

On Tense-Aspect-Mood in Polar Interrogatives

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Abstract

The paper reports the preliminary results of a typological study of the marking of tense, aspect and mood (TAM) categories in polar interrogatives. The results are based on a pilot sample of 105 languages. Special attention is paid to how the marking of TAM categories in polar interrogatives differs from their marking in declaratives. The following types are found: the marking of polar interrogation is part of the mood system, interrogation is expressed by the absence of declarative marking, interrogation is expressed by an auxiliary construction, interrogatives require a non-finite form of the verb, TAM distinctions made in declaratives are lost in polar interrogatives. Finally, the results are compared with earlier results on the marking of TAM categories in negatives.

Keywords: polar interrogation, tense-aspect-mood, negation, typology, markedness, sampling.

1. Introduction

This paper is a typological study of the marking of tense, aspect and mood (TAM) categories in polar interrogatives. I will restrict my attention to polar interrogation in main clauses with verbal predicates and focus on interrogatives that are as neutral as possible in terms of focus or bias towards positive vs. negative reply. These conditions are satisfied by, e.g., the English polar interrogative sentence in (1a) but not by focused questions such as (1b,c), by tag questions such as in (1d), or by indirect questions such as the one in (1e).

(1) English (constructed examples)

- a. *is King Arthur barking on the balcony ?*
- b. *is King Arthur barking on the **balcony** ?*
- c. *is it King Arthur that is barking on the balcony ?*
- d. *King Arthur is barking on the balcony, isn't he ?*

e. *I wonder whether King Arthur is barking on the balcony*

Typological studies of polar interrogatives (Moravcsik 1971; Ultan 1978; Sadock & Zwicky 1985; Siemund 2001; Dryer 2005a; König & Siemund 2007) have found the following types of marking polar interrogation: intonation, interrogative particles, interrogative verb morphology, order of constituents (verb fronting), disjunction (A-not-A), and absence of declarative morphemes. In an earlier study (Miestamo 2004, 2007), I have pointed out that interrogative (auxiliary) verbs should be regarded as a further type. In addition to the types of markers, attention has also been paid to their position (see Dryer 2005b). In my investigation of the marking of TAM categories in polar interrogatives, I will pay special attention to how their marking differs from their marking in declaratives. This question has not been previously addressed on the basis of extensive typological samples (Schmid 1980 examined co-occurrence restrictions in interrogatives, but without using an extensive and systematic sample). In my pilot study (2004, 2007), I have taken a preliminary look at the structural differences between polar interrogatives and declaratives, but with no special focus on TAM categories.

This study is part of a larger project examining structural similarities and differences between polar interrogatives and declaratives (and marked and unmarked categories more generally). In my earlier work (Miestamo 2005), I have examined structural differences between negatives and affirmatives, and proposed the following typological classification. Symmetric negatives differ from the corresponding affirmatives by the mere presence of the negative marker(s) whereas asymmetric negatives show some further structural differences vis-à-vis affirmatives. Symmetry and asymmetry can be observed in constructions and paradigms (what this means will become clearer in Section 3 below) and asymmetric negation can be divided into further subtypes according to the nature of the asymmetry. The different types of the classification can be accounted for by an analogy-based model of explanation where symmetric negation is explained by (language-internal) analogy to the structure of the affirmative and asymmetric negation by (language-external) analogy to functional properties of negation. In addition to negation, these principles of classification and explanation can be applied to other marked categories, e.g., polar interrogation. As I have shown in (Miestamo 2007), symmetric and asymmetric interrogative structures can be distinguished according to whether and how polar interrogatives differ from their unmarked declarative counterparts. In this paper, I will pursue this idea further, paying special attention to the marking of TAM categories.

This is a preliminary survey of the marking of TAM categories in polar interrogatives, and the conclusions will therefore remain preliminary. Furthermore,

focus will be on describing and classifying the data, and issues of explanation and other more theoretical questions will not be addressed in this paper. The structure of the paper is as follows: Section 2 introduces the language sample on which the study is based. Section 3 briefly introduces the distinction between symmetric and asymmetric polar interrogatives. Section 4 constitutes the central part of the study, focusing on the ways in which the marking of TAM categories can be affected in polar interrogatives in different languages. Section 5 compares the findings to what has been observed earlier about the marking of TAM categories in declarative negatives. Section 6 concludes the paper.

2. Sample

The sampling procedure follows the sampling principles introduced in Miestamo (2005). A variety sample containing at least one language from each of the 458 genera in Dryer's (2005c) WALS classification forms the basis of the study. The poorer availability of sources for the languages of some areas will introduce an areal-genealogical bias into the sample and therefore quantitative observations will be based on an areally balanced subsample of the overall variety sample. At this stage, only a part of the sample languages has been examined, and the results of this paper are based on this pilot sample of 105 languages (which is still to some extent areally biased). Table 1 lists the sample languages in each macroarea. In Figure 1, the sample languages are plotted on a world map.

Table 1. Sample languages (n = 105)

Africa (17):	Arabic (Egyptian), Degema, Ha, Hdi, Igbo, Jamsay, Kabyle, Khoekhoe, Kisi, Koyra Chiini, Krongo, Lango, Ma'di, Ngiti, Somali, Supyire, Swahili
Eurasia (27):	Basque, Estonian, Evenki, Finnish, French, German, Greek (Modern), Hungarian, Icelandic, Irish, Italian, Kabardian, Kannada, Korean, Lezgian, Lithuanian, Malayalam, Mordvin (Erzya), Portuguese, Rājbanishi, Romanian, Russian, Saami (Skolt), Spanish, Swedish, Welsh, Yukaghir (Kolyma)
SE Asia and Oceania (13):	Hmong Njua, Indonesian, Kambara, Khmer, Kilivila, Lao, Malagasy, Meithei, Newari (Dolakha), Paamese, Semelai, Thai, Tukang Besi
Australia and New Guinea (23):	Alamblak, Arapesh, Daga, Gaagudju, Gooniyandi, Imonda, Inanwatan, Kayardild, Kobon, Lavukaleve, Malakmalak, Mangarrayi, Maung, Maybrat, Nabak, Sentani, Tauya, Una, Ungarinjin, Wambaya, Wardaman, Yelî Dnye, Yimas

North America (12):	Cree (Plains), Greenlandic (West), Halkomelem, Koasati, Maricopa, Mixtec (Chalcatongo), Osage, Pipil, Purépecha, Slave, Tiipay (Jamul), Wintu
South America (12):	Awa Pit, Hixkaryana, Hupda, Jarawara, Kwazá, Mapudungun, Mosetén, Rama, Sanuma, Trumai, Urarina, Yagua
Creoles (1):	Mauritian Creole

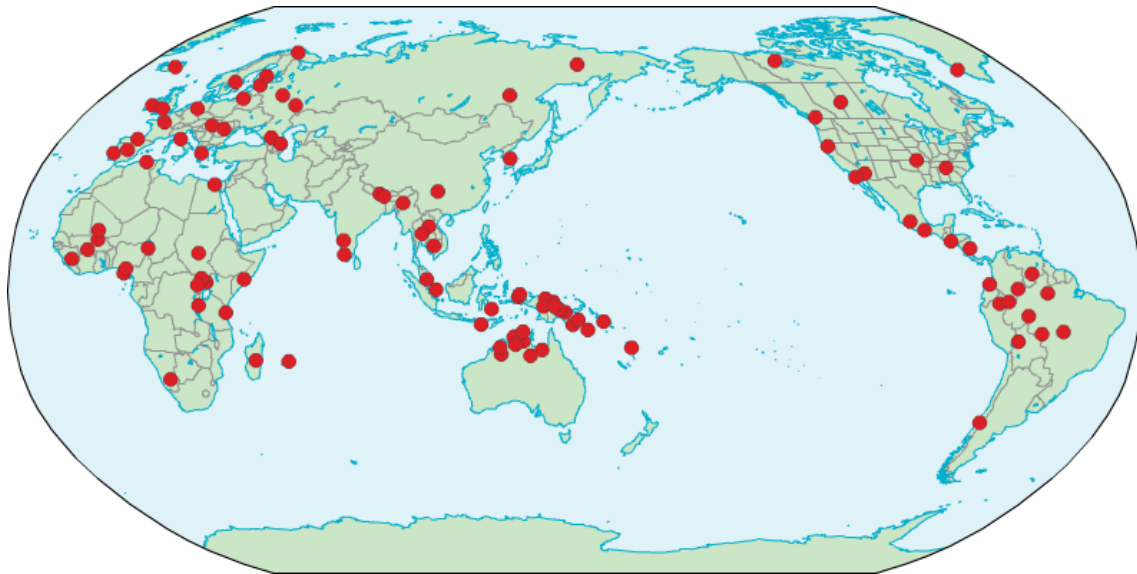


Figure 1. Sample languages (n = 105)

3. Symmetric and asymmetric polar interrogatives

We may observe symmetry and asymmetry in constructions and paradigms. In symmetric constructions, the presence of interrogative markers is the only difference as compared to the corresponding declaratives. This is the case, e.g., in Malayalam (2),¹ where the interrogative marker *-oo* appears clause-finally, and in Estonian (3), where the interrogative particle *kas* appear clause-initially.

¹ The following abbreviations are used in the glosses: 1 first person, 2 second person, 3 third person, ABS absolutive, ACC accusative, AFF affirmative, ALL allative, AOR aorist, ASS assertive, CNTMP contemporative, DAT dative, DECL declarative, DEF definite, ERG ergative, F feminine, FUT future, IMPF imperfective, IND indicative, INF infinitive, LCT locutor, LOC locative, NHYP nonhypothetical, NLCT non-locutor, NMLZ nominalizer, NPST nonpast, OBJ object, OBL oblique, PFV perfective, PL plural, POSS possessive, PRES present, PRT particle, PST past, PTCP participle, Q interrogative, REFL reflexive, SG singular, SOLCT solicitive, SS same subject, SUBJ subject, TOP topic, UNCERT uncertain, VN verbal noun.

(2) Malayalam (Asher and Kumari 1997: 8)

- | | |
|------------------------------|-----------------------------------|
| a. <i>ava</i> <i>varum</i> | b. <i>ava</i> <i>varum-oo</i> ? |
| she come.FUT | she come.FUT-Q |
| ‘She will come.’ | ‘Will she come?’ |

(3) Estonian (Erelt 2003: 108)

- | |
|--------------------------------------|
| a. <i>sa tule-d täna meile</i> |
| 2SG come-2SG today 2PL.ALL |
| ‘You will come to visit us today.’ |
| b. <i>kas sa tule-d täna meile ?</i> |
| Q 2SG come-2SG today 2PL.ALL |
| ‘Will you come to visit us today?’ |

In symmetric paradigms, the members of the paradigms used in declaratives and interrogatives show a one-to-one correspondence, and no grammatical distinctions are lost in the interrogative. This can be illustrated by the English paradigms in (4).

(4) English (constructed examples)

- | | | |
|------------|---|---|
| a. PRESENT | | b. PAST |
| | DECL Q | DECL Q |
| 1SG | <i>I sing do I sing ?</i> | <i>I sang did I sing ?</i> |
| 2SG | <i>you sing do you sing ?</i> | <i>you sang did you sing ?</i> |
| 3SG | <i>(s)he sings does (s)he sing ?</i> | <i>(s)he sang did (s)he sing ?</i> |
| 1PL | <i>we sing do we sing ?</i> | <i>we sang did we sing ?</i> |
| 2PL | <i>you sing do you sing ?</i> | <i>you sang did you sing ?</i> |
| 3PL | <i>they sing do they sing ?</i> | <i>they sang did they sing ?</i> |

Asymmetric interrogative constructions show structural differences as compared to the corresponding declaratives in addition to the presence of interrogative markers. In Halkomelem (5), the structure of the interrogative differs from the declarative in that interrogation is marked with an auxiliary and the lexical verb becomes less finite by losing its person marking to the auxiliary. In the Swedish interrogative construction (6) the asymmetry consists of a change in the position of the finite verb (verb fronting).

Asymmetric interrogatives – constructional or paradigmatic – may be further divided into subtypes according to the nature of the asymmetry, but this is not the main focus of the present study, where I will pay attention to how TAM categories behave in interrogatives. In symmetric interrogatives they are, by definition, expressed just like in declaratives. The cases that interest us are found within the asymmetric type. In other words, I will examine those cases of asymmetric interrogation where the asymmetry involves the marking of TAM categories. This will be the topic of the following section.

4. The marking of tense, aspect and mood in polar interrogatives

This section discusses the different ways in which the marking of TAM categories in polar interrogatives has been found to differ from their marking in declaratives. For each type, at least one glossed example is discussed, and after the examples, some other languages are mentioned where TAM marking behaves in a similar manner. For lack of space, I cannot give examples of all the languages mentioned.

In Purépecha (8), polar interrogatives are marked by a polar interrogative marker that is part of the mood system of the language. The interrogative suffix *-(k)i* appears in the position where the declarative suffix *-ti* would appear in declaratives (except in the future where the interrogative marker is zero).² The other moods appearing in the same position are subjunctive, imperative and exclamative.

(8) Purépecha (Chamoreau 2000: 113)

- a. *'pedru i'se-š-ti-Ø 'pablu-ni*
 pedro see-AOR-DECL-3SG pablo-OBJ
 'Pedro saw Pablo.'
- b. *'pedru i'se-š-ki-Ø 'pablu-ni ?*
 Pedro see-AOR-Q-3SG Pablo-OBJ
 'Did Pedro see Pablo?'

² It is not entirely clear whether a case where the marker of the marked category (e.g., interrogative) simply replaces the marker of the unmarked category (e.g., declarative) and no other changes occur should be analysed as asymmetric at all (cf. the discussion in Miestamo 2007: 304–305). Nevertheless, strictly speaking, we are dealing with a difference in TAM marking between interrogatives and declaratives here, and this is thus clearly relevant to the present discussion.

In West Greenlandic (9), the interrogative mood is a member of the mood paradigm including declarative, interrogative, imperative/optative, contemporative, causative, conditional and participial moods. These mood distinctions are made in the inflectional suffix that also carries the marking of person and number of subject and object. The distinction between declarative and interrogative is not made in all person-number combinations. In (9a,b) we can see that with 2nd person singular intransitives the declarative and interrogative moods differ, but (9c,d) show that with transitives involving 3rd person singular subject and object the markers are identical. The marking of mood is thus affected in only a subset of the available person-number combinations. In West Greenlandic intonation takes part in the marking of polar interrogation and in the cases where there is no morphological difference between declaratives and interrogatives, only intonation marks the distinction.

(9) West Greenlandic (Fortescue 1984: 4, 160, 192, 215)

- | | |
|---|--|
| <p>a. <i>immi-nut naalliut-sip-putit</i>
 self-ALL suffer-cause-2SG.IND
 ‘You caused yourself suffering.’</p> | <p>b. <i>niri-riir-pit ?</i>
 eat-already-2SG.Q
 ‘Have you already eaten?’</p> |
| <p>c. <i>savi-ni atur-nagu</i>
 knife-REFL.POSS use-SS.NEG.CNTMP.3SG.P
 ‘He killed the bear without (using) his his knife.’</p> | <p><i>nanuq tuqup-paa</i>
 polar.bear kill-3SG>3SG.IND</p> |
| <p>d. <i>piita-p takurnartaq tuqup-paa ?</i>
 Piitaq-ERG stranger kill-3SG>3SG.Q
 ‘Did Piitaq kill the stranger?’</p> | |

The marking of polar interrogation is part of the mood system, the polar interrogative marker appearing in the place of a declarative marker, also in Korean, Kwazá, Somali and Tauya, and in some contexts in Maricopa as well. In Una, the interrogative marker also belongs to the paradigm of mood markers, but as declarative mood has no overt marking, the interrogative marker is simply added to the declarative.

In Welsh, polar interrogation is marked by a change in the form of the auxiliary in periphrastic tenses using *bod* ‘be’ as auxiliary. The present tense of this auxiliary, and to some extent also the past, has different forms for (affirmative) declaratives and interrogatives (as well as for negatives, which are irrelevant here). In (10a) the 3rd singular present declarative form of the auxiliary appears and in (10b) we find the corresponding interrogative form. It can be noted that, in the sense that we have a change in mood marking here as well, the Welsh construction is not that far from

constructions where interrogation is part of the mood system as in Purépecha – the main difference being that the marker that changes has the status of an auxiliary verb, and is therefore perhaps simply at an earlier stage on the cline of grammaticalization.

(10) Welsh (King 2003: 169)

- a. *mae- 'r* *dyn 'na- 'n* *darllen* *y* *daily telegraph*
 be.PRES.3SG.DECL-DEF man there-PRT read.VN DEF Daily Telegraph
 ‘That man is reading / reads the Daily Telegraph.’
- b. *ydy- 'r* *dyn 'na- 'n* *darllen* *y* *daily telegraph ?*
 be.PRES.3SG.Q-DEF man there-PRT read.VN DEF Daily Telegraph
 ‘Is that man reading / does that man read the Daily Telegraph?’

In Kabardian (11), polar interrogatives lack the affirmative mood suffix *-s* that occurs in affirmative declaratives (except for the present active tense where the suffix is not used in declaratives either). In most of the TAM categories polar interrogation is thus marked by the absence of the mood suffix. The mood suffix is also absent in negatives and in irrealis contexts.

(11) Kabardian (Colarusso 1992: 122, 126)

- a. *sə-λaaža-aγ-s* b. *ha-r* *yəg^va-m* *ø-y-a-g^v-a-aγ ?*
 1SG-work-PST-AFF 3-ABS school-OBL 3-3-DAT-call-DAT-PST
 ‘I worked.’ ‘Was (s)he attending school?’

In Khoekhoe, too, polar interrogation involves the loss of the declarative marker, but this is not the only segmental indication of polar interrogation since there are other structural differences between interrogatives and declaratives as well (and furthermore, an emphatic interrogative marker may appear in the position of the declarative marker). In Maricopa and Purépecha, the interrogative mood marker is zero in some persons or TAM categories, and in these cases we are also dealing with the loss of a declarative marker.

In addition to the construction exemplified in (7), Awa Pit has another interrogative construction, in which the auxiliary-like element *ki* (or *sa*) appears and the lexical verb is in a participial or infinitival form (12). This construction can distinguish between three tenses: the use of the infinitive conveys a future meaning (12a), the imperfective participle expresses the present (12b) and the perfective participle refers to the past (12c).

(12) Awa Pit (Curnow 1997: 324–325)

- a. *tilawa a-n ki-s ?*
 tomorrow come-IMP PTCP Q-LCT
 ‘Are you coming tomorrow?’
- b. *ashaŋpa mil ki-s ?*
 woman have[IMP PTCP] Q-LCT
 ‘Do you have a wife?’
- c. *nu=na ricaurte=mal i-t ki-s ?*
 2SG=TOP Ricaurte=LOC go-PFV PTCP Q-LCT
 ‘Did you go to Ricaurte?’

In the Halkomelem interrogative auxiliary construction (4), the marking of TAM categories is also affected in that the past and future markers occur on the auxiliary instead of the verb on which they would occur in the corresponding declaratives.

In Meithei (13), polar interrogatives are marked with the suffix *-lə*, which can only appear on nominalized verb forms. In (13d) *-lə* is preceded by the nominalizer *-pə*. Derivational TAM categories such as the perfective occur quite freely with the nominalizer, but inflectional categories such as the nonhypothetical or the assertive do not and TAM distinctions made by the inflectional categories are thus lost in the interrogative. Some derivational TAM suffixes, e.g. the potential and the non-potential, are inherently nominalizing, and the polar interrogative marker can thus be added to these forms.³

(13) Meithei (Chelliah 1997: 133, 140, 240)

- a. *təw-i* b. *təw-e* c. *mə-hák lak-lə-e*
 do-NHYP do-ASS 3-here come-PFV-ASS
 ‘(She) does.’ ‘(Yes, she) has.’ ‘He came.’
- d. *sém-thok-lə-pə-lə-o ?*
 correct-out-PFV-NMLZ-Q-SOLCT
 ‘Did they complete the corrections?’

In Hixkaryana (14) polar interrogation is marked by intonation. The language can make a distinction between nonpast and nonpast uncertain tenses, but in polar

³ I am grateful to Shobhana Chelliah for confirming these facts in personal communication.

interrogatives only the latter category may be used (14b).⁴ There is thus paradigmatic asymmetry between declaratives and interrogatives in that the certain-uncertain distinction is lost in nonpast interrogatives. Another case where TAM distinctions made in declaratives are lost in interrogatives was seen in Awa Pit (7) above. In Awa Pit, the loss of the distinctions is due to morphological incompatibility of the question marker and the markers of the categories expressing the TAM distinctions that are lost. In Hixkaryana this is not the case, and the loss of the distinction appears to be semantically motivated (a request for information involves lower certainty on the part of the speaker).

(14) Hixkaryana (Derbyshire 1985: 57)

- | | |
|----------------------|---|
| a. <i>nomok-yaha</i> | b. <i>nomok-yano</i> (?) |
| 3.come-NPST | 3.come-NPST.UNCERT |
| ‘He is coming.’ | ‘Is he coming?’ / [‘He is perhaps coming.’] |

Loss of at least some TAM distinctions in polar interrogatives through mutual (morphological) incompatibility with the polar interrogative marker has also been found in West Greenlandic, Korean, Purépecha, Jamul Tiipay, Una, and more marginally in Basque and Imonda. The absence of mood marking in Kabardian also leads to the loss of some TAM distinctions. It should be noted that in West Greenlandic, Korean and Purépecha, the categories that are mutually exclusive with the interrogative marker are mood categories that are functionally incompatible with the interrogative to start with, e.g., declarative and imperative, and are thus, strictly speaking, irrelevant in a comparison between interrogatives and declaratives. In the other languages mentioned, as seen in the Awa Pit and Hixkaryana examples, at least some of the categories that are lost in interrogatives could, from a semantic point of view, be expressed in interrogatives. Lack of space precludes a more detailed discussion of these cases.

I have now discussed and exemplified the asymmetries concerning the marking of TAM in interrogatives vs. declaratives, i.e. the different ways in which the marking of TAM categories in polar interrogatives differs from their marking in declaratives in the sample languages. The following types were found: 1) interrogative marking is part of the mood system and replaces declarative mood marking in the same morphosyntactic position (e.g., in Purépecha, West Greenlandic and Welsh), 2) polar interrogation

⁴ No example of a declarative with a nonpast uncertain tense verb, parallel with the examples in (14a), was found in the source. The translation in square brackets in (14b) shows what the meaning of the sentence without question intonation would be according to my reading of the source.

involves the loss of a declarative mood marker without the latter being replaced by an interrogative marker in the same morphosyntactic position (e.g., in Kabardian), 3) polar interrogation is expressed by an auxiliary construction that marks at least some TAM categories in a different way from how they are marked in declaratives (e.g., in Awa Pit), 4) the construction expressing polar interrogation requires the verb to be in a nominalized form which has an effect on the marking of least some TAM categories (e.g., in Meithei), 5) some or all TAM distinctions made in the declarative are lost in polar interrogatives (e.g., in Hixkaryana and Awa Pit). Note that this classification must be regarded as tentative at this pilot stage of the study.

In addition to the comparison between interrogative and declarative structure, we may also note that in a number of languages different interrogative constructions are used in different TAM categories. This is the case, e.g., in Awa Pit, where past tense interrogatives may use the suffixal construction (7) but other tenses must use the auxiliary construction (12), as well as in Halkomelem, Jarawara, and Welsh.

5. A comparison with negation

The ways in which TAM categories behave in polar interrogatives (vs. declaratives) can be compared to earlier observations about their behaviour in declarative negatives (vs. affirmatives) made in (Miestamo 2005; Miestamo & van der Auwera, in press). First of all, we may observe that the loss of TAM distinctions is clearly less common in polar interrogation than in declarative negation; a preliminary count based on the pilot sample shows loss of TAM distinctions in polar interrogatives in 11 languages (including the three strictly speaking irrelevant cases mentioned above), whereas in negation this happens in 21 out of the 105 languages.⁵ Furthermore, unlike in declarative negatives, the loss of TAM categories in polar interrogatives is almost always due to morphological incompatibility (occupying the same slot) with the question marker (naturally, semantics is partly responsible for which markers occur in the same slot). The only clear exception is found in Hixkaryana, where morphological incompatibility does not play a role, and the exclusion appears to be semantically motivated. In polar interrogatives, the loss of categories due to occupying the same slot most typically results in the loss of mood distinctions, and other categories are less

⁵ The difference is interesting for the discussion on how the asymmetries observed between marked and unmarked categories can be explained (cf. Haspelmath 2006), see (Miestamo 2007) for discussion.

commonly affected. In negatives, tense, aspect and mood are equally often affected.

Another interesting difference between interrogatives and negatives can be observed in how they relate to irrealis marking. Both polar interrogatives and declarative negatives are prototypically about states of affairs that are either unrealized or whose reality status is not known to the speaker, and thus it could be expected that they behave similarly with respect to irrealis marking. My study shows, however, that irrealis marking is required in declarative negatives much more often than in polar interrogatives. In the 105-language pilot sample, there are 8 languages where declarative negatives require irrealis marking (at least in some TAM categories) but polar interrogatives can freely use realis as well (Alamblak, Arapesh, Halkomelem, Korean, Mangarrayi, Maung, Ungarinjin, and Wambaya), but there is only one language where the opposite is the case (Hixkaryana). In one language both polar interrogatives and declarative negatives must use an irrealis form (the non-declarative marked form in Kabardian), and in all the rest of the sample, realis can be freely used in both negatives and interrogatives. I do not have an explanation to offer for this difference at this point, but the line of explanation proposed by Mithun (1995), where the difference found in Caddo vs. Central Pomo is accounted for by scope differences, might be worth pursuing.

6. Conclusion

In this paper, I have taken a preliminary look at TAM marking in polar interrogatives, paying special attention to how it differs from TAM marking in declaratives. The observations are based on a pilot sample of 105 languages. I first illustrated the distinction between symmetric and asymmetric interrogatives, then discussed the ways in which TAM marking was found to differ between interrogatives and declaratives, and then compared the findings to similar observations made on negatives (vs. affirmatives). In future work, these preliminary results must be re-examined with a much more extensive and representative sample, which will certainly reveal additional interesting phenomena concerning TAM in polar interrogatives and result in modifications of the preliminary typology proposed here. The issue of explaining the cross-linguistic findings can then also be addressed.

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