

## Introduction to Phonetics I

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## 12. Chapter Two: Phonology and Phonetic Transcription (I)

### I. Outline for today:

1. Test on Chapter One (footnotes)
2. Discussion of class notes
3. *A Course in Phonetics*: Chapter 2: Phonology and Phonetic Transcription
4. Homework

### II. Notes

#### 1. Test on Chapter One (footnotes)

- a. Two ways to produce /r/ in English:
  - Post-alveolar /r/ is more front
    - The front of the tongue gets close to the alveolar ridge (how many English native speakers normally do it); the body of the tongue is *bunched*
    - e.g. *car* [kaɹ]
  - Retroflex: more back
    - The underside of the tongue tip turns back in and gets close to the alveolar ridge or post-alveolar area or even further back.
    - e.g. 兒子 (Taiwan Mandarin < Beijing Mandarin) However, the /r/ in both of the dialects is closer to the post-alveolar /r/ than to the retroflex. The /r/ in the Dravidian languages of Southern India is much more retroflex.
- /r/ behaves like a lot like a vowel. → It is best described auditorily or acoustically, not articulatorily.
- The IPA symbol for the English /r/ is the upside-down “r” [ɹ].

#### 2. Discussion of class notes

- a. IPA symbols: glottal stop, tap, and trill
  - [ʔ]: glottal stop (the sound you’d make if a basketball suddenly hit your tummy)
    - Regardless of whether you write it by hand or type it, there should be **no bar**!
  - [ɾ]: tap – this is **not** a backward version of the glottal stop symbol!
    - if typed (in Sans font) → no bar; if handwritten → add a baseline bar at the bottom e.g. Spanish *pero* [ˈpeɾo] ‘but’
  - [r]: trill (tongue tip makes contact with the alveolar ridge at least 3 times) e.g. Spanish *perro* [ˈpeɾo] ‘dog’


b. The empty set (空集合) symbol  $\emptyset$ :

- Mentioned during the discussion on glides in Mandarin (see Unit 9)
- Actually a mathematical symbol – not a legitimate IPA symbol! It is used only in Chinese linguistics (as far as Ms. Chung knows).
- In phonetics, it's called a *zero initial* (零聲母), meaning a bare vowel that is not preceded by either a glottal stop or glide  
e.g. ‘烏來’ / $\emptyset$ u/ vs. [wu] vs. [ʔu] (contrastive function)
- In IPA, there is a vowel that looks similar; it is a smaller circle with a line, and it stands for a mid-high front rounded vowel. [ø] (search for an IPA vowel chart on the Internet or look it up on the inside back cover of the textbook) e.g. ö [ø] in Norwegian
- In IPA, there is a consonant which also looks similar and may be confused with the vowel. It is an even smaller circle with a straight vertical line, and it stands for a voiceless bilabial fricative. To produce it, spread your lips (like making a smile), make your lips approach to each other (without contact), and blow air out. (we will learn about it second semester) e.g. ふ [ɸu] in Japanese
- If you have questions, make sure that you find an answer to them! Also, please make sure you check NTU Phonetics – our Facebook group – often.

## c. もじばけ (文字化け) ([mɔ̃dʒibakɛ] 亂碼; もじ = 文字, ばけ = 亂七八糟的, or ‘monster’!)

- When you print out a Word file, sometimes the words/symbols do not look like what you originally inputted, (for example, you may see little boxes instead of the symbols you inputted), or they do not appear at all. Those words/symbols are what we call 亂碼 or *mojibake*.
- Solve the problem by saving your word file as a pdf file and then printing it out – although you may need to download some special fonts for Japanese characters, etc. for the pdf to display and print correctly.
- Always **proofread** your notes before you hand them in. If any symbols are incorrect or missing, you can use correction tape and write them in by hand; if you have more time, reprint the file in pdf format.

\*Footnote about the diacritic in the transcription for もちばけ

- ☺☺☺☺#  = lower tongue position

## d. “Palato-alveolar”/“Alveolo-palatal”

- When you combine these two terms together, either for 顎齶音 or 齶顎音, the former one will become the modifier of the latter and has to change to an “-o” ending.
- → palatal + alveolar = palato-alveolar [dʒ] [tʃ]; alveolar + palatal = alveolo-palatal (ㄔ [tɕ], ㄑ [tʰɕ], ㄗ [ɕ])

## e. Rules for adding an -s to words:

- Some people may need to review the rules.
- The words that -s can be added to include regular verbs (→ third person singular present tense), nouns (→ regular plurals), possessives (’s), and contractions with *is*, e.g. *John’s going*.

Please see CET article No. 8: [http://homepage.ntu.edu.tw/~karchung/pubs/76\\_hello\\_et.pdf](http://homepage.ntu.edu.tw/~karchung/pubs/76_hello_et.pdf)

## f. The two IPA symbols for English “a” sounds

- [a] is used for the monophthong. (and mind the spelling of *monophthong*!)
- [a] is used only for diphthongs in General American English [aɪ] [aʊ]
- Useful tools for typing IPA: i2Speak <http://www.i2speak.com/>  
for typing Pinyin: Pinyin Tone Tool: <http://toshuo.com/chinese-tools/pinyin-tone-tool/>

## g. Translation for “sibilant”:

- 嘶音 – Taiwan
- 咝音 – PRC (this is now used in Taiwan, too)
- There are six sibilants in English – [s], [z], [ʃ], [ʒ], [tʃ], [dʒ]; the last two in the list are affricates.

## h. [ʒ] vs. [dʒ]

- [ʒ] fricative (= [ʃ] + voicing)
- [dʒ] affricate = a very short stop + fricative; similar to the ㄗ [tʃ] consonant in 這, which is also an affricate

## i. [ə] [ɐ] [ɜː]

- [ə]: The schwa is not really a phoneme but a reduced vowel (the vowel was originally a full vowel). Many vowels in unstressed syllables are pronounced as a schwa.
  - [ɐ]: unstressed rhoticized (兒化) vowel e.g. (AE) *teacher* ['ti:tʃɐ] cf. (BE) ['ti:tʃə]
  - In the KK system and in the conventional IPA representation of English, the schwa cannot be used in stressed syllables, and therefore we use a different symbol for stressed syllables.
- [ɜː]: stressed rhoticized vowel e.g. *bird* (AE) [bɜːd] cf. (BE) [bɜːd]
- (Standard British English is a non-rhotic dialect, in which post-vocalic (母音後的) /r/s are not pronounced, but instead usually become a schwa, or the vowel is lengthened e.g. *fire* [faɪə], *car* [kɑː], *word* [wɜːd])
- (You can check our Facebook group for a related discussion.)

\*About *rhotic* (兒化韻)

- = rhoticized
- Some people say ['ɔʊrɪk] while Ms. Chung sometimes says ['ɔrɪk] (but it may sound funny when we say “a rhotic”). For this class, we will say ['ɔʊrɪk].

## j. Spellings

- 延續音 (X) \*continuent (X) continent (大洲) (O) continuant
- ‘一段話; 一個聲音’ (X) \*oterin (O) utterance (to utter: 說出; 出聲)
- Although many native speakers make this kind of spelling mistakes (e.g. “independant” for *independent*), you should still make sure you always use correct spelling. The red underlining in Word can help – don’t ignore it!

3. If there are things you don’t know or are not sure about, you can (1) look it up, (2) ask Ms. Chung or the TAs, or (3) post your questions on Facebook.

### 3. *A Course in Phonetics: Chapter 2: Phonology and Phonetic Transcription* (p. 33)

- a. Bold: Items in bold are important and often appear in tests.
- b. Citation style of speech/citation form: (In Chapter Two, we will focus on the phonetic transcription of this style of speech)
  - the dictionary form; the style (very clear articulation) you use when you read a word in isolation (in careful speech) → very different from phonetic descriptions of **connected speech** (see below)
    - e.g. *a* [eɪ] *book* → **this sounds odd** because function words (the *a* is an article 冠詞) are usually not pronounced in their citation form.
    - e.g. (Mandarin) ‘程’ vs. ‘計程車’ (has been written in a paper by Ms. Chung)
  - useful in language documentation 語言紀錄, fieldwork 田野調查, and lexicography 字典編纂.

#### \*Applying what you learn

- Some DFLL students may end up better at English than Chinese in some arease! Although it is a good thing that our English is good, still we need to maintain our native language. Much of the knowledge we are learning now can be applied to Chinese, and other languages.
- The concept of “citation form” is a good example. If we want to have a language exchange or teach our native language to foreigners in the future, we may pronounce words according to the dictionary when we read them in isolation. When we say the words in a compound, phrase, or long sentence, however, we may pronounce them in different ways (e.g. Mandarin 計程車; **the initial of the second item in a three-syllable expression is often elided.** For a study on contraction in Taiwan Mandarin, please see: [http://homepage.ntu.edu.tw/~karchung/pubs/Contractions\\_Chung.pdf](http://homepage.ntu.edu.tw/~karchung/pubs/Contractions_Chung.pdf))

c. Connected speech: used in normal conversation

### 4. Homework:

Do the Tutorial on Plosives (Part 1) on webpage 7.

<http://homepage.ntu.edu.tw/~karchung/intro%20page%2017.htm> 

#### Pronunciation corrections:

**framed** syllables are stressed; \* = tonic stress



voiced	[vɔɪst]	→ [vɔɪst] (vowel: [ɔ] is very short)
stop	[stɒp] (BE)	→ [stap] (system)
come	[kʌŋ]	→ [kʌm] (the [m] was missing → close your mouth for [m] and don't substitute [ŋ]!)
	In this *chapter,	→ In *this chapter, ( <i>this</i> is stressed; it is being contrasted with the <i>previous</i> or other chapters)
	we will be	→ we will be (function word → unstressed)
concerned	[kən'sɜːnd]	→ [kən'sɜːnd] (vowel) cf. confirm; see CET 86: <a href="http://homepage.ntu.edu.tw/%7Ekarchung/pubs/CET86.pdf">http://homepage.ntu.edu.tw/%7Ekarchung/pubs/CET86.pdf</a>
consider	[kən'sɪdə]	→ [kən'sɪdə] (vowel)

five

[faɪv]

[faɪ:v] (vowel: make it longer)

we will

we will (function word → unstressed)

**Stressed function words:**

- Although function words are usually not stressed, we do stress them when they carry contrastive meaning.  
 e.g. The word *some* is not stressed when it means *a few* (一些), but when it is contrasted with *other* (and in this case, it means *certain* 某些), we stress it.

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