A’ingae (Cofán/Kofán) operators
Kees Hengeveld & Rafael Fischer

1. Introduction

A’ingae is a language spoken in Colombia (provinces of Putumayo and Nariño) and Ecuador (province of Sucumbios). According to UNESCO (Moseley ed. 2010) there were 379 speakers in Colombia in 2008 and 700 speakers in Ecuador in 2002. The endonymic glottonym is A’ingae (a’i = ngae ‘person = MANN’, “in the manner of the people”), the Spanish-based Cofán/Kofán is the exonymic glottonym. A grammar sketch is provided in Fischer & Hengeveld (forthc.), a full grammar is in preparation (Hengeveld & Fischer in prep.).

This paper studies the expression of localization, aspect, tense, mood, polarity, and evidentiality in A’ingae. The description is guided by the theoretical framework of Functional Discourse Grammar, especially by the hierarchical, layered approach to operators taken in this approach. The idea that operators are in scopal relationships leads to predictions concerning the combinability and ordering of operators that will turn out to be relevant to the A’ingae system as well. In what follows we will first, in Section 2, present the operator inventory of A’ingae in descriptive terms. Section 3 provides a brief overview of the FDG approach to operators. In Section 4 we then investigate whether the A’ingae data is consistent with the FDG approach. Several challenges that the A’ingae data pose for the current FDG approach are discussed, and solutions for these are proposed. The paper is rounded off with conclusions in Section 5.

2. Operators in A’ingae

2.1. Introduction

In this section the inventory of operators in A’ingae is presented by semantic domain. We will discuss localization (2.2), aspect (2.3), tense (2.4), mood (2.5), polarity (2.6), and evidentiality (2.7). Section 2.8 then provides an overview of the system as a whole, paying special attention to co-occurrence restrictions between and the ordering of operators in A’ingae.
2.2. Localization

The category of localization has two subcategories: directionality and event location.

Directionality is expressed in A’ingae by the cislocative and the translocative suffixes. The cislocative suffix is used to indicate movement in the direction of the speaker, the translocative to indicate movement away from the speaker. Examples (1)-(4)\(^1\) illustrate the use of these suffixes.

(1) \[ I-\text{ngi} = \text{pa} \quad \text{ke} \quad \text{kun’sin} \quad \text{sanja} = \text{ma} \quad \text{an} = \text{ja}. \]
   \text{bring-CIS=SS} \quad 2.SG \quad \text{woolly.monkey} \quad \text{smoke=ACC1} \quad \text{eat=IMP}
   \text{‘Come and get your smoked monkey meat and eat it!’} (BC13.074)

(2) \[ I-\text{nga} = \text{pa} \quad \text{fûesû-si} = ‘u = \text{ma} = \text{ta} \quad \text{afe} = ‘ya}. \]
   \text{bring-TRANS} \quad \text{other-SHAPESPINE=AUG=ACC1=NEW} \quad \text{give=IRR}
   \text{‘He went and got the other clothes and handed them over.’}
   (20060119-AnC-Consiana-01-0356.152)

(3) \[ Jinge \quad \text{tû’i} \quad \text{ju’-\text{ngi}-ye}. \]
   \text{HORT} \quad \text{tomorrow} \quad \text{sow-CIS-INF}
   \text{‘Let’s come to sow tomorrow.’} (20060119-AnC-Consiana-02-0028.5)

(4) \[ Tse = \text{tsût} \quad \text{thûse-\text{nga}}. \]
   \text{then=3} \quad \text{call-TRANS}
   \text{‘Then he went to call (her).’} (20040306-AC-01-Pajiisune-0143.905)

In examples (1) and (2) the directional suffixes are combined with the same movement verb \( i \) ‘bring/take’ and specify the direction of movement. In examples (3) and (4) the verbs themselves do not express movement, but the suffixes add a movement component to their meaning.

The translocative suffix –\( nga \) may also be used to indicate event location. In this use it indicates that the event occurred at a place removed from the reference location. An example is given in (5).

\(^1\) Most examples in this chapter are taken from the data collected by Rafael Fischer between 2001 and 2006 in the villages of Dureno, Sábalo and Sinangoe in Ecuador. These data are coded in the following way: Date of recording – Abbreviations of names of speakers involved – Topic – Time code/line number. Additional examples are taken from legends told by Enrique Criollo and presented in M.B. Borman (1990). These data are coded by the abbreviation ‘BC’ followed by the legend number and the line number within the legend. Some further examples are taken from the earlier publications on A’ingae by M.B. Borman mentioned above and are then referenced in the regular way. When an example was obtained in elicitation this is indicated by means of the abbreviation ‘elic.’.
(5) Kathû-je-nga = ni = nda tise düštsh’ye = ndekhû ichuru’chu = ma
      clear-IMPF = TRANS = LOC = NEW REFL child = HUMPL gourd.bowl = ACC1
      pûvi-a = mba khusha changu jin-’thi.
      roll-CAUS = SS heal hole exist-LOCNR
      ‘While she was away clearing the field, her children, having turned a gourd bowl upside
      down, were drumming on it near the hole.’ (BC08.009)

2.3. Aspect

2.3.1. Introduction

There are many aspectual operators in A’ingae. Some of these are qualificational in nature, and are
discussed in Section 2.3.2. Others express quantification and are presented in Section 2.3.3.

2.3.2. Qualificational aspect

In order to express qualificational aspect four suffixes are used. The first is the imperfective marker –
je(n), which may be used to express habitual (see Section 2.3.3) and progressive aspect. The latter use is
illustrated in (6) and (7).

(6) Tuya=tsû uya-je tsa = ‘ma.
      still = 3 move-IMPF ANA = FRT
      ‘But it’s still moving.’ (20040202-FASC-Panzaye-3-066)

(7) Dûse-an-je = ni = nda düşhû = ndekhû athe = fa.
      hang-CAUS-IMPF = LOC = NEW child = HUMPL watch = PLS
      ‘When he was hanging them there, the young men saw it.’ (BC02.027)

The second suffix expressing qualificational aspect is the precumulative marker -ji(n). Its interpretation
depends on the dynamicity of the predicate with which it combines. When combining with a dynamic
predicate, it expresses the process leading up to the completion of the event (8). When it combines with
a stative predicate, it expresses the process leading up to the state (9).

(8) Pan thûthû-ji kuse anthe = ’fa.
      nearly fell-PRECUM night stop = PLS
      ‘When it was nearly felled, it was night, and they stopped.’ (BC03.003)

(9) Kûnu-jiu.
The third suffix expressing qualificational aspect is the *prospective* aspect marker –yi. This marker is used exclusively with the verb *ja* ‘go’, as illustrated in (10) and (11).

(10) Si'tsi=ve ja-yi.
    firewood=ACC2 go-PROSP
    ‘I’ll go for firewood.’ (BC24.008)

(11) Tsun=si sepakhue andû~ː ansûnde-ye sefaku=ni ja-yi=ya.
    do=DS behind carry~DUR go.up-INF sky=LOC go-PROSP=IRR
    ‘So she started packing her stuff behind them to go up to the sky.’
    (001-04-03-LC-Unfendyu'ndyu-062)

Another way of expressing prospective aspect is by using an auxiliary construction that consists of the infinitival form of the main verb and the auxiliary verb *tsun* ‘do’, inflected for imperfective aspect. This is illustrated in (12) and (13).

    old.man=NEW die-INF do-IMPF=IRR
    ‘The old man was about to die.’ (20040215-03-LC-Unfendyu'ndyu-023)

(13) Ku'i-ye tsun-je.
    drink-INF do-IMPF
    ‘He was going to drink it.’ (BC09.042)

The last suffix expressing qualificational aspect is –*tshi* ‘QUAL’. This suffix derives a quality meaning from the predicate it attaches to. This may be the quality resulting from the event described by a dynamic predicate, as in (14) and (15). When attached to a stative predicate, no resultative meaning is implied, as in (16) and (17).

(14) Khûi=ta mûtsinu~ː-tshi =te khûi='ya.
    lie.down=NEW rotate~DUR-QUAL=RPT lie.down=ASS
    ‘It is said that he layed down rolled over, layed down.’
    (20060104-AQ-Matachi-0166.962)

(15) Nane phû'chu-tshi=a pûshesû=te nane.
    surely fatten-QUAL=ADJR woman=RPT surely
    ‘It is said that she surely is a chubby woman.’
    (20060119-AnC-Consiana-01-0286.702)
(16) Tse = ni ŋu-tshi kan'jen-ye.
ANALOC = LOC good-QUAL live-INF
‘There it was good to live.’ (BC08.065)

(17) A’i tsu’fe thuthu-tshi.
person eye white-QUAL
‘Men’s eyes are white.’ (BC09.031)

2.3.3. Quantificational aspect

A’ingae has grammatical means to express a large number of distinctions pertaining to the category of quantificational aspect.

Vowel lengthening is used to express durative aspect, as shown in (18) and (19).

(18) lsû = pa si’vu~ː dyai.
take = SS twist~DUR sit
‘He sat twisting string.’ (BC09.029)

(19) Findi~ː anga pa'khu ai'vu findi.
encircle~DUR proceed all body encircle
‘Encircling it wrapped her whole body.’ (BC14.027)

Iterative aspect can be expressed in two different ways. In the first the suffix –ñakha is added to the verb stem, as illustrated in (20) and (21).

(20) Tise pûshe thatha-ñakha ja-yi.
3.SGwoman search-ITER go-PROSP
‘His wife went searching for him.’ (BC19.079)

(21) Khashi-ñakha = mbi = ta akhia = te setaen-ñakha shundûsû’chu = ma
wash-ITER = NEG = NEW just = RPT sing-ITER penis = ACC1
pisa-ñakha pisa-ñakha anga~ː.
press-ITER press-ITER carry
‘When they weren't washing it they'd be just singing and proceeded to pinch and pinch his penis together.’ (BC15.093)

Another way of expressing iterativity is the reduplication of (part of) the verbal stem, as in (22) and (23).

(22) Uchhi~chhi = pa ru'nda.
knock~ITER = ss wait

‘He knocked and waited.’ (20040215-03-LC-Unfendyu'ndyu-020)

(23)  Ingi = ma = tšû  iñen = e  atûi~fûi = ’fa = ya.
1.PL = ACC1 = 3  hurt = ADVR  chop~ITER = PLS = IRR

‘They are going to chop us up painfully.’ (20040215-03-LC-Unfendyu'ndyu-028)

The same strategy is also used to indicate that there are multiple undergoers involved in a state of affairs, as shown in (24) and (25).

(24)  Fûefayi  a’ta  uma’khu = ma  ankan~ka-en = ’fa.
five  day  palm.spear = ACC1 hold.on~ITER-CAUS = PLS

‘For five days they made spears.’ (BC12.045)

(25)  Kata = pa  fithi~thi.
cast = SS  kill~ITER

‘He cast and killed them.’ (BC12.102)

The imperfective suffix does not only express progressive aspect, as shown in Section 2.3.2, but also expresses habituality, as exemplified in (26) and (27).

(26)  tsa = ’ma = tšû  a’i = ma  paji = si  se’je = pa  khûsha-en-jen.
ANA = FRT = 3  person = ACC1  ill = DS  cure = SS  recover-CAUS-IMPF

‘But when the people are ill, he cures them.’ (20040218-EC-Interview-113)

(27)  Tsun = si = gi  sarûpa = ma  isû~je = ’fa = ’ya.
do = DS = 1  clothes = ACC1  get-IMPF = PLS = ASS

‘This is how we used to get clothes.’ (20040218-EC-Interview-147)

In order to indicate that an event took place during a short period of time the diminutive aspect suffix is used. This is illustrated in (28) and (29). The same form is also used as a clitic to mitigate imperatives (see Section 2.5.3).

(28)  Dyo-kha = pa  anthe.
fear-DIM = SS  let.go

‘I was a bit afraid and let it go.’ (20040202-FASC-Panzaye-1-036)

(29)  Jinge  ru’nda-kha-ye.
HORT  wait-DIM-INF

‘Let’s wait a little bit.’ (20040202-FASC-Panzaye-3)

Habitual and negative habitual aspect may be expressed through periphrastic constructions based on
habitual and negative habitual participles, used predicatively in a non-verbal predication. In examples (30) and (31) the participles are used as attributes in a headless and headed noun phrase respectively, which shows that they are non-verbal in nature.

(30) atesian = khesû
    teach = HAB
    ‘(things) that are taught’ (20060118-LM-2-02-0204.761)

(31) atesû = masia  a’i
    know = NEIGHAB person
    ‘ignorant people’ (20050701-MA-Letter-2-040)

When used predicatively, these participles behave like other non-verbal predicates, and express (negative) habituality at the clausal level, as shown in (32) and (33).

(32) Ja’ñu  in’jan-je = ’fa  Chiga  tsæ = ’ka = en  ji = khesû.
    now  think-IMPF = PLS God  ANA = CMP = ADVR come = HAB
    ‘Now they understand God comes like that.’ (BC25.044)

(33) Je’nda  kûti’chu kuku = ta = ti  tsæ = ’ka = en  fi’thi = masia  tsæ = ja.
    then tree  devil = INT  ANA = CMP = ADVR kill = NEIGHAB ANA = CONTR
    ‘Then the yachapo demon is not killed like that?’
    (20040218-EC-Interview-0429.314)

Finally, habituality can also be expressed by a same subject verb form in =pa followed by the auxiliary kanse ‘live’ (34), or by an infinitive in –ye–ñe followed by the auxiliary verb atesû ‘know’ (35). The latter may also be used as an auxiliary expressing acquired ability (see Section 2.5.2).

(34) Tsa = ’ka = en  = tsu  ji = pa  kanse = ’fa = ’ya,
    ANA = CMP-ADVR = 3  come = SS  live = PLS = ASS
    ‘That’s how they came here.’ (20060118-MM-2-0237.799)

(35) Je’nda  pûshesû = ndekhû = khe = ti  setha’pue-ñie  atesû = ’fa.
    then  woman = HUMPL = ADD = INT  sing-INF  know = PLS
    ‘So the women too used to sing?’ (20060118-BM-Interview-2497.032)

2.4. Tense

Absolute tense distinctions are not made in the grammar of A’ingae. Rather, the language uses a realis-
irrealis system that is modal in nature and will be further discussed in Section 2.5.2. Here it will suffice to mention that when reference is made to the future the irrealis mood is used (36), while when reference is made to the past and the present the (unmarked) realis is used (37). Whether reference is made to the past or the present can only be derived from the context.

(36)  Feña=pa=tsù ja-nga=`fa=ya.
      laugh=SS=3 go-TRANS=PLS=IRR
‘They will leave laughing.’ (20060118-LM-2-0316.279)

(37)  Indi=pa=te pisa kani-an=`fa=Ø.
      hold=SS=RPT press.down enter-CAUS=PLS=REAL
‘It is said that they grabbed him and pushed him under the water.’
(20060104-AQ-Matachi-0076.409)

Similarly, relative tense is not expressed directly in A’ingae, though it is implied in several subordinating morphemes. The converb construction created with the suffix -in (38) implies simultaneity, the infinitive (39) implies posteriority, and the same (40) and different (41) subject co-subordinators imply anteriority.

(38)  Paña=mba anthe=pa butho-in ji tsa’o=ni.
      hear=SS stop=SS run-SIM come house=LOC
‘She heard it, stopped, and came running to the house.’ (BC08.023)

(39)  Sombo-en-fie=tsù injenge.
      emerge-CAUS-INF=3 important
‘It’s important to get it out.’ (20040202-FASC-Panzaye-2-010)

(40)  Biani ja=pa aña'chu san=`sù ja=pa=te shipare=nga khûkhû-ye.
      far go=SS food dry=ATTR go=SS=RPT manta.ray=DAT sting-PASS
‘They say that having gone far, having gone for dried meat, he was stung by a manta ray.’
(20060118-MM-2-0054.384)

(41)  Afe=si dü’shû=ja shunchhankan=`fa=`ya.
      give=DS child=CONTR smell=PL=ASS
‘Having given it, the children smelled.’ (20040218-EC-Interview)

2.5. Mood

2.5.1. Introduction

The term mood covers both modal and illocutionary distinctions (see Hengeveld 2004 for an overview).
In the following sections modality is discussed first, followed by illocution.

2.5.2. Modality

Only few modal markers can be found in A’ingae. This may be due to the fact that the irrealis clitic mentioned above covers many different modal distinctions. The examples in (42)-(45) show some of these.

(42) Tsa = 'ma = ki  sumbu-e = ña  tse = 'thi = ye = ja  
ANA = FRT = 2  emerge-CAUS = IRR  ANALOC = LOCNR = ELAT = CONTR  
‘Can you get it out of there?’ (20040202-FASC-Panzaye-3-011)

(43) Tsa = 'ka = en = ne  tsandie = ve  me'io = ya.  
ANA = CMP = ADVR = ABL  man = ACC2  NEGP = IRR  
‘That will be the reason that there were no men.’ (20040215-03-LC-Unfendyu'ndyu-005)

(44) Me'i  ña  pûshe = ya = mbi = gi.  
no  1.SG marry = IRR = NEG = 1  
‘No, I can’t marry.’ (BC15.009)

In these examples the irrealis expresses facultative and epistemic modality. No examples have been encountered so far in which the irrealis expresses deontic modality.

The irrealis clitic may have more than one State-of-Affairs in its scope. This is illustrated in (45).

(45) Na’e = me  da = ni = khe  a’i  akhi = pa  jacan = ya.  
river = ACC2  become = LOC = ADD  person  pole = SS  travel = IRR  
‘If we become rivers, people will pole their canoes over us.’ (BC08.040)

Both the event of poling and the event of travelling are situated in irreality in this sentence.

There are two modal auxiliaries, both used to express facultative participant-oriented modality, and both combine with the infinitive, as shown in (46) and (47). Atesû ‘know’ in (46) expresses acquired ability, usha ‘be able’ in (47) intrinsic ability. As shown in Section 2.3.3, atesû is also used as an auxiliary expressing habitual aspect.

(46) Avûja-ye  atesû = 'chu  tayupi = sû  a'i.  
pray-INF  know = SUB  former = ATTR  person  
‘People from the past knew how to pray.’ (BC24.051)

(47) Tsu'fe  tshan = si  athe-ye  usha = mbi.  

Finally, there is a periphrastic construction expressing participant-oriented deontic modality. This is a non-verbal predication in which the predicate is a headless relative clause using the subordinator = 'chu, which contains a verb marked for irrealis mood. This is illustrated in (48) and (49).

(48) Kitsa = ndekhu = khe = ti tisù tsa'u = ni kukama = ngaế afa-je = ya = 'chu.
father = HUMPL = ADD = INT REFL house = LOC Spanish = MANN speak-IMPF = IRR = SUB
‘Should the parents speak Spanish at home?’ (20060118-LM-2-0246.062)

"Are the parents (the ones) to speak Spanish at home?"

(49) Tsa khûsha = ya = 'chu.
ANA recover = IRR = SUB
‘That man had to repair it.’

‘That man was (the one) to repair it.’

2.5.3. Illocution

Seven different basic illocutions can be expressed in A’ingae, using a variety of expression formats. A second position clitic is used to express polar interrogatives; clitics attaching to the predicate express the imperative, prohibitive, and mitigated imperative; another predicate clitic, further removed from the predicate, expresses the assertive; in content questions there is always an ignorable word in the initial position of the sentence; and a special sentence-initial hortative particle triggering the infinitival form of the verb marks hortative sentences. Examples (50)-(56) illustrate these sentence types.

(50) Assertive
Tisù tsa’u = ni anga = ‘ya.
REFL house = LOC carry = ASS
‘He took them to his house.’ (20060119-AnC-Consiana-01-0157.705)

(51) Imperative
Ña = mbe tsa’u-en = ‘fa = ja.
1.SG = DAT house-CAUS = PLS = IMP
‘Make a house for me!’ (20040218-EC-Interview-080)

(52) Prohibitive
Ke’i kha = ni ja = ‘fa = jama.
2.PL other = LOC go = PLS = PROH
‘Don’t you go anywhere!’ (20040215-01-LC-Tetetene-040)
Mitigated Imperative
Injan = **kha**.
think = MITIMP
‘Be careful!’ (20040202-FASC-Panzaye-2-075)

Yes/no-Interrogative
Tse = ni = ngae = ti ja.
ANALOC = LOC = MANN = INT go
‘Did it go that way?’ (20040202-FASC-Panzaye-3-020)

Content Interrogative
**Majan** = tsū anga.
IGNAN = 3 carry
‘Who carried it?’

Adhortative
**Jinge** juva = nga ja-ye.
HORT DIST = DAT go-INF
‘Let’s go over there.’ (20040215-03-LC-Unfendyu'ndyu-037)

2.6. Polarity

A’ingae uses two different strategies to express negation. The first involves a negative predicate based on the root *me’/me’i* ‘no’, the second the predicate clitic =mbi ‘NEG’.

Negative predicates are formed by combining the negative particle *me’/me’i* ‘no’ with one of the clitics =tshi ‘STAT’, =’u(n) ‘AUG’ or =’chu ‘SUB’, thereby creating a non-verbal predicate. This negative predicate is then used in the expression of negative existentials, as shown in (57).

(57) Tsa = ’ka = e = ne tsandie = ve *me’i = ’u = ēña.
ANA = CMP = ADVR = ABL man = ACC2 NEG = AUG = IRR
‘That’s must be why there weren’t any men.’ (20040215-03-LC-Unfendyu'ndyu-005)

A second use is to express negative possession as shown in (58).

(58) Convenio = ve *me’i = ’chu = ’fa = ’ya.
convenant = ACC2 NEG = SUB = PLS = ASS
‘We do not have a convenant.’ (20060118-LM-2-0517.965)

Negative existential clauses such as the one in (57) are pseudo-transitive in nature. There is only one argument (*tsandie = ve *man-ACC2*) in this sentence which is marked for accusative case. In clauses like
these the variants metshi and me’i’on are used. Negative possessive clauses such as the one in (58) are transitive in nature. In these clauses the variant me’cho is used.

Often negative predicates have just one State-of-Affairs in their scope. They may, however, scope over more than one State-of-Affairs, provided that the two States-of-Affairs are closely connected. The following is an example:

(59) jungue = ’sù = ve  isù = pa  ja-je = ya = ’chu = ve  me’i = tshi = ’fa = gi.
    something = ATTR = ACC2  get = SS  go-IMPF = IRR = SUB = ACC2  NEGP = QUAL = PLS = 1
    ‘I don’t receive money and go (sell).’ (20050701-MA-Letter-2-010)
    “There isn’t my receiving money and going selling.”

But note that in this case the negative verb takes an embedded clause with the subordinator = ’chu, so that it scopes indirectly over the two events.

In all the cases above the negative predicate is probably best interpreted as a lexical predicate meaning something like ‘non-existent’. Evidence for this comes from the fact that it takes one or more arguments, as shown above. Auxiliary predicates do not take arguments themselves.

In order to express non-existential negation, the clitic =mbi is used. It combines with verbal (60) and non-verbal (61) predicates.

(60) Ja’ñu = ta = gi   mañan = ’fa = ya = mbi.
    now = NEW = 1  free = PLS = IRR = NEG
    ‘Now we won’t let it go.’ (20040202-FASC-Panzaye-3 -052)

(61) U’ma  fiesta = mbi = ti.
    chonta  party = NEG = INT
    ‘Wasn’t it the chonta party?’ (20060118-MM-2 -0109.384)

In (60) and (61) the scope of =mbi is a single State-of-Affairs. One may also find examples, however, with =mbi having scope over closely related States-of-Affairs. This is shown in (62), in which the predicate anchun ‘sew’ and tandan ‘tie’ are both negated.

(62) Ke  a’mbian = ’chu = ma = ja  anchun = pa  tandan = ya = mbi = gi.
    2.SG  have = SUB = ACC = CONTR  sew = SS  tie = IRR = NEG = 1
    ‘The clothes that you have I am not going to make for myself.’
    (20060119-AnC-Kunsiana-01-0490.799)
2.7. Evidentiality

A’ingae has two grammaticalized constructions to express reportativity. The first is through the use of the second position clitic =te. This clitic is often used in narration, to indicate that the story narrated was passed on to the current speaker by someone else. It is illustrated in (63) and (64).

(63) Fingi fingi=mba=te chhaje-in ja-je.
flap flap=SS=RPT fly-SIM go-IMPF
‘It is said that flapping and flapping she went away.’ (BC23.1.007)

(64) Tsampi=ni ja=pa=te tise=ja sime ji=’ya.
forest=LOC go=SS=RPT 3.SG=CONTR evening come=ASS
‘It is said that he went to the forest and came back in the evening.’
(20060119-AnC-Consiana-02-0115.484)

A second construction can be seen as a grammaticalized version of the direct speech construction in A’ingae. A common way of expressing direct speech is by using a construction with the adverb khen ‘thus’, often combined with the reportative clitic =te. This is illustrated in (65):

(65) “Va=nga cha’ndi=’sû=gi” khen=de sû=’ya matachi=ja.
PROX=DAT cold=ATTR=1 thus=RPT say=ASS matachi.clown=CONTR
‘“I’m cold in these (clothes)” so the Matachi said.’
(20060104-AQ-Matachi-0090.782)

This construction is used with verbs like in’jan ‘think’, asi’thaen ‘think’, sû ‘say, mean, call’, kundase ‘tell’, manda ‘order’, and ina ‘cry’.

The reportative clitic may also be left out, as shown in (66):

(66) “Pa=ya=ti=gi khen?” khen Napa asi’thaen=mba dyu=pa anthe.
die=IRR=INT=1 thus thus Quichua think=SS fear=SS stop
‘“Will I die doing this?” the Quichua thought and became afraid and stopped.’
(BC14.077)

There is, however, a further reduced version of this construction, in which the reporting verb is missing too. In these cases khen serves as a quotative marker. This is shown in (67) and (68).

(67) Chigane afe=’fa=ja khen.
please give=PLS=IMP QUOT
‘“Please give it to me” (she said).’ (20060119-AnC-Consiana-01-0250.03)
This marker is also often found accompanying non-linguistic sound strings (69).

(69) “Tron” khen amphiji.
tron QUOT fall come
‘He came falling “tron”.’ (BC26.117)

2.8. The expression of operators in A’ingae

As shown above, operators in A’ingae may be expressed in a variety of ways: through stem modulation, suffixes, clitics, free grammatical words, and auxiliary constructions. We will discuss these here in terms of their position and interaction. All expressions of operators discussed here are represented in the overall template given in Table 1.

*Stem modulations* either reduplicate or lengthen part of the stem. Given their nature, they are the most inner type of expression of operators, as they expand on part of the stem itself. This is indicated in Table 1 in their position closest to the verbal stem.

*Suffixes* only occur with verbal stems and are limited in number. Suffixes necessarily occur further away from the verbal stem than stem modulations (70), but closer to it than clitics (71).

(70) sharû~:-yē
yawn~DUR-INF
‘to yawn (intensely)’ (20060104-AQ-Matachi-0284.533)

(71) Pasia-ngi = pa ja-je = ’fā = ’ya.
make.a.trip-CIS = SS go-IMPF = PLS = ASS
‘They only came here to make a trip and return.’ (20040218-EC-Interview-235)

In (70) the infinitive suffix follows the modulated stem. In (71) the verb *pasia* ‘make a trip’ is followed by the cislocative suffix, which in turn is followed by the same subject clitic, and the verb *ja* ‘go’ is followed by the imperfective suffix, which in turn is followed by the plural subject and assertive clitics.
Table 1. *A’ingae* operators

<table>
<thead>
<tr>
<th>Free words</th>
<th>Predicate Phrase</th>
<th>Free words</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2 clitics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head</td>
<td>Number</td>
<td></td>
</tr>
<tr>
<td>Free words</td>
<td>+1</td>
<td>+2</td>
</tr>
<tr>
<td>Verbal words</td>
<td>+3</td>
<td>+4</td>
</tr>
<tr>
<td>Head</td>
<td>Mood</td>
<td>Polarity</td>
</tr>
<tr>
<td>Aspect</td>
<td>Assertive</td>
<td></td>
</tr>
<tr>
<td>Aspect, Direction</td>
<td>Imperfective</td>
<td></td>
</tr>
<tr>
<td>Event location</td>
<td>(-je(n))</td>
<td>Distal</td>
</tr>
<tr>
<td>Event location</td>
<td>PreCumulative</td>
<td>Subject</td>
</tr>
<tr>
<td>Event location</td>
<td>(-ji(n))</td>
<td>(-nga)</td>
</tr>
<tr>
<td>Event location</td>
<td>Prospective</td>
<td>= 'fa</td>
</tr>
<tr>
<td>Event location</td>
<td>(-yi/-ūn)</td>
<td>Prohibitive</td>
</tr>
<tr>
<td>Event location</td>
<td>Diminutive</td>
<td>Mitigated imperative</td>
</tr>
<tr>
<td>Event location</td>
<td>(-kha)</td>
<td>(=kha)</td>
</tr>
<tr>
<td>Event location</td>
<td>Quality</td>
<td>Imperative</td>
</tr>
<tr>
<td>Event location</td>
<td>(-tshī)</td>
<td>(=ja(n))</td>
</tr>
<tr>
<td>Event location</td>
<td>Cislocative</td>
<td>Prohibitive</td>
</tr>
<tr>
<td>Event location</td>
<td>(-ngī)</td>
<td>(=jama)</td>
</tr>
<tr>
<td>Event location</td>
<td>Translocative</td>
<td>Mitigated imperative</td>
</tr>
<tr>
<td>Event location</td>
<td>(-nga)</td>
<td>(=kha)</td>
</tr>
<tr>
<td>Adhortative</td>
<td>Plural subject</td>
<td>Negation</td>
</tr>
<tr>
<td>jinge</td>
<td>= 'fa</td>
<td>Assertive</td>
</tr>
<tr>
<td>Interrogative</td>
<td>Irrealis</td>
<td>(= yai)</td>
</tr>
<tr>
<td>= ti</td>
<td>= yai = ūna</td>
<td>(= mbī)</td>
</tr>
<tr>
<td>Reportative</td>
<td>= yai = ūna</td>
<td>(= 'ya = ūna)</td>
</tr>
<tr>
<td>= te</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Auxiliary constructions, non-verbal predicates

<table>
<thead>
<tr>
<th>Prospective (V-ye'-ūn + tsun-jen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic ability (V-ye'-ūn + usha)</td>
</tr>
<tr>
<td>Acquired ability (V-ye'-ūn + atesū)</td>
</tr>
<tr>
<td>Habitual (V-ye'-ūn + atesū)</td>
</tr>
<tr>
<td>Habitual (V = pa + kanse)</td>
</tr>
<tr>
<td>Non verbal predicates, including:</td>
</tr>
<tr>
<td>Habitual (V = khesū)</td>
</tr>
<tr>
<td>Negative Habitual (V = masia)</td>
</tr>
<tr>
<td>Obligation (V = yai = ūna = 'chu)</td>
</tr>
</tbody>
</table>

Quotative khen
Suffixes are arranged in a particular order, as indicated in Table 1. The aspectual suffixes\(^2\) occur closer to the stem then the suffix expressing event location. This is illustrated in (72).

(72) Napi-ji='fa=si ja-ji tayu ru'nda-je-nga='ya pûvi khûi-ji.

arrive-PRECUM=PLS=DS go-PRECUM already wait-IMPF-TRANS=ASS turn lie.down-PRECUM

‘As they were arriving he had already gone to wait elsewhere lying face down.’
(20060119-AnC-Consiana-01-0045.338)

The clitics of A’ingae come in three groups. The first group consists of clause level clitics that occupy the second position in the clause. Examples are the interrogative clitic illustrated in (54) and the reportative clitic shown in (63) and (64). The second group concerns constituent level clitics attaching to predicate phrases. Examples from this group are the irrealis clitic shown in (42)-(45) and the negative clitic exemplified in (60)-(62). The third group contains constituent level clitics that attach to noun phrases and subordinate clauses and are not relevant to the present discussion. Example (73) illustrates all three types of clitics. The pronoun ŋa ‘I’ is followed by the noun phrase clitics =ma ‘ACC1’ and =nda ‘NEW’, the verb fi’thi ‘kill’ is followed by the predicate phrase clitics =’fa ‘PLS’, =ya ‘IRR’, and =’ya ‘ASS’. Finally, the clause initial constituent ŋa=ma=da is followed by the clause level second-position clitic =tsû ‘3’.

(73) ņa=ma=nda=tsû fi’thi=’fa=ya=’ya

1.SG=ACC1=NEW=3 kill=PL=IRR=ASS

‘They will kill me.’ (V104-BM-Interview-0246.473)

Within the group of predicate phrase clitics four subgroups can be distinguished, based on their position with respect to the predicate. These groups are listed in Table 1, and their positions are illustrated in (74) and (75).

(74) Jañu=nda=gi mañan=’fa=ya=mbi.

now=NEW=1 set.free=PLS=IRR=NEG

‘Now we won’t let it go.’ (20040202-FASC-Panzaye-3-052)

(75) Tsa=ma=ta=tsû shunchhan=ya=mbi=’ya.

ANA=ACC=NEW=3 smell=IRR=NEG=ASS

‘One couldn’t smell it.’ (20060118-BM-Interview-0419.697)

In (74) the plural subject clitic occurs in the first clitic position following the predicate, the irrealis clitic in the second, and the negative clitic in the third. Example (75) shows that the

---

\(^2\) The directional and event location suffixes do not seem to co-occur.
negative clitic may be followed by the assertive clitic in the fourth position.

Second position clausal clitics are given in Table 1 as preceding the predicate phrase. This should not be taken literally, as these clitics follow the predicate phrase when the latter is in the clause initial position. The interrogative and reportative second position clitics have been illustrated above. Further examples are (76) and (77).

(76) Pûshesû = ndekû = mbe thenangu = nga = ti khûi.
    woman = HUMPL = BEN leg = DAT = INT lie.down
    ‘Did he lie down on the women’s laps?’ (20060104-AQ-Matachi-0178.903)

(77) Ja = sî = te matachi = ja ja = ’ya.
    do = DS = RPT matachi = clown = CONTR go = ASS
    ‘After they left the Matachi left.’ (20060104-AQ-Matachi-0048.121)

In (76) the interrogative clitic =ti follows the clause initial nominal phrase pûshesûndekhmbe thenangung ‘on the women’s laps’. In (77) it follows the clause initial embedded clause jasite ‘having left’.

Free grammatical words may be found in clause initial and final position. In initial position the hortative marker jinge is found, in final position the quotative marker khen. These are once more illustrated in (78) and (79).

(78) Jinge kû'i-ye varapo = ma.
    HORT drink-INF sugarcane.drink = ACC1
    ‘Let’s drink sugarcane drink.’ (20060118-BM-Interview-2645.118)

(79) Ña khu’pa mama khen.
    1.SG defecate mama QUOT
    ‘I am defecating mama’.

Finally, auxiliary constructions behave like non-verbal predicates, in the sense that they do not allow the attachment of verbal suffixes. An exception is the fixed combination of tsun ‘do’ as a prospective auxiliary, which necessarily occurs in the imperfective aspect. Otherwise, auxiliary constructions directly combine with the predicate clitics, as in (80) and (81).

(80) Se’je-ye usha = ’fa.
    cure-INF able = PLS
    ‘They can cure them.’ (BC15.061)

(81) Tayupi tsa = ’ka = en tise = pa ñuña-ye atesû = ’ya.
    formerly ANA = CMP = ADVR 3 = ASS make-INF know = ASS
    ‘In early times they knew how to make it.’ (20060118-MM-2-0158.794)
Auxiliary constructions and non-verbal predicates do not combine with the imperative, prohibitive, and mitigated imperative enclitics. This restriction probably simply follows from the stative nature of these predicates.

3. Operators in FDG

In Functional Discourse Grammar, and in various other grammatical theories, grammatical categories are organized in terms of their scope. Scope relations are defined in terms of different interpersonal (pragmatic) and representational (semantic) layers. These are represented in Figure 1. In this figure the symbols ‘>’ when read from left to right and ‘∨’ when read from top to bottom mean ‘has scope over’.

At the Interpersonal Level different pragmatic layers are recognized, with scope relations between them: the lowest one relevant here is the Ascriptive Subact (T), which represents an act of predication; the next higher one is the Communicated Content (C), which is the message transmitted in an utterance; then follows the Illocution (F), which captures the communicative intention of the speaker; and the highest layer relevant here is the Discourse Act (A), which represents the basic unit of communicative behaviour.

At the Representational Level different semantic layers are distinguished, again with scope relations between them: the lowest one is the Property (f) expressed by a lexical element; next is the Configurational Property (fc), which consists of the lexical element and its argument(s) and as such provides the basic characterization of a State-of-Affairs; then follows the State-of-Affairs (e) itself, which is the situated real or hypothesized situation the speaker has in mind; the Episode (ep) is the next higher layer, and is a thematically coherent combination of States-of-Affairs that are characterized by unity or continuity of time, location, and participants; the highest layer is the Propositional Content (p), which is a mental construct entertained about an episode.

The levels among themselves are also hierarchically related, with the Interpersonal Level having higher scope than the Representational Level, as indicated in Figure 1.

Non-relational grammatical categories are treated as operators in FDG. For the purposes of this
paper, in general terms two groups can be distinguished: operators that have the noun phrase as their domain, and operators that operate elsewhere. The former group might be classified as noun phrase operators and are not dealt with in this paper. The latter group can, however, not be treated as clausal operators, as not all discourse acts are realized as clauses. For instance, non-clausal Discourse Acts like the expression Why? may well occur independently, yet are clearly expressing the grammatical category of interrogativity. I therefore will take the Discourse Act rather than the clause as the relevant domain of investigation.

This wide definition of operators outside the domain of the noun phrase opens up an enormous range of grammatical categories. Table 2 gives an overview of all the relevant categories as presented in Hengeveld & Mackenzie (2008), but including the modifications proposed in Hengeveld & Hattner (2015) for evidentiality, Hattner & Hengeveld (2016), Olbertz & Gasparini Bastos (2013) and Olbertz & Honselaar (2017) for modality, Mackenzie (2009) and Hengeveld & Mackenzie (subm.) for polarity, and Olbertz (2012) and Hengeveld (2017) for mirativity. It is outside the scope of this paper to give a full motivation of the categorization presented in Table 2. The reader is referred to the papers mentioned here for further argumentation.
Table 2. Tense, aspect, mood, evidentaility, mirativity, polarity, and direction categories in FDG

<table>
<thead>
<tr>
<th></th>
<th>Interpersonal Level</th>
<th>Representational Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Discourse Act (A)</td>
<td>Illocution (F)</td>
</tr>
<tr>
<td>Mood</td>
<td>irony, mitigation,</td>
<td>basic illocution,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>illocutionary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>modification</td>
</tr>
<tr>
<td>Polarity</td>
<td>rejection</td>
<td>negative basic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>illocutions</td>
</tr>
<tr>
<td>Evidentiality</td>
<td>reportative</td>
<td>reportative</td>
</tr>
<tr>
<td>Mirativity</td>
<td>mirative</td>
<td></td>
</tr>
<tr>
<td>Tense</td>
<td></td>
<td>absolute tense</td>
</tr>
<tr>
<td></td>
<td></td>
<td>relative tense</td>
</tr>
<tr>
<td>Aspect</td>
<td></td>
<td>quantitative aspect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>qualitative aspect</td>
</tr>
<tr>
<td>Direction</td>
<td></td>
<td>event location</td>
</tr>
<tr>
<td></td>
<td></td>
<td>directionality</td>
</tr>
</tbody>
</table>

3 This category includes subjective epistemic modality.
4 This category includes objective epistemic modality and evaluative deontic modality.
5 This category includes event-oriented facultative, deontic, and volitive modalities.
6 This category includes participant-oriented facultative, deontic, and volitive modalities.
4. A’ingae operators in FDG

4.1. Introduction

The FDG approach to operators predicts that operators with lower scope occur closer to the stem than operators with wider scope. The expectation is thus that the hierarchical classification presented in Table 2 is reflected in the ordering of morphemes expressing those operators in a certain language. We thus expect that the A’ingae system presented in Table 1 matches the ordering given in Table 2. Table 3 makes the match visible, by replacing the actual morphemes in Table 1 by the FDG-layers that they operate on, using the variables that stand for each layer.

Table 3 shows that in many respects there is a good match between the FDG predictions and the A’ingae facts. There are, however, a number of classifications of morphemes that seem to be less compatible with the predictions. These are the following.

Illocution can be expressed in three different positions: as a clause level enclitic (interrogative), in the second clitic position of the verbal template (imperative, prohibitive, mitigated imperative), and in the fourth position of the verbal template (assertive).

Quantificational aspect can be found expressed immediately on the verb, through vowel lengthening and reduplication, in the second suffix in the template for the verbal word, when the imperfective suffix is used to express habituality, and it can be realized through auxiliary constructions. Especially the fact that durative and iterative aspect, both classified as operators on the State-of-Affairs, are expressed immediately on the verb stem and are followed by qualificational aspect markers, which are classified as operators on the Configurational Property, goes against the predictions in FDG.

Reportative evidentiality can be found in two different positions, as a second position clitic and as a sentence final particle. This is not consistent with the idea that reportative evidentiality is a single grammatical category.

These three types of counterexamples to the FDG predictions will be discussed one by one in the following subsections.
Table 3. *A’ingae operators in FDG (first attempt)*

<table>
<thead>
<tr>
<th>Free words</th>
<th>Predicate Phrase</th>
<th>Free words</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2 clitics</td>
<td>Head</td>
<td>Head</td>
</tr>
<tr>
<td></td>
<td>Verbal words</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Head</td>
<td>Verbal words</td>
</tr>
<tr>
<td></td>
<td>+1</td>
<td>+2</td>
</tr>
<tr>
<td></td>
<td>+2</td>
<td>+3</td>
</tr>
<tr>
<td></td>
<td>+3</td>
<td>+4</td>
</tr>
<tr>
<td>Verbal words</td>
<td>Number</td>
<td>Mood</td>
</tr>
<tr>
<td></td>
<td>Polarity</td>
<td>Assertive</td>
</tr>
<tr>
<td></td>
<td>Adhortative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interrogative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reportative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>Intrinsic ability</td>
</tr>
<tr>
<td></td>
<td>Durative e</td>
<td>Acquired ability</td>
</tr>
<tr>
<td></td>
<td>Iterative e</td>
<td>Habitual e</td>
</tr>
<tr>
<td></td>
<td>Imperfective f</td>
<td>Habitual e</td>
</tr>
<tr>
<td></td>
<td>Precumulative f</td>
<td>Habitual e</td>
</tr>
<tr>
<td></td>
<td>Prospective f</td>
<td>Habitual e</td>
</tr>
<tr>
<td></td>
<td>Diminutive e</td>
<td>Non verbal predicates, including:</td>
</tr>
<tr>
<td></td>
<td>Iterative e</td>
<td>Habitual e</td>
</tr>
<tr>
<td></td>
<td>Quality f</td>
<td>Habitual e</td>
</tr>
<tr>
<td></td>
<td>Cislocative f</td>
<td>Negative Habitual e</td>
</tr>
<tr>
<td></td>
<td>Translocative f</td>
<td>Obligation f</td>
</tr>
<tr>
<td></td>
<td>Distal e</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Imperative F</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Prohibitive F</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Mitigated imperative F</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Irrealis ep</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Negation ep</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assertive F</td>
<td></td>
</tr>
</tbody>
</table>

Auxiliary constructions, non-verbal predicates:
- Prospective f
- Intrinsic ability f
- Acquired ability f
- Habitual e
- Habitual e
- Non verbal predicates, including:
  - Habitual e
  - Negative Habitual e
  - Obligation f
4.2. Illocution

As mentioned above, illocution can be expressed in three different positions. The first interesting fact is that the Imperative, Prohibitive, and Mitigated Imperative occur closer to the verb than the Assertive. There is a fundamental difference between these two. Hengeveld et al. (2007: 73) make a distinction between propositional illocutions and behavioural illocutions. Propositional illocutions have to do with the transmission of information, while the latter have to do with influencing behaviour. The Assertive in A’ingae is a propositional illocution, the Imperative, Prohibitive, and Mitigated Imperative are behavioural illocutions.

Hengeveld (1990: 7) argues that behavioural illocutions, unlike propositional illocutions, do not contain the layer of the propositional content. They are not about the transmission of propositional information, but map directly onto the State-of-Affairs that the Addressee should bring about.

Hengeveld (1990) was framed in terms of FG, a theory that did not distinguish the Episode as a relevant representational unit. In an FDG framework, however, we should say that a behavioural illocution maps directly onto an Episode rather than onto a State-of-Affairs, as is evident from the fact that more than one State-of-Affairs may be ordered (82) or prohibited (83) in a single imperative or prohibitive Discourse Act.

(82) Va = ma anchun = pa undikhû-ja.
    PROX = ACC sew = SS dress-IMP
    ‘Sew this and wear it!’ (20060119-AnC-Consiana-01-0452.44)
(83) Ja = pa fi’thi = jama.
    go = SS kill = PROH
    ‘Sew this and wear it!’ (BC12.051)

There are two operator categories pertaining to the Episode layer, which is thus relevant to behavioural illocutions, which are the irrealis in clitic position +2 and negation in clitic position +3. Since the irrealis meaning is intrinsic to behavioural illocutions and negation is expressed in the prohibitive illocutionary marker itself, we may assume that the clitic positions +2 and +3 are not relevant for these illocutions, and that they therefore align with the assertive in clitic position +4, rather than with the irrealis in clitic position +2.

The fact that the interrogative illocution is expressed in the clausal clitic position may be related to the fact that all questions are marked at the beginning of the utterance. Question words in content questions always occupy the first position in the clause. Similarly, the interrogative clitic attaches to the first constituent of the clause. Note that illocutionary distinctions are not marked prosodically in A’ingae.
4.3. Quantificational aspect

A second remarkable aspect in Table 3 concerns the expression of quantificational aspect. This type of operator can be found expressed immediately on the verb, through vowel lengthening and reduplication, in the suffix position +2, when the imperfective suffix is used to express habituality, and it can be realized through auxiliary constructions.

Especially the expression of iterative and durative aspect on the verb stem itself, where these can be followed by qualificational aspect, is problematic for the current FDG approach. In Hengeveld & Mackenzie (2008) all quantificational aspect distinctions are presented as operators at the layer of the State-of-Affairs and as having scope over qualificational aspect distinctions.

Boland (2006: 61), however, following Klein (1994) and Anstey (2002), distinguishes between ‘expressions that indicate the frequency of a property or relation and expressions that indicate the frequency of an entire event’. Property quantification specifies iteration or intensity of a property, while event quantification quantifies over the event as a whole. In FDG property quantification would apply at the layer of the Lexical Property, while event quantification applies at the layer of the State-of-Affairs.

Property iteration is present in verbs with meanings that are intrinsically iterative. It is precisely these verbs that occur either with reduplication or with the suffix –ñakha in A’ingae. Examples are ovi ‘fill up with earth’, khupi ‘wipe with hand’, uchhi ‘knock’, maphi ‘punish’, atoi ‘chop’, findi ‘twist’, kitsu ‘peck’, tsha ‘rub’, and kichu ‘jab’. Some illustrations are (84) and (85).

(84) Tise pûshe thatha-ñakha ja-yi.
3.SGwoman search-ITER go-PROSP
‘His wife came searching for him.’ (BC19.079)

(85) Chhi~chhi =pa phiña =mba api = nga si'nge = nga utsian.
slice~ITER=SS put.in=SS pot=DAT fire=DAT put.on
‘Having sliced it she put it in the pot and set it on the fire.’ (BC13.021)

These markers of iterativity might thus be reclassified as expressing property quantification rather than event quantification. This would then explain why we may find it in the scope of a direction operator, as in:

(86) Jinge patû=sû a’i=ma fi’thi~thi = nga = ‘fa=ye
HORT rock=ATTR people=ACC1 kill~ITER=TRANS=PLS=INF
‘Let’s go kill the rock people.’ (BC12.046)

A similar argument applies to durative aspect, expressed through vowel lengthening. This aspect is found with verbs with intrinsically durative meanings, such as mangû ‘drag’, mútsinon ‘rotate’, sharu ‘yawn’, suivo ‘twist’, khejian ‘make noise’, kà’ndyi ‘urinate (male)’, and a’jù ‘vomit’. An example is
This type of example suggests that here again we are dealing with property quantification, and this would be consistent with the fact that durative aspect can be within the scope of a marker of qualificational aspect, as in (88).

(88) Khûi=ta mûtsinu~ːtshi =te khûi = ’ya.
lie.down = NEW rotate~DUR-QUAL = RPT lie.down = ASS
‘It is said that he layed down rolled over, layed down.’
(20060104-AQ-Matachi-0166.962)

A final category to be reconsidered is the diminutive suffix –kha. It is used with verbs like feña ‘laugh’, dyo ‘fear’, fundo ‘scream’ and ru’nda ‘wait’. As it also indicates duration, just as vowel lengthening, I will likewise classify it as an instance of property quantification.

Among the other quantificational aspects there is another category that stands out. Cross-linguistically, most quantificational aspects can be defined as simple quantifications over events, such as the semelfactive, the repetitive, and the distributive. The habitual, however, needs an additional qualification. It has to be defined as characterizing an event that occurs frequently ‘due to a habitual propensity of the participant involved’ (Dik 1997: 236). In a sense, then, habitual aspect specifies a relationship between a participant in an event and the (regular) realization of that event. Exactly that relationship between participant and event has been the reason in FDG to locate participant-oriented modalities at the layer of the Configurational Property. Thus, Hengeveld & Mackenzie (2008: 212) state that participant-oriented modality ‘affects the relational part of the utterance as expressed by a predicate and its arguments and concerns the relationship between a participant in a State-of-Affairs and the potential realization of that State-of-Affairs’. That same definition would apply to habitual aspect as well. We therefore propose to assign habitual aspect to the layer of the Configurational Property as well. This also explains why habitual aspect (a quantificational aspect) and ability (a participant-oriented modality) can be expressed by the same auxiliary construction with the verb atesû ‘know’.

This then leaves us with three categories of quantificational aspect: Property quantification at the (f)-layer, Participant-oriented quantification at the (F)-layer, and Event quantification at the (e)-layer. A’ingae would then only have instances of Property quantification and Participant-oriented quantification.
4.4. Reportative evidentiality

A final issue that needs to be addressed concerns the existence of two different strategies to express reportativity. The two markers occupy different positions, one as a second position clitic, another as a clause final particle, but more importantly, they show a different behaviour as regards their combinability with other elements. The most important of these is that the sentence final particle *khen* may be used in reporting discourse acts with different illocutions. The following examples illustrate this:

(89) Ke=ja  kuira=pa  va=ni  kanse=ja  khen.
2SG=CONTR look.after=SS  PROX=LOC  live=IMP  QUOT
‘’You take good care of him and live here’’

(90) Ñan=jan  tisû=ni  ja-ye-ngi  in'jan khen
1SG=CONTR REFL=LOC  go-INF-CIS  think QUOT
‘’I want to go to my own home, she said.’’

In (89) *khen* occurs at the end of an imperative sentence, in (90) at the end of a declarative sentence. The reportative clitic *=te*, on the other hand, only occurs in declarative clauses. As examples (89) and (90) furthermore show, they represent cases in which the speech of the reported person is quoted literally. This is different from the cases in which the reportative clitic *=te* is used. In these cases, the person reporting is using his/her own words, but at the same time indicates that the information he/she is communicating was provided by someone else. The distinction is similar to the one between direct and indirect speech.

The A’ingae facts thus suggest that in FDG a distinction should be made between reportative evidentiality (RPRT), and quotative evidentiality (QUOT). The former operates at the layer of the Communicated Content (the information that is being passed on), the latter at the layer of the Discourse Act (the earlier contribution to discourse that is being quoted). This distinction was not made in Hengeveld & Hattner (2015). By assigning quotative evidentiality to the layer of the Discourse Act the fact that it may combine with different illocutions is accounted for, as it has scope over the illocutionary layer. Reportative modality, on the other hand, operates at the layer of the Communicated Content and is within the scope of illocution. Hence, it cannot freely combine with all kinds of illocutions.
Table 4. *A’ingae operators in FDG (second attempt)*

<table>
<thead>
<tr>
<th>Free words</th>
<th>Predicate Phrase</th>
<th>+1</th>
<th>+2</th>
<th>+3</th>
<th>+4</th>
<th>Free words</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2 clitics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal words</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>+1</td>
<td>+2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head</td>
<td>Aspect</td>
<td>Aspect, Direction</td>
<td>Event location</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>Durative f</td>
<td>Diminutive f</td>
<td>Distal e</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>Iterative f</td>
<td>Imperfective f</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>Precumulative f</td>
<td>Prospective f</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>Quality f</td>
<td>Cislocative f</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>Translocative f</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Auxiliary constructions, non-verbal predicates</td>
<td>Prospective f</td>
<td>Intrinsic ability f</td>
<td>Acquired ability f</td>
<td>Habitual f</td>
<td>Habitual f</td>
<td>Non verbal predicates, including:</td>
</tr>
<tr>
<td></td>
<td>Imperative f</td>
<td>Prohibitive F</td>
<td>Mitigated imperative F</td>
<td>Irrealis ep</td>
<td>Negation ep</td>
<td>Assertive F</td>
</tr>
</tbody>
</table>
4.5. Reconsidering the A’ingae system

The incorporation of the modifications suggested in this section leads to the revised classification of A’ingae operators in FDG in Table 4. As this table shows, there is a neat correlation between the position of an operator and its scope. The head of the predicate phrase is where operators of the Lexical Property, the Configurational Property, and the State-of-Affairs are expressed. Episode operators are expressed in clitic positions +2 and +3. Behavioural illocutions, i.e. those that do not target a Propositional Content, skip the latter two positions, as these are not relevant for them, the result being that most illocutions are expressed in clitic position +4. The reportative operator with the Communicated Content in its scope, is realized as a clausal clitic, while the quotative operator occurs in the absolute final position, where it can show its scope over all other layers. Note that the second suffix position within the verbal word hosts operators of both the Lexical Property and the Configurational Property.

The modifications proposed here have consequences for the classification of operators in FDG in general. These consequences are shown in Table 5. Newly added categories are printed in bold.

5. Conclusions

This study has shown that the FDG approach to grammatical categories is capable of accounting for many of the A’ingae facts. At the same time, it shows how the detailed study of the facts of a single language may help refine the theory in important ways.
Table 5. Tense, aspect, mood, evidentiality, mirativity, polarity, and direction categories in FDG – version 2

<table>
<thead>
<tr>
<th></th>
<th>Interpersonal Level</th>
<th>Representational Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discourse Act</td>
<td>Ilocution</td>
<td>Communicated Content</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ascriptive Subact</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mood</td>
<td>irony, mitigation,</td>
<td>basic illocution,</td>
</tr>
<tr>
<td></td>
<td>reinforcement</td>
<td>illocutionary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>modification</td>
</tr>
<tr>
<td>Polarity</td>
<td>rejection</td>
<td>negative basic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>illocutions</td>
</tr>
<tr>
<td>Evidentiality</td>
<td>quotative</td>
<td>reportative</td>
</tr>
<tr>
<td>Mirativity</td>
<td></td>
<td>mirative</td>
</tr>
<tr>
<td>Tense</td>
<td></td>
<td>absolute tense</td>
</tr>
<tr>
<td></td>
<td></td>
<td>relative tense</td>
</tr>
<tr>
<td>Aspect</td>
<td></td>
<td>event quantification</td>
</tr>
<tr>
<td></td>
<td></td>
<td>qualitative aspect,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>participant-oriented</td>
</tr>
<tr>
<td></td>
<td></td>
<td>quantification</td>
</tr>
<tr>
<td></td>
<td></td>
<td>property quantification</td>
</tr>
<tr>
<td>Direction</td>
<td></td>
<td>event location</td>
</tr>
<tr>
<td></td>
<td></td>
<td>directionality</td>
</tr>
</tbody>
</table>

Interpersonal Level:
- Discourse Act: Illocution
  - Communicated Content
  - Ascriptive Subact

Representational Level:
- Propositional Content: Episode
  - State-of-Affairs
  - Configurational Property: Lexical Property
  - Mood: irony, mitigation, reinforcement
  - Polarity: rejection, negative basic illocutions
  - Evidentiality: quotative
  - Mirativity: mirative
  - Tense: absolute tense, relative tense
  - Aspect: event quantification, qualitative aspect, participant-oriented quantification
  - Direction: event location, directionality
Acknowledgements

Abbreviations

1 = first person  
2 = second person  
3 = third person  
ABL = ablative  
ACC1 = accusative 1  
ACC2 = accusative 2  
ADD = additive focus  
ADJR = adjectivalizer  
ADVR = adverbializer  
ANA = anaphoric reference to entity or event  
ANALOC = anaphoric reference to location or time  
ASS = assertive  
ATTR = attributive  
AUG = augmentative  
BEN = beneficiary  
CAUS = causativizer  
CIS = cislocative  
CMP = comparative  
CONTR = contrastive topic  
DAT = dative  
DIM = (verbal) diminutive  
DUR = durative  
DS = different subject cosubordinator  
ELAT = elative  
FRT = frustrative  
HAB = habitual  
HORT = hortative  
HUMPL = human  
IGNAN = ignorative animate  
IMP = imperative  
IMPF = imperfective  
INF = infinitive  
INT = interrogative  
IRR = irrealis  
ITER = iterative  
LOC = locative  
LOCNR = locative nominalizer  
MANN = manner, path  
MITIMP = mitigated imperative

References


Hengeveld, Kees & Mackenzie, J. Lachlan (subm.), Negation in FDG.


