Prosodic Morphology-2: Japanese hypocoristics, truncations, and argots
Japanese syllables: CV, CVV, CVN, CVG; Japanese is traditionally described as a "mora" language; it has a pitch-accent system with a drop in pitch (formalized as a [ $\left.\mathrm{H}^{*} \mathrm{~L}\right]$ pitch accent by Beckman \& Pierrehumbert 1988) after the accented mora. Intensive study of the language over the past 15 years has shown that the metrical foot plays a fundamental role in various aspects of the prosody.

Hypocoristics: Poser 1990, Mester 1992
[1]. Pattern-1 personal names: a variety of possible patterns obtain (see Sugawara 2012 for recent analysis of their accent); the one constant is truncation to a bimoraic foot showing the top-ranking of Ft-Bin. Words without an accent mark belong to the unaccented class and are associated with a LH...H pitch contour.

| A'kira | A'ki-tyan |
| :--- | :--- |
| Megumi | Me'gu-tyan |
| Ke'iko | Ke'i-tyan |
| Ju'Nko | Ju'N-tyan |
| Sa'tyiko | Sa't-tyan |
| Hiromi | Hi'ro-tyan, Ro'mi-tyan |
| Mi'dori | Mi'do-tyan, Mi'i-tyan |
| Yo'oko | Yo'ko-tyan, Yo'o-tyan |
| Ma'riko | Ma'ri-tyan, Ma'ko-tyan |
| Ha'nako | Ha'na-tyan, Ha'a-tyan, Ha't-tyan |
| Ta'kako | Ta'ka-tyan, Ta'a-tyan, Ta't-tyan |

target: Ft-Bin >> Minimize >> Max-BTr
directionality: Anchor-L, Anchor-R, Contiguity
faith: Dep-Mora
markedness: *VV, *CC
Hi'ro-tyan Anchor-L, Cont >> Anchor-R
Ro'mi-tyan Anchor-R, Cont $\gg$ Anchor-L
Ma'ko-tyan Anchor-L, Anchor-R >> Contiguity
Yo'ko-tyan
Mi'i-tyan Min >> Dep-Mora
Mi'do-tyan Dep-Mora >> Min
Ha't-tyan Min >> Dep-M, *VV >> *CC
[2] Pattern-2: Rustic Girls' names: "..a process used to form familiar forms for girls' names that is now largely disused in urban speech" (Poser:' 90:92) formed with o- prefix. Our source does not indicate the accent.

| Yuuko | o-Yuu, *o-Yuko |
| :--- | :--- |
| Ranko | o-Ran |
| Yukiko | o-Yuki, *o-Yuu |
| Hanako | o-Hana, *o-Haa, *o-Han |
| Kaede | o-Kae |
| Kinue | o-Kinu |
| Midori | o-Mido |
| Sigeno | o-Sige |

> Takie o-Taki

This pattern is more faithful to the Base with various markedness constraints outranked by faithfulness and strict alignment

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Anchor-L, Contiguity >> Anchor-R
Dep-Mora >> Min, *VV, *CC
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[3] Pattern-3: Geisha/Bar-girl client names. "regular clients of bars and geisha houses are referred to by the bar-girls and geisha using a special modified form of their surname". Accompanied by -san 'Mr.' and honorific o-.

| Koono | o-Koo-saN |
| :--- | :--- |
| Iida | o-Ii-saN |
| Uno | o-Uu-saN, $*_{0}$ o-Uno-saN |
| Tanaka | o-Taa-saN, $*_{0}$ o-TaN-saN, $*_{0}$-Tana-saN |
| Yasuda | o-Yaa-saN, ${ }_{0}$ o-Yas-saN, *o-Yasu-saN |
| Hattori | o-Haa-saN, $*_{0}$ o-Has-saN |

Maximal minimization to (C)V
Anchor-L, Contiguity >> Anchor-R
*o-Uno-saN, *o-Has-san Min >> Dep-Mora
[4] Word Clippings: Itô 1990, Itô-Mester 1992
Japanese has a "complex but highly systematic array of prosodic shapes of word clippings, a productive word formation pattern of the contemporary language (often involving shortened loanwords) which abounds with almost daily neologisms". I-M: 3
$\mathrm{L}=$ light syllable, $\mathrm{H}=$ heavy syllable
LL su'to sutora'iki 'strike'
hisu hisuterii 'hysterie' Ger.
ra'bo raboratorii 'laboratory'
ne'ga negatibu 'negatives'
LL de'mo demoNsutore'esyoN 'demonstration'
ro'ke roke'esyoN 'location'
gyara gyaraNtee 'guarantee'
HL da'iya daiyamo'Ndo 'diamond'
pa'ama paamane'Nto 'permanent' (hair style)
ko'Nbi koNbinee'syon'combination'.
LLL te'rebi terebizyon 'television'
ba'suke basuke'tto 'basket'
do'mesu domesuti'kku 'domestic'
a'rumi aruminyu'umu'aluminum'
LLLL rihabiri rihabirite'esyoN 'rehabilitation'
torikuro torikuroroeti'reN 'trichloroethylene'
HLL koNbini koNbinie'Nsu 'convenience store'
HH bateN

Compound clippings

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seku(syuaru) hara(sumeNto) 'sexual harassment' sekuhara (wa) unaccented
mayo(neezu) dore(ssiNgu) 'mayonnaise dressing' mayodore (wa)
fami(rii) koN(pyuutaa) 'family computer` famikoN (wa)
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[5] generalizations

- There is left-edge anchoring; a heavy syllable is largely confined to the left edge; the systematic breakup of the LH sequences to LL suggests that a bimoraic trochee ( $\mathrm{F}=[\mathrm{LL}],[\mathrm{H}]$ ) is at play, similar to the hypocoristics. But surprisingly, a single H is avoided and larger structures occur: FF and $\mathrm{F}+\mathrm{L}$.
- Accent follows the Latin Stress Rule except that in four-mora words a preference for unaccented structures obtains
- Itô \& Mester 1992 suggest that strict layering of the prosodic hierarchy is a violable constraint; and that this word formation process imposes a requirement of binary branching at the level of the PW or Foot: P-derived words must be prosodically binary and syllable-internal structure is opaque for word-level conditions (a type of relativized minimality)
- Feet are aligned to the left. This blocks a Light+Heavy analysis for demoN
analysis:
$[\mathrm{L} \mathrm{L}]$
$[\mathrm{LH}]$
$\mathrm{L}[\mathrm{H}]$
$[\mathrm{H}] \mathrm{L}$
$[\mathrm{H}]$
$[\mathrm{LL}] \mathrm{L}$
$[\mathrm{LL}][\mathrm{LL}]$
$[\mathrm{H}][\mathrm{LL}]$
branching at Ft level invalid foot
violates alignment
$[\mathrm{H}] \mathrm{L} \quad$ branching at P level
[H] violates syllable as opaque domain for branching
[LL]L branching at P level
[H][LL]
[6] Labrune (2001) constructs a corpus of 277 clippings confirming the findings of Itô '90; if compounds like fami(rii) koN(pyuutaa)'family computer' are put in a different category, then the pool of statistically significant shapes is circumscribed by Itô \& Mester's Binary Branching requirement plus a ban on final heavy syllables *H\# (or perhaps licensing of H only initially). Branching at any level possible; *H\# blocks heavy syllables not at the left edge

| L | 0 |
| :--- | :--- |
| LL | 113 |
| H | 3 |
| LLL | 59 |
| LH | 1 |
| HL | 64 |
| LLLL | 35 |
| LLH | 8 |
| HLL | 31 |
| LHL | 5 |
| HH | 4 |

HHL
[6] Labrune also tries to predict the choice among the licit clippings for any given base by reference to the accent of the base: cutting the base at the accented syllable; Align right edge of Truncate with left edge of the head foot in the Base.

| ana | anau'nsaa | 'announcer' |
| :--- | :--- | :--- |
| tero | terori'zumu | 'terrorism', |
| kosume | kosumeti'kku | 'cosmetic', |
| sando | sandoi'tti | 'sandwich' |
| maiku | maikuro'hon | 'microphone' |
| irasuto | irasutore'esyon | 'illustration', |
| bangura | bangurade'syu | 'Bangladesh' |

In the corpus there are 72 exceptions; many of these can be explained by other constraints:

Avoidance of final epenthetic vowel: basuke, *basu basuke'tto 'basket' (35) Avoidance of final r: terebi, *tere terebi'zyon 'television' (20)
Avoidance of initial vowel as mora: akuse, *aku akuse’sarii 'accessory'

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