

1 The discourse particle *wal* in Yucatec Maya:
2 uncertainty and negativity across sentence types*

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*[Acknowledgments redacted for review]

1 Introduction

Across languages, various researchers (e.g. Vuillermet (2018), Angelo & Schultze-Berndt (2016), Lichtenberk (1995)) have described morphemes that have come to be known as ‘apprehensives’. While there are of course many important points of cross-linguistic variation, apprehensives are described as modals that convey epistemic possibility (roughly that a state of affairs *p* might be true) as well as a negative evaluative or similar attitudinal component (roughly that *p* is undesirable or to be feared). One defining property of apprehensives, as discussed by Lichtenberk (1995) for the apprehensive *ada* in Toqabaqita (Austronesian ISO 639-3: *mlu*), is that they are “mixed” modals in the sense that these epistemic and negative evaluative meanings are expressed simultaneously, as in (1).¹

(1) Ada ’oko mata’i.

APPR 2sg:SEQ be.sick

‘You may be sick’

Toqabaqita, Lichtenberk (1995:294)

In this paper, I examine a morpheme which also can be used to express both epistemic possibility and negative evaluative meanings, the discourse particle *wal* in Yucatec Maya (ISO 639-3: *yua*). Despite expressing these two meaning components, I draw on both primary fieldwork and textual examples to show that when we consider the full range of uses of *wal*, a quite different picture emerges. First, I argue that *wal* in simple declarative sentences does not convey these two meanings simultaneously, but rather conveys one or the other depending on the intonation with which it is realized. We dub these two variants “stressed” and “unstressed” based on informal phonetic intuitions of the two.

¹The following abbreviations are used: 1: 1st person, 2: 2nd person, 3: 3rd person, ADMON: admonitive, APPR: apprehensive modality, CLF: numeral classifier, DAT: dative, DEF: definite article, DIST: distal deixis, EP: epenthetic glide, FEM: feminine prefix/classifier, FUT: future, HORT: hortative, IPFV: imperfective, IMP: imperative, MASC: masculine prefix/classifier, MIR: mirative, NEG: negation, NEG.CL negative/extrafocal clitic, PFV: perfective aspect, PASS: passive, PL: plural, POLQ: polar question clitic, PREP: preposition, PROG: progressive aspect, PROX: proximal deixis, QUOT: quotative, REL: relational noun suffix, SEQ: sequential subject/tense, SG: singular, STATUS: so-called “status” suffixes, SBJV: subjunctive mood, TERM: terminative aspect, TOP: topic marker, For agreement morphology, I follow the terminological tradition among Mayanists, referring to Set A ($\approx$ Ergative/Nominative/Genitive) and Set B ($\approx$ Absolutive/Accusative) markers, e.g. A3 = 3rd person Ergative/Nominative. B3 is phonologically null and therefore left unglossed.

The orthography used for Yucatec Maya examples is 1984 standard orthography established by the Academia de la Lengua Maya de Yucatán. It differs from the IPA in the following non-obvious ways: orthographic *j* is used for IPA [h], *x* for [ʃ], *b* for the implosive [b], *y* for [j], and *r* for [r]. For vowels: *a* for short toneless vowels [a], *aa* for long low tone [a:], *a’a* for creaky voice [a̰:], and an acute accent on the first vowel grapheme *áa* for long high tone [á:].

Naturally occurring data and data from previous literature are cited as such. All other data from elicitation conducted by the author. See §2 for details regarding the speakers consulted.

44 As seen in (2), the unstressed or deaccented use of *wal* – henceforth *wal_{uns}* – in a declar-
 45 ative conveys only the speaker’s uncertainty, with no negative evaluative implication
 46 present. Indeed, given the positive valence of *ki* ‘tasty’, a negative sentiment would be
 47 contradictory absent some sort of very unusual scenario.

48 (2) **Uncertainty Scenario:** At a restaurant, A states that he is hungry, but does not
 49 know what to order because all of the dishes on the menu are of interest. B thinks
 50 that the sikil p’aak (pumpkin seed dip) here is good but is uncertain:

51 Le sikli p’aako’ jach ki’ wale’.
 52 le sikli p’aak=o’ jach ki’ wal_{uns}=e’
 DEF sikil p’aak=DIST very tasty wal=TOP
 53 ‘Maybe the sikil p’aak is tasty.’

54 In contrast, the stressed or accented use of *wal* – henceforth *wal_{str}* – in a declarative, as
 55 in (3), conveys only the negative evaluative message, with no uncertainty. Unlike in (2),
 56 there is no intrinsic emotional valence to there being a dog, but rather the use of *wal* itself
 57 causes it to be clear that the speaker thinks the dog is to be feared or disliked (or at least
 58 that the addressee should regard it as such).

59 (3) **Warning Scenario:** The speaker knows there is a potentially dangerous dog
 60 around the corner.

61 Te’ela’ yan jun túul peek’ wale’.
 62 te’el=a’ yan jun túul peek’ wal_{str}=e’
 there=PROX exists one CLF dog wal=TOP
 63 ‘There’s a dog over there [Watch out!].’

64 Second, whereas epistemic modals cross-linguistically often are not possible in imper-
 65 ative sentences, *wal* is possible in imperatives (and indeed in all major sentence types),
 66 again with different interpretations for *wal_{uns}* and *wal_{str}*. Imperatives with *wal_{uns}* are in-
 67 tuitively ‘softened’, functioning as offers and permissions, while imperatives with *wal_{str}*
 68 warn the addressee of an adverse situation by specifying a course of action.

69 By considering the contribution of *wal* across sentence types and intonational variants,
 70 we show that despite being frequently used to convey epistemic possibility – indeed, most
 71 dictionaries simply regard it as an epistemic modal, defining it with terms like English
 72 ‘maybe’ or Spanish ‘quizás’ – the particle does not have a meaning which is intrinsically
 73 epistemic. Instead, we propose that *wal* highlights an unresolved problem in the conver-
 74 sation. In the case of *wal_{uns}*, this problem concerns the illocutionary update the sentence

75 encodes (e.g. whether the sentence is true for declaratives). In the case of *wal_{str}*, the unre-
76 solved problem is how to address a negative prospective situation in the context with the
77 sentence’s illocutionary update being interpreted separately and related only by inference
78 to the contribution of *wal_{str}* itself. In addition to helping better understand the seemingly
79 quite different uses that *wal* has in YM, the account therefore contributes to the growing
80 body of literature showing a cross-linguistically consistent role played by intonational
81 variation in discourse particles (e.g. Rojas-Esponda 2015), even in languages where the
82 role of intonation more broadly is quite distinct.

83 The road map for the rest of the paper is as follows: §2 provides background on Yu-
84 catec Maya with a focus on intonation and discourse particles; §3 introduces the formal
85 properties of *wal*, situating it within the language-internal category of discourse parti-
86 cles and discussing its synchronic and diachronic connection to other elements of the lan-
87 guage; §4 and §5 present the core claims about the uses of *wal* in declaratives and imper-
88 atives; §6 develops unified accounts of the unstressed and stressed variants of *wal* across
89 sentence types and explores the synchronic and diachronic relationship between the two;
90 §7 concludes.

91 2 Background

92 Yucatec Maya (YM) is one of 30 languages in the Mayan family, spoken by approxi-
93 mately 750,000 people throughout the Yucatán peninsula and in diasporic communities
94 elsewhere. Despite being one of the more widely spoken of the Mayan languages and en-
95 joying a substantial and growing body of media of different kinds in the language, YM
96 has very low rates of monolingualism (only 5.3% are reported to be monolinguals accord-
97 ing to census data reported in INEGI (2009)). Additionally, while there remain speakers
98 in all age groups, the percent of speakers who speak it in younger age groups is lower and
99 there is therefore some worry as to the long-term health of the language.

100 In this paper, we make use of both elicited and naturally-occurring textual data. Natu-
101 ralistic data come from various published sources across different genres including nov-
102 els, a literary magazine, newspaper articles, blog posts, etc. Sources for each such ex-
103 ample is noted alongside the example. Elicited data was collected from bilingual college
104 students and other native speaker consultants at the Universidad de Oriente (UnO) in Val-
105 ladolid, Yucatán during fieldwork conducted in the summers of 2013 and 2014. The data
106 here tend to represent varieties spoken in Eastern Yucatán, primarily in and around Val-

ladolid. That said, the data shown here are common across all varieties of the language to my knowledge. Unless a citation is present, all data is elicited using context-relative felicity judgment tasks of the sort described by Matthewson 2004. In cases where the relevant context is self-evident from the example itself, we omit it for brevity's sake.

In terms of its grammar, YM is a consistently head-marking language with split-ergative agreement conditioned by the overt Aspect/Modal marker in a given clause. While these Aspect/Modal markers are semantically quite distinct from, say, Tense in English (see Bohnemeyer 2002 for comprehensive discussion), they are syntactically quite analogous in that matrix and other finite clauses obligatorily have exactly one such morpheme present in most cases. In terms of word order, YM is typically regarded as having VOS as a basic word order (though see Gutiérrez-Bravo & Monforte y Madera 2010 for claims that SVO is basic) despite the fact that this order with both arguments overtly realized is extremely rare. VOS is considered basic because preverbal arguments are consistently associated with particular information structural categories, namely Topic and Focus. For postverbal argument order, while VOS is typically considered basic. See Skopeteas & Verhoeven (2005), Gutiérrez-Bravo & Monforte y Madera 2010, and Verhoeven & Skopeteas (2015) for detailed discussion of word order in YM.

Since this paper is concerned principally with the interactions of intonation and what we will argue in §3 is discourse particle, we turn now to review these two aspects of Yucatec Maya grammar.

2.1 Prosody and information structure in Yucatec Maya

As we have just noted, the most striking expression of information structure in Yucatec Maya, like all Mayan languages, is through the frequent use of preverbal syntactic positions marking topic and focus (Aissen 2017 for a recent overview of topic and focus across the Mayan family). Within these two positions, foci occur immediately before the verb and A/M marker and explicitly indicate the presence in prior discourse of a set of competing alternatives with which the focal element contrasts. Topics precede foci and are prosodically separate from the rest of the clause in which they occur, accompanied by the intonational boundary clitic *=e'* and a significant pause following (Avelino 2009, Skopeteas & Verhoeven 2005).²

²This is a slight oversimplification since each intonational phrase can only host one clitic and there are several other clitics such as PROXIMAL *=a'* and DISTAL *=o'* which replace *=e'* when their use conditions are met.

Whereas topics are prosodically distinguished from other sentential elements by a pause following them, foci have no clear prosodic correlate (aside from placing the focused element in intonational phrase-initial position). In particular, extensive work has shown that the presence/absence of pitch accents systematically does not encode information-structural notions like topic and focus (Kügler & Skopeteas 2007, Kügler et al. 2007, Verhoeven & Skopeteas 2015). Conversely, we can conceive of this finding as follows: Yucatec Maya does not show evidence for post-focal/givenness-driven deaccenting analogous to that of English and German. Whereas variation between stressed/accented or unstressed/deaccented realizations of lexical items in these languages obligatorily conveys information about the state of the discourse, such variation is not Yucatec Maya is not meaning-bearing in this way.

Aside from providing general background on the language, these prosodic details are of particular relevance for understanding the two prosodic variants of *wal* which we discuss below. Although we label the two variants ‘stressed’ and ‘unstressed’ for convenience, we have just seen that this sort of variation is not attested for lexical material. Within Yucatec Maya grammar, then, the interaction between intonation and *wal* is therefore a surprising finding. However, as we discuss in more detail in §5.3, there is an emerging consensus in the recent literature on discourse particles that even in languages where intonational variation in the realization of discourse particles is acoustically similar to that of lexical material, its semantic/pragmatic contribution is often distinct. We note this here as a caution to the reader that the ‘stressed’ and ‘unstressed’ forms we discuss in what follows are not related to meaningful intonational categories in the grammar of the language more broadly in the way that a reader familiar with intonation in many other languages might assume.

2.2 Discourse particles in Yucatec Maya

“Discourse particle” is a semantically diverse category consisting of elements which express the epistemic or other attitudinal state of the speaker and/or their interlocutors, their stance towards a given proposition or question, or otherwise positions a given discourse move within the surrounding conversation. Of course, many elements of different categories potentially fit with this quite vague semantic/pragmatic characterization, not all of which are regarded as discourse particles.

In many languages, the category of discourse particle can be made more precise by reference to particular syntactic or other formal properties. For example, discourse particles

170 occur in the German middle-field, as second position clitics in Tagalog, and clause-finally
 171 in Japanese. As the preceding list makes clear, while such formal considerations may pro-
 172 vide a language-specific criterion, these criteria differ substantially across languages. In
 173 some Mayan languages, such as Ch’ol (Vázquez Álvarez 2011, pp.172-175) and Tojol-
 174 a’bal (Curiel 2007, pp.36-37), discourse particles can be defined as elements that must
 175 occur in second position within a clause.

176 In Yucatec Maya, we can identify a small class of discourse particles, as in (4). While
 177 these elements frequently occur in second position, several recent works have shown that
 178 this is merely a tendency; they in fact can be realized in various linear positions, so long
 179 as certain, relatively small prosodic units are not broken up (e.g. particles may intervene
 180 between the verb root and preceding set A agreement marker).³

181 (4) Discourse particles in Yucatec Maya:

	<i>bin</i>	reportative
	<i>bakáan</i>	mirative
	<i>túun</i>	‘then’
182	<i>wáa(j)</i>	polar question
	<i>xan</i>	additive
	<i>lo’obal</i>	frustrative ⁴
	<i>wal</i>	‘maybe’, ‘watch out’, ...

183 For example, Verhoeven & Skopeteas (2015) demonstrate this sort of flexibility in lin-
 184 ear position for the polar question particle *wáaj*, as in (5a). AnderBois (2018) shows a
 185 similar flexibility in (5b) for the mirative *bakáan* and (5c) for the reportative *bin*. Cru-
 186 cially, for all of these particles, the linear position has no discernible effect on the contri-
 187 bution of the sentence or the particle in discourse.

188 (5) a. T-a xokaj (wáaj) óox p’éel (wáaj) áanalte’-o’ob (wáaj) jo’oljeak
 PFV-A2 read (POLQ) three CLF (POLQ) book-PL (POLQ) yesterday
 189 (wáaj).
 (POLQ)
 190 ‘Did you read three books yesterday?’ Verhoeven & Skopeteas (2015:13)

³N.B. this does not appear to a morphological restriction since certain ‘low’ adverbs such as manner adverbs can productively occur in this same position.

⁴Although the root on which it is presumably based historically *loob* ‘bad, damage’ has various uses for all speakers, the use as a frustrative particle with an intonationally flexible distribution appears to be more variable across speakers. Additionally, Hanks (1984) reports a similar particle element, *lobil*, ungrammatical in particle uses for the native speakers consulted here. We leave detailed investigation of these issues to future work.

- 191 b. K-u jantik (bakáan) puut (bakáan) le áak (bakáan)=o'.
 IPFV-A3 eat (MIR) papaya (MIR) DEF turtle (MIR)=DIST
 192 'Oh, the turtle is eating papaya!' AnderBois (2018:175)
- 193 c. Ma' (bin) t-u máansaj (bin) u examen (bin) Carmen (bin)=i'.
 NEG (REP) PFV-A3 pass (REP) A3 exam (REP) Carmen (REP)=NEG.CL
 194 'Carmen didn't pass the exam (they say).' AnderBois (2018:176)

195 Beyond the flexibility in linear position, discourse particles in Yucatec Maya (with the
 196 exception of the polar question particle *wáaqj*) exhibit no clear interaction with clause type.
 197 That is to say, they are permissible not only in declaratives, but also in interrogatives, im-
 198 peratives, and various minor sentence types (cf. AnderBois (2018) for mirative *bakáan*,
 199 AnderBois (2017) for reportative *bin*).

200 In sum, we have seen that Yucatec Maya has a small closed-class set of discourse par-
 201 ticles characterized by their flexible prosodically determined positioning and syntactic
 202 independence the sentence in which they occur, specifically with regards to clause type.
 203 We turn now in §3 to introduce the morpheme *wal*, showing that it fits this profile.

204 3 Introducing the discourse particle *wal*

205 In this section, we introduce the basic properties of *wal*, arguing that it shows the same
 206 major properties of discourse particles within Yucatec Maya as well as discussing briefly
 207 a few further basic properties common to all its uses.

208 3.1 The morpheme *wal* as a discourse particle

209 Similar to the other discourse particle just seen, *wal* exhibits considerable flexibility in
 210 its linear position, as illustrated in the elicited data in (6).

- 211 (6) (%*wal_{uns}*=e') táan (*wal_{uns}*) u (**wal_{uns}*) k'áax-al (?*wal_{uns}*) ja' (*wal_{uns}*)=e'
 wal=TOP PROG (wal) A3 (wal) fall-STATUS (wal) water (wal)=TOP
 212 'Maybe it's raining.'

213 Although it shows the same range of possibilities as other discourse particles, it should
 214 be noted that (anecdotally) *wal* does tend to occur in clause-final position (save for the
 215 intonational boundary clitics discussed below), whereas the other particles above occur
 216 most frequently in second position (a difference we return briefly in §3.2). Despite this
 217 apparent difference in the frequency of the possible options, *wal* is accepted in elicitation
 218 tasks in this position, and amply attested in non-final position in natural texts as well:

- 219 (7) a. U pak'iko'ob wal ya'ab tamane' le ku piits'o'.
 220 u pak'-ik-o'ob wal_{uns} ya'ab taman=e' le k-u piits'=o'
 A3 plant-STATUS-A3PL wal much cotton=TOP DEF IPFV-A3 harvest=DIST
 221 'They planted a lot of cotton, and then harvested.' Monforte et al. (2010:136)
 222 b. Lelo' antes k yaantal wal to'one'.
 223 lel=o' antes k yaan-tal wal_{uns} to'on=e'
 DEF=DIST before *alpl* exist-PROC wal PRO:1PL=TOP
 224 'This might have been before we were there' Can Canul & Gutiérrez-Bravo
 225 (2016:135)

226 In addition to flexibility in linear position, we find as well the other major property of
 227 discourse particles in YM: a lack of formal constraints on its occurrence across sentence
 228 types, as seen in (8).⁵ Beyond the three major sentence types cross-linguistically – declar-
 229 atives, interrogatives, and imperatives – *wal* is also possible in minor sentence types such
 230 exhortatives, optatives, and ostensives. The conclusion, therefore, is that *wal* exhibits no
 231 clear formal restrictions, similar to other discourse particles in the language.

- 232 (8) a. **Declarative**
 233 Te'ela' yan jun túul peek' wale'.
 234 te'el=a' yan jun túul peek' wal_{str}=e'
 there=PROX exists one CLF dog wal=TOP
 235 'There's a dog over there [Watch out!].'
 236 b. **Imperative**
 237 Bis le ch'óoy walo' (bik tu'ubuk tech).
 238 bis le ch'óoy wal_{str}=o' (bik tu'ub-uk tech)
 take:IMP DEF bucket wal=DIST ADMON forget-SBJV DAT:2SG
 239 'Take the bucket! Don't forget!'
 240 c. **Interrogative**
 241 ¿Xi'ipalalo'ob, ch'úupalalo'ob, táankelemo'ob, ma'atech u t'aniko'ob maaya
 242 bejla'e', ba'axten wale'?
 243 xi'ipalal-o'ob, ch'úupalal-o'ob, táankelem-o'ob, ma'atech u t'anik-o'ob
 boy-PL girl-PL young.man-PL NEG A3 speak-PL

⁵(8f) uses a phonological variant, *wel*, instead of *wal*. In a strictly grammatical sense, this variation appears to be free, not regularly conditioned by any particular morphosyntactic or phonological environment. We leave it to future work to determine the range of grammatical, sociolinguistic, and/or other factors which may condition it.

244 maaya bejla'=e', ba'axten wal_{uns}=e'?
 245 Maya today=TOP why wal=TOP
 246 'Boys, girls, young men, people are not speaking Maya today, whyever is
 that?' Unknown (2012)

247 **d. Exhortative**

248 X-Sika, ko'ox wal taanaje' kin wilike' ts'o'ok a chan ka'anal.
 249 x-Sika, ko'ox wal_{uns} taanaj=e' k-in wilik=e' ts'o'ok a chan
 250 FEM-Sika go:HORT wal house=TOP IPFV-A1 see=TOP TERM A2 little
 ka'anal
 251 tired
 'Sika, let's go to the house, I see you're a little tired.' May May (2007:7)

252 **e. Optative**

253 Káa a jop wal a xikine' j-Peedroj.
 254 káa a jop wal_{str} a xikin=e' j-peedroj
 255 for A2 kindle wal A2 ear=TOP MASC-Pedro
 'You'd better listen carefully, Pedro.' Bricker et al. (1998:299)

256 **f. Ostensive evidential**

257 ¡Je'el ku taal le waay welo', chuke'ex, chuke'ex, chuke'ex!
 258 Je'el k-u taal le waay wel=o', chuk-e'ex, chuk-e'ex,
 259 surely IPFV-A3 come DEF pig wal=DIST grab:IMP-B2PL grab:IMP-B2PL
 chuk-e'ex!
 grab:IMP-B2PL
 260 'There goes the pig, grab it, grab it, grab it' Canul Yah (2008:361)

261 For the most part, we will find that these various uses either pattern similarly to declar-
 262 atives (ostensives) or imperatives (exhortatives and optatives). We therefore focus primar-
 263 ily on these two major sentence types, with only occasional discussion of the other more
 264 minor sentence types. The one case which does not seem clearly similar to either declar-
 265 atives or imperatives are interrogatives like (8c). While *wal* in interrogatives is grammat-
 266 ical, the resulting utterances are not ordinary illocutionary questions, but rather are more
 267 like rhetorical questions. We leave investigation of *wal* in interrogatives to future work,
 268 but note that the apparent effect it has is not unlike the so-called conjectural questions that
 269 have been observed cross-linguistically with other epistemic modal or evidential mor-
 270 phemes in interrogatives (e.g. Littell et al. 2010).

271 Finally, we note that *wal* is possible with the 'ostensive evidential' or 'presentational'
 272 construction in YM, as discussed by Hanks (1984) in his work on this construction, and
 273 illustrated in (8f). According to Hanks, this construction functions to direct the addressee's

274 attention to some object or state of affairs for which the speaker has direct sensory/experiential
 275 evidence, with the specific type of evidence claimed to be encoded by the choice of into-
 276 nation phrase-final clitic. Such sentences are therefore claimed to be incompatible with
 277 expressions of epistemic uncertainty/possibility, such the epistemic possibility modal
 278 *m̃in*. The felicity of *wal* in this construction, as Hanks 1984 argues, is therefore evidence
 279 that *wal* does not always encode epistemic possibility (see also Vapnarsky 2012).⁶

280 3.2 Further properties of *wal*

281 We have just seen that *wal* patterns with other discourse particles in YM in terms of being
 282 prosodically positioned, having a relative lack of formal constraints on this positioning,
 283 and occurring freely across different sentence types. Beyond these, there are two further
 284 properties of *wal* to note before we turn to examine its semantic contribution across sen-
 285 tence types: its interaction with intonational phrase-final clitics and, as noted in the intro-
 286 duction, its own intonational realization.

287 First, *wal* differs from other discourse particles in that it shows an interaction with
 288 intonational phrase-final boundary clitics. Yucatec Maya has a set of four clitics, =*a*’
 289 PROX, =*o*’ DIST, =*e*’ TOP, and =*i*’ NEG.CL which occur at intonational phrase bound-
 290 aries including following topics and sentence-final positions. As described in great detail
 291 by Hanks (1990), Bohnemeyer (2002), and others, a wide range of different elements of
 292 different categories oblige the presence of particular clitics at the end of the intonational
 293 phrase in which they occur. For example, sentential negation, *ma*’ NEG, triggers the pres-
 294 ence of =*i*’ NEG.CL (e.g. in (5c)) and the definite determiner *le* DEF typically obliges the
 295 presence of either =*a*’ PROX or =*o*’ DIST (e.g. in (5b)). The clitic =*e*’ TOP similarly is
 296 triggered by particular functional elements such as the A/M marker *layli*’ ‘still’, and ad-
 297 ditionally occurs at the right edge of topics regardless of whether they contain such a trig-
 298 ger. The particle *wal* triggers the clitic =*e*’ TOP, as seen, for example, in (6) above.

299 Since various elements trigger intonational boundary clitics, we might expect to find
 300 phrase boundaries with multiple clitics stacked up in sequence. What we find, however,
 301 is that only one clitic is possible per intonational phrase. In cases where the multiple cli-
 302 tics triggered within the intonational phrase are not identical, which clitic is pronounced
 303 depends on the hierarchy { =*a*’ PROX, =*o*’ DIST } > =*e*’ TOP > =*i*’ NEG.CL (see Bohne-
 304 meyer (2002), p.133, for further discussion). Returning to *wal*, then, we see that this hi-

⁶While we do not investigate ostensive evidentials any further here, it seems to be the case that only stressed *wal_{str}* is possible in these sentences.

erarchy predicts correctly that *wal* can occur without =*e*' TOP just in case some other element selects a higher ranked clitic. We have seen this possibility realized, for example, in (8f) above where the ostensive evidential *je'el* triggers the clause-final clitic =*o*' DIST, resulting in an output without =*e*' TOP.⁷

The final fact about *wal* relevant for understanding its role across sentence types is that it varies in its intonational realization in ways that have regular semantic effects. For example, if we consider the exact same string realized in two very different contexts in (9), we find that *wal* in (9a) shows up in what we call an 'unstressed' realization, whereas in (9b), it occurs in a 'stressed' form:

- (9) a. **Unstressed *wal_{uns}*:** A child wants to take the bucket to use as a toy. His father says:
 Bis le ch'óoy walo'.
 bis le ch'óoy wal_{uns}=o'.
 take:IMP DEF bucket wal=DIST
 'Take the bucket (if you want).'
- b. **Stressed *wal_{str}*:** A child is not doing their chore of bringing the water. His father says:
 Bis le ch'óoy walo'.
 Bis le ch'óoy wal_{str}=o'.
 take:IMP DEF bucket wal=DIST
 'Take the bucket! (Don't forget!).'

While we leave acoustic phonetic analysis to future work, anecdotally, stressed *wal_{str}* often has higher pitch and amplitude, with a sharper final drop in amplitude. One challenge for analyzing the phonetic realization of *wal* is that, as discussed in §2.1, we do not find analogous differences elsewhere in the language, so it's not clear there are baseline categories to which to compare the realizations of *wal*. Additionally, it is unclear how, if at all, this distinction interacts with differences in the linear position of *wal*.

Despite these challenges, consultants have clear intuitions about the 'stressed' and 'unstressed' realizations of *wal* that are quite consistent across elicitation sessions, examples, and consultants. The elicited data I report throughout are based on native speaker intuitions combined with my own impressions of the prosody. For written textual examples,

⁷Since *wal* triggers =*e*' TOP and frequently occurs in final position, this has led many dictionaries to wrong posit an entry *wale*' rather than *wal*. This is falsified both by the examples discussed here what a higher ranking clitic replaces *wal* as well as by examples like (7) where other unrelated material intervenes.

the variant reported is based on assumptions about the scenarios informally confirmed with native speaker intuitions on which variant would be pronounced in the situation.

In this section, we have seen that *wal* exhibits a consistent variation in its prosodic realization across contexts. §§4-5 explores in detail the semantic effect of both variants of *wal* across different sentence types. §6 looks across sentence types to hone in on the effect of *wal* itself and its interaction with intonation.

4 *wal* in declaratives

We have seen in §3 that *wal* occurs in two intonational variants across different major sentence types, including declaratives and imperatives. In this section, we explore in detail the use of these two intonational variants of *wal* in declarative sentences.

4.1 Unstressed uses with declaratives

Perhaps the most common use of *wal*, or at least the one that has been most salient to dictionary makers is to indicate uncertainty or epistemic possibility. This use illustrated in elicited and naturally occurring examples in (10-12).

- (10) **Scenario:** José’s car is stopped alongside the road. Alejandro is walking and asks him what happened. José says he’s out of gas. José thinks there might be a place nearby to get gas, but isn’t sure.

Mina’an u kuuchil tu’ux káa áantakech wale’.

mina’an u kuuchil tu’ux káa áant-ak-ech wal_{uns}=e’
not.exist A3 place where for help-SBJV:PASS-B2SG wal=TOP
‘There might not be anywhere that can help you.’

- (11) **Scenario:** At a restaurant, A states that he is hungry, but does not know what to order because all of the dishes on the menu are of interest. B thinks that the sikil p’aak here is good but is uncertain:

Le sikli p’aako’ jach ki’ wale’.

le sikli p’aak=o’ jach ki’ wal_{uns}=e’
DEF sikil p’aak=DIST very tasty wal=TOP
‘Maybe the sikil p’aak (pumpkin seed dip) is tasty.’

- (12) Ti’ chéen lechekbalo’on te tu k’ab le che’e’ mixmáak ts’a óoltiko’on, ti’ mix máak wel k’aja’anene’

362 ti' chéen lech-ekbal-o'on te t-u k'ab le che'=e' mix-máak ts'a
 PREP just sun-POS-B1PL LOC PREP-A3 hand DEF tree=TOP NEG-person give
 363 óol-t-ik-o'on, ti' mix máak **wel_{uns}** k'aja'an-en=e'.
 soul-TR-STATUS-B1PL PREP NEG person wal aware-B1SG=TOP
 364 'We were in the tree branches without anyone noticing. I think nobody took no-
 365 tice of me.' Carrillo Can (2011:90)

366 Beyond communicating uncertainty, we might wonder if *wal* conveys other inferences,
 367 in particular negative evaluative ones. As noted in the introduction, apprehensional mor-
 368 phemes (e.g. Lichtenberk 1995, Vuillermet 2018) represent a robust cross-linguistic cat-
 369 egory expressing simultaneously both prospective uncertainty/possibility and negative
 370 evaluative inferences. Moreover, as we will see in detail below in §4.2, stressed uses of
 371 *wal* clearly convey fear, apprehension, or related negative sentiments.

372 Considering the examples in (10)-(12), however, we see that there is no evaluative in-
 373 ference presence. While (10) happens to have content which is undesirable, (11) is clearly
 374 desirable to the addressee and no infelicity arises. The textual example in (12) similarly
 375 does not appear to be plausibly undesirable in context, since the speaker is describing at-
 376 tempts to hide himself from view and saying they may have been successful at this goal.
 377 We also see that there is no constraint on temporal orientation either, with examples de-
 378 scribing past, present, or future time reference all possible.

379 While *wal* in these uses conveys uncertainty or possibility and is readily translated as
 380 such in these uses, it nonetheless exhibits important differences with more straightforward
 381 epistemic possibility modals such as English *might* or YM *mín* (see Vapnarsky (2018),
 382 AnderBois (in prep) for discussion of *mín* itself). One important difference with both
 383 English *might* and YM *mín* is that *wal* cannot mark incompatible propositions in coordi-
 384 nations or juxtapositions, as seen in (13).

385 (13) #Ganarnaj le trii walo' (chen ba'ale') ma' ganarnaj wale'.
 386 #ganar-naj le trii wal_{uns}=o', (chen ba'ale') ma' ganar-naj wal_{uns}=e'
 win-STATUS DEF tri wal=DIST just but NEG win-STATUS wal=TOP
 387 Intended: 'Maybe the tri (the Mexican soccer team) won, (but) maybe they didn't.'

388 Another clear difference with many possibility modals such as English *might* is that it
 389 is not possible to semantically embed *wal_{uns}*, as illustrated in (14). Whereas the English
 390 translation allows for *might* to be interpreted within the relative clause, YM *wal_{uns}* always
 391 indicates uncertainty at the matrix level. This latter interpretation does not describe the

392 context given, supporting the claim that *wal_{uns}* cannot be semantically embedded in the
 393 same way that *might* can.

394 (14) **Context:** I am an employer looking for students to apply for a job and I come at
 395 the end of class to explain what the job is, how much it pays, etc. after class ends.
 396 Since I haven't explained the details, nobody knows if they want to apply yet, but
 397 the teacher announces:

398 #Tuláakal le u k'áato'ob le meyaj walo' je'el u beytal u p'ataloobe'.
 399 #tuláakal le u k'áat-o'ob le meyaj wal_{uns}=o' je'el u beytal u
 all DEF A3 ask-PL DEF job wal=DIST surely A3 be.able A3
 400 p'at-al-o'ob=e'
 stay-STATUS-PL-TOP
 401 Intended: 'Everyone who might want the job should stay.'

402 One further type of use which fits under the uncertainty/possibility umbrella are 'po-
 403 liteness' uses, since such uses are common for many epistemic modals cross-linguistically.
 404 YM *wal* is commonly used in order as a hedging strategy to avoid committing oneself to
 405 controversial opinions, as in (15), or making promises one might not be able to keep, (16).

406 (15) **Context:** A polite attempt to get the leader, Rosendo, to yield the floor.

407 Síi ma' ti jun túulo' wale' Rosendo.
 408 síi ma' ti jun túul=o' wal_{uns}=e' Rosendo
 yes NEG PREP one CLF=DIST wal=TOP Rosendo
 409 'But maybe this should not be just one person [speaking], Rosendo.'
 410 Vapnarsky (2012:5)

411 (16) Tak tujel k'iin wale'.

412 tak t-u-jel k'iin wal_{uns}=e'
 until PREP-A3-different day wal=TOP
 413 'Until another day perhaps.' (i.e. 'See you later!')

414 Such cases could conceivably be regarded as cases of pretense, that is, instances where
 415 the speaker acts as though they are uncertain of the truth of the proposition in question.
 416 The account we develop in §6, however, does not require any such pretense to be as-
 417 sumed.

418 4.2 Stressed uses with declaratives

419 We have just seen that unstressed *wal* in declaratives conveys uncertainty but does not
 420 convey a negative evaluation of any kind. In this section, we consider stressed *wal*, find-

ing essentially the opposite. Stressed *wal* conveys undesirability, fear, or apprehension, but no longer convey uncertainty. Functionally, such uses often have the effect of conveying warnings or threats, but they need not involve uncertainty about whether the state of affairs described obtains nor do they require that any avertive action be expressed or even be possible. That is to say, *wal* is possible not only in cases where the speaker thinks the addressee should act to avoid the undesirable state of affairs, but also in cases of ‘idle warnings’, where the addressee can at best only act to prepare themselves for the situation described (cf. Lichtenberk (1995)’s “in-case” uses of apprehensional morphemes).

The examples in (17-18) illustrate warnings of the former type – henceforth, “avertive” warnings – since the context makes clear that the addressee can avert the state of affairs described, and even explicitly exhorts the addressee to do so in the case of (17).

(17) Yan k k’e’eyel wale’ –ki ko’ox.
 yan k k’e’ey-el wal_{str}=e’ –ki. ko’ox
 FUT A 1 PL punish:PASS–STATUS wal=TOP QUOT go:HORT
 ‘We’re going to be punished!’ he said. Let’s go! Carrillo Can (2011:134)

(18) Tumeen wa ka p’áatak je’ebix le ts’uulo’obo’ yaan wal u p’ekta’ale’.
 tumeen wa ka p’áat-ak je’ebix le ts’uul-o’ob=o’ yaan wal_{str} u
 because if IRR leave-SBJV like.how DEF foreigner-PL=DIST OBLIG wal A3
 p’ek-t-a’al=e’
 hate-TR-PASS=TOP
 ‘If they charge interest and treat him like a white person, it will be returned.’
 Dirección general de educación indígena (2010:23)

Conversely, (19-20) do not present situations where an avertive action is possible; if the chile is spicy, it’s spicy. The addressee can avoid eating it of course, but this does not effect the truth of the proposition the sentence itself introduces (see AnderBois & Dabkowski (t.a.) for analysis of the relationship between avertive and in-case uses of apprehensional morphemes in other languages). Nor is the speaker in such examples recommending an action to avoid downstream consequences of the state of affairs described. For example, the vendor in (19) is presumably not suggesting that the speaker refrain from buying the chiles, but merely letting the addressee know what they are in for.

(19) **Scenario:** A local woman selling chiles at the market. As a local, she knows all the chiles well. She warns the foreign visitor:
 Le habanero’o’ jach páap wale’.

451 le habanero'=o' jach páap wal=e'
 DEF habanero=DIST very spicy wal=TOP
 452 'It's very spicy [Watch out!]'

453 (20) **Scenario:** We are on the street and you see a dangerous-looking dog:
 454 Te'ela' yan jun túul peek' wale'.
 455 te'el=a' yan jun túul peek' wal=e'
 there=PROX exists one CLF dog wal=TOP
 456 'There's a dog over there [Watch out!].'

457 Rather than a warning per se, *wal* can also yield a threat in cases where world knowl-
 458 edge happens to suggest this. Typically, this is in cases with a first person subject, as in
 459 (21) (see Vuillermet (2018:22) and Epps (2008:631) for similar claims for apprehensives
 460 in Ese Ejja and Hup respectively). This need for specific content to produce a speech act
 461 of threatening, as opposed to a mere warning, stands in contrast to the imperative exam-
 462 ples in §4, which we will see communicate threats under clearly defined grammatical con-
 463 ditions, rather than depending on specific content to achieve this effect.

464 (21) **Scenario:** A father to his naughty son:
 465 Je' in topkech wale' ¿Ta wu'uyaj? ¡U'uy t'áan!
 466 je' in top-k-ech wal=e' ¿T-a wu'uy-aj? ¡U'uy t'áan!
 surely A1 beat-STATUS-B2 wal=TOP PFV-A2 hear-STATUS hear:IMP word
 467 '[I'm warning you] I'm going to beat you. Did you hear me? Do what I say!'
 468 Vapnarsky (2012:6)

469 Looking at the warning uses of *wal_{str}* we have seen, it is clear that while warning uses
 470 can happen to involve uncertainty, they do not require it. This is clearest in the case of
 471 idle warnings, where the event or state in question is one which cannot be avoided, some-
 472 times because it already obtains. We conclude, therefore, that *wal_{str}* does not encode un-
 473 certainty or possibility of any kind.

474 Considering all declarative uses, I have argued that *wal* conveys either uncertainty,
 475 when unstressed, or a negative evaluative meaning (often a warning), when stressed. We
 476 therefore predict that a context supporting uncertainty, but with no negativity, *wal* must be
 477 unstressed. Conversely, for a context supporting a negative evaluative meaning, but with
 478 no uncertainty, we expect *wal* must be stressed. Finally, *wal* should be infelicitous alto-
 479 gether in a context supporting neither of these inferences. We see these predictions borne
 480 out in the minimal triple in (22-24). The context in (22) only makes salient the speaker's
 481 uncertainty, and *wal* must be unstressed. The context in (23) precludes uncertainty, but

482 makes salient the potential negative consequences, and therefore allows only stressed *wal*.
 483 Finally, (24) gives no support to either inference and we indeed find that the inclusion of
 484 *wal* is simply infelicitous.

485 (22) **Uncertainty context:** A Yucatecan woman is selling chiles to a gringo. Since she
 486 is local and works at the market, she normally knows the chiles, but this time she
 487 has a new variety she does not know. It looks like it could be spicy, but since it's
 488 new, she is unsure.

489 Le iiko' jach páap wale'.

490 a. #Le iik=o' jach páap wal_{str}=e'
 DEF chile=DIST very spicy wal=TOP

491 b. Le iik=o' jach páap wal_{uns}=e'
 DEF chile=DIST very spicy wal=TOP
 492 'Maybe this chile is spicy.'

493 (23) **Warning context:** A local woman is at the market, selling chiles to a gringo.
 494 Since she is local, she knows all the types of chiles very well. Since the customer
 495 is not local, she gives him the warning:

496 Le iiko' jach páap wale'.

497 a. Le iik=o' jach páap wal_{str}=e'
 DEF chile=DIST very spicy wal=TOP
 498 'This chile is very spicy [Watch out]!

499 b. #Le iik=o' jach páap wal_{uns}=e'
 DEF chile=DIST very spicy wal=TOP
 500 Intended: 'This chile is very spicy [Watch out]!

501 (24) **Neutral context:** A woman is selling chiles in the market. The woman is from
 502 the area and is therefore quite knowledgeable about local chiles. The buyer is also
 503 from the area and therefore presumably also knowledgeable about them and there-
 504 fore in search of spicy chiles.

505 #Le iiko' jach páap wale'.

506 a. #Le iik=o' jach páap wal_{str}=e'
 DEF chile=DIST very spicy wal=TOP
 507 Intended: 'This chile is spicy.'

508 b. #Le iik=o' jach páap wal_{uns}=e'
 DEF chile=DIST very spicy wal=TOP
 509 Intended: 'This chile is spicy.'

Summing up, we see that while *wal* is associated with inferences of both uncertainty and negativity, these inferences are tied to the intonation of *wal*. This contrasts starkly with apprehensional morphemes in other languages, which are mixed modals, simultaneously expressing inferences of both sorts.

5 *wal* in imperatives

We have seen that *wal* in declarative sentences makes different contributions depending on whether it occurs in its stressed, *wal_{str}*, or unstressed, *wal_{uns}*, variant. In this section, we turn to another major sentence type, imperatives, and observe a parallel pattern. Concretely, we show that *wal_{uns}* in imperatives results in speech acts like permissions and offers, rather than directive speech acts like commands. Stressed *wal_{str}*, on the other hand, does essentially the same thing as in declaratives: it highlights a state of affairs as being undesirable for the addressee, in effect issuing a warning or threat.

5.1 Warning uses with imperatives

Similar to what we have seen in declaratives, stressed *wal_{str}* in imperatives conveys a warning or threat to the addressee. What is different here is that the imperative sentence itself does not encode the undesirable state of affairs, but rather encodes a precautionary or avertive action that the addressee ought to undertake to avoid or prepare for that negative outcome. That is to say, the imperative tells the addressee what to do, and the inclusion of *wal_{str}* makes explicit that there would be negative consequences for not heeding this.

(25) **Context:** Lupe wants to reach a book on a high shelf. Since she doesn't have a step, she tries to use Miguel as a stool and tells him to get down on all fours:

Ma' p'eeek wale'.

ma' péek wal_{str}=e'

NEG move:IMP wal=TOP

'Don't move or else!'

(26) **Context:** José's grandmother has asked him to take his sister to the market. José says he has other plans and that he can't take her. The grandmother says:

Bis wale'.

538 bis wal_{str}=e'
 take:IMP wal=TOP
 539 'Take her or else!'

540 While wal_{str} communicates the existence of negative consequences, crucially the utter-
 541 ances do not specify their precise nature. We return to this dynamic below in §4.2. This
 542 is the opposite of wal_{str} in declaratives, where the precautionary/avertive action is left un-
 543 stated and the undesirable state of affairs is explicit in the sentence. Looking beyond the
 544 sentence, while not obligatory, the undesirable state of affairs is frequently also expressed
 545 overtly through a juxtaposed declarative clause as in (27-29). The reverse is also true (e.g.
 546 in (17) above), but anecdotally, this seems to be true less frequently than in the case here
 547 (one reason for which will be discussed in §4.2).

548 (27) **Context:** I see my friend Juan in the street in front of my house and a jaguar ap-
 549 proaching. I say:
 550 Oken wale', yaan balam te'elo'.
 551 ok-en wal_{str}=e' yaan balam te'el=o'
 enter-IMP wal=TOP exist jaguar there=DIST
 552 'Come in! There's a jaguar over there.'

553 (28) **Context:** A mother hears the cawing of the chickens and yells to her small son:
 554 K'al uts wale' Wiwi! Yo'osal mun janta'al.
 555 k'al uts wal_{str}=e' Wiwi! Yo'osal mun jant-a'al
 close:IMP good wal=TOP Wiwi for NEG eat-PASS
 556 'Close it well, Wiwi! In order that they [the chickens] aren't eaten'

Vapnarsky (2012:6)

558 (29) -Ko'ox tun wale' suku'un le ba'ala' ma' uts' -ku yawat nuxi Pasuch.
 559 Ko'ox tun wal_{str}=e' suku'un le ba'al=a' ma' uts' -k-u yawat nuxi
 go:HORT then wal=TOP brother DEF thing=PROX NEG good IPFV-A3 cry old
 560 Pasuch
 Pasuch
 561 'Let's go then, brother, that thing [that I just saw] isn't good – cried old Pasuch.'

Canché Briceño (2009:173)

563 Finally, we note that beyond imperatives proper, another imperative-like construction –
 564 exhortatives formed with *ko'ox* – allow for wal_{str} with similar effects:

565 (30) Ko'ox meyaj wale'.

- 566 ko'ox meyaj wal_{str}=e'
 go:HORT work wal=TOP
 567 'Let's go work [hurry up!].' Hanks (1984:165)
- 568 (31) ;Ko'one'ex wale' áake'ex je'e ku taal Yum K'áak'o'!
 569 ko'on-e'ex wal_{str}=e' áak-e'ex je'e k-u taal yum k'áak'=o'
 go:HORT-B2PL wal=TOP turtle-B2PL surely IPFV-A3 come lord fire=DIST
 570 'Leave, turtles, the fire god is coming!' Sánchez Chan (1999:4)

571 5.2 Is that a warning or a threat?

572 In the examples of stressed *wal_{str}*, we have seen both cases where the utterance serves
 573 as a warning and others where it seems more like a threat (i.e. a warning about the in-
 574 tent of a speaker or another agent). For declaratives, threat uses arise just in case the con-
 575 tent happens to be appropriate for this, mostly with first person subjects. For imperatives,
 576 however, threat uses arise more generally, being found consistently whenever the impera-
 577 tive with *wal_{str}* is not followed by a declarative spelling out an undesirable state of affairs
 578 not due to the speaker. For example, (25-26) from above both convey not only that a bad
 579 thing will happen if the addressee fails to perform the specified precautionary action, but
 580 also that the speaker would be responsible for bringing about the unspecified undesirable
 581 state of affairs.

582 One way to support this intuition is to create contexts where a threat is inappropriate,
 583 such as the following context in which an employee talks to their boss. The social dy-
 584 namic makes a threat seem unlikely and the imperative with *wal_{str}* alone, (32a), is deemed
 585 odd or perhaps simply rude or insubordinate. In contrast, the same sequence is felicitous
 586 in (32b) when followed by a declarative stating the undesirable consequence, with speak-
 587 ers reporting no sense of the insubordination found in (32a). That is to say, that warning
 588 one's boss is socially acceptable in a way threatening is not and (32a) is inappropriate by
 589 virtue of communicating not just an unspecified warning, but more specifically a threat.

590 (32) **Context:** A worker in a store is talking to the boss:

- 591 a. K'al le joonaj walo'.
 592 #?K'al le joonaj wal_{str}=o'
 close:IMP DEF door wal=DIST
 593 'Close the door or else!'
- 594 b. K'al le joonaj walo' yo'osal ma' okok le ja'o'.

595 K'al le joonaj wal_{str}=o' yo'osal ma' ok-ok le ja'=o'
 close:IMP DEF door wal=DIST for NEG enter-SBJV DEF water=DIST
 596 'Close the door or else the water will come in!'

597 While this dynamic may seem somewhat ad hoc, we in fact see a similar pattern with
 598 English imperatives with *or else*. A disjunction of an imperative with a declarative can be
 599 either a warning or a threat depending on its content, as in (33a). In contrast, a 'unary'
 600 disjunction with *or else*, i.e. one lacking a declarative disjunct following, can only be
 601 interpreted as a threat regardless of the scenario, (33b). While we leave a principled ex-
 602 planation of this aspect of *wal_{str}* to future work, the presence of a similar restriction in a
 603 different language suggests that such an explanation should be sought.

- 604 (33) a. Close the door or else the water will come in! ~→ WARNING
 605 b. Close the door or else! ~→ THREAT

606 Beyond showing a similar restriction to threat uses in the absence of a negative declar-
 607 ative clause, this parallel is notable in that it arises in English with a form of disjunction.
 608 Unlike many Mayan languages, Yucatec Maya has a non-borrowed means for expressing
 609 disjunction using the disjunctive coordinator *wáa/wa*, as in (34).⁸

- 610 (34) Tu yuk'aj le sa'o' Juan wáa Daniel.
 611 t-u yuk'-aj le sa'=o' Juan wáa Daniel
 PFV-A3 drink-STATUS DEF atole=DIST Juan or Daniel
 612 'Juan or Daniel drank the atole.' AnderBois (2012:357)

613 Since disjunctive *wáa/wa* is already attested in colonial documents such as the Dic-
 614 cionario Motul, Martinez Hernandez (1929), as well as in other Yucatecan languages, the
 615 exact diachrony remains somewhat speculative. However, we know cross-linguistically
 616 that expressions of uncertainty or possibility are common (see, e.g. Mauri (2008)). It
 617 therefore seems plausible to assume that the disjunctive *wáa/wa* is grammaticalized from
 618 the discourse particle *wal*⁹, especially since YM shows various cases of coda l-deletion
 619 elsewhere.

⁸The morpheme *wáa* also appears in a variety of other 'alternative-evoking' uses besides disjunction: as a polar question clitic, in non specific wh-indefinites, and heading conditional antecedents and embedded interrogatives (cf. English *if*). See AnderBois (2012) for further discussion of these connections and detailed analysis of the connection between disjunction and the polar question use.

⁹We return to this in §6.3, but the presence of negativity in stressed uses of *wal* also finds a parallel of sorts in English disjunction. Imperative and Declarative (IaD) constructions can involve either positive or negative consequences. In contrast, closely related IoD constructions with *or* in place of *and* have been claimed to be universally negative by Russell (2007) et seq.

620 To sum up, we have seen in this section that *wal_{str}* in imperatives gives rise to warn-
 621 ings or threats of the potential consequences of not complying with the action described
 622 by the imperative.

623 5.3 Permission/offer uses with imperatives

624 Whereas *wal_{str}* in imperatives intuitively serves to ‘strengthen’ the imperative by high-
 625 lighting potential negative consequences for not heeding it, *wal_{uns}* does quite the opposite,
 626 ‘softening’ them to permissions or offers. Often, such uses are found in cases where the
 627 speaker has some sort of social authority over the addressee and therefore might other-
 628 wise be taken to be issuing a command. We see such uses illustrated in (35-37).

629 (35) **Context:** I see that my friend José is outside, but is not coming in or ringing the
 630 doorbell. I say:

631 Oken wale’.
 632 ok-en wal_{uns}=e’
 enter-IMP wal=TOP
 633 ‘Enter (if you want)!’

634 (36) **Context:** A boss is talking to an employee. He knows the employee loves to
 635 sweep the floor more than anything else and says:

636 Míist le piiso’ walo’ (wáa a k’áate’).
 637 míist le piiso’ wal_{uns}=o’ (wáa a k’áate=e’)
 sweep:IMP DEF floor wal=DIST if A2 want=TOP
 638 ‘Sweep the floor (if you want).’

639 (37) **Context:** Someone has said that they are hungry. The addressee replies:

640 Ko’ox welo’ ka jáan tsikbalt ten bix úuchik a wojéeltik a k’uchul weye’.
 641 Ko’ox wal_{uns}=o’ ka jáan tsikbal-t-∅ ten bix úuchik a w-ojéel-t-ik
 go:HORT wal=DIST for fast talk-TR-SBJV DAT: 1 SG how happen A2 EP-know-TR-STATUS
 642 a k’uch-ul wey=e’
 A2 arrive-STATUS here=TOP
 643 ‘Let’s go (to eat) and you can tell me real quick how you got here.’

644 Carrillo Can (2011:98)

645 As in the case of declaratives, we can further confirm the role of intonation by looking
 646 at one and the same sentence across different scenarios:

647 (38) **Permission Context:** A child wants to take the bucket to use as a toy. His father
 648 says:

649 (Wáa a k'áate') bis le ch'óoy walo'.

650 a. #(wáa a k'áate=e') bis le ch'óoy wal_{str}=o'.
if A2 want=TOP take:IMP DEF bucket wal=DIST
651 Intended: 'Take the bucket (if you want).'

652 b. (wáa a k'áate=e') bis le ch'óoy wal_{uns}=o'.
if A2 want=TOP take:IMP DEF bucket wal=DIST
653 'Take the bucket (if you want).'

654 (39) **Warning scenario:** A child is not doing their chore of bringing the water. His
655 father says:
656 Bis le ch'óoy walo' (bik tu'ubuk tech).

657 a. bis le ch'óoy wal_{str}=o' (bik tu'ub-uk tech)
take:DMP DEF bucket wal=DIST ADMON forget-SBJV DAT:2SG
658 'Take the bucket! Don't forget!'

659 b. #bis le ch'óoy wal_{uns}=o' (bik tu'ub-uk tech)
take:DMP DEF bucket wal=DIST ADMON forget-SBJV DAT:2SG
660 Intended: 'Take the bucket! Don't forget!'

661 To summarize, while stressed *wal_{str}* in imperatives creates stronger, more urgent im-
662 peratives, unstressed *wal_{uns}* produces 'softer' imperatives which are addressee-oriented,
663 such as permissions and offers. We turn now to explore in more detail the parallels be-
664 tween the role of *wal* in declaratives and imperatives.

665 6 Relating the uses of *wal*

666 In the previous two sections, we have seen that the surface effect of *wal* seems to vary
667 based on its interactions with two cross-cutting factors: (i) intonation, and (ii) sentence
668 type. The effect of sentences with *wal* across these four conditions is briefly summarized
669 in (40):

670 (40) Summary of uses of *wal*:

	Unstressed <i>wal_{uns}</i>	Stressed <i>wal_{str}</i>
671 Declarative	Uncertainty	Undesirable situation
Imperative	Permission/offer	Avertive or preparatory action

672 In this section, we turn to understand this picture and in particular, to understand what
673 aspects of this empirical picture are attributed to the meaning of *wal* itself, its intonation,
674 and the semantic effects of the sentence type itself. One central question we address is

675 whether a single meaning for *wal* can be assigned across all its uses or whether distinct
676 (but hopefully related) meanings for *wal* are needed.

677 We tackle these questions by providing a unified account of unstressed *wal_{uns}* across
678 sentence types, §6.1, as well as a unified account of stressed *wal_{str}* across sentence types,
679 §6.2. In both cases, the accounts are presented only informally, as a detailed formal se-
680 mantic/pragmatic account is beyond the scope of this paper. Finally, in §6.3, we address
681 the question of the synchronic and diachronic relationship between the stressed and un-
682 stressed variants.

683 6.1 Unstressed *wal* across sentence types

684 Starting with declaratives, we have shown that unstressed *wal_{uns}* does not convey undesir-
685 ability or a warning of any kind, but instead conveys uncertainty or epistemic possibility.
686 At the same time, however, we noted two important differences with other epistemic pos-
687 sibility modals: the infelicity of conflicting claims marked with *wal_{uns}* (i.e. ‘maybe so,
688 maybe not’ cases), (13), and their inability to be semantically embedded, (14). We pro-
689 pose to account for these aspects of *wal_{uns}* by taking it to convey the speaker’s uncertainty
690 about whether the speech act/illocutionary update the sentence encodes ought to be per-
691 formed.

692 For declaratives, then, this speech act is most typically assertion, which is commonly
693 taken to at least include the speaker’s commitment to the truth of the sentence’s content.
694 The lack of a semantically embedded interpretation then follows from the fact that the
695 effect we propose for *wal_{uns}* is taking place at the discourse level and therefore concerns
696 the entirety of the discourse move. The account therefore predicts that declaratives with
697 unstressed *wal_{uns}*, unlike epistemic possibility modals, should be felicitous in contexts
698 where their propositional content is certain, but the speaker is uncertain of their overall
699 discourse contribution. This prediction is borne out by examples like (41-42) in which the
700 context establishes the speakers certainty but where the speaker is uncertain of whether
701 the propositional content indeed resolves the question posed by the interlocutor.

702 (41) **Context:** Alejandra and Beto are talking about a petition and who signed it. Beto
703 saw María write the petition for certain, but isn’t sure if María is a teacher or not.

704 a. Alejandra: Tu ts’íibtaj u k’áaba’ jun túul kanasaj?
705 t-u ts’íibt-aj u k’áaba’ jun túul ka’ansaj?
PFV-A3 write-STATUS A3 name one CLF teacher
706 ‘Did a teacher sign their name?’

- 707 b. Beto: Pues, Maariya ts'íibt wale'.
- 708 pues, máariya ts'íibt wal_{uns}=e'
- 709 well María write:AF wal=TOP
- 710 'Well, María did [but I'm not sure if she's a teacher]'
- 710 (42) **Context:** Alejandra and Beto are talking about an event at the university. Beto
- 711 saw a student leave early, Juan, but can't remember if Juan is a Linguistics stu-
- 712 dents or an Anthropology student.
- 713 a. Alejandra: Máakalmáak xoknáalil ti' lingüística bin aantes le tsikbalo'
- 714 máakalmáak xoknáalil ti' lingüística bin aantes le tsikbal=o'?
- 715 which student PREP linguistics go:PFV before DEF talk=DIST
- 716 'Which linguistics student went before the talk?'
- 716 b. Beto: (Pues), Juan bin wale'.
- 717 (Pues,) Juan bin wal_{uns}=e'
- 718 well Juan go:PFV wal=TOP
- 718 '(Well,) Juan did [but I'm not sure if he studies linguistics].'

719 In both of these examples, the propositional content of the rest of Beto's utterances is

720 not in doubt in the discourse context. However, the potential ultimate conversation effect

721 – resolving the question posed by Alejandra – is in doubt and this is sufficient to license

722 *wal_{uns}*. Such examples highlight the idea that while the effect of *wal_{uns}* often appears

723 similar to epistemic modals, it achieves this effect by providing an 'illocutionary hedge',

724 rather than contributing to propositional content itself.

725 For imperatives, examining the relative contributions of *wal_{uns}* and the imperative it-

726 self requires first more careful consideration of the meanings of imperative sentences

727 themselves. While there are some minor points of cross-linguistic variation, recent for-

728 mal semantic (e.g. Kaufmann (2012), Condoravdi & Lauer (2012)) and typological (e.g.

729 Aikhenvald (2010), Aikhenvald & Dixon (2017)) literature has emphasized the *polyfunc-*

730 *tionality* of imperatives, that is, the fact that imperatives are used to perform a variety of

731 different direct speech acts including not only commands and other directives, but also

732 offers, permissions, advice, wishes. This is true in YM too, as illustrated in (43):

- 733 (43) a. **Command**
- 734 K'al le naajo'.
- 735 k'al le naaj=o'
- 736 close:IMP DEF house=DIST
- 736 'Close the door!'

- 737 b. **Offer**
 738 Ko'oten janal.
 739 ko'ot-en janal
 come:IMP-IMP eat
 740 'Come eat!'
- 741 c. **Warning**
 742 Ma' jantik le iiko'. Yaan a meetik teech k'aas.
 743 ma' jant-ik le iik=o'. yaan a meet-ik teech k'aas
 NEG eat-STATUS DEF chile=DIST FUT A2 do-STATUS DAT:2SG damage
 744 'Don't eat that chile! You will harm yourself.'
- 745 d. **Advice**
 746 Wáa wi'ijeche' jaant wáa ba'ax.
 747 wáa wi'ij-ech=e' jaant wáa ba'ax
 if hungry-B2SG=TOP eat:IMP or what
 748 'If you're hungry, eat something or other'
- 749 e. **Wish**
 750 Ki'ich sayab ja'il kuxtal siijs u puksi'ik'al in mek'tan kaj ti' ka'an.
 751 ki'ich sayab ja'-il kuxtal siij-s-∅ u puksi'ik'al in mek'tan
 beautiful spring water-REL life flow-CAUS-IMP A3 heart A1 family
 752 kaj ti' ka'an
 town from sky
 753 'Oh beautiful spring of water of life, flow from the sky to the heart of my
 754 town.'

Noh Tzec (2015:4)

755 While there are many different ways of classifying imperatives, one first distinction
 756 that can be made is between imperatives which are uttered based on the speaker's goals
 757 and desires, such as commands, and those like offers which are rooted in the addressee's
 758 goals and desires (see, e.g. Poletto & Zanuttini (2003)'s account of discourse particles
 759 in imperatives in Badiotto, a variety of Ladin ISO 639-3: 11d). Based on declaratives
 760 above, we claimed that *wal_{uns}* conveys the speaker's uncertainty about whether the speech
 761 act/illocutionary update the sentence encodes ought to be performed. Such uncertainty
 762 makes sense in imperatives based on the addressee's goals and desires since the speaker
 763 may well be uncertain about them while making suggestions about what they might be or
 764 how they might be reached.

765 For imperatives rooted in the speaker's own desires, however, such uncertainty seems
 766 incoherent given that it occurs together with the imperative. This is what explains the

767 restrictions on the use of *wal_{uns}* in imperatives discussed above. Whereas addressee-
 768 oriented imperatives like (44) can use *wal_{uns}* to convey that the speaker is uncertain about
 769 whether the preference in question should be adopted, speaker-oriented imperatives like
 770 (45), are infelicitous with *wal_{uns}*. Note that this generalization goes beyond the informal
 771 characterization of “softening”; no matter how gentle the father in (45) aims to be, they
 772 are still imposing a preference on the child and have no uncertainty about this preference.

773 (44) **Addressee-oriented imperative context:** I see that my friend José is outside, but
 774 is not coming in or ringing the doorbell. I say:

775 Oken wale’.

776 ok-en wal_{uns}=e’
 enter-IMP wal=TOP
 777 ‘Enter (if you want)!’

778 (45) **Speaker-oriented imperative context:** A child is not doing their chore of bring-
 779 ing the water. His father says:

780 Bis le ch’óoy walo’ (bik tu’ubuk tech).

781 #bis le ch’óoy wal_{uns}=o’ (bik tu’ub-uk tech)
 take:IMP DEF bucket wal=DIST ADMON forget-SBJV DAT:2SG
 782 ‘Take the bucket! Don’t forget!’

783 In sum, we have argued that *wal_{uns}* conveys the speaker’s uncertainty about the illocu-
 784 tionary update the rest of the sentence encodes. For declaratives, this illocutionary uncer-
 785 tainty most typically approximates epistemic uncertainty, though we have also seen cases
 786 where a speaker is uncertain of an assertions relevance or unwilling to state something for
 787 reasons unrelated to their anything epistemic. Since imperatives update shared effective
 788 preferences, illocutionary uncertainty produces a range of distinct effects depending on
 789 the context. We turn now to analyze stressed *wal_{str}* across declaratives and imperatives.

790 6.2 Stressed wal across sentence types

791 Thus far, we have argued that across sentence types, unstressed *wal_{uns}* encodes the speaker’s
 792 illocutionary uncertainty, i.e. their uncertainty about whether to perform the update the
 793 rest of the sentence encodes. The contribution of an utterance with *wal*, then, is to make a
 794 “meta-commentary” on the appropriateness of a given move in a discourse, in particular
 795 to highlight the speaker’s uncertainty over whether it should be made.

796 *wal_{str}*, on the other hand, is quite different. It conveys that there exists a state of af-
 797 fairs, possible or actual, which the speaker considers to be undesirable for the addressee.

798 Whereas *wal_{uns}* communicated about the effect of the clause containing it, the effect of
 799 *wal_{str}* occurs in addition to its effect. That is to say that whereas an utterance containing
 800 *wal_{uns}* makes a single discourse move, one with *wal_{str}* introduces two separate moves,
 801 the one the sentence otherwise encodes and the one *wal_{str}* adds. Crucially, though, *wal_{str}*
 802 has no direct semantic interaction with the content of the sentence in which it occurs. It
 803 merely makes an additional not-at-issue contribution to the conversation.

804 Declaratives with *wal_{str}*, then, commit the speaker to there being an undesirable state
 805 of affairs and at the same time (typically) make an assertion. The connection between
 806 the two is not semantically specified, but instead left to pragmatic inference and there-
 807 fore may vary in its directness. In an example like (46), repeated from (17), the content of
 808 the declarative is itself the undesirable state of affairs to which *wal_{str}* refers. In contrast,
 809 in (47), repeated from (3), the link between the proposition asserted and the undesirable
 810 state of affairs is less direct. The mere presence of a dog is not itself undesirable per se,
 811 but could lead to an undesirable state of affairs, which *wal_{str}* serves to highlight. In the
 812 absence of *wal_{str}*, (47) would run the risk of failing to convey to the addressee that the
 813 speaker considers the dog to be a danger to the addressee (in contrast to (46), where the
 814 propositional content itself makes this quite clear).

815 (46) **Direct link to undesirable situation:**

816 Yan k k'e'ey-el wale' -ki ko'ox.
 817 yan k k'e'eyel wal_{str}=e' ki ko'ox
 FUT A1PL punish:PASS-STATUS wal=TOP QUOT go:HORT
 818 'We're going to be punished!' he said. Let's go! Carrillo Can (2011:134)

819 (47) **Indirect link to undesirable situation:**

820 Te'ela' yan jun túul peek' wale'.
 821 te'el=a' yan jun túul peek' wal_{str}=e'
 there=PROX exists one CLF dog wal=TOP
 822 'There's a dog over there [Watch out!].'

823 Imperatives with *wal_{str}*, then, commit the speaker to there being an undesirable state
 824 of affairs and at the same time perform an ordinary imperative speech act such as offering
 825 advice or a warning, as seen in (48), repeated from (32b).

826 (48) K'al le joonaj walo' yo'osal ma' okok le ja'o'.

827 K'al le joonaj wal_{str}=o' yo'osal ma' ok-ok le ja'=o'
 close:IMP DEF door wal=DIST for NEG enter-SBJV DEF water=DIST
 828 'Close the door or else the water will come in!'

829 As for the nature of the negative situation to be avoided, things are slightly more com-
 830 plicated than for declaratives. In cases like (48), a declarative clause explicitly character-
 831 izing this negative prospective state is juxtaposed to the clause containing *wal_{str}* itself.
 832 The clause with *wal_{str}* therefore does not give any indication of what the situation is be-
 833 yond that it is to be avoided. Recall, however, that when no adjacent clause describes the
 834 situation, as in (49), the only interpretation available is that of a threat, i.e. the negative
 835 situation can only be the potential future actions of the speaker.

836 (49) K'al le joonaj walo'.
 837 ?K'al le joonaj wal_{str}=o'
 close:IMP DEF door wal=DIST
 838 'Close the door or else!'

839 The details of the negative situation that comprises this threat are left for the addressee
 840 to infer, but this restriction to future actions within the speaker's control (i.e. to threats) is
 841 unexpected. As noted above, however, this unexpected restriction is not unique to *wal_{str}*
 842 but can also be found in English *or else* constructions despite their numerous other dif-
 843 ferences. Vuillermet (2018) also describes a similar restriction to threat uses (at least as
 844 a default) in apprehensional morphemes in Hup and Ese Ejja (though interestingly, she
 845 notes that some languages such as Matsigenka show the opposite restriction). We leave it to
 846 future work to provide a principled explanation synchronically and/or diachronically for
 847 this restriction of *wal_{str}* in imperatives.

848 In sum, we have argued that stressed *wal_{str}* uniformly conveys the existence of an un-
 849 desirable state of affairs.

850 6.3 Relating the two *wals*

851 Thus far, we have developed analyses for the two intonational variants of *wal* – stressed
 852 *wal_{str}* and unstressed *wal_{uns}* – which appear quite different. *wal_{str}* highlights a prospective
 853 negative situation alongside whatever move the rest of the sentence contributes, allowing
 854 the addressee to infer the connection between the two. *wal_{uns}* highlights the speaker's un-
 855 certainty about the move that the rest of the sentence makes. In this section, we explore in
 856 more depth potential relationships between these. While we ultimately conclude a unified
 857 synchronic analysis is not possible, we show that the relationship between them is not ar-
 858 bitrary and explore a potential diachronic explanation for the discrepancies between *wal_{str}*
 859 and *wal*.

860 Drawing inspiration from Davis (2011)’s work on Japanese discourse particles, one
 861 way we might begin to try to unify the two variants of *wal* is by appealing to the notion
 862 of ‘decision problems’ (see also van Rooy 2003). Davis characterizes discourse contexts
 863 as including for each agent a decision problem, i.e. a salient set of potential actions from
 864 which that agent must choose. We can therefore characterize the contributions of *wal_{uns}*
 865 and *wal_{str}* as follows. *wal_{uns}* highlights an open decision problem about whether a given
 866 discourse move ought to be made and/or accepted, what we have described above as illo-
 867 cutionary uncertainty. *wal_{str}* on the hand, highlights an open decision problem about what
 868 to do about a prospective negative situation. The discourse move contributed by the rest
 869 of the sentence helps provide additional information about the negative situation and/or
 870 what actions might be taken in response to it.

871 This attempt at recasting both analyses as referencing different kinds of decision prob-
 872 lems makes salient that both variants of *wal* have a common core: highlighting an open
 873 decision problem. At the same time, however, this comparison also makes clear precisely
 874 where the two variants differ: *wal_{str}*’s negative evaluative component. *wal_{str}* doesn’t just
 875 highlight any old open decision problem in the context, it specifically conveys that the
 876 decision problem concerns a pending *negative* situation which can only be averted by re-
 877 solving the decision problem in particular ways. For example, the context in (50) presents
 878 a salient decision problem – what to order – but one which does not concern any actual or
 879 prospective negative situation no matter how it is resolved.

880 (50) **Scenario:** At a restaurant, A states that he is hungry, but does not know what to
 881 order because all of the dishes on the menu. B has had sikil p’aak (pumpkin seed
 882 dip) before and therefore knows whether it is tasty. B offers advice to A:

883 #Le sikli p’aak-o’ jach ki’ wal_{str}-e’
 884 DEF sikil p’aak-DIST very tasty wal=TOP
 ‘Sikil p’aak is be tasty.’

885 We therefore conclude that a unified synchronic analysis of the two variants of *wal* is
 886 not possible. Despite this, we find that the connection between the two variants is not al-
 887 together random. Setting aside the negativity of *wal_{str}*, the core difference between the
 888 two is reminiscent of that found in a number of discourse particles in unrelated languages.
 889 While the specific phonetic distinction varies, a number of recent works on discourse par-
 890 ticles cross-linguistically has argued for systematic semantic differences correlated with
 891 whether the particle is phonetically marked (i.e. uses which are described variously as
 892 ‘stressed’, ‘focused’, ‘accented’, or has ‘rising intonation’) or unmarked (‘unstressed’,

893 ‘unfocused’, ‘deaccented’, or has ‘falling intonation’).

894 Building on proposals for specific particles or languages (e.g. Davis 2011, McCready
895 & Tawilapakul 2015, Rojas-Esponda 2014), authors such as McCready (2015) and Rojas-
896 Esponda (2015) propose a uniform effect of intonation across a variety of particles with
897 intonational variants. Such a proposal is made in greatest detail by Rojas-Esponda 2015,
898 in (51), focusing specifically on particles which target a decision problem or Question
899 Under Discussion (QUD) in the sense of Roberts (1996) (i.e. an issue that discourse par-
900 ticipants are presumed to be mutually endeavored to resolve at any point in the discourse
901 implicitly or explicitly).

902 (51) **Rojas-Esponda (2015:103)’s particle generalization:**

903 A discourse particle which has a focused and unfocused variant appears focused
904 if and only if the particle signals a change in the QUD or a change in the previous
905 resolution of a QUD.

906 Since our analysis of *wal* does not reference the QUD per se, we propose a somewhat
907 broader generalization building on Rojas-Esponda 2015’s proposal (see also McCready
908 2015) as in (52).

909 (52) **Principle of intonation and discourse particle:**

- 910 a. **Intonationally marked uses:** A discourse particle that has intonationally
911 ‘marked’ and ‘unmarked’ variants appears in the ‘marked’ form when it di-
912 rectly updates the discourse context in some way.
- 913 b. **Intonationally unmarked uses:** A discourse particle that has intonationally
914 ‘marked’ and ‘unmarked’ variants appears in the ‘unmarked’ form when it
915 modifies or comments on the contribution of the utterance in which it occurs.

916 The intonationally marked *wal_{str}* on the analysis proposed above fits the characteriza-
917 tion in (52a) since it directly contributes to the context of the speaker’s assessment of a
918 state of affairs as being undesirable, leaving the rest of the sentence’s contribution unal-
919 tered. In contrast, the proposed analysis of intonationally unmarked *wal_{uns}* modifies the
920 way that the utterance’s main update updates the context, indicating the speaker’s uncer-
921 tainty about whether or not it should take place. While detailed cross-linguistic study of
922 interactions between intonation and discourse particles remains in its infancy, the pro-
923 posed role of intonation here supports the emerging picture from recent literature on other
924 languages.

925 While pairs of intonationally distinct discourse particles are cross-linguistically com-
926 mon, this is an initially surprising finding in YM since, as discussed in §2.1, YM doesn't
927 otherwise make use of stress/deaccenting in any meaning-bearing way (e.g. as English
928 or German do). However, it turns out that even in cases like German and Japanese where
929 prosody affects discourse particles and plays a role elsewhere in the language, previous
930 research has been more or less unanimous in finding that the role of intonation in particles
931 is fundamentally distinct from the same intonational cues elsewhere in the same language
932 (Rojas-Esponda 2015 makes this point perhaps most strongly). Therefore, we may take
933 the interaction of *wal* and intonation in YM as another instance of this general pattern,
934 showing that it extends to languages with quite different prosodic properties outside of
935 discourse particles.

936 While this principle relates the two variants of *wal* in a principled way, it still does
937 not result in a unified compositional semantics for *wal* across both uses. *wal_{str}* conveys
938 the speaker's negative evaluation while *wal_{uns}* has no analogous contribution. As noted
939 above, we still must conclude that synchronically, there are simply two different particles
940 *wal_{str}* and *wal_{uns}* with irreducibly distinct semantics.

941 Diachronically, however, there is perhaps more room for optimism. As noted in the
942 introduction, a number of related languages have so-called 'apprehensive' morphemes,
943 which simultaneously convey negative evaluative and uncertainty inferences. Further-
944 more, within this domain, we find cases such as Fijian *de/dē/dee*, which Lichtenberk (1995:315-
945 318) describes as having undergone a diachronic process of semantic bleaching from ap-
946 prehensives to an affectively neutral markers of uncertainty.

947 An attractive hypothesis, then, is that there was an earlier stage in which *wal* uniformly
948 included a negative evaluative component with intonation following the principles in (52).
949 This earlier form of unstressed *wal_{uns}*, then, would be an apprehensive, simultaneously
950 conveying that the stated proposition is possible but not certain and undesirable. At a sub-
951 sequent stage, the semantic bleaching Lichtenberk (1995) posits for Fijian takes place,
952 leaving us with the attested use of *wal_{uns}*. Note also that such bleaching for stressed *wal_{str}*
953 would be potentially non-sensical, since the resulting meaning would be to point out that
954 there is some state of affairs which is possible.

955 This potential diachronic trajectory is made plausible sby the cross-linguistic consid-
956 erations mentioned above, but is only a speculation. Unfortunately, it is likely to remain
957 this way since possibility uses with no negative component are found both in the early
958 colonial YM sources such as the Diccionario Motul (Martinez Hernandez 1929) and even

959 in the most distantly related Yucatecan language, Mopán, as seen in (53). Additionally,
 960 I am not aware of cognates beyond the Yucatecan subfamily that would allow for further
 961 comparative work.¹⁰

962 (53) Dios wal tan u yaant-ic-oo'
 God wal PROG A3 help-STATUS-B3PL
 963 'Maybe God will help them' Mopán, Ulrich & de Ulrich (1976:235)

964 In this section, we have explored the prospects for a single unified account of *wal*
 965 across sentence types and intonational variants. Looking across sentence types, we have
 966 proposed uniform meanings for *wal_{uns}* and *wal_{str}*, which interact in principled ways with
 967 the contributions of declarative and imperative illocutionary moods. On the other hand,
 968 we have argued that *wal_{uns}* and *wal_{str}* cannot be unified synchronically since only the
 969 latter has a negative evaluative component. Despite the lack of a compositional seman-
 970 tic unification, we nonetheless hope to have shown that the two variants are nonetheless
 971 related in principled ways which are compatible with a plausible (albeit somewhat specu-
 972 lative) diachronic account of their divergence.

973 7 Conclusions

974 In this paper, we have presented a detailed account of the morpheme *wal* in Yucatec Maya.
 975 While often described informally as an epistemic possibility modal, I have argued that
 976 *wal* is far more complex than this. In particular, the particle can be realized in two distinct
 977 intonational variants with quite different communicative effects. In its 'unstressed' form
 978 *wal_{uns}*, it communicates uncertainty about the discourse move encoded by the rest of the
 979 sentence. For declaratives, this approximates an epistemic possibility modal, though with

¹⁰An anonymous reviewer provides an alternative speculation: that *wal* may be derived historically from a first person form of a verb of saying in *w-a'al-ik* A1 EP-say-STATUS ('I say' being a rough paraphrase for the unstressed use, 'I'm telling you!' for the stressed one). While similar in some ways to the account here, this alternative diachrony crucially lacks a mixed modal stage expressing both components. The lack of comparative evidence means that this alternative cannot be definitively confirmed or disconfirmed any more than the proposal here. However, we note that this alternative is quite a bit more abstract in the sense that the most reduced uses of *a'al* as hedges are forms like *in wa'alike'*, *in wa'ake'*, and (less commonly) *wa'ake'* that differ substantially in form. I'm not familiar with any reduced forms along the lines of 'I'm telling you!', but analogous full clausal forms in present day YM would be significantly longer. In short, this alternative is not altogether implausible, but requires substantial additional assumptions about phonological reduction to yield the segmental phonetics of *wal*. Moreover, I presume that this would require two separate sets of such assumptions, one for *wal_{uns}* and one for *wal_{str}*, since on this hypothesis, these would have different sources.

several key differences. For imperatives, where epistemic modals are often ungrammatical, this precludes the possibility of directive force, typically producing offers, suggestions, and other ‘addressee-oriented’ speech acts. In its stressed form, *wal_{str}*, it communicates the existence of a negative prospective situation in addition to the discourse move contributed by the rest of the sentence.

Beyond providing a detailed account of a particular discourse particle in Yucatec Maya, the picture we have presented is in many ways illustrative of the challenges that discourse particles often present across languages. First, discourse particles often occur across sentence types with superficially quite different meanings. This variation poses an analytical challenge, but also an opportunity to better isolate the contribution of the discourse particle itself, as we have done here. Second, in order to understand the relationship between the different uses of *wal*, we have needed to draw upon both synchrony and diachrony.

Finally, we have seen that even in a language where intonation – in particular intonational focus/deaccenting – plays little role outside of discourse particles, intonation can interact with discourse particles in crucial ways. Yucatec Maya *wal* is thus a particularly striking entry in the growing body of literature showing that intonation may interact in different ways with discourse particles than other elements. More specifically, we have suggested that the account we have proposed fits within a broader pattern in which more prosodically stressed/marked variants of discourse particles refer directly to discourse contexts, while prosodically unstressed/unmarked variants provide meta-commentary on the sentence’s own contribution.

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