

Answers to Pause and Reflect Boxes for Chapter 2 Phonetics

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Pause and Reflect 2.1

Sign languages rely on signs rather than speech sounds to produce language. These language systems rely primarily on the hands as articulators, with some use of other body parts. Spelling systems are another form of language production that does not involve speech sounds.

Pause and Reflect 2.2

- i. You should feel the difference between voiced and voiceless sounds.
- ii. Native Spanish speakers might have a difficult time pronouncing the [z] sound and instead pronounce [s] in these positions.

Pause and Reflect 2.3

- i. Answers will vary.
- ii.
 - a. five sounds, four letters
 - b. four sounds, six letters
 - c. three sounds, five letters
 - d. four sounds, six letters
 - e. two sounds, three letters
 - f. two sounds (assuming the diphthong counts as a single sound), four letters.
- iii. These words illustrate the mismatch between the number of orthographic (spelled) segments and the number of sounds in a word in English. This mismatch is due to the *opaque* nature of the English spelling system.
- iv. 's-sound' – sent, cent, scent, class, exact* (*there may be some individual variability with the 's-sound' in this word; some speakers may produce it more like a 'z-sound').

Pause and Reflect 2.4

enough – 'gh' [f]
women – 'o' [ɪ]
nation – 'ti' [ʃ]

Pause and Reflect 2.5

- i. These sounds share the place of articulation **bilabial**. They are produced with both lips.
- ii. These sounds share the place of articulation **alveolar**. They are produced when the tongue contacts the alveolar ridge.
- iii. These sounds have the same manner of articulation: **fricative**. They involve a high level of friction created when air must pass through a narrow channel in the vocal tract.

iv. These sounds share the manner of articulation: **stop**. They are all produced by creating a complete closure which blocks air flow completely, then releasing the closure.

Pause and Reflect 2.6

- i. a) [d] b) [ʃ] c) [skɪ] d) [g] [ʒ] e) [dʒ] f) [j] g) [s]
 h) [f] i) [ʃ] j) [k] k) [s] l) [n]
- ii. a) shoot, wish b) beige, garage c) think, myth d) choose, which
 e) cat, tack f) sing, ringer g) rat, bark
- iii. a) [ʃ] b) [m] c) [ʃ] d) [v] e) [k] f) [ʁ]

Pause and Reflect 2.7

- i. The alveolar tap occurs when [t] or [d] occur between vowels, unless they are followed by a stressed vowel.
- ii. Speakers of an English dialect do not produce an alveolar flap in this context. Instead, they may produce a [t], a [d], or a glottal stop [ʔ].
- iii. Australian English and New Zealand English also produce the alveolar flap in intervocalic (between vowels) contexts.

Pause and Reflect 2.8

When producing [kl] in the word *clear*, you may have noticed that the tip of your tongue is already at the alveolar ridge pronouncing [l] when you are still making the velar closure for the [k] sound. This is evidence of how common coarticulation is in speech and why it is found across all languages.

Pause and Reflect 2.9

This is an example of place assimilation. The voiced fricative [ð] acquires the place of the sound before it. Because the place of assimilation, *alveolar*, spreads *forward* from the [s] to the [z], this is an instance of progressive assimilation.

Pause and Reflect 2.10

When people use language they try to be as efficient as possible. Deleting sounds makes the production of speech faster and easier. However, speakers also need to be understood, so they cannot delete to the point that communication suffers. Obviously, words or phrases that are very frequent, such as *give me* or *want to*, are more likely to be understood, even when certain sounds are missing. Furthermore, the deletion itself becomes common. On the other hand, infrequent words or phrases are less likely to be easily understood and so need to be expressed with greater precision.

Pause and Reflect 2.11

It can sometimes be difficult to understand new, completely unfamiliar sounds in a second language. However, it is even more difficult to learn new sounds that are similar but not identical to the sounds in the native language. The Speech Learning Model (SLM, Flege, 1996) describes why this is the case.

Pause and Reflect 2.12

Other examples include: *summer camp counselor* and *assistant art director*. The primary stress on these examples is also on the left-most word.

Pause and Reflect 2.13

Answers may vary slightly. The most likely stressed syllable for each word has been underlined.

<u>tro</u> tment	trot <u>men</u> tal
non <u>im</u> pt	non <u>im</u> ption
<u>stoi</u> l	<u>stoi</u> ler

These examples demonstrate two points. First, they show that English stress, though unpredictable at times, is built on a set of principles and tendencies, such that speakers have instincts about stress placement, even on made-up words. Second, these word pairs show how the addition of suffixes, like *-al* in *trotmental* can shift stress in a word.

Pause and Reflect 2.14

Answers will vary.