11. Letter-to-sound rules – Part 1: Consonants

Before you study this chapter, check whether you are familiar with the following terms: allophone, allomorph, aspiration, clear/dark-L, coronal, devoicing, digraph, glottalization, homorganic, loanword, morpheme (free and bound), orthography, palatalization, palato-alveolar, place assimilation, productive/non-productive, R-dropping, rhotic/non-rhotic, root/stem, suffix, tapping/flapping, weak/strong forms of function words, Yod-dropping

This chapter mainly focuses on the regular correspondences between consonant letters and sounds, and the rules regulating this relationship. This is made necessary by the fact that the principles of English spelling (or, orthography) are quite different from those of Hungarian. On the one hand, the correspondences between Hungarian letters and sounds are much more straightforward as spelling observes the **phonemic principle** more than in English, i.e., it aims at setting up a one-to-one relationship between letters and phonemes as much as possible, but at least much more successfully than English spelling does. On the other hand, Hungarian mostly represents the different pronunciation variants, allomorphs of a morpheme differently in spelling, e.g., *ház-hoz*, *kert-hez*, *föld-höz* where the vowels of the three different variants of this suffix are different in pronunciation and it is clearly indicated in spelling, too. This way, the spelling will always tell us how to pronounce the particular morpheme in question. English observes another principle instead, that of **morpheme identity**: it prefers to keep the spelling of a morpheme unchanged regardless of whether the particular morpheme is pronounced with one allomorph or another, e.g., *want-ed* /ˈwɒntɪd/, *kiss-ed* /kɪst/, *play-ed* /pleɪd/ (cf. Chapter 6). This sometimes also happens in

Hungarian but not as often as in English. Thus, the two languages observe the principles of spelling in very different ways – although they are clearly not the two extremes on the scale.

In this chapter we are going to take a look at the regular pronunciation of single consonant letters and consonant digraphs one by one, and also at the letter-to-sound rules that regulate the connection between sounds and letters as well as the exceptions that fail to obey these rules. The next chapter is going to discuss the same for vowel letters and vowel digraphs.[1]

Single consonant letters

Let us take a look at single consonant letters first. For each consonant letter we are going to define what sound(s) it normally represents in what environments, list exceptional cases and positions in which the letter is typically silent. We have to note again that English lacks long or so-called **geminate consonants**. Although doubled consonant letters do occur in English, they are pronounced as short sounds as in *letter* /ˈletə(r)/, *attack* /əˈtæk/, *ballet* RP /ˈbæleɪ/ (GA /bæˈleɪ/), *recommend* /ˌrekəˈmend/, *Higgins* /ˈhɪgɪnz/. Long consonants are only pronounced if two identical consonant sounds are put in adjacent positions at morpheme or word boundaries, i.e., if a word or morpheme ends in a certain consonant and the next one starts with the same as in *disservice* /dɪsˈsɜːvɪs/, *unnatural* /ʌnˈnætʃrəl/, *greenness* /ˈgriːnnɪs/.

[1] Throughout these two chapters transcriptions show RP pronunciations. Keep in mind that GA is a rhotic accent (Chapter 2) with extensive Yod-dropping (Chapter 5) and frequent tapping (Chapters 2 and 7). These and other systematic differences between RP and GA, mentioned in previous chapters, are not indicated separately. However, full transcriptions are given whenever the two accents differ more significantly.

p	It regularly represents the phoneme /p/ and all of its possible variants – weakly or strongly aspirated, unaspirated, glottalized – as in *plenty* /ˈplentɪ/, *prayer* 'words used in praying' /ˈpreə(r)/, *pen* /pen/, *pirate* /ˈpaɪ(ə)rət/, *lap* /læp/ [læp] or [læʔp], *step* /step/ [step] or [steʔp], *leopard* /ˈlepəd/, *super* /ˈs(j)uːpə(r)/, *supper* /ˈsʌpə(r)/. It is regularly silent in word-initial position in *pn-* and *ps-* as in *pneumonia* /njuːˈməʊnjə/, *pneumatic* /njuːˈmætɪk/, *psychology* /saɪˈkɒlədʒɪ/, *psychiatrist* /saɪˈkaɪətrɪst/, *psychopath* /ˈsaɪkəpæθ/. It is irregularly silent in *corps* /kɔː/, *coup* /kuː/, *cupboard* /ˈkʌbəd/, *raspberry* /ˈrɑːzbrɪ/, *receipt* /rɪˈsiːt/.
b	It regularly represents the phoneme /b/ and its – devoiced or voiced – allophones as in *banana* RP /bəˈnɑːnə/ (GA /-næ-/), *below* /bɪˈləʊ/, *label* /ˈleɪbl/, *sober* /ˈsəʊbə(r)/, *rob* /rɒb/, *stab* /stæb/, *rubber* /ˈrʌbə(r)/, *pebble* /ˈpebl/. It is regularly silent in morpheme-final position after a nasal as in *numb* /nʌm/, *bomb* /bɒm/, *climb* /klaɪm/, *numbest* /ˈnʌmɪst/, *bomber* /ˈbɒmə(r)/, *bombed* /bɒmd/, *climbing* /ˈklaɪmɪŋ/. (Cf. Chapter 5.) It is irregularly silent in certain *-bt* clusters as in *debt* /det/, *debtor* /ˈdetə(r)/, *doubt* /daʊt/, *subtle* /ˈsʌtl/.
t	It regularly represents the phoneme /t/ and its allophonic – weakly or strongly aspirated, unaspirated, glottalized or flapped – variants as in *take* /teɪk/, *tonight* /təˈnaɪt/, *better* /ˈbetə(r)/ [ˈbetə(r)] or [ˈbeɾə(r)], *rotten* /ˈrɒtn/, *late* /leɪt/ [leɪt], [leɪʔt] or [leɪʔ], *fantastic* /fænˈtæstɪk/. It regularly represents the palatals /ʃ/ and /tʃ/ in cases of lexical palatalization (see rule at the end of Chapter 11) in words like *action*

/ˈækʃn/, *literature* /ˈlɪtrɪtʃə(r)/, *motion* /ˈməʊʃn/, *nature* /ˈneɪtʃə(r)/, *picture* /ˈpɪktʃə(r)/, *question* /ˈkwestʃn/.

It is irregularly silent in words of French origin ending in *-et* as in *ballet* RP /ˈbæleɪ/, *beret* RP /ˈbereɪ/ (GA /bəˈreɪ/), *bouquet* /buːˈkeɪ/ or /bəʊˈkeɪ/, *buffet* RP /ˈbʊfeɪ/ (GA /bəˈfeɪ/), *cabaret* /ˈkæbəreɪ/, *Chevrolet* RP /ˈʃevrəleɪ/ (GA /ˌʃevrəˈleɪ/).

It is irregularly silent in consonant clusters in words like *boatswain* /ˈbəʊsn/ (also spelled *bosun*), *Christmas* /ˈkrɪsməs/, *forecastle* /ˈfəʊksl/, *listen* /ˈlɪsn/, *often* /ˈɒfn/ (this word is pronounced by some speakers as /ˈɒftən/), *wrestle* /ˈresl/, *tsar* /zɑː(r)/.

d It regularly represent the phoneme /d/ and its allophonic – devoiced, flapped – variants as in *damage* /ˈdæmɪdʒ/, *delete* /dɪˈliːt/, *rider* /ˈraɪdə(r)/, [ˈraɪdə(r)] or [ˈraɪrə(r)], *sender* /ˈsendə(r)/, *madder* /ˈmædə(r)/, [ˈmædə(r)] or [ˈmærə(r)], *bend* /bend/, *recommend* /ˌrekəˈmend/.

It regularly represents the phoneme /t/ in the past tense suffix after stem final voiceless consonants other than /t/ as in *backed* /bækt/, *kissed* /kɪst/, *laughed* RP /lɑːft/ (GA /læft/), *squashed* /skwɒʃt/, *stepped* /stept/ (for the pronunciation rule of the past tense suffix, see Chapter 6).

It regularly represents the palatal /dʒ/ in cases of Palatalization (see below) in words like *educate* /ˈedʒʊkeɪt/, *gradual* /ˈgrædʒʊəl/, *grandeur* /ˈgrændʒə(r)/, *soldier* /ˈsəʊldʒə(r)/.

It is irregularly silent in words like *grandmother* /ˈgrænmʌðə(r)/,

	grandpa /ˈgrænpɑː/, *sandwich* /ˈsænwɪtʃ/ or /ˈsænwɪdʒ/.
k	It regularly represents the phoneme /k/ and its allophonic – weakly or strongly aspirated, unaspirated and glottalized – variants as in *kettle* /ˈketl/, *king* /kɪŋ/, *baker* /ˈbeɪkə(r)/, *poker* /ˈpəʊkə(r)/, *banking* /ˈbæŋkɪŋ/, *thank* /θæŋk/. It is regularly silent in word-initial *kn-* cluters as in *knave* /neɪv/, *knife* /naɪf/, *knitting* /ˈnɪtɪŋ/, *knock* /nɒk/, *knowledge* /ˈnɒlɪdʒ/, *knuckle* /nʌkl/.
c	It regularly represents the phoneme /k/ and its – aspirated, unaspirated and glottalized – variants as in *cat* /kæt/ *cover* /ˈkʌvə(r)/, *account* /əˈkaʊnt/, *vicar* /ˈvɪkə(r)/, *acne* /ˈæknɪ/. It regularly represents the phoneme /s/ as in *city* /ˈsɪtɪ/, *lucid* /ˈl(j)uːsɪd/, *face* /feɪs/, *racing* /ˈreɪsɪŋ/, *dice* /daɪs/ (see the discussion of Velar Softening below). It regularly represents the phoneme /ʃ/ in cases of Palatalization (see below) as in *vicious* /ˈvɪʃəs/, *musician* /mjuːˈzɪʃn/, *facial* /ˈfeɪʃl/, *social* /ˈsəʊʃl/, *ocean* /ˈəʊʃn/. It irregularly represents the phoneme /tʃ/ in words of Italian origin like *cello* /ˈtʃeləʊ/, *concerto* /kənˈtʃeətəʊ/. It is irregularly silent in *Connecticut* /kəˈnetɪkət/, *endictment* /ɪnˈdaɪtmənt/, *muscle* /ˈmʌsl/, *czar* /zɑː(r)/.
g	It regularly represents the phoneme /g/ and its devoiced variant as in *gallop* /ˈgæləp/, *get* /get/, *goulash* RP /ˈguːlæʃ/ (GA /ˈguːlɑːʃ/), *linguist* /ˈlɪŋgwɪst/, *longer* /ˈlɒŋgə(r)/, *beggar* /ˈbegə(r)/, *bigger* /ˈbɪgə(r)/, *hug*

	/hʌg/. It regularly represents the phoneme /dʒ/ (see the discussion on Velar Softening below) and its – devoiced – variants as in *engineer* /ˌendʒɪˈnɪə(r)/, *gym* /dʒɪm/, *ginger* /ˈdʒɪndʒə(r)/, *harbinger* /ˈhɑːbɪndʒə(r)/, *huge* /hjuːdʒ/. It is irregularly pronounced as /ʒ/ in French loanwords as in *beige* /beɪʒ/, *garage* RP /ˈgærɑːʒ/ (GA /gəˈrɑːʒ/), *collage* /kəˈlɑːʒ/, *regime* RP /reɪˈʒiːm/ (GA /rəˈʒiːm/). It is regularly silent in morpheme-final position after a nasal as in *sing* /sɪŋ/, *singing* /ˈsɪŋɪŋ/, *singer* /ˈsɪŋə(r)/, *belong* /bɪˈlɒŋ/, *belonged* /bɪˈlɒŋd/. But it is irregularly pronounced in morpheme-final position after a nasal in the comparative and superlative forms of the following three adjectives: *long* /lɒŋ/, *longer* /ˈlɒŋgə(r)/, *longest* /ˈlɒŋgɪst/, *young* /jʌŋ/, *younger* /ˈjʌŋgə(r)/, *youngest* /ˈjʌŋgɪst/, *strong* /strɒŋ/, *stronger* /ˈstrɒŋgə(r)/, *strongest* /ˈstrɒŋgɪst/. (Cf. Chapter 5.) It is regularly silent in word-initial and word-final *gn* clusters as in *gnome* /nəʊm/, *gnu* /nuː/; *sign* /saɪn/, *resign* /rɪˈzaɪn/.
j	It regularly represents the phoneme /dʒ/ and its devoiced variant as in *jet* /dʒet/, *jockey* /ˈdʒɒkɪ/, *cajole* /kəˈdʒəʊl/, *Don Juan* /ˈdɒn ˈdʒuːən/. It irregularly represents the phoneme /h/ in some Spanish geographical names like *Baja* /ˈbɑːhɑː/. Note that this consonant letter is never pronounced as /j/!
f	It is regularly pronounced as /f/ as in *final* /ˈfaɪnl/, *forget* /fəˈget/, *café* RP /ˈkæfeɪ/ (GA /kæˈfeɪ/), *reference* /ˈrefrəns/, *coffee* /ˈkɒfɪ/, *strife*

	/straɪf/, *stuff* /stʌf/, *staff* RP /stɑːf/ (GA /stæf/). It is irregularly pronounced as /v/ in *of* RP /ɒv/ (GA /ʌv/) (in its strong form) or /əv/ (in its weak form). (Cf. Chapter 7.)
v	It is regularly pronounced as /v/ and its devoiced variant as in *veal* /viːl/, *vanity* /ˈvænɪtɪ/, *lover* /ˈlʌvə(r)/, *never* /ˈnevə(r)/, *Denver* /ˈdenvə(r)/, *elves* /elvz/, *wives* /waɪvz/, *grave* /greɪv/, *jive* /dʒaɪv/. It never represents the phoneme /w/!
s	It regularly represents the phonemes /s/ and /z/ depending on the environment: Word-initially it regularly represents the phoneme /s/ as in *singer* /ˈsɪŋə(r)/, *silence* /ˈsaɪləns/, *Sudan* RP /suːˈdɑːn/ (GA /-ˈdæn/), *senior* /ˈsiːnɪə(r)/. Word-finally it regularly represents /s/ as in *hazardous* /ˈhæzədəs/, *cactus* /ˈkæktəs/, *crisis* /ˈkraɪsɪs/, *minus* /ˈmaɪnəs/, *bus* /bʌs/; but it irregularly represents /z/ in word-final position in proper names and function words, i.e., in words like *is* /ɪz/, *was* RP /wɒz/ (GA /wʌz/) or /wəz/, *has* /hæz/ or /həz/, *his* /hɪz/, *Jones* /dʒəʊnz/, *James* /dʒeɪmz/, *Charles* /tʃɑːlz/. Between vowel letters it regularly represents /z/ as in *music* /ˈmjuːzɪk/, *desert* (n) /ˈdezət/, *cousin* /ˈkʌzɪn/, *phase* /feɪz/, *close* (v) /kləʊz/, *bosom* /ˈbʊzəm/, *busy* /ˈbɪzɪ/; but it irregularly represents /s/ between vowel letters, for instance in *base* /beɪs/, *basic* /ˈbeɪsɪk/, *case* /keɪs/, *bison* /ˈbaɪsn/, *promise* /ˈprɒmɪs/, *goose* /guːs/, *house* /haʊs/, *close* (adj) /kləʊs/.

Between a root vowel and an affix vowel it normally represents /s/ as in *dis-integrate* /dɪsˈɪntəgreɪt/, *dis-agree* /ˌdɪsəˈgriː/, *mis-understand* /ˌmɪsʌndəˈstænd/, *bi-sect* /baɪˈsekt/, *be-side* /bɪˈsaɪd/; but it irregularly represents /z/ in words like *divis-ible* /dɪˈvɪzɪbl/, *pre-sume* /prɪˈz(j)uːm/, *dis-ease* /dɪˈziːz/, *de-sign* /dɪˈzaɪn/ (the hyphens indicate morpheme boundaries).

It regularly represents /s/ when doubled, *ss*, as in *kiss* /kɪs/, *bass* /beɪs/, *message* /ˈmesɪdʒ/, *passing* RP /ˈpɑːsɪŋ/ (GA /ˈpæsɪŋ/), *assassin* /əˈsæsɪn/, but it irregularly represents /z/ in words like *scissors* /ˈsɪzəz/, *dissolve* /dɪˈzɒlv/, *dessert* /dɪˈzɜːt/, *possess* /pəˈzes/.

It regularly represents /s/ after *n*, *l*, and *r* (silent in the non-rhotic accents) as in *course* /kɔːs/, *horse* /hɔːs/, *universe* /ˈjuːnɪvɜːs/, *insist* /ɪnˈsɪst/, *tense* /tens/, *false* /fɔːls/, *pulse* /pʌls/.

It regularly represents /z/ in final *-es* when not a regular suffix as in *species* /ˈspiːʃiːz/, *Hercules* /ˈhɜːkjʊliːz/, *analyses* /əˈnæləsiːz/, *crises* /ˈkraɪsiːz/, *Mercedes* /mɜːˈseɪdiːz/.

It regularly represents /s/ or /z/ in the regular suffix *-(e)s*. For the rules of its pronunciation, see Chapter 6.

It regularly represents the palatalized variants of the above sounds, /ʃ/ and /ʒ/, in all the possible environments (for Palatalization see below) as in *mission* /ˈmɪʃn/, *sure* /ʃʊə(r)/, *mansion* /ˈmænʃn/, *version* RP /ˈvɜːʃn/ (GA /ˈvɜrʒn/), *vision* /ˈvɪʒn/, *measure* /ˈmeʒə(r)/, *fusion* /ˈfjuːʒn/.

z — It regularly represents the phoneme /z/ and its devoiced variant as in

	zoo /zuː/, *zeal* /ziːl/, *razor* /ˈreɪzə(r)/, *Gonzo* /ˈgɒnzəʊ/, *buzz* /bʌz/.
m	It regularly represents the phoneme /m/ as in *matter* /ˈmætə(r)/, *meringue* /məˈræŋ/, *hammer* /ˈhæmə(r)/, *summer* /ˈsʌmə(r)/, *plumb* /plʌm/, *bottom* /ˈbɒtm/. It is irregularly silent in the word-initial *mn-* cluster in *mnemonic* /nɪˈmɒnɪk/.
n	It regularly represents the phoneme /n/ as in *number* /ˈnʌmbə(r)/, *notion* /ˈnəʊʃn/, *penny* /ˈpenɪ/, *fence* /fens/, *pin* /pɪn/. It regularly represents the phoneme /ŋ/ when followed by *k* or *g* (at least in spelling) as in *ink* /ɪŋk/, *sing* /sɪŋ/, *singing* /ˈsɪŋɪŋ/, *language* /ˈlæŋgwɪdʒ/, *pink* /pɪŋk/, *banquet* /ˈbæŋkwɪt/. It is irregularly silent in final *-mn* clusters as in *autumn* /ˈɔːtəm/, *solemn* /ˈsɒləm/, *condemn* /kənˈdem/.
l	It regularly represents the phoneme /l/ and its – clear and dark – allophones (see Chapter 2) as in *light* /laɪt/, *level* /ˈlevl/, *building* /ˈbɪldɪŋ/, *follow* /ˈfɒləʊ/, *fell* /fel/, *people* /ˈpiːpl/, *final* /ˈfaɪnl/. It is irregularly silent before consonants in words like *folk* /fəʊk/, *talk* /tɔːk/, *walk* /wɔːk/, *yolk* /jəʊk/, *salmon* /ˈsæmən/, *almonds* /ˈɑːməndz/.
r	It regularly represents the phoneme /r/ as in *rifle* /ˈraɪfl/, *raccoon* /rəˈkuːn/, *redial* /riːˈdaɪəl/, *burial* /ˈberɪəl/, *borrow* /ˈbɒrəʊ/, *caring* /ˈkeərɪŋ/. It is regularly made silent before consonants and a pause by the R-Dropping Rule (see Chapter 2) as in *cart* /kɑːt/, *flair* /fleə(r)/, *barn* /bɑːn/, *steer* /stɪə(r)/.

	Note that it is silent in *iron* /ˈaɪən/ (cf. footnote 1 in Chapter 4).
y	It regularly represents the phoneme /j/ as in *yet* /jɛt/, *yoghurt* /ˈjɒgət/, *mayonnaise* /ˌmeɪəˈneɪz/, *junkyard* /ˈdʒʌŋkjɑːd/. It often functions as a single vowel letter, almost like a variant of <i>, as in *cry* /kraɪ/, *analysis* /əˈnælɪsɪs/, *bicycle* /ˈbaɪsɪkl/ or, after a vowel letter, as a member of vowel digraphs like <ay>, <ey>, <oy> as in *bay* /beɪ/, *key* /kiː/, *coyote* /kɔɪˈəʊtɪ/ (see Chapter 12).
w	It regularly represents the phoneme /w/ and its – devoiced – variants as in *want* /wɒnt/, *reward* /rɪˈwɔːd/, *away* /əˈweɪ/, *watt* /wɒt/, *witch* /wɪtʃ/. It is regularly silent in initial *wr-* clusters as in *writer* /ˈraɪtə(r)/, *wrong* /rɒŋ/, *wretched* /ˈretʃɪd/, *wrist* /rɪst/. It is irregularly silent in words like *who* /huː/, *whom* /huːm/, *whose* /huːz/, *whole* /həʊl/, *answer* RP /ˈɑːnsə(r)/ (GA /ˈænsər/), *sword* /sɔːd/, *two* /tuː/. Note that when following a vowel letter, it often forms part of a vowel digraph as in *row* /rəʊ/ or /raʊ/, *coward* /ˈkaʊəd/. For details see the next chapter. For the pronunciation of the digraph *wh*, see below.
h	It regularly represents the phoneme /h/ as in *head* /hed/, *hollow* /ˈhɒləʊ/, *history* /ˈhɪstrɪ/, *ahead* /əˈhed/, *cohesion* /kəʊˈhiːʒn/. It is regularly silent in words like *Shah* /ʃɑː/, *blah-blah* /ˈblɑːblɑː/, *yacht* /jɒt/, *vehicle* /ˈviːɪkl/, *annihilate* /əˈnaɪəleɪt/. It is irregularly silent in words like *honest* /ˈɒnɪst/, *hour* /aʊə(r)/.

	For the rule on the deletion of /h/, see below.
x	It regularly represents the sequence /ks/ and its palatalized variant (see the rule of Palatalization below) as in *axe* /æks/, *expand* /ɪkˈspænd/, *exit* /ˈeksɪt/, *boxing* /ˈbɒksɪŋ/, *tax* /tæks/, *anxious* /ˈæŋkʃəs/, *luxury* /ˈlʌkʃərɪ/. It regularly represents the sequence /gz/ and its palatalized version /gʒ/ when followed by a stressed vowel as in *executive* /ɪgˈzekjʊtɪv/, *example* RP /ɪgˈzɑːmpl/ (GA /-ˈzæm-/), *exist* /ɪgˈzɪst/, *exempt* /ɪgˈzempt/, *exult* /ɪgˈzʌlt/, *luxurious* /lʌgˈʒʊərɪəs/. It regularly represents the phoneme /z/ when word-initial as in *xerox* /ˈzɪərɒks/, *xylophone* /ˈzaɪləfəʊn/, *Xavier* /ˈzævɪə/, *xenophobia* /ˌzenəˈfəʊbɪə/, Xena /ˈziːnə/.
q	It regularly represents the phoneme /k/ and its – weakly or strongly aspirated, unaspirated or glottalized – variants as in *quotation* /kwəʊˈteɪʃn/, *quickly* /ˈkwɪklɪ/, *quart* /kwɔːt/, *clique* /kliːk/, *antique* /ænˈtiːk/, *liqueur* RP /lɪˈkjʊə(r)/ (GA /lɪˈkɜr/), *liquid* /ˈlɪkwɪd/, *lacquer* /ˈlækə(r)/.

Finally, we must consider two vowel letters that may often represent the consonant /w/ in certain environments.

u	It may regularly represent the phoneme /w/ in the combinations *qu, ngu, su* in words like *language* /ˈlæŋgwɪdʒ/, *acquaint* /əˈkweɪnt/, *aquarium* /əˈkweərɪəm/, *banquet* /ˈbæŋkwɪt/, *persuade* /pəˈsweɪd/, *dissuade* /dɪˈsweɪd/, *suite* /swiːt/, *quest* /kwest/, *question* /ˈkwestʃn/.

o It may irregularly represent the phoneme /w/ or the phoneme combination /wʌ/ in words like *choir* /kwaɪə/, *one* /wʌn/, *once* /wʌns/, and in some words of French origin containing *-oir, -ois* as in *reservoir* /ˈrezəvwɑː(r)/, *bourgeois* /ˈbʊəʒwɑː/, *memoirs* /ˈmemwɑːz/.

Let us now turn to those cases when two or three consonant letters represent a phoneme regularly, i.e., to **digraphs** and **trigraphs**.

Consonant digraphs and trigraphs

Before we start discussing consonant digraphs, we must emphasize once more that although there are a great many English words containing two identical consonant letters next to one another, these are normally pronounced as a single short consonant unless they belong to two different morphemes (see above). In the following, we only discuss cases in which the two consonant letters are different.

ch It regularly represents the phoneme /tʃ/ and its glottalized variant as in *chocolate* /ˈtʃɒklɪt/, *bachelor* /ˈbætʃələ(r)/, *beach* /biːtʃ/, *chunk* /tʃʌŋk/, *munch* /mʌntʃ/, *cheque/check* /tʃek/.

It irregularly represents the phoneme /ʃ/ in words of French origin like *machine* /məˈʃiːn/, *moustache* RP /məˈstɑːʃ/ (GA /ˈmʌstæʃ/), *champagne* /ˌʃæmˈpeɪn/, *chauffeur* RP /ˈʃəʊfə(r)/ (GA /ʃoʊˈfɜr/), *chauvinism* /ˈʃəʊvɪnɪzəm/, *chic* /ʃiːk/, and also in *Chicago* /ʃɪˈkɑːgəʊ/, *Chevrolet* /ˈʃevrəleɪ/, *Michigan* /ˈmɪʃɪgən/.

It regularly represents the phoneme /k/ and its allophones, mostly in words of Latin and Greek origin as in *chaos* /ˈkeɪɒs/, *chameleon*

	/kəˈmiːlɪən/, *character* /ˈkærɪktə(r)/, *charisma* /kəˈrɪzmə/, *chemical* /ˈkemɪkl/, *choir* /kwaɪə/, *Christian* /ˈkrɪstʃən/, *Munich* /ˈmjuːnɪk/, *echo* /ˈekəʊ/, *Czech* /tʃek/.
tch	It regularly represents the phoneme /tʃ/ as in *catching* /ˈkætʃɪŋ/, *fetch* /fetʃ/, *latch* /lætʃ/, *wretched* /ˈretʃɪd/.
rh	It regularly represents the phoneme /r/, i.e., we may say that the letter <h> is regularly silent in this combination in words like *rhyme* /raɪm/, *rhythm* /ˈrɪðm/, *rheumatism* /ˈruːmətɪzm/, *rhino* /ˈraɪnəʊ/, *myrrh* /mɜː(r)/.
sh	It regularly represents the phoneme /ʃ/ as in *shooting* /ˈʃuːtɪŋ/, *fashion* /ˈfæʃn/, *cushion* /ˈkʊʃn/, *bushes* /ˈbʊʃɪz/, *crush* /krʌʃ/, *hush* /hʌʃ/, *Bolshevik* RP /ˈbɒlʃəvɪk/ (GA /ˈboʊl-/).
ph	It regularly represents the phoneme /f/ as in *phoneme* /ˈfəʊniːm/, *allophone* /ˈæləfəʊn/, *Humphrey* /ˈhʌmfrɪ/, *pamphlet* /ˈpæmflɪt/, *photograph* RP /ˈfəʊtəgrɑːf/ (GA /-græf/).
th	This digraph regularly represents the dental fricatives /θ/ and /ð/. Unfortunately there is no rule predicting when it stands for which. However, we can say that in the majority of the cases, especially in "international" words of Greek origin, it is normally /θ/ except for *rhythm* /ˈrɪðm/, and that in function words it is pronounced as /ð/, e.g., *they* /ðeɪ/, *that* /ðæt/, *those* /ðəʊz/. /θ/: *thinking* /ˈθɪŋkɪŋ/, *bath* RP /bɑːθ/ (GA /bæθ/), *cathedral* /kəˈθiːdrəl/, *healthy* /ˈhelθɪ/, *Thursday* /ˈθɜːzdɪ/, *fifth* /fɪfθ/, *length* /leŋθ/, *method* /ˈmeθəd/. /ð/: *bathe* /beɪð/, *feather* /ˈfeðə(r)/, *this* /ðɪs/, *these* /ðiːz/, *the* /ðə/,

	brother /ˈbrʌðə(r)/*, soothe* /suːð/. It irregularly represents the phoneme /t/ in a few words, typically in proper names: *Thomas* /ˈtɒməs/*, Thames* /temz/*, Anthony* /ˈæntənɪ/*, thyme* /taɪm/.
kh	It regularly represents the phoneme /k/ as in *khaki* RP /ˈkɑːkɪ/ (GA /ˈkækɪ/).
gh	It irregularly represents two phonemes, /g/ and /f/, the former before vowels as in *ghoul* /guːl/*, ghost* /gəʊst/*, ghetto* /ˈgetəʊ/*, gherkin* /ˈgɜːkɪn/, the latter in a few words as in *enough* /ɪˈnʌf/*, rough* /rʌf/*, toughness* /ˈtʌfnɪs/*, laughing* RP /ˈlɑːfɪŋ/ (GA /ˈlæfɪŋ/)*, cough* /kɒf/. It is irregularly silent in many words and indicates the length of the preceding vowel as in *sight* /saɪt/*, nightingale* /ˈnaɪtɪŋgeɪl/*, fought* /fɔːt/*, weight* /weɪt/*, although* /ɔːlˈðəʊ/*, daughter* /ˈdɔːtə(r)/*, height* /haɪt/.
wh	It regularly represents the phoneme /w/ as in *where* /weə(r)/*, why* /waɪ/*, what* /wɒt/*, whale* /weɪl/*, wheel* /wiːl/*, whether* /ˈweðə(r)/*, whine* /waɪn/. Note that in some dialects of English (especially in some American dialects and in conservative British, e.g., Scottish pronunciations) it represents a voiceless labiovelar, /ʍ/.[2] For these speakers there is a difference between *which* /ʍɪtʃ/ and *witch* /wɪtʃ/, *where* /ʍeə(r)/ and *wear* /weə(r)/.
qu	It regularly represents the phoneme /k/ word-finally as in *cheque* /tʃek/, *antique* /ænˈtiːk/, *clique* /kliːk/.

[2] This sound is similar to the sequence of a /h/ and a /w/.

	It regularly represents the phoneme combination /kw/ in other positions as in *queen* /kwiːn/, *question* /ˈkwestʃn/, *request* /rɪˈkwest/, *banquet* /ˈbæŋkwɪt/. It irregularly represents the phoneme /k/ in *queue* /kjuː/, *quay* /kiː/, *liquor* /ˈlɪkə(r)/, *liqueur* RP /lɪˈkjʊə(r)/.
gu	It regularly represents the phoneme /g/ (for the pronunciation rules of *g* see below) as in *guerrilla* /gəˈrɪlə/, *guest* /gest/, *guardian* /ˈgɑːdjən/, *colleague* /ˈkɒliːg/, *guy* /gaɪ/. It regularly represents /gw/ in the combination *ngu* as in *language* /ˈlæŋgwɪdʒ/, *distinguish* /dɪˈstɪŋgwɪʃ/. In some words *gu* is actually a sequence of *g* + *u* and is pronounced as /gjuː/ or /gjʊ/ as in *argument* /ˈɑːgjʊmənt/, *Jaguar* /ˈdʒægjʊə(r)/.
ck	It regularly represents the phoneme /k/ as in *back* /bæk/, *hacker* /ˈhækə(r)/, *reckon* /ˈrekən/, *docking* /ˈdɒkɪŋ/, *sucker* /ˈsʌkə(r)/.
cz	It regularly represents the phoneme /tʃ/ as in *Czech* /tʃek/, *Czechoslovakia* /ˌtʃekəsləˈvækɪə/, *czardas* RP /ˈtʃɑːdæʃ/ (GA /ˈtʃɑrdɑːʃ/).
dg	It regularly represents the phoneme /dʒ/ in environments where *g* would represent /dʒ/ as in *edge* /edʒ/, *hedge* /hedʒ/, *badger* /ˈbædʒə(r)/, *gadget* /ˈgædʒɪt/, *budget* /ˈbʌdʒɪt/, *bridge* /brɪdʒ/. It irregularly represents the phoneme sequence /dg/ in some words as in *Edgar* /ˈedgə(r)/.
xc	It regularly represents the phoneme sequence /ks/ before the vowel letters *e, i, y* as in *excited* /ɪkˈsaɪtɪd/, *excellent* /ˈeksələnt/, *exception*

	/ɪkˈsepʃn/.
sc	It regularly represents the phoneme /s/ before the vowel letters *e, i, y* as in *science* /ˈsaɪəns/, *scenery* /ˈsiːnərɪ/, *sci-fi* /ˈsaɪfaɪ/, *scissors* /ˈsɪzəz/.

In the last part of this chapter we take a look at the rules that regulate some of the letter-to-sound correspondences mentioned above.

Consonant rules

Lexical palatalization

Lexical palatalization is a rule that operates inside a word, i.e., a lexical item, and regulates the pronunciation of the consonant letters <t>, <d>, <s>, <c>, <x> representing the alveolar obstruents /t/, /d/, /s/, /z/ before an underlying /j/ phoneme represented by the vowel letters <i> or <u> in certain environments. It is an obligatory process independent of style, speech situation or tempo (in contrast to cross-word palatalization, discussed in Chapter 7).

1. **Palatalization by <i>**

An alveolar obstruent will be palatalized before <i> if the vowel letter if the vowel letter does not represent a stressed vowel and it is followed by another vowel letter. It is also important that palatalization does not apply in word-initial position (for exceptions see Palatalization by <u>). This environment of palatalization is often referred to as *CiV* as the alveolar consonant, i.e., C, is followed by the vowel letter <i> and another vowel letter, i.e., V, hence the name *CiV.* (We have seen a different effect of the same environment in CiV Laxness and CiV Tenseness in Chapter 3.) The vowel letter <i> is usually not

pronounced at all, e.g., *soCIAl* /ˈsəʊʃl/ (the relevant letters of the words will be capitalized).

	alveolar C ⇩	unstressed <i> ⇩	V letter ⇩		
so	c	i	a	l	/ˈsəʊʃl/
an	c	i	e	nt	/ˈeɪnʃnt/
mi	ss	i	o	n	/ˈmɪʃn/
vi	s	i	o	n	/ˈvɪʒn/
an	x	i	o	us	/ˈæŋkʃəs/
men	t	i	o	n	/ˈmenʃn/
ques	t	i	o	n	/ˈkwestʃn/
sol	d	i	e	r	/ˈsəʊldʒə(r)/

Note that because of the above requirements there is no lexical palatalization if the vowel letter <i> represents a stressed vowel, e.g., *soCIEty* /səˈsaɪətɪ/, or if it is not followed by another vowel letter, e.g., *construcTIVe* /kənˈstrʌktɪv/.

2. **Palatalization by <u>**

An alveolar obstruent will also be palatalized before <u> if the vowel letter represents an unstressed vowel and it is followed by another vowel letter or a consonant+vowel letter combination. Palatalization by <u> does not apply in word-initial position, except in the words *sugar* /ˈʃʊgə(r)/ and *sure* /ʃʊə(r)/. It logically follows from the above that there is no palatalization if <u> represents a stressed vowel, e.g., *asSUME* /əˈsjuːm/, or if <u> is not followed by another vowel letter or consonant+vowel letter combination but two consonant letters or one consonant letter in word-final position, e.g., *constrUCT* /kənˈstrʌkt/, *cacTUS* /ˈkæktəs/. The word *maTURE* /məˈtʃʊə(r)/ is

exceptional as Lexical Palatalization does apply although <u> is stressed (but it is usually /məˈtʊər/ in GA).

	alveolar C ⇩	unstressed <u> ⇩	V letter ⇩		
u	s	u	a	l	/ˈjuːʒʊəl/
ca	s	u	a	l	/ˈkæʒʊəl/
vi	s	u	a	l	/ˈvɪʒʊəl/
ac	t	u	a	l	/ˈæktʃʊəl/
sen	s	u	a	l	/ˈsenʃʊəl/

	alveolar C ⇩	unstressed <u> ⇩	C letter ⇩	V letter ⇩	
na	t	u	r	e	/ˈneɪtʃə(r)/
litera	t	u	r	e	/ˈlɪtrɪtʃə(r)/
mea	s	u	r	e	/ˈmeʒə(r)/
cen	s	u	r	e	/ˈsenʃə(r)/

The dropping of <b> and <g>

We have already noted in the discussion above (as well as in Chapter 5) that the consonants *b* and *g* are often dropped in certain positions. As it will be clear from what follows, the two consonants are affected by the very same letter-to-sound rule. These voiced non-coronal stops are dropped if they are preceded by a homorganic nasal and are in morpheme-final position. It follows, then, that the two stops are not dropped in morpheme-initial and internal positions.

b dropped	*b* pronounced	*g* dropped	*g* pronounced
climber /ˈklaɪmə(r)/	*timber* /ˈtɪmbə(r)/	*singer* /ˈsɪŋə(r)/	*fungus* /ˈfʌŋgəs/
number (adj) /ˈnʌmə(r)/	*number* (n) /ˈnʌmbə(r)/	*hanging* /ˈhæŋɪŋ/	*bingo* /ˈbɪŋgəʊ/
thumb /θʌm/	*sombrero* /sɒmˈbreərəʊ/	*belonged* /bɪˈlɒŋd/	*Bangor* /ˈbæŋgə(r)/

The dropping of <h>

The consonant *h* has a very restricted distribution in both English and Hungarian. In both languages the *h* is silent in word-final position and before consonants.

h silent in Hungarian
céh /tseː/, *juh* /ju/, *csehnek* /ˈtʃɛnɛk/, *méhtől* /ˈmeːtøːl/

h silent in English
Shah /ʃɑː/, *Sarah* /ˈseərə/, *John* /dʒɒn/, *yacht* /jɒt/

In a great many words in Hungarian the letter *h* is pronounced before a vowel or in final position. Note, however, that in final position it is not a glottal fricative, /h/, that occurs in pronunciation but a voiceless velar fricative, /x/ (the same sound as the so-called Ach-Laut in German), as in *doh* /dox/, *potroh* /ˈpotrox/, *jacht* /jɒxt/, *Bachtól* /ˈbɒxtoːl/.

Another difference between the two languages lies in the behaviour of *h* before vowels: in Hungarian *h* is always pronounced before vowels while in English, as mentioned in Chapter 7, *h* is only pronounced before stressed vowels. Before unstressed vowels it is always deleted in English (recall examples like *véhicle* vs. *vehícular*), except in word-initial position, where it is pronounced even before unstressed vowels, e.g., in both *hállow* and *helló*.

h pronounced in Hungarian
ház /haːz/, *juhéj* /ˈjuheːj/, *csehek* /ˈtʃɛhɛk/, *méhek* /ˈmeːhɛk/

h pronounced in English
historical /hɪˈstɒrɪkl/, *ahead* /əˈhed/, *height* /haɪt/, *Soho* /ˈsəʊhəʊ/

In some words, of typically French origin, the *h* is irregularly silent in initial position as in *honest* /ˈɒnɪst/, *honour* /ˈɒnə(r)/, *heir* /eə(r)/, *hour* /aʊə(r)/, and

before a stressed vowel in *exháust, exhíbit, exhílarate, exhórt* and all their derivatives.

Velar Softening

Velar Softening regulates the pronunciation of the consonant letters *c* and *g*, which have two regular pronunciations, a "hard" one, a velar stop, and a "soft" one, a coronal sibilant: *c* may be pronounced as /k/ or /s/ while *g* may represent /g/ or /dʒ/. According to the rule, *c* and *g* are pronounced soft, i.e., as a coronal sibilant, before the vowel letters <e>, <i>, <y> regardless of whether the vowel letter is pronounced and how it is pronounced, i.e., it is a purely graphic rule only based on spelling.

c regularly pronounced as /s/
cellar /ˈselə(r)/, *facilitate* /fəˈsɪlɪteɪt/, *cyber* /ˈsaɪbə(r)/, *dance* RP /dɑːns/ (GA /dæns/)

g regularly pronounced as /dʒ/
fragile RP /ˈfrædʒaɪl/ (GA /ˈfrædʒl/), *sergeant* /ˈsɑːdʒənt/, *stingy* /ˈstɪndʒɪ/, *gyroscope* /ˈdʒaɪrəskəʊp/

There are quite a few cases when *c* and (especially) *g* fail to be pronounced soft in this environment, for instance:

c irregularly pronounced as /k/
soccer /ˈsɒkə(r)/, *Celtic* /ˈkeltɪk/, *sceptical* /ˈskeptɪkl/

g irregularly pronounced as /g/
get /ˈget/, *give* /ˈgɪv/, *hunger* /ˈhʌŋgə(r)/, *finger* /ˈfɪŋgə(r)/, *begin* /bɪˈgɪn/, *girl* /gɜːl/

In other positions, i.e., before other vowel letters, before consonant letters and in word-final position *c* and *g* are normally pronounced hard, as a velar stop, although exceptions exist, e.g., *Caesar, gaol, margarine, veg,* etc. Note

that in morpheme-final position after a nasal, *g* is not pronounced (see above).

c regularly pronounced as /k/
catarrh /kəˈtɑː(r)/, *function* /ˈfʌŋkʃn/, *culinary* /ˈkʌlɪnərɪ/, *cancer* /ˈkænsə(r)/

g regularly pronounced as /g/
bogus /ˈbəʊgəs/, *language* /ˈlæŋgwɪdʒ/, *distinguish* /dɪˈstɪŋgwɪʃ/, *jungle* /ˈdʒʌŋgl/

We should also remember that root-final *g* is not softened if a regular, productive suffix starting with <e>, <i>, or <y> is added as in *bigger* /ˈbɪgə(r)/ and not */ˈbɪdʒə(r)/, *longest* /ˈlɒŋgɪst/ and not */ˈlɒndʒɪst/, *bagged* /bægd/ and not */bædʒd/.

There are cases, though, when a non-productive suffix is added to the stem, a suffix which is normally placed after a bound and not a free stem. In such cases, if the stem ends in *c* or *g* (which is, of course, pronounced hard in final position if no suffix follows) and the non-productive suffix begins with <e>, <i>, or <y>, then the stem-final consonant changes into a coronal sibilant, i.e., into its soft pronunciation: Velar Softening as a process has taken place. In just the other way round, if a stem ends in a *c* or *g* in their soft pronounciation when followed by a suffix then in the unsuffixed form they will be present with their hard pronunciation.

<c>	*electri*[k] - electri[s]*ity*	<g>	*analo*[g]*ous* – *analo*[ʤ]*y*
	indu[k]*tion* – indu[s]*e*		*ma*[g]*us* – *ma*[ʤ]*ic*
	dedu[k]*tion* – *dedu*[s]*e*		*lo*[g]*o* – *lo*[ʤ]*ic*

Yod-Dropping

This rule was introduced in Chapter 5 as a phonotactic restriction on homorganic consonant clusters, however, it may as well be conceived of as a letter-to-sound rule. Although it refers to the deletion of a consonant sound /j/, it is used to distinguish between two very similar vowel pairs of English, the Plain-Tense /juː/-/uː/ and their Broken-Tense variants /jʊə/-/ʊə/.

The assumption underlying this distinction is that /j/+/uː/ or /j/+/ʊə/ sequences are not really combinations of two separate sounds but form one unit, one complex vowel, like a diphthong. The main reason for this is that the combination /j/+/uː/ has interesting phonotactic characteristics as it shows a very special behaviour in syllable structure. If we list all the possible two or three-member consonant clusters that may start a syllable in English, then we will find that whenever the last member of such a cluster is /j/, it is always followed by the vowel /uː/ or /ʊə/. Of course, it cannot be a coincidence and the most obvious explanation for this state of affairs is that /j/ and /uː/ or its Broken-Tense variant /ʊə/ form one unit, /juː/ and /jʊə/. This complex vowel is regularly represented by <u>, <eu>, <ew>, <ue>, <ui> in spelling. However, it often happens that although one of these possible spellings occurs, in pronunciation we have /uː/ or /ʊə/, i.e., /j/ is missing. This is due to the rule of Yod-Dropping, which deletes the /j/ of the complex vowel /juː/ in certain environments.

1. Obligatory Yod-Dropping

Yod-Dropping is obligatory in RP after palato-alveolars, /ʃ, ʒ, tʃ, dʒ, r/ and consonant+/l/ sequences as in the words *parachute* /ˈpærəʃuːt/, *luxurious*

/lʌgˈʒʊərɪəs/, *mature* RP /məˈtʃʊə(r)/, *June* /dʒuːn/, *July* /dʒuːˈlaɪ/, *rude* /ruːd/, *rumour* /ˈruːmə(r)/.

Recall, however, that in GA Yod-Dropping is much more extensive as it applies after all coronal consonants – dentals, alveolars, palato-alveolars. As a result of this, many words are pronounced differently in (conservative – see below) RP and in GA.

	RP	GA
enthusiasm	/ɪnˈθjuːzɪæzəm/	/ɪnˈθuːzɪæzəm/
new	/njuː/	/nuː/
tuna	/ˈtjuːnə/	/ˈtuːnə/
dubious	/ˈdjuːbɪəs/	/ˈduːbɪəs/
super	/ˈsjuːpə(r)/	/ˈsuːpər/
exuberant	/ɪgˈzjuːbərənt/	/ɪgˈzuːbərənt/
illusion	/ɪˈljuːʒn/	/ɪˈluːʒn/

2. Optional Yod-Dropping

In RP, there is a tendency to also drop the /j/ in some environments, especially in the speech of speakers belonging to the younger generations. Elderly speakers still often retain the Yod in these words. This version of Yod-Dropping is optional, it depends on style and speech tempo. It applies after the consonants /s, z, l/ as in *super* /ˈs(j)uːpə(r)/, *suit* /s(j)uːt/, *assume* /əˈs(j)uːm/, *exuberant* /ɪgˈz(j)uːbərənt/, *presume* /prɪˈz(j)uːm/, *illusion* /ɪˈl(j)uːʒn/, *lukewarm* /ˈl(j)uːkwɔːm/, *lewd* /l(j)uːd/.

3. The absence of Yod-Dropping

It has also been mentioned in Chapter 5 above that if the complex vowel /juː/ occurs in a completely unstressed syllable, Yod-Dropping is prohibited not just in RP but also in GA, where Yod-Dropping is otherwise obligatory in a

much wider range of environments than in RP. Thus, the rule cannot apply in words like *value* /ˈvælju:/, *consulate* /ˈkɒnsjʊlət/, *annual* /ˈænjʊəl/, *menu* /ˈmenju:/.

In this chapter we have seen the regular and irregular pronunciation values of single consonant letters and consonant digraphs, as well as the positions in which they are silent. Then we have also seen the most important letter-to-sound rules that refer to the pronunciation of consonant letters.