

REVISITING ACCENT IN JAPANESE GIVEN NAMES: STEM-LIKE ACCENT WITH FOOT FAITHFULNESS*

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1 Introduction

Previous studies on the phonology of Japanese given names show that their accent patterns are largely predictable (see Akinaga 1985; Tanaka and Kubozono 1999; Sugawara 2012 among others). Names derived from verbs, those derived from unaccented nouns, and those with particular name-specific suffixes (e.g. *-o*, *-e*, etc.) are unaccented, as shown in (1a). Most other names, on the other hand, are accented and receive antepenultimate accent, as shown in (1b).

(1) Given names in Japanese¹

- a. Unaccented: *Manab-u*, *Mamor-u*, *Makoto*, *Hikari*, *Taka-o*, *Hana-e*
- b. Accented: *Masá-hiro*, *Masá-yuki*, *Táka-si*, *Hána-ko*, *Kén-ta*, *Áya-ka*

What is yet to be explained in the literature is *why* given names exhibit such systematic accentuation patterns. This study makes two proposals; (i) names receive stem-like accent, and (ii) those derived from existing words must retain their original footing. The proposals will be couched in an Optimality-Theoretic analysis. We show that Ito and Mester's (2016) grammar for Japanese stems with the addition of one Output-Output Faithfulness constraint, MAX(foot)-OO, can well predict the basic accent patterns of given names. We will further discuss other rarer patterns and show how they can be accounted for by the proposed grammar.

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¹ Throughout the paper, an accented syllable is indicated by an acute accent mark on the nucleus vowel (and also sometimes shown in bold for clarity). The absence of an accent mark indicates that the word is unaccented. Hyphens represent morpheme boundaries. Transcriptions mostly follow the *kunrei* romanization system.

2 Data and analyses

2.1 Stem-like accent for names

2.1.1 Default antepenultimacy

Accentually, given names can be characterized as behaving like “regular single stems.” If a name is accented, accent falls on the syllable containing the antepenultimate mora, which is the default accent pattern for Japanese stems (McCawley 1968; also see Kubozono 2008; Kawahara 2015 and references therein). In other words, names do not show irregular variation in the location of accent, unlike normal nouns. Another characteristic of given names is that their morphological structures are ignored in terms of accent assignment. Most names are compounds being composed of several elements: e.g. *Masá-taka* ‘truth-respect.’ However, they do not receive compound accent, which would normally fall near the boundary between the two elements (see Kubozono 1995, 1997, 2008; Kawahara 2015 for the details of compound accent). For instance, in three mora compound names, accent still falls on the antepenultimate syllable, instead of a syllable at the boundary: e.g. *Hána-ko*, not expected **Haná-ko* ‘flower-child.’

Based on these observations, we adopt the Weak Antepenultimate System, the subgrammar for accentuation in Japanese stems proposed by Ito and Mester (2016), as the fixed grammar of given names.² This foot-based grammar assigns antepenultimate accent to most words through binary trochaic footing with an extrametrical (i.e. unfooted) syllable at the right word edge, as in [(bána)na] ‘banana’ and [pa(púri)ka] ‘paprika.’ Our proposal is that given names go through this stem accent grammar and receive antepenultimate accent, as in *Hána-ko* [(hána)-ko] and *Masá-taka* [ma(sá-ta)ka]. In research on accent in regular compounds, it is often assumed that each element of a compound must be parsed into an independent foot (see e.g. Kubozono 1995, 1997, 2008; Tanaka 2001). Our claim is that compound names are exempt from this requirement. It is thus possible to leave one of the elements unparsed, as in [(hána)-ko], or form a foot spanning across the morpheme boundary, as in [ma(sá-ta)ka].³

Let us illustrate how the stem grammar assigns accent to given names. The definitions of key constraints are given in (1) below.

(1) Key constraints in Ito and Mester’s (2016) stem grammar

FOOTBINARITY: No unary feet; feet are minimally binary at some level (μ, σ)	
NONFINALITY(FOOT’): No head foot word-finally	— *... (óó)] _{word}
RIGHTMOST: A head foot must be the rightmost foot	— *(óó)(oo) ...] _{word}
INITIALFOOT: Have a foot word-initially	— * _{word} [o(óó) ...
WORDACCENT: Prosodic words must have accent	
PARSE- σ : No unfooted syllables	
NOLAPSE: No consecutive unparsed syllables	
TROCHEE: Feet are trochaic	

² Ito and Mester (2016) propose four subgrammars with slightly different constraint rankings in order to account for lexical variation.

³ More specifically, we argue that the elements of a compound name are not subject to high-ranked LEXICALFOOT, which requires every lexical morpheme (or full content morpheme) to be parsed into a foot (Ito and Mester 2016). See Tanaka (2017) for the original proposal and an analysis of Japanese compound surnames in a similar vein.

Tableaux (2) and (3) show accentuation in a three-mora name and a four-mora name composed of light syllables (LLL and LLLL) respectively. Note that we have not changed the constraint rankings of the Weak Antepenultimate System in Ito and Mester (2016). TROCHEE, which is ranked highest in the grammar, is omitted from the following tableaux for simplicity.

(2) Antepenultimate accent in three-mora names (LLL)

/hana-ko/	NOLAPSE	FTBIN	NONFIN	RTMOST	WDACC	INIFT	PAR- σ
a. (hana)-(kó)		*!	*				
b. (hána)-(ko)		*!		*			
c. (hana)-(ko)		*!			*		
d. ha(ná-ko)			*!			*	*
e. → (hána)-ko							*

As can be seen, high-ranked FOOTBIN eliminates candidates (a), (b) and (c) with a unary foot. Having a head foot at the right edge as in candidate (d) also violates NONFINALITY. The optimal candidate is thus (e) [(hána)-ko] with a trochaic foot and a final extrametrical syllable, which derives antepenultimacy. Other names of this type include [(mása)-to], [(áya)-ka], [(háru)-ki] and so on. Note that the same analysis extends to three-mora names composed of heavy and light syllables (HL), such as [(kén)-ta], [(yúu)-zi] and [(ái)-ko].

(3) Antepenultimate accent in four-mora names (LLLL)

/masa-taka/	NOLAP	FTBIN	NONFIN	RTMOST	WDACC	INIFT	PAR- σ
a. (masa)-(táka)			*!				
b. (mása)-(taka)				*!			
c. (masa)-(taka)					*!		
d. → ma(sá-ta)ka						*	**
e. (mása)-taka	*!						**

Four-mora names may be footed exhaustively and have two feet in a row without violating FOOTBIN. However, NONFINALITY prohibits a head foot to occur at the right edge, as in (a), and RIGHTMOST prohibits a head foot to be followed by another foot, as in (b). Candidate (c) with no accent also incurs a violation of WORDACCENT, which requires a prosodic word to be accented. Given these constraints are ranked above INITIALFOOT, the winner is candidate (d) with a single trochaic foot and a final extrametrical syllable, that is, antepenultimate accent. Other names of this type are [ta(ká-hi)ro], [yo(sí-no)ri], [ka(zú-to)si] and so on.

To summarize, we argue that given names are treated as single stems despite being structurally compounds. The stem accent grammar in Ito and Mester (2016) assigns antepenultimate accent to them through binary trochaic footing and final extrametricality.

2.1.2 Consecutive feet and unaccentedness

The proposed analysis now raises one question: if the grammar assigns antepenultimate accent to given names just like regular stems, why are certain names unaccented? Before addressing the question, let us first review Ito and Mester's (2016) analysis of unaccented stems. They argue

that unaccentedness in stems arises from exhaustive footing and consecutive feet. For illustration, we present another subgrammar in Ito and Mester (2016), which is called the “Default Unaccented System.” It differs from the Weak Antepenultimate System in that INITIALFOOT outranks WORDACCENT. This grammar predicts that four-mora stems composed of light syllables (LLLL) will contain two feet in a row and be unaccented, as in [(ame)(rika)] ‘America,’ as shown in (4) below.

(4) Unaccentedness derived from consecutive feet (Ito and Mester 2016)

/amerika/	NO LAP	FTBIN	NONFIN	RTMOST	INI FT	WDACC	PAR- σ
a. a(méri)ka					*!		**
b. (ame)(rí)ka			*!				
c. (á)me(ri)ka				*!			
d. → (ame)(rika)						*	
e. (á)me(ri)ka	*!						**

In this grammar, candidate (a) with a single foot in the middle of the word is ruled out due to a violation of INITIALFOOT, which requires a prosodic word to begin with a foot. As we have seen earlier, four-mora stems may be fully parsed into two feet with no violation of FOOTBIN. However, placing accent in either foot, as in (b) or (c), violates NONFINALITY or RIGHTMOST. The optimal way to satisfy these constraints is to assign no accent to the word, as in (d), at the cost of violating low-ranked WORDACCENT. Put differently, when there are two consecutive feet, NONFINALITY and RIGHTMOST claim different accent patterns, and unaccentedness then comes in to resolve the tension between the two; no accent, no conflict.

We follow this basic analysis and argue that unaccentedness in names arises from the same principle. In what follows, we will show that, if given names contain two feet in a row due to constraint interactions or lexical specifications, the Weak Antepenultimate System also derives unaccentedness. In the next subsection, we will first discuss a factor that determines the foot structures of names derived from existing words.

2.2 Foot faithfulness

2.2.1 MAX(foot)-OO

As we have seen in (1), unaccentedness is found only in particular kinds of given names, including those derived from existing words such as verbs and nouns. Along the lines of Ito and Mester (2016), we posit that such names are unaccented due to containing two consecutive feet. We further propose that the foot structures of derived names in general are influenced by those of the base words. More specifically, a name must retain the same number of feet as its original form. This foot structure requirement on derived names can be formalized as the following Output-Output Faithfulness constraint.

(5) MAX(foot)-OO: Every foot in the base form must be present in a derived form

As we will show below, with this MAX(foot)-OO ranked high in our stem accent grammar, deverbal names and a subset of denominal names are correctly predicted to be unaccented.

2.2.2 Deverbal names

First, let us take a look at names derived from verbs. Deverbal names are all unaccented, whether they are accented or not in their original forms (Akinaga 1985; Tanaka and Kubozono 1999). For example, the verb *manab-u* ‘to study’ is unaccented, and so is the derived name *Manab-u*. The verb *mamór-u* ‘to protect’ is accented, but the derived name *Mamor-u* is, again, unaccented.

Kubozono (2008) suggests that infinitive verbs, which are morphologically complex, behave like compound nouns; the verb root and the infinitival suffix *-u* are each parsed into a foot, and accent falls on a syllable near the boundary, as in [(mamó)(r-u)], or else the word is unaccented, as in [(mana)(b-u)].⁴ In other words, verbs are fully parsed into two feet, regardless of their accentual profile. In light of this analysis, unaccentedness in deverbal names naturally follows if MAX(foot)-OO is ranked high in our stem accent grammar based on the Weak Antepenultimate System. Names retain two consecutive feet in their original verb forms in order to satisfy output-output correspondence, and that foot structure in turn derives unaccentedness, as shown in (6).

(6) Unaccentedness in deverbal names⁵

[(mamó)(r-u)]	MAXFT	FTBIN	NONFIN	RTMOST	WDACC	INIFT	PAR-σ
a. (mámo)r-u	*!						*
b. (mamo)(r-ú)		*	*!				
c. (mamó)(r-u)		*		*!			
d. → (mamo)(r-u)		*			*		

Note that the input here is the verb [(mamó)(r-u)] with a foot structure. Candidate (a) with a single foot incurs a violation of MAX(foot), as it deletes one of the two feet in the original form. Ranking MAX(foot) above FOOTBIN ensures that a unary foot can be retained, as in (b), (c) and (d). If a three-mora name is exhaustively footed, the situation is now similar to the one with four-mora *regular stems*, which we have seen in (4) above. There is a tension between NONFINALITY and RIGHTMOST in terms of the location of accent. Since WORDACCENT is dominated, unaccentedness arises as the optimal solution, as in (d).

The same analysis holds for names derived from unaccented verbs, such as [(mana)(b-u)]; with two consecutive feet, a derived name is also unaccented. Also notice that MAX(Foot) only requires that the number of feet be the same in a derived form and its base. Thus, it does not penalize a candidate even if it has a different accentual profile from the original form. This explains why deverbal names are always unaccented, whether they are originally accented or not. Other deverbal names are [(wata)(r-u)], [(sige)(r-u)], [(take)(r-u)], [(sino)(b-u)], and so on.

For clarity, we restate that given names are treated as single stems. The claim is that, although deverbal names have a compound-like foot structure like their original verb forms, they still undergo the stem accent grammar. In fact, their unaccentedness emerges precisely because they are subject to stem-like accentuation with compound-like (i.e. exhaustive) footing.⁶

⁴ In Kubozono’s (2008) analysis of compound accent, iambic feet may occur under certain circumstances, as in [(mamó)(r-u)]. See Alderete (2015) for a possible reanalysis without foot flipping. Also, in both [(mamó)(r-u)] and [(mana)(b-u)], the infinitival suffix *-u* forms a foot with the verb root final consonant, instead of projecting a foot on its own, due to a syllable structure requirement.

⁵ Hereafter, NOLAPSE is omitted unless it is relevant due to space limitations.

⁶ Note that, if deverbal names were treated as actual compounds, they could possibly receive penultimate accent, as in [(mamó)(r-u)], as a result of compound accentuation. However, this pattern is never attested.

2.2.3 Denominal names

Next, we will turn to names derived from nouns. At a first glance, denominal names seem to show complex accentuation patterns; some are accented, and others unaccented. Once we look at their original accent, however, we do find systematic patterns. As a general rule, denominal names are unaccented if they are originally unaccented; otherwise, they receive antepenultimate accent (or initial accent if they are as short as two moras).

Let us first see examples of unaccented denominal names. The name *Makoto* is derived from the noun *makoto* ‘truth,’ which is unaccented. *Megumi* is another unaccented name, and its noun counterpart *megumi* ‘grace’ also has no accent. As discussed above, Ito and Mester (2016) argue that unaccentedness in noun stems comes from two consecutive feet. Following the analysis, we posit that these base forms are also parsed into two feet, as in [(ma)(koto)] and [(megu)(mi)]. Names derived from them are then expected to be unaccented, as shown in (7).

(7) Unaccentedness in denominal names

	[(ma)(koto)]	MAXFT	FTBIN	NONFIN	RTMOST	WDACC	INIFT	PAR-σ
a.	(máko)to	*!						*
b.	(ma)(kóto)		*	*!				
c.	(má)(koto)		*		*!			
d.	→ (ma)(koto)		*			*		

One may wonder on what basis, besides them being unaccented, we infer the foot structures of the original words. It is worth noting that they are etymologically composed of two elements: *ma-koto* ‘true-thing’ and *megum-i* ‘bless-nominalizer.’ Their historical compound-like status suggests that each of the components is parsed into a foot, as in [(ma)-(koto)] and [(megu)(m-i)], just like regular compound words or infinitive verbs (Kubozono 1995, 1997, 2008; Tanaka 2001; see Sections 2.1.1 and 2.2.2). Other unaccented denominal names include *Tubasa*, *Kaede*, *Nozomi*, *Hazime*, *Hitomi* and *Sumire*. Their base forms, which are all unaccented, are also morphologically complex in origin according to etymological dictionaries.⁷ It is of course unlikely that all Japanese speakers are aware of the history of each of these nouns. We assume that their historical foot structures have persisted and been lexicalized, causing their unaccented status in present-day Japanese. (See Ito and Mester 2016 for the original observation and discussion.) Most importantly for us, unaccented noun stems are analyzed as being exhaustively footed into two feet, and derived names with the same foot structure are also unaccented.⁸

Other denominal names generally show regular antepenultimate accent patterns. For example, those derived from nouns with antepenultimate accent simply leave the accent as is: e.g. *yámato* ‘Yamato’ → *Yámato*; *ázusa* ‘catalpa’ → *Ázusa*. Those with original penultimate accent, on the other hand, shift it to the antepenult: e.g. *kokóro* ‘heart’ → *Kókoró*; *tikára* ‘force’ → *Tikára*.⁹ Under Ito and Mester’s (2016) analysis of stems, the original nouns presented here are all

⁷ *tu-basa* ‘wing (<bird-tuft),’ *kae-de* ‘maple (<frog-hand),’ *nozom-i* ‘wish (<wish-nominalizer),’ *hazim-e* ‘beginning (begin-nominalizer),’ *hito-mi* ‘pupil (<person-see)’ and *sumi-re* (or *sum-ire*) ‘violet (ink-container).’

⁸ One notable exception is the name *Sákura*; although the base noun *sakura* ‘cherry tree’ is unaccented, the derived name is accented. For some speakers, *Ituki* derived from unaccented *ituki* ‘tree’ also has the accented variant *Ítuki*.

⁹ Some Tokyo Japanese speakers also accept final accent for these words, as in *kokoró* and *tikará*. Here, we assume that the original forms are the ones with penultimate accent, based on the fact that the accent shift to the final mora is a somewhat recent innovation.

expected to have a single trochaic foot, as in [(yáma)to], [(ázu)sa], [ko(kóro)] and [ti(kára)]. Our proposed grammar then correctly predicts that words with such a foot structure will receive antepenultimate accent as names. This is illustrated in the tableau below with the accent-shifting name *Kókorō* as an example.

(8) Antepenultimate accent in denominal names: Accent shift

	[ko(kóro)]	MAXFT	FTBIN	NONFIN	RTMOST	WDACC	INIFT	PAR-σ
a.	ko(kóro)			*!			*	*
b.	→ (kóko)ro							*
c.	(koko)(ró)		*!	*				
d.	(kóko)(ro)		*!		*			
e.	(koko)(ro)		*!			*		

The input here is the original noun [ko(kóro)] with penultimate accent. The faithful candidate in (a) violates NONFINALITY, since it has a head foot at the right edge of the word. The optimal solution is to shift the foot leftward, as in (b), resulting in antepenultimate accent. Recall that MAX(foot)-OO is satisfied as long as the number of feet is the same between two output forms in correspondence. Thus, accent shift per se does not incur a violation of the constraint. In the case of a name with original antepenultimate accent, such as [(yáma)to], the faithful candidate already satisfies NONFINALITY and thus will be the winner. In short, names have antepenultimate accent if they are derived from nouns with penultimate or antepenultimate accent, which are analyzed as containing a single foot.¹⁰

Shorter denominal names need some special attention. Those that are two-mora long always have initial accent, regardless of their original accent pattern (Tanaka and Kubozono 1999): e.g. *haná* ‘flower’ → *Hána*; *sóra* ‘sky’ → *Sóra*; *riku* ‘earth’ → *Ríku*. This is in fact predicted by Ito and Mester’s (2016) stem accent grammar. Based on the observation that one-mora and two-mora stems are predominantly accented, they propose that the constraint MINIMALWORDACCENT defined in (9) is ranked high.

(9) MINWORDACC: Minimal (monomoraic and bimoraic) prosodic stems must have accent

We posit that the foot structures of the words above are [ha(ná)], [(sóra)] and [(riku)]. With the high-rankings of MINWORDACC and MAX(foot), the grammar assigns initial accent to names derived from them, whether it involves accent shift or accent insertion, as shown in (10) below.

(10) Initial accent in two-mora denominal names¹¹

	[ha(ná)]	MAXFT	MINWDACC	FTBIN	NONFIN	RTMOST	WDACC	INIFT	PAR-σ
a.	ha(ná)			*!	*			*	*
b.	(hana)		*!				*		
c.	→ (hána)				*				

¹⁰ There are very few three-mora denominal names with original final accent, and it is hard to make a generalization. *Hikari*, derived from *hikari* ‘light,’ is unaccented, while *Tákara*, which is a somewhat infrequent name and is derived from *takará* ‘treasure,’ has antepenultimate accent. The unaccentedness of the former may be due to the compound-like origin of the base: *hikar-i* ‘shine-nominalizer.’ We leave this issue for future research.

¹¹ Candidate (a) [ha(ná)] also violates high-ranked NONFINALITY(σ) (see Ito and Mester 2016 for details).

2.2.4 Deadjectival names

Lastly, brief notes on deadjectival names are in order. Names derived from old adjective forms, such as *táka-si* ‘high/respectful’ and *kíyo-si* ‘pure,’ are all accented, as in *Táka-si* and *Kíyo-si* (Akinaga 1985; Tanaka and Kubozono 1999). Notice that the original adjectives have antepenultimate accent. Their expected foot structures are thus [(*táka*)-*si*] and [(*kíyo*)-*si*]. Our grammar then correctly predicts that deadjectival names will be accented; with an original single foot, a derived name also has a single trochaic foot, which derives antepenultimate accent.

2.3 Summary

To summarize the analysis so far, we argue that given names are treated as single stems even if they have a compound-like structure. They thus go through the accent grammar for stems, and generally receive regular antepenultimate accent. We further argue that names derived from existing words must retain the number of feet in their original forms. On the assumption that consecutive feet derive unaccentedness as claimed by Ito and Mester (2016), the proposed analysis well predicts which derived names will be accented or unaccented.

3 Other patterns

In the remaining of the paper, we will discuss given names that show idiosyncratic behaviors and propose an analysis to account for their accent patterns.

3.1 Anti-accenting onomastic suffixes

Names with certain onomastic (name-specific) suffixes are generally unaccented (Akinaga 1985; Tanaka and Kubozono 1999), as in *Masa-o*, *Hana-e* and *Aya-mi*. Such anti-accenting suffixes include *-o*, *-e*, *-mi*, *-yo* and *-ne*. We claim that these items are specified to be parsed into an independent foot. To formalize this, we propose a constraint indexed to this specific class *i* of suffixes (à la Pater 2007), which is defined as follows.

(12) PARSEONOMASTICSUFFIX-*i*: An onomastic suffix of class *i* must project its own foot

Although stipulative, ranking this constraint high in the grammar predicts that names with those particular suffixes will be unaccented, as shown in (13).

(13) Unaccentedness in names with class-*i* onomastic suffixes

<i>/masa-o/</i>	NO LAPSE	MAX FT	MINWD ACC	PARSE ONOM	FT BIN	NON FIN	RIGHT MOST	WD ACC	INI FT	PARSE -σ
a. (má sa)-o				*!						*
b. masa-(ó)	*!				*	*			*	**
c. (masa)-(ó)					*	*!				
d. (má sa)-(o)					*		*!			
e. → (masa)-(o)					*			*		

High-ranked PARSEONOM requires *-o* to form a foot on its own. Once the suffix is parsed into a foot, the two-syllable first element cannot be left unfooted due to also high-ranked NOLAPSE, which prohibits consecutive unparsed syllables. This results in exhaustive footing, which in turn leads to unaccentedness in the familiar way. We argue that names with other suffixes of the same type are also parsed into two feet, as in [(hana)-(e)], [(aya)-(mi)] and [(tomo)-(yo)].

One may wonder what happens if the first element is shorter than two syllables. A name composed of one heavy syllable and a special onomastic suffix is still unaccented, as in *Ree-mi*. This is actually expected from the high ranking of WEIGHT-TO-STRESS/STRENGTH PRINCIPLE (WSP; Ito and Mester 2016), which essentially requires every heavy syllable to form an independent foot.¹² Due to this constraint, the heavy-syllable first element, as well as the onomastic suffix, is parsed into a foot, as in [(ree)-(mi)], and the result is unaccentedness.

On the other hand, names are accented even with such an anti-accenting suffix if their first element is one mora long, as in *Sá-e* and *Kú-mi*. In light of the fact that names formed this way are two moras in length, we argue that MINWORDACC in (9) is responsible for their accentedness. Here, we also propose to redefine the constraint slightly, in such a way that it requires a minimal (one- or two-mora) prosodic stem to be “parsed into a single foot” and be accented. Ranking this modified constraint above PARSEONOM, the expected accent pattern of names in question is initial accent, as in [(sá-e)] and [(kú-mi)].¹³

In sum, our grammar predicts that a name with a special onomastic suffix, such as *-o*, *-e*, *-mi*, *-yo* and *-ne*, will be unaccented, unless the name is two-mora long.

3.2 Suffix-driven patterns

Names with other onomastic suffixes show more complex patterns. We will leave notes on two kinds of such names.

3.2.1 Names with *-iti*

Names with *-iti* show different accentual profiles depending on the prosodic structure (Tanaka and Kubozono 1999). They usually have a heavy-syllable first element, resulting in an HLL configuration as a whole, and are unaccented: e.g. *Koo-iti*, *Yuu-iti* and *Sin-iti*. On the other hand, when they only consist of light syllables, as in LLL and LLLL, they are accented: e.g. *Tá-iti* and *Hikó-iti*. We argue that *-iti* does not belong to the class of anti-accenting suffixes, and thus need not be independently footed. Then, the accent patterns of names with *-iti* are correctly predicted by our current constraint rankings. With HLL, a foot cannot be formed in the middle of the word as it would break a syllable: e.g. *[ko(ó-i)ti]. With high-ranked NOLAPSE and WSP discussed above, neither the two-mora suffix or the heavy-syllable first element can be left unfooted: *[(koo)-iti] and *[koo-(iti)]. The optimal foot structure is then exhaustive footing, which derives unaccentedness: [(koo)-(iti)]. With LLL and LLLL, on the other hand, a name may contain a single foot, resulting in regular antepenultimate accent: e.g. [(tá-i)ti] and [hi(kó-i)ti].¹⁴

¹² The definition of the constraint in Ito and Mester (2016) is: “Heavy syllables are footheads. Violated when a heavy syllable is not a foothead: *.H., *(HX), *(XH).”

¹³ Without such redefinition, the expected accent pattern would be final accent, as in [sa-(é)] and [ku-(mí)]. Note that this slight modification does not affect Ito and Mester’s (2016) analysis of regular stems.

¹⁴ [(tá-i)ti] and [hi(kó-i)ti] may also be analyzed as HL and LHL respectively, on the assumption that [ai] and [oi] could form a diphthong.

3.2.2 Names with *-suke*

Names with *-suke* show irregular patterns. HLL names are accented, as in *Dái-suke* and *Yúu-suke*, while LLL names are unaccented, as in *Sa-suke* and *Yo-suke*. We argue that *-suke* is one of the anti-accenting suffixes which are required to be independently footed. We further propose a lexically-specific constraint, *X-sukeACCENT*, which requires that names with *-suke* be accented. If this constraint and NONFINALITY outrank RIGHTMOST,¹⁵ HLL *suke* names will be accented. Furthermore, ranking *X-sukeACCENT* below FOOTBIN and NONFINALITY derives unaccentedness in LLL names. The analysis is illustrated in the tableaux in (14).

(14) Accentuation in *-suke* names

/dai-suke/	NO LAPSE	MAX FT	PARSE ONOM	FT BIN	NON FIN	<i>X-suke</i> ACC	RIGHT MOST	WD ACC	INI FT	PARSE -σ
a. (dái)-suke	*!		*							**
b. (dai)-(súke)					*!					
c. → (dái)-(suke)							*			
d. (dai)-(suke)						*!		*		

/sa-suke/	NO LAPSE	MAX FT	PARSE ONOM	FT BIN	NON FIN	<i>X-suke</i> ACC	RIGHT MOST	WD ACC	INI FT	PARSE -σ
a. (sá-su)ke			*!							*
b. (sá)-(suke)				*!			*			
c. (sa)-(suke)				*!		*		*		
d. sa-(súke)					*!				*	*
e. → sa-(suke)						*		*	*	*

Notice that [sa-(suke)] is unaccented without having two consecutive feet. This suggests that, under certain conditions, [L(LL)] may also derive unaccentedness.

Idiosyncratic patterns like names with *-suke* do exist, and they pose a challenge to an analysis based on a single grammar.¹⁶ The point here is that lexically-specific constraints can explain such exceptional cases, while keeping the basic grammar intact.

3.3 “Long” names

Names that are longer than usual also show peculiar accent patterns. They are either unaccented, as in *Koo-ta-roo* and *Sin-no-suke*, or accented with accent falling near a morpheme boundary, as in *Yúu-zi-roo*, *Soo-íti-roo* and *Mata-sábu-roo*.¹⁷ In other words, accentually they behave like

¹⁵ In the Weak Antepenultimate System in Ito and Mester (2016), NONFINALITY and RIGHTMOST are left unranked. Note, however, that deciding the ranking between the two does not affect our analysis of given names presented earlier in the paper, nor Ito and Mester’s analysis of regular stems.

¹⁶ Even more challenging are names with *-roo*. LH names are accented, as in *Tá-roo* and *Góroo*, while LLH names are unaccented, as in *Iti-roo* and *Sabu-roo*. With our current analysis, capturing these patterns would require several ad hoc, lexically-specific constraints. We leave this issue for future research.

¹⁷ Capturing the accent in *Yúu-zi-roo* is especially difficult for the Weak Antepenultimate System. Also see footnote 16 for the complications posed by names with *-roo* in general.

compounds, rather than single stems. We argue that this is still compatible with the original proposal that the grammar treats given names as stems. Japanese stems are mostly two or three moras, and four at the longest. Names that are long are thus not optimal in terms of the length requirement for stems. We speculate that the stem grammar cannot handle such long names, and they are subject to a different accentuation system, that is, compound accentuation. (See Kubozono 1998 for a similar proposal.)

One may wonder, however, what counts as “too long.” Interestingly, the threshold seems to differ depending on the gender. As we have seen, four-mora male names show regular antepenultimate accent: e.g. *Masá-taka* (see Section 2.1.1). On the other hand, female names of the same length with the suffix *-ko* show irregular penultimate accent, as in *Sakurá-ko* and *Kaorú-ko*, suggesting that they receive compound accent falling near the boundary of elements. Sugawara (2012) collects 1,200 common Japanese given names, and reports that four-mora female names are extremely rare (less than 1% of the entire female names), as shown in (15).

(15) Distribution of Japanese given names by length (1,200 types; Sugawara 2012)

	Two moras	Three moras	Four moras	Five+ moras
Male names	11%	55%	27%	7%
Female names	29%	71%	<1%	0%

Based on these data, we argue that female names that are longer than three moras are considered to be compounds, while male names must exceed four moras in length to be counted as compounds. We admit that this is a mere speculation, and leave for future research how to formalize it as a grammatical principle. Here, we conclude that our stem accent grammar accounts for most Japanese given names, and long names which show exceptional behaviors are taken care of by the grammar for compounds.¹⁸

4 Discussion and conclusions

In this paper, we have given an analysis of accentuation in Japanese given names. We have proposed that names, many of which are compounds, are subject to the phonology of stems, and receive stem-like accent. We have also argued that there is a requirement for names derived from existing words to retain their original number of feet. We have formalized the proposals by means of the stem accent grammar proposed by Ito and Mester (2016) with a high-ranked Output-Output Faithfulness constraint, or MAX(foot)-OO. We have shown that the proposed analysis not only accounts for the accent patterns of most given names, but also reveals the fundamental reasons for why unaccentedness arises in certain names, and not in others. Names generally show antepenultimate accent, the default pattern for stems, but are unaccented if they contain two consecutive feet by carrying them over from their original forms or due to lexical specifications.

The findings have some implications to the field of phonology. First, the study confirms consecutive feet as the origin of unaccentedness (Ito and Mester 2016). As we have shown, our stem accent grammar with foot faithfulness well predicts that names derived from words that are

¹⁸ Another remaining issue is predicting the accent patterns of compounds (including which words are accented or unaccented), which is beyond the scope of this paper.

independently analyzed as being exhaustively footed (e.g. verbs; Kubozono 2008) will all be unaccented. This provides another piece of evidence that unaccentedness is rooted in this specific foot structure, as envisaged by Ito and Mester (2016). Second, the paper also reveals that Output-Output Correspondence of foot structures may play a role in the accentuation of derived words. Feet, unlike accent, do not have phonetic realizations by themselves. However, our analysis suggests that Output-Output Faithfulness constraints can refer to not only directly audible prosodic features like accent but also so-called “hidden structures” such as feet. More concretely, speakers are aware of, or able to infer, the foot structures of existing words, and they can use the knowledge in deriving words such as names.

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