

Chapter 1

The apprehensional domain in A'ingae (Cofán)

Maksymilian Dąbkowski

Brown University

Scott AnderBois

Brown University

This paper provides the first detailed description of the apprehensional domain in A'ingae (Cofán, ISO 639-3: con), with the cross-linguistic category of *apprehension* defined as a mixed modality encoding both undesirability and epistemic possibility.

We contribute to the study of apprehensional typology by reporting on a language of a heretofore unattested profile: one apprehensional morpheme =*sane* 'APPR' spanning robust precautioning uses (both avertive and in-case), robust negative-verbal complementizer uses, restricted timitive uses, and marginal apprehensive uses.

1 Introduction

Grammatical morphemes encoding emotions, with the exception of surprise and its correspondent *mirative* category, received little attention in typological studies. It has even been suggested that surprise is the only emotion for which dedicated morphology can be found across the world's language (Majid 2012; Foolen 2012). This has been met with a challenge in Vuillermet (2018) who proposed a semantic category of morphologically encoded fear or apprehension.

Formally and semantically versatile, *apprehension* is defined as a mixed modality encoding both undesirability and epistemic possibility. Although the category has varied and robust manifestations across languages, it has been largely overlooked by descriptive grammarians, typologists, and formal analysts alike until quite recently (for extant descriptions, see Lichtenberk 1995; Green 1989; François

2003; Dobrushina 2006; Pakendorf & Schalley 2007; Angelo & Schultze-Berndt 2016; Vuillermet 2018).

In this paper, we contribute to the cross-linguistic understanding of the apprehensional domain through a detailed exploration of apprehensional forms in A'ingae (Cofán, ISO 639-3: con), an isolate language of Amazonia, spoken by approximately 2,000 speakers in Northeastern Ecuador and Southern Colombia.

In line with the nascent understanding of the apprehensional domain emergent from cross-linguistic research (Vuillermet 2017), we distinguish four different main uses of apprehensional morphology.

First, the *apprehensive* proper encodes a highly probable undesirable situation and is typically associated with matrix-clausal uses. It is often employed to convey warnings. No English construction directly corresponds to it; it can be best rendered by *beware* (possibly in combination with *lest*), *watch out* (both encoding undesirability), *might* (encoding high likelihood), or negative imperative (encoding a warning).

Second, the *precautioning*—prototypically biclausal—function hypotactically relates an undesirable event to a precaution aimed to counteract it. The situation expressed in the subordinate clause marked with precautioning morphology is known as *apprehension-causing* while the situation expressed in the matrix clause is known as *preemptive*. Previous literature has distinguished two subfunctions, labeled *avertive* and *in-case*. The avertive subfunction refers to uses where the preemptive situation is aimed at forestalling the apprehension-causing one, while the in-case subfunction—to uses where the preemptive situation is aimed only at mitigating its negative consequences. In English, the negative purpose constructions *in order not to* or *so as not to* express only the avertive semantics, although the largely archaic *lest* can be used to express both the avertive and in-case subfunctions.

Third, the *timitive* introduces a noun phrase in a manner similar to case or adpositions. The timitive relates a feared entity to the matrix-clausal situation it triggered. These uses are best translated by English constructions involving *for fear of*.

Fourth, the *complementizer* function is to head the complements of certain negative verbs, most often associated with the emotion of fear. Here again, English translations are not straightforward, as the complementizer of fear predicates is most often *that* or null, although *lest* can also be archaically used.

While some languages have distinct morphological manifestations for various of these different categories, others have morphemes that can be used across several of them. So is the case in A'ingae, whose only apprehensional morpheme

=sane 'APPR' is multifunctional. It is used most robustly as a head of subordinate clauses introducing apprehension-causing situations (precautioning function, 1), and to mark complements of certain verbs (complementizer function, 2). It also occurs in a somewhat restricted fashion as a timitive (3), and even more marginally as an apprehensive (4). For syntactic clarity, constituents headed by =sane 'APPR' and some subordinate clauses in the examples given across the paper will be bracketed.

- (1) *phuraen kan-ñakha [amphi ja=sane]*
touch try-ITER fall go=APPR
'He felt with his hand so as not to fall down.'
(20170803_dyandyaccu_LC: 40)
- (2) *[tsama ña dañu=sane=khe] dyuju-je=ya*
but 1SG be hurt=APPR=THUS be afraid-IMPV=VER
'But I didn't want to get hurt.'
(20170731_yaje2_MM: 53)
- (3) *[anae'ma=ni=ngi phi thesi=sa'ne]*
hammock=LOC=1 sit jaguar=APPR
'I'm in a hammock for fear of a jaguar.'
- (4) *[tsai-ye=sane]*
bite-PASS=APPR
'You might get bitten.'

An immediate question that arises in such cases is that of the relationship between various apprehensional functions. Is it solely diachronic? Does it arise from a uniform semantics which is more general, or from a covert ambiguity or polyfunctionality? Do some functions—or aspects of their semantics—pattern together? For example, does the availability of in-case uses of one apprehensional morpheme entail anything about its reading in a apprehensive role? Furthermore, what is the relation of the apprehensional domain in a language to other related domains, most notably the infinitive in the case of A'ingae, which also tends to have a prospective or irrealis modality and a variety of formally distinct adjunct and argument uses?

Beyond providing the first detailed description of A'ingae =sane APPR, we add to the study of the apprehensional domain a language with previously unreported typological profile: robust precautioning and fear complement uses, restricted timitive uses, and marginal apprehensive uses. We argue that the apprehensive uses of =sane 'APPR' are instances of partially conventionalized uses

of subordinate clauses. They occupy, therefore, an intermediate stage in the diachronic trajectory of insubordination proposed by Evans (2007). Lastly, although a proper formal semantic analysis is beyond the scope of this paper, we gesture at common threads across the different functions of =sane ‘APPR’ to point out how the semantic commonalities underlying all of them are responsible for the range of functions attested.

The road map for the remainder of the paper is as follows: §2 briefly presents background on A’ingae and the data used here; §3 examines the precautioning use of =sane APPR as a subordinator; §4 examines the use of =sane APPR as a complementizer of *dyuju* ‘be afraid’ and other negatively valenced predicates; §5 examines the timitive use; §6 examines the apprehensive use; §7 concludes.

2 Background

A’ingae (Cofán) is an indigenous language spoken by around 2,000 people in the province of Sucumbíos in northeast Ecuador as well as southern Colombia (Fischer & Hengeveld forthcoming). Despite being an isolate, a number of aspects of its grammar, both phonologically and morphosyntactically, point towards membership in the Amazonian sprachbund (Fischer & Hengeveld forthcoming; Repetti-Ludlow et al. 2019; AnderBois & Sanker 2019; AnderBois et al. 2019).

Outside of a few brief word lists, the first contributions to the systematic study of A’ingae were made by Marlytte Bub Borman and Roberta Bobbie Borman, missionary linguists first active in the Cofán communities in 1950’s. Borman (1976) provides the first (and only) substantial dictionary; Borman & Criollo (1990)—a collection of cosmological narratives. Other notable works include a grammatical sketch by Fischer & Hengeveld (forthcoming), a traditional story collection (Blaser & Umenda 2008), and the scholarly output of A’ingae Language Documentation Project (which includes, but is not limited to, AnderBois & Silva 2018; Repetti-Ludlow et al. 2019; AnderBois & Sanker 2019; Pride et al. forthcoming; Dąbkowski in preparation).

An orthography for the language was first developed by the Bormans, and recently revised by members of the Cofán communities themselves. The present chapter makes use of the revised orthography. For details, see Fischer & Hengeveld (forthcoming) and Repetti-Ludlow et al. (2019). The data here are presented in this revised practical orthography.

While phonological and orthographic details are generally not relevant here, one slight exception is the presence of glottal stops. Glottal stops are frequently

contrastive (at least in some positions) and represented by apostrophes orthographically. Nevertheless, they are not transcribed consistently by native speakers. Furthermore, glottal stops influence the position of lexical stress and lexical stress, conversely, influences the surfacing of glottal stops: in unstressed positions, glottal stops tend to be realized suprasegmentally or not realized at all. This interplay feeds back into the orthography, as apostrophes end up being used to cue lexical stress and, therefore, morphological boundaries (Dąbkowski *in preparation*).

Across all of its uses, apprehensional =*sane* 'APPR'—like many other morphemes—shows variation between variants with, =*sa'ne* 'APPR,' and without a glottal stop, =*sane* 'APPR.' Since this difference does not appear to be semantically important and the phonetic/phonological reality is somewhat unclear, we retain the forms of previous published works and native speaker transcriptions in naturalistic data. In elicited data, we do not transcribe the glottal stops.¹

The preponderance of our data comes from the fieldwork conducted by the authors. The naturalistic interviews and elicitation sessions which form the basis of our analyses come from our work with speakers representing three Ecuadorian communities: Zábalo, Sinangoé, and Dureno. If naturalistic, the citation accompanying the example contains the identifier (file name) and line number in the collection deposited by AnderBois & Silva (2018) with the Endangered Languages Archive at SOAS University of London. If elicited, no citation is given. A minority of the data sourced from written texts is cited as such, but updated to the revised orthography.

2.1 Typological profile

A'ingae is a head-final language, with predominantly SOV basic word order. In matrix clauses, word order is largely free, though with a preference for SOV and subject to a variety of pragmatic demands (Fischer & Hengeveld *forthcoming*). Subordinate clauses are strictly verb final, a fact which we make use of below (see §2.2 for more detail).

Functional morphology of the language is dominated by enclitics, with a lesser role of suffixation. The verbal paradigm is quite complex with many verbal and

¹One further complication we have noticed is that older sources (i.e. the work of the Bormans and their collaborators) often shows glottal stops in places where modern-day transcribers do not and for which phonetic support is not immediately clear. This is especially true in unstressed positions, and is suggestive of a progressive loss of glottal stop therein. These complexities, however, are not at all unique to =*sa'ne* 'APPR' and we refer the interested reader to Dąbkowski (*in preparation*) for more detailed discussion and analysis.

clausal morphemes typically present, significant ordering restrictions between them, as well as morphophonological interactions with stress and glottalization. Verbal morphology is discussed more fully in §2.3.

The language is consistently dependent marking, with verbal dependents marked for case in a nominative-accusative alignment. The four cases most commonly used to introduce verbal arguments include the nominative (unmarked, 5-8), the dative =*nga* ‘DAT’ (6), as well as two accusatives =*ma* ‘ACC’ and =*ve* ‘ACC2’ (nasal allomorph =*me* ‘ACC’). Although the semantics of the two accusatives isn’t fully understood, one dimension along which they’re differentiated is that of affect-*edness*. Thus, with =*ma* ‘ACC’ marking the prototypical affected object and =*ve* ‘ACC2’ marking the unaffected or absent object, the distinction between the two can resemble that of the more familiar accusative/partitive split (7-8).

- (5) *ña būthu-’je*
1SG running-IMPV
‘I am running.’
- (6) *dyu=ngi thesi=nga*
be scared=1 jaguar=DAT
‘A jaguar scared me.’
- (7) *khuanifae’khu kunsin=ma fi’thi*
three monkey=ACC kill
‘I killed three monkeys (out of three).’
- (8) *khuanifae’khu kunsin=me fi’thi*
three monkey=ACC2 kill
‘I killed three monkeys (out of more than three).’

As seen in the above analyses, case is expressed via clitics. The clitic-hood of A’ingae case markings is corroborated by their stress profile (they stand outside of the phonological noun, Dąbkowski in preparation) as well as by their NP-final position, regardless of its internal order, as seen in (9-10) (Fischer & Hengeveld forthcoming).

- (9) *rande tsa’u=ma athe*
large house=ACC see
‘I saw a large house.’
- (10) *tsa’u rande=ma athe*
house large=ACC see
‘I saw a large house.’

2.2 Subordination

A *subordinate clause* is a clause which forms a part of another clause, often the *matrix clause*. Subordinate clauses do not constitute full sentences on their own. Their relationship to the matrix clause, both semantic and syntactic, is that of dependence, or *hypotaxis*.

Subordinate clauses can be further subdivided between *argument clauses* and *adjunct clauses*. While the distinction is in some cases fraught, argument clauses are—broadly speaking—syntactically mandatory, semantically essential, and selected for by particular predicates in accordance with their semantic nature. Adjunct clauses, on the other hand, are optional, provide inessential information (i.e. are modifiers), and have no special relationship with the predicates of the clauses in which they occur.

Just as infinitives in a language like English have both argument and adjunct uses, we will see below that A'ingae =*sane* 'APPR' clauses do too. We therefore summarize these two classes of subordinate clauses in A'ingae, noting key similarities and differences.

2.2.1 Argument clauses

In A'ingae, various types of subordinate clauses can serve as verbal arguments. All subordinate clauses carry enclitics on their main verbs which, due to the rigidly verb-final word order of subordinate clauses, are at the same time clause-final. The argument clause can appear to the left or right of the matrix clause.

The first, most general strategy for sentential subordination involves the subordinator =*'chu* 'SBRD.' Since the subordinator =*'chu* 'SBRD' creates formal nominalizations, =*'chu* 'SBRD' clauses can appear in all the same environments as NPs. It commonly forms headless relative clauses (11), but can also be used to form clausal complements (12). Sometimes, an ambiguity between a headless relative and a clausal complement parse results (13). As nominalizations, these clauses are case-marked like other nominal expressions, here with =*ma* 'ACC' (12-13).

- (11) *tise* [*tsa changu sheke*=*'chu*=*nga*] *ja*=*'ya*
 3SG ANA hole be scattered=SBRD=DAT go=VER
 'He ran to where the holes were.' (20170804_kuke_chiste_FACQ: 209)
- (12) *pañā=ña* [*tise dūshû=n'dekhû ina-jen*=*'chu*=*ma*]
 understand=VER 3SG child=PLH cry-IMPV=SBRD=ACC
 'He realized his children were crying.' (20170803_dyandyaccu_LC: 72)

- (13) *atesû=ngi [dû'shû kinijin=nga mandian-ñe='chu=ma]*
 know=1 child large tree=DAT chase-PASS=SBRD=ACC
 'I know a child that was chased by a large tree.'
 'I know that a child was chased by a large tree.'

Among sentential complementation strategies not reliant on nominalization, we find complements introduced by the infinitival =*ye* 'INF,' manner deictic =*khen* 'THUS,' adverbial =*e* 'ADV,' attributive =*sû* 'ATTR,' and apprehensional =*sane* 'APPR'.

The category of verbs selecting for infinitival =*ye* 'INF' clauses includes, among others, attitude verbs such as *in'jan* 'want' or *chi'ga* 'not want' and modal verbs such as *tsun* 'do' (prospective semantics) or *atesû* 'know' (habitual or acquired ability semantics, Fischer & Hengeveld forthcoming).

- (14) *in'jan=gi [panza=ye]*
 want=1 hunt=INF
 'I want to hunt.'
- (15) *chi'ga=fa [thûthû=ye] tsa'ka=mba=tsû akhia=yi ansûnde=pa*
 not want=PLS fell=INF thus=SS=3 only=EXCL go up=ss
cha'thû=fa=ya
 prune=PLS=VER
 'They did not want to chop down the trees, only go up and cut the leaves.'
 (20170731_building_house_sapohe_mmemq_jc_: 15)
- (16) [*ya jañu=ngi asha-en=ñe] tsun-jen=fa*
 already now=1 beginning-CAUS=INF do-IMPV=PLS
 'Now we're going to start.' (20170801_autobiography_CLC: 1)
- (17) [*tsa=ma tshe'tshe=pa yaya'khashe'ye=ye ujun=ñe] atesû*
 ANA=ACC mash=ss grandfather=HONR bathe=INF know
 'My grandfather would mash it and use it to bathe.'
 (20170807_autobiography_JWC: 72)

Verba dicendi, *in'jan* 'think,' *tsun* 'do' and *iyikhu* 'fight' select for manner deictic =*khen* 'THUS' clauses. With verba dicendi and *in'jan* construed cognitively (i.e. to mean 'think'), the reading is that of speech (18) or thought report (19). With *tsun* 'do' and *iyikhu* 'fight', the reading is that of desire or intention (20).

- (18) [*i=pa vasû=ma chava=ja khen] sû=ni ...*
 bring=ss this kind=ACC buy=IMP THUS say=LOC ...
 'When they brought it and said «buy this kind»...'
 (20170730_comentario_sobre_lengua_vc_copy: 122)

- (19) *tsa tsandû injan=ña [tetete fithi=khen]*
 ANA husband think=VER Teteté kill=THUS
 'The husband thought the Tetetés killed her.'
 (20170804_erision_cuento_FACQ: 30)

- (20) [*fetha=khen*]=ngi {*tsun-'jen, iyikhu-'je*}
 open=THUS=1 {do-IMPV, fight-IMPV}
 'I'm {trying, struggling} to open it.'

The verb *da* 'become' selects for accusative 2 nominalized clauses =*'chuve* 'SBRD.ACC2' (21) or adverbial =*e* 'ADV' clauses (22).

- (21) [*pa=ya=chu=ve*] *da=ya*
 die=IRR=SBRD=ACC2 become=VER
 'He was going to die.'
 (20170806_sapo_pushesu_BRCA: 89)

- (22) *tsa=ta=te [tsûthe'=ma tsai-kha=ka=en] da=si dûshû*
 ANA=NEW=REPR foot=ACC bite-DIMN=CMP=ADV become=DS child
ina
cry
 'The child cries because of biting sensation on their feet.'
 (20170803_garden_medicinal_plants_LC: 45)

Motion verbs can select for attributive =*'sû* 'ATTR' clauses to express the purpose of the motion (23).

- (23) [*kûndyi='sû*] *jayi*
 urinate=ATTR go.PRSP
 'I'm off for a slash.'

Finally, verbs such as *dyuju* 'be afraid,' *anse'nge* 'be ashamed,' *se'pi* 'prohibit,' and *chi'ga* 'not want,' select for =*sane* 'APPR.' The complementizer function of =*sane* 'APPR' is discussed more fully in §4, especially since it is not immediately clear that these are complements as opposed to adjuncts with precautioning =*sane* 'APPR' (24).

- (24) *dyuju=ngi [thesi ña=ma mandian=sa'ne]*
 be afraid=1 jaguar 1=ACC chase=APPR
 argument paraphrase: 'I am afraid that the jaguar would chase me.'
 adjunct paraphrase: '#I would be afraid in case a jaguar would chase me.'

2.2.2 Adjunct clauses

There are many available strategies in the language for adjunction. As adjunct clauses are not selected for by the matrix verb, but rather modify the predicate or the clause, there are no particular restrictions on which types of adjunct clauses can go together with which verbs. Like argument clauses, adjunct clauses carry enclitics and can appear on either side of the matrix clause.

One common strategy for adjunction involves the nominalizing subordinator =*'chu* 'SBRD' in conjunction with oblique case marking (25).

- (25) [giyatshe fündûi=pa tayu thuni=ma=khe kati=chu=nga]=te
 cleanly sweep=ss already shell=ACC=ADD cast out=SBRD=DAT=REPR
 bitha=ya
 wake up=VER
 'When he woke up, everything had been cleanly swept and the shells had
 been cast out.'
 literally: 'He woke up to [everything] having been swept clear, shells
 having been cast out.' (20170730_kunsiana_cuento_VC2: 164)

A number of strategies rely on the adverbializing clitic =*e* 'ADV,' which in combination with the negative polarity clitic =*mbi* 'NEG' and the qualitative clitic =*tshi* 'QUAL' yields the negative circumstance clitic =*mbe* 'NEG.ADV' and the qualitative circumstance clause =*tshe* 'QUAL.ADV,' respectively (26-27).

- (26) jûn ñutshe=tsû jayi=fa pûiyikhu panshan=mba
 hm well=3 go.PRSP=PLS everyone pass=ss
 [kati-ye=mbi=tsh=e]
 cast out-PASS=NEG=QUAL=ADV
 'They all pass without repeating a year.'
 literally: 'They are all going well and pass, not having been cast out.'
 (20170801_autobiography_CLC: 231)
- (27) [kati-ye=mb=e=yi] jayi=fa=ya
 cast out-PASS=NEG=ADV=EXCL go.PRSP=PLS=VER
 'They don't repeat a year.'
 literally: 'Not being cast out, they are going.'
 (20170801_autobiography_CLC: 232)

Other common strategies include the locative clitic =*ni* 'LOC'² to signal a temporal relation between two clauses (28), the infinitive clitic =*ye* 'INF' to express positive purpose semantics (29), the new =*ta* 'NEW' and contrastive =*ja* 'CNTR' topic clitics to signal a conditional relation between two clauses (30), as well as the apprehensional clitic =*sane* 'APPR' for undesirable outcome clauses in precautioning sentences (31). The precautioning function of =*sane* 'APPR' is discussed more fully in §3.

- (28) *tša=te, tise tsûthe'=ma tsai='ya, [kan dyai='ni]*
 ANA=REPR 3SG foot=ACC bite=VER look sit=LOC
 'As he watched, it bit him on the foot.' (20170803_dyandyaccu_LC: 70)
- (29) *sema-'je=ngi [ankhe'sû=ma a'mbian=ñe]*
 work-IMPV=1 food=ACC have=INF
 'I am working to have food.'
- (30) *[tsesû=ve da=ta]=ki [atesû=mbi=ja] pa=ya nane*
 DIST=ACC2 become=NEW=2 know=NEG==CNTR die=IRR truly
 'If that happens to anyone, and if you do not know, that may cause death.'
 (20170803_garden_medicinal_plants_LC: 31)
- (31) *pa'khu a'ta ja-je=ya tša undikhûje=ma khani=nde*
 every day go-IMPV=VER ANA robe=ACC elsewhere=REPR
tša'u-ñā=mba ambian=ñā [tise khashe athe=pa ja=sane]
 house-CAUS=SS have=VER 3SG old woman see=SS go=APPR
 'Every day he would go to see the clothes because he had them in another house far away so that his wife does not see them.'
 (20170730_kunsiana_cuento_VC2: 77-79)

2.2.3 Subordination diagnostics

The subordinate status of a clause can be ascertained via a number of diagnostics. Below, we present three such diagnostics, one of which is semantic, the other two syntactic.

First, the subordinate status can be identified via scopal means. For example, the negation scoping over the infinitival clause testifies to its subordinate status. A paratactic analysis here would predict a clearly incorrect meaning (32).³

²The nominal variant of the morpheme, =*ni* 'LOC,' has more straightforwardly locative semantics; hence the gloss.

³The hypothetically available adjunct reading ('I don't want it in order to hunt.') is impossible or very difficult to get here.

- (32) *in'jan=mbi=gi* [*panza=ye*]
 want=NEG=1 hunt=INF
 subordinate analysis: 'I don't want to hunt.'
 paratactic analysis: '#I don't want to. I'm off to hunt.'

Second, the subordinate status can be corroborated by restrictions on word order. While word order in matrix clauses is quite flexible, subordinate clauses are strictly verb final (Fischer & Hengeveld forthcoming), as in (33-34). Below, we will apply their diagnostic to *=sane* 'APPR,' which they do not explicitly discuss.

- (33) [*ûnjîn tûi='ni=nda*]=*ngi* *avûja=ya*
 rain splash=LOC=NEW=1 rejoice=IRR
 'I will be happy if it rains.'
- (34) *[*tûi='ni=nda=ngi* *ûnjîn*] *avûja=ya*
 splash=LOC=NEW=1 rain rejoice=IRR
 intended: 'I will be happy if it rains.'

Third, the subordinate status can be established by a restriction on the occurrence of sentence-level clitics. These include the reportative evidential *=te* 'REPR' (nasal allomorph: *=nde*) and the polar interrogative *=ti* 'INT' (nasal allomorph: *=ndi*), as well as the optional first person *=ngi* '1,' second person *=ki* '2,' and third person *=tsû* '3' clitics, which encode, sometimes redundantly, the sentential subject. All of the sentence-level clitics occur close to the left edge of the clause, often in second position. (They are Wackernagel clitics, modulo information structure-sensitive permutations of word order, which can obscure their second position nature.) Fischer & Hengeveld (forthcoming) observe that their distribution is limited to matrix clauses only (35), which constitutes our last test for distinguishing them from matrix clauses.

- (35) *[*ûnjîn*{*=ngi*, *=tsû*} *tûi='ni=nda*] *avûja=ya*
 rain{=1, =3} splash=LOC=NEW rejoice=IRR
 intended: 'I will be happy if it rains.'

2.3 Conjugation

There are several dozen inflectional morphemes, both suffixes and enclitics, that can attach to verbs across a dozen or so inflectional slots. A fragment of the verbal template is given in Table 1.⁴ For the full template and its justification,

⁴Only those inflectional clitics are listed which will be relevant to the discussion of the paradigmatic status of the apprehensional clitic *=sane* 'APPR.' Valences suffixes, aspectual suffixes, and

see Dąbkowski (in preparation) (see also Fischer & Hengeveld (forthcoming) for an alternative template). The template captures the ordering of inflectional morphemes as well as the co-occurrence restrictions that obtain among them. As such, it is a visual representation of a generative algorithm for A'ingae conjugation. To generate a legal verbal form, go from left to right picking at most one morpheme per column along the way. Do not cross the horizontal lines.

Table 1: Verbal inflectional template, a fragment.

...	NUM	MOD	POL	TAX	TOP	FOC	...
				= 'ya			
				VER			
				=pa			
				SS			
				=si	= 'ta	= 'khe	
		=ya	=mbi	DS	NEW	ADD	
		IRR	NEG	= 'ma			
				FRST			
				= 'ni			
				LOC			
	= 'fa			=sane	= 'ja		
	PLS			APPR	CNTR		
				=ye			
				INF			
				=ja			
				IMP			
				=kha			
				IMP2			
				= 'se			
				IMP3			
				=jama			
				PROH			

associated motion suffixes, which all come before the plural subject = 'fa 'PLS' number NUM clitic, are omitted. So are the second-position clitics (the polar interrogative =ti 'INT' clitic, the reportative evidential =te 'REPR' clitic, as well as the person subject clitics), which all come after the topic TOP and focus FOC clitics.

The number NUM slot lists the only number clitic, the plural subject =*'fa* 'PLS.' The modality MOD slot lists one modal clitic, the irrealis =*ya* 'IRR,' although other clitics (e.g. the imperatives given in the taxis TAX slot) also arguably express modal semantics. The polarity POL slot lists one negative indicative =*mbi* 'NEG,' although negativity can also be expressed in the semantics of the frustrative =*'ma* 'FRST' and the prohibitive =*jama* 'PROH,' too.

The taxis TAX slot lists all the clitics which appear in a clause-final position,⁵ do not co-occur with other taxis TAX clitics, and which establish its status as independent or dependent.

Among subordinating clitics figure the same subject =*pa* 'SS,' which signals identity between subjects of two clauses, the different subject =*si* 'DS,' which signals non-identity between subjects of two clauses,⁶ the frustrative =*'ma* 'FRST,' which signals a frustration of otherwise anticipated consequences of the encoded clause, the locative =*'ni* 'LOC,' the apprehensional =*sane* 'APPR' (our focus here), as well as the infinitive =*ye* 'INF.'

Among matrix clausal clitics figure the three imperatives =*ja* 'IMP,' =*kha* 'IMP2,' and =*'se* 'IMP3,' the semantic differences among which are not well understood, the prohibitive =*jama* 'PROH,' expressing negative commands—or prohibitions, and the “elusive” veridical =*'ya* 'VER,' as epithetized by Fischer & Hengeveld (forthcoming: p. 35), whose semantics is likewise unclear, but whose restrictions on co-occurrence with other speech act clitics justify its gloss.

The topic TOP and focus FOC slots lists three versatile discourse structure clitics: new topic =*'ta* 'NEW,' contrastive topic =*'ja* 'CNTR,' and additive focus =*'khe* 'ADD.' One of their uses is to mark conditional antecedents. The fourth discourse structure clitic listed by Fischer & Hengeveld (forthcoming), the exclusive focus =*'yi* 'EXCL,' has not been observed to attach to verbs.

3 Precautioning function

Having reviewed the landscape of other subordinate clauses in A'ingae, we turn now to our main focus, the apprehensional =*sane* 'APPR'. One typologically common apprehensional function is what Lichtenberk (1995) has dubbed *precautioning*. The precautioning function involves two clauses: one *apprehension-causing*

⁵Though barring discourse structure clitics in the topic TOP and focus FOC columns and some of the clitics absent from Table 1.

⁶The same and different subject clitics =*pa* 'SS' and =*si* 'DS' can be employed in subordinate as well as co-subordinate constructions. The distinction is immaterial for our purposes. For the definition and discussion of A'ingae insubordination, see Fischer (2007).

clause, which expresses a negative potential situation, and one *preemptive* clause, which expresses the precaution taken to either avert the apprehension-causing situation expressed in the other clause or else to be prepared for it, in case it should occur. Lichtenberk (1995) has labeled these two cross-linguistically attested subfunctions of precautioning morphemes the *avertive* and the *in-case*, respectively. In English, the former may be expressed with the somewhat archaic conjunction *lest* or a negative purpose clause (36).⁷ The latter can be expressed with *lest*, but not a negative purpose clause (37, Vuillermet 2017).

(36) I took a rifle {lest a jaguar kill me, so that a jaguar does not kill me}.

(37) I took a rifle {lest I see a jaguar, #so that I do not see a jaguar.}

The precautioning use of the apprehensional clitic =sane 'APPR' is its most common one (38).

(38) tse=fan khi<'>tsha=jama [khitsha thúña=sane]
ANA=PEJ.ACC pull<PLV>=PROH [pull break=APPR]
'Don't pull it so that you don't break it!'
(20170801_river_contamination_ARLQ: 8)

In principle, the syntactic relation between the apprehension-causing and the preemptive clause could be that of parataxis, coordination, or subordination. In A'ingae, the apprehension-causing =sane 'APPR' clauses are subordinate to the preemptive clauses, as we demonstrate below. They are adjuncts, their presence is optional—they are not selected by particular verbs and have similar distribution to other adjuncts, as shown in §2.2.2.

The apprehensional clitic =sane 'APPR' scopes over a full clause, whose subject as well as object can be overt. Whereas some subordinators in A'ingae encode switch reference, the subject of the apprehension-causing =sane 'APPR' clause can be the same (39) or different (40) from that of the preemptive clause.

(39) sema-'je=ngi [khiphue'sû=sane]
work-IMPV=1 [starve=APPR]
'I am working lest I starve.'

⁷The semantics literature on English dating back to Faraci (1974) typically reserves the term *purpose clause* for a very specific subtype of such clauses, ones where the clause specifically encodes the purpose of the direct object. Here, we broaden the usage in accord with its less technical sense.

- (40) *sema-’je=ngi [dû’shû=ndekhû khiphue’sû=sane]*
 work-IMPV=1 child=PLH starve=APPR
 ‘I am working lest my children starve.’

The apprehension-causing =*sane* ‘APPR’ clauses are subordinate. This can be demonstrated via the diagnostics introduced in §2.2.3.

First, we can consider the interaction between =*sane* ‘APPR’ and scope-taking operators such as negation. A paratactic analysis of the apprehension-causing =*sane* ‘APPR’ clauses more or less approximate the apparent meaning when no such operator is present (41). However, once we add in negation to the preemptive clause, we see that the paraphrase the paratactic analysis would provide is no longer even approximately right (42)—the thing being negated is the preemptive clause as modified by the =*sane* ‘APPR’ clause.

- (41) *tise=ta=tsû tsakhû=ma guathian-’jen [iyufa jin=sane]*
 3SG=NEW=3 water=ACC boil-IMPV worm be=APPR
 subordinate analysis: ‘He is boiling water lest there be germs.’
 paratactic analysis: ‘He is boiling water. There might be germs.’
- (42) *tise=ta=tsû tsakhû=ma guathian-’jen=mbi [iyufa jin=sane]*
 3SG=NEW=3 water=ACC boil-IMPV=NEG worm be=APPR
 subordinate analysis: ‘He is not boiling water lest there be germs. (He is boiling it for chicha.)’
 paratactic analysis: ‘#He is not boiling water. There might be germs. (He is boiling it for chicha.)’

Second, the subordinate status of the undesirable outcome =*sane* ‘APPR’ clauses is corroborated by strict-verb finality (43-44).

- (43) [*ña dû’shû=ndekhû khiphue’sû=sane*] *sema-’jen*
 1SG child=PLH starve=APPR work-IMPV
 ‘I am working lest my children starve.’
- (44) *[*khiphue’sû=sane ña dû’shû=ndekhû*] *sema-’jen*
 starve=APPR 1SG child=PLH work-IMPV
 intended: ‘I am working lest my children starve.’

Third, we find that second-position subject clitics in the apprehension-causing clause are ungrammatical (45). In sum, precautioning =*sane* ‘APPR’ clauses display all of the major syntactic and semantic properties associated with A’ingae subordinate clauses more generally.

- (45) **[ña dû'shû=ndekhû{=ngi, =tsû} khiphue'sû=sane] sema-'jen*
 1SG child=PLH{=1, =3} starve=APPR work-IMPV
 intended: 'I am working lest my children starve.'

In addition, the apprehensional clitic =sane 'APPR' is paradigmatically related to some other subordinating enclitics in the language in that it combines with subject number NUM, modal MOD, and polarity POL clitics to its left; and topic TOP and focus FOC clitics to its right, as given in Table 1. These other subordinate clitics include the same subject =pa 'SS,' the different subject =si 'DS,' the frustrative =ma 'FRST,' and the locative =ni 'LOC.'

The apprehensional clitic =sane 'APPR' differs from the infinitive clitic =ye 'INF,' which does not combine with modal MOD and polarity POL clitics. The infinitive clitic =ye 'INF' creates purpose clauses (46), subject argument clauses, or object argument clauses when selected for by matrix verbs.

- (46) *yaje=ma kû'i=pa [tse='an fi'thi=ye]*
 ayahuasca=ACC drink=SS [ANA=PEJ.ACC kill=INF]
 'They drank ayahuasca to kill it.' (20170807_tshararukuku_RJCL: 39)

The apprehensional clitic =sane 'APPR' also stands apart from matrix clausal clitics, i.e. the veridical mood clitic =ya 'VER' and the four directive clitics, which include the three poorly understood imperative mood clitics *ja* '=IMP,' =kha 'IMP2,' and =se 'IMP3,' and the prohibitive mood clitic =jama 'PROH.' The matrix-clausal clitics do not combine with the topic TOP and focus FOC clitics.

Lastly, =sane 'APPR' is paradigmatically distinct from the nominal subordinator =chu 'SBRD,' which creates argument clauses (47), attribute clauses (48), as well as perfective clauses when attached to the matrix verb (49).

- (47) *pañā=ña [tise dûshû=n'dekhû ina-jen='chu=ma]*
 understand=VER [3SG child=PLH cry-IMPV=SBRD=ACC]
 'He realized his children were crying.' (20170803_dyandyaccu_LC: 72)
- (48) *[khe='chu] año=ma=ngi kunda*
 err=SBRD year=ACC=1 let know
 'I'm saying it's the year that's wrong.'
 (20170801_autobiography_CLC: 147)
- (49) *[ke=ta=ti=ki escuela=nga ka'ni=chu]*
 2SG=NEW=INT=2 school=DAT enter=SBRD
 'Have you started school?' (20170801_autobiography_CLC: 35)

In terms of linear order, the apprehension-causing =*sane* ‘APPR’ clauses can appear before or after preemptive clauses (50-51).

- (50) [ñā chan=ma iyikha’ye=sane]=ngi shu’khaen
 [1SG mother=ACC annoy=APPR]=1 cook
 ‘I cooked so that my mother does not get mad.’
- (51) ka’shi=ngi apishu’tthu=ma [chan ñā=ma iyû’û=sane]
 wash=1 dish=ACC [mother 1SG=ACC scold=APPR]
 ‘I washed the dishes so that my mother does not scold me.’

The content of the apprehension-causing =*sane* ‘APPR’ clauses contributes to the sentence’s ‘main point’, i.e. is ‘at-issue’ content in the sense of [Simons et al. \(2010\)](#) and related work. This is demonstrated by showing that it can be directly dissented to (52). The embeddability of =*sane* ‘APPR’ clauses further supports their at-issueness, as illustrated for negation above and with the antecedent of a conditional clause here (53, [Tonhauser 2012](#)).

- (52) A: tise=ta=tsû tsa’khû=ma guathian-’jen [iyufa jin=sane]
 3SG=NEW=3 water=ACC boil-IMPV worm be=APPR
 ‘He is boiling water because of germs.’
 B: me’in guathian-’jen=tsû [kûnapecha=ma mandyi=ye]
 no boil-IMPV=3 chicha=ACC squeeze=INF
 ‘No, he’s boiling it for chicha.’
- (53) [[iyufa jin=sane] tayu tsa’khû=ma gua’thian=’chu=ni] khase
 worm be=APPR already water=ACC boil=SBRD=LOC again
 gua’thian=ñe injienge=mbi
 boil=INF be important=NEG
 ‘If the water’s already been boiled for germs, there is no reason to boil it again.’

Lastly, the negativity of the apprehension-causing =*sane* ‘APPR’ clauses is uniformly subject-oriented. In (54), the negatively affected entity is the person to be bitten by a spider, not the spider in the shoe, or the speaker. Likewise, in (55), the negatively affected entity is, again, the person being threatened, not the speaker who is simultaneously the intimidator.

- (54) zapato=ma kan=kha [junguesû phi=sane]
 shoes=ACC look=IMP2 [something sit=APPR]
 ‘Check your shoes in case anything’s in there.’

- (55) *upitshe dyai=ja [ke=ma tshai=sane]*
 quitely sit=IMP [2SG=ACC hit=APPR]
 ‘Shut up or I’ll hit you.’

3.1 Avertive and in-case subfunctions

The apprehensional clitic =sane ‘APPR’ used in a precautioning fashion displays the two typologically attested subfunctions: *avertive*, with the preemptive clause expressing an action undertaken to avoid the event expressed in the apprehension-causing clause, and *in-case*, with the preemptive clause expressing an action undertaken to avoid the negative consequences of the event expressed in the apprehension-causing clause. Both readings are available with agentive verbs (56-57), non-agentive verbs (58-59), as well as weather verbs (60-61).

- (56) *ka’shi=ngi apishu’tthu=ma [chan ña=ma iyû’û=sane]*
 wash=1 dishes=ACC [mother 1SG=ACC scold=APPR]
 ‘I washed the dishes so that my mother does not scold me.’
- (57) *putaen’gu=ma am’bian [tetete=ndekhû ji=’fa=sane]*
 rifle=ACC have Tetete=PLH come=PLS=APPR
 ‘I got my rifle ready in case the Tetetes come.’
- (58) *upûi=ngi [cha’ndi’sû=sane]*
 cover up=1 [be cold=APPR]
 ‘I covered myself so that I don’t get cold.’
- (59) *vasûi=ngi tsûi [iyu khûi=sane]*
 slowly=1 walk [snake lie=APPR]
 ‘I walked slowly in case snakes be there.’
- (60) *kuenza=ja yaje=ma kû’i [ûnjin tûi=sane]*
 old=CNTR ayahuasca=ACC drink [rain splash=APPR]
 ‘The elder drank ayahuasca for rain not to come.’⁸
- (61) *chaketa=ma=ngi undikhû [ûnjin tûi=sane]*
 jacket=ACC=1 don [rain splash=APPR]
 ‘I put on a jacket in case it rains.’

Negativity associated with the precautioning =sane ‘APPR’ clauses is conventional (semantic). The avertive =sane ‘APPR’ clauses might appear with verbs of

⁸Felicitous weather-averting scenarios often involve agents with shamanic training.

negative (62), neutral (63), or positive (64) emotional connotation, though the prospective situation of the avertive =*sane* ‘APPR’ clause, or the larger situation containing it for the *in-case* use, is always judged as negative by the subject of the matrix verb. This distinguishes the *in-case* precautioning uses from the ostensibly similar English “*in case*” construction, which need not have any negativity associated with it.

- (62) [*ñā chan=ma iyikha’ye=sane*]=*ngi shu’khaen*
[1SG mother=ACC annoy=APPR]=1 cook

‘I cooked so that my mother does not get mad.’

- (63) *jūnde ja [tise faengae ji=sane]*
soon go 3SG together come=APPR

‘I hurried up to leave so that he doesn’t come with us.’

- (64) *pūshesū tsū tsandie aya’fa=ma phikhu [feña=sane]*
woman 3 man mouth=ACC cover [laugh=APPR]

‘She covered his mouth so that he does not laugh.’

Likewise, the *in-case* =*sane* ‘APPR’ clauses might appear with verbs of negative (65), neutral (66), or positive (67-68) emotional connotation. When the situation referred to by the =*sane* ‘APPR’ clause is unambiguously positive, only *in-case* readings are pragmatically available (i.e. ones in which a larger situation including that described is deemed to be negative, such as my friends coming and my house being dirty, 68).

- (65) *seje’pa=ma=ngi tsun-’jen [ñā dū’shū iyu=nga tsei-ye=sane]*
medicine=ACC=1 do-IMPV [1SG child snake=DAT bite-PASS=APPR]

‘I’m preparing medicine in case my son gets bitten by a snake.’

- (66) *jayi=mbi=ngi fiesta=nga [tsetse’pa jin=sane]*
go.PRSP=NEG=1 party=DAT alcohol be=APPR

‘I’m not going to the party in case there is alcohol.’

- (67) *tsa’khū=ma=ngi guathian-’jen [ñā yaya khuvi=ma i=sane]*
water=ACC=1 boil-IMPV [1SG father tapir=ACC bring=APPR]

‘I am boiling water in case my father brings a tapir.’

- (68) *tsa’u=ma=ngi giyaen-’jen [faengasū=ndekhū ji=’fa=sane]*
house=ACC=1 clean-IMPV [friend=PLH come=PLS=APPR]

‘I am cleaning my house in case my friends come.’

3.2 Precautioning and negative purpose clauses

We define *purpose clauses* as adjuncts which express the purpose of the action given by the matrix clause. In doing so, we deviate from the definition used in some previous literature (see fn 7). English has several constructions capable of expressing purpose semantics (69).

(69) I took a rifle {to, in order to, so as to} hunt a jaguar.

In A'ingae, positive purpose clauses are most typically introduced with the infinitive clitic =ye 'INF' (70).

(70) *ciendo dolar=khû=ki ja=ya Lago=ni [chava=ye]*
 hundred dollar=INST=2 go=IRR Lago Agrio=LOC [buy=INF]
 'You're going to Lago Agrio with \$100 to buy something.'
 (20170801_escuela_CLC: 194)

The subjects of the matrix and subordinate purpose clauses may or may not be the same (71-72); if no subject is overtly given in the purpose clause, it is interpreted as co-referential with the subject of the matrix clause (71).

(71) *sema-'je=ngi [(ña) ankhe'sû=ma a'mbian=ñe]*
 work-IMPV=1 [1SG food=ACC have=INF]
 'I am working to have food.'

(72) *sema-'je=ngi [dû'shû ankhe'sû=ma a'mbian=ñe]*
 work-IMPV=1 [children food=ACC have=INF]
 'I am working so that my child can have food.'

There is, to a large extent, a semantic parallelism between =ye 'INF' and =sane 'APPR:' the infinitival =ye 'INF' purpose clauses are the positive counterpart to the avertive =sane 'APPR' clauses; the purpose =ye 'INF' clauses express a desirable outcome which is intended to be brought about by the matrix clause, whereas the avertive =sane 'APPR' clauses express the apprehension-causing situation that is supposed to be forestalled by the matrix clause.

This parallelism may be the reason why Fischer & Hengeveld (forthcoming) gloss =sane as a negative purpose clause clitic 'NEG.PURP.' Yet, although one function of the clitic =sane 'APPR' is to head negative purpose clauses, this does not capture its versatility, as it can also head precautioning in-case clauses, complements of certain verbs (§4), and timitive adjuncts (§5). A better candidate for a properly negative purpose operator is the complex =mbe kañe 'NEG.ADV AUX.INF' with exclusively avertive semantics.

The complex operator *=mbe kañe* ‘NEG.ADV AUX.INF’ provides a periphrastic means by which to express a combination which violates the syntactic restrictions on clitic co-occurrence discussed above. As shown in Table 1, the infinitive clitic *=ye* ‘INF’ does not combine with the negative polarity clitic *=mbi* ‘NEG’ (73).

- (73) **sema*–’*je*=*ngi* [*vana*=*mbi*=*ye*]
 work–IMPV=1 [suffer=NEG=INF]
 intended: ‘I’m working to not be in trouble.’

The dummy auxiliary verb *kan* ‘AUX’ originates as a lexical verb *kan* ‘watch’ (74) and simultaneously functions as a productive modal auxiliary of tentative (i.e. ‘try’) semantics (75). Nevertheless, its use in the complex construction *=mbe kañe* ‘NEG.ADV AUX.INF’ is distinct from the other two, as evidenced by the fact that encoding a infinitival negative tentative (i.e. ‘not to try’) requires employing both the tentative *kan* ‘try’ and the auxiliary *kan* ‘AUX’ (76).

- (74) *ke*=*ma* *kan*=*ña*=*mbi*
 2SG=ACC look=IRR=NEG
 ‘He is not going to look for you.’ (20170731_attembi_a’i: 18)
- (75) *me*’*in* *ña* *an* *kan*=*mbi*=*ngi* *ña*
 no 1SG eat try=NEG=1 1SG
 ‘No, I have not tried it.’ (20170801_fishing_CLC: 22)
- (76) *in*’*jan*=*ngi* *panza* *kan*=*mb*=*e* *kan*=*ñe*
 want=1 hunt try=NEG=ADV AUX=INF
 ‘I want not to try to hunt.’

In forming *=mbe kañe* ‘NEG.ADV AUX.INF’, *=mbi* ‘NEG’ is first combined with *=e* ‘ADV’ to yield the negative adverbial clitic *=mbe* ‘NEG.ADV.’ Aside from the periphrastic negative purpose to be discussed, *=mbe* ‘NEG.ADV’ is used to form negative circumstance clauses (77, Fischer & Hengeveld forthcoming).

- (77) *tse*’*kan*=*nda* [*u*⟨’⟩*ya*=*mb*=*e*] *dyai*=*ye*
 thus=NEW [move⟨PLV⟩=NEG=ADV] sit=INF
 ‘Then I will sit still.’ (20170801_cuiccu_chicha_ARLQ: 206)

Second, the auxiliary *kan* ‘AUX’ combines with the negative adverbial clause. The dummy verb is there to carry the infinitive clitic *=ye* ‘INF’, which conveys the purpose semantics.

The complex operator *=mbe kañe* ‘=NEG.ADV AUX.INF’ is used to create negative purpose clauses proper. Negative purpose *=mbe kañe* ‘=NEG.ADV AUX.INF’ clauses

and precautioning =sane 'APPR' clauses converge in their semantics when the former receives an exclusively averting reading (78). The uses of the operator =mbe kañe 'NEG.ADV AUX.INF' are limited to the averting.

- (78) *putaen'gu=ma=ngi am'bian* [*thesi ña=ma* {*an=sane, an=mb=e*
rifle=ACC=1 have [jaguar 1=ACC {eat=APPR, eat=NEG=ADV
kan=ñe}]
AUX=INF}]

'I have a rifle so that a jaguar does not eat me.'

Negative purpose =mbe kañe 'NEG.ADV AUX.INF' clauses and precautioning =sane 'APPR' clauses diverge, however, in contexts where =sane 'APPR' clauses receive in-case readings. Compare (67-68) with the pragmatically aberrant (79-80), whose infelicity is readily signalled by native speakers.

- (79) *#tsa'khû=ma=ngi guathian-'jen* [*ña yaya khuvi=ma i=mb=e*
water=ACC=1 boil-IMPV [1SG father tapir=ACC bring=NEG=ADV
kan=ñe]
AUX=INF]

'#I am boiling water so that my father does not bring a tapir.'

- (80) *#tsa'u=ma=ngi giyaen-'jen* [*faengasû=ndekhû ji='fa=mb=e*
house=ACC=1 clean-IMPV [friend=PLH come=PLS=NEG=ADV
kan=ñe]
AUX=INF]

'#I am cleaning my house so that my friends do not come.'

3.3 Relating the subfunctions

With two precautioning strategies, one capable of expressing both precautioning subfunctions (=sane 'APPR'), the other restricted to the averting subfunction (=mbe kañe 'NEG.ADV AUX.INF'), A'ingae parallels To'aba'ita exactly (Lichtenberk 1995). To'aba'ita's first strategy involves the apprehensional conjunction *ada* 'APPR', analogous to =sane 'APPR' (81). Its second strategy involves the purpose clause conjunction *fasi* 'PURP', which in combination with a grammatically negative clause yields negative purpose semantics (82).

- (81) To'aba'ita (Austronesian; Lichtenberk 1995: 12, glossing simplified)
nau ku agwa 'i buira fau ada [*wane 'eri ka riki nau*]
I hid at behind rock APPR man that he see me
'I hid behind a rock so that the man might not see me.'

- (82) To'aba'ita (Austronesian; [Lichtenberk 1995](#): 17, glossing simplified)
ngali-a kaleko 'aa'ako [fasi 'osi gwagwari 'afa rodo]
 take-them clothes warm PURP you.NEG be cold at night
 'Take warm clothes so that you are not cold at night.'

Discussing the two precautioning strategies in To'aba'ita, [Lichtenberk \(1995\)](#) raises the question of how the avertive and in-case subfunctions are related. Having considered ambiguity and polysemy, he concludes that they are polysemous ("semantically rather than pragmatically ambiguous," p. 302), thus granting the two uses equal status. His three main arguments are:

- (a) that an element used to encode negative purpose need not have an in-case function; (b) that there is a formal difference between negative-purpose and in-case clauses in at least one language; and (c) that there are differences in paraphrase possibilities between negative-purpose and in-case clauses — serve as evidence that the avertive and the in-case functions are conceptually distinct from each other. ([Lichtenberk 1995](#): p. 302)

The idea that avertive and in-case are equal in some sense with morphemes like A'ingae =*sane* 'APPR' and To'aba'ita *ada* 'APPR' simply being ambiguous between the two cannot be rejected without a more thorough typology. There are, however, reasons for skepticism. First, we can note that the one language with a formal difference between negative-purpose and in-case clauses [Lichtenberk \(1995\)](#) references is Martuthunira, where both avertive and in-case uses deploy the same apprehensional morpheme, *-wirri* 'APPR,' and differ only in that the avertive use combines with an accusative *-i* 'ACC' case marker, whereas the in-case use combines with a locative *-la* 'LOC' case marker or no case marker at all ([Dench 1988](#)). Without a more detailed understanding of case marking in Martuthunira, then, it is not clear how precisely to interpret this data.

More generally, there appears to be an asymmetry in the attested precautioning morphemes. While we find a number of elements like A'ingae =*sane* 'APPR' and To'aba'ita *ada* 'APPR,' which have both uses, as well as elements like A'ingae =*mbe kañe* 'NEG.ADV AUX.INF' and To'aba'ita *fasi* 'PURP,' which only have avertive uses, we are not aware of precautioning morphemes which only have the in-case use, but cannot be used in avertive cases as well.

In contrast to [Lichtenberk \(1995\)](#) and what seems to have been at least implicitly assumed in subsequent literature, we have at times above discussed the two uses in a somewhat different, asymmetrical way which we make explicit here. In our analysis, =*sane* 'APPR' requires a possible undesirable situation which contains that of its argument to be contextually salient or otherwise recoverable.

If the containment is proper (i.e. the undesirable situation contains, but is not identical to =sane 'APPR's' argument), the in-case function obtains. If the containment is improper (i.e. the undesirable situation is identical to =sane 'APPR's' argument), the avertive function obtains. That is to say, elements like A'ingae =sane 'APPR' require a salient negative situation containing the one it introduces, whereas elements like A'ingae =mbe kañe 'NEG.ADV AUX.INF' require the situation it introduces to itself be negative.

Since the situation explicitly stated in the complement is necessarily salient, this approach therefore captures the apparent typological asymmetry between the avertive and in-case uses. Moreover, it illuminates why the two subfunctions are expressed in the same way in so many languages in a way that the 'ambiguity' account does not. Finally, as we will argue in §5, the same mechanism that allows for the in-case uses also explains the semantics of the timitive.

4 Complementizer function

It has been observed in previous descriptive work that the morphemes which serve apprehensional functions might also act as complementizers with verbs of fearing (Lichtenberk 1995; Dobrushina 2017; Wiemer 2018). We refer to this as the *complementizer* function. In English, for example, *lest* can be a somewhat archaic complementizer of the predicate *fear* (83, Vuillermet 2017).

(83) I fear lest a jaguar eat me.

In To'aba'ita, complements of fear predicates are introduced by the apprehensional morpheme *ada* 'APPR' discussed above (84).

(84) To'aba'ita (Austronesian; Lichtenberk 1995: 8, glossing simplified)
nau ku ma'u 'asia na'a [ada laalae to'a baa ki keka lae mai keka
 I be afraid very APPR later people that they go hither they
thaungi kulu]
 kill us
 'I am scared the people might come and kill us.'

In A'ingae, the apprehensional clitic =sane 'APPR' can introduce complements of fear predicates as well (85).

(85) *tsama ña [dañu=sane=khe] dyuju-je=ya*
 but 1SG be hurt=APPR=THUS be afraid-IMPV=VER
 'But I didn't want to get hurt.' (20170731_yaje2_MM: 53)

Nevertheless, the formal status of the so-called fear complementizer uses is often far from obvious and its analysis fraught with difficulties. The complement status of the apprehensional clauses when used with fear predicates is difficult to discern since they can also be interpreted as in-case precautioning uses (86). The extant literature rarely provides explicit arguments for the genuinely complement status of such uses.

(86) I fear it might rain. \approx I (would) fear (it) in case it rained.

On the other hand, other researchers report apprehensional morphemes acting as complementizers of a wider range of predicates (Yallop 1997; François 2003). A'ingae fits in the latter category: the apprehensional =sane 'APPR' clauses can function as complements and their distribution is not limited to fear predicates. Since there are strong parallelisms between the apprehensional and the infinitival constructions, this finding is not unreasonable. Like the apprehensional =sane 'APPR' clauses, the infinitival =ye 'INF' clauses have complement uses and purpose-like adjunct uses both cross-linguistically, including in A'ingae. Furthermore, both clause types can be complements of the switch-reference subordinating conjunction *kûintsû* 'SRCN,' possibly to the exclusion of all other clausal types.

We analyze fear complementizer uses as involving genuine complementation and argue against the other *a priori* available alternatives—the adjunct and paratactic analyses—with arguments from the scope of polar and temporal operators. While we argue that =sane 'APPR' has uses as a complementizer, there are also many cases which have the superficial appearance of complements, but whose interactions with operators such as negation do not support this conclusion. Moreover, there is a semantic sense to the two categories since the former are negatively valenced, while the latter are not.

To see how the alternative analyses yield incorrect meanings, first consider the case of negated fear predicates. Although all three paraphrases (complement, adjunct, and paratactic) are sensible semantic approximations when the polarity of the matrix clause is positive (87), the adjunct and paratactic paraphrases fail to properly reflect the meaning of A'ingae sentences when negated (88).

(87) *anse'nge=ngi* [*ñā=ma feñā=sane*]

be ashamed=1 1SG=ACC laugh=APPR

complement paraphrase: 'I am afraid that he might laugh at me.'

adjunct paraphrase: 'I am afraid in case he laughs at me.'

paratactic paraphrase: 'I am afraid. He might laugh at me.'

- (88) *anse'nge=mbi=ngi [ñā=ma feña=sane]*
 be ashamed=NEG=1 1SG=ACC laugh=APPR
 complement paraphrase: 'I am not afraid that he might laugh at me.'
 adjunct paraphrase: '#I am not afraid in case he laughs at me.'
 paratactic paraphrase: '#I am not afraid. He might laugh at me'

The complement analysis is further supported by the the high scope taken by temporal operators: if the situation of the matrix clause has past temporal reference, so does the =sane 'APPR' clause. This is predicted by the complement analysis, while unaccounted for by the other two (89), given that other adjunct clauses do not show such dependence in A'ingae. In the adjunct paraphrase, in particular, the expected meaning of the subordinate =sane 'APPR' clause is prospective or future-oriented, contrary to what we observe here. And if this meaning did characterize the subordinate =sane 'APPR' clause, we would expect the matrix clause (i.e. the one with the fear predicate) to be marked for counterfactuality, irrealis modality, or future temporality, which is likewise not the case.

- (89) *kani=ngi dyu [thesi=nga mandian-ñe=sane] tsa'ma=ngi me'in*
 yesterday=1 be scared jaguar=DAT chase-PASS=APPR but=1 no
ja'ñu
 today
 complement paraphrase: 'Yesterday I got scared that a jaguar was chasing me. But today I am not scared anymore.'
 adjunct paraphrase: '#Yesterday I got scared in case a jaguar is chasing me. But today I am not scared anymore.'
 paratactic paraphrase: '#Yesterday I got scared. A jaguar might be chasing me. But today I am not scared anymore.'

As complements, the apprehensional =sane 'APPR' clauses are subordinate and pass the three subordination diagnostics introduced in §2.2.3. They pass the first semantic test (87-89). They pass the second test of strict verb-finality (90-91). Lastly, they pass the third test of second-position clitic-shunning (92).

- (90) *[thesi ñā=ma an=sane] dyuju*
 jaguar 1SG=ACC eat=APPR be afraid
 'I fear the jaguar might eat me.'
- (91) **[ñā=ma an=sane thesi] dyuju*
 jaguar 1SG=ACC eat=APPR be afraid
 intended: 'I fear the jaguar might eat me.'

- (92) * $[\tilde{n}a=nda\{=ngi, =ts\hat{u}\} tise=ma tshai=sane=ts\hat{u}] dyuju$
 1SG=NEW=1{=1, =3} 3SG=ACC hit=APPR=3 be afraid
 intended: ‘He’s afraid I’ll hit him.’

As seen above, the verb *anse* ‘be ashamed’ is one verb with fear-like semantics which can take =*sane* ‘APPR’ complements. Two more such fear-like verbs are *dyuju* ‘be afraid’ (93) and *dyu* ‘be scared’ (94).

- (93) $dyuju=ngi [thesi=nga mandia-\tilde{n}e=sane]$
 be afraid=1 jaguar=DAT chase-PASS=APPR
 ‘I’m afraid of being chased by a jaguar.’
- (94) $kani=ngi dyu [thesi=nga mandia-\tilde{n}e=sane]$
 yesterday=1 be scared jaguar=DAT chase-PASS=APPR
 ‘Yesterday I got scared that a jaguar was chasing me.’

Other verbs with negative semantics which can take =*sane* ‘APPR’ complements include *se’pi* ‘prohibit’, where =*sane* ‘APPR’ expresses the object of prohibition (95), and *chi’ga* ‘not want’ where it expresses the object of distaste (96).

- (95) $yaya=ts\hat{u} se’pi [d\hat{u}sh\hat{u}=ndekh\hat{u} phi=’fa=sane]$
 father=3 prohibit child=PLH sit=PLH=APPR
 ‘The father prohibited the children from sitting (in the hammock).’
- (96) $yaya=ts\hat{u} chi’ga [d\hat{u}sh\hat{u}=ndekh\hat{u} phi=’fa=sane]$
 father=3 not want child=PLH sit=PLS=APPR
 ‘The father does not want the children to sit (in the hammock).’

The complement status of the =*sane* ‘APPR’ clauses in these cases (95-96) is corroborated by their semantics under negation (97-98).

- (97) $yaya=ts\hat{u} se’pi=mbi [d\hat{u}sh\hat{u}=ndekh\hat{u} phi=’fa=sane]$
 father=3 prohibit=NEG child=PLH sit=PLH=APPR
 ‘The father did not prohibit the children from sitting (in the hammock).’
- (98) $yaya=ts\hat{u} chi’ga=mbi [d\hat{u}sh\hat{u}=ndekh\hat{u} phi=’fa=sane]$
 father=3 not want=NEG child=PLH sit=PLS=APPR
 ‘The father does not mind the children sitting (in the hammock).’

As such, the negatively-valenced verb *chi’ga* ‘not want’ contrasts starkly with the positively-valenced *in’jan* ‘want, think’. While we can find sentences with *in’jan* and a =*sane* ‘APPR’ clause, careful consideration of them shows that these are in fact adjuncts headed by in-case precautioning uses of =*sane* ‘APPR’ rather

than complements. First, looking at the simple sentences, we see that – unlike in the case of intuitively negative predicates – the object of *in'jan* is coreferential with something from prior discourse rather than the content of the *=sane* 'APPR' clause, which is reflected in back-translations (99). Second, we find a quite different interaction with negation than what we have seen above for *chi'ga* 'not want' (100). Taken together, these observations confirm that whereas *=sane* 'APPR' can serve as a complementizer for negative-valenced predicates, sentences which are superficially similar except for having a positive predicate have a quite different structure, one not involving complementation.

- (99) *yaya=tsû in'jan [dûshû=ndekhû phi='fa=sane]*
 father=3 want child=PLH sit=PLH=APPR
 'The father wants it in case the children sit (in the hammock).'
- (100) *yaya=tsû in'jan=mbi [dûshû=ndekhû phi='fa=sane]*
 father=3 want=NEG child=PLH sit=PLS=APPR
 'The father does not want it in case/because the children might sit (in the hammock).'

To account for the complementizer uses, we propose a pathway of diachronic development from precautioning uses. In the absence of relevant historical data, we hypothesize that this development can be attributed to the pragmatic near-equality between the two uses in simple positive unembedded statements. This is to say, we observe that being afraid in case of an event is near equal to being afraid of that event. This, we posit, facilitated a syntactosemantic tightening of the in-case precautioning adjuncts into proper complements of verbs of fearing, such as *dyuju* 'be afraid,' *dyu* 'be scared,' and *anse'nge* 'be ashamed.' Analogous reasoning applies to *chi'ga* 'not want' and *se'pi* 'prohibit.' As for the former, we observe that a distaste in case of an event is near equal to a distaste of that event; as for the latter – that a prohibition given lest an event occur is near equal to a prohibition of that event.

Our account is thus close to that of [Lichtenberk \(1995\)](#)'s account of To'aba'ita's analogous data. In relating the complementizer function to other apprehensional functions, [Lichtenberk \(1995: p. 305\)](#) observes that "[a]n undesirable future situation is likely to be feared" and proposes that "[t]hrough this metonymy, *ada* clauses began to be embedded under predicates of fearing." Our proposal, however, goes beyond [Lichtenberk \(1995\)](#)'s in that it extends to other verbs of neg-

ative emotional valence (i.e. *chi'ga* ‘not want’ and *se'pi* ‘prohibit’) and provides syntactosemantic tests for the genuine complement status of this function.⁹

5 Timitive function

A third apprehension function proposed in previous literature is the *timitive*. The timitive function picks out a noun phrase which refers to a feared entity and relates it to the matrix-clausal situation it triggered. Since timitive morphemes prototypically attach to NPs, this function is sometimes referred to as the timitive case marker or adposition (Vuillermet 2017; 2018). Although there is no dedicated timitive morphology in English, the timitive can often be approximated with the periphrastic *for fear of* (101).

(101) I ran for fear of the jaguar.

In A'ingae, =*sane* ‘APPR’ can attach to nominal phrases in the function of a timitive, although it appears quite rarely in naturalistic speech (102).

(102) *tuyakaen ña ambian setsani=da=tsû jin=ña ña=mbe ushachu,*
 and 1SG have downriver=NEW=3 be=VER 1=BEN everything
 [ayafakhupi=sane] kûpakhu
 mouth sore=APPR prayer plant
 ‘I have prayer plant downriver [at my old house] for mouth sores.’
 (20170803_garden_medicinal_plants_LC: 34)

As discussed by Vuillermet 2018, there appears to be considerable cross-linguistic variation with respect to the semantic properties of the timitive. For example, the timitive in Ese Ejja does not require that the feared entity be avoided (Vuillermet 2018), while the analogous morpheme in Marrithiyel does (Green 1989). In Ese Ejja, stand-alone uses of the timitive are not attested (Vuillermet 2018), while in Manambu, they are (Aikhenvald 2008). It is therefore desirable to outline the parametrization of the A'ingae timitive, which we will later relate to other uses.

To begin with, the A'ingae timitive =*sane* ‘APPR’ can combine with non-human entities such as weather conditions (103) and with inanimate entities such as mycosis (104).

⁹Given the range of predicates which we find take =*sane* ‘APPR’ complements in A'ingae, we might wonder whether Lichtenberk (1995)’s characterization of the To’aba’ita data in terms of ‘fear’ specifically is correct, or whether there too, we might find other negative desire predicates in this category. If not, some further explanation would seem to be needed since undesirable future situations are also likely not wanted, prohibited, not only feared.

- (103) *tša'u=ni=ngi jayi* [ûnjîn=sá'ne]
 house=LOC=1 go.PRSP rain=APPR
 'I'm going home for fear of rain.'
- (104) *tsumba tsu'the, thenangu='ki, shamandakhû=ma='khe santshe*
 then foot leg=2 armpit=ACC=ADD drily
san'jan=ña='chu [asapa'chu=sane]
 dry=IRR=SBRD mycosis=APPR
 'You must then dry your feet, legs, and armpits dry to avoid mycosis.'

The timitive =*sane* 'APPR' can introduce the object of fear predicates (105).¹⁰ It coexists alongside another strategy with the accusative =*ma* 'ACC' (106). Intriguingly, the two strategies tend to be back-translated differently. Accusative objects are translated with nominal phrases; timitive objects—with full clauses.

- (105) *dyuju=ngi* [thesi=sane]
 be afraid=1 jaguar=APPR
 'I am afraid there could be a jaguar.'
 'I am afraid I'll encounter a jaguar.'
- (106) *dyuju=ngi thesi=ma*
 be afraid=1 jaguar=MA
 'I am afraid of the jaguar.'

It is available in narratives (107), conveying the fear of the sentence subject, not speaker, and with any main sentence type (e.g. the interrogative, 108).

- (107) *kuenza=ndekhû uke='fa uvepa'chu tsau'pa=ma* [anchan=sane]
 elder=PLH burn=PLS termite nest=ACC mosquito=APPR
 'The elders burn termites' nests to avoid mosquitoes.'
- (108) *kuenza=ndekhû=ti uke='fa uvepa'chu tsau'pa=ma* [anchan=sane]
 elder=PLH=INT burn=PLS termite nest=ACC mosquito=APPR
 'Do the elders burn termites' nests to avoid mosquitoes?'

It can stand on its own, but only when there is a strong cultural association between its object and the threat it poses and it can be interpreted elliptically in a pragmatically rich context (109-110).

¹⁰ Analogous to the fear complement uses discussed in §4, some or all of the =*sane* 'APPR'-marked objects could potentially be best analyzed as precautioning-like adjuncts rather than arguments per se. We leave demonstrating their genuine object status to future work.

- (109) [*thesi=sane*]
 jaguar=APPR
 ‘For jaguars.’ [uttered upon handing in a rifle]
- (110) [*ûnjin=sane*]
 rain=APP
 ‘For the rain.’ [uttered upon handing in an umbrella]

Nevertheless—aside from its fear-complement function (105)—the timitive =*sane* ‘APPR’ is restricted to predicates which make salient an individual whose actions bring about the situation in question, most typically an agent (111–112).¹¹

- (111) *tsampi=ni ja=mbi=ngi [thesi=sa’ne]*
 forest=LOC go=NEG=1 jaguar=APPR
 ‘I did not go to the forest for fear of a jaguar.’
- (112) *#juva=tsû {i’na, fûndu} [unkumari=sane]*
 DIST=3 {cry, scream} bear=APPR
 intended: ‘He {cried, screamed} for fear of the bear.’

The timitive cannot generally combine with nouns of positive emotional connotation, such as *chan* ‘mother’ (113). Instead, its semantics is expressed with a precautioning =*sane* ‘APPR’ that makes explicit the nature of the avertive situation (114) or a periphrastic *dyyu* ‘be scared’ construction (115).

- (113) *#shu’khaen=ngi ña [chan=sane]*
 cook=1 1SG mother=APPR
 intended: ‘I cooked for fear of my mother.’
- (114) [*ña chan=ma iyikha’ye-en=sane*]=*ngi shu’khaen*
 1SG mother=ACC annoy-PASS=SANE=1 cook
 ‘I cooked so that my mother does not get mad.’
- (115) [*ña chan=ma dyyu=’chu=i’khû*]=*ngi shu’khaen*
 1SG mother=ACC be scared=SBRD=INST=1 cook
 ‘I cooked for fear of my mother.’

Finally, it can be combined with neutral nouns, such as *tsetse’pa* ‘chicha’ (116), though its distribution is restricted. Such uses are judged as felicitous only when

¹¹We refrain from claiming that these predicates have to strictly be agentive, as this would incorrectly predict, for example, the timitive’s unavailability with *am’bian* ‘have’ (102). For a similar idea regarding rationale clauses, see Grano (2017); Farkas (1988).

the preceding linguistic context explicitly sets up the unwelcome situation. Even then, though, including a verb makes it better, with =sane 'APPR' preferably heading a sentence, rather than a noun phrase.

- (116) #(*pûi fiesta=nga tsû tsetse'pa jin=ñe atesû.*) *jayi=mbi=ngi fiesta=nga*
 each party=DAT 3 chicha be=INF know go.PRSP=NEG=1 party=DAT
 [*tsetse'pa* ?(*jin*)=sane]
 chicha be=APPR
 'There is alcohol at every party. I'm not going to the party to avoid alcohol.'

We understand the avertive, in-case, and timitive functions of the apprehensional =sane 'APPR' to be underpinned by uniform semantics. That is to say, the semantics of the timitive is that laid out in §3, where the clitic =sane 'APPR' is posited to encode the apprehension of a situation which contains its argument. This accounts for all the discussed properties of its timitive function.

First, it accounts for the timitive =sane 'APPR's' rarity, as noun phrases do not prototypically denote situations (=sane 'APPR' preferably combines with clauses).

Second, it accounts for its proclivity for eventive nouns, as the timitive use of =sane 'APPR' is common with eventive nouns such as *ûnjin* "rain" (103) or *tsanda* 'thunder' (117), which make salient such situations.

- (117) *chaketa=ma undikhû=ja [tsanda=sane]*
 jacket=ACC don=IMP thunder=APPR
 'Put on a jacket in case of thunder.'

Third – for its proclivity for negative nouns and stereotypically associated events. The timitive use of =sane 'APPR' is likewise common with nouns such as *asapa'chu* 'mycosis' (104), *thesi* 'jaguar' (109) or *anchan* 'mosquito' (107), where an association between the noun phrase and the undesired situation is immediate (i.e. being eaten by a jaguar, ravaged by mycosis, or stung by mosquitoes). On the other hand, when such an association is lacking, as is the case with mothers not inherently perilous (113), the timitive construction is deemed infelicitous.

Fourth – its availability for complementation with negative verbs (105) and the complementation strategy's sensitivity of back-translations. The timitive objects tend to be rendered with full clauses, which brings in close correspondence to their situational semantics.

Fifth – its availability in narratives and with any main sentence type (107-108), by analogy with precautioning uses which encode subject, not speaker, fear.

Sixth – its occasional ability to stand on its own (109), possibly when interpretable as ellipsis in a pragmatically loaded context, by analogy with monoclausal uses elaborated in §6.

Seventh – its restriction to predicates which make salient an individual whose actions bring about the situation in question, most typically an agent (111-112). The argument of =sane ‘APPR’ maps to a situation avoided by the subject of the clause, for which agency is a prerequisite.

And finally, eighth – the amelioration of certain infelicitous examples in rich contexts (116), since making the dispreferred situation explicit makes it more easily recoverable.

6 Apprehensive function

The precautioning, complementizer, and timitive uses are the main functions of the apprehensional clitic =sane ‘APPR.’ These main functions all involve subordination (with precautioning and sentential complementizer uses) or NP-complementation (with timitive uses). The last use of the A’ingae =sane ‘APPR’ clitic is the apprehensive proper, although this function is attested only marginally.

The *apprehensive* function is used to mark potential undesirable future events. It is most closely rendered by the English *watch out* (118), *might* (119), or the negative imperative (120). Unlike the other apprehensional uses, the negativity with apprehensives is typically speaker-, not subject-, oriented (the situation is undesirable in the judgment of the speaker).

(118) Watch out for the curb.

(119) You might trip.

(120) Don’t trip!

The apprehensive is prototypically used with warning speech acts where the speaker is worried about some potential negation situation, often but not always one the addressee can take actions to avoid (121).

(121) [tsa’khû=ma sefa-en]=sa’ne
water=ACC end-CAUS=APPR

‘Don’t use up all the water.’

(Borman 1990: p. 37)

Although functionally independent, apprehensive uses have the formal properties of subordinate clauses and pass the syntactic test of second-position clitic-shunning (122).

- (122) [ke(*=ki) ana=sane]
 2SG=2 sleep=APPR
 'You might fall asleep.'

The data above suggest insubordination, defined by Evans (2007: p. 367) as “conventionalized main clause use of what, on *prima facie* grounds, appear to be formally subordinate clauses.” The development of the apprehensive use out of the precautioning use is a typologically attested pathway, first proposed by Lichtenberk (1995).

While the matrix clausal apprehensive uses here discussed are attested, they are strongly dispreferred. Native speakers characterize them as most appropriate as answers, conceptualizing them within larger discourse (123). When a discourse-initial position is demanded of them, often paraphrases are offered where the lacking matrix clausal verb *in'jan'jen* ‘be careful’ is supplemented (124).

- (123) A: *jungueje=ngi yuku=ma kû'i=ya*
 why=1 yoco=ACC drink=IRR
 ‘Why should I drink yoco?’

- B: [ke anae'sû=sane]
 2SG be sleepy=APPR
 ‘Because you might fall asleep.’
 ‘So that you don’t fall asleep.’

- (124) [tsai-ye=sa'ne] *in'jan-jen=jan*
 bite-PASS=APPR watch out-IMPV=IMP
 ‘(Watch out) you might get bitten.’

This suggests that the insubordination is in its early stages where the elided material is recoverable, and the ellipsis is preferably altogether avoided given insufficient contextual priming.

The transitional nature of A'ingae insubordination is further evident from the fact that native speakers differ in whether they allow it. Some translate the below in a manner congruent with the insubordination hypothesis. For others, the insubordination reading is unavailable even when the context is very loaded. The translation offered by those suggest they interpret it as an ellipsis of linguistically recoverable material in a rich enough context. That is to say, for those speakers the ellipsis has not reached the stage where it is conventionalized.

(125) [tshipa=sane]

be wet=APPR

back-translation A: ‘Don’t get wet.’ / ‘Avoid getting wet.’

back-translation B: ‘So that you don’t get wet.’ [uttered upon handing in an umbrella]

Lastly, the ongoing insubordination hypothesis is supported by the availability of third-person-oriented apprehension (126) given a sufficiently rich context.

(126) A: *khuvi mingae=tsû da-’je?*

tapir how=3 become-IMPV

‘What’s up with the tapir?’ [uttered upon seeing a running tapir]

B: [*thesi tise=ma fi’thi=sa’ne*]

jaguar 3SG=ACC kill=APPR

‘It’s afraid the jaguar will kill it.’

All this testifies to the fact that insubordination in A’ingae is in its first stage, where both first-person (121) and third-person (126) monoclausal fear uses can be analyzed as “underlying subordinate clauses whose main clauses have been ellipsed but can plausibly be restored for analytic purposes” Evans (2007: p. 430). Plausible restorations for (121) and (126) are given in (127) and (128), respectively.

(127) [*tsa’khû=ma sefa-en=sa’ne*] *in’jan-’jen=jan*

water=ACC end-CAUS=APPR watch out-IMPV=IMP

‘Pay attention lest you use up all the water.’

(128) [*thesi tise=ma fi’tti=sa’ne*] *dyuju*

jaguar 3SG=ACC kill=APPR be afraid

‘It’s afraid the jaguar will kill it.’

The insubordination of the apprehensive uses has not reached its second stage, whereby “the structure itself may still be adequately described by treating it as an underlying subordinate clause,” but only at the cost of “turning a blind eye to the greater semantic specificity associated with the insubordinated clause, and ignoring the fact that certain logically possible ‘restored’ meanings or functions are never found with the insubordinated construction” (Evans 2007: p. 430–431).¹² In

¹²Trivially, therefore, apprehensive insubordination has not reached its third stage either, in which “these clauses have been so nativized as main clauses that the generalizations gained by drawing parallels with subordinate structures are outweighed by the artificiality of not including them in the muster of main clause types” (Evans 2007: p. 431).

relationship to the apprehensive function, this refers to the narrowing of the pool of potential grammatical persons towards which the apprehension is oriented. In prototypical apprehensives, it is only the speaker's fear that can be thus encoded. Since in A'ingae monoclausal uses of the =*sane* 'APPR' clitics can express both first and third persons' fear, we know this stage has not been achieved.

7 Conclusions

The A'ingae apprehensional clitic =*sane* 'APPR' has robust precautioning uses, both avertive and in-case, restricted timitive uses, and marginal apprehensive uses. Furthermore, it can serve as a complementizer to a number negatively-valenced verbs. The apprehensional clitic =*sane* 'APPR' thus presents us with novel typological properties, as this particular range of function has not been reported in previous literature.

For several languages, attempts have been made to explicate the ranges of usage for their respective apprehensional morphologies on diachronic grounds. (among others, [Lichtenberk 1995](#); [Dobrushina 2017](#); [Wiemer 2018](#)). We argue that the particular functional range of the A'ingae apprehensional clitic =*sane* 'APPR', and in particular the range of available precautioning and timitive uses, should be accounted for on synchronic—both semantic and syntactic—grounds.

Semantically, =*sane* 'APPR' requires a possible undesirable situation which contains that of its argument. If the containment is proper (i.e. the undesirable situation contains and is not identical to =*sane* 'APPR's' argument), the in-case function obtains. If, on the other hand, the undesirable situation is identical to =*sane* 'APPR's' argument, the avertive function obtains. Semantically, then, the possibility for a timitive use (at least given its semantics in A'ingae) automatically¹³ follows from the presence of the in-case use. The timitive use is limited due to the recoverability of the apprehensional situation from a noun phrase.

Syntactically, =*sane* 'APPR' is a subordinator, a status which we have supported by both semantic evidence as well as through examining language-particular syntactic properties of subordinate clauses (see §2.2.3 and §3). The marginal apprehensive uses are therefore understood as contextual ellipsis or incipient insubordination of the precautioning uses given their dependence on context and the fact that they too retain these hallmarks of subordinate clauses in the language.

¹³Of course, other languages may have precautioning morphemes with in-case uses which lack timitive uses altogether for syntactic reasons. We therefore do not predict that any precautioning morpheme with in-case uses must have timitive uses, but rather that if it lacks such uses, it is for syntactic reasons rather than semantic ones.

Abbreviations

1	first person subject clitic	ADD	additive focus
1SG	first person singular pronoun	ADJ	adjectivizer
1PL	first person plural pronoun	ADV	adverbializer
2	second person subject clitic	ANA	anaphoric demonstrative
2SG	second person singular pronoun	AND	andative direction
2PL	second person plural pronoun	APPR	apprehensional marker
3	third person subject clitic	ASP	aspectual suffixes
3SG	third person singular pronoun	ATTR	attributive marker
3PL	third person plural pronoun	AUX	dummy auxiliary verb
ABL	ablative case	BEN	benefactive case
ACC	accusative case	CAUS	causative voice
ACC2	accusative case 2	CMP	comparative marker
		CNTR	contrastive topic
		DAT	dative case
		DIMN	diminutive aspect
		DS	switch reference (different subject)
		ELAT	elative case
		EXCL	exclusive focus
		FOC	focal clitics
		FRST	frustrative marker

HES	hesitative particle	POL	polarity clitics
HONR	honorific marker	PRCM	precumulative aspect
IMP	imperative mood	PROH	prohibitive mood
IMP2	imperative mood 2	PROX	proximal demonstrative
IMP3	imperative mood 3	PRSP	prospective aspect
IMPV	imperfective aspect	PURP	purpose clause marker
INF	infinitive marker	QUAL	qualitative marker
INST	instrumental case	RECP	reciprocal voice
INT	polar interrogative	REPR	reportative evidential
IRR	irrealis mood	SBRD	nominal subordinator
ITER	iterative aspect	SRCN	switch-reference conjunction
LOC	locative case	SS	keep reference (same subject)
MOD	modal clitics	THUS	manner deictic demonstrative
NEG	negative polarity	TAX	dependency (taxis clitics)
NEW	new topic	TOP	topical clitics
NUM	subject number clitics	VEN	venitive direction
PASS	passive voice	VER	veridical mood
PEJ	pejorative marker		
PLH	human plurality		
PLS	subject plurality		
PLV	pluractionality (verbal plurality)		

Acknowledgements

First of all, our heartfelt thanks to the A'i who have welcomed us into community and shared their language with us. Thanks especially to Shen Aguinda, Hugo Lucitante, and Leidy Quenamá who have graciously spent their time thinking carefully about the data and ideas discussed here. Thanks also to the editors of this volume, anonymous reviewers for *Syntax of the World's Languages* 8, Wilson Silva, and Pauline Jacobson for helpful discussion of aspects of the data and analysis here.

References

- Aikhenvald, Alexandra Y. 2008. *The Manambu language of East Sepik, Papua New Guinea*. Oxford: Oxford University Press.
- AnderBois, Scott, Nicholas Emlen, Hugo Lucitante, Chelsea Sanker & Wilson Silva. 2019. *Investigating linguistic links between the amazon and the andes: the case of a'ingae*.
- AnderBois, Scott & Chelsea Sanker. 2019. *Reconstruction of A'ingae prenasalized stops*. Berkeley, CA: UC Berkeley. Paper presented at the Third Symposium on Amazonian Languages (SAL 3).
- AnderBois, Scott & Wilson Silva. 2018. *Kofán collaborative project: Collection of audio-video materials and texts*. London: SOAS, Endangered Languages Archive. <https://elar.soas.ac.uk/Collection/MPI1079687>.
- Angelo, Denise & Eva Schultze-Berndt. 2016. Beware *bambai* – Lest it be apprehensive. In Felicity Meakins & Carmel O'Shannessy (eds.), *Loss and renewal: Australian languages since colonisation* (Language Contact and Bilingualism (LCB) 13), 255–296. Berlin: Mouton de Gruyter. DOI:[10.1515/9781614518792-015](https://doi.org/10.1515/9781614518792-015)
- Blaser, Magdalena & María Enma Chica Umenda. 2008. *A'indeccu canqque'sune condase'cho – mitos del pueblo cofán*. Centro Cultural de Investigaciones Indígenas Padre Ramón López.
- Borman, Marlytte Bub. 1976. *Vocabulario cofán: Cofán-castellano, castellano-cofán* (Vocabularios indígenas 19). Quito: Instituto Lingüístico de Verano (Summer Institute of Linguistics).
- Borman, Marlytte Bub & Enrique Criollo. 1990. *La cosmología y la percepción histórica de los cofanes de acuerdo a sus leyendas* (Cuadernos etnolingüísticos 10). Quito: Instituto Lingüístico de Verano (Summer Institute of Linguistics).
- Borman, Roberta F. 1990. *Cofán: Basic lessons for learning the A'ingae language (for English speakers)*. SIL International.
- Dąbkowski, Maksymilian. in preparation. *The morphophonology of A'ingae lexical stress*. Providence, RI: Brown University honors thesis.
- Dench, Alan. 1988. Complex sentences in Martuthunira. In Peter Austin (ed.), *Complex sentence constructions in Australian languages* (Typological Studies in Language 15), 97–139. Amsterdam: John Benjamins. DOI:doi.org/10.1075/tsl.15.06den
- Dobrushina, Nina. 2006. Grammatical forms and constructions with the meaning of fear and caution. *Voprosy Jazykoznanija (Topics in the Study of Language)* 2. 28–67.

- Dobrushina, Nina. 2017. *Fear complement clauses in typological perspective*. Saint Petersburg: Institute for Linguistic Studies, RAS. Paper presented at the 14th Conference on Typology and Grammar for Young Scholars.
- Evans, Nicholas. 2007. Insubordination and its uses. In Irina Nikolaeva (ed.), *Finiteness: Theoretical and empirical foundations*, 366–431. Oxford: Oxford University Press.
- Faraci, Robert Angelo. 1974. *Aspects of the grammar of infinitives and for-phrases*. Cambridge, MA: Massachusetts Institute of Technology doctoral dissertation.
- Farkas, Donka F. 1988. On obligatory control. *Linguistics and Philosophy* 11(1). 27–58.
- Fischer, Rafael. 2007. Clause linkage in Cofán (A'ingae), a language of the Ecuadorian-Colombian border region. In W. Leo Wetzels (ed.), *Indigenous languages of Latin America (ILLA)*. Vol. 5: *Language endangerment and endangered languages: Linguistic and anthropological studies with special emphasis on the languages and cultures of the Andean-Amazonian border area*, 381–399. Leiden: CNWS Publications. <https://hdl.handle.net/11245/1.277948>.
- Fischer, Rafael & Kees Hengeveld. Forthcoming. A'ingae (Cofán/Kofán). In Patience Epps & Lev Michael (eds.), *Amazonian languages. An international handbook*. Vol. 1: *Smaller language families and isolates* (Handbooks of Linguistics and Communication Science (HSK) 44). Berlin: De Gruyter Mouton.
- Foolen, Ad. 2012. The relevance of emotion for language and linguistics. In Ad Foolen, Ulrike M. Lüdtke, Timothy P. Racine & Jordan Zlatev (eds.), *Moving ourselves, moving others: Motion and emotion in intersubjectivity, consciousness and language* (Consciousness & Emotion Book Series 6), 349–68. Amsterdam: John Benjamins. DOI:[10.1075/ceb.6.13foo](https://doi.org/10.1075/ceb.6.13foo)
- François, Alexandre. 2003. *La sémantique du prédicat en mwotlap (Vanuatu)* (Société de linguistique de Paris 84). Leuven-Paris: Peeters.
- Grano, Thomas. 2017. The Logic of Intention Reports. *Journal of Semantics* 34(4). 587–632. <https://doi.org/10.1093/jos/ffx010>. DOI:[10.1093/jos/ffx010](https://doi.org/10.1093/jos/ffx010)
- Green, Ian. 1989. *Marrithiyel: A language of the Daly River region of Australia's Northern Territory*. Canberra, Australia: The Australian National University doctoral dissertation. <http://hdl.handle.net/1885/10926>.
- Lichtenberk, Frantisek. 1995. Apprehensional epistemics. In Joan L. Bybee & Suzanne Fleischman (eds.), *Typological studies in language*. Vol. 32: *Modality in grammar and discourse*, 293–327. Amsterdam & Philadelphia: John Benjamins. [10.1075/tsl.32.12lic](https://doi.org/10.1075/tsl.32.12lic).
- López-Couso, María José. 2007. Adverbial connectives within and beyond adverbial subordination: The history of *lest*. In Ursula Lenker & Anneli Meurman-

- Solin (eds.), *Connectives in the history of English* (Current Issues in Linguistic Theory 283), 11–29. Amsterdam: John Benjamins. DOI:10.1075/cilt.283
- Majid, Asifa. 2012. Current emotion research in the language sciences. *Emotion Review* 4(4). 432–43. DOI:10.1177/1754073912445827
- Mithun, Marianne. 2008. The extension of dependency beyond the sentence. *Language* 84(1). 69–119. <http://www.jstor.org/stable/40071012>.
- Noonan, Michael. 2007. Complementation. In Timothy Shopen (ed.), *Language typology and syntactic description*. Vol. 2: *Complex constructions*, 52–150. Cambridge: Cambridge University Press. DOI:10.1017/CBO9780511619434.002
- Pakendorf, Brigitte & Ewa Schalley. 2007. From possibility to prohibition: A rare grammaticalization pathway. *Linguistic Typology* 11(3). DOI:10.1515/LINGTY.2007.032
- Pride, Kalinda, Nicholas Tomlin & Scott AnderBois. Forthcoming. Lingview: A web interface for viewing FLEx and ELAN files. *Language Documentation & Conservation*.
- Repetti-Ludlow, Chiara, Haoru Zhang, Hugo Lucitante, Scott AnderBois & Chelsea Sanker. 2019. A’ingae (Cofán). *Journal of the International Phonetic Association*. 1–14. DOI:10.1017/S0025100319000082
- Simons, Gary F. & Charles D. Fennig. 2018. *Ethnologue: Languages of the world, Twenty-first edition*. Dallas, Texas: SIL International. <http://www.ethnologue.com>. Online version.
- Simons, Mandy, Judith Tonhauser, David Beaver & Craige Roberts. 2010. What projects and why. In *Semantics and linguistic theory*, vol. 20, 309–327.
- Tonhauser, Judith. 2012. Diagnosing (not-)at-issue content. In *Proceedings of semantics of under-represented languages of the Americas (SULA)*, vol. 6, 239–254.
- Vuillermet, Marine. 2017. *Questionnaire on the apprehensional domain*. Lyon: Laboratoire Dynamique Du Langage. Unpublished.
- Vuillermet, Marine. 2018. Grammatical fear morphemes in Ese Ejja: Making the case for a morphosemantic apprehensional domain. In Maïa Ponsonnet & Marine Vuillermet (eds.), *Morphology and emotions across the world’s languages* (Special issue of *Studies in Language* 42.1), 256–293. DOI:10.1075/sl.00010.vui
- Wiemer, Björn. 2018. *Major and minor apprehensive strategies in Slavic: A diachronic and areal assessment*. Tallinn: University of Tallinn. Paper presented at the 51st Annual Meeting of the Societas Linguistica Europaea.
- Yallop, Colin. 1997. *Alyawarra, an Aboriginal language of Central Australia* (Research and Regional Studies 10). Canberra: Australian Institute of Aboriginal Studies.