different in some other properties. Give

the phonetic symbol for each sound and state the shared feature(s) and difference(s).

Example [p] 'park' - 'phone [f] Shared: voiceless, obstruent

Difference(s): [p] bilabial, stop

[f] labiodental, fricative

(a)	tele <u>ph</u> one – tele <u>v</u> ision	Shared: labiodental fricative
	•	Different: [f] voiceless, [v] voiced
(b)	atop – wiser	Shared: alveolar
	•	Different: [t] voiceless stop, [z] voiced fricative
(c)	b <u>i</u> tter – <u>e</u> asy	Shared: high front
	•	Different: [I] lax, [i] tense
(d)	<u>m</u> ister – e <u>n</u> emy	Shared: nasal
	Ž	Different: [m] bilabial, [n] alveolar
(e)	shipment – justice	Shared: palato-alveolar
	•	Different: [ʃ] voiceless fricative, [dʒ] voiced
		affricate
(f)	w <u>ai</u> t – r <u>oo</u> t	Shared: tense
		Different: [e] mid front unrounded, [u] high
		back round
(g)	li <u>me</u> – <u>w</u> indow	Shared: voiced
		Different: [m] bilabial nasal, [w] labio-velar
		glide
(h)	alo <u>ne</u> – e <u>l</u> evate	Shared: voiced alveolar
		Different: [n] nasal, [l] liquid
(i)	f <u>ea</u> ther – f <u>oug</u> ht	Shared: mid
		Different: [ɛ] front lax unrounded, [ɔ] back
		round
(j)	limp – so <u>cc</u> er	Shared: voiceless stop

9. The following groups consist of sounds that share a phonetic feature plus one sound that does not belong to this group. Circle the sound that does not belong to the group, and identify the feature shared by the remaining sounds of the group.

Different: [p] bilabial, [k] velar

Example /l, \downarrow , d, s, t, k, z/ /k/ is a velar, the rest are alveolars

10. Fill in the boxes with the appropriate label for the *final sounds* of each word.

	sipped	latex	triumph	bridge	rough	fought	dogs	palm
Upper articulator	Alv. ridge	Alv. ridge	Upper teeth	Alveolar rg./hrd. palate	Upper teeth	Alv. ridge	Alv. ridge	Upper lip
Lower articulator	Tip of tongue	Tip of tongue	Lower lip	Blade of tongue	Lower lip	Tip of tongue	Tip of tongue	Lower lip
Voicing	Vs.	Vs.	Vs.	Vd.	Vs.	Vs.	Vd.	Vd.
Manner of articulation	Stop	Fric.	Fric.	Affric.	Fric.	Stop	Fric.	Nasal

11. Do the same for the *initial sounds* of the same words.

	sipped	latex	triumph	bridge	rough	fought	dogs	palm
Upper articulator	Alv. ridge	Alv. ridge	Alv. ridge	Upper lip	Hard palate	Upper teeth	Alv. ridge	Upper lip
Lower articulator	Tip of tongue	Tip of tongue	Tip of tongue	Lower lip	Tip of tongue	Lower lip	Tip of tongue	Lower lip
Voicing	Vs.	Vd.	Vs.	Vd.	Vd.	Vs.	Vd.	Vs.
Manner of articulation	Fric.	Liquid	Stop	Stop	Liquid	Fric.	Stop	Stop

12. Fill in the boxes for the first vowels of the following.

	park	ocean	make	ember	hamper	fought	hypocrite	chew
Tongue height	Low	Mid	Mid	Mid	Low	Mid	High	High
Frontness/ backness	Back	Back	Front	Front	Front	Back	Front	Back
Lip position	Unrd.	Rd.	Unrd.	Unrd.	Unrd.	Rd.	Unrd.	Rd.
Tenseness/ laxness	Tense	Tense	Tense	Lax	Lax	Tense	Lax	Tense

7

- 13. Circle the correct alternative(s).
 - (a) Tensing the vocal cords makes them vibrate faster / slower, so that the pitch increases / decreases.
 - (b) In the production of stops / fricatives / glides / affricates, the air is blocked from going out through the nose and the mouth.
 - (c) In the production of stops / liquids / fricatives / nasals, the constriction of the vocal tract is such that a noisy airstream is formed.
 - (d) In the production of palato-alveolar sounds, the tip / front / blade / back of the tongue goes to the forward part of the hard palate / soft palate / uvula.
 - (e) In the production of labiodental / bilabial / labio-velar / velar sounds, the two lips approach one another, and the back of the tongue is raised towards the soft palate.
- 14. Transcribe the following (about 'the spread of English') *from* P. Trudgill and J. Hannah, *International English* (London: Edward Arnold, 2002).

The English language developed out of Germanic dialects that were ða inglas længwadz davelapt aut av dza mænik daialeks ðæt wa brought to Britain, during the course of the 5th and 6th centuries, by Jutes bust tə buitn dunin ðə kəis əv ðə fiθ ən siksθ sentsəniz bai dzuts (from modern Jutland, Denmark), Angles (from modern Schleswig, fixm madən dzntlænd denmaik ængəlz fixm madən flesvik Denmark/Germany), and Frisians (from modern Friesland, Netherlands/ denmajk dzemeni en fijzenz fiam maden fijzlend nedelendz Germany). By medieval times, this Germanic language had replaced the dzaməni. bar medivəl tarmz dis dzamænək længwədz hæd rəplest də original Celtic language of Britain in nearly all of England as well as in əridzənəl keltik længwədz əv britin ən nirili əl əv inglənd əz wel əz ən southern and eastern Scotland. Until the 1600s, however, English remained saðan en istan skatlend. entil ðe sikstin handjedz haueva ingles jemend a language spoken by a relatively small number of people and was confined ə læŋgwədʒ spokən bai ə iɛlətivli sməl namba əv pipəl ən wəz kənfaind geographically to the island of Great Britain. Indeed, even much of Britain dziəgiæfəkli tə ðə ailənd əv giet biitin. əndid ivən mats əv biitin remained non-English-speaking. The original Celtic language of Britain يəmend nan ıŋglə∫ spikıŋ. ðə əيıdzənəl kεltık læŋgwədz əv bيıtn survived in the form of Welsh in nearly all of Wales and as Cornish in sa vaivd ən də fəim əv welf ən niili al əv welz ən æz kəinəf ən much of Cornwall. The Highlands and islands of western and northern mats əv kəinwəl. Öə hailəndz ən ailəndz əv westə n ən nəiðə n Scotland spoke Gaelic, another Celtic language which had been brought skatland spok gelik annða keltik længwadz wits hæd bin bist across from Ireland in pre-medieval times. And the populations of the əkias finm aiilənd ən pii medivəl taimz. ænd də papjəlesənz əv də

Northern Isles – Orkney and Shetland – still spoke the Scandinavian nɔiðə n aɪlz ɔikni ən ſetlənd stil spok ðə skændəneviən language, Norn, which they had inherited from their Viking ancestors. længwədʒ nɔin witʃ ðe hæd inheiətəd fiəm ðei vaikin ænsestə z.

CHAPTER 2: PHONOLOGY

- 1. Circle the correct alternative(s).
 - (a) If two languages have the same sounds, then they (sometimes / always / often / never) have different phonologies.
 - (b) If the phonetic difference between two sounds serves as the basis for distinguishing words, then the difference is (distinctive / phonemic / non-predictable / allophonic / predictable).
 - (c) Occurrences of the allophones of a single phoneme are (always / sometimes / often / never) predictable.
 - (d) Allophones of a single phoneme are (sometimes / often / always / never) phonetically similar.
 - (e) If two phonetically similar sounds are in complementary distribution, then they are (sometimes / often / always / never) the allophones of the same phoneme.
 - (f) If two sounds are in free variation, then they are (sometimes / always / never) the allophones of the same phoneme.
 - (g) Speakers of a language tend to be (more / less / equally) consciously aware of phonemes than allophones.
 - (h) Two sounds that appear in a minimal pair (sometimes / always / never) belong to distinct phonemes.
 - (i) If two sounds are not phonemically distinct, their distribution overlaps / does not overlap.
- 2. Create two minimal pairs with each given word in different word positions. Answers may vary. Here are some suggestions.

	Initial	Medial	Final
Exa	ample		
/t/	tea: 'pea', 'sea'	charter: 'charmer', 'charger'	seat: 'seed', 'seal'
	-	Ţ.	
/p/	pack: back, tack	mapping: matting, mashing	ape: ate, aim
/m/	mate: bait, hate	slimming: slipping, slitting	room: root, rouge
/s/	seek: leak, beak	leasing: leashing, leaping	class: clap, clam
/ʃ/	sheet: feet, beat	mashed: mapped, mast	bash: bat, bass
/1/	lash: sash, gash	rolling: roping, roaming	coal: comb, cope
/f/	feel: peel, real	refined: remind, rewind	staff: stack, stab
/n/	knee: bee, fee	sneak: speak, sleek	bone: boat, bowl

R KEY

9

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/d/ dash: bash, cash budding: butting, bumming bed: bet, been
/g/ gain: rain, pain plugging: plucking, plumbing wig: win, wit
/ɪ/ rain: mane, cane roaring: roaming, rolling four: fall, fog
/z/ zip: tip, sip buzzing: budding, bugging seize: seek, seen
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Create three words with contrasts by supplying different vowels (diphthongs) in the following consonantal frames. (Answers may vary: here are some suggestions.)

Example [b t]: 'beat', 'bait', 'bet'

- (a) [s l]: seal, sell, soul
- (b) [pl]: plea, plow, play
- (c) [sp k]: speak, spoke, spike
- (d) $[m \theta]$: math, moth, myth
- (e) [l n]: lean, loan, lawn
- (f) [k n]: cone, keen, kin
- (g) [d m]: dim, dumb, dam
- (h) [t k]: take, took, tick
- (i) [g.i nd]: grind, ground, groaned
- 4. Identify the sounds in contrast in the following minimal pairs.

Example $\underline{\text{eke}} - \underline{\text{ache}} / i / - / e /$

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ceased – cyst /i/ - /I/
                                                   sinned – send /I/ - /\epsilon/
(a)
                                             (b)
       gym – jam /I/ – /æ/
                                             (d)
                                                   phase – fuzz /\frac{e}{-} /\frac{\Lambda}{}
(c)
                                                   rot – wrote /\alpha/ – /o/
(e)
      laugh - life /æ/ - /aI/
                                             (f)
(g)
      how - hi /au / - /aI /
                                             (h) \lim_{x \to \infty} - \lim_{x \to \infty} \frac{1}{y} - \frac{f}{f}
      white – right /w/ - /J/
                                             (j)
                                                   miff – myth /f/ - /\theta/
(i)
(k)
      rough – rush f/ - f/
                                             (1)
                                                   phi – high /f/ - /h/
      thigh – shy /\theta/ – /\int/
                                                  wit – witch /t/ - /t \int /t
(m)
                                             (n)
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5. Identify the sounds that are alternating in the following morphophonemically related pairs.

(a)	profane/profanity	[e/æ]
(b)	serene/serenity	[i/ε]
(c)	pedagogue/pedagogy	[g/dʒ]
(d)	receive/receptive	[i/ε]
(e)	mine/mineral	[a1/1]
(f)	verbose/verbosity	[o/a]
(g)	consume/consumption	$[u/\Lambda]$

(h) public/publicity [k/s](i) sign/signature [aɪ/1]

- 6. Examine the distribution of [s] and [ʃ] in the speech of T (4;3), a child with phonological disorders, and determine if their distribution is:
 - (a) complementary
 - (b) contrastive minimal pair [fæsən] [fæʃən]

State your evidence.

7. Examine the following data from B (4;1), a child with phonological disorders. The /ɪ/ targets show three different realizations: [ɪ], [w], or 'zero' (i.e. deleted). What kind of distribution do these realizations reveal? State your rationale.

rich [intf] raise [iez] red [ied]
more [mo] door [do] deer [di]
wrong [ion] correct [kowek] mirror [miwə]
rain [ien] room [ium] parrot [pæwət]
roller [iolə] parade [pəwed] Henry [hɛn.ii]

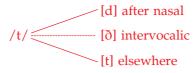
[ø] word final

[w] intervocalic

[ɪ] elsewhere

8. (a) Examine the following data from Maasai, a Nilotic language spoken in Kenya and Tanzania, and determine the phonemic status of [t], [d] and [ð] (i.e. if they belong to one, two, or three phonemes). State your evidence.

[6aða] "dangerous" "bribe him" [endorop] "disabled" "sift it" [tasat] [tisila] [tarubini] "binoculars" [oltuli] "buttock" "barrel" [iltoi] [dalut] "mischievous" "'you' plural" [endaraða] "fight each other" [indai] "fright" [endulelei] "apple" [engiruðoðo] "thunder" [embiðir] "female wart hog" [endaraða]

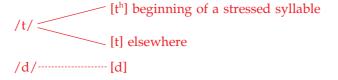


- (b) Note that the same three sounds are also found in English. Are their distributions in the two languages the same or different? Explain. No. Whereas Maasai has a complementary distribution of [t], [d], and [ð], English has a contrastive distribution: ten, den, then.
- (c) In learning each other's language (English speaker learning Maasai Maasai speaker learning English), who do you think will have greater difficulty with respect to the three sounds in question? Why? Maasai to English. The sounds have meaning difference in English, but not in Maasai. An English speaker can make errors with these sounds when learning Maasai, and it will not change the meaning.
- 9. (a) Examine the following data from Hindi and determine the phonemic status of [t], [th], and [d] (i.e. if they belong to one, two, or three phonemes). State your evidence.

[tantrik]	"tantra"	[tʰan]	"a bolt of cloth"
[dan]	"donate"	[bath]	"words"
[tal]	"beat"	[thal]	"beat"
[pathak]	"one who studies"	[bad]	"later"
[dal]	"lentil"	[pʰatak]	"a gate"

[thal], [tal], [dal] = minimal pairs. 3 phonemes.

(b) Note that the same three sounds are also found in English. Are their distributions the same or different in the two languages? Explain. Different.



(c) In learning each other's language (English speaker learning Hindi – Hindi speaker learning English), who do you think will have greater difficulty with respect to the three sounds in question? Why? English to Hindi. Hindi makes meaning contrasts out of the allophonic variations of English.

ANSWER KEY

10. Examine the following data from German and determine the phonemic status of [ç] and [x] (that is, whether they are the allophones of the same phoneme or belong to separate phonemes). State your evidence.

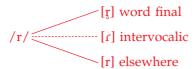
[abmaxə]	"to remove"	[ɛçtə]	"to ban"
[axt]	"eight"	[ɛ:nliç]	"like, resembling"
[blɛ:çən]	"small blister"	[drɔliç]	"amusing"
[ɛlç]	"elk"	[fraxt]	"carriage"
[fruxt]	"fruit"	[glaɪç]	"equal"
[knoplaux]	"garlic"	[mɛçtiç]	"powerful"
[ho:x]	"high"	[laxən]	"to laugh"
[lox]	"hole"	[fɛçtən]	"to fence"

/ç/ becomes the velar [x] when preceded by a back vowel.

 $/\varsigma/$ [x] after back vowel [ς] elsewhere

11. Examine the following data from Persian (Farsi) and determine the phonemic status of [r], [r], and [r] (that is, whether they belong to one, two, or three phonemes). State your evidence.

[acam] [ræhim] [zice] [musafir] [nærm] [moder]	"calm" "giver" "cumin" "traveler" "soft" "mother"	[arezu] [ʃir] [zærd] [kæbir] [ræht] [sefer]	"wish" "lion" "yellow" "grand" "laundry" "trip"	[kærim] [pænir] [farsi] [bære] [ræʃid] [pæriveʃ]	"giving" "cheese" "Persian" "sheep" "strong" "angel
					looking"



12. Transcribe the following (about 'the spread of English', cont.) from P. Trudgill and J. Hannah, *International English* (London: Arnold, 2002).

It was not until the 17th century that the English language began the It was not until do seventing sentsai det do ingles længwadz begæn do geographical and demographic expansion which has led to the situation dziegiæfekel en demographic expansion with hæz led to do sitsuesen in which it finds itself today, with more non-native speakers than any other en with it fains itself tode wid mai non netev spike z dæn eni ade

language in the world, and more native speakers than any other language længwədz ən ðə wæld ænd məz netəv spikaz ðæn eni nða længwədz except Chinese. This expansion began in the late 1600s, with the əksept tſaɪniz. ðis əkspænʃən bəgæn ən ðə let sikstin hʌndɹədz wiθ ðə arrival of English-speakers in the Americas – North America (the modern əiainəl ən ingləs spikaz ən gə əmeiəkəz usiθ əmeiəkə gə magan United States and Canada), Bermuda, the Bahamas, and the Caribbean – junaītad stets an kænada ba mjuda da bahamaz an da kajībian and the importation of English from Scotland, into the northern areas of ən də impoitesən əv ingləs fixm skatlənd intə də noidə n eijəz əv Ireland. Subsequently, during the 1700s, English also began to aiilənd. sabsəkwəntli duiin də sevəntin handiədz ingləs also bəgæn tə penetrate into southern Ireland, and it was during this time, too, that penətiet intə saðən aiilənd ən it wəz duiin dis taim tu dæt Cornish finally disappeared from Cornwall, and Norn from Orkney and kəinəl fainəli disəpiid fiəm kəinwəl ən nəin fiəm əikni ən Shetland. During the 1800s, English began making serious inroads into stlənd. duin ðə etin handiedz inglə∫ bəgæn mekin sijiəs iniodz intə Wales, so that today only twenty percent of the population of that country welz so ðæt təde onli twenti pæsent əv ðə papjule∫ən əv ðæt k∧ntょi are native Welsh speakers; and in the Highlands and islands of Scotland, aı netəv welf spikaz ænd ən ðə hailændz ən ailəndz əv skatlənd English also began to replace Gaelic, which today has around 70,000 ıŋgləs also bəgæn tə ɹəples gelik wits təde hæz əɹaund sevənti θauzənd native speakers. netəv spikəz.

CHAPTER 3: ENGLISH CONSONANTS

- 1. Complete the following statements and give examples (in phonetic transcription). Your examples should be different from the ones provided in the chapter.
 - (a) Vowels/diphthongs are longer before voiced stops than before voiceless stops.

e.g. bæ:g/bæk bī:d/bīt

- (b) Voiceless (lenis) stops are aspirated when at the beginning of a stressed syllable.
 e.g. p^hæt t^hek k^hId
- (c) Stops are unreleased when followed by another stop. e.g. sip t sab d gud gal
- (d) Stops are nasally released when followed by a homorganic nasal. e.g. bʌtn mædnəs sædnuz

- (e) Alveolar stops become dental when followed by an interdental. e.g. bædθιηz gṛeṭθιηz hædðis
- (f) Alveolar stops are flapped when intervocalic, second syllable not stressed.

e.g. ıDəli əDəm noDəbl

- (h) /t/ may be replaced by a glottal stop when in syllable-final position. e.g. bæ?mæn əʔlæntə æ?ləs
- (i) Velar stops are more front when before a front vowel. e.g. kaɪ/ki gus/gis galf/gɪv
- (j) Velar stops are rounded when before a round vowel. e.g. gus/gis kup/kip kom/kin
- (k) Vowels, nasals, and /l/ are longer before voiced fricatives than before voiceless fricatives.

 e.g. baz/bas fenz/fens felv/felf
- (l) Interdental fricatives are elided when before alveolar fricatives. e.g. kloz manz slos
- (m) Stops, fricatives, and nasals are long when followed by the same sound. e.g. bæd:ɔg ðis:tap tɛn:emz
- (n) Alveolar sonorants become dental when followed by an interdental.
 e.g. tenθ bænðəfilm wenðə benðer
- (o) Non-velar nasals become labio-dental when followed by a labio-dental. e.g. emfəsis imvait
- (p) Nasals may be syllabic when preceded by an obstruent. e.g. sʌdn bʌtn kæzm
- (q) Approximants /j/, /w/, /i/, /l/ are devoiced when preceded by a voiceless obstruent.e.g. pie slip swit twil
- (r) Approximants /i/ and /l/ may be syllabic when preceded by a consonant.e.g. kɛnl tʃænl æpl pikl

2. /t/ is probably the most versatile of all stops of English, as it can undergo several processes such as becoming dental, preglottalization, glottal stop replacement, deletion, flapping, aspiration, etc. Examine the following list of words and indicate the various possibilities for the /t/ targets together with the phonetic transcription.

Example entity [entɪti] t-deletion: [enɪti], flapping [entɪDi], t-deletion and flapping [enɪDi]

mentality [mentæliDi] flapping scientist [saiantist] unreleased stunting [st_An_In_] deletion [beDin] betting flapping attest [ət^hɛst[¬]] aspiration, unreleased [thanstəbl] trustable aspiration, affrication tractor [thaæktad] aspiration, affrication don't think [dont\thetaink] dental mortality [moathæləDi] aspiration, flapping [kwɔiDa] flapping quarter battle [bæDl] flapping at large [æ?laɹdʒ] glottal stop

3. Transcribe the following and discuss the release of the stops.

skip town [skip taun] unreleased /p/ non-homorganic (a) (b) sheep dog [ʃip¬dɔg] unreleased /p/ non-homorganic (c) great dane [giet den] unreleased /t/ (d) drip blood [dilp_plvq] unreleased /p/ non-homorganic (e) light bulb [laɪt¬bʌlb] unreleased /t/ non-homorganic (f) fake gun [fek]gʌn] unreleased /k/ (g) ship mate [∫ɪpmet] nasal plosion (h) club member [klʌbmɛmbə] nasal plosion cat tail [kæt:el] long /t/ homorganic

4. Circle the items that qualify for lateral plosion. State the generalization. puddle, bottle, goggle, apple, head lice, deep lake, red light, pickle

The /l/ is preceded by a homorganic stop.

5. Transcribe the following. Pay special attention to the nasals.

keep him here [kipmhix] looking good [lukɪŋgud]

ANSWER KEY

I can go [aɪkæŋgo] lamb meat [læm:it] green thumb $[g_{xin}\theta_{Am}]$ citizen Kane [sɪtəzəŋken] pen-pal [pempæl] home free [homfai] run there [řyďgeř] blame me [blem:i] in Greece [Ingais]

6. If the following were to undergo spoonerisms, what would be the likely and unlikely results, and why?

```
red jeep [ied djep] \rightarrow [ded iep], not [ded jep] just right [ded ier] \rightarrow [ier] djed ier], not [jer] dier] cheap rate [jer] \rightarrow [jer] tjet], not [jer] tjet]
```

An affricate is a single unit, so it does not split up.

7. Transcribe the following (about 'the spread of English', cont.) *from* P. Trudgill and J. Hannah, *International English* (London: Arnold, 2002).

It was also during the 1800s that the development of Southern Hemisphere ıt wəz also durin öə etin handradz öæt öə dəveləpmənt əv saöən heməsfir varieties of English began. During the early 19th century, large-scale vəṇaiətiz əv ingləs bəgæn. duṇn ðə 3 li naintinθ sentsəṇi laṇdz skel colonization of Australia began to take place and, at a slightly later date, kalənaizesən əv əstieljə bəgæn tə tek ples ən æt ə slaitli letə det New Zealand, South Africa, and the Falkland Islands also began to be nu zilənd sauθ æf. jəkə ən ðə falklənd aıləndz also bəgæn tə bi colonized from the British Isles. The South Atlantic islands of St. Helena kalənaizd fɨnm ðə bɨitis ailz. ðə sauθ ætlæntik ailəndz əv sent həlenə and Tristan da Cunha also acquired English-speaking populations during ən taistən də kunjə also əkwatad ingləs spikin papjulesənz duain the 1800s, as did Pitcairn Island and, subsequently, Norfolk Island in ðə etin handjədz æz did pitkein ailənd ən sabsəkwentli nəifək ailənd in the South Pacific. Not surprisingly, these patterns of expansion, settlement ðə sauθ pəsifik. nat səpiaizinli ðiz pætænz əv əkspænsən setļmənt and colonization have had an effect on the relationships, similarities and ən kalənaizesən hæv hæd ən əfekt an ðə iəlesənsips siməleiətiz ən differences between the varieties of English which have grown up in dīfijansəz bətwin də vəiaiətiz əv ingləf witf hæv gion ap ən different parts of the world. For example, there are very many similarities dıfıant paits əv də wald. fəi əksæmpl dei ai veii meni sıməleiətiz

between Scottish and northern Irish English. North American English and bətwin skatəf ən nəzðan azzəf ingləf. nəzθ əmezikən ingləf ən the English of southern Ireland also have many points of similarity. And ðə ingləf əv saðan aillənd also hæv meni points əv siməleləti. ænd the English varieties of the Southern Hemisphere (Australia, New Zealand, ðə ıŋglə∫ vəɹaɪətiz əv ðə sʌðə•n hɛməsfiɹ əstɹeljə nu zilənd South Africa, Falklands), which were transplanted relatively recently sauθ æfijəkə falkləndz wits wə tiænzplæntəd ielətivli iisəntli from the British Isles, are very similar to those of the south-east of firm go pitti allz ατ κετί simolo to goz on go sand ist on England, from where most emigrants to Australasia and South Africa ınglənd finm wei most eməgiənts tə əstiəlezə ən sauθ æfiəka came. They are quite naturally much less different from the English of kem. ðe az kwait nætszəli mats les difzənt fiam də ingləs əv England than are the varieties spoken in the Americas, which were ınglənd dæn a də və aiətiz spokən ən də əme iəkəz wits wa settled much earlier. setld mats rlia.

CHAPTER 4: ENGLISH VOWELS

1. In some words, the sequence represented by orthographical <u>or</u> has the phonetic realization [ɔi̯], which may be shifted to [ai̞]. In which of the following words would this be possible? Explain your reasoning.

forge, ignore, divorce, bore, horoscope, Oregon, explore, tomorrow, lord

The vowel and /i/ are not tautosyllabic.

2. As we saw in section 4.8, [ə] has a special relationship with /i, o, u/ whereby the pronunciation of the word can be with an [ə] as well as with one of these vowels. Examine the following words and state which one(s) would qualify for this alternation.

devoid, satisfactory, photography, progress (v), episcopal, calculate, statutory, reserve, meaning, gratefully, supremely, obscene, consumer, vocation

- 3. Circle the words that contain:
 - [i]: audible, hitter, lisp, pity, foreign, Nancy, horrible, slowly, leave, heed, crease, Greek
 - [1]: seen, pitch, sneaker, feast, knit, cheap, sing, fist, greed, simmer, evening, each, eat

- [e]: sense, aide, starved, sensational, amaze, enough, nation, revolver, nervous, forgiven
- [ɛ]: locate, perceive, slapped, said, maid, adept, laughed, check, came, tread, grained
- [æ]: panda, peptic, cabin, delta, cobra, bandit, camel, alone, inept, coma, acted, dragon
- [a]: hopper, dole, hotter, father, tranquil, market, polar, bargain, magnify, organizer, vanity
- [o]: could, groan, brook, flowed, boiling, cook, told, boat, crook, poised, posed, bowling
- [u]: should, most, coin, could, poled, good, stood, broke, soul, hoop, cooled, wood, booking
- [u]: goodness, groom, foot, cooled, woman, root, broom, shook, school, coiled, couch, under
- [aɪ]: imply, ironic, point, arrive, halve, advice, save, thyself, fatherly, breath, decide, lake
- [51]: spoiling, beside, guile, pointless, boil, Norwegian, soil, voyages, official, soy, continent
- [au]: bought, laundry, bound, owl, vowed, old, nose, cow, ploy, toad, Joan, foul, drowsy
- 4. Circle the words that have both $[\Lambda]$ and $[\vartheta]$.

undone, luckily, abundance, Monday, rushing, redundant, trouble, Paris, plaza, suspend.

5. Circle the words that have both $[\Lambda]$ and $[\mathfrak{P}]$.

mustard, award, wonderful, support, guarded, thunder, serpent, walker, tremor, barley, harbor, rubber, custard, under, others

- 6. Which words have:
 - (a) both [3] and [a]
 - (b) both $[3^{\circ}]$ and $[3^{\circ}]$
 - (c) only [3¹]
 - (d) only [3]
 - (e) only [ə]

Example bourbon: a

cursor b, person a, career d, abort e, verses a, whisper d, suburb d, carat e, convert (v) a, surprise d, heard c, Herbert b, under d, shivered d, birthday c, worker b, serviced c.

7. Transcribe the following (about 'English as a world language') from D. Crystal, The Cambridge Encyclopedia of the English Language (Cambridge: Cambridge University Press, 1995).

The movement of English around the world began with the pioneering ðə muvmənt əv ıŋgləs əɹaund ðə wald bəgæn wıθ ðə paɪəniɹɪŋ voyages to the Americas, Asia, and the Antipodes, continued with the vərədzəz tə ðə əmεjəkəz ezə ən ðə æntrpədiz kəntrnjud wrθ ðə 19th century colonial developments in Africa and the South Pacific, and naıntin0 sentsəii kəloniəl dəveləpmənts ın æfiakə ən öə sau0 pəsifik ən took a significant further step when it was adopted in the 20th century tuk ə sıgnıfəkənt f3·δο· step wen it wəz ədaptəd in δə twentiəθ sent∫ə,ii as an official or semi-official language by many newly independent states. æz ən əfifəl əz semi əfifəl længwədz bai meni nuli indəpendənt stets. English is now the dominant or official language in over 60 countries, and Ingləf iz nau ðə damənənt əz əfifəl længwədz in ova siksti kantziz ən is represented in every continent. It is this spread of representation which Iz iebrizented in erii kantenent. It iz gie ebried er iebrizentelen mitl makes the application of the term 'world language' a reality. The meks ða æplakesan av ða teim wæld længwadz a iiælati. ða present-day world status of English is primarily the result of two factors: piezant de wald stætas av inglas iz piaimerali ga iazvit av tr tæktaz the expansion of British colonial power, which peaked towards the end ða ikspænsan av biitis kalonial paua wits pikt twoidz da end of the 19th century, and the emergence of the United States as the leading əv ðə naɪntinθ sɛntʃəɹi ən ðə əm3·dʒəns əv ðə junaɪtəd stets æz ðə lidɪŋ economic power of the 20th century. It is the latter factor which continues ekənamık paua əv də twentiəb sentsəii. It iz də læta fækta wits kəntinjuz to explain the position of the English language today. The USA contains tu əksplen də pəzisən əv də ingləs længwədz təde. də ju es e kəntenz nearly four times as many English-mother-tongue speakers as the next most nizli fəz taimz æz meni ingləs maða tan spikaz æz ða nekst most important nation (UK), and these two countries comprise 70 percent of Important nesan ju ke an diz tu kantriz kampraiz sevanti pasent av all English-mother-tongue speakers in the world. al ingləs madə tan spikəz in də world.

CHAPTER 5: ACOUSTICS OF VOWELS AND CONSONANTS

1. What differences do you expect to find in the spectrograms of the following pairs?

Example (a) <u>court</u> – (b) <u>scored</u>

- Initial frication noise of /s/ in (b)
- Initial aspiration of /k/ in (a)

ANSWER KEY

- longer vowel before /d/ in (b)
- longer duration for final /t/ in (a)
- ?? voice bar in final /d/ in (b)
- (i) (a) sip (b) zip
 - [s] longer duration, greater frication noise
 - [z] possible voice bar
- (ii) (a) britches (b) bridges
 - [tʃ] longer duration
 - [dʒ] possible voice bar
- (iii) (a) hat (b) ahead

<u>hat</u> – one syllable, longer and lower vowel

ahead - two syllables, shorter mid vowel

Initial voiceless friction for [h] in <u>hat;</u> breathy intervocalic [h] in <u>ahead</u>.

- [t] longer duration, [d] shorter duration and partial voicing
- (iv) (a) parade (b) pilot

parade – very short [ə] then diphthongal [e], lower F₃ for [ɹ], shorter closure and partially voiced [d]

- $\underline{\text{pilot}}$ distinct diphthong then short [ə], higher F_3 for [l], longer closure and voiceless [t]
- (v) (a) name (b) mine

name – diphthongal mid [e], formant transition from alveolar to

<u>mine</u> – clear low to high diphthong [aɪ], formant transition from bilabial to alveolar

- 2. Match the following spectrograms with the targets <u>open</u>, <u>tiger</u>, <u>package</u>, <u>camel</u>, <u>apple</u>, <u>table</u>. Explain your rationale.
 - open long back diphthongal vowel, short vowel for [ə]

unaspirated stop

faint nasal

tiger aspirated stop

diphthong

voice bar for voiced stop and merging F_2 and F_3 for velar

weak / 1, lowering of F_3 of vowel

package aspirated stop

low front vowel

stop gap and unaspirated stop

affricate, frication noise, palato-alveolar place of articulation

camel aspirated stop

faint nasal weak /l/

apple rather long vowel

unaspirated stop

weak /l/

table aspirated stop

diphthongal front vowel voice bar for voiced stop

weak /l/

3. Transcribe the following (about 'second language varieties of English') based on P. Trudgill and J. Hannah, *International English* (London: Edward Arnold, 2002).

English is a language which has more non-native speakers than native Ingləf iz ə længwədz witf hæz məz nan netəv spikaz ðæn netəv speakers. Besides the fact that it is learned by millions of people around spikaz. basaidz da fækt dæt it iz land bai miljanz av pipal ajaund the world as a foreign language, there are millions of speakers of English ðə wæld æz ə fəjən længwədz ðej aj miljənz əv spikəz əv ingləs as a second language in many countries. In the Americas, English is an æz ə sekənd længwədz ən meni kantaiz. In ðə əmeaəkəz ingləs iz ən important second language in Puerto Rico, and also has some second-Important sekand længwadz in pwerto riko an also hæz sam sekand language presence in Panama. In Europe, it has official status in Gibraltar længwədz piezəns ən pænəmə. In juiəp it hæz əfisəl stætəs ən dzəbialtə and Malta and is also widely spoken as a second language in Cyprus. In ən maltə ən ız also waidli spokən æz ə sekənd længwədz ən saipiəs. in Africa, there are large communities of native speakers of English in Liberia, æfijaka dei ai laidz kamjunatiz av netav spika z av inglas an laibijija South Africa, Zimbabwe and Kenya, but there are even larger communities sauθ æfijaka zimbabwe an kenja bat dei ai ivan laidza kamjunatiz in these countries of second-language speakers. Elsewhere in Africa, ən diz kantıiz əv sekənd længwədz spikəz. Elswei ən æfiəkə English has official status, and is therefore widely used as a second ıngləf hæz əfifəl stætəs ən iz ðeifəi waidli juzd æz ə sekənd language lingua franca in Gambia, Sierra Leone, Ghana, Nigeria, længwədz lingwə famikə in gembijə sieaə lion ganə naidziaijə

Cameroon, Namibia, Botswana, Lesotho, Swaziland, Zambia, Malawi and kæməzun namibijə batswanə ləsoθo swazilænd zambijə məlawi ən Uganda. It is also widely used in education and for government purposes jugandə. It ız also waidli juzd ən £dzjuke∫ən ən fə.i gavız∙nmənt pz•pəsəz in Tanzania and Kenya. In the Indian Ocean, Asian and Pacific Ocean areas, ən tænzənijə ən kenjə. In də Indijən ofən ezən ən pəsifək ofən exijəz English is an official language in Mauritius, the Seychelles, Pakistan, India, ıngləs iz ən əfisəl længwədz ən məxisəs ðə seselz pækəstæn ındijə Singapore, Brunei, Hong Kong, the Philippines, Papua New Guinea, the sinəpəi biunei hən kən də filəpinz papuə nu gini də Solomon Islands, Vanuatu, Fiji, Tonga, Western Samoa, American Samoa, saləmən arlandz vænuatu fidzi tonga westərn səmoə əmerəkən səmoə the Cook Islands, Guam and elsewhere in American administered də kuk ailəndz gwam ən elswei ən əmeiəkən ædminəstə d Micronesia. It is also very widely used as a second language in Malaysia, markioniza. It iz also veii waidli juzd æz a sekand længwadz an maleza Bangladesh, Sri Lanka, the Maldives, Nepal and Nauru. bænglədes si lankə də maldivz nəpal ən nauju.

CHAPTER 6: SYLLABLES

1. In section 6.5.6 several patterns for non-suffixed triple codas are discussed. Which ones of these (if any) violate(s) the Sonority Sequencing Principle? State the example(s) and your rationale.

stop-fricative-stop	$1,2 \rightarrow 3,4 \rightarrow 1,2$
nasal-stop-fricative	$5 \rightarrow 1,2 \rightarrow 3,4$
lateral-stop-fricative	$6 \rightarrow 1,2 \rightarrow 3,4$
flap-stop-fricative	$7 \rightarrow 1.2 \rightarrow 3.4$

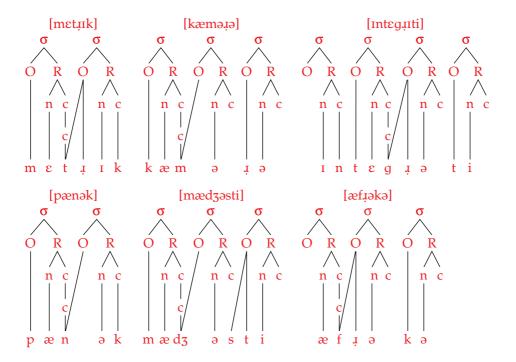
The SSP states that the sonority will drop as the coda progresses. All of these have rises and dips within the coda.

2. Do the same as above for the suffixed triple codas.

```
nasal-obstruent-/t, d, s, z/ potential to violate (/nts/) /s/-stop-/t, d, s, z/ potential to violate (/sps/) /l/-obstruent-/t, d, s, z/ potential to violate (/lps/) /i/-obstruent-/t, d, s, z/ potential to violate (/idz/) obstruent-obstruent potential to violate (/pst/)
```

3. Which of the following would qualify for ambisyllabicity? Circle the word(s), state your rationale, and give the tree diagram(s).

metric, regime, anecdote, camera, integrity, person, panic, majesty, Africa, rival



A consonant that is part of a permissible onset is ambisyllabic if it occurs after a short stressed vowel.

4. Consider the following:

While certain combinations are possible, certain others (in c) are not allowed. State the generalization.

After a short vowel, double codas should have homorganicity (same place of articulation). After long vowels and diphthongs, stop consonants of all places of articulation are possible as simple codas. Double codas after long vowels or diphthongs are possible only if they are alveolars.

5. In section 6.5.6, we saw that, because of reduced vowel deletions, several normally impermissible consonant clusters can be created (e.g. <u>photography</u> [ftag.ie]). Find five examples of such clusters.

```
potato \rightarrow [pteto] marina \rightarrow [minə] malaria \rightarrow [mlɛɹiə] fanatics \rightarrow [fnætɪks] tomorrow \rightarrow [tmɑɹo]
```

6. English final consonant clusters are simplified by deleting the final member of the cluster in certain contexts (e.g. /nd/ in sand piles [sæn paɪlz], /st/ in first class [f3·s klæs]). The same is not possible in other contexts (e.g. /nd/ in canned vegetables [kænd νε . . .], /st/ in missed goals [mɪst golz]). State the generalization and give three examples for each possibility.

When the word ending in a cluster not created by the addition of a grammatical ending is followed by a word that begins with a consonant, the final member of the cluster is deleted.

```
hand made \rightarrow [hæn med] planned trip \rightarrow [plænd tɪɪp] next class \rightarrow [nɛks klæs] fixed game \rightarrow [fɪkst gem] autographed book \rightarrow [ɔtəgɹæft buk]
```

7. Transcribe the following (about 'English in America') from J. Jenkins, World Englishes (London: Routledge, 2002).

Walter Raleigh's expedition of 1584 to America was the earliest from the waltə jæliz ekspedisən əv fiftin eti fəj tu əmejəkə wəz də aliəst finm də British Isles to the New World, though it did not result in a permanent pittis ailz tu de nu mæld do it did nat iesylt iu e bæmeneut settlement. The voyagers landed on the coast of North Carolina near setəlmənt. Öə vəijədzə z lændəd an Öə kost əv nəz0 kezəlainə niz Roanoke Island, but fell into conflict with the native Indian population Joanok ailand bat fel inta kanflikt wiθ ða netav indian papjulesan and then mysteriously disappeared altogether. In 1607, the first permanent ən den mıstiriəsli disəpird altəgedər. In sıkstin o sevən də farst parmənənt colonist arrived and settled in Jamestown, Virginia, to be followed in 1620 kalənist ə.aivd ən setəld in dzemztaun vz dzinjə tə bi falod in sikstin twenti by a group of Puritans and others on the Mayflower. The latter group landed bai ə giup əv pjuiətənz ən Aðaz an ða meflaua. ða læta giup lændad further north, settling at what is now Plymouth, Massachusetts, in New taga bicu ag mat iz nan bliməθ wæsətlesəts in un England. Both settlements spread rapidly and attracted further migrants ıŋglənd. boθ setəlmənts spied iæpədli ən ətiæktəd faða maigiənts during the years that followed. Because of their different linguistic duin ðə jiz ðæt falod. bəkaz əv ðez difzənt lingwistək backgrounds, there were immediately certain differences in the accents of bækgjaundz ðei wa imidiətli saitən difiənsəz in də æksents əv

ANSWER KEY

the two groups of settlers. Those in Virginia came mainly from the West ða tu grups av setlaz. ðoz in vædzinja kem menli fram ða west of England and brought with them their characteristic rhotic /r/ and ev ingland an brought with them their characteristic rhotic /r/ and ev ingland an brought with dem der keraktaristak rotak i an voiced /s/ sounds. On the other hand, those who settled in New England voist s saundz. an ða aða hænd doz hu setald in nu ingland were mainly from the east of England, where these features were not a war menli fram ða ist av ingland wer diz fitsaz war nat a part of the local accent.

CHAPTER 7: STRESS AND INTONATION

1. In the following we observe schwa deletion in fast speech for words (a)–(k); the same is not possible in words (l)–(v). State the generalization. Pay special attention to morphologically related words such as (f and s), (g and v), (h and u), (i and t), (j and q), (k and r).

		Careful speech	Fast speech
(a)	camera	[kæməɨə]	[kæmɨə]
(b)	veteran	[vɛtəɹ̞ən]	[vɛtɹən]
(c)	aspirin	[weredew]	[æspɨən]
(d)	temperature	[tɛmbəṙət]s₁]	[tembiət]&]
(e)	reasonable	[ˌɪizənəbl̩]	[ɹiznəbl̩]
(f)	imaginative	[ɪmædʒənətɪv]	[ɪmædʒnətɪv]
(g)	principal	[biɪusəbəl]	[birusb9]]
(h)	management	[mænədzmənt]	[mændʒmənt]
(i)	testament	[tɛstəmənt]	[tɛstmənt]
(j)	general	[qaeuəiəl]	[d3eni9]]
(k)	opera	[abəiə]	[abiə]
(1)	famous	[feməs]	[feməs] <u>not</u> [fems]
(m)	vegetarian	[vedzəteriən]	[vedzətexiən] not [vedztexiən]
(n)	motivate	[motəvet]	[motəvet] <u>not</u> [motvet]
(o)	pathology	[pæθalədʒi]	[pæθalədʒi] <u>not</u> [pæθaldʒi]
(p)	facilitate	[fəsɪlətet]	[fəsɪlətet] <u>not</u> [fəsɪltet]
(q)	generality	[dʒɛnəɹæləti]	[dʒɛnəɹæləti] <u>not</u> [dʒɛnɹæləti]
(r)	operatic	[apəɹætɪk]	[apəɹætɪk] <u>not</u> [apɹætɪk]
(s)	imagination	[əmædʒəneʃən]	[əmædʒəneʃən] <u>not</u> [əmædʒneʃən]
(t)	testimony	[tɛstəmoni]	[tɛstəmoni] <u>not</u> [tɛstmoni]
(u)	managerial	[mænədzeɹiəl]	[mænədʒɛɹiəl] <u>not</u> [mændʒɛɹiəl]
(v)	principality	[pɹɪnsəpæləti]	[pɹɪnsəpæləti] <u>not</u> [pɹɪnspæləti]

In English fast speech, a schwa from a word when it is preceded by a stressed vowel and followed by another schwa.

T.A.

F.V.

+ - +

+ - + +

2 4 1 3

ANSWER KEY

Analyze the stress patterns of the following words by using the three parameters (stress, tonic accent, and full vowel), and give the traditional numbers.

Example mineralogy

```
[mɪ.nə.ɹa.lə.dʒi]
Stress
               + - + - -
Tonic Accent
Full vowel
               + - + -
               2 4 1 4 3
                                                   (c) mythical
(a)
     choreography
                        (b) <u>discretional</u>
     [kəiiagiəti]
                             [dəskie]ənəl]
                                                        [mɪθəkəl]
St.
      +-+ - -
                              - + - -
                                                         + - -
T.A.
      --+ - -
                                                         + - -
                                                         + - -
      +++ - +
                              - + - -
F.V.
      231 4 3
                              4 1 4 4
                                                         1 4 4
     gratification
(d)
                                                   (f) modality
                        (e) <u>autograph</u>
     [gɹætəfəkeʃən]
                                                        [modæləti]
                             [ɔtəgɹæf]
St.
       - - - + -
                             +- -
                                                          - + - -
T.A.
       + --+ -
                                                          - + - -
                             +- +
F.V.
       + --+ -
                             +- +
                                                          + + - +
       2 4 4 1 4
                              14 2
                                                          3 1 4 3
(g)
     conciliation
                        (h) <u>punishable</u>
                                                        phonological
     [kənsiliefən]
                             [pʌnɪʃəbəl]
                                                        [fonəladzəkəl]
St.
       - --+ -
                              + - - -
                                                         - - + - -
T.A.
                              + - - -
       - +-+ -
                                                         --+--
F.V.
                              + + - -
                                                         +-+--
      - +++ -
       4 \ 231 \ 4
                              1 3 4 4
                                                         3 4 1 4 4
(j)
     profundity
                        (k) consumptiveness
                                                        resumption
     [paofandəti]
                             [kənsamptəvnəs]
                                                        [ɹizʌmpʃən]
St.
       - + --
                                                           +
T.A.
       - + --
                                                            +
F.V.
       + + -+
                                                         + + -
       3 1 4 3
                                                         3 1
                                   1
                                                                4
(m)
     diagnosis
                        (n) <u>neutralize</u>
                                                   (o) <u>resignation</u>
     [daɪəgnosis]
                             [nut.jəlaiz]
                                                        [¡ɛzəgneʃən]
St.
      - - + -
                              + - -
                                                         - - + -
```

+ - +

+ - +

1 4 2

+ - + -

+ - + -

2 4 1 4

(p)	<u>eccentricity</u>	(q) <u>recessional</u>	(r)	protestation
_	[ɛksəntɹɪsəti]	[ˈseʃənəl]		[pɹatəsteʃən]
St.	+	-+		+ -
T.A.	+ - +	-+		+ - + -
F.V.	+ - + -+	++		+ - + -
	2 4 1 4 3	3 1 4 4		2 4 1 4

- 3. In light of what you have seen regarding the intonation patterns in section 7.8, determine where the tonic accent will be in the following (in their neutral, non-contrastive readings).
 - Are you coming to the movie? I have exams to grade.
 - (b) The dog barked.
 - (c) The building's falling down.
 - (b) I go to Boston, usually.
- 4. Match the intonation patterns of the following with the six types indicated below.
 - (a) low rise low fall (e) fall-rise (c) high (long) rise (d) long (full) fall (f) rise-fall (i) I am so happy for you. d (ii) Would you like to have coffee or tea? (open choice reading) a (iii) Would you like to have coffee or tea? (closed choice) (iv) Where will the meeting be held? (information seeking) d (v) Where will the meeting be held? (I couldn't hear you) a (vi) What am I doing? I am trying to fix the TV. a Her predictions came true. (clear finality) d (vii) (viii) Who was at the meeting? d (ix) Whatever you say. c (χ) We should look for him, shouldn't we? f
 - (xi)You can take the old route. (agree with reservation) e (xii) Are you out of your mind? b

 - Did you wash the car yet? a (xiii)
 - I would have done it the same way, wouldn't you? f (xiv)
- Transcribe the following (about 'English in America', cont.) from J. Jenkins, World Englishes (London: Routledge, 2002).

During the seventeenth century, English spread to southern parts of duin δο seventinθ sentsei ingles spied tu saδon paits ev

America and the Caribbean as a result of the slave trade. Slaves were əmeyəkə ən də kəyibiən æz ə yəzalt əv də slev tyed. slevz wa transported from West Africa and exchanged, on the American coast and tjænspojtad fjam west æfjaka an ekstsendad an da amejakan kost an in the Caribbean, for sugar and rum. The Englishes which developed among ən də kəxibiən fəx suga ən xam. də ingləsəz wits dəveləpt əman the slaves and between them and their captors were initially contact ðə slevz ən bətwin ðem ən ðei kæptaz wa ınısəli kantækt pidgin languages but, with their use as mother tongues following the birth pidzən længwədzəz bat wiθ ðei jus æz maða tanz faloin ðə baθ of the next generation, they developed into creoles. Then, in the əv ðə nekst dzenəjesən de dəveləpt intu kijolz. Den in də eighteenth century, there was large-scale immigration from Northern etinθ sentsəii ðei məz laidz skel Iməgiesən tiəm nəigə n Ireland, initially to the coastal area around Philadelphia, but quickly ai lənd ini səli tu də kostəl e i ə ə aund filədelfi ə bat kwikli moving south and west. After the Declaration of American Independence muvin sauθ ən west. æftæ ða deklajesan av amejakan indapendans in 1776, many loyalists (the British settlers who had supported ın sevəntin sevənti sıks meni ləiəlists də biitə setləz hu hæd səpəitəd the British government) left for Canada. ðə birtəs gavəinmənt left for kænədə.

CHAPTER 8: STRUCTURAL FACTORS IN SECOND LANGUAGE PHONOLOGY

1. First, transcribe the following word-pairs, and then, with the contrastive information you had in this chapter, identify the languages whose native speakers would have problems related to these target English word-pairs.

```
cheap - chip: /tʃip/ - /tʃip/ Arabic, Russian, Korean, Portuguese,
  Spanish, Turkish, Greek, French, Persian
sieve – save: /siv/ – /sev/ Arabic
age - edge: /edʒ/ - /ɛdʒ/ Spanish, Greek, French, Arabic, Russian,
  Korean, Persian
bend - band: /bend/ - /bænd/ Spanish, Turkish, Greek, French,
  German, Arabic, Russian
band - bond: /bænd/ - /band/ Spanish, Turkish, Greek, Arabic,
  Russian
fool – full: /ful/ – /ful/ Arabic, Russian, Spanish, Turkish, Greek,
  French, Korean, Portuguese, Persian
backs – box: /bæks/ – /baks/ Arabic, Russian, Spanish, Turkish, Greek
look – Luke: /luk/ – /lok/ Arabic, Russian, Spanish, Turkish, Greek,
  French, Korean, Portuguese, Persian
feast - fist: /fist/ - /fist/ Arabic, Russian, Spanish, Turkish, Greek,
  French, Korean, Portuguese, Persian
```

ANSWER KEY

wait – wet: /wet/ – /wet/ Arabic, Spanish, Greek, Russian, Korean, Persian slept – slapped: /slept/ – /slæpt/ Spanish, Turkish, Greek, French, German, Arabic, Russian, Korean, Portuguese, Persian

2. Now, do the same for the following target pairs in contrast.

```
glass – grass: /glæs/ – /gɹæs/
peach – beach: /pitʃ/ – /bitʃ/
                               Arabic, Korean
pour – four: /poi/ – /foi/ Korean
went – vent: /went/ – /vent/ Turkish, German, Russian, Persian
feel – veal: /fil/ – /vil/ Spanish, Arabic
vowel – bowel: /vaul/ – /baul/ Spanish, Korean
dense – dens: /dens/ – /denz/ Spanish
three – tree: /θμi/ – /tμi/ Persian, Spanish, Turkish, Greek, Arabic,
  Russian, Korean, Portuguese
thick – sick: /\theta Ik/ – /sIk/ Spanish, Greek, French, German, Arabic
those – doze: /ðoz/ – /doz/ Spanish, Turkish, Persian, Greek, Arabic,
  Russian, Korean, Portuguese
leaf – leave: /lif/ – /liv/ Spanish, German, Arabic, Korean
rope – robe: /iop/ – /iob/ German, Arabic, Russian, Korean
stow – stove: /sto/ – /stov/ Spanish, German, Korean, Persian
curved – curbed: /k3·vd/ – /k3·bd/ Spanish, Korean
math – mat: /m \approx \theta / - /m \approx t / Spanish, Turkish, Arabic, Russian, Korean,
  Portuguese
forth – force: /foμθ/ – /foμs/ Spanish, German, French, Arabic
soothe – sued: /suð/ – /sud/ Spanish, Turkish, Arabic, Russian, Korean,
  Portuguese, Persian
clothed – closed: /kloðd/ – /klozd/ Spanish, French, German, Arabic
sin – sing: /sɪn/ – /sɪŋ/ Turkish, Greek, French, Arabic, Russian,
  Portuguese
cart – card: /kaɪ̞t/ – /kaɪ̞d/ German, Turkish, Russian
thin – chin: \theta In/ – t In/ Spanish, Greek, Portuguese
lamp – ramp: /læmp/ – /ɹæmp/ Korean
sift – shift: /sift/ – /ʃift/ Arabic, Korean
sink - zinc: /sink/ - /zink/ Spanish
cheer – sheer: /tʃiɪ/ – /ʃiɪ/ Spanish, Greek, French, Arabic, Korean
surge – search: /s3<sup>d</sup>dʒ/ – /s3<sup>t</sup>f/ German, Russian, Korean
dug – duck: /dʌg/ – /dʌk/ German, Turkish, Russian
```

3. Now, do the same for the following triplets.

```
huck – hock – hawk: /hʌk/ – /hɔk/ – /hɑk/ Portuguese, Persian, French, German, Arabic, Russian, Korean, Spanish, Turkish, Greek panned – punned – pond: /pænd/ – /pʌnd/ – /pɔnd/ Spanish, Turkish, Greek, French, Arabic, Russian, Korean, Portuguese, Persian
```

bag – bug – bog: /bæg/ – /bʌg/ – /bag/ Persian, French, German, Arabic, Russian, Portuguese, Spanish, Turkish, Greek, Korean
bid – bead – bed: /bid/ – /bid/ – /bɛd/ Russian, Portuguese, Persian, Spanish, Turkish, Greek, Arabic, Korean
stack – stuck – stock: /stæk/ – /stʌk/ – /stak/ French, German, Arabic, Russian, Korean, Spanish, Turkish, Greek, Portuguese, Persian

- 4. Although contrastive phonological information is indispensable for the prediction of learners' difficulties, it is not sufficient in many cases, because for certain phenomena, constraints based on universal markedness have been shown to be influential in explaining the degree of difficulty of targets. Order the following targets in terms of difficulty (from most difficult to least difficult), and state the rationale.

 - (b) liquids:

 /1/ full, elect, lamp, fly, belt

 /1/ green, boring, tire, room, card
 full, belt, fly, elect, lamp.
 tire, card, green, boring, room.
 Postvocalic, postconsonantal, intervocalic, then initial.
 - (c) /s + C/ onsets: slow, sticker, swing, small sticker, small, slow, swing. The higher the sonority jump from C_1 to C_2 , the less difficult the cluster is.
 - (d) aspiration:
 pig, keep, park, course, torn, tease
 park, pig, torn, tease, course, keep.
 Aspiration is less difficult as the place of articulation moves further back
 (bilabial, to alveolar, to velar). Also, if the following vowel is high, rather
 than low, it facilitates the aspiration.
 - (e) final voiced stops:
 lab, bid, rod, rag, rib, wig
 wig, rag, bid, rod, rib, lab.

 Velars are the most vulnerable for devoicing, followed by the alveolars and then the bilabials. Also, the higher the preceding vowel, the more difficult the production of the target voiced stop.

5. Japanese lacks English target /θ/ and learners replace it with a [s] (e.g. thank [sæŋk]). Also, [ʃ] is an allophone of /s/ in Japanese before /i/. This results in renditions such as sip [ʃɪp]. While we have these two patterns (/s/ as [ʃ] before /i/, and /θ/ as [s]) Japanese speakers' rendition of English think is [sɪŋk] and not [ʃɪŋk]. Does this support or counterargue for the case made for deflected contrast in section 8.3.2. State your reasoning.

This supports the case of deflected contrast because learners distinguish the three target phonemes /s/, $/\int/$, $/\theta/$ and prevents the neutralization of any contrast.

- 6. Transcribe the following ('Citations on American English') *from* T. McArthur, *The English Languages* (Cambridge: Cambridge University Press, 1998, pp. 220–7).
 - (a) The American I have heard up to the present is a tongue as distinct from English as Patagonian. (*Rudyard Kipling* 1889) ði əmɛɹəkən aı hæv hɜd ap tu ðə pɹɛzənt ız ə taŋ æz dəstɪŋkt fɹəm ɪŋgləʃ æz pætəgoniən.
 - (b) The rich have always liked to assume the costumes of the poor. Take the American language. It is more than a million words wide, and new terms are constantly added to its infinite variety. Yet, as the decade starts, the US vocabulary seems to have shrunk to child size. (Stefan Kanfer, 1980)

 ðə int hæv alwez lankt tu əsum ðə kastjumz əv ðə pui. tek ðə əmeiðəkən længwəd3. It iz məi ðæn ə miljən wadz waid ən nu tamz ai kanstəntli ædəd tu its infənət vəiaiəti. jet æz ðə deked staits ðə ju es vokæbjuleji simz tu hæv siank tu tsaild saiz.
 - (c) I mean that almost everyone who touches upon American speech assumes that it is inferior to British speech. Just as the Englishman, having endured for a time the society of his equals, goes on to bask in the sunshine of aristocracy, so the American, when he has used the American language for business or for familiar intercourse, may then, for higher or more serious purposes, go on to the aristocratic or royal language of Great Britain. (Fred Newton Scott, 1917) at min ðæt almost eviiwan hu tatsəz əpan əmeiəkən spitsəsumz ðæt it iz infiiia tu bittəs spits. daast æz ðə ingləsmən hævin ənduid fai ə taim ðə səsaiəti əv hiz ikwəlz goz an tu bæsk in ðə sansain əv æiəstakiəsi so ðə əmeiəkən wen hi hæz juzd ðə əmeiəkən længwəda fai biznəs ə fai fəmiljə intəkais me ðen fai haijə ai mai siiiəs papəsəz go antu ðə əiistəkiætik ai iaijəl længwəda əv giet biitən.

ANSWER KEY

CHAPTER 9: SPELLING AND PRONUNCIATION

1. The words in the following pairs are spelt differently; some pairs are pronounced the same (i.e. they are homophonous), and others are not. Identify each pair as either same (S) or different (D), and provide the phonetic transcription(s).

```
Example: plain – plane (S) [plen]
              price – prize (D) [piais] – [piaiz]
(a)
     key – quay S: [ki] D: [ki] – [kwe] or [ke]
(b)
     gorilla – guerrilla S: [gəˌɪɪlə]
(c)
     person – parson D: [pasən] – [pasən]
(d)
     profit – prophet S: [p.afət]
(e)
     rout – route S: [xut] D: [xut] – [xavt]
(f)
     draught – draft S: [diæft]
(g)
     genes – jeans S: [dʒinz]
(h)
     colonel – kernel S: [k3ºnəl]
(i)
     raiser – razor S: [iezə ]
(j)
     patron – pattern D: [petɹən] – [pætən]
(k)
     temper – tamper D: [tempəl] – [tæmpəl]
(1)
     cymbal – symbol S: [sɪmbəl]
(m) local – locale D: [lokəl] – [lokæl]
(n)
     discreet – discrete S: [dəskɹit]
(o)
     review – revue S: [ɹəvju]
(p)
     critic – critique D: [kɹɪtək] – [kɹətik]
```

2. Identify the vowel changes in the stressed syllables (spelt identically) of the following morphologically related words.

Example: gradient – gradual letter \underline{a} [e] / [æ]

```
derive - derivative
                                    [aɪ]/[ɪ]
provoke - provocative
                           0
                                    [o]/[a]
punitive - punishment
                                    [u]/[\Lambda]
                           u
harmonious – harmonic o
                                    [o]/[a]
deduce - deduction
                                    [u]/[\Lambda]
                           11
satire - satiric
                                    [æ]/[I]
                           a
                                    [i]/[ε]
serene – serenity
                           e
major – majesty
                                    [e]/[æ]
                           a
wild - wilderness
                           i
                                    [aɪ]/[ɪ]
```

3. Find an appropriate morphologically related word for the similar vowel changes (represented by the same orthographic letter).

Example: letter \underline{e} [i] / [ϵ] austere – austerity

(a) letter <u>a</u> [e] / [æ]
profane – profanity grateful – gratitude
collate – collateral sane – sanity

(b) letter \underline{e} [i] / [ϵ] meter – metrical supreme – supremacy succeed – success discreet – discretion

(c) letter <u>i</u> [aɪ] / [ɪ]
decide – decision
divine – divinity
line – linear

(d) letter \underline{o} [o] / [ɔ/a] cone – conic code – codify protest – protestant vocal – vocative

(e) letter <u>u</u> [u] / [ʌ]
duke – duchess consume – consumption
resume – resumption assume – assumption

- 4. Transcribe the following ('Citations on American English') *from* T. McArthur, *The English Languages* (Cambridge: Cambridge University Press, 1998, pp. 220–7).
 - (a) The foreign language which has most affected English in our own time is contemporary American.... The colloquial speech of the American is becoming, largely as a result of the foreign ingredients in the melting-pot, more and more remote from the spoken English of the educated Englishman, but, at the same time, the more slangy element in our language is being constantly reinforced by words and phrases taken from American, especially the type of American which is printed in the cinema caption. (Ernest Weekley, UK, 1928) ðə fəjən længwədʒ witʃ hæz most əfɛktəd ingləʃ in aui on taim iz kəntempəjeji əmejəkən. Öə kəlokwiəl spitʃ əv ðə əmejəkən iz bəkamin laidʒli æz ə jəzalt əv ðə fəjən ingjidiənts in ðə meltin pat məj ən məj jəmot fiəm ðə spokən ingləʃ əv ðə ɛdʒjuketəd ingləʃmən bat æt ðə sem taim ðə məj slængi ɛləmənt in aui længwədʒ iz biin kanstəntli jiənfəjət bai wɔ-dz ən fiezəz tekən fiəm əmejəkən ispɛʃəli ðə taip əv əmejəkən witʃ iz pjintəd in ðə sinəmə kæpʃən.
 - (b) It was the British Empire, on which the sun never set, that originally spread English around the world, along with the tea breaks, cuffed trousers and the stiff upper lip. But when the imperial sun finally did

set after World War II, the American language followed American power into the vacuum. (Otto Friedrich et al., US, 1986) It wəz ðə butəʃ εmpali an witʃ ðə san nevæ set ðæt əudʒənəli spied ingləʃ əuaund ðə wæld ələŋ wiθ ðə ti bueks kaft tuauzæz ən ðə stif apælip. bat wen ðə impiniəl san fainəli did set æftæ wæld wəi tu ðə əmenəkən læŋgwədʒ falod əmenəkən pauæ intu ðə vækjum.

(c) Whose English language is it, anyway? From the tone of the new 'BBC News and Current Affairs Stylebook and Editorial Guide', you'd think the Brits invented it. With unmistakable disdain, the broadcastocrats in London call what we speak 'American'. As a user of Murkin English, I rise to the defense. (William Safire, US, 1993). huz Ingləʃ længwədʒ Iz It ɛniwe. fiʌm ðə ton əv ðə nu bi bi si nuz ən kʌiənt əfɛ.iz stailbuk ən ɛdətɔ.iəl gaɪd jud θɪŋk ðə b.its ɪnvɛntəd It. wɪθ ʌnmɪstekəbəl dɪsden ðə b.iɔdkæstək.iæts ɪn lʌndən kal wʌt wi spik əmɛ.iəkən. æz ə juzə əv mɜˈkən ɪŋgləʃ aɪ ɹaɪz tu ðə dəfɛns.