1. Introduction. As pointed out in Hyman 2009:213, ‘[t]he central goal of phonological typology is to determine how different languages systematize the phonetic substance available to all languages’. One of the most intensively discussed subfields in phonological typology is prosody. In prosodic typology, the notions ‘tone’ and ‘stress’ have long played a key role in classifying prosodic systems; the arguably most influential recent contributions along these lines can be found in a series of articles by Larry Hyman (e.g. 2006, 2009). Such an approach has also been taken in Wee’s 2016 study of the tone system of Hong Kong English (HKE), a variety of English spoken in Hong Kong. Essentially, Wee argues that HKE does not have a stress system like other varieties of English, but a lexical-tone system instead; his view contrasts with previous research on HKE where the language has typically been classified as a stress system (e.g. Hung 2005, Cheung 2009). Wee’s main arguments can be roughly summarized along two lines (a more detailed discussion can be found in §2). First, Wee doubts that HKE shows any prototypical correlates of stress (duration, intensity). Furthermore, he claims that the language displays a considerable variety of tonal patterns across di- and trisyllabic words that cannot be explained in a satisfactory way by making reference to stress. To account for the patterns, Wee suggests an analysis in which the language is treated as having lexical high tone, but no stress (a similar analysis of HKE has independently been proposed in Yiu 2014).

In this response paper, we reevaluate Wee’s claims and conclude that his data do not provide conclusive evidence that HKE has lexical tone; instead, the facts at least leave open the possibility, or possibly even suggest, that foot structure governs the distribution of tone in HKE. Roughly, we aim to demonstrate that referring to foot structure can account for the tonal facts at least equally as well as the tonal approach, and arguably offers a more parsimonious account of the distribution. Our general line of argument is as follows.

* We would like to thank Charles Kisseberth, Suki Yiu, and the Phonetics and Phonology Discussion Group (Phonies) at the Ohio State University for helpful discussion and suggestions. The usual disclaimers apply.
On the one hand, Wee’s arguments concerning the distribution of tones are complicated by the fact that his analysis conflates morphologically simplex and morphologically complex words (particularly compounds). We argue that when taking morphological factors into account, apparent structural differences between HKE and other varieties of English do not appear to be as strong as suggested by the author. On the other hand, Wee operates under the assumption that, since HKE apparently does not show any correlates of stress, the word-level tones in the language must be lexical. This claim is based on the phonological principle of culminativity, which states that every constituent that correlates with prominence (at the word or phrase level) needs to have one position that stands out in terms of prominence (e.g., Hayes 1995, Hyman 2006). While we acknowledge that this argument is in line with widespread assumptions in prosodic typology, we do not agree that the absence of correlates of stress necessitates lexical tone. Instead, we claim that in HKE, the foot as a phonological constituent is responsible for the distribution of surface tones, even in the absence of phonetic correlates of stress.

First of all, it is important to note that stress does not have clearly definable phonetic properties crosslinguistically. That is, it is well known that the correlates of stress differ across languages (e.g., Gordon & Roettger 2017), which suggests that there is no universal phonetic manifestation of prominence in the foot. Furthermore, various scholars have questioned whether culminativity constitutes a linguistic universal, both at the phrase level (e.g., dual focus; Wang & Féry 2018 for German) and at the word level (see e.g., van der Hulst 2011 for an overview, Bogomolets 2014 for compelling evidence from Arapaho). That is, there is ample evidence indicating that phonetic prominence (e.g., pitch peaks, increased duration, intensity) need not always be a surface exponent of foot structure.

A well-understood tone-based example can be found in, for example, Pearce (2006), who shows that foot structure influences tone placement in Kera, even though the language shows no overt correlates of stress. Other scholars have suggested that in some languages, stress and foot structure can even be independent of each other (Vaysman 2009, Gordon 2011). Furthermore, consider the distribution of vowel length in Chimwiini, a language that has been extensively studied by Charles Kisseberth and collaborators for more than four decades. In Chimwiini, underlyingly long vowels can surface either in the penultimate syllable of the phonological phrase or in the antepenult if the penult does not contain a long vowel and is not a closed syllable.

As originally argued in Selkirk 1986 and later confirmed in, for example, Kisseberth & Abasheikh 2011, the most parsimonious analysis of the facts relies on the assumption that foot structure determines the distribution of vowel length along the lines of the Latin stress rule. Crucially, there are no other correlates of stress in the language, and in phrases where all vowels are underlyingly short, no syllable will stand out phonetically. As a last example, the large-scale typological study in Bennett 2012 demonstrates that the active role of foot structure need not imply the presence of phonetic correlates of stress; Bennett notes that ‘the presence of foot structure in a particular language does not depend on the prior existence of phonetic stress’ (2012:4).

In light of such examples, we believe that the apparent absence of phonetic correlates of stress and, by extension, culminativity in HKE should not be taken to exclude the possibility that HKE has a foot-based metrical system, where metrical constituency determines the placement of tone. With this in mind, we reevaluate the distribution of tone in HKE under the working assumption that the heads of trochaic feet are the primary anchors for high tones, and we demonstrate how an analysis based on this representational premise successfully derives the data discussed by Wee. If our analysis is correct,
HKE would have the same general type of metrical system as other varieties of English, but would differ in how foot structure is expressed on the surface, viz. only in the placement of tone and without any overt correlates of prominence.

We would like to point out that proposing a metrical alternative to lexical tone does not mean that the whole system will be fully predictable. Most importantly, the influx of loanwords has made the English metrical system partially unpredictable over time. This is observed, for example, in loanwords like "garage" with final stress in American English, unlike the more typical strong-weak pattern in nouns like "apple" (see Dresher 2013 for discussion). There is no reason to assume that HKE would have fully regularized these patterns. It should also be noted that there are several competing foot-based analyses of English stress, such as Hayes 1982, Kager 1989, or Burzio 1994, among many others.

Our metrical approach to HKE does not aim to resolve ongoing theoretical debates about what the default stress patterns are, how to mark apparent lexical exceptions, and so on. Rather, we aim to show that the widely accepted foot-based approach to English can be successfully applied to HKE. Crucially, unlike the lexical-tone analysis, we argue that the foot-based approach makes it possible to explain distributional patterns in a more principled way and allows us to make certain predictions about the distribution of tone. Unless these predictions can be falsified, we believe that this favors a foot-based analysis of the patterns.

The paper is structured as follows. We first present the basic facts as discussed by Wee and summarize his analysis (§2), and then discuss an alternative metrical account of the facts (§3). Section 4 discusses why we think the foot-based approach is more restrictive than the competing tonal analysis. We conclude the paper in §5 and suggest some directions for further research on HKE and on prosodic typology in general.

2. Wee’s data and analysis. Wee claims that HKE has a tone system rather than a stress system, thereby arguing against the position taken in most previous research on HKE. On the basis of a production study with eight speakers of HKE (four female, four male; ages eighteen to twenty), he assumes that the principles of tone assignment shown in 1 are active in the HKE tone system.

(1) Principles of tones in HKE (adapted from Wee 2016:e75)
   a. Some syllables in HKE are underlyingly specified for H; all words have at least one H.
   b. Associate M to any word-initial syllable that is not underlyingly H.
   c. Associate L% to utterance-final position.
   d. H-spread: Except for the H nearest the utterance-final boundary, spread H rightward to all toneless pre-H or pre-M syllables.
   e. M-spread: Spread M rightward to all pre-H syllables.
   f. Except for the utterance-final syllable, HKE bans contour tones.

Here, we restrict ourselves to realizations in isolation, which includes all aspects relevant to the general analysis of the system as tone-based or foot-based. Wee (p. e69) argues convincingly that there is interpolation between the last H-toned syllable and the utterance-final L%, which suggests that intervening syllables between the two tones remain phonologically toneless (‘o’). These general principles are sufficient to understand Wee’s tonal assignment for monosyllabic, disyllabic, and trisyllabic words in isolation.

To begin, all monosyllables have a falling pattern HL%, as shown in 2. This tonal mapping follows from the obligatory assignment of H and the utterance-final L%, which surfaces in all pronunciations in isolation.
(2) Tonal assignment in monosyllabic words: always HL%

While the tonal mapping in monosyllables is thus fully predictable, variation occurs in longer words. In disyllables, Wee recognizes three distinctive patterns, as shown in 3.

(3) Tonal mapping in disyllables: H-L%, H- HL%, or M-HL%

a. H-L%: apple, clockwise, greeted
b. H- HL%: sometimes, outsell, inborn
c. M-HL%: create, giraffe, before

Lastly, Wee identifies seven distinct tonal patterns for trisyllabic words, which are summarized in 4.


a. H-o-L%: yesterday, beautiful, popular
b. H-M-HL%: runaway, roundabout, go-between
c. H-H-L%: kidnapper, handwriting, newspaper
d. H-H-HL%: undersold, overwrite, kangaroo
e. M-H-L%: prohibit, emergence, erotic
f. M-H-HL%: about-turn, Repulse Bay, alarm clock
g. M-M-HL%: introduce, dislocate, recommend

In sum, Wee (p. e72) observes that all content words have at least one high tone and claims that H-tone assignments are attested in all possible combinations. As shown in 2–4, there are eleven patterns: one in monosyllabic words, three in disyllabic words, and seven in trisyllabic words. This variation is regarded as evidence in favor of an analysis with lexical tone because all logical possibilities are found (which, according to Wee, we would not expect in a stress system) and because none of the high-toned syllables stand out in terms of prominence. Wee (p. e72) concludes that H is ‘lexically assigned and probably is part of the lexical stipulation of each given word’.

Furthermore, Wee analyzes M as a word-initial boundary tone since its assignment is predictable, its occurrence is restricted to word-initial position, and M occurs only if no H is present on an initial syllable. Furthermore, L% is an utterance-final boundary tone. There are no contour tones in HKE except utterance-finally: H spreads rightward to all toneless syllables preceding the next syllable that has its own tone, unless that next tone is a low boundary tone (L%); in that case, syllables intervening between H and L% remain toneless. Other data (such as introduce and comprehend with M-M-HL%) indicate that M can likewise spread to the right, which ultimately means that all pre-H syllables receive M in HKE, but that post-H, word-internal syllables cannot have M. This is supported by the fact that introduce and comprehend have the tonal variants M-M-HL% and H-H-HL%, but *H-M-HL%, for example, is not a possible pronunciation of these items.

3. A foot-based alternative. While we follow Wee’s analysis with regard to the boundary-tone status of word-initial %M and utterance-final L% (see also Yu 2014 for similar analytical suggestions), this section challenges his treatment of H. We argue that its occurrence is foot-based, not lexical. More concretely, we claim that it is better analyzed as a surface high tone assigned to foot heads (with possible spreading), rather than as a prespecified lexical tone.

As discussed in §2, one of Wee’s main analytical arguments for the lexical-tone approach builds on the observation that HKE allegedly allows for all logically possible distributions of high tones across words and that this would be unexpected in a stress system. In response to that, we observe in Wee’s data that the tone combinations assigned to a given word do not appear to be synchronically arbitrary, but rather correlate
with the morphological structure of the words in question. Along these lines, we argue that the tonal mapping in Wee’s data can be attributed to the surface manifestation of foot structure in this variety of English, with H as a word-level tone that marks foot heads. Wee’s other argument is the fact that no syllables stand out in terms of prominence. As we have already remarked in the introduction, this may certainly be an argument against the presence of stress in HKE, but tone assignment in the language can still be based on foot structure, since the presence of feet does not presuppose the existence of phonetic correlates of stress.

Before we analyze the system in more detail, we briefly state that we use common assumptions about foot assignment in English as a baseline: along these lines, HKE has trochaic feet, adjacent foot heads within prosodic words are avoided (no stress clash), and disyllabic feet are preferred over monosyllabic feet since they guarantee an alternation of stressed and unstressed syllables.

Take the distinction between popular (H-o-L%) and handwriting (H-H-L%) as a preliminary example. Given Wee’s proposal of tone assignment, popular is assigned a single H tone on the first syllable, while handwriting has H on the first and second syllables. In this pair, we observe that popular (arguably) consists of a single morpheme, while handwriting is a morphologically complex compound. Given this observation, it seems useful to analyze the different tonal structures as a surface reflection of the structural differences between these items. Handwriting consists of two phonological words, each of which contains a foot with a head syllable that receives a high tone. Popular, by contrast, contains only one foot, and thus has only one H. This is illustrated below in 5. Concerning the third syllable in popular, we assume here that it is stray and attaches to the word node, but we acknowledge that there may be other ways to treat it. For instance, it may be possible to assume that the syllable attaches to a different higher-level node, such as a recursive foot (e.g. Davis & Cho 2003 for English), but these alternatives are not of immediate relevance for the purposes of this paper. Furthermore, as shown in 5, we propose that the two prosodic words in handwriting combine to a recursive prosodic word, following, for example, Itô & Mester 2007 (yet see Vigário 2010 for counterarguments); again, this is not essential for our analysis.

(5) Metrical representation and tonal mapping for popular and handwriting

As shown in 5b, each of the two H tones pronounced in handwriting occurs in the head syllable of its foot. Consequently, they do not have to be lexically assigned but can rather be regarded as predictable surface tones that associate with the heads of trochaic feet. Similarly, popular in 5a contains only a single H tone, representing a single trochaic foot in its structure. It is important to note that Wee (p. e72) does, in fact, make reference to the morphological structure of words in his analysis, noting that words of
the H-M-HL% type, such as runaway, must contain two phonological words in order to motivate the word-initial boundary tone M in the middle of the word.

In what follows, we aim to show that this general analysis can be extended to all of the words in Wee’s data. The analysis of monosyllabic words, which always have falling tone in isolation, is straightforward (one foot head = H, utterance-final boundary = L%) and requires no further discussion. In disyllabic words, three patterns can be observed. The pattern H-L% would appear to be the default pattern for disyllabic words with initial stress that consist of only one prosodic word, as given in 6. In writing, we give foot structure in round parentheses and indicate prosodic-word status with square brackets.

(6) [(H-L%)]: [(apple)], [(clockwise)], [(greedied)]

Of these examples, apple appears to be the most prototypical case, as it can be considered a ‘default’ English monomorphemic, disyllabic word. As indicated in 6, we argue that it is parsed as one disyllabic, trochaic foot. The foot head, the first syllable, therefore receives H, and the second syllable receives the utterance-final low boundary tone. We expect that other prototypical, clearly monomorphemic disyllabic words like google, butter, button, and so forth will have the same tonal pattern. The other two examples provided by Wee are a bit less straightforward, since they are both (unfortunately) morphologically complex, which makes it more difficult to compare them to the pattern for apple, particularly since the examples are isolated. For clockwise, we can assume either that the item has been lexicalized as one prosodic word, or that -wise is a suffix that is prosodified with the stem. In both cases, we can assume that the foot head is the first syllable, which results in an H-L% melody. Greedied ends in the past-tense suffix -ed, which can either be parsed as a foot dependent or attach directly to the word node, but both of these parsings lead to an H-L% tonal pattern.

Next are words with the structure H-HL%, as provided in 7. For these words, we assume that out-, in-, and some- in outsell, inborn, and sometimes, respectively, are prefixes that form independent prosodic words. Consequently, the resulting items will have the structure of a compound consisting of two prosodic words; hence there will be two high tones in these words.

(7) [[(H)]=[HL%]]: [[(some)][(times)]], [[(out)][(sell)]], [[(in)][(born)]]

The third pattern attested for disyllabic words (M-HL%) is seen in 8, including the metrical structure we propose for the words in question. We assume that such items, which have final stress in many varieties of English, start with an unparsed syllable (since English does not allow for iambic feet), which is followed by a second syllable that is the head of a monosyllabic trochaic foot. As the first syllable does not contain a foot head, it can host the word-initial boundary M, while H and L% follow in the second syllable.

(8) [M-(HL%)]: [create], [giraffe], [before]

Final stress in verbs with sufficiently heavy word-final syllables (as in create) is the default in many varieties of English (e.g. Hayes 1982:§2.2), and the word before can be assumed to predictably begin with a weak syllable (as is typical for words starting in be-). A noun like giraffe with final stress, however, is presumably exceptional and will have to be lexically marked for stress. In some sense, such cases could thus be considered similar to the storage of lexical tone, but this is not a reason to abandon a metrical analysis (after all, such exceptions must be learnable in other, stress-based varieties of English as well). As indicated in the introduction, we argue that the metrical analysis of tone, even if not fully predictable, is still more restrictive than the tonal alternative; we address this question in more detail in §4.
Moving on to trisyllabic words, the first pattern is H-o-L%, as provided in 9. This pattern has already been discussed for 5a regarding the word *popular*. We claim that the items in question are parsed as one prosodic word and have a disyllabic trochaic foot spanning the first two syllables, with the word-final syllable receiving the low boundary tone. The overall falling tonal pattern is due to interpolation between the high tone on the first syllable and the low tone on the third syllable. In our representations, we give the final syllable as unparsed because we follow the common assumption that feet are maximally binary (Hayes 1995), but we do not take a position as to where this syllable attaches (e.g. directly to the prosodic word, or possibly to a recursive foot)—as far as we can see, this does not affect the analysis.

\[(9) \text{[(H-o)-L\%]: [yes.ter).day], [beau.ti).ful], [po.pu).lar]}\]

The second attested pattern is H-M-H L%, as given in 10 with our metrical analysis. Wee (p. e72) explicitly analyzes these words as compounds and shows how the tonal mappings follow from their compound structure. Therefore, we only have to restate his analysis in this case, just pointing out that, once again, there is no need to make reference to lexical tone to account for the observed patterns. In all of the cases in 10, we find compounds formed by a monosyllabic word and a disyllabic word with stress on the second syllable. The monosyllabic initial word receives H because it has a monosyllabic foot. The second member of the compound, like in 8 above, starts with an unparsed syllable that receives the word-initial %M, and the second syllable receives a monosyllabic foot, which results in it having a high prominence tone and hosting the phrase-final L%.

\[(10) \text{[[H-M-(H-L\%)]: [(run)][a.(way)], [(round)][a.(bout)])},
\text{[[(go)]-[be.(tween)]]}\]

The third pattern for trisyllables, which is shown in 11, is equally straightforward, as demonstrated in 5b above for *handwritting*. All of these words are compounds with a monosyllabic first member (= H) and a disyllabic second member with initial stress (H-L%), resulting in the tonal melody H-H-L%.

\[(11) \text{[[H-][H-L\%]]: [(kid)][nap.per)], [(hand)][wri.ing]),
\text{[[(news)][pa.per)]}\]

In our analysis, the fourth pattern (H-H-H L%), as shown in 12, can be attributed to foot heads on the first and the third syllables, with H on the second syllable due to H-spreading from the first.\(^1\)

\[(12) \text{[[H-H-][H-L\%]]: [[un.der)][sold)], [[o.ver)][write)),
\text{[[(kan.ga)][roo)]}}\]

The metrical analysis is rather straightforward for *undersold* and *overwrite*, where under- and over- can be analyzed as prefixes forming independent prosodic words, which results in a compound structure that leads to the tonal melody [[H-H-][H-L\%]]. Additional evidence for this comes from the fact that over- and under- do not syllabify with vowel-initial stems in English, as in *overachieve* or *underachieve*. For the word *kangaroo*, we follow an analytical possibility suggested to us by Charles Kisseberth (p.c.), which is that speakers might analyze this word as a compound consisting of the prosodic words *kanga* and *roo*. This explanation seems plausible, particularly given the fact that *roo* is an attested clipping of *kangaroo*. Furthermore, the existence of such ‘prosodic compounds’

\(^1\) Other analyses might be possible here, such as saying that pitch stays high until the end of the prosodic word as a matter of phonetic implementation, but we choose not to deviate from Wee’s approach.
without overt morphological complexity has been proposed for other languages (e.g. Booij 1999, Hall 2002). Another way to analyze the word would be to assume that it is monomorphemic with two feet, the first foot spanning the first two syllables, and the second foot being located on the third syllable, which would lead to a full parse. In that case, we would assume that both foot heads receive a high tone.

The fifth type of trisyllabic words attested in Wee’s corpus are those with the tonal pattern M-H-L%, as given in 13. Analyzing Wee’s examples is complicated by the fact that they can be analyzed as affixed (pro-hibit, emerg-ence, erot-ic). For our purposes, we assume that the presumable affixes in these words behave the same way that they do in American English, for example. This may very well be the case, but it would have to be verified by studying the prosody of HKE in more detail. Along these lines, -ence in emergence can be regarded as a so-called ‘stress-neutral suffix’ that does not typically affect the location of foot heads in the base forms it attaches to. We follow Kager (1989:146) in assuming that such stress-neutral suffixes can incorporate into a disyllabic foot if the final syllable of the base form is a foot head, as is the case in emergence. The suffix -ic in erotic is in English a prestressing suffix that attracts stress to the preceding syllable (with a few exceptions, as in Arabic, for example, which has antepenultimate stress), so we can assume that -ic preferably occurs in the weak position of a disyllabic trochaic foot. Along these lines, erotic has a trochaic foot on the final two syllables. Finally, pro- in prohibit can be analyzed as a prefix that does not attract stress, a pattern we find in similar words like in-hibit, ex-hibit. A trochaic foot, then, can again be built over the last two syllables.

Given these metrical parsings, the word-initial unparsed syllable in all three items receives the initial mid boundary tone; the second syllable, which is the head of the trochaic foot, gets a high tone; and the third syllable receives the low boundary tone. This results in the attested M-H-L% melody, as shown in 13. Independent of representational details, such as the phonological status of prefixes and suffixes or questions of extrametricality, our main point is that, once again, these patterns can be accounted for in a foot-based approach.

(13) \[M-(H-L\%): [pro.(hi.bit)], [e.(mer.gence)], [e.(ro.tic)]\]

The sixth pattern, given in 14, is straightforward, since all of the examples are compounds, consisting of disyllabic first members that have stress on the second syllable in other varieties of English, followed by a monosyllabic second member. Along the lines of our analysis, the first members receive a tonal melody M-H (unparsed first syllable, monosyllabic stress on the second syllable), and the second members are predictably HL%.

(14) \[M-(H\%): [(H-L\%)] \[(a.(bout).UTC[turn]), [(Re.(pulse)] [(Bay)], [(a.(larm)] [(clock)]\]

The final pattern, M-M-HL% (shown in 15), is of particular interest, as it is the only set of examples starting with a lapse under a foot-based approach—that is, with two mid-toned syllables. Once more, all of the words in question have some kind of morphological complexity to them, as they all begin with recognizable prefixes: intro- (intro-duce), dis- (dislocate), and re- (recommend). The analytical possibility that we explore in the structures in 15 is to assume that these words are fully parsed with a primary foot on the last syllable and a secondary foot on the first two syllables, but that only the realization of H on the primary foot head is obligatory.\(^2\)

\(^2\) It is possible that (some of) the prefixes in question do not participate in the assignment of foot structure to the words given here. Again, more systematic data would be needed for a full-fledged analysis of these prefixes in HKE.
We believe that there is some additional evidence in favor of this claim: Wee (p. e74) mentions that ‘both introduce and comprehend have the tonal variants M-M-H and H-H-H, but never *M-H-H or *H-M-H’. Note that Wee does not refer to the utterance-final version here, which means that the last syllables will be produced as HL% in the contexts we discuss. We believe this pattern of variation provides support for our claim that there are two feet in these words, but that it is obligatory to realize H only on the second foot head, which corresponds to the foot with primary stress in other varieties of English. If no H is realized on the secondary foot, then there is space to associate %M. The two tonal mappings in question are given in 16 for the word introduce. As we discuss subsequently in §4, such a principled analysis is not available in an approach with lexical tone.

(16) Optional realizations of introduce with H assigned only to the primary foot head (M-M-HL%, 16a) and H assigned to both foot heads (H-H-HL%, 16b)

4. Discussion. In §3, we have shown that the variability of tone assignment across the items discussed in Wee’s article can be accounted for by assuming that the assignment of postlexical word-level tones is governed by foot structure. Under this approach, words in HKE would be structurally similar to their realizations in other varieties of English, but would still differ in how foot structure is reflected on the surface. Notably, the two approaches differ in the types of tonal patterns they predict. A key ingredient of Wee’s analysis is the claim that ‘H-assignment covers all possible combinations of di- and trisyllabic sequences’ (p. e71) and that therefore an analysis with lexical tone should be preferred over one with stress. Wee’s analysis thus predicts the assignment of high tones to essentially exhaust the number of logical possibilities. This is different from a foot-based analysis where certain restrictions are to be expected, based on the fact that feet are preferably binary.

To begin, recall that words like introduce and comprehend can be produced as H-H-HL% or M-M-HL%. Given that this appears to be a recurring pattern in such words, we are presumably not dealing with a lexical idiosyncrasy, but with a regularity in need of explanation. As shown in §3, our approach derives these alternative pronunciations by arguing that only the primary foot head on the final syllable must be associated with H, while the secondary foot head on the first syllable can have H or not; this is fully consistent with default assumptions about the metrical structure of English words. We cannot see how this variation would be explained, rather than merely observed, under the competing tonal analysis.

3 Wee includes comprehend in discussions of this group along with his initial set of examples as in 15.
Furthermore, only the foot-based analysis provides a straightforward explanation for the fact that the pronunciation *M-H-HL% is unattested. In our approach, *M-H-HL% within one prosodic word could only arise with an unparsed first syllable followed by two monosyllabic feet, a structure that would be extremely marked in an English-style metrical system. Such a structure would result in a ‘stress clash’ between the second and the third syllables and violate foot binarity. The tonal mapping M-H-HL% is, of course, attested for about-turn, alarm clock, and Repulse Bay. Crucially, however, all of these items are compounds consisting of two prosodic words. Again, the tonal approach predicts the existence of monomorphemic M-H-HL% words, and it will have to be investigated whether such words exist.

Wee’s analysis does not consider longer words, but these might be interesting to study. If our analysis is on the right track, monomorphemic quadrisyllabic words like cappuccino or avocado, if represented with two feet and ‘primary stress’ on the head syllable of the second foot, [(cap.pu).()().(c.ci.no)], might have two alternative pronunciations, viz. [(M-M-)(H-L%)], where only the primary foot head on the third syllable receives H, and [(H-H-)(H-L%)], where each foot head receives H and the first H spreads. This would be similar to the pronunciation of words like introduce, assuming that the patterns in these words extend to monomorphemic words. If this variation exists, only the metrical approach predicts that an additional alternative pronunciation of the type [(M-H-)(H-L%)] should still be ungrammatical, as this would correspond to an illicit placement of H solely on the weak second syllable of the first foot.

We aimed to elicit relevant pronunciations in experiments with speakers of HKE but were unable to locate participants in Columbus whose English did not show any prototypical correlates of stress similar to American English. We take this to mean that they had already adapted their pronunciation to the variety of English spoken here. Therefore, we will have to leave the answer to this question for future research.

5. Conclusion. Our analysis in §3 shows that the HKE prosodic system can certainly be analyzed as foot-based and that in this analysis the proposed structures are essentially identical to those found in other varieties of English; what differs is the way prosodic structure is articulated. We have argued that our metrical analysis provides a more straightforward account of the patterns, particularly if the morphological structure of the respective items is taken into consideration, something we maintain should be done anyway, even in a tonal analysis. Furthermore, while Wee argues that any tonal pattern should be possible (except for toneless words), we have discussed the fact that our approach makes concrete predictions about possible distributions of high tones in a word (§4). To show that Wee’s arguments in favor of lexical tone and against metrical structure hold, it would have to be demonstrated that all of the patterns of variation in tone placement which he uses to refute the metrical approach can also be found in monomorphemic words. As we have demonstrated, certain potentially challenging patterns, such as M-H-HL%, are attested only for compound words in Wee’s data.

Crucially, as we have pointed out throughout this paper, more is at stake here than the analysis of a given pattern in a specific language variety. If our analysis is on the right track, this would mean that HKE violates the principle of culminativity, despite having foot structure. In light of emerging debates about the theoretical and typological status of culminativity, we believe that this makes studying the prosodic system of HKE particularly relevant. More generally, HKE would add to the number of phenomena de-
scribed across languages which suggest that foot structure can govern segmental and tonal patterns in the absence of other correlates, including stress. Along these lines, and independent of the ‘correct’ analysis of HKE in particular, our broadest conclusion is that equating foot structure with stress and systematizing prosody based on the notions ‘tone’ and ‘stress’—still common in prosodic typology—oversimplifies the study of prosodic systems in the languages of the world.

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