2. **Sequential voicing**

1. (1) What is *Rendaku* ‘sequential voicing’?
   (2) Why are [h], [ç], and [φ] replaced by [b] in *Rendaku*?

2. Can you explain why *Rendaku* does or does not apply in a-i below?
   a. [ori] ‘fold’ + [kami] ‘paper’  \[\text{ori-gami} \] ‘folded paper; paper folding’
   b. [kami] ‘paper’ + [koppu] ‘cup’  \[\text{kami-koppu} \] ‘paper cup’  *[kami-goppu]
   c. [ama] ‘rain’ + [kappa] ‘coat’  \[\text{ama-gappa} \] ‘rain coat’
   d. [ama] ‘nun’ + [tera] ‘temple’  \[\text{ama-tera} \] ‘nunnery’
   e. [kyo:] ‘strong’ + [teki] ‘enemy’  \[\text{kyo:-teki} \] ‘strong enemy’  *[kyo-eki]*
   f. [inoči] ‘life’ + [ciroi] ‘pick’  \[\text{inoči-ci} \] ‘life saved (i.e. s.o. manages not to die)’
   g. [očiba] ‘fallen leaves’ + [ciroi] ‘pick’  \[\text{očiba-ci} \] ‘fallen-leaf picking’  cf. *[očiba-ci]*
   h. [te] ‘hand’ + [kami] ‘paper’  \[\text{te-gami} \] ‘letter (for correspondence)’
   i. [te] ‘hand’ + [kagami] ‘mirror’  \[\text{te-kagami} \] ‘hand-held mirror’  *[te-gagami]*

3. (1) Can the ‘frequency’ of words explain the nonoccurrence of *Rendaku* in nonnative words?
   (2) If yes, how? If not, what other factor may be more important?
   Cf. [yasu] ‘cheap’ + [hoteru] ‘hotel’  \[\text{yasu-hoteru} \] ‘cheap hotel’  *[yasu-boteru]*

4. Can you explain why *Rendaku* does or does not apply in a-d below?
      \[\text{ko-tanuki} \] / \[\text{ko-gitsune} \] / \[\text{ko-saru} \] ‘baby (or young or small) raccoon/fox/monkey’
   b. [ko] ‘child’ + [tori] ‘bird’
      \[\text{ko-tori} \] ‘small bird’  *[ko-dori]*  cf. [men-dori] ‘hen, female chicken’
   c. [naka] ‘middle’ + [ta] ‘rice paddy’  \[\text{naka-ta} \] ‘Nakada (family name)’ (in Tokyo, etc.)
      \[\text{naka-ta} \] ‘Nakata (family name)’ (in Hiroshima, etc.)

5. (1) What is Lyman’s Law?  \[\text{p. 58 (117a)}\]
   (2) Can it explain the difference in meaning between (a) and (b) below? If yes, how? If not, why not?
      a. [[nuri-baši]-bako] ‘case for lacquered chopsticks; [[lacquered chopsticks] case]’
      b. [nuri-[haši-bako]] ‘lacquered case for chopsticks; [lacquered chopsticks case]’
   (3) Does (d) below pose a problem for this law? If yes, how? If not, why not?
      a. [[nuri-gasa]-kasa] ‘umbrella case’
      c. [[nuri-gasa]-kasa] ‘case for lacquered umbrellas; [[lacquered umbrella] case]’
      d. [nuri-[kasa-ire]] ‘lacquered case for umbrellas,’  *[nuri-[gasa-ire]]*

6. (1) What is Right Branch Condition?  \[\text{p. 58 (117b)}\]
   (2) Can it explain the nonoccurrence of *Rendaku* in 5(3d) above?
   (3) Does (b) below pose a problem for this condition? If yes, how? If not, why not?
      a. [sake] ‘alcohol’ + [nomi] ‘drink’  \[\text{sake-nomi} \] ‘drinker’
      b. [o:] ‘big’ + [sake] ‘alcohol’ + [nomi] ‘drink’  \[\text{o:-zake-nomi} \] ‘big drinker’  *[o:-sake-nomi]*
3. Mora vs. syllable
7. (1) What does a single mora look like in Japanese? → p. 59 (121)
   (2) How many syllables and morae are there in each of the following?
   a. [hakkyu:] ‘low salary’
   b. [pasokon] ‘personal computer’ ← [pa:sonaru kompyu:ta(:)]

3.1. Speech errors
8. (1) What are the characteristics of speech errors in Japanese? → p. 64 (138)
   (2) Do they show that Japanese is mora-based, and not syllable-based? If yes, how? If not, why not?

9. Do examples (a)-(f) below ‘all involve a moraic unit being exchanged with or replaced by another moraic unit’? If yes, how. If not, why not?
   a. original [aki-ba-hara] ‘autumn-leaf-field (place name)’ → current [akï habara]
   b. original [san-sa-ka] ‘mountain-tea-flower (name of flower)’ → current [sazanka]
   c. correct [doro-bo:] ‘thief (lit. dirt-stick)’ → error [do-boro:]
   d. correct [to:-moroko:shï] ‘corn’ → error [to:mokoro:shï]
   e. correct [o-tama-jakushi] ‘tadpole’ → error [o-jamatakushi]
   f. correct [kyoka-kyoku] ‘permit bureau’ → errors [kyokya-kyoku], [kyoka-koku], [kyokya-koku]

10. Try saying the following fast. (Okay, you can say it slowly, if you prefer. 😊)
   a. [tonari no kyaku wa yokû kakî kuu kyaku da] 隣の客はよく柿喰う客だ。
      ‘My neighbor’s guest (is a guest who) eats a lot of persimmons.’
   b. [nama-mugi, nama-gome, nama-tamago] 生麦、生米、生卵。
      raw wheat raw rice raw egg
cf. p. 105, fn. 16: ‘…according to the detailed study of Kuboizono (1989), speech errors where an initial consonant of a syllable interchanges with an initial consonant of another syllable are rare in Japanese, though quite common in English as in (127a, c).’

3.2. Language games: ‘Babibu’ language
11. In what ways is the ‘babibu’ language mora-based, rather than syllable-based?

4. Accentualtion in Japanese
4.1. Stress vs. pitch
4.2. Accentuation in Japanese
12. (1) What does ‘accent’ mean in Japanese phonology?
   (2) Does a Japanese word always have accent?
   (3) How is the pitch pattern for a word predictable in Tokyo JPN, given the location of the accent?

4.3. Mora vs. syllable
13. (1) Are the two words in (a)-(c) below pronounced the same?
   (2) How many syllables and morae are there in each of the words in (1a)-(1b)? Cf. p. 72
   a. [ta:li] ‘other intention’ vs. [mi-talî] ‘want to see’
   b. [sato:oya] ‘foster parent’ vs. [sato:ya] ‘sugar seller’
   c. [e:] ‘painting’ vs. [e] ‘handle’

14. (1) In Tokyo Japanese, is it the mora or the syllable that bears pitch?
   (2) Is the following word possible in Japanese? → [anta] (LHL)

Exercises #3, 4, 8-10