

Describing and Analysing Language

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Contents

| | | |
|---|---------------------|----|
| 1 | Question One | 2 |
| 2 | Question Two | 6 |
| 3 | Question Three..... | 7 |
| 4 | Question Four | 8 |
| | Bibliography | 11 |

Question One

Part B:

Sentence: “He selects the best actors one could wish for.”

Transcription of native speaker (NS): /hisəleks ðəbestæktəɪz wʌŋkədwiʃfə/

There were two problem areas. The first was with “best actors”. Initially, it was hard to decide whether the NS was pronouncing the “t” at the end of “best”. On closer listening, it was apparent that the NS was. This can be explained by the fact that “if a vowel follows [a consonant], the consonant remains” (Hawkins, 1984: 171). As the /t/ is followed by the vowel /æ/, it remains.

Another problem was with the pronunciation of “one could”. After several listenings, it became clear that the “one” should be transcribed as /wʌŋ/ rather than /wʌn/. An explanation for this is the fact that “[a] nasal’s locus of articulation varies quite precisely according to the following obstruent” (Hawkins, 1984: 184). In the above case, /n/ is a nasal which assimilates to the velar consonant /ŋ/ because the following obstruent, /k/, is velar.

Transcription of non-native speaker (NNS)¹: /hi:səlektiv ðəbesæktəɪz wʌŋkʊdwiʃfɔ:ɪ/

For both speakers, there were three stressed-timed breaks in the sentence (“he selects / the best actors / one could wish for”). However, quite naturally, the combination of these three sentence parts was done more fluently by the NS. There were two apparent reasons for this. First, the time between the breaks was much less for the NS. Secondly, the NNS also spent longer on each part of the sentence because of extra stress on certain words. The NNS put more stress on “he” , “best” , “could” and “for” and this would account for the different transcriptions of “he” (/hi:/), “could” (/kʊd/) and “for” (/fɔ:ɪ/). It also appeared that the NNS pronounced “selects” with a /t/ between the /k/ and the /s/. This would be an unnatural insertion pattern for a native speaker. However, as there is no “x” or /eks/ sound in the Thai language, the NNS may have pronounced the word as it can be read, hence the insertion of the /t/. Finally, the NNS dropped the “t” in “best”. This is a common occurrence with Thai speakers of English and seems to happen more often with plosives. When Thai words are written in the English alphabet, it’s quite common to see them end in “p”, “b”, “t”, “d”, “k” or “g”, but on listening to Thai people pronouncing these words you realize that in Thai they are not plosives².

¹ The NNS was a Thai national, female, 30-years old and with what I would describe as intermediate-level English.

² They are not produced with air from the lungs. They are examples of non-pulmonic consonants.

Part C: Consonants can be described by using three labels: **voice, place of articulation** and **manner**.

Voice: Consonants can be either *voiced* or *voiceless*. According to Ashby (1995:16), “[a] voiced sound such as /z/ is accompanied by a buzz or tone which can be varied in a musical fashion to produce different pitches” and a “voiceless sound such as /s/ has no musical pitch and can’t be used to sing a tune.”³

Place of articulation: Sounds are generally produced in the mouth/oral cavity. They are produced by two parts of the mouth/oral cavity touching. One of these parts moves and is called the active articulator; the other remains stationary and is called the passive articulator. For example, in the case of the consonant /p/, the upper lip remains stationary and is therefore the passive articulator whereas the lower lip moves to touch the upper lip and is thus the active articulator. The place where the two parts meet is called the *place of articulation*.

Manner: Two aspects of manner need to be considered. The first, what the sound actually sounds like, or what Ashby (1995: 41) calls the “sound effect”, and the second, “the type of gesture that is responsible for making such a sound” Ashby (1995: 41). For example, looking at the consonant /p/, the air is moving from the lungs to the mouth, but is initially blocked by the lips before being suddenly released, creating an explosive sound. This type of consonant is known as a **plosive**.

Using these three parameters, the consonants, /h/, /s/, /l/, /k/, /ð/, /b/, /t/, /ɹ/, /z/, /w/, /ŋ/, /d/, /ʃ/ and /f/, that occurred in the transcriptions can now be described.

/h/: This is voiceless. Its place of articulation is in the **glottal** (the space between the vocal folds) and when produced the air passage is neither fully blocked nor fully open. Air is allowed pass but with a slight obstruction. Consonants with a manner of this type are called **fricatives**.

/s/: This is voiceless. Its place of articulation is between the tip of the tongue and the **alveolar** ridge (the gum ridge behind the upper teeth); it is alveolar. Like /h/, it is also a fricative.

/l/: This is voiced and also described as alveolar. When produced, the tongue partially blocks the air coming from the lungs but allows the air to pass over its sides. Consonants with a manner of this type are called **laterals** (or **liquids**).

/k/: This is voiceless. When produced, the back of the tongue touches the soft palate (the velum) at the back of the mouth; it’s a **velar** consonant. Like the consonant /p/ in the example above, /k/ is plosive.

/ð/: This is voiced. Its place of articulation is between the upper front teeth and the tongue tip; it is **dental**. It also has a fricative manner.

³ If you put your fingers around your Adam’s apple, you should be able to detect your vocal folds (chords) vibrating as the air passes through when a consonant is voiced.

/b/: This is voiced. When produced, the upper and lower lips meet; it is **bilabial**. Its manner is plosive.

/t/: This is voiceless with an alveolar place of articulation and a plosive manner.

/ɹ/: This is voiced. When produced, the tip of the tongue touches the back of the alveolar ridge; it is **post-alveolar**. And like /l/, it is a lateral or liquid.

/z/: This is voiced with an alveolar place of articulation and a fricative manner.

/w/: This is voiced. Its place of articulation is two-fold—between the upper and lower lips and between the back of the tongue and the velum; it is labial-velar. There is little or no blockage of the air passage and, as /w/ is followed by a vowel, its type of manner is known as **glide**.

/ŋ/: This is voiced and its place of articulation is velar. It is produced by lowering the soft palate at the back of the mouth and allowing air to escape through the nose—a **nasal** manner.

/d/: This is voiced with an alveolar place of articulation and a plosive manner.

/ʃ/: This is voiceless. Its place of articulation is between the back of the alveolar ridge/front of the hard upper part of the mouth (the hard palate) and the blade of the tongue; it is palato-alveolar. Its manner is fricative.

/f/: This is voiceless. When being produced, the lower front lip moves to touch the upper front teeth; it is labiodental. It has a fricative manner.

The voice, place and manner of the consonants are summarized in Table 1 below.

| consonant | voice | place | manner |
|-----------|-----------|-----------------|-----------|
| /h/ | voiceless | glottal | fricative |
| /s/ | voiceless | alveolar | fricative |
| /l/ | voiced | alveolar | liquid |
| /k/ | voiceless | velar | plosive |
| /ð/ | voiced | dental | fricative |
| /b/ | voiced | bilabial | plosive |
| /t/ | voiceless | alveolar | plosive |
| /ɹ/ | voiced | post-alveolar | liquid |
| /z/ | voiced | alveolar | fricative |
| /w/ | voiced | labial-velar | glide |
| /ŋ/ | voiced | velar | nasal |
| /d/ | voiced | alveolar | plosive |
| /ʃ/ | voiceless | palato-alveolar | fricative |
| /f/ | voiceless | labiodental | fricative |

Table 1: VPM description of the consonants

Part D: The following vowels occurred in the transcriptions: /i:/, /ɪ/, /e/, /æ/, /ʌ/ and /ɪ/ in both the native speaker and non-native speaker's utterances and /i:/, /ʊ/ and /ɔ:/ in the non-native speaker's utterance only. Their positions in the vowel diagram are shown in Table 2 below.

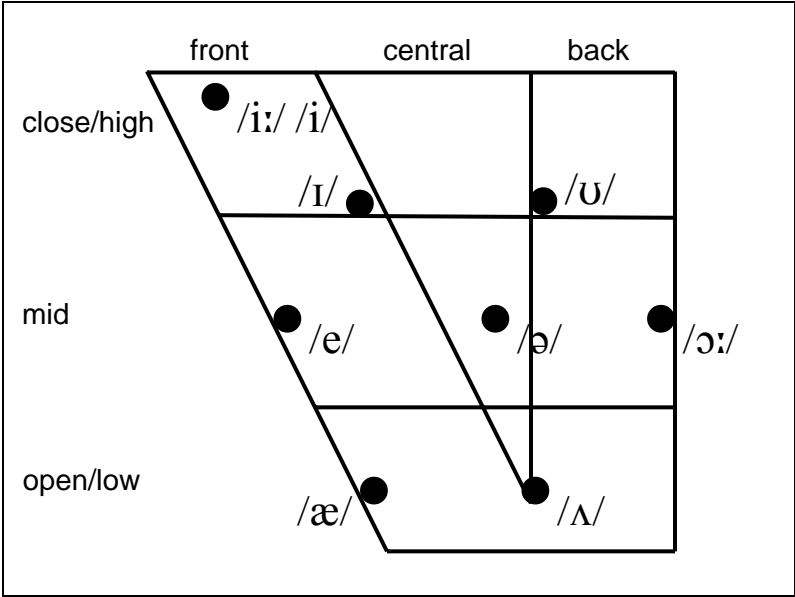


Table 2: vowel diagram

Question Two

| Kenyang | English | Kenyang | English |
|---------|------------|---------|----------------|
| enɔq | tree | enoq | drum |
| eket | house | ntʃiku | I am buying |
| nek | rope | eywarek | sweet potato |
| ŋgak | knife | ekaq | leg |
| mək | dirt | naq | brother in law |
| ndek | European | pəbrik | work project |
| betək | job | bepək | to capsize |
| tiku | (name) | ku | buy! |
| ajuk | (name) | esikɔŋ | Pipe |
| kebwep | stammering | ŋkɔq | Chicken |
| ŋkap | money | kɔ | walk! |

Table 3: Kenyang words and their English equivalents

Based on the above data, the following points can be observed. First, [k] can occur in the word-initial (**k**ɔ), -middle (e**k**et) and -final (ne**k**) positions. However, [q] only occurs in the word-final position (enɔ**q**). Generally, both [k] and [q] occur after vowels, but [k] can also come after the voiced, velar, nasal consonant /ŋ/, (**ŋk**ap and **ŋk**ɔq). [k] follows the vowels /e/ (**ek**et), /i/ (**ti**ku), /ə/ (**mək**), /a/ (**ŋgak**) and /u/ (**aju**k) whereas [q] follows the vowels /ɔ/ (enɔ**q**), /o/ (eno**q**) and /a/ (**na**q). Were it not for both [k] and [q] following the open-front vowel /a/, it could be said that [q] only follows mid-back vowels (/ɔ/ and /o/) whereas [k] can follow mid-front (/e/), close-front (/i/), mid-central (/ə/) and close-back (/u/) vowels. So how can the distribution of [k] and [q] after the vowel /a/ be explained? Based on the limited data, it can be seen that if voiced, velar consonants, /g/ and/or /ŋ/ precede the vowel /a/, then [k] follows the /a/ (**ŋgak**). For all other cases, [q] follows the /a/ (ekaq, naq). Finally, [k] would appear to be the underlying phoneme as it occurs in a larger number of environments.

Question Three

| Setswana | English | Setswana | English |
|----------|-----------------|--------------------|-----------|
| lefifi | darkness | loleme | tongue |
| selepe | axe | molomo | mouth |
| xobala | to read | mmadi | reader |
| lerumo | Spear | xoṅala | to marry |
| loxadima | Lightning flash | didzo | food |
| dumela | greetings | feedi | sweeper |
| lokwalo | letter | k ^h udu | tortoise |
| mosadi | woman | podu | goat |
| badisa | the herd | hudi | wild duck |

Table 4: Setswana words and their English equivalents

Based on the above data, it can be seen that [l] and [d] are allophones. First of all, there are no examples of minimal pairs to prove that they are phonemes. Also, [l] and [d] occur in complementary distribution. [l] occurs before a variety of vowels, the mid-front vowels /e/ and /ɛ/ (**le**fifi, se**le**pe), the open-front vowel /a/ (xob**al**a), and the mid-back vowels /ɔ/ and /o/ (mo**l**omo, lo**x**adima). On the other hand, [d] only occurs before two closed vowels, the close-front vowel /i/ (ba**d**isa) and the close-back vowel /u/ (**du**mela). Despite being in complementary distribution, [l] and [d] can occur in word-initial, -middle and -final positions⁴ ([l] : **l**okwalo, lo**l**eme, xo**l**ala and [d]: **d**umela, ba**d**isa, mm**d**i). Finally, [l] would appear to be the underlying phoneme as it occurs in a larger number of environments.

⁴ Technically, [l] and [d] cannot finish in the word-final position because Setswana words appear to finish in a vowel.

Question 4

| Gascon | English | Gascon | English |
|----------|----------------|--------|------------|
| bren | endanger | gat | cat |
| bako | cow | lung | long |
| umbro | shadow | saliβo | saliva |
| krambo | room | noβi | husband |
| dilys | Monday | aβe | to have |
| duŋko | until | ʃiβaw | horse |
| duso | sweet | byðet | gut |
| taldepan | leftover bread | eʃaðo | hoe |
| punde | lay eggs | biγar | mosquito |
| dudze | twelve | riγut | he laughed |
| guteza | flow | agro | sour |
| eŋgwan | this year | zuγet | he played |
| puðe | be able | | |

Table 5: Gascon words and their English equivalents

- a. Table 6 below show the voice, place, manner (VPM) descriptions of the six Gascon consonants.

| consonant | voice | place | manner |
|-----------|--------|----------|-----------|
| /b/ | voiced | bilabial | plosive |
| /β/ | voiced | bilabial | fricative |
| /ð/ | voiced | dental | fricative |
| /d/ | voiced | alveolar | plosive |
| /g/ | voiced | velar | plosive |
| /γ/ | voiced | velar | fricative |

Table 6: VPM descriptions of the Gascon consonants

The two voiced, bilabial consonants /b/ and /β/ are phonetically similar, differing only in their manner (/b/ is plosive whereas /β/ is fricative). Likewise, the two voiced, velar consonants /g/ and /γ/ are phonetically similar. The consonants /ð/ and /d/ present a little more difficulty. /ð/ is voiced and fricative, therefore phonetically similar to /β/ and /γ/. /d/ is voiced and plosive, therefore phonetically similar to /g/ and /b/. However, despite having only one VPM label in common, /ð/ and /d/ are dental and alveolar respectively, thereby making them phonetically very similar. In fact, for many speakers the /ð/ is quite often

pronounced /d/. (An example of which is children pronouncing “mother” /mʌðə/ as “mudder” /mʌdə/.)

b. Table 7 below shows the consonants and the environments in which they occur:

| consonant | Environment |
|-----------|--|
| /b/ | word-initial before /re/ and /a/ word-middle before /ro/ and /o/, after /m/ |
| /β/ | word-middle before /o/, /i/, /e/ and /aw/, always after a vowel |
| /ð/ | word-middle before /e/ and /o/ always after vowel |
| /d/ | word-initial before /i/ and /u/ word-middle before /e/ and after consonant |
| /g/ | word-initial before /u/ and /a/ word-middle before /ro/, after /a/ after /ŋ/ |
| /ʎ/ | word-middle before /a/ and /u/ and after /i/ word-middle before /e/ and after /u/ always after vowel |

Table 7: the Gascon consonants and their environments

c. The evidence for grouping the pairs of sounds into phonemes is as follows:

/b/ and /β/: When in the word-initial position, /b/ occurs before the front vowels /(r)e/ (bren) and /a/ (bako). /β/ never occurs in the word-initial position. In the word-middle position, both /b/ and /β/ occur before /(r)o/ (umbro, krambo, saliβo). However, /b/ must be preceded by the consonant /m/ (krambo). /β/ only occurs after a vowel. /β/ can also occur before the vowels /i/, /e/ and /aw/⁵ (noβi, aβe, ʃiβaw) whereas there is no evidence of this pattern for /b/. Therefore, /b/ and /β/ are in complementary distribution and are allophones of the same phoneme.

⁵ I have assumed /aw/ to be phonetically equivalent to /ɔ:/.

/ð/ and /d/: When in the word-initial position, **/d/** occurs before the closed vowels /i/ and /u/ (**d**ilyš, **d**uŋko). **/ð/** never occurs in the word-initial position. In the word-middle position, both **/ð/** and **/d/** occur before the close-front vowel /e/ (pu**ð**e, by**ð**et, tal**d**epan). However, **/ð/** must be preceded by a vowel (pu**ð**e, by**ð**et) while **/d/** occurs after a consonant (tal**d**epan). **/ð/** can also occur before the closed-back vowel /o/ (eʃa**ð**o) whereas there is no evidence of this pattern for **/d/**. Therefore, **/ð/** and **/d/** are in complementary distribution and are allophones of the same phoneme.

/g/ and /ɣ/: When in the word-initial position, **/g/** occurs before the vowels /a/ and /u/ (**g**at, **g**uteza). **/ɣ/** never occurs in the word-initial position. In the word-middle position, both **/g/** and **/ɣ/** always occur after a vowel (**a**gro, bi**ɣ**ar). However, they are followed by different sounds. **/g/** is followed by /(r)o/ (**a**gro) while **/ɣ/** occurs before the vowels /a/, /u/ and /e/ (bi**ɣ**ar, ri**ɣ**ut, zu**ɣ**et). **/g/** can also occur after the consonant /ŋ/ (**e**ngwan, lu**ng**) whereas there is no evidence of this pattern for **/ɣ/**. Therefore, **/g/** and **/ɣ/** are in complementary distribution and are allophones of the same phoneme.

One other piece of evidence for grouping the pairs of sounds into phonemes is that there are no minimal pairs present in the given data.

- d. A general statement about the patterning of the phonemes is as follows:

The plosive form of the phonemes can occur in the word-initial position whereas the fricative form cannot. Both the plosive and fricative forms can occur in the word-middle position but the plosive form follows a consonant while the fricative form follows a vowel⁶.

⁶ There is one exception to this rule in the data, *agro*. However, /g/ does come after the consonant /ŋ/.

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