Phonetics in the Real World

8.1. Introduction

The goal of this chapter is to provide you with tools and exercises that will help you improve your pronunciation of German. You will learn how to use the spelling of German to determine how words in German should be pronounced. You will put this knowledge to use by reading phonetic transcriptions and by producing phonetic transcriptions of German words and phrases. Listening and speaking exercises in this chapter will focus on the "new" consonants and vowels in German, that is, those sounds that have no counterparts in North American English.

8.2. Orthography and the IPA: Letters and Sounds

As you learned in chapter 1, German orthography is relatively transparent. The way words are spelled in German typically tells us how to pronounce them. However, there is not a perfect one-to-one correspondence between the orthographic symbols used to spell words and the sounds used to pronounce these words. A letter can represent more than one sound. For example, <b> can represent both [b], as in <aber> 'but', and [p], as in <Dieb> 'thief'. One sound can be represented by different letters. The sound [ε], for example, can be represented by both <e> and <ä>, as in <Bett> 'bed' and <älter> 'older'. In addition, two letters can represent one sound (the letters <ch> represent [x] in <Buch> 'book') and one letter can represent two sounds (<z> represents the sounds [ts] in <Zeit> 'time'). Nonetheless, there are some generalizations that can be made about German orthography that will help you determine which sounds you should be aiming for when you pronounce German words.

8.2.1. Consonants

This discussion of German orthography and consonant sounds follows the order of the discussion of German consonants in chapter 1. We start by treating the letters used to represent single sounds, beginning with plosives, the consonants at the top of the chart in table 1.1, and ending with the letter <l>, which represents the lateral approximant, the consonant at the bottom of the chart. We then talk about the letters used to represent important combinations of consonants like affricates.

In our discussion of consonants we will need to talk about syllables. Although you probably know enough about syllables to understand what we will say in this chapter, we want to make sure that you do. If you keep in mind the following points, you should be able to follow our discussion. The sounds in a word are grouped together into larger units that we call syllables. Words like <um> 'around', <da> 'there', <Weg> 'path', and <spitz> 'pointed' all consist of one syllable; words like <aber> 'but', <Beere> 'berry', <streben> 'to strive', and <findest> '(you) find' are all made up of two syllables; words like <bekommen> 'to receive', <Wohnungen> 'apartments', and <Sicherheit> 'certainty' all have three syllables— and so on. You should have no trouble identifying the number of syllables in a word (it can help to clap your hands when you say a word slowly). The different parts of a syllable are important, and there are special terms for these parts (see chapters 4 and 11 for details). All you need to know for the discussion here, however, is whether a consonant is at the beginning of a syllable or at the end. In a word like <leben> 'to live' [leːbən], for example, you need to know that the <b> sound is at the beginning of the second syllable. In a word like <lebhaft> 'lively' [leːphaft], on the other hand, you should recognize that the <b> is at the end of the first syllable. The position in a syllable is particularly important for plosives, the first type of consonant we will discuss.

When the letters <p>, <t>, and <k> are used alone or doubled, they are pronounced [p], [t], and [k], respectively. When <b>, <d>, and <g> appear at the end of a word or a syllable, they are also pronounced as [p], [t], and [k], the voiceless plosives.

(1)   ***Voiceless plosives***

[p]   <p, pp, b>   <Panne> 'breakdown' [panə], <Mappe> 'folder' [mapə], <Lob>
                       'praise' [loːp], <abfahren> 'to depart' [ʔapfaːʁən], <habt>
                       'have' [haːpt]

[t]   <t, tt, d, dt, th>   <Tee> 'tea' [teː], <bitte> 'please' [bɪtə], <Lied> 'song' [liːt],
                       <freundlich> 'friendly' [fʁɔɪ̯ntlɪç], <abends> 'in the evening'
                       [ʔaːbənts], <Stadt> 'city' [ʃtat], <Thema> 'topic' [teːma]

[k]   <k, ck, g>   <Kamm> 'comb' [kam], <Decke> 'ceiling' [dɛkə], <Tag> 'day'
                       [taːk], <Zeugnis> 'evidence' [tsɔɪ̯knɪs], <sagt> 'says' [zaːkt]

If there are other consonants between <b>, <d>, and <g> and the end of a word or syllable, these letters are still pronounced as [p], [t], and [k], as the words <habt>, <abends>, and <sagt> in (1) demonstrate. There are a few additional ways in which [t] is represented in German that you should be aware of. These have therefore been included in (1). The combinations <dt> and <th> both represent [t], as the words <Stadt> and <Thema> show. Although the glottal stop, [ʔ], is a sound of German, it is not represented in the German spelling system. We say more about this sound in chapters 3 and 10.

As long as they do not occur at the end of a word or syllable, the letters <b>, <d>, and <g>, alone or doubled, represent the voiced plosives, [b], [d], and [g].

(2)   Voiced plosives

[b]   <b, bb>   <Ball> 'ball' [bal], <Leber> 'liver' [leːbɐ], <Ebbe> 'ebb tide' [ʔɛbə]

[d]   <d, dd>   <dann> 'then' [dan], <müde> 'tired' [myːdɐ], <Widder> 'ram' [vɪdɐ]

[g]   <g, gg>   <Gans> 'goose' [gans], <Geige> 'violin' [gaɪɡə], <Bagger> 'excavator' [bagɐ]

Remember that plosives in word-final and syllable-final position are always voiceless. This also holds for fricatives, as we will discuss in more detail below. The devoicing of plosives and fricatives in these positions is a salient feature of German. You have probably noticed that when different endings are added to a word that change the position of <b>, <d>, or <g> in the word, this can result in alternations of voiced and voiceless plosives in different forms of the word.

(3)   Alternations in voicing: <b>, <d>, <g>

<b>   [b]/[p]   <Verben> 'verbs' [vɛɐbən]   <Verb> 'verb' [vɛɐp]

<d>   [d]/[t]   <runder> 'rounder' [ʁʊndɐ]   <rund> 'round' [ʁʊnt]

<g>   [g]/[k]   <Kriege> 'wars' [kʁiːɡə]   <Krieg> 'war' [kʁiːk]

It is important to pay attention to the position of <b>, <d>, and <g> and remember that these letters are pronounced [p], [t], and [k] when they appear at the end of a word or syllable.

The representation of the nasals is relatively straightforward. The letter <m> represents [m] when used alone or doubled. The letter <n>, alone or doubled, represents [n]—an exception to this being situations in which <n> occurs before a <g> or <k>. When <n> appears before <g>, the combination of letters is typically pronounced as the velar nasal [ŋ]. When <n> appears before a <k>, the <n> is typically pronounced as the velar nasal, and the <k> is pronounced as the voiceless velar stop, [k].

(4)   Nasals

[m]   <m, mm>   <Mutter> 'mother' [mʊtɐ], <immer> 'always' [ʔɪmɐ]

[n]   <n, nn>   <Nase> 'nose' [naːzə], <Kinn> 'chin' [kɪn]

[ŋ]   <ng>, <n> (before <k>)   <lang> 'long' [laŋ], <Bank> 'bench' [baŋk]

When the letter <r> appears (alone or doubled) or in the sequence <rh> before a vowel in the same syllable, it is pronounced as a consonant—either as [r], [ʀ], or [ʁ]. We will use the voiced uvular fricative, [ʁ], in the examples we provide here, since it is the dominant pronunciation of consonantal <r>.

(5)   Consonantal <r>

[ʁ]   <r, rr, rh>   <Rede> 'speech' [ʁeːdə], <Schreck> 'fright' [ʃʁɛk], <Beere> 'berry' [beːʁə], <Sperre> 'barrier' [ʃpɛʁə], <Rhein> 'Rhine' [ʁaɪ̯n]

When <r> (alone or doubled) follows a vowel in the same syllable (with the exception of the vowel in the ending <-er>; see below), it has a vocalic pronunciation; it is pronounced as dark schwa, [ɐ̯]. It is marked with the diacritic [̯] because the vowel preceding it is the more prominent vowel sound in the syllable. We will refer to this sound as nonsyllabic dark schwa.

(6)   Nonsyllabic vocalic <r>

[ɐ̯]   <r, rr>   <mir> 'me' [miːɐ̯], <herrlich> 'marvelous' [hɛɐ̯lıç], <dort> 'there'
                    [dɔɐ̯t], <fuhrst> '(you) drove' [fuːɐ̯st]

When <r> appears in the ending <-er> at the end of a syllable, the entire ending is pronounced as dark schwa, [ɐ]. You can find this ending in nouns like <Leser> 'reader'. It is also a plural ending, as in the plural form for the noun <Mann> 'man', namely, <Männer> 'men'. It is the ending used to create the comparative form of adjectives, <kleiner> 'smaller', as well as an adjective ending, as in <guter> 'good'. Some verb stems have this ending, which is pronounced as dark schwa when followed by one or more consonants. (A verb stem is the infinitive without the <-n> or <-en>. The stem of the verb <lächeln> 'to smile', for example, is <lächel->; the stem of <verkaufen> 'to sell' is <verkauf->.)

(7)   Vocalic <r>

[ɐ]   <-er>   <Raucher> 'smoker' [ʁaʊ̯xɐ], <Bilder> 'pictures' [bıldɐ], <größer>
                    'bigger' [gʁøːsɐ], <großer> 'big' [gʁoːsɐ], <liefern> 'to supply' [liːfɐn]

Although dark schwa is a vowel, we treat it here in our discussion of consonants because it occurs only when the consonant symbol <r> appears.

How to pronounce <r>

The position of <r> in a syllable determines whether it has a consonantal or vocalic pronunciation. When it occurs before a vowel in the same syllable, it is pronounced as a consonant, as in the word <rufen> 'to call' [ʁuːfən]. When it occurs after a vowel in the same syllable (with the exception of the vowel in the ending <-er>), it is pronounced as nonsyllabic dark schwa, as the word <Tier> 'animal' [tiːɐ̯] shows. When it occurs in the ending <-er> (at the end of a word or syllable), the entire ending is pronounced as dark schwa, [ɐ], as we see in the word <kälter> [kɛltɐ]. When you see a word with the letter <r>, you will need to pay attention to the structure of the word (determine whether it has the ending <-er>) as well as the position of <r> in the syllable.

Note: The Duden pronunciation dictionary (Mangold 2005) uses [r] to transcribe consonantal pronunciations of <r>. In addition, Duden transcribes <r> as a consonant when it occurs after short vowels (<Form> 'form' [fɔrm]); we transcribe it as a vowel ([fɔɐ̯m]). Both pronunciations are acceptable (Mangold 2005:54).

It is not as easy to make generalizations about the letters used to represent the fricatives in German as it is for the plosives. For this reason we will start our discussion with the letters used to represent the fricatives produced at the front of the mouth and work our way to those used for fricatives at the back.

The letters <f> (alone or doubled) and <v> represent the voiceless labiodental fricative, [f]. The sequence <ph>, which often occurs in words that were borrowed from Greek, also represents the sound [f].

(8)   [f]   <f, ff, v, ph>   <fünf> 'five' [fʏnf], <Koffer> 'suitcase' [kɔfɐ], <Vater>
'father' [faːtɐ], <aktiv> 'active' [ʔaktiːf], <Phrase> 'phrase'
[fʁaːzə]

An important feature to note about <v> is that it represents [f] when it appears at the beginning of native German words, like the word <Vater>. Some other words that demonstrate this use of <v> are <viel> 'a lot of' [fiːl], <Vogel> 'bird' [foːgəl], <verbieten> 'to forbid' [fɛɐ̯biːtən] (which has the prefix <ver->), <voll> 'full' [fɔl], and <vor> 'in front of' [foːɐ̯].

The letters <w> and <v> represent the voiced labiodental fricative, [v].

(9)   [v]   <w, v>   <wann> 'when' [van], <Villa> 'villa' [vɪla], <November>
'November' [novɛmbɐ]

As the word <Villa> shows, <v> typically represents [v] when it occurs at the beginning of words borrowed from another language. Some other examples are words like <Vase> 'vase' [vaːzə] and <Vokal> 'vowel' [vokaːl]. When <v> appears word-internally, as in <November>, it typically represents [v]. Whenever <v> occurs at the end of a word or syllable, however, it is pronounced as [f]. The word <aktiv> in (8) above demonstrates this. Because all fricatives that appear at the end of a word or syllable are voiceless (like all plosives), <v> can only represent [f] when it occurs in this position.

Notice that because <v> can be pronounced as both [v] and [f], this can result in alternations of [v] and [f] in different forms of a word. For example, when adjectives or nouns ending in <v> have an ending that begins with a vowel, which causes <v> to become word-internal and syllable-initial, <v> is pronounced as [v]. When these words do not have an ending and <v> is word-final, it is pronounced [f].

(10)   ***Alternations in voicing: <v> [v]/[f]***
<braver> 'more well-behaved' [bʁaːvɐ]   <brav> 'well-behaved' [bʁaːf]
<Archive> 'archives' [ʔaʁçiːvə]   <Archiv> 'archive' [ʔaʁçiːf]

As we will see below, this is a characteristic of <v> that is shared by the symbol <s>.

The letters <s>, alone or doubled, and <ß> are used to represent the voiceless alveolar fricative, [s].

(11)   [s]   <s, ss, ß>   <das> 'the' [das], <essen> 'to eat' [ʔɛsən], <gießen> 'to pour'
                                [giːsən]

Although the symbol <s> is used to represent the sound [s], as in English, it is also used to represent the sound [z], the voiced alveolar fricative. This is the only letter used to represent [z].

(12)   [z]   <s>   <singen> 'to sing' [zɪŋən], <böse> 'evil' [bøːzə]

It is important to pay attention to the location of a single <s> in a word because its location will determine how it is pronounced. A single <s> is pronounced as [z] if it occurs at the beginning of a word or a syllable and is followed immediately by a vowel, as the words <singen> and <böse> in (12) show. If it appears at the end of a word or syllable (with or without consonants between it and the end of the word or syllable), it is pronounced as [s]. The word <das> in (11) and a word like <kommst> '(you) come' [kɔmst] demonstrate this use of the <s> symbol.

Because <s> can be pronounced as both [z] and [s], this can result in alternations of [z] and [s] in different forms of a word, as the following examples demonstrate.

(13)   *Alternations in voicing: <s> [z]/[s]*
          <Gläser> 'glasses' [gleːzɐ]   <Glas> 'glass' [glaːs]
          <krauser> 'frizzier' [kʁaʊzɐ]   <kraus> 'frizzy' [kʁaʊs]
          <lesen> 'to read' [leːzən]   <liest> 'reads' [liːst]

Alternations of voiced and voiceless plosives and fricatives

If you look at the alternations presented in (3), (10), and (13), you will notice that the letters <b>, <d>, <g>, <v>, and <s> represent voiced sounds—unless they appear at the end of a word or syllable, in which case they represent voiceless sounds. The <b> in <lieben> 'to love', for example, is pronounced as [b], a voiced bilabial plosive, but in the past participle of this verb, <geliebt> 'loved', it is pronounced as [p], a voiceless bilabial plosive. We refer to the alternation as final devoicing. You will need to pay close attention to the position of <b>, <d>, <g>, <v>, and <s> in order to determine how these letters are pronounced.

The three-letter combination <sch> is typically used to represent the postalveolar voiceless fricative, [ʃ]. The letter <s> is also used to represent this sound when it occurs at the beginning of a word before <p> and <t>.

(14)   [ʃ]   <sch>, <s> (before <p> and <t>)   <schön> 'beautiful' [ʃøːn], <spitz>
                                                    'pointed' [ʃpɪts], <Stein> 'stone' [ʃtaɪ̯n]

Note that <s> at the beginning of a word before <k> represents [s], not [ʃ]: <Skandal> 'scandal' [skandaːl].

The letters <g> and <j> are used to represent the sound [ʒ], which is the voiced counterpart of [ʃ]. This is not a common sound in German and occurs only in words borrowed from French and Italian.

(15)   [ʒ]   <g, j>   <Gelee> 'jelly' [ʒəle:], <Blamage> 'disgrace' [blama:ʒə],
                        <Journal> 'journal' [ʒʊ̯ɐ̯na:l]

The letters <g> and <j> are used to represent [ʒ] when it occurs at the beginning of a word; <g> is used to represent it when it occurs word-internally.

The letters <ch> are used to represent [ç], the voiceless palatal fricative. The letter <g> in the ending <-ig> is also used to represent this sound as long as a vowel does not follow it.

(16)   [ç]   <ch>, <g> (in <-ig>)   <China> 'China' [çi:na], <ich> 'I' [ʔɪç], <Milch>
                                  'milk' [mɪlç], <manch> 'many a' [manç], <Brötchen>
                                  'roll' [bʁø:tçən], <ruhig> 'calm' [ʁu:ɪç]

If a vowel follows the <-ig> suffix, the <g> is pronounced as expected—as the voiced velar stop [g]: <ruhiger> 'calmer' [ʁu:ɪgɐ].

The <ch> combination is also used to represent [x], the voiceless velar fricative.

(17)   [x]   <ch>   <Bach> 'stream' [bax], <doch> 'but' [dɔx], <Buch> 'book' [bu:x],
                      <auch> 'also' [ʔaʊ̯x]

The position of the letters <ch> in a word will tell you how to pronounce them. When they appear after the vowel symbols <a>, <o>, <u>, and <au>, they represent the sound [x]. In all other locations they represent the sound [ç].

Which sound is represented by <ch>?

In native German words, the sequence <ch> can be used to represent the voiceless palatal fricative, [ç], as well as the voiceless velar fricative, [x]. The simplest way to remember how <ch> is pronounced is to learn when it represents the velar fricative, [x], which is when it appears after the vowels <a>, <o>, <u>, and <au>. In all other positions, <ch> represents the palatal fricative, [ç].

The following quote from Friedrich Nietzsche (1975) may help you remember when <ch> represents [x]:

Ein gutes B<u>uch</u> m<u>acht</u> <u>auch</u> n<u>och</u> seine Gegner geistreich.
'A good book makes even its opponents intelligent.'

The last fricative, the glottal fricative, [h], is represented by the letter <h>.

(18)   [h]   <h>   <Hafen> 'harbor' [ha:fən], <behalten> 'to keep' [bəhaltən]

The letter <h> is also used to signal that the preceding vowel is long, as in the word <fahren> 'to drive', and is not pronounced. This use of <h> will be taken up in the following section.

The alveolar approximant, [j], is represented by the symbol <j>.

(19)   [j]   <j>   <ja> 'yes' [ja:], <Kajak> 'kayak' [ka:jak]

The lateral approximant, [l], is represented by the letter <l>, either alone or doubled.

(20)   [l]   <l, ll>   <Lippe> 'lip' [lɪpə], <wollen> 'to want' [vɔlən]

So far we have discussed the representation of single consonant sounds. There are also some consonant combinations that we will need to discuss because of the way they are represented orthographically. These consonant combinations include [kv] and [ks] as well as the affricates, [pf], [ts], [tʃ], and [dʒ]. With the exception of the affricate [pf], you do not yet have all the information you need to be able to determine their pronunciation from the ways in which they are spelled.

(21)   ***Affricates and other consonant combinations***

[pf]	<pf>	<Pfund> 'pound' [pfʊnt]
[ts]	<z, zz, tz>, <t>	<Zeit> 'time' [tsaɪ̯t], <Pizza> 'pizza' [pɪtsa], <Katze>
	(before <ion>)	'cat' [katsə], <Nation> 'nation' [natsi̯o:n]
[tʃ]	<tsch>	<klatschen> 'to clap' [klatʃən]
[dʒ]	<dsch>	<Dschungel> 'jungle' [dʒʊŋəl]
[kv]	<qu>	<Quelle> 'source' [kvɛlə]
[ks]	<x, chs>	<Hexe> 'witch' [hɛksə], <sechs> 'six' [zɛks]

One important point to note about <z> and <x> is that they are both single letters that are used to represent a sequence of two consonant sounds. You will need to keep this in mind in particular with <z>, which represents [ts] in German, not [z] as in English. This will be clear when you compare the pronunciation of the words for 'zoo' in German and English: German <Zoo> [tso:]; English <zoo> [zu:]. The use of <x> to represent [ks] is straightforward if you remember that it is also used in English in the same way, as words like <box>, <mix>, and <tax> demonstrate. The use of <chs> to represent [ks] is a bit trickier because this same combination of letters can also represent [çs] or [xs]. However, if you analyze the structure of the following words, you will see that <chs> represents [ks] only when <ch> and <s> belong to the stem of a word; not when <s> is part of an ending: <wachsen> 'to grow' [vaksən], <höchst> 'highest' [hø:çst], <lachst> '(you) laugh' [laxst]. In a word like <höchst>, for example, <ch> belongs to the adjective stem, and <s> belongs to the superlative ending, <-st>, so the combination is not pronounced [ks].

The preceding section, especially the information presented in the boxes, should make you realize how helpful German spelling can be as you figure out how to pronounce a word. You can also refer to table 8.1, which provides a list

Table 8.1   Sound-Grapheme correspondences for German consonants.

Sound	Grapheme	Examples
[p]	<p, pp, b>	<Pass>, <Suppe>, <Grab>
[b]	<b, bb>	<Boot>, <schrubben>
[t]	<t, tt, d, dt, th>	<Tisch>, <retten>, <Tod>, <verwandt>, <These>
[d]	<d, dd>	<Ding>, <paddeln>
[k]	<k, ck, g>	<kennen>, <Wecker>, <mag>
[g]	<g, gg>	<gegen>, <Flagge>
[m]	<m, mm>	<Mensch>, <Stimme>
[n]	<n, nn>	<nein>, <Sonne>
[ŋ]	<ng>, <n> (before <k>)	<jung>, <schlank>
[f]	<f, ff, v, ph>	<falsch>, <treffen>, <Volk>, <Phon>
[v]	<w, v>	<Welt>, <Verb>
[s]	<s, ss, ß>	<Haus>, <Wasser>, <groß>
[z]	<s>	<sagen>
[ʃ]	<sch>, <s> (before <p> and <t>)	<Schaf>, <Spaß>, <Stoff>
[ʒ]	<g, j>	<Massage>, <Jackett>
[ç]	<ch>, <g> (in <-ig>)	<mich>, <salzig>
[x]	<ch>	<Sprache>
[ʁ]	<r, rr, rh>	<reif>, <Herren>, <rhythmisch>
[h]	<h>	<Hilfe>
[j]	<j>	<jagen>
[l]	<l, ll>	<leicht>, <toll>
[pf]	<pf>	<Pfeffer>
[ts]	<z, zz, tz>, <t> (before <ion>)	<Zunge>, <Skizze>, <Mütze>, <Konvention>
[tʃ]	<tsch>	<Deutsch>
[dʒ]	<dsch>	<Dschungel>
[kv]	<qu>	<Quatsch>
[ks]	<x, chs>	<Text>, <Fuchs>

of the consonant sounds of German and the letters typically used to represent them—together with relevant examples. The table also includes affricates and other important consonant combinations. The glottal stop, [ʔ], is not included in this table because it is not represented in the German spelling system.

8.2.2. Vowels

Like many of the letters used to represent consonants, those used for vowels can represent two or more different sounds. The letter <o>, for example, can be used to represent the long tense vowel [o:] as well as its short lax counterpart [ɔ].

(22)   [o:]   <o>   <Ofen> 'oven' [ʔo:fən]
         [ɔ]   <o>   <offen> 'open' [ʔɔfən]

Even though the same letter is used to represent these two different vowels, we know which one to use when we pronounce these words. The consonant symbols following the letter <o> provide that information. Notice that there is one

consonant, <f>, after the long vowel [o:], but two consonants, <ff>, after the short vowel [ɔ]. The general rule of thumb that allows us to use consonant symbols to tell us how to pronounce vowels is the following.

(23)   Rule of thumb for pronunciation of vowel letters

> One or no consonant letter in the same morpheme indicates that the preceding vowel is long.
>
> Two or more consonant letters in the same morpheme indicate that the preceding vowel is short.

A morpheme is the smallest unit of language that has meaning. The word <Tische> 'tables', for example, is made up of two morphemes, <Tisch> 'table' and <-e>, a plural suffix, which means something like 'more than one'. A verb form like <ver-bringt> 'spends' is made up of three morphemes, <ver->, <bring>, and <-t>. Although it can sometimes be difficult to formulate the meaning of a morpheme (a good example of this is the prefix <ver->), it is generally not difficult to identify morphemes, and this is all that is necessary for using the rule of thumb in (23).

This rule of thumb accounts for the pronunciation of the vowels in the following words.

(24)   One or no consonant letter after the vowel

[o:]	<wo> 'where' [vo:]	no consonant
[u:]	<Fuß> 'foot' [fu:s]	one consonant
[e:]	<wen> 'whom' [ve:n]	one consonant

(25)   Two or more consonant letters after the vowel

[ɔ]	<hoffen> 'to hope' [hɔfən]
[ʊ]	<Zucker> 'sugar' [tsʊkɐ]
[ɛ]	<eng> 'narrow' [ʔɛŋ]

When we count consonant symbols in verbs, we exclude consonants that belong to endings because endings are separate morphemes. All forms of verbs with stems that end in a single consonant letter have vowels that are long.

(26)   One consonant letter after the vowel in a verb stem

[o:]	<holen> 'to get' [ho:lən], <holst> '(you) get' [ho:lst], <holt> 'gets' [ho:lt]
[u:]	<rufen> 'to call' [ʁu:fən], <rufst> '(you) call' [ʁu:fst], <ruft> 'calls' [ʁu:ft]
[e:]	<schälen> 'to peel' [ʃe:lən], <schälst> '(you) peel' [ʃe:lst], <schält> 'peels' [ʃe:lt]

Verb forms like <holst> '(you) get' and <holt> 'gets', for example, which both have long <o> sounds, show that the consonant letters of endings do not count when determining vowel length.

We also exclude the letter <h> when we count consonant letters. In the following examples, <h> is not pronounced but can be viewed as a redundant (extra) signal that the preceding vowel is long.

(27) ***<h> as signal of length***

    [e:]   <Weh> 'ache' [ve:]   no consonant

    [a:]   <sahen> 'saw' [za:ən]   no consonant

    [i:]   <ihm> 'him' [ʔi:m]   one consonant

Another orthographic convention that is used to indicate vowel length is the doubling of the vowel letters themselves. The double vowels found in German are <ee>, <oo>, and <aa>.

(28) ***Doubled vowels as a signal of length***

    [e:]   <Tee> 'tea' [te:]

    [o:]   <Boot> 'boat' [bo:t]

    [a:]   <Paar> 'pair' [pa:ɐ̯]

The final orthographic means of signaling length is the use of <e> following <i> to indicate that the <i> is long. The sequence <ie> represents the vowel [i:].

(29) ***<e> as a signal of length***

    [i:]   <wie> 'how' [vi:], <bieten> 'to offer' [bi:tən], <quietschen> 'to squeak'
          [kvi:tʃən]

We refer to the principle in (23) as a "rule of thumb" because it is not foolproof; it does not work in all cases. In the vast majority of cases, vowel sounds that occur before the letters <sch> are short—which is what our rule of thumb predicts.

(30) ***Short vowels before <sch> (three consonant letters)***

    [ɪ]   <mischen> 'to mix' [mɪʃən]

    [ɛ]   <Esche> 'ash-tree' [ʔɛʃə]

    [a]   <Flasche> 'bottle' [flaʃə]

There are exceptions, however. Two exceptions that are worth mentioning are <Nische> 'niche' [ni:ʃə] and <wusch> 'washed' [vu:ʃ].

The vowel sounds that occur before the letters <ch>, which are used to represent [ç] and [x], can be either long or short.

(31) ***Long vowels before <ch>***

    [u:]   <suchen> 'to search for' [zu:xən]

    [o:]   <hoch> 'high' [ho:x]

    [a:]   <nach> 'after' [na:x]

(32)   Short vowels before <ch>

[ɪ]   <ich> 'I' [ʔɪç]

[ɔ]   <noch> 'still' [nɔx]

[a]   <Dach> 'roof' [dax]

In the case of <ch>, then, you will not be able to use German spelling to determine the length of the preceding vowel. You will have to pay attention to spoken German or consult a dictionary to determine whether the vowel is long or short.

One additional feature of our rule of thumb is that it cannot be applied reliably to the vowels in prefixes and suffixes. A number of prefixes and suffixes have short vowels but end in a single consonant or no consonant. Some common prefixes and suffixes that do not follow our rule of thumb are the following.

(33)   Prefixes with short vowels before one or no consonant

[a]   <ab-> [ʔap], <an-> [ʔan]

[ɛ]   <er-> [ʔɛɐ̯], <ver-> [fɛɐ̯], <zer-> [tsɛɐ̯]

[ə]   <be-> [bə], <ge-> [gə]

[ʊ]   <um-> [ʔʊm], <un-> [ʔʊn]

(34)   Suffixes with short vowels before single consonants

[ɪ]   <-ig> [ɪç], <-in> [ɪn], <-nis> [nɪs]

[ə]   <-chen> [çən]

Given the relatively small number of these prefixes and suffixes, it should not take long to learn which sounds their vowel letters represent.

Although our rule of thumb is not a reliable predictor of the pronunciation of vowels in prefixes and suffixes, there is one very useful generalization that can be made about the vowel <e> when it occurs at the end of a word or in an ending. As long as <e> does not occur in the ending <-er> at the end of a syllable, it will be pronounced as [ə] when it occurs at the end of a word or in an ending.

(35)   [ə]   <e>   <Sonne> 'sun' [zɔnə], <komme> '(I) come' [kɔmə], <öffnet>
                       'opens' [ʔœfnət], <ruhen> 'to rest' [ʁuːən], <kleinere> 'smaller'
                       [klaɪ̯nəʁə]

Rule of thumb for pronunciation of vowel letters

One or no consonant letter in the same morpheme indicates that the preceding vowel is long (<beten> 'to pray' [beːtən]).

Two or more consonant letters in the same morpheme indicate that the preceding vowel is short (<Betten> 'beds' [bɛtən]).

See appendix D for a list of common exceptions to this rule of thumb.

Recall that the combination <-er> at the end of a syllable is pronounced as dark schwa, [ɐ]. This is why <-er> in the word <schöner>, for example, is pronounced as dark schwa: [ʃø:nɐ]. In the word <schönere>, in comparison, the <r> appears before a vowel in the same syllable, so it is pronounced as [ʁ], and both <e> letters are pronounced as schwa: [ʃø:nəʁə].

Table 8.2 provides a list of letters that represent the vowel sounds of German and the sounds that these letters represent. If you use this chart together with the information provided above (the rule of thumb in [23] and in the box; other means of indicating length; the pronunciation of vowels in prefixes and suffixes), you will find that you can determine the pronunciation of the vast majority of common words in German simply by paying attention to how they are spelled. For example, the chart tells us that the vowel <ö> can be pronounced either as [ø:] or [œ]. In the word <stören> 'to disturb', we know that it is pronounced as the long tense vowel [ø:] because only one consonant letter follows it. Because the <e> in <stören> is in an ending, it will be pronounced as schwa, [ə]. Even though there are two consonant letters after the <ö> in the word <stört>, <r> and <t>, we know that it represents the long tense vowel [ø:] because only one consonant, the <r>, follows it in the verb stem.

Table 8.2   Grapheme-Sound correspondences for German monophthongs.

Grapheme	Sound	Example
<a>	[a:]	<Rad>
	[a]	<Saft>
<e>	[e:]	<Mehl>
	[ɛ]	<nett>
	[ə]	<Hose>
<i>	[i:]	<Stil>
	[ɪ]	<Sinn>
<o>	[o:]	<Not>
	[ɔ]	<voll>
<u>	[u:]	<Kuh>
	[ʊ]	<null>
<ä>	[e:]	<spät>
	[ɛ]	<März>
<ö>	[ø:]	<schön>
	[œ]	<Köln>
<ü>	[y:]	<süß>
	[ʏ]	<fünf>
<y>	[y:]	<Typ>
	[ʏ]	<Hymne>
<er>	[ɐ]	<Fischer>
<r>	[ʁ̩]	<Bier>

Table 8.3   Grapheme-Sound correspondences for German diphthongs.

Grapheme	Sound	Examples
<ai, ei, ay, ey>	[aɪ̯]	<Mai>, <Stein>, <Bayern>, <Meyer>
<au>	[aʊ̯]	<Baum>
<eu, äu>	[ɔɪ̯]	<neun>, <läuft>

Diphthongs in German are typically represented by sequences of two vowels and therefore easy to identify by the way they are spelled. The common vowel sequences used to represent the three main diphthongs in German are provided in table 8.3. The only two-vowel sequences that pose particular problems for students learning German are <ie> and <ei>. The first one, <ie>, represents the monophthong [iː], as in <Dieb>, which means 'thief'. Notice that both <Dieb> and <thief> have essentially the same vowel, [iː], and both are spelled with the sequence <ie>. The second two-vowel sequence, <ei>, represents the diphthong [aɪ̯], as in <reich> 'rich'. If you remember that <ai> as well as <ei> can represent this diphthong (<Kaiser>, <Mai>), this could help you remember how <ei> is pronounced.

8.2.3. Advanced Topics

In this section we will provide you with some additional information about German orthography and pronunciation. These details go beyond the basics, but they may answer questions that could arise as you become more proficient in the language.

You now know that the <g> in the ending <-ig> is pronounced as [ç] as long as it is not followed by a vowel. It is pronounced as [ç] in <lockig> 'curly' [lɔkɪç], for example, but as [g] in <lockiger> 'curlier' [lɔkɪɡɐ]. There is one situation that is an exception to this: If there is another [ç] sound following <-ig> in a word, the <g> is pronounced as [k]. In the word <König> 'king', for example, the <g> is pronounced as [ç]: [køːnɪç]. In the word <königlich> 'royal', however, it cannot be pronounced as [ç] because the suffix <-lich> contains this sound, so <g> is pronounced as [k] (because of final devoicing): [køːnɪklɪç].

When we discussed the nasals, we said that the combination <ng> represents the sound [ŋ] and that <n> before <k> also represents [ŋ]. This is correct as long as the <n> and <g> (or <k>) both belong to the same morpheme. If not, the <n> is pronounced as [n]. In a word like <Lunge> 'lung', both <n> and <g> belong to the same morpheme, so the combination is pronounced [ŋ]: [lʊŋə]. In a word like <ungern> 'unhappily', on the other hand, the <n> belongs to the prefix <un-> and the <g> belongs to the root, a different morpheme, so the <n> is pronounced as [n]: [ʔʊngɛɐ̯n]. For the same reason, the <n> in <unklug> 'unwise' is pronounced [n], not [ŋ]: [ʔʊnkluːk].

You may have already noticed that the combination <ch> is used to represent more than just the sounds [ç] and [x]. As the following examples show, these letters are also used to represent [k], [ʃ], and [tʃ].

(36) <ch>   [k]   <Chor> 'chorus' [koːɐ̯], <Charakter> 'character' [kaʁaktɐ]

[ʃ]   <Chef> 'boss' [ʃɛf], <charmant> 'charming' [ʃaɐ̯mant]

[tʃ]   <checken> 'to check' [tʃɛkən], <chartern> 'to charter' [tʃaɐ̯tɐn]

You will recognize these words through your knowledge of English, and even though some are originally borrowings from French, you can often use the English pronunciation of these (or related) words to help you determine how to pronounce the sounds in them that are represented by <ch>. For example, the <ch> in English <chorus> is pronounced with a [k], as is the <ch> in German <Chor>.

You have no doubt already encountered words in German with the affricate [dʒ] that are not spelled with <dsch>. This affricate is only found in loanwords, and the ones you will encounter in German will often be familiar to you through your knowledge of English. As the following examples show, <j> and <g> are used to represent this affricate—in addition to <dsch>.

(37) [dʒ]   <j>   <Jeans> 'jeans' [dʒiːns], <joggen> 'to jog' [dʒɔgən]

<g>   <Manager> 'manager' [mɛnɪdʒɐ], <Gin> 'gin' [dʒɪn]

Again, when you encounter words like these, you can rely on your knowledge of English to help you determine how the consonant letters in these words are pronounced.

8.3. Reading the IPA

The following exercises will give you practice in reading the IPA. Commas, semicolons, periods, and spaces between words have been added for ease of reading in those exercises that involve stretches of speech longer than a single word.

8.1. Read the following phonetic transcriptions aloud. Then transcribe the words into standard German orthography.

a. [bʁɪŋt]
b. [ha̯ɪsɐ]
c. [tsuːk]
d. [vɛtɐ]
e. [bʁaːfstən]
f. [ʁuːɪç]
g. [haːzə]
h. [zaːən]
i. [kœntən]
j. [liːploːs]

k. [tsaːnflaɪʃ]
l. [ʔɛltɐ]
m. [kvɪtʊŋ]
n. [dʊ̥çʃaʊ̯ən]
o. [faɪ̯nt]
p. [zɔmɐʔaːbənt]
q. [bəhɪndɐt]
r. [fɛɐ̯liːʁən]
s. [mʏstə]
t. [zɪçɐ]

8.2. Read the following phonetic transcriptions of German sentences aloud. Then transcribe the sentences into standard German orthography.

a. [ʔɪç haːbə maɪ̯nə tœçtɐ bəzuːxt]
b. [diː ʔaʊ̯tobaːn vʊɐ̯də ʔɪn baɪ̯dən ʁɪçtʊŋən totaːl gəʃpɛɐ̯t]
c. [diː tsaːl deːɐ̯ ʔʊnfɛlə ʔaʊ̯f deːn bɛɐ̯liːnɐ gəvɛsɐn ʔɪst ʔɪn deːn lɛtstən jaːʁən ʃtɛndɪç gəzʊŋkən]
d. [ziː vɔlən vɔlf biːɐ̯man høːʁən ʔaːbɐ nuːɐ̯ fʏnfhʊndɐt pasən ʔɪn deːn zaːl]
e. [vaʁʊm bɪn ʔɪç ʔɪmɐ zoː myːdə]
f. [ziː leːpt ʔɪn deːɐ̯ ʔeːɐ̯stən ʔetaːʒə ʔɪn deːm haʊ̯s ʔan deːɐ̯ ʔɛkə]
g. [fʁaŋkfʊɐ̯t ʔɪst diː tɔɪ̯ʁestə ʃtat dɔɪ̯tʃlants]
h. [ziː ʔɪst vaːnzɪnɪç ʃøːn]
i. [baɪ̯ deːm ʁɔkkɔntsɛɐ̯t vaːʁən ʔam fʁaɪ̯taːk meːɐ̯ ʔals fʏnftsɪç mɛnʃən fɛɐ̯lɛtst vɔɐ̯dən]
j. [deːn zats bʁaxtə ʔeːɐ̯ nɪçt tsuː ʔɛndə]

8.3. Read the following transcriptions aloud. Each represents the pronunciation of more than one word in German. For each transcription, provide the standard German spelling for as many different words as indicated in parentheses.

a. [das] (2)
b. [ʁaːt] (2)
c. [zaɪ̯tə] (2)
d. [ʃtiːl] (2)
e. [ʁaɪ̯n] (3)
f. [lɔɪ̯tən] (2)
g. [ʃtat] (2)
h. [toːt] (2)
i. [bɛlə] (2)
j. [maɪ̯n] (2)

8.4. Read the following excerpt aloud and then transcribe it into standard German orthography. Which word in the second sentence in the second paragraph violates the rule of thumb for the pronunciation of vowel letters and why?

[di: bʊtɐ ʔɪst das ʔɛʁʃtaʁtə fɛt deːɐ̯ mɪlç, ʔɛnthɛlt ʔaːbɐ nɔx ʔʊŋɡəfeːɐ̯ fʏnftseːn pʁotsɛnt mɪlç ʔɪn faɪ̯nstɐ fɛɐ̯taɪ̯lʊŋ. baɪ̯m ʃmɛltsən tʁɪt ʔaɪ̯nə tʁɛnʊŋ ʔaɪ̯n; di: maːɡəmɪlç zɪŋkt tsu: boːdən, daʁyːbɐ ʃteːt ʔaɪ̯nə klaːʁə fɛtʃɪçt. lɛst man diːzə ʔɛʁkaltən, zoː ʔɛʁʃtaʁt das klaːʁə fɛt ʔʊnt hat deːn naːmən ʃmɛltsbʊtɐ ʔoːdɐ bʊtɐʃmalts ʔɛʁhaltən. di: ʔɪn deːɐ̯ bʊtɐ ʔaɪ̯ŋɡəʃlosənə mɪlç ʔɪst kaɪ̯n tsuːfɛlɪɡə bəʃtanttaɪ̯l, ʔaʊ̯x kaɪ̯nə fɛʁ̥ʔʊnʁaɪ̯nɪɡʊŋ ʔoːdɐ fɛʁfɛlʃʊŋ, zɔndɐn ʔaɪ̯n noːtvɛndɪɡɐ bəʃtanttaɪ̯l deːɐ̯ bʊtɐ, deːɐ̯ ʔeːɐ̯st das bʊtɐfɛt tsu: bʊtɐ maxt.]

[deːɐ̯ ɡəʃmak deːɐ̯ bʊtɐ ʔɪst ʔaphɛŋɪç dafɔn, ʔɔp di: bʊtɐ ʔaʊ̯s zyːzəm ʔoːdɐ zaʊ̯ɐʁəm ʁaːm heːɐ̯ɡəʃtɛlt ʔɪst, ʔɔp zi: ɡəzaltsən ʔoːdɐ ʔʊnɡəzaltsən ʔaʊ̯f deːn tɪʃ kɔmt. deːɐ̯ voːlɡəʃmak deːɐ̯ bʊtɐ kan dʊʁç fɛʁʃiːdənə ʔaɪ̯nflʏsə bəʔaɪ̯ntʁɛçtɪçt veːɐ̯dən. tsu: laŋəs fɛʁvaɪ̯lən deːɐ̯ mɪlç ʔɪm ʃtal fɛʁlaɪ̯t deːɐ̯ bʊtɐ ʔaɪ̯nən ʃtalɡəʃmak. di: bʊtɐ vɪʁt zeːɐ̯ laɪ̯çt ʁantsɪç, vɛn zi: ʔɔfən ʔan deːɐ̯ lʊft ʃteːt, ʔʊnt ɡants bəzɔndɐs vɛn zi: fɔm lɪçt ɡətʁɔfən vɪʁt.]

8.4. Transcription I: From the Written Word

In the section on orthography and the IPA earlier in this chapter, you learned about the relationship between letters and sounds in German. With this knowledge, use the orthography of German to provide phonetic transcriptions of the sounds, words, and phrases in the following activities. Transcribe consonantal <r> as the voiced uvular fricative, [ʁ].

8.5. Write the phonetic symbol of all the plosives in the following words.
   a. <packen>
   b. <Tochter>
   c. <binden>
   d. <geben>
   e. <schlapp>
   f. <ab>
   g. <hält>
   h. <Held>
   i. <Schreck>
   j. <klug>
   k. <Gräber>
   l. <Grab>
   m. <Lieder>
   n. <Lied>
   o. <Wege>
   p. <Weg>
   q. <gesund>
   r. <begabt>
   s. <beklagst>
   t. <Dienstag>

8.6. Write the phonetic symbol of all the nasals and plosives in the following words.
- a. <Mappe>
- b. <nackt>
- c. <Klang>
- d. <Bank>
- e. <Menge>
- f. <keinem>
- g. <hingen>
- h. <hinken>
- i. <unbekannt>
- j. <klingen>

8.7. Write the phonetic symbol of the sound represented by <r> in the following words. Is it [ʁ] or [ɐ̯]?
- a. <Regel>
- b. <Schrift>
- c. <Schere>
- d. <mehr>
- e. <irren>
- f. <Bier>
- g. <hören>
- h. <hört>
- i. <fährst>
- j. <Lehre>
- k. <Wehrmacht>
- l. <Brille>
- m. <Wort>
- n. <vergeben>
- o. <bessere>

8.8. [ç] *or* [x]? Write the phonetic symbol of the fricative represented by <ch> in the following words.
- a. <Koch>
- b. <nach>
- c. <Kuchen>
- d. <Bauch>
- e. <Chemie>
- f. <Licht>
- g. <sprechen>
- h. <riechen>
- i. <gleich>

    j. <solch>
    k. <durch>
    l. <Mönch>
    m.<Märchen>
    n. <rauchen>
    o. <räuchern>
    p. <Loch>
    q. <röcheln>
    r. <Dächer>

8.9. Write the phonetic symbol of the fricatives in the following words. Include the consonantal pronunciation of <r>, which is the fricative [ʁ].

    a. <Waffe>
    b. <Fisch>
    c. <stoßen>
    d. <Rasse>
    e. <fluchen>
    f. <Hose>
    g. <definitive>
    h. <definitiv>
    i. <Gläser>
    j. <Glas>
    k. <niesen>
    l. <genießen>
    m.<Courage>
    n. <Schlussseite>
    o. <vielleicht>
    p. <Nichtachtung>

8.10. [g], [k], *or* [ç]? Write the phonetic symbol for the pronunciation of <g> in the following words. You will need to keep in mind the details about the pronunciation of <g> when it appears in the ending <-ig>.

    a. <geben>
    b. <mögen>
    c. <schräg>
    d. <täglich>
    e. <sandig>
    f. <sonniger>
    g. <beleidigen>
    h. <beleidigt>
    i. <ewig>
    j. <Ewigkeit>

    k. <ewige>
    l. <König>
    m.<Könige>
    n. <sieghaft>
    o. <siegt>
    p. <gewohnt>

8.11. Write the phonetic symbol of all the consonant sounds in the following words.
    a. <Wind>
    b. <dunkel>
    c. <Staub>
    d. <kochst>
    e. <stehen>
    f. <Soße>
    g. <Junge>
    h. <gelebt>
    i. <fährt>
    j. <Morgen>
    k. <Preises>
    l. <Teilchen>

8.12. [ə] *or* [ɐ]? Write the phonetic symbol for the *vowel sounds* in the underlined portions of the following words. Remember that [ɐ] is the pronunciation of <-er> at the end of a syllable (with or without consonants between <-er> and the end of the syllable).
    a. <Leh<u>re</u>>
    b. <Leh<u>rer</u>>
    c. <Leh<u>rers</u>>
    d. <schli<u>mme</u>>
    e. <schli<u>mmer</u>>
    f. <schli<u>mmere</u>>
    g. <Stär<u>ke</u>>
    h. <stär<u>ker</u>>
    i. <stär<u>kerer</u>>
    j. <bi<u>tter</u>>
    k. <verbi<u>ttert</u>>
    l. <verbie<u>tet</u>>
    m.<trau<u>en</u>>
    n. <trau<u>ern</u>>
    o. <trau<u>erte</u>>

8.13. Write the phonetic symbol for the vowels in the following words.
- a. <wider>
- b. <Widder>
- c. <Beet>
- d. <Bett>
- e. <lahm>
- f. <Lamm>
- g. <wohne>
- h. <Wonne>
- i. <Mus>
- j. <muss>
- k. <kämmen>
- l. <kämen>
- m. <Höhle>
- n. <Hölle>
- o. <Hüte>
- p. <Hütte>

8.14. *Prefixes and suffixes.* Write the phonetic symbol for the vowels in the following words.
- a. <bekommen>
- b. <Wohnung>
- c. <billig>
- d. <schließlich>
- e. <gefangen>
- f. <Tänzerin>
- g. <vergeben>
- h. <zerstören>
- i. <Verständnis>
- j. <Ungeduld>

8.15. *Long vowels or diphthongs?* Write the phonetic symbols for all the sequences of two vowels in the following words.
- a. <Biene>
- b. <sauber>
- c. <Neuzeit>
- d. <häufig>
- e. <Moos>
- f. <Haar>
- g. <Wien>
- h. <Wein>

    i. <Waise>
    j. <Fee>
    k. <Teufel>
    l. <Stausee>
    m. <Leid>
    n. <Lied>
    o. <blieben>

8.16. *Number of letters versus number of sounds.* Provide a phonetic transcription for the following words. Keep in mind that there is not necessarily a one-to-one correspondence between the number of letters and number of different sounds.
    a. <Zange>
    b. <gehen>
    c. <Schuh>
    d. <Pfarrer>
    e. <schattig>
    f. <Zahl>
    g. <trotz>
    h. <reisen>
    i. <reizen>
    j. <siegen>
    k. <Fluss>
    l. <Schoß>
    m. <Hitze>
    n. <Schweiz>
    o. <rutschen>
    p. <zwischen>
    q. <Nummer>
    r. <Schlüssel>
    s. <Bäcker>
    t. <Schicht>

8.17. [ʁ], [ɐ], *or* [ɐ̯]? Transcribe the following words phonetically. Remember that [ʁ] is the pronunciation of <r> before a vowel in the same syllable; [ɐ̯] is the pronunciation of <r> after a vowel in the same syllable; and [ɐ] is the pronunciation of <-er> at the end of a syllable (with or without following consonants in the syllable).
    a. <heißer>
    b. <heißere>
    c. <Spur>
    d. <Spuren>
    e. <Schirm>

  f. \<warten\>

  g. \<frieren\>

  h. \<friert\>

  i. \<verschlimmern\>

  j. \<hungert\>

  k. \<genauer\>

  l. \<früher\>

  m. \<tiefere\>

  n. \<jammern\>

  o. \<Zitterlaut\>

  p. \<Schnauzer\>

8.18. Transcribe all the words in table 8.1.

8.19. Transcribe all the words in tables 8.2 and 8.3.

8.20. Transcribe the following phrases. For now, you should transcribe a glottal stop, [ʔ], before all word-initial vowels. For example, you should transcribe a word like \<oft\> 'often' as [ʔɔft]. See chapters 3 and 10 for more information on the glottal stop.

  a. weder Fisch noch Fleisch sein

  b. kein heuriger Hase sein

  c. aufs Land fahren

  d. von Luft und Liebe leben

  e. bittere Not leiden

  f. ein frühes Grab finden

  g. lieber Wein als Bier

  h. in dunkler Vergangenheit

  i. seinen Hut nehmen müssen

  j. ein dickes Fell haben

  k. tanzen und springen

  l. in Rauch aufgehen

  m. nichts als Blödsinn reden

  n. Jubel, Trubel, Heiterkeit

  o. Tod auf dem Schlachtfeld

  p. summende Bienen

8.5. Pronunciation Similarities and Differences

In the sections that follow, we will discuss the sounds of German as they fit into three groups: those that are roughly the same in North American English and German, those that are different, and those that are typically perceived and treated by language learners as similar in the two languages. Research has shown

that segments that are the same in two languages are not problematic for learners, and those that are different can also be learned. It is those sounds that are similar across two languages that have been shown to pose the greatest difficulty for learners (Flege et al. 2003). The pronunciation and perceptual practice in this chapter will focus on the "new" German segments (those that are different from North American English segments).

Consonants that are very much the same in German and English and can therefore be produced essentially alike include the following: [p b t d k g ʔ m n ŋ f v s z ʃ ʒ h j]. This means that in most instances, producing consonantal segments in German as you would in English will work well for you. It is important to remember, however, that these are segments, not letters of the alphabet. This is especially true of obstruents (plosives and fricatives) that occur at the ends of syllables. This aspect of German pronunciation is taken up in greater detail in chapters that follow. For now, though, it is important to remember that the letters <b d g v> at the ends of words and syllables are pronounced as voiceless sounds: [p t k f]. Although these are not new sounds, this is a new pattern for native speakers of English. This means that German words that end with letters that are typically used to represent voiced obstruents, <Laub> 'foliage', <Neid> 'envy', <leg> 'lay', and <naiv> 'naïve', are all pronounced with voiceless obstruents: [laʊp], [naɪt], [leːk], and [naiːf]. It is also important to remember that the symbol <s> represents [z] in syllable-initial position before a vowel, but [s] in syllable-final position: <Kreise> 'circles' is pronounced [kʁaɪzə], whereas <Kreis> 'circle' is pronounced [kʁaɪs]. The German consonants [ç] and [x] can be considered new segments in that they do not occur in English. The production of these segments and the devoicing of syllable-final obstruents are taken up below.

There is one vowel that is nearly identical in its production in German and English: [iː]. In some environments, though, there are slight differences. The new German vowels for native speakers of English include the front, rounded vowels, [y ʏ øː œ], and dark schwa, [ɐ]. The production of these segments is taken up below. Unlike the consonants, most vowels of German and English differ at least somewhat from one another. While many of the segments share a common IPA symbol, their production differs significantly across the two languages. In particular, German vowels tend to make greater use of articulatory space than do English vowels. Specifics about the production of the similar vowels are taken up in chapter 10.

8.6. Pronunciation Practice I

As we noted in chapter 1, articulatory phonetics is concerned with the movement of the vocal organs to produce speech. Knowing how the sounds of German are produced is a first step to producing them correctly, and practicing may help you as a learner to become more accurate in your production. Before we begin the

practice exercises, we would like to make a few important points. First of all, it is quite unlikely that you as an adult learner of German will accurately produce all of the segments like a native speaker. In fact, there are some sounds—especially <r>—that stand out in the German speech of native speakers of North American English. We do not say this to discourage learners from working on their pronunciation. Instead, we hope to encourage you to have reasonable expectations and to focus instead on the second point that we would like to raise: comprehensible second language speech is a realistic goal (Derwing and Munro 2009). That is, being understood by other speakers of German is possible, even when your speech has a detectable foreign accent. Research has shown that pronunciation practice can make second language speech more comprehensible, especially if pronunciation training proceeds through a series of steps. It is for this reason that the following pronunciation activities are included throughout the book and appear in the order presented here: a brief description of the production of sounds, isolated practice (using words), and contextualized practice (using sentences, paragraphs, and dialogues).

In the practice sections that follow, we will focus on those German segments that are new for speakers of North American English. This means that we will work with the consonants [ç], [x], and syllable-final devoiced obstruents. In terms of vowels, we will focus on the front, rounded vowels, [y: ʏ ø: œ], and dark schwa, [ɐ]. We will begin with a brief overview of each of the phones and a discussion of how they differ from North American English segments. The activities below focus on both perception and production, because it has been shown that a combination of the two can be helpful for learners.

8.6.1. New German Consonants

It is a realistic goal for English-speaking learners of German to acquire the new German phones [ç] and [x] and to learn to devoice obstruents at the ends of syllables.

There are two approaches that can be helpful in producing the palatal fricative, [ç]. One approach is to make use of the <h> in English words like <hue>, <huge>, and <human>. Many speakers of English pronounce the <h> in these words with a sound that is very much like [ç]. Here is how you can use this sound to help you say [ç]: First isolate this <h> sound by starting to say the word <hue> [hju:] and then just prolonging the <h>. If, while pronouncing this <h>, you narrow the space between the front of the tongue and the palate enough so that friction is produced, you will be saying [ç]. To be able to pronounce [ç] after front vowels (one of the environments it which it appears), start by putting the vowel [ɪ] (which occurs in a word like <ist> 'is') in front of the word <hue>. You will first be saying something like [ɪhju:]. Then say this again, but change the pronunciation of <h> so that you are creating more friction when you say it (by narrowing

the space between the front of your tongue and your palate), which will produce [ɪçjuː]. Then say this word again, but stop after [ç], and you will have said [ɪç], the German word <ich> 'I'. The sequence to repeat is the following: [ɪhjuː], [ɪçjuː], [ɪç].

A second approach to pronouncing [ç] is to work with [j], the sound that occurs at the beginning of a word like <ja> 'yes'. This sound is palatal, like [ç]. It differs from [ç], however, in that it is voiced. It is also an approximant, not a fricative, so there is no friction when it is produced. If you whisper the word <ja>, you will produce a voiceless <j>. If you whisper <ja> again, prolong the <j>, and then also narrow the space between the front of your tongue and the palate enough to produce friction, you will be saying [ç].

German [ç] appears at the beginnings of words (<Chemie> 'chemistry' [çemiː]) and at the beginning of the diminutive suffix <-chen> (<Mädchen> 'girl' [meːtçən]), after the front vowels (<Licht> 'light' [lɪçt]), and after consonants in the same syllable (<welch> 'which' [vɛlç]). It is also the pronunciation of <g> in the ending <-ig> as long as it does not occur before a vowel (<wenig> 'little' [veːnɪç]).

The velar fricative, [x], is produced in the back of the mouth by raising the back of the tongue toward the velum, so it makes physiological sense that it appears after the nonfront vowels. It appears after the central vowels (<brach> 'broke' [bʁaːx], <Fach> 'subject' [fax]) and the back vowels (<Loch> 'hole' [lɔx], <Tuch> 'scarf' [tuːx]). To figure out where to put your tongue to produce [x], you can use the [k] sound after the central and back vowels as a guide. For example, say the word <Lok> 'engine' [lɔk] and feel where the back of your tongue touches the velum. This is where you will want it when you say the [x] in <Loch> 'hole' [lɔx]. Do not allow the back of the tongue to touch the velum, however. Leave some space so that the air can escape with audible friction. You will then be producing the velar fricative, [x].

It is common for native speakers of English to produce [ç] and [x] as [k] or [ʃ]. If you find yourself producing <ch> as [k] (for example, saying <ich> 'I' [ʔɪç] as [ʔɪk] or <noch> 'still' [nɔx] as [nɔk]), you are producing it as a plosive instead of a fricative. Therefore, instead of stopping the air as you produce the sound, allow it to flow. If [ʃ] is what you produce (for example, if you say <ich> 'I' [ʔɪç] as [ʔɪʃ]), then you are producing the segment too far forward in your mouth and you are probably also rounding your lips. Try repeating the syllable [jɪ] twice and then follow it with [jɪç]. This should give you a feel for the proper place of articulation, since [j] is palatal, like [ç].

Although the production of voiceless obstruents at the ends of syllables and words is common in English (<cup>, <wick>, <half>), voiced obstruents are also allowed (<cub>, <wig>, <have>). The difference in Modern Standard German is that only voiceless obstruents are produced at the ends of syllables. In a word like <Lieder> 'songs' [liːdɐ], for example, the <d> is pronounced as a voiced alveolar

plosive, [d], but in the singular form, <Lied> 'song' [liːt], it is pronounced as the voiceless alveolar plosive, [t], because it occurs at the end of a syllable.

If you find yourself producing voiced obstruents at the ends of syllables, we recommend that you spend time reading aloud in German. Before you begin reading you may wish to underline the obstruents that you will produce as voiceless sounds. A number of the exercises below focus specifically on the devoicing of obstruents in syllable-final position.

8.6.1.1. Perceptual Practice 1

8.21. Listen to the following words and write which phone ([ç], [x], [ʃ], [k]) you hear for each of the underlined segments.
   a. <Kir<u>ch</u>e>
   b. <Pa<u>kt</u>>
   c. <Mil<u>ch</u>>
   d. <Bu<u>ch</u>>
   e. <Lö<u>sch</u>er>
   f. <Psy<u>ch</u>e>
   g. <<u>Ch</u>emie>
   h. <ba<u>ck</u>en>
   i. <na<u>ckt</u>>
   j. <Kir<u>sch</u>e>
   k. <di<u>ch</u>>
   l. <ma<u>ch</u>en>
   m. <Wo<u>ch</u>e>
   n. <herr<u>sch</u>en>
   o. <di<u>ck</u>>

8.22. Listen to the following words and fill in the appropriate phone in each.
   Example: Armban[t]uhr
   a. Freita[ ]
   b. Urlau[ ]er
   c. Klei[ ]er
   d. Lei[ ]
   e. Verbän[ ]e
   f. Fie[ ]er
   g. Gel[ ]
   h. run[ ]lich
   i. Stran[ ]
   j. Hal[ ]
   k. tä[ ]lich

l. schrei[ ]en
m. Para[ ]ies
n. bra[ ]
o. Far[ ]e

8.23. Listen to the sentences and decide whether the underlined segment is voiced or voiceless.

a. Die Frau hat drei Kin<u>d</u>er.
b. Wenn es kalt ist, trage ich ein Hal<u>s</u>tuch.
c. Wir schwimmen gern im Schwimmba<u>d</u>.
d. Die nati<u>v</u>en Olivenöle schmecken am besten.
e. Ist Kal<u>bf</u>leisch sehr teuer?
f. Meine Mutter ist Marburgerin.
g. Ärmello<u>s</u>e T-Shirts sind in der Schule nicht erlaubt.
h. Im Winter trage ich immer Han<u>d</u>schuhe.
i. Die bra<u>v</u>en Kinder hören gut zu.
j. Sie trägt einen Kor<u>b</u>, wenn sie einkaufen geht.

8.24. Listen to the poem that follows. Underline all of the examples of final devoicing that you hear. Do not include the <d> in the word <und> 'and'.

Der Werwolf

Ein Werwolf eines Nachts entwich
von Weib und Kind und sich begab
an eines Dorfschullehrers Grab
und bat ihn: Bitte, beuge mich!

Der Dorfschulmeister stieg hinauf
auf seines Blechschilds Messingknauf
und sprach zum Wolf, der seine Pfoten
geduldig kreuzte vor dem Toten:

Der Werwolf‹ – sprach der gute Mann,
›des Weswolfs, Genitiv sodann,
›dem Wemwolf, Dativ, wie man's nennt,
›den Wenwolf, – damit hat's ein End'.‹

Dem Werwolf schmeichelten die Fälle,
er rollte seine Augenbälle.
Indessen, bat er, füge doch
zur Einzahl auch die Mehrzahl noch!

Der Dorfschulmeister aber mußte
gestehn, daß er von ihr nichts wußte.
Zwar Wölfe gäb's in großer Schar,
doch ›Wer‹ gäb's nur im Singular.

Der Wolf erhob sich tränenblind –
er hatte ja doch Weib und Kind!!
Doch da er kein Gelehrter eben,
so schied er dankend und ergeben.

Christian Morgenstern (1917)

8.25. Listen to the following poem. Above each example of <ch>, indicate whether you have heard [x] or [ç]. (Exclude the <ch> in <Christ>, which is pronounced [k].)

Bim, Bam, Bum
Ein Glockenton fliegt durch die Nacht,
als hätt er Vogelflügel;
er fliegt in römischer Kirchentracht
wohl über Tal und Hügel.

Er sucht die Glockentönin BIM,
die ihm vorausgeflogen;
d.h., die Sache ist sehr schlimm,
sie hat ihn nämlich betrogen.

"O komm," so ruft er, "komm, dein BAM
erwartet dich voll Schmerzen.
Komm wieder, BIM, geliebtes Lamm,
dein BAM liebt dich von Herzen!"

Doch BIM, daß ihrs nur alle wißt,
hat sich dem BUM ergeben;
der ist zwar auch ein guter Christ,
allein das ist es eben.

Der BAM fliegt weiter durch die Nacht
wohl über Wald und Lichtung.
Doch, ach, er fliegt umsonst! Das macht,
er fliegt in falscher Richtung.

Christian Morgenstern (1917)

8.26. Listen to the text that follows from *Spiegel Online* (2012). Underline all of the examples of <ch> and indicate whether you have heard [x] or [ç].

Studentische Selbsttäuschung: Juhu, ich langweile mich
     Das Referatsthema ist öde, das Studium langweilig, der Job ätzend. Doch wir verteidigen alles als spannend, interessant, herausfordernd, vor allem vor uns selbst. Stefanie Unsleber, 24, spürt solchen Uni-Alltagsphänomenen nach – und erklärt, wie wir uns selbst austricksen.

Mein erstes Studium habe ich abgebrochen. Islamwissenschaft und Philosophie, in der Universität war das langweiliger als in den Geschichten von "Sophies Welt" und den Infobänden zu islamischem Fundamentalismus. Ich brauchte ein neues Fach. Die Wahl fiel auf Politikwissenschaft. "Ist es das jetzt wirklich?", fragten meine Eltern. "Bist du dir sicher?", meine Freunde. "Ja", sagte ich. Der Studienplan klang gut: Internationale Beziehungen, Vergleich politischer Systeme, Afrika, Asien, Krieg, Krisen und dazu der theoretische Unterbau.

Es war schrecklich langweilig.

Aber das erzählte ich keinem, auch nicht mir selbst. Stattdessen hörte ich mich über die Interdependenztheorie plaudern. Schilderte, wie interessant die Parteienlandschaft Thailands ist. Versuchte, meine Freunde für das Rechtsstaatsprinzip zu begeistern. Wahrscheinlich habe ich sie ziemlich genervt, mich selbst ja auch.

Aber Menschen wie ich begegnen mir ständig. Da ist die Freundin, die sich nie besonders für Betriebspsychologie begeistern konnte, aber nun ständig davon spricht, seit sie ihre neue Hiwi-Stelle hat. Oder meine ehemalige Mitschülerin, die jetzt als Finanzberaterin arbeitet und mir erklärte, wie interessant sie das deutsche Steuersystem findet.

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8.6.1.2. Production Practice 1

8.27. Read each German word aloud. Then indicate which phone you have produced for the underlined segments and provide a rationale for your production.

Example: <ste<u>ch</u>en> [ç] following a front vowel, [ɛ]

   a. <Tei<u>ch</u>>
   b. <sa<u>g</u>t>
   c. <Infiniti<u>v</u>>
   d. <hal<u>b</u>e>
   e. <Männ<u>ch</u>en>
   f. <Rin<u>d</u>fleisch>
   g. <ge<u>g</u>essen>
   h. <lie<u>s</u>t>
   i. <Oli<u>v</u>en>
   j. <Trei<u>b</u>haus>
   k. <tru<u>g</u>>
   l. <ruhi<u>g</u>>
   m. <Mun<u>d</u>>
   n. <fla<u>ch</u>>
   o. <la<u>g</u>en>
   p. <gi<u>b</u>st>
   q. <Va<u>s</u>e>

r. <fin<u>d</u>en>
s. <tau<u>ch</u>en>
t. <Krei<u>s</u>>

8.28. The alternations between [ç] and [x] and voiceless and voiced consonants are often found in different grammatical forms of words. Produce the following pairs of words and write down the consonantal alternations that you produce.
    Example: <Bach> - <Bäche> [x] - [ç]
a. <Hand> - <Hände>
b. <Koch> - <Köche>
c. <geben> - <gibst>
d. <Bild> - <Bilder>
e. <Tag> - <Tages>
f. <Buch> - <Bücher>
g. <Bad> - <Bäder>
h. <Loch> - <Löcher>
i. <Wald> - <Wälder>
j. <Tochter> - <Töchter>

8.29. Read "Der Werwolf" in exercise 8.24 aloud. You may wish to listen to it a few times before you read it aloud. Pay close attention to final devoicing.

8.30. Read the poem from exercise 8.25. Pay particular attention to your production of [x] and [ç].

8.31. Read the text from *Spiegel Online* in exercise 8.26 aloud. Concentrate especially on your production of [x] and [ç].

8.32. Before you read the paragraphs that follow, underline all occurrences of <ch> as well as all examples of final devoicing. Pay close attention to these new sounds as you read the paragraph aloud.

Elf Söhne

    Ich habe elf Söhne.

    Der Erste ist äußerlich sehr unansehnlich, aber ernsthaft und klug; trotzdem schätze ich ihn, wiewohl ich ihn als Kind wie alle andern liebe, nicht sehr hoch ein. Sein Denken scheint mir zu einfach. Er sieht nicht rechts noch links und nicht in die Weite; in seinem kleinen Gedankenkreis läuft er immerfort rundum oder dreht sich vielmehr.

    Der Zweite ist schön, schlank, wohlgebaut; es entzückt, ihn in Fechterstellung zu sehen. Auch er ist klug, aber überdies welterfahren; er hat viel gesehen, und deshalb scheint selbst die heimische Natur vertrauter mit ihm zu sprechen, als mit den Daheimgebliebenen. Doch ist gewiß dieser Vorzug nicht nur und nicht einmal wesentlich dem Reisen zu verdanken, er gehört vielmehr zu dem Unnachahmlichen dieses Kindes,

das zum Beispiel von jedem anerkannt wird, der etwa seinen vielfach sich überschla-
genden und doch geradezu wild beherrschten Kunstsprung ins Wasser ihm nach-
machen will. Bis zum Ende des Sprungbrettes reicht der Mut und die Lust, dort aber
statt zu springen, setzt sich plötzlich der Nachahmer und hebt entschuldigend die
Arme. – Und trotz dem allen (ich sollte doch eigentlich glückselig sein über ein solches
Kind) ist mein Verhältnis zu ihm nicht ungetrübt.

Franz Kafka (1919)

8.6.2. New German Vowels

As is the case with the consonants discussed above, it is possible for you to pro-
duce the vowels in this section—in spite of their status as new—if you make slight
adjustments to other vowels. You can produce each of the front, rounded vow-
els, [y ʏ ø œ], by articulating their unrounded counterparts, [i ɪ e ɛ], and then
rounding your lips. It is important to remember that although the practice stage
might involve movement from the unrounded to the rounded vowel, German
front, rounded vowels are produced as monophthongs, that is, without move-
ment from the unrounded to the rounded counterpart.

Although an umlaut (the diacritic <¨> placed over a vowel) may seem insig-
nificant, the fronting associated with these vowels is important because it dis-
tinguishes meaning. For example, if the <o> in <Ofen> 'oven' [ʔoːfən], which is a
mid, back, rounded vowel, is umlauted, it becomes a mid, front, rounded vowel,
[øː], which results in a different word form: <Öfen> 'ovens' [øːfən]. A similar phe-
nomenon in English is the morpheme-final <e> in words like <fate> and <bite>,
which differ in meaning from their counterparts without this <e>: <fat> and <bit>.
If you ignore the pronunciation information provided by this <e>, you will end up
saying a completely different word. Similarly, if you ignore the "two dots" over a
vowel in German and do not produce the fronting associated with them, you will
end up saying something you did not intend to say.

We will look now at the pronunciation of each of the front, rounded vowels in
German, beginning with [yː]. A phone similar to German [yː] exists in the speech
of some speakers of North American English. Some speakers produce the <u> in
the word <dude> with extreme fronting. Even if you are not one of these speakers,
you can still learn to pronounce German [yː]. All you have to do is to produce Ger-
man [iː] with lip rounding. If you say [iː] and round your lips while saying it, you
will end up saying [yː]. You can also practice this sound by alternating between
the German words <liegen> 'to lie in a horizontal position' [liːgən] and <lügen>
'to tell a lie' [lyːgən]. Many native speakers of North American English have dif-
ficulty distinguishing [yː] from [uː]. For example, they have trouble distinguish-
ing <Güter> 'goods' [gyːtɐ] and <guter> 'good (nominative masculine)' [guːtɐ]. If
you find that you have difficulty making this distinction, pay close attention to

the position of your tongue. Say [uː] and then push your tongue forward in your mouth, keeping your lips rounded. You will then be saying the vowel [yː].

German [ʏ] is produced by making [ɪ] and then rounding your lips. After you practice alternating between [ɪ] and [ʏ], you can practice these sounds in words by saying <Kiste> 'box' [kɪstə] and then <Küste> 'coast' [kʏstə]. You may notice that you have the tendency to produce something that sounds like [kʊstə] when you try to pronounce <Küste>. It is important to remember that this may cause difficulties for native speakers. If you say <wurde>, for example, instead of <würde>, you are saying 'became' rather than 'would'. It is crucial that you focus on the distinction between [ʏ] and [ʊ]. Work on keeping your tongue forward when you pronounce [ʏ].

To produce German [øː], say [eː] and then round your lips. An example of a pair of words that differ only in these vowels is <sehne> '(I) long for' [zeːnə] and <Söhne> 'sons' [zøːnə]. As with the other front, rounded vowels, native speakers of North American English often ignore the umlaut and produce [zoːnə] for the second word in this pair. If you find that you do this, be sure to pay attention to the position of your tongue, and move it forward as you produce the <ö> sound.

The final front rounded German vowel, [œ], is produced similarly to German [ɛ], but with rounded lips. A pair of words such as <kennen> 'to know' [kɛnən] and <können> 'to be able to' [kœnən] is an example of words whose vowels differ primarily in degree of lip rounding. North American English speakers have the tendency to ignore the fronting that goes along with [œ] and often produce the vowel [ɔ] instead. If you find yourself doing this, concentrate on moving your tongue to the position that it is in when you produce the vowel [ɛ]. There are dialects of German, particularly in the south, in which speakers do not produce the front, rounded vowels. Instead, they just produce the front, unrounded counterparts, [i ɪ e ɛ]. This should serve as evidence that merely producing the back "umlautless" vowels [u ʊ o ɔ] will not suffice to distinguish meaning in your speech.

The final new vowel in German is dark schwa, [ɐ], which is syllabic when it corresponds to unstressed syllable-final <-er> in words such as <besser> 'better' [bɛsɐ] and <Mutter> 'mother' [mʊtɐ]. It is a lax, central vowel that is produced lower in the mouth than [ə]. The North American English <u> in "uh" is a close approximation of this vowel. Your tongue should remain level in your mouth when you produce this segment. One other variant of this vowel is the "r-coloring" that it represents. That is, when <r> follows a vowel in the same syllable in words like <Uhr> 'clock', <hier> 'here', <erkennen> 'to recognize' and <hört> 'listens', the <r> is not produced in the same way as it is at the beginning of a syllable. Instead, it is pronounced as a nonsyllabic version of dark schwa: [ɐ̯]. Because it is a vowel-like pronunciation of <r>, it is often called vocalic <r>.

Native speakers of North American English have the tendency to produce an American English [ɹ] whenever they see <r>. If you notice that you are doing this,

remind yourself that whenever <r> is *not* at the beginning of a syllable, it will be pronounced as dark schwa, a vowel. Syllabic dark schwa, [ɐ], sounds like English <uh>, and nonsyllabic dark schwa, [ɐ̯], is simply a less prominent version of this sound that appears when it follows a vowel in the same syllable.

8.6.2.1. Perceptual Practice 2

Instructions for exercises 8.33 through 8.43: Consider each pair of words and circle the word you hear.

8.33. [y:] *or* [i:]?
   a. <lügen>   <liegen>
   b. <spülen>   <spielen>
   c. <Züge>   <Ziege>
   d. <für>   <vier>
   e. <Mythe>   <Miete>
   f. <Bühne>   <Biene>
   g. <Süden>   <sieden>
   h. <Düse>   <diese>

8.34. [y:] *or* [u:]?
   a. <Brüder>   <Bruder>
   b. <kühl>   <cool>
   c. <führen>   <fuhren>
   d. <klüger>   <kluger>
   e. <Blüten>   <bluten>
   f. <Tür>   <Tour>
   g. <spülen>   <Spulen>
   h. <lügt>   <lugt>

8.35. [ʏ] *or* [ɪ]?
   a. <müssen>   <missen>
   b. <Lüste>   <Liste>
   c. <Bünde>   <Binde>
   d. <küssen>   <Kissen>
   e. <Gerücht>   <Gericht>
   f. <zücken>   <Zicken>
   g. <brüllen>   <Brillen>
   h. <Fürst>   <First>

8.36. [ʏ] *or* [ʊ]?
   a. <müsste>   <musste>
   b. <drücken>   <drucken>
   c. <füttern>   <futtern>

    d. <Jünger> <junger>
    e. <dürfte> <durfte>
    f. <Mütter> <Mutter>
    g. <Kürze> <kurze>
    h. <Rücken> <rucken>

8.37. [y:] *or* [ʏ]?
    a. <Hüte> <Hütte>
    b. <Wüste> <wüsste>
    c. <Düne> <dünne>
    d. <Flüge> <flügge>
    e. <pflügt> <pflückt>
    f. <Dürer> <dürrer>
    g. <rügt> <rückt>
    h. <Grübchen> <Grüppchen>

8.38. [ø:] *or* [e:]?
    a. <lösen> <lesen>
    b. <Höfe> <Hefe>
    c. <bösen> <Besen>
    d. <Möhre> <Meere>
    e. <Söhne> <sehne>
    f. <Öre> <Ehre>
    g. <stößt> <stehst>
    h. <Löhne> <Lehne>
    i. <Flöte> <flehte>

8.39. [ø:] *or* [o:]?
    a. <größer> <großer>
    b. <schön> <schon>
    c. <Öfen> <Ofen>
    d. <Vögel> <Vogel>
    e. <Böden> <Boden>
    f. <töten> <toten>
    g. <Törin> <Toren>
    h. <röten> <roten>

8.40. [œ] *or* [ɛ]?
    a. <völlig> <fällig>
    b. <können> <kennen>
    c. <Stöcke> <stecke>
    d. <möchte> <Mächte>
    e. <Hölle> <helle>

    f. <Röcke>   <Recke>
    g. <Kölner>   <Kellner>
    h. <Söckchen> <Säckchen>

8.41. [œ] *or* [ɔ]?
    a. <könnte>   <konnte>
    b. <Töchter>   <Tochter>
    c. <fördern>   <fordern>
    d. <Schlösser> <Schlosser>
    e. <Stöcken>   <stocken>
    f. <Böcken>   <bocken>
    g. <Töpfen>   <Topfen>
    h. <Zölle>   <zolle>

8.42. [øː] *or* [œ]?
    a. <Röslein>   <Rösslein>
    b. <Tönchen>   <Tönnchen>
    c. <Höhle>   <Hölle>
    d. <Schöße>   <schösse>
    e. <gewöhnen> <gewönnen>
    f. <Flöße>   <flösse>

8.43.
    a. <Hütte>   <Hüte>
    b. <Bögen>   <Bogen>
    c. <Kissen>   <küssen>
    d. <spülen>   <spielen>
    e. <Höcker>   <Hocker>
    f. <drücken> <drucken>
    g. <schon>   <schön>
    h. <her>   <hör>
    i. <füllen>   <fühlen>
    j. <können>   <kennen>
    k. <Brüder>   <Bruder>
    l. <Besen>   <bösen>
    m. <Mutter>   <Mütter>
    n. <Hölle>   <Höhle>
    o. <fällig>   <völlig>
    p. <Miete>   <Mythe>

8.44. Listen to each German word and repeat what you hear. Write down the vowel phone that you have heard and produced: [yː], [ʏ], [øː], or [œ].
    a. [   ]
    b. [   ]

c. [   ]
d. [   ]
e. [   ]
f. [   ]
g. [   ]
h. [   ]

8.45. Consider each pair of words and circle the word you hear.
   a. <ja>   <Jahr>
   b. <vom>   <Form>
   c. <Kuss>   <Kurs>
   d. <Lehre>   <Lehrer>
   e. <Messe>   <Messer>
   f. <ehe>   <eher>
   g. <stumm>   <Sturm>
   h. <statt>   <Start>
   i. <Bad>   <Bart>
   j. <bitte>   <bitter>
   k. <Lage>   <Lager>
   l. <Fische>   <Fischer>

8.46. Listen to each word and fill in the symbol for the phone that you hear.
   a. Ku[   ]s
   b. Ei[   ]
   c. Lag[   ]
   d. läng[   ]
   e. Meist[   ]
   f. Ja[   ]
   g. lieb[   ]
   h. Fahr[   ]

8.47. Choose the word that you hear in each of the following sentences.
   Example: Ich sehe den Kölner / <u>Kellner</u>.
   a. Der Mann muss das Problem lesen / lösen.
   b. Die Lehrerin findet ihre Schule / Schüler toll.
   c. Die Mädchen sehen ihre Mutter / Mütter nicht.
   d. Da drüben sind die Besen / Bösen.
   e. "Söhne / Sonne!" sagte die Frau.
   f. Schüler sollen im Klassenzimmer nicht liegen / lügen.
   g. Ein Föhn / Phon ist der Linguistin sehr wichtig.
   h. Das Kind hat zwei Stöcke / Stücke.
   i. Mein Onkel hat keine Tochter / Töchter.
   j. Wir mussten / müssten die Antwort sagen.

    k. Die Kiste / Küste ist toll.

    l. "Nein, ich habe Bruder / Brüder gesagt", sagte der Junge.

8.48. Listen to the following excerpts from "Das Märchen vom Sandmann," by Hans Christian Andersen (2006). Provide the IPA symbols for each of the underlined segments.

    a. In der ganzen Welt versteht niemand so sch<u>ö</u>ne Geschichten zu erzählen wie der alte liebe Sandmann. Gegen Abend, wenn die Kinder noch h<u>ü</u>bsch artig am Tische oder auf ihrem St<u>üh</u>lchen sitzen, kommt das alte Männchen ganz leise die Treppe herauf, denn es geht auf Socken. Husch, <u>ö</u>ffnet es die Th<u>ü</u>re und streut den Kindern Sandk<u>ö</u>rnchen in die Augen, so fein, so fein, aber doch immer genug, daß sie nicht länger die Augen aufzuhalten verm<u>ö</u>gen. Deshalb sind sie auch nicht im stande, ihn zu sehen. Er schl<u>ü</u>pft gerade hinter sie, bläst ihnen sanft in den Nacken und dann wird ihnen das K<u>ö</u>pfchen gar schwer. O ja, aber es thut ihnen nicht weh, denn der Sandmann meint es mit den Kindern gerade gut. Er verlangt nur, daß sie ruhig sein sollen, und das sind sie am besten, wenn man sie zu Bette bringt.

    b. <u>Ü</u>ber der Kommode hing ein großes Gemälde in einem reich vergoldeten Rahmen, welches eine herrliche Landschaft darstellte. Als der Sandmann dasselbe mit seiner Zauberspritze benetzt hatte, begannen die V<u>ö</u>gel darauf zu singen, die Baumzweige bewegten sich, und die Wolken flogen so nat<u>ü</u>rlich, daß man ihren Schatten <u>ü</u>ber die Landschaft konnte dahinschweben sehen.

    c. „Es fehlt ihnen aber doch unser Gr<u>ü</u>nkohl!" sagte die Henne. „Ich brachte einen Sommer mit allen meinen K<u>ü</u>cheln auf dem Lande zu. Dort war eine Sandgrube, in der wir umhergehen und scharren konnten. Auch hatten wir Zutritt zu einem Garten mit Grünkohl! O wie gr<u>ü</u>n der war! Ich kann mir nichts Sch<u>ö</u>neres denken!"

8.49. Listen to the paragraphs that follow, from *Immensee*, by Theodor W. Storm (1852). Provide the IPA symbols for each of the missing phones.

Reinhard hatte hier mit Elisabeths Hilfe ein Haus aus Rasenst[ ]cken aufgef[ ]hrt; darin wollten sie die Somm[ ]abende wohnen; ab[ ] es fehlte noch die Bank. Nun ging er gleich an die Arbeit; Nägel, Hammer und die n[ ]tigen Brett[ ] waren schon bereit.

    Während dessen ging Elisabeth an dem Wall entlang und sammelte den ringf[ ]r-migen Samen de[ ] wilden Malve in ihre Sch[ ]rze; davon wollte sie sich Ketten und Halsbänd[ ] machen; und als Reinhard endlich trotz manches krumm geschlagenen Nagels seine Bank dennoch zustande gebracht hatte und nun wied[ ] in die Sonne hinaustrat, ging sie schon weit davon am and[ ]n Ende der Wiese.

8.6.2.2. Production Practice 2

8.50. Practice pronouncing each pair of words in exercises 8.33 through 8.42. For each exercise, pay attention to the differences in tongue position and lip rounding

between the words in each pair. In exercise 8.33, for example, the only difference between the [y:] in <lügen> and the [i:] in <liegen> is lip rounding. In 8.34, the difference is one of tongue position: the [y:] in <Brüder> is a front vowel, whereas the [u:] in <Bruder> is a back vowel.

8.51. In German, different forms of a word (the singular and plural form, for example) or different words that are related because they share the same root morpheme (a verb and a noun, for example) often exhibit an alternation between different vowels or between [ʁ] and [ɐ̯]. Pronounce the following pairs of words, paying close attention to the vocalic contrasts we have discussed in this chapter as well as the alternation between [ʁ] and [ɐ̯].

   a. <gesund>   <gesünder>
   b. <Schloss> <Schlösser>
   c. <Mund>   <Münder>
   d. <Nuss>   <Nüsse>
   e. <schöne>   <schöner>
   f. <Sohn>   <Söhne>
   g. <Länge>   <länger>
   h. <Schüler> <Schule>
   i. <Grund>   <gründlich>
   j. <Uhr>   <Uhren>
   k. <öffnen>   <offen>
   l. <fuhr>   <führe>
   m. <Loch>   <Löcher>
   n. <Bücher>   <Buch>
   o. <Reiter>   <reite>
   p. <Koch>   <Köchin>
   q. <lehr>   <lehren>
   r. <Chöre>   <Chor>

8.52. Read each of the following sentences aloud. Be sure to pay close attention to your production of the new vowels.

   a. Ich habe "Fliege", nicht "Flieger", gesagt.
   b. Es waren vier Kinder, nicht für Kinder.
   c. Ein Bruder? Nein, zwei Brüder.
   d. Zwei Öfen habt ihr? Nein, wir haben nur einen Ofen.
   e. Ich habe "Kissen", nicht "küssen", gesagt.
   f. Das war keine Mühle, sondern ein Müller.
   g. Es waren viele Fischer aber wenige Fische.
   h. Ich habe "helle", nicht "Hölle", gesagt.
   i. Das war keine Biene, sondern eine Bühne.
   j. Er hat "müsste", nicht "musste", gesagt.

8.53. Read aloud the excerpts from Hans Christian Andersen's "Das Märchen vom Sandmann" in exercise 8.48. Pay close attention to the production of front, rounded vowels when you read. You may wish to listen to the excerpts again before you read them aloud.

8.54. Read aloud the excerpts from Theodor Storm's *Immensee* from exercise 8.49. Pay attention to your production of the front, rounded vowels and dark schwa as you read.