

## Japanese as an Accent and Stress Language

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### 1.2 Pitch fall on head in Japanese compounds

- \* Japanese is the only exception to Complement Accent on the assumption that ..
  - \* pitch drop (HL) in Japanese may correspond to stress in other languages (Kubozono 1996).
  - \* The head keeps its accent HL while the accent on the complement is reduced.
- (3) **shakai** + **seido** = *shakai-seido*  
HLL HLL LHH-HLL  
**Compl** + **Head** = Compl-**Head**  
 society system 'social system'

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### 2.2 Some pitch falls do not mark the edge

- (7) a. *minami + america* = *minami-america*  
 L H H L H H H L H H H L L L L  
 b. *kuwagata + mushi* = *kuwagata-mushi*  
 L H H H L H L H H H L L
- (8) a. *ne + shoogatsu'* = *ne-shoogatsu*  
 L L H H H L H L L L  
 b. *akita + inu'* = *akita-inu*  
H L L L H L H H L L
- (9) a. *minami + america* = \**minami-america*  
 L H H L H H H L H H L L L L  
 b. *kuwagata + mushi* = \**kuwagata-mushi*  
 L H H H L H L H H H H L
- (10) a. *ne + shoogatsu'* = \**ne-shoogatsu*  
 L L H H H L H L L L L  
 b. *akita + inu'* = \**akita-inu*  
H L L L H L H H H L

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### Proposal and road map

- \* A Japanese word/compound has two accents:
    - primary accent: stress on the initial mora
    - optional secondary accent: pitch fall on the (ante) penultimate mora
- (1) a.  $\mu \mu \dots \underline{\mu} (\underline{\mu} (\mu \dots))$     b.  $\underline{\mu \mu} (\mu \dots)$   
 L H .. H (L ..)                      H L (L ..)
1. Complement Accent and Japanese pitch fall
  2. Problems in the boundary-marker analysis
  3. Initial stress accent and secondary pitch accent
  4. Arguments for word-initial accent

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### 1.3 Japanese pitch-fall as a boundary marker?

- \* Japanese accent is not a real counterexample to Complement Accent because ..
  - \* pitch accent serves as a boundary marker rather than a stress (Kubozono 1996).
- (4) a. *minami + america* = *minami-america*  
 L H H L H H H L H H H L L L L  
 b. *kuwagata + mushi* = *kuwagata-mushi*  
 L H H H L H L H H H L L
- (5) a. *ne + shoogatsu'* = *ne-shoogatsu*  
 L L H H H L H L L L  
 b. *akita + inu'* = *akita-inu*  
H L L L H L H H L L
- ❖ No phonological subordination in Japanese

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### 2.3 No phonological subordination in Japanese?

- ❖ If Japanese is the only language whose accent functions as a boundary marker, it is the only exceptional language in the world.
- ❖ Why does Japanese have no phonological subordination?
- ❖ Why is Japanese accent exceptional?

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## 1. Complement Accent and Japanese pitch fall

### 1.1 Universal complement accent

- \* Complement Law: In a head and complement pair of words, main stress falls on the complement (Nespor and Vogel (1982, 1986))
- (2) **hóuse** + **kéeper** = **hóuse** keeper  
**Cómpl** + **Héad** = **Cómpl**-Head
- \* The one-wordness of compounds is expressed by the reduction of word-stress/accent on the head (Kubozono 1996).

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## 2. Problems in the boundary-marker analysis

### 2.1 Head deletion in compounds

- \* The head instead of the complement is deleted in the shortened form (Kubozono 1996).
- (6) *koomori + kasa* = *koomori-gasa* or *koomori-ø*  
H L L L H L L H H H H L H L L L L  
 bat umbrella umbrella  
 Compl + head = Compl-Head or Compl-ø
- \* Deletion is the maximal phonological reduction.
  - \* Why is the accented head deleted?

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## 3. Initial stress-accent and secondary pitch accent

- \* A Japanese word/compound has two accents:
    - primary accent: stress on the initial mora
    - optional secondary accent: pitch fall on the (ante) penultimate mora
- (11) a.  $\mu \mu \dots \underline{\mu} (\underline{\mu} (\mu \dots))$     b.  $\underline{\mu \mu} (\mu \dots)$   
 L H .. H (L ..)                      H L (L ..)
- ❖ The first word (complement) in a compound has the primary stress accent on its initial mora.
  - ❖ The second word (head) in a compound may have the secondary pitch accent on its initial mora.
  - ❖ Japanese conforms to Compound Accent

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### 3.1 Secondary accent deleted in compounds

\* In (12), the complement *koomori* is stressed as the initial element in the compound *koomori-gasa* to survive in the shortened form.

(12) *kóomori* + *kasa* = *kóomori-gasa* or *kóomori-ø*  
 HL L L HL LHHH HL HL LL  
 bat umbrella umbrella  
 compl head compl-head compl-ø

\* The head with the secondary accent can be deleted.

\* Japanese conforms to Complement Accent.

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### 4. Arguments for word-initial accent

#### 4.1 Pitch accent on the first mora

❖ The first mora in a word has the H/L contrast in Keihan (Kansai) accent system:

*hashi*  
 (18) a. H L (bridge)  
 b. L H (chopstick)  
 c. H H (edge)

❖ The first pair of moras in a word has pitch movement: HL or LH in Tokyo Japanese:

*hashi*  
 (19) a. H L (chopsticks)  
 b. L H (bridge)  
 c. \* H H  
 d. \* L L

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### 4.4 Stress on the initial mora in Altaic languages

❖ Turkish has word-initial stress characterized by more energy of articulation in addition to pitch accent, which is on the final syllable in most words (Johanson (1998: 34-35).  
*evde* ['evdɛ́] 'at home'

❖ Mongolian: default initial accent accompanied by a tone on the final syllable (Matthews 1951: 60)

❖ Korean (Seoul): Accent on the first syllable if heavy; otherwise accent the second syllable (Schiering and van der Hulst (2010))

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### 3.2 Reduced secondary accent in compounds

(13) a. *minami* + *america* = *minami-america*  
 L H H L H H H L H H HL L L L  
 b. *kuwagata* + *mushi* = *kuwagata(-mushi)*  
 L H H H L H L H H H (L L)

(14) a. *ne* + *shoogatsu*' = *ne-shoogatsu*  
 L L H H H L HL L L L  
 b. *akita* + *inu*' = *akita-inu*  
 HL L L H L H H L L L

(15) a. *minami* + *america* = \**minami-america*  
 L H H L H H H L H HL L L L L  
 b. *kuwagata* + *mushi* = \**kuwagata-mushi*  
 L H H H L H L H H H HL

(16) a. *ne* + *shoogatsu*' = \**ne-shoogatsu*  
 L L H H H HL L L L L  
 b. *akita* + *inu*' = \**akita-inu*  
 HL L L H L L H H HL

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### 4.2 Emphatic stress/lengthening on the initial mora

❖ Emphatic stress falls on the initial mora of a word/compound, not on the accented mora (cf. intensity on the stressed syllable (*lin-guis-tics!*)).

(20) a. *anata!* b. *ken-gikai!*  
 LH L LH HL L (non-contrastive)  
 You! Prefectural assembly!

❖ In Korean, "vowels (sometimes even consonants) may be lengthened for emphatic or connotative purpose." (Sohn 1999: 196)

(21) a. cə:gi over there  
 b. cə::gi way over there

(22) a. *anata* b. *a::nata* c. *ana::ta*  
 LHL LHL LHL  
 you you! you!

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### 4.5 Initial accent and typological correlations

• Initial accent languages are likely to have:

❖ Vowel harmony

Uralic: Finnish, Hungarian, Estonian  
 Altaic: Turkish, Mongolian, Korean

✓ Old Japanese (*Jodai*) had vowel harmony?

*atama karada hiji*  
 head body elbow

❖ Gemination

✓ Japanese has geminates (*sokuon*):

*kitte totte kippu*  
 stamp handle ticket

❖ Morphosyntactic head-final order (suffix, OV, ..)

✓ Japanese is consistently head-final.

(cf. Donegan and Stampe 1983, Plank 1998)

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### 3.3 Japanese conforms to Compound-Accent

❖ Japanese is not an exception to universal Compound-Accent.

❖ Primary accent is realized as stress on the initial mora of the complement.

❖ Secondary accent may be realized as pitch fall on the left-edge of the head.

(17) *shakai* + *seido* = *shakai-seido*

HLL HLL LHH-HLL

Compl + Head = Compl-Head

society system 'social system'

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### 4.3 No lenition on the first mora

❖ Word-initial is the strong position in Japanese (Nasukawa 2005).

❖ In Southern Tohoku Japanese, lenited reflexes of plosives appear in intervocalic position, but never in initial position.

(23) Southern Tohoku Japanese Tokyo Japanese  
*kayi* \*[ɣ- \*-k- 'persimmon' *kaki*  
 ɣ = velar approximant  
*hara* \*[r- \*-t- 'flag' *hata*  
 r = alveolar lateral flap

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