

Chapter 4: Vowels



In Chapter 4: Vowels, we will be covering all of the English vowel sounds. We will discuss them in terms of the manner that they are articulated and you will be introduced to their phonetic symbols for transcription purposes. It will be vitally important for you to complete all of the exercises embedded in this chapter and the extra practice exercises at the end of the chapter.

English Vowel and Diphthong Production

- Vowels are phonemes produced without constriction or blockage of airflow in the vocal tract
- Refer to Table 4.1 on page 54 for the Standard American English vowels and their classification
- Tongue is the primary articulator for vowels; changing jaw position is linked to vowel production
- Size/shape of pharynx changes to correspond with tongue positioning

Vowels are phonemes that are produced without any constriction or blockage of the airflow through the vocal tract. If you will see Table 4.1 on page 54, you will find the Standard American English vowels and their classifications. For vowels, the tongue is the primary articulator, however, the changing positions of the jaw is significantly linked to the production of vowel sounds. The size and the shape of the pharynx changes to ammodate tongue positioning for vowel sounds.

English Vowel and Diphthong Production

- Vowels are categorized by position of the tongue in the mouth during production according to:
 1. tongue height – how high/low in the oral cavity the tongue is during vowel production (high, mid, low)
 2. tongue advancement – how far forward/backward in the mouth the tongue is during vowel production (front, central, back)
- Vowel quadrilateral – schematic representation of oral cavity showing approximation of height/advancement of tongue for each vowel
- Refer to Figure 4.1 on page 55 for vowel quadrilateral

Vowels sounds can be categorized by the position of the tongue in the mouth during vowel production. There are 4 ways that vowels are typically described: 1. tongue height, 2. tongue advancement, 3. whether they are tense or lax, and 4. lip rounding. We will discuss the first two on this slide and continue with the last two on the next slide. First is tongue height. This is reflective of how high or how low in the oral cavity the tongue is during vowel production. Tongue height is described in three dimensions: high, mid, and low. The next category is tongue advancement. Tongue advancement is how far forward or how far backward in the mouth the tongue is during vowel production. Tongue advancement is described using the terms front, central and back. In your textbook you can see the vowel quadrilateral, a schematic representation of the oral cavity that shows the approximate height and advancement of the tongue for each American English vowel. You can find it on page 55 in Figure 4.1. Across the type you will see tongue advancement and along the side you will see tongue height.

English Vowel and Diphthong Production

- 3. tense/lax – tense vowels are longer in duration and require more muscle effort than lax vowels; tense vowels can end stressed open syllables and can occur in closed syllables; lax vowels never end a stressed open syllable
 - Tense: /i, e, u, o, ɔ, ɑ, ɜ/
 - Lax: /ɪ, ε, æ, ʊ, ə, ʌ, ə/
- 4. lip rounding – secondary characteristic of vowels (rounded, unrounded)
 - Most English back vowels are rounded; front vowels are unrounded
 - Unrounded: /i, ɪ, e, ε, æ, ɑ, ə, ʌ/
 - Rounded: /u, ʊ, o, ɔ, ə, ɜ/

The third way that vowels can be categorized is by whether they are tense or lax. Tense vowels exhibit a longer duration and require more muscular effort than lax vowels. Tense vowels can end stressed open syllables and can also occur in closed syllable while lax vowels can never end a stressed open syllable. The following vowels are considered to be tense: /i/ as in “key”, /e/ as in “rebate”, /u/ as in “moon”, /o/ as in “okay”, /ɔ/ as in “law”, /ɑ/ as in “cod”, and /ɜ/ as in “bird”. The following vowels are considered to be lax: /ɪ/ as in “win”, /ε/ as in “red”, /æ/ as in “had”, ʊ// as in “wood”, /ə/ as in “about”, /ʌ/ as in “bud”, and /ə/ as in “butter”. Finally, there is lip rounding. This is a secondary characteristic of vowels. Most of the English back vowels are rounded while the front vowels are unrounded. The unrounded vowels include /i, ɪ, e, ε, æ, ɑ, ə, ʌ/ and the rounded vowels include /u, ʊ, o, ɔ, ə, ɜ/.

English Vowel and Diphthong Production

- Most English vowels are monophthongs
 - Monophthongs – vowel phoneme consisting of one distinct articulatory element
 - Diphthongs – single phoneme consisting of two vowel elements
- Articulation of a diphthong involves tongue placement for the first element then movement to second element in a continuous gliding motion
 - First element is the onglide; second element is the offglide
 - Offglide is always at a higher position in oral cavity than onglide

Most of the vowel in the English language are monophthongs. Monophthongs are a vowel phoneme that consists of one distinct articulatory element while vowel diphthongs are a single phoneme that consist of two vowel elements. The articulation of a diphthong vowel involves tongue placement for the first element and then movement of the tongue to the second element. This movement occurs in a continuous gliding motion. The first element in the production of the vowel as a diphthong is called the onglide and the second element is the offglide. The offglide always occurs at a higher position in the oral cavity than the onglide.

English Vowel and Diphthong Production

- All English vowels are oral sounds and velum is raised to prevent air from entering the nasal cavity
- Vowels CAN take on a nasal quality due to nasalization
 - Nasalization – production of an oral phoneme with accompanying nasal resonance due to a lowered velum
 - Often occurs when the vowel precedes a nasal consonant
- Nasalized vowels are typical of some English dialects and some speech disorders

All of the English vowels are considered to be oral sounds. The velum is raised in order to prevent air from entering the nasal cavity, however, vowels CAN take on a nasal quality due to nasalization which is the production of an oral phoneme with accompanying nasal resonance due to a lowered velum. This often occurs when the vowel precedes a nasal consonant (if you will remember the nasal consonants are /m, n, and ŋ/. Nasalized vowels are typical for some English dialects and can be found within some speech disorders.

Transcription of English Vowels and Diphthongs - Front Vowels /i/

- /i/ as in “keep”, “fleet”, “Easter”, and “edict”
- Symbol: lowercase i
- High, front, unrounded, tense
- Allographs – “i”, “e”, “ei”, “ea”, “ee”, “ey”, “ie”, “oe” (e.g. reach, keel, key, seizure, etc)
- Raise the body of the tongue to a high, front position near the hard palate; lips are unrounded; tense
- Highest and most fronted of all vowels
- Point vowel – one of the four extreme corner vowels of the vowel quadrilateral

We are going to discuss the front vowels first starting with /i/. The sound is written using the lower-case i symbol. This phoneme is /i/ as in “keep”, “fleet”, “Easter”, and “edict”. This is a high, front, unrounded, tense vowel. It has multiple allographs that are commonly used to represent this phoneme when spelling words. Some examples are the use of “ea” as in “reach” and “ei” as in seizure. To produce the vowel the body of the tongue is raised into a high, front position near the hard palate. The lips are unrounded and the phoneme is tense in nature. /i/ is the highest and most fronted of all of the vowel sounds. It is also considered to be a point vowel or one of the four extreme corner vowels of the vowel quadrilateral.

Transcription of English Vowels and Diphthongs – Front Vowels /ɪ/

- /ɪ/ as in “flit”, “business”, “really” and “steer”
 - Symbol: uppercase I
 - High, front, unrounded, lax
 - Allographs – “i”, “y”, “ui”, “u”, “ee”, “o”, “ie”, “e”, “ea(r)”, “ee(r)”, “i(r)”, “ej(r)”, “ie(r)”, “e(re)” (e.g. “with”, “gym”, “been”, “pretty”, etc)
 - Raise body of the tongue to a high, front position (slightly lower than for /i/) near the hard palate; jaw fairly closed; lips unrounded; lax
- *text says use /ɪ/ when transcribing the “y” in final, unstressed syllables BUT we will continue to use /i/ as this is acceptable/typical (e.g. “many”/meni/)

Next is /ɪ/ as in “flit”, “business”, “really” and “steer”. It is written as an upper-case I symbol. It is a high, front, unrounded, lax vowel. It has numerous allographs that you can see in your text including “y” as in “gym” and “e” as in “pretty”. To produce this vowel sound, the body of the tongue is raised to a high, front position near the hard palate. This is slightly lower than the position required for /i/. The jaw is fairly closed for this vowel produce and the lips are unrounded. This is a lax vowel. Your text does make a note that you can utilize //ɪ/ when transcribing the “y” in final unstressed syllables BUT we will continue to use /i/ as this is an acceptable/typical way to transcribe words like “many” /meni/.

Transcription of English Vowels and Diphthongs – Front Vowels /ɪ/

- Note use of /ɪ/ for “ing” words (e.g. “sting” /stɪŋ/)
- /ɪ/ often found in combination with /r/ like in “hear” /hɪr/ - r-colored vowel
- R-colored vowels possess an auditory quality known as rhotacization (the vowel is perceived as having an “r” quality)
- /ɪr/ may be transcribed as /ɪə/ - both are acceptable
- Dialectal variations occur

You will want to note the use of /ɪ/ for “ing” words like “sting” /stɪŋ/. The /ɪ/ is often found in combination with consonantal /r/ like in “hear” /hɪr/ making it an r-colored vowel. R-colored vowels possess an auditory quality that is known as rhotacization in which the vowel is perceived as having an “r” quality to it. Therefore, /ɪr/ may be transcribed as small capital I and the turned R or as /ɪə/ the small capital I and the right hook schwa or the “Schwar”. Both of these are acceptable. It is important to note that different dialects will pronounce some words containing /ɪ/ differently and that is still considered correct based on the dialect that the speaker is using.

Transcription of English Vowels and Diphthongs – Front Vowels /e/ and /eɪ/

- /e/ as in “gyrate” and “decade”
- Symbol: lowercase e
 - Use when syllable does not receive primary stress
- /eɪ/ as in “away” and “toupee”
- Symbol: lowercase e & uppercase I
 - Use when syllable is stressed or at the end of a word
- High-mid, front, unrounded, tense
- Allographs: “ea”, “a...e”, “au”, “ai”, “ei”, “ay”, “ey” (e.g. “great”, “gauge”, “veil”, etc)
- Body of tongue slightly higher than middle of mouth; lips unrounded; tense
- Allophone of /e/ is a diphthong /eɪ/
- Dialectal variations occur

The next front vowel is /e/ as in “gyrate” and “decade”. You will use the lower-case e symbol in transcription when the syllable does not receive primary stress. This vowel sound has an allophone /eɪ/ as in “away” and “toupee” which looks like the lower-case e symbol and the upper-case I symbol. This IPA symbol is used when the syllable is stressed or when the sound occur at the end of a word. This vowel is produced as a high-mid, front, unrounded, tense sound. It has several allographs to include “ea” as in “great” and “ei” as in “veil”. To produce /e/ the body of the tongue must be slightly higher than the middle of the mouth. The lips are rounded and it is a tense vowel. The allophone of /e/ using the lower-case e symbol is a diphthong using two vowel elements to make a single phoneme. Again, it’s important to remember that dialectal variations will occur in the pronunciation of words containing this vowel sound.

Transcription of English Vowels and Diphthongs – Front Vowels /ɛ/

- /ɛ/ as in “met”, “bury”, and “elephant”
- Symbol: Epsilon symbol from Greek alphabet
- Low-mid, front, unrounded, lax
- Allographs: “e”, “ei”, “ea”, “a”, “ie”, “ue”, “eo”, “ai”, “ai(r)”, “ei(r)”, “ea(r)”, “u(r)”, “a(re)”, “e(re)” (e.g. “let”, “heifer”, “guest”, “bear”, “where”, etc)
- Tongue body located midway between mid and low positions in mouth; unrounded lips; lax
- R-colored vowel when it occurs before consonant /ɹ/ as in “hair” /hɛɹ/; can be transcribed as /ɛə/
- Dialectal variations occur

The vowel sound /ɛ/ as in “met”, “bury”, and “elephant” is our next front vowel to discuss. It is written using the Epsilon symbol from the Greek alphabet and is often referred to as epsilon. This is a low-mid, front, unrounded, lax vowel. It has multiple allographs including “ei” as in “heifer”, “ue” as in “guest” and “ea(r)” as in “bear”. This sound is produced with the tongue body located midway between the mid and low positions in the mouth. The lips are unrounded and the vowel is lax. It is an r-colored vowel when it occurs before the consonantal /ɹ/ as in “hair” and can be transcribed as the epsilon symbol and the turned R /hɛɹ/. It can also be transcribed as /ɛə/ using the epsilon symbol and the schwa symbol. Dialectal variation to pronunciation of this vowel do occur.

Transcription of English Vowels and Diphthongs – Front Vowels /æ/

- /æ/ as in “trash”, “jazz” and “smacked”
- Symbol: Ash
- Low, front, unrounded, lax
- Allographs: “a”, “a(ng)”, “a(nk)”, “au”, “ai” (e.g. “back”, “tank”, “plaid”, etc)
- Lowest of the 5 front vowels; point vowel
- Mandible and tongue are in the lowest position; tongue body in an inferior and posterior position; unrounded lips; lax
- /æ/ is used when it precedes the nasal /ŋ /
- Dialectal variation occur

The final front vowel is the /æ/ which is written using the “ash” symbol. This is /æ/ as in “trash”, “jazz” and “smacked”. It is a low, front, unrounded, lax vowel. It has 5 allographs including “a” as in back and “ai” as in “plaid”. Ash is the lowest of the 5 front vowels and it is considered one of the point vowels on the vowel quadrilateral. The ash symbol is used in the transcription of words when it precedes the nasal /ŋ / or eng symbol like in “sank” or “bang”. Again, dialectal variations can occur and should be noted in transcription.

Transcription of English Vowels and Diphthongs – Back Vowels /u/

- /u/ as in “toot”, “chew” and “tulip”
- Symbol: lowercase u
- High, back, rounded, tense
- Allographs: “u”, “ue”, “u...e”, “ui”, “ou”, “oo”, “o...e”, “wo”, “oe”, “o”, “ew”, “ieu”, “eu”, “ioux” (e.g. “to”, “maneuver”, “tune”, “moon”, etc)
- Body of tongue raised to velum; lip rounding; tense
- Be mindful of words in which /j/ precedes the /u/ in order to transcribe them accurately (e.g. “you” /ju/, “few” /fju/)

This brings us to the first of the back vowels – the /u/. It is written as a lower-case u symbol. This is /u/ as in “toot”, “chew” and “tulip”. It is a high, back, rounded, tense vowel. It has multiple allographs including “eu” as in “maneuver” and “oo” as in “moon”. To produce the sound, the body of the tongue is raised to the velum in the far back of the throat and the lips are rounded. It is a tense vowel sound. One tip for transcription is to be mindful of words in which /j/ sound precedes the /u/ sound in order to transcribe them accurately. You must be sure to include the /j/ sound. Some examples are the word “you” which is transcribed as “lower-case j, lower-case u” or the word “few” which is transcribed as lower-case f, lower-case j, lower-case u.

Transcription of English Vowels and Diphthongs – Back Vowels /ʊ/

- /ʊ/ as in “could”, “hood”, and “put”
- Symbol: Upsilon symbol from Greek alphabet
- High, back, rounded, lax
- Allographs: “u”, “ou”, “u(r)”, “oo”, “o” (e.g. “push”, “book”, “wolf”, etc)
- Tongue body slightly lower in oral cavity than for /u/ (still high); lips rounded; lax
- R-colored vowel transcribed as /ʊɹ/ or /ʊɹ̃/
- Dialectal variations occur

The next back vowel is the /ʊ/ as in “could”, “hood”, and “put”. The symbol for this sound is Upsilon from the Greek alphabet. It is a high, back, rounded, lax vowel. There are few allographs for this vowel sound but the existing ones include “u”, “ou”, “u(r)”, “oo” and “o”. Some examples of those include the words “push”, “book”, and “wolf”. To produce this sound the tongue body is slightly lower in the oral cavity than it is for the /u/ but it is still a high vowel. The lips are rounded and the production is lax. This is another vowel that can receive r-coloring. When rhotacized, this vowel can be transcribed as /ʊɹ/ or /ʊɹ̃/. This is another vowel in which dialectal variations might occur.

Transcription of English Vowels and Diphthongs – Back Vowels /o/ and /oʊ/

- /o/ as in “obese”, “flotilla”, and “rotation”
- Symbol: lowercase o
 - Use when the syllable is not stressed
- /oʊ/ as in “probate”, “bowl”, and “slower”
- Symbol: lowercase o & Upsilon symbol
 - Use when syllables are stressed or at the end of a word
- High-mid, back, rounded, tense
- Allographs: “o”, “o...e”, “oa”, “ow”, “ew”, “oe”, “oh”, “ou”, “eau”, “au” (e.g. “open”, “sew”, “beau”, etc)
- Body of tongue in high-middle portion of oral cavity; lip rounding; tense

The back vowels /o/ and /oʊ/. These symbols represent essentially one sound. The /o/ is represented in words like “obese”, “flotilla”, and “rotation” and is used when the syllable containing that vowel is unstressed. The other symbol, the /oʊ/ is represented in words like “probate”, “bowl”, and “slower” and is used when the vowel is in a syllable that is stressed or at the end of a word. This vowel is a high-mid, back, rounded, tense sound. It has multiple allographs including “o”, “o...e”, “oa”, “ow”, “ew”, “oe”, “oh”, “ou”, “eau”, and “au”. You can find some of those allographs in words like “open”, “sew”, and “beau”. This sound is produced when the body of the tongue is in the high-middle portion of the oral cavity and lips are rounded. The vowel is considered to be tense.

Transcription of English Vowels and Diphthongs – Back Vowels /ɔ/

- /ɔ/ as in “prawn”, “thought”, and “haul”
- Symbol: Open o
- Low-mid, back, rounded, tense
- Allographs: “ou”, “au”, “aw”, “o”, “a”, “oa” (e.g. “wrought”, “lawn”, “log”, etc)
- Tongue slightly lower in oral cavity than /o/; lip rounding; tense
- R-colored vowel transcribed as /ɔɹ/ or /ɔɹ̥/
- Dialectal variations occur

That brings us to /ɔ/ as in “prawn”, “thought”, and “haul”. The symbol for this sound is the open o. This vowel is a low-mid, back, rounded, tense vowel. It is represented by the allographs “ou”, “au”, “aw”, “o”, “a”, and “oa” as in “wrought”, “lawn”, and “log”. The vowel is produced when the tongue is in a slightly lower position in the oral cavity than when producing the /o/. The lips are rounded and the vowel is considered to be tense. Dialectal variations can occur with the production of this vowel.

Transcription of English Vowels and Diphthongs – Back Vowels /ɑ/

- /ɑ/ as in “rotten”, “stop”, and “watch”
- Symbol: Script a
- Low, back, unrounded, tense
- Allographs: “a”, “o”, “a(r)”, “ea(r)”, “e(r)” (e.g. “shawl”, “rob”, “heart”, etc)
- Tongue extremely low, back position in oral cavity; lips unrounded; tense
- Point vowel
- R-colored vowel transcribed as /ɑɹ/ and /ɑɚ/
- Dialectal variations occur

The next back vowel we will discuss is /ɑ/ as in “rotten”, “stop” and “watch”. The symbol for this sound is a script a. This is a low, back, unrounded, tense vowel. This phoneme only has a few allographs to include “a”, “o”, “a(r)”, “ea(r)” and “e(r)”. You would see these allographs in words such as “shawl”, “rob”, and “heart”. In order to produce this phoneme, the tongue is in an extremely low, back position within the oral cavity with the lips unrounded. It is made with a tense production. This is another of the 4 point vowels existing in the lower right corner of the quadrilateral. The /ɑ/ is another vowel that can take on some r-coloring and therefore could be transcribed as /ɑɹ/ and /ɑɚ/ in those instances. Dialectal variations are noted with this vowel as well.

Transcription of English Vowels and Diphthongs – Central Vowels /ə/

- /ə/ as in “alone”, “rearrange”, and “spumoni”
 - Use when the syllable is unstressed
- Symbol: schwa
- Mid, central, unrounded, lax
- Allographs: “u”, “o”, “a”, “ai”, “ia”, “io”, “ou”, “i”, “oi”, “e”, “eo” (e.g. “untrue”, “machine”, “nation”, “jealous”, etc)
- Tongue body in most central portion of oral cavity; entire vocal tract in neutral positioning; lips unrounded; lax

The first central vowel we will talk about is the /ə/ sound as in the words “alone”, “rearrange”, and “spumoni”. This is a sound that is utilized when the vowel sound is in the unstressed syllable. If the syllable is stressed, there will be a different symbol utilized and we will talk about that symbol next. This symbol is termed the schwa. The vowel is a mid, central, unrounded, lax sound. This phoneme has many allographs including “u”, “o”, “a”, “ai”, “ia”, “io”, “ou”, “i”, “oi”, “e”, and “eo”. You will see examples of some of these allographs in words like “untrue”, “machine”, “nation”, and “jealous”. In order to produce this sound the body of the tongue is located in the most central portion of the oral cavity. The entire vocal tract is in a neutral position when this sound is produced. It requires the lips to be unrounded and is lax in its production.

Transcription of English Vowels and Diphthongs – Central Vowel /ʌ/

- /ʌ/ as in “rub”, “abundance”, and “undone”
 - Use when the syllable is stressed or monosyllabic
- Symbol: turned v or wedge
- Low-mid, back-central, unrounded, lax
- Allographs: “u”, “o”, “oo”, “oe”, “ou” (e.g. “crumb”, “flood”, “does”, etc)
- Tongue in slightly lower, more backed placement than for /ə/; lips unrounded; lax
- Does not usually occur in open syllables in English
 - Exception being “the” (as it does not receive stress)

The next sound on the list of central vowels is /ʌ/ as in “rub”, “abundance” and “undone”. The symbol is a turned v or referred to as the wedge. This is the symbol you use for this vowel sound when the syllable is stressed or when it is in a one syllable word. This vowel is a low-mid, back-central, unrounded, lax vowel. It is presented through only a few allographs to include “u”, “o”, “oo”, “oe”, and “ou” as in words like “crumb”, “flood”, and “does”. To produce this sound, the tongue is in a slightly lower, more backed placement than for the /ə/ written as the schwa. The lips are unrounded for this vowel production. The /ʌ/ sound does not usually occur in open syllables in English. There is one exception to this rule which is in the word “the”. This word typically does not receive any stress but it is transcribed with the turned v symbol.

Transcription of English Vowels and Diphthongs – Central Vowels /ə/

- /ə/ as in “pertain”, “under” and “Saturday”
 - Used in only unstressed syllables
- Symbol: right-hook schwa or schwar
- Mid, central, rounded, lax
- Allographs: “or”, “ar”, “ur”, “er”, “ir”, “yr” (e.g. “labor”, “urbane”, “winner”, etc)
- Involves additional tongue movement; pharynx constricts; space in oral cavity is increased by raising tongue tip, curling posteriorly OR lowering tongue tip, bunching tongue body toward palate; lips rounded; lax

The next central vowel we will discuss is the /ə/ sound. This is the sound you find in words that “pertain”, “under” and “Saturday”. This is the symbol used in transcription when the sound occurs in unstressed syllables. The symbol is referred to as the right-hook schwa or the schwar. This is a central, rounded, lax vowel. It can be found in several allograph such as “or”, “ar”, “ur”, “er”, “ir”, and “yr” as in words like “labor”, “urbane” and “winner”. The production of this vowel sound involves additional tongue movement. The pharynx constricts during it productions and the space within the oral cavity is increased by either raising the tongue tip and curling posteriorly or by lowering the tongue tip and bunching the tongue body toward the palate. The lips are rounded in the production of the sound.

Transcription of English Vowels and Diphthongs – Central Vowels /ɜː/

- /ɜː/ as in “curse”, “surgeon” and “thirsty”
- Used in only stressed syllables
- Symbol: right-hook reversed Epsilon
- Mid, central, rounded, tense
- Allographs: “or”, “ear”, “er”, “ir”, “ur”, “yr” (e.g. “word”, “perk”, “shirt”, “Myrtle”, etc)
- Produced similarly to /ə/ with rounded lips; only central vowel considered to be tense; confused with r-colored vowels
- Can undergo derhotacization (produced without r-coloring)

Our final central vowel is the counterpart of the schwa. It also makes the /ɜː/ sound. The appropriate place to use this symbol is in stressed syllables like in the word “curse”, “surgeon” and “thirsty”. The symbol is the right-hook reversed Epsilon and the vowel sound is a mid, central, rounded, tense vowel. It is found in several allographs such as “or”, “ear”, “er”, “ir”, “ur” and “yr” like in the words “word”, “perk”, “shirt”, and “Myrtle”. This vowel sound is produced similarly to the schwa again with rounded lips. It is the only central vowel that is considered to be tense. It is often confused with r-colored vowels. This sound can undergo derhotacization meaning it can be produced without r-coloring.

Transcription of English Vowels and Diphthongs – More on Diphthongs

- /eɪ/, /oʊ/, (already discussed) and /aɪ/, /aʊ/, and /ɔɪ/
- Variation in transcription of vowel diphthongs because of variation due to dialect
- All exhibit gliding of tongue from first articulatory position (onglide) to second position (offglide); from a lower position to a higher position in the oral cavity

This brings us to our last category vowel sounds – the diphthongs. We have already discussed two of the diphthongs – the /eɪ/ as in “away”, represented by the symbols lowercase e and uppercase I, and the /oʊ/ as in “bowl”, represented by the lowercase o and Upsilon symbols. This leaves us with the diphthongs for /aɪ/ as in “buy”, /aʊ/ as in “loud” , and /ɔɪ/ as in “toy” left to talk about in this chapter. There is a lot of variation that occurs during the transcription of vowel diphthongs because of variations in the English language due to dialect. All of these diphthongs exhibit a gliding of the tongue from the first articulatory position or the onglide to the second articulatory position or the offglide. In all of them the tongue moves from a lower position to a higher position within the oral cavity during production.

Transcription of English Vowels and Diphthongs - /aɪ/

- /aɪ/ as in “buy”, “fiber” and “light”
- Symbol: lowercase a and uppercase I
- Allographs: “i..e”, “i”, “ai”, “ae”, “y”, “uy”, “ie”, “ei”, “ey”, “ay” (e.g. “write”, “aisle”, “my”, “height”, etc)
- Tongue body begins in low central/low back portion of mouth for onglide of /a/; moves to high front position for offglide of /ɪ/
- Dialectal variations occur

The diphthong /aɪ/ as in “buy”, “fiber” and “light” is transcribed using the combination of the lowercase a and uppercase I. The allographs for this diphthong include “i..e”, “i”, “ai”, “ae”, “y”, “uy”, “ie”, “ei”, “ey”, and “ay” found in words like “write”, “aisle”, “my”, and “height”. For the production of this diphthong, the tongue body begins in the low central/low back portion of the mouth for the onglide and then moves to the high front position within the oral cavity for the offglide. Dialectal variations can occur for this particular diphthong.

Transcription of English Vowels and Diphthongs - /ɔɪ/

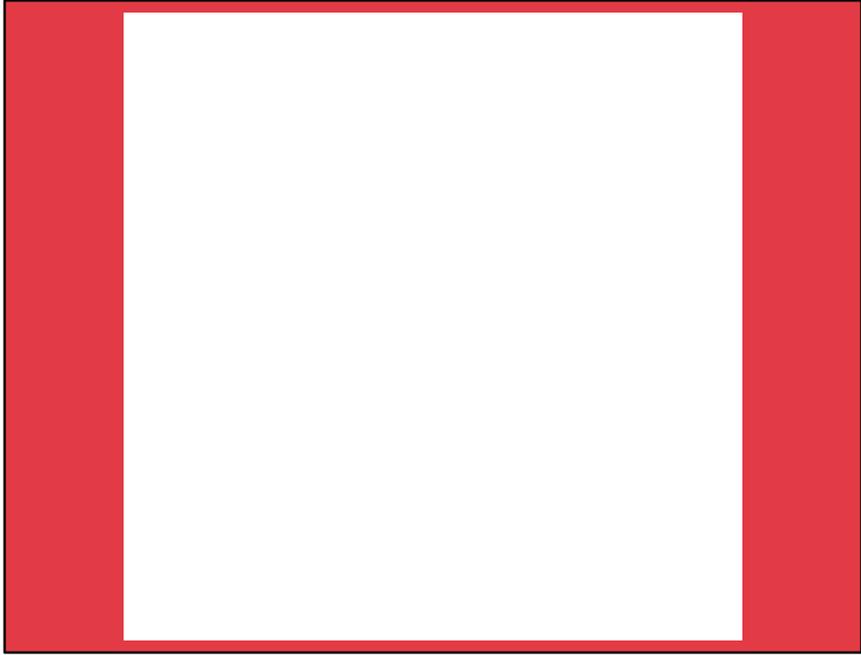
- /ɔɪ/ as in “toy”, “join”, and “coined”
- Symbol: open o and uppercase I
- Allographs: “oy”, “oi” (e.g. “soy”, “foil”, etc)
- Tongue body begins in low-mid back position for onglide of /ɔ/ ; moves to high front position for offglide of /ɪ/; lips become unrounded in offglide
- Dialectal variations occur

The next diphthong is the /ɔɪ/ as in “toy”, “join” and “coined”. The symbol used to transcribe this sound is the open o and uppercase I. It can be found in two allographs the “oy” and the “oi” like in the words “soy” and “foil”. For this sound, the tongue body begins in a low-mid back position for the onglide and transitions to a high front position for the offglide. The lips become unrounded in the offglide. Dialectal variations can occur.

Transcription of English Vowels and Diphthongs - /aʊ/

- /aʊ/ as in “loud”, “around”, and “powder”
- Symbol: lowercase a and Upsilon
- Allographs: “ou”, “ow” (e.g. “house”, “cow”, etc)
- Tongue in low back position of mouth for onglide of /a/; moved to high back position for offglide of /ʊ/; lips are initially unrounded at onglide and rounding occurs in offglide

The final diphthong and final sound we will discuss in this chapter is the /aʊ/ sound as in “loud”, “around”, and “powder”. This sound is transcribed using the symbols for the lowercase a and Upsilon. This diphthong also is represented in two allographs – the “ou” and the “ow” like in the words “house” and “cow”. The tongue is in a low back position in the mouth for the onglide and moves to a high back position for the offglide. The lips, while initially unrounded at onglide, become rounded during the offglide.



This concludes Chapter 4.