

#### **RESEARCH**

# Frustration, culmination, and inertia in Kimaragang grammar

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The FRUSTRATIVE particle in Kimaragang marks unrealized expectations or intentions, counterfactuals, etc. Copley & Harley (2010) propose a unified account for frustratives, non-culminating accomplishments ('I killed the snake but it didn't die') and the "imperfective paradox", based on Dowty's (1979) concept of "inertia". I argue that this analysis makes the wrong predictions for Kimaragang. The distribution of frustratives and non-culminating accomplishments in Kimaragang reveals a number of differences not predicted by the Copley & Harley analysis. These differences in distribution reflect in part a difference in the kind of expectation that is involved. In non-culminating accomplishments, the unachieved result is specified by the meaning of the verb, whereas frustrative clauses may involve expectations that are based on cultural factors, knowledge of the world, etc. I sketch out an alternative analysis of Kimaragang frustratives which treats expectation and intention as modal concepts.

**Keywords:** Kimaragang; Dusunic; Austronesian; frustrative; optative; inertia; culmination; accomplishment; counterfactual

# 1 Introduction

This paper discusses the meaning and uses of the FRUSTRATIVE particle *dara* in Kimaragang, an endangered Philippine-type language belonging to the Dusunic subgroup in northeastern Borneo. As far as I know, this particle has not been described in any previous literature. The paper also explores to what extent frustratives are similar to non-culminating accomplishments. Recent work by Copley & Harley (2010, 2014) points out that frustratives and non-culminating accomplishments both involve the failure to achieve an expected result. They propose a unified analysis for these constructions, adapting Dowty's (1979) notion of INERTIA as a starting point. I argue that this analysis, indeed any unified analysis, makes the wrong predictions for Kimaragang. I show that frustratives and non-culminating accomplishments in Kimaragang have very different properties and are subject to different constraints.

The primary function of *dara* is to mark frustrated expectation or intention. As a first step toward developing an alternative analysis, I observe that expectation and intention are modal concepts, similar to epistemic and bouletic modality respectively. Building on the approach of Kratzer (1981, 1991), I sketch out an analysis of these concepts in terms of quantification over possible worlds. I propose that *dara* indicates two things: first, that a certain proposition will be true in all "optimal" worlds, and second that the real world is not optimal in this sense.

The outline of the paper is as follows: Section 2 illustrates some of the more common frustrative uses of *dara*. Section 3 introduces Dowty's (1979) concept of INERTIA and summarizes the unified analysis proposed by Copley & Harley (2010, 2014) for frustratives

and non-culminating accomplishments. Section 4 provides some background information about Kimaragang morpho-syntax, focusing in particular on the Philippine-type voice system, verbal inflection for tense and modality (which play an important part in the later discussion), and the distribution of second position (2P) particles like *dara*.

Section 5 discusses the grammar of non-culminating accomplishments, first in Tagalog and then in Kimaragang. Tagalog is by far the best described and most thoroughly analyzed Philippine-type language, and Tagalog non-culminating accomplishments have received a fair bit of attention; see for example Dell (1983); Kroeger (1993: 80ff.); and Travis (2000). Non-culminating accomplishments in Kimaragang are mentioned briefly in Kroeger (2010), and even more briefly in Kroeger (1990, 2005), but have not previously been discussed in much detail. However, in terms of the facts which are relevant to the present paper, and in particular the correlation between culmination entailments and modality, Kimaragang is very similar to Tagalog.

With this background in place, Section 6 procedes to test the predictions of the unified analysis proposed by Copley & Harley (2010, 2014). Frustratives and non-culminating accomplishments in Kimaragang are shown to exhibit a number of differences in terms of distribution and other constraints which are difficult to account for under the Copley & Harley analysis.

Section 7 presents a very brief discussion of optative uses of *dara*. Section 8 offers a tentative proposal concerning the meaning of *dara*. This proposal is intended to cover both optative and frustrative uses, but only the frustrative is discussed in any detail. Section 9 goes into more detail about the possible worlds analysis for frustrative clauses, and shows how other clauses within the same sentence can contribute to the interpretation of the frustrative.

Much of the data for this study is taken from example sentences in a lexical database compiled by Jim Johansson.<sup>1</sup> Most of these sentences were composed by three native speakers of Kimaragang who grew up in the plains south of Tandek, Kota Marudu. The version of the database that I worked with contained approximately 36,250 example sentences, which included 239 occurrences of the particle *dara*.<sup>2</sup>

Some additional examples were taken from texts, and others were elicited (including, of course, all the negative/unacceptable examples). One of the speakers who was a major contributor to the dictionary, Janama Lantubon, also served as my primary consultant for eliciting new data and clarifying the meaning and context of the corpus examples. Janama is a Kimaragang man born in the late 1960's.

# 2 Uses of the FRUSTRATIVE particle

Uses of the FRUSTRATIVE particle *dara* include: unfulfilled desires or intentions (1a–b), failed attempts (1c), former states that no longer obtain (1d–e), states that do not lead to expected results (1f), things done in vain (1g), and counterfactual conditionals (1h–i). A strikingly similar range of uses is reported for frustratives in other languages, including Tolkapaya (Pomoan; Hardy & Gordon 1980), Tohono O'odham (also known as Papago; Uto-Aztecan; Hale 1969; Copley 2005), and St'át'imcets (Salish; Davis & Matthewson 2016).

(1) a. Patay-on ku dara ilo' masalong nga', tiniag oku di=ama. kill-OV 1SG FRUST that cobra but PST.forbid.OV 1SG GEN=father 'I was going to kill that cobra, but Father forbade me.' (due to ritual taboo against killing a snake while walking to rice field?)

<sup>&</sup>lt;sup>1</sup> A revised version of this database is currently being prepared for publication. A version very close to the one I worked with is available via PARADESIC at: http://paradisec.org.au/catalog/.

<sup>&</sup>lt;sup>2</sup> This figure includes 12 occurrences of the alternate form *dara'ay*. The conditions for choosing one form over the other are not well understood; as noted below, *dara'ay* seems to be preferred in questions, but in most contexts the two forms seem to be interchangeable.

<PST>trap-OV

- b. Tila'ay di=tusing i=pinggan pinangakan ku dot lick.DV.ATEMP GEN=cat NOM=plate IV.PST.eat 1SG.GEN COMP mangakan oku po dara.
   AV.eat 1SG.NOM yet FRUST 'The cat licked the plate that I ate from, when I still intended to eat some more.'
- c. Bu-buyuk-an no dara i=iyay di=kikina, i
  DUP-cheat-DV COMPL FRUST NOM=mother GEN=chinese NOM
  pinadagang do=paray, nga' siri oku díiri.
  AV.PST.sell ACC=rice but there 1sg.NOM that
  'Mother would have been/was about to be cheated by the Chinese
  (shopkeeper) when she sold her rice, but (fortunately) I arrived there in time.'
- d. Waro **dara** siin ku nga' n-i-baray ku dot=tutang. exist FRUST money 1SG.GEN but PST-IV-pay 1SG.GEN ACC=debt 'I did have money but I used it to pay off my debt.'
- e. Limo okoy dara miobpinee, tolu po tu' duwo five 1PL.EX.NOM FRUST siblings three still because two ot lisat.

  NOM slip.through.cracks 'There were five of us siblings, but only three are still here; two have "slipped through the cracks" (i.e., have passed away).'
- f. Mikeengin okoy dara nga', i = tama dat = tongondu AV.RECIP.love 1PL.EX.NOM FRUST but NOM = father GEN = woman ot amu eengin dogon.

  NOM NEG like 1SG.ACC 'We love each other but her father is the one that doesn't like me.'
- g. N-o-sii-Ø ku no dara it=tasu nga' n-iit-an PST-NVOL-shoo-OV 1SG already FRUST NOM=dog but PST-bite-DV oku=i'.
  1SG=EMPH 'I said Shii! to the dog, but I got bitten anyway.'
- h. Ong n-o-guring-Ø no koniab ino, a-tanam-an if PST-NVOL-plow-OV already yesterday that(NOM) NVOL-plant-DV no do=paray benoy dara. already ACC=rice today FRUST 'If that (field) had been plowed yesterday, it could have been planted with
- rice today.'

  i. Amu **dara** a-gamit-Ø i=kambing ong konoko' g<in>ipit-Ø

NEG FRUST NVOL-catch-OV NOM = goat if not

sid = susut. DAT = below

'The goat could not have been caught if we hadn't trapped it under the house.'

# 3 Frustration, culmination, and inertia

Copley & Harley (2010, 2014) point out that frustrative clauses have much in common with non-culminating accomplishments (e.g. 'I killed the snake but it didn't die') and the "imperfective paradox" (*John was drawing a circle* does not entail that *John drew a circle*; Dowty 1979). All three of these phenomena describe situations in which something prevents the expected outcome of the situation from being achieved.

Dowty (1979) noted that examples like (2a) are a problem for the definition of progressive aspect proposed by Bennett & Partee (1972). That definition essentially says that *John was X-ing* will be true when asserted about a time interval I just in case (i) there is some longer time interval I' which contains I and extends beyond the end-point of I; and (ii) *John X-ed* is true when asserted about time interval I'. The problem arises because (2a), and thus (2b), could well be true for a give topic time (TT) even though, under the most plausible interpretation, there is no interval containing TT for which (2c) is true.

- (2) a. John was crossing the street when a bus hit him.
  - b. John was crossing the street.
  - c. John crossed the street.

Dowty referred to this problem as the "imperfective paradox". It is specific to accomplishment predicates, and does not arise with states and activities. For example, *John was pushing a cart* entails that *John pushed a cart* (cf. Vendler 1957), because *push a cart* is an activity.

Dowty's solution was to propose that the progressive encodes not only aspect but also modality, that is, quantification over a certain class of possible worlds. He designated the relevant class of possible worlds INERTIA WORLDS, which he defined as follows: an inertia world is a possible world which is exactly like the actual world under discussion up to and including the topic time, "and in which the future course of events after this time develops in ways most compatible with the past course of events" (Dowty 1979: 148). In other words, inertia worlds are possible worlds in which the expected outcomes from a given situation are actually realized. Dowty then modified the definition of the progressive to say that *John was X-ing* will be true when asserted about a time interval I just in case (i) there is some longer time interval I' which contains I and extends beyond the end-point of I; and (ii) *John X-ed* is true in all inertia worlds when asserted about time interval I'.

The concept of INERTIA that Dowty proposed has been extremely influential, but there has been considerable controversy over whether it can actually provide a satisfactory analysis for the imperfective paradox and other features of accomplishment predicates. Copley & Harley (2010, 2014) define an analogous concept, which they refer to as EFFICACY, in terms of a formal theory of force dynamics. The basic intuition is that, when all of the forces involved in a given situation are fully understood, the outcome can be predicted with certainty:

"In the framework we are proposing, outcomes of fully-understood situations are indeed deterministic. However, situations may be incompletely represented, resulting in several different possible net forces, and therefore in several different potential outcome situations, i.e. in branching futures [...] We will call situations which are well-enough specified to fully determine what comes next EFFICACIOUS. Branching futures result when the initial situation is not efficacious". (Copley & Harley 2010: 10–12)

Copley & Harley use their theory of force dynamics to propose a unified account for progressive aspect, non-culminating accomplishments, and frustrative clauses. In this paper I focus on non-culminating accomplishments and frustrative clauses. Copley & Harley's analysis for these two constructions can be summarized as follows:

"In languages or forms where accomplishments culminate, we propose that there is a presupposition that the topic situation s is efficacious; that is, that s is presupposed to proceed successfully, via the action of its net force, to its final situation without interference from outside of s. Since s is presupposed efficacious, it is entailed that the result situation of the net force of s actually occurs. In languages or forms with non-culminating accomplishments, on the other hand, we propose that there is no presupposition that s is efficacious". (Copley & Harley 2010: 16)

"Following Copley (2005) we take [...] the only contribution of [the Tohono O'odham frustrative particle] cem [to be] a presupposition. Copley proposes that the presupposition cem contributes is that the actual world is not an inertia world. We will express our analogous, force-theoretic presupposition thusly: [...]  $s_0$  [the topic situation] is not efficacious". (Copley & Harley 2010: 19)

So non-culminating accomplishments are blocked by a presupposition that the topic situation is efficacious. Such a presupposition may hold generally for languages as a whole, as in English, or may be triggered by specific verb forms, as discussed below for Tagalog and Kimaragang. Non-culminating accomplishments are possible in languages or forms which lack this presupposition. The frustrative particle in Tohono O'odham is assumed to contribute a presupposition that the topic situation is not efficacious. This means that the ordinary course of events that would be expected on the basis of what is known about the topic situation alone is not in fact realized, due to the effects of forces which are not part of the description of the topic situation.

I will argue that this analysis makes the wrong predictions for Kimaragang. In fact, the Kimaragang facts presented below seem to argue against any analysis that seeks to explain non-culminating accomplishments and frustrative constructions in terms of the same semantic property. Kimaragang makes an interesting test case, because both non-culminating accomplishments and the frustrative particle are quite productive. However, as I will show, the two constructions are subject to very different sets of constraints. Before discussing these constraints, I summarize some basic facts about Kimaragang morpho-syntax which will be important in what follows.

# 4 Background information: Kimaragang morpho-syntax 4.1 Voice

Kimaragang has a typical Philippine-type voice system.<sup>3</sup> Each NP is marked for case, and the voice marker on the verb provides partial information about the semantic role of the nominative NP. There are four basic voice markers that can occur on transitive roots, plus a fifth which occurs only on intransitive roots. These are illustrated in (3–7). The nominative NP, which I refer to as the SUBJECT (though this analysis remains controversial), is printed in boldface in the Kimaragang examples and in the free translations.

# (3) **ACTIVE VOICE:**

Mangalapak(m-poN-lapak) **oku** do=niyuw.

AV-TR1-split 1SG.NOM ACC=coconut

'I will split a coconut/some coconuts.'

# (4) **OBJECTIVE VOICE** (a.k.a. Patient Voice):

Lapak-on ku do=kapak **ilo' niyuw ku**. split-ov 1sg.gen ACC=axe that.NOM coconut 1sg.gen 'I will split **my coconuts** with an axe.'

<sup>&</sup>lt;sup>3</sup> For a more detailed description see Kroeger (2005).

# (5) **DATIVE VOICE:**

Lapak-an ku do=niyuw **it=wogok**. split-DV 1SG.GEN ACC=coconut NOM=pig I will split some coconuts for **the pigs** (to eat).

(6) a. **INSTRUMENTAL VOICE** (default):

**Tongo** ot pangalapak(Ø-poN-lapak) nu dilo' niyuw? what NOM IV-TR1-split 2SG.GEN that.ACC coconut 'What will you split those coconuts with?'

b. **Instrumental Voice** ("affected instrument"):
Okon.ko' i-lapak do=niyuw **ino dangol ku**.
do.not IV-split ACC=coconut that(NOM) bush.knife 1SG.GEN
'Don't split coconuts with **my bush knife**.'

# (7) LOCATIVE VOICE:

Siombo ot ogom-on ku? where NOM sit-LV 1SG.GEN 'Where shall I sit?'

# 4.2 Tense and modality

Kimaragang exhibits a simple two-tense system, past vs. non-past. Past tense is marked by the infix  $\langle in \rangle$ , realized as n- on vowel-initial stems, while the non-past is unmarked. The past tense affix is obligatory in main clauses for events in the past (8a), and impermissible for present and future reference (8b–c). This is different from the use of the same affix in Tagalog and some other Philippine languages, where it functions as a kind of realis marker as illustrated in (9). This association between infix  $\langle in \rangle$  and realis mood will be important to our discussion in Section 8.

- (8) a. M<in>ongoy/\*mongoy oku sid=talob koniab. <PST>AV.go/\*AV.go 1SG.NOM DAT=market yesterday 'I went to the market yesterday.'
  - b. M-ongoy/\*minongoy oku sid=talob (diti). AV-go/\*<PST>AV.go 1SG.NOM DAT=market PROX 'I am going to the market (right now).'
  - c. M-ongoy/\*minongoy oku sid=talob suwab.

    AV.go /\* < PST > AV.go 1SG.NOM DAT = market tomorrow

    'I will go to the market tomorrow.'

# (9) Tagalog

- a. B<in>igy-an si=Maria ng=pera ni=Ben. <REAL>give-DV NOM=Maria GEN=money GEN=Ben 'Maria was given money by Ben.'
- b. B<in>i-bigy-an si=Maria ng=pera ni=Ben. <REAL>DUP-give-DV NOM=Maria GEN=money GEN=Ben 'Maria is being given money by Ben.'
- c. Bi-bigy-an si=Maria ng=pera ni=Ben.

  DUP-give-DV NOM=Maria GEN=money GEN=Ben
  'Maria will be given money by Ben.'

The basic tense and voice paradigm is summarized in (10). In addition to the two tenses, past vs. non-past, Kimaragang has an atemporal form which is used for imperatives, for the "main verb" following an auxiliary verb, and for main-line events in narrative. In Actor Voice it is indicated by a zero allomorph of the voice marker. The prefix *poN*- is one of the two most common "transitivity" prefixes. It occurs with transitive verbs in Actor Voice, and in other voices (not shown here) under certain conditions; see Kroeger (1996) for details.

# (10) Kimaragang: basic (neutral/volitive) tense and voice paradigm:

Voice: Tense:	Actor (AV)	Objective (OV)	Instr. (IV)	Dative (DV)	Locative (LV)
Non-past	R <um>OOT (intr.)</um>	ROOT-on	i-Root	ROOT-an	ROOT-on
	<i>m-poN-</i> ROOT (tr.)				
Past	R < in > < um > oot	$R < in > OOT-\emptyset$	n-i-Rоот	R <in>oot-an</in>	R <in>oot-on</in>
	<in>m-poN-ROOT</in>				
Atemp.	Ø-ROOT (intr.)	ROOT-o'	**	R00т-ау	**
	Ø-poN-Root (tr.)				

The verb forms listed in (10) are unmarked for modality; in Philippine linguistics these forms have been called "neutral", "intentive", or "volitive", among other labels. They contrast with a set of marked forms shown in (11), which have been called "ability/involuntary-action verbs", "potentive", or "non-volitive". The primary uses of these non-volitive forms are to express: a) ability; b) involuntary or accidental actions; c) experiential perfect; d) perfect of result.

# (11) "Ability/involuntary-action" (non-volitive) tense and voice paradigm:

Voice: Tense:	Actor (AV)	Objective (OV)	Instr. (IV)	Dative (DV)
Non-past	ko-STEM	o-STEM-Ø	ko-STEM	o-STEM-an
Past	noko-STEM	no-STEM-Ø	noko-STEM	no-STEM-an

This contrast in modality will turn out to be very important in the discussion below, because (as first demonstrated by Dell 1983 for Tagalog) non-culminating accomplishments are only possible with neutral/volitive verbs.

# 4.3 Second-position (2P) particles

Kimaragang, like many other Philippine-type languages, has a large inventory of second-position (2P) particles. The frustrative particle *dara* is one of these. Because of their special word order properties, these particles are often referred to as clitics. Most of the 2P clitics in Kimaragang can be assigned to one of the six position classes shown in the chart in (12). The position classes are defined by co-occurrence restrictions and relative ordering. Generally speaking, no clause can contain more than one clitic from the same class, and when clitics from two different classes co-occur, they must occur in the order indicated in the chart.

Obligatory 2P clitics			Optional 2P clitics			
GEN pron.	NOM pron.	focus/aspect	mood	mixed func- tions	vocatives	
ku '1sG' nu '2sG' yo '3sG' to '1DU.INCL' ya '1PL. EXCL' duyu '2PL'	oku '1sg' ko '2sg' kito '1du. INCL' tokow '1pl. INCL' okoy '1pl. EXCL' kow '2pl'	= i' 'emph' no 'compl' po 'noncompl' nogi' 'again' nopo 'only'	ga(a)m 'YNQ' ma 'rhet. Q' pogi' 'forceful' to 'empa- thetic'	dara ~ dara'ay 'frustrative' bala' ~ bala'ay 'mirative' dati' 'likely' gima 'after all' mari' 'certainly' katoy 'contra- diction/ disapproval'	markers of solidarity: obo (manto-man) owo (womanto-woman)	

# (12) Template for 2P clitic ordering

"Second position" in Kimaragang means immediately following the first constituent within the minimal clause. In most clauses, this means right after the verb as in (13a). However, if some other element within the minimal clause precedes the verb, as in (13b), 2P clitics will precede the verb. Classes 1–3 are labeled "Obligatory 2P clitics", because they always occupy the second position within the clause. Classes 4–6 are labeled "Optional 2P clitics", because they may occur either in second position or in clause-final position, like the vocative particle in (13c). In practice, it is rare to find more than three clitics together in the second position.

(13) a. Tulung-ay **oku po** dikoo ... help-DV.IMPER 1SG.NOM FOC 2PL.DAT 'Help me, all of you, ...'

person ordering constraint for pronominal clitics: 1 < 2 < 3

- b. Amu **oku po dati'** ko-guli dot suwab siti kumaraja. NEG 1SG.NOM yet probably NVOL.AV-return COMP tomorrow here AV.work 'Tomorrow I probably cannot return to work here.'
- c. Garan-ay **no pogi**' i = tana nu **owo**. grant-DV.IMPER PRTCL PRTCL NOM = land 2SG.GEN PRTCL 'You must get a grant (i.e. title) for your land, friend.'

With these details in mind, we proceed to the discussion of non-culminating accomplishments. We begin with the widely-cited Tagalog facts, which are essentially identical to the pattern observed in Kimaragang.

# 5 Non-culminating accomplishments

# 5.1 Non-culminating accomplishments in Tagalog

Dell (1983) shows that "neutral" (volitive) telic verbs in Tagalog permit a non-culminating interpretation, as illustrated in (14). The first clause in each example asserts that a certain action was performed, but the final clause denies that it was performed completely, i.e.,

that the lexically specified result was attained. The English translations are contradictory, but this is not the case for the Tagalog. However, this pattern is not possible for the corresponding "ability/involuntary action" (AIA, = non-volitive) forms, as seen in (15).<sup>4</sup>

- (14) *Tagalog* (Dell 1983; Kroeger 1993)
  - a. P<um>unta sa=Maynila si=Pedro, pero na-ligaw
     <AV>go DAT=Manila NOM=Pedro but REAL.NVOL-get.lost siya, kaya hindi siya naka-rating.
     3SG.NOM hence not 3SG.NOM REAL.AV.NVOL-arrive 'Pedro went to Manila but got lost, and so didn't arrive there.'
  - b. In-alis-Ø ko ang = mantsa, pero na-ubus-an REAL-remove-OV 1SG.GEN NOM = stain, but REAL.NVOL-run.out-DV ako kaagad ng = sabon, kaya hindi ko na-alis-Ø.

    1SG.NOM rapidly GEN = soap hence not 1SG.GEN REAL.NVOL-remove-OV 'I removed the stain, but I ran out of soap, so I couldn't remove it.'
  - In-abot-Ø c. niya ang = saging,pero kapos ang = patpatREAL-reach-OV 3SG.GEN NOM = banana but lacking NOM = stick kaya't hindi rin niya na-abot-Ø. niya, also 3sg.gen real.nvol-reach-ov 3sg.gen thus not 'He reached the banana, but his stick was too short, so he didn't reach it.'
- (15) Tagalog (Dell 1983: 188)
  {T < in > awag-Ø / \* Na-tawag-Ø} ko si = Ben, pero < REAL > call-OV / REAL.NVOL-call-OV 1SG.GEN NOM = Ben but wala = ng lumabas na salita sa = bibig ko.
  not.exist = LNK come.out already word DAT = mouth 1SG.GEN 'I called Ben, but not a word came out of my mouth.'

Dell argues that this contrast follows from a difference in the lexical entailments of the two forms:

"It is my contention that the ultimate semantic difference between neutral forms and their AIA counterparts is this: one uses a neutral form when one intends to assert that a certain Maneuver took place, but one wants to remain noncommittal as to whether it did actually bring about the intended Result; on the other hand, one uses an AIA form when the main business at hand is to assert that a Result, intended or not, was actually achieved". (Dell 1983: 181)

Dell points out that the two forms also differ with respect to speaker's intention. He states that volitive verbs entail that the described Maneuver was performed, and in performing this Maneuver the Actor intended to bring about a certain Result; whereas non-volitive verbs entail that the Result was actually achieved, whether intended or not.<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> A similar contrast in Malagasy is discussed in Travis (2000).

<sup>&</sup>lt;sup>5</sup> Dell (1983: 200) ends his paper with the following comment: "The scope of this article is limited to sentences with an actor NP referring to a human agent". He notes that "neutral" (volitive) forms are possible for non-agentive events with at least some roots, e.g. 'The boxes were **carried away** by the current', but adds: "I have not yet figured out how they work".

# 5.2 Non-culminating accomplishments in Kimaragang

In Kimaragang, as in Tagalog, non-culminating accomplishments are possible in the volitive (unmarked) modality, as illustrated in (16–17). Once again, the non-culminating interpretation is never possible with non-volitive modality, as shown in (18) and (19b).

- (16) a.  $L < in > apak-\emptyset$  ku it=niyuw nga' amu n-a-lapak. < PST > split-OV 1SG NOM = coconut but NEG PST-NVOL-split 'I split the coconut but it didn't split.'
  - b. T<in>otok-Ø ku ilo' tangaw nga', amu n-o-totok-Ø. <PST>chop-OV 1SG.GEN that(NOM) vine but NEG PST-NVOL-chop-OV 'I chopped that vine, but it didn't chop through.'
  - c. Minonginis oku do=kadut nga', amu n-o-kinis.
    PST.AV.TR1.tear 1SG.NOM ACC=gunny but NEG PST-NVOL-tear
    'I tore a gunnysack, but it didn't tear.'
- (17) a. B<in>obog-Ø ku it=tasu nga', amu n-o-onong-Ø. <PST>beat-OV 1SG.GEN NOM=dog but NEG PST-NVOL-hit-OV 'I beat the dog, but I didn't hit it.' (i.e., failed to make contact)
  - - 'I met with the village chief but he had gone out (so I couldn't meet him).'
  - c. T<in>obok-Ø ku yalo nga', amu n-o-togu-Ø <PST>stab-OV 1SG.GEN 3SG.NOM but NEG PST-NVOL-pierce-OV tu', ki-kobol yalo. because EXIST-invulnerability 3SG.NOM 'I stabbed him, but I didn't/wasn't able to pierce him because he has *kebal* protection (i.e., has been made invulnerable by performing certain rituals).'
- (18) a. \*N-o-bobog-Ø ku it=tasu nga', amu n-o-onong-Ø.

  PST-NVOL-beat-OV 1SG.GEN NOM=dog but NEG PST-NVOL-hit-OV intended: 'I accidentally/managed to beat the dog, but I didn't hit it.' (cf. 17a)
  - b. \*Naka-sambat oku dit=orang.tua nga' naka-payig
     PST.NVOL.AV-meet 1SG.NOM ACC=head.man but PST.NVOL.AV-go.out
     yalo.
     3SG.NOM intended: 'I accidentally/managed to meet with the village chief but he had
     gone out (so I couldn't meet him).' (cf. 17b)
- (19) a. L<in>awa-Ø ya no it=karabaw nga'amu ya <PST>snare-OV 1PL.EX.GEN already NOM=buffalo but NEG 1PL.EX.GEN n-a-anu-Ø tu' osiyaw.

  PST-NVOL-take-OV because wild 'We snared the buffalo (with a noose) but we didn't catch it, because it is (too) wild.'
  - b. \*N-a-lawa-Ø ya no it=karabaw nga' amu
    PST-NVOL-snare-OV 1PL.EX.GEN already NOM=buffalo but NEG
    ya n-a-anu-Ø tu' osiyaw.

    1PL.EX.GEN PST-NVOL-take-OV because wild
    intended: 'We accidentally/managed to snare the buffalo but we didn't catch it, because it is (too) wild.'

# 6 Testing the predictions of Copley and Harley's model

Now we are ready to test the predictions of the analysis developed by Copley & Harley (2010, 2014). As discussed in Section 3 above, that analysis assumes that frustrative particles contribute a presupposition to the effect that the topic situation is not efficacious, while forms like non-volitive modality in Tagalog and Kimaragang, which make it obligatory for accomplishments to culminate, contribute a presupposition to the effect that the topic situation is efficacious. Since frustrative particles and non-volitive modality are assumed to contribute contradictory presuppositions, the analysis predicts that the two should never co-occur:

**Prediction 1:** the frustrative particle should be incompatible with non-volitive modality.

However, there is no such incompatibility: the frustrative particle co-occurs freely with non-volitive forms, as illustrated in (20) (see also examples (1g, h, i)):

- (20) a. N-o-bobog-Ø ku **dara** it=tasu nga', amu minatay.

  PST-NVOL-beat-OV 1SG.GEN FRUST NOM=dog but NEG <PST>AV-die

  'I (managed to) beat the dog, but it didn't die.'
  - Naka-sambat oku dara dit = orang.tua nga' magaago
     PST.NVOL.AV-meet 1SG.NOM FRUST ACC = head.man but hurry
     yalo.
     3SG.NOM
    - 'I managed to meet with the village chief but he was in a hurry (so I didn't get to talk with him much).'
  - c. N-o-liong **dara** iti siin ku nga'n-o-kito-Ø
    PST-NVOL-lost FRUST this(NOM) money 1SG.GEN but PST-NVOL-see-OV
    ku kembagu.
    1SG.GEN again
    'This money of mine got lost, but I found it again.'
  - d. Noko-durakop no **dara** i = bunga nga' g < in > amas-Ø dialo. PST.NVOL.AV-creep already FRUST NOM = flower but < PST > clear-OV 3SG 'The flowering vine had spread out along the ground, but he cut it all out.'

Furthermore, under the C&H analysis frustrative clauses and non-culminating accomplishments both involve an interpretation under which the topic situation is not efficacious. This suggests that the two constructions should be subject to the same semantic and pragmatic constraints, and thus should be acceptable in a similar range of contexts:

**Prediction 2:** non-culminating accomplishments and frustrative clauses should be permissible across a similar range of contexts.

However, it turns out that there are a number of systematic differences in their distributions. First, non-culminating accomplishments are (by definition) possible only with telic events, and, at least in Tagalog and Kimaragang, primarily with volitional actions. But frustrative clauses are also possible with states ((1d–f)), atelic events ((1b), (20d), (37)), and non-volitional or non-agentive events ((20c–d), (37)).

This difference in compatibility with various situation types (*aktionsart*) reflects a fundamental difference regarding the kind of non-culmination that is involved in each of these constructions. Non-culminating accomplishments are constrained by lexical semantics and involve the modification or truncation of the event structure for a single event. The unachieved result in a non-culminating accomplishment is the end-point or result state that is specified by the meaning of the verb.

Frustrative clauses, on the other hand, express the non-fulfillment of speaker expectations (and/or agent's intentions); and these expectations may be based on cultural norms, knowledge of the world, etc. The expectation that two people who fall in love will want to get married ((1f)) is not a part of the meaning of 'love'; it is based on cultural knowledge. The expectation that beating a dog may cause it to die ((20a)) is not a part of the meaning of 'beat'; it is based on knowledge of the world, like the expectation that young fruit will ripen into mature fruit ((21)). In such cases the topic situation and the expected outcome are not expressible as components of a single event.

Ogumu dara tuwa dat=mangga di=Soyinsin nga' m-in-(p)upor much FRUST fruit GEN=mango GEN=Soyinsin but AV-PST-cast.fruit kikiawi.
all
'There was a lot of fruit on Soyinsin's mango tree dara, but they all fell off be-

fore they got ripe.'

Concepts like inertia or efficacy may be appropriate for the analysis of non-culminating

Concepts like inertia or efficacy may be appropriate for the analysis of non-culminating accomplishments, but they are too constrained to account for the kinds of expectations that may be involved in the various uses of the frustrative.

A second systematic difference in the distribution of the two constructions is that the non-culminating accomplishment interpretation is not available when circumstances are such that the described action cannot be performed, e.g. when no appropriate instrument is available as in examples (22c) and (23c). This may follow from Dell's observation that neutral (volitive) verbs entail that the described Maneuver was actually performed, even though they do not entail the culmination of the event. Frustrative clauses, however, are possible under these same circumstances ((22a) and (23a)).

- (22) a. Lapak-on ku dara it=tinggaton nga' aso pangalapak split-OV 1SG.GEN FRUST NOM=betel.nut but NEG.EXIST IV.split ku.

  1SG.GEN
  'I want/wanted to split the betel nut but I don't/didn't have anything to split it with.'
  - b. L<in>apak-Ø ku it=tinggaton nga' amu n-a-lapak. <PST>split-OV 1SG.GEN NOM=betel.nut but NEG PST-NVOL-split 'I split the betel nut but it didn't split.' [non-culminating accomplishment]
  - c. \*L<in>apak-Ø ku it=tinggaton nga' aso pangalapak <PST>split-OV 1SG.GEN NOM=betel.nut but NEG.EXIST IV.split ku.
    1SG.GEN intended: 'I split the betel nut I didn't have anything to split it with.'
- (23) a. Bobog-on ku **dara** it = tasu nga' aso pomobog ku. beat-OV 1SG.GEN FRUST NOM = dog but NEG.EXIST IV.beat 1SG.GEN 'I want/wanted to beat the dog but I don't/didn't have anything to beat it with.'
  - b. B<in>obog-Ø ku it=tasu nga' amu n-o-onong-Ø. <PST>beat-OV 1SG.GEN NOM=dog but NEG PST-NVOL-hit-OV 'I beat the dog but I didn't hit it.' [non-culminating accomplishment]
  - c. \*B<in>obog-Ø ku it=tasu nga' aso pomobog ku. <PST>beat-OV 1SG.GEN NOM=dog but NEG.EXIST IV.beat 1SG.GEN intended: 'I beat the dog but I didn't have anything to beat it with.'

A third way in which the distribution of the two constructions can be seen to differ is that many non-culminating accomplishments which are otherwise acceptable become unacceptable when the frustrative particle is added, as illustrated in (24). This is an unexpected result under the C&H analysis, which predicts that the frustrative particle should simply reinforce the lack of efficacy that results in non-culmination. Notice that the unacceptability of *dara* in these examples is not due to redundancy. It is quite common for a speaker-oriented particle (the fifth position in the chart in (12)) to co-occur with an adverb or predicate that carries essentially the same meaning. In such cases the particle simply reinforces the meaning of the content word, with no reduction in naturalness or acceptability. The strong unacceptability of *dara* in (24) is something quite different.

- (24) a. L<in>apak-Ø ku (\*dara) it=niyuw nga' amu n-a-lapak. <PST>split-OV 1SG.GEN FRUST NOM=coconut but NEG PST-NVOL-split 'I split the coconut but it didn't split.'
  - b. B<in>obog-Ø ku (\*dara) it=tasu nga', amu n-o-onong-Ø. <PST>beat-OV 1SG.GEN FRUST NOM=dog but NEG PST-NVOL-hit-OV 'I beat the dog but I didn't hit it.'
  - c. T<in>otok-Ø ku (\*dara) ilo' tangaw nga', amu <PST>chop-OV 1SG.GEN FRUST that(NOM) vine but NEG n-o-otas-Ø.

    PST-NVOL-sever-OV 'I chopped the vine but didn't sever it.'

The arguments presented in this section against the analysis proposed by Copley & Harley would hold with equal force against any analysis that posits the same semantic basis for non-culminating accomplishments and frustrative clauses. The evidence shows that these are two very different phenomena.

Having stated what I am against, I feel some obligation to spell out what I am for; but of course, that is a much more difficult task. What is the semantic function of frustrative clauses in Kimaragang? What does *dara* actually mean? At this point I have only a tentative proposal to offer in answer to these questions. Before discussing it, I would like to mention another use of *dara* that does not seem to be frustrative at all.

# 7 Optative uses of dara

In addition to the uses discussed above, Kimaragang *dara* also has some non-frustrative uses which might be classified as OPTATIVES, expressing something wished or hoped for. Most of the recent discussion of optative constructions has focused on optative exclamations, such as *If only it would rain!* or *If only it had rained!* The pattern illustrated in (25a) may be a type of optative exclamation: *Awasi dara ong X*, meaning 'How good it would be if X!' Most often, however, optative uses of *dara* occur in statements.

- (25) a. Awasi **dara** ong o-winsil-an no ilot jonjila. good OPT if NVOL-lock-DV COMPL that(NOM) window 'How good it would be if a latch was installed on that window.'
  - b. Kikiroon **dara** dialo dot poki-rata-an i=tana yo. think OPT 3SG COMP PET-level-DV NOM=land 3SG.GEN 'He is thinking of/wanting to get someone to level his land.'

- c. Ti-pomoli oku **dara** da=ringkat dilo' owo, DESID-TR1.buy 1SG.NOM OPT ACC=layered.dish that VOC poongolutuan ku. place.to.carry.food my 'I'd like to buy that layered food carrier, to carry my lunch in.'
- d. Ong a-sawak-Ø no i=sada sid=parik, ki-rinapa tokow if NVOL-scoop-OV COMPL NOM=fish DAT=ditch EXIST-viand 1PL.INCL dara obo.
   OPT VOC
   'If we scooped the fish out of that ditch, we would have some meat to eat with our rice.' (or, possibly, 'If we had scooped... we would have had...')

Sometimes *dara* appears redundantly in its optative function with a lexical predicate expressing a desire or wish, as in (25b), or with verbs that bear the desiderative prefix (25c). Conditional sentences containing *dara* do not always get a counterfactual interpretation; (25d) is apparently ambiguous between an optative reading (possibly an indirect request or suggestion) vs. a frustrative/counterfactual reading.<sup>6</sup> Moreover, the distinction between the optative vs. frustrative reading for *dara* is not always clear cut, as illustrated in (26).

(26) Ti-indoo oku **dara** nga', amu po kawasa.

DESID-descend 1SG.NOM FRUST but NEG yet able
'I want to go down (out of the house), but I am not yet able to (due to ritual taboo).'

In the following examples of requests, *dara* is used as a kind of politeness marker. This could be viewed as a type of optative function, as in 'I'd like to borrow your fish scoop', or 'I'd like to ask you to X'. But one might also view this pattern as a conventionalized frustrative, e.g. 'I would borrow your fish scoop (but I am too shy').<sup>7</sup>

- (27) a. Ki-sawak kow oy, mongolos oku **dara**.

  EXIST-scoop 2PL.NOM Q AV.borrow 1SG.NOM FRUST

  'Do you (PL) have a fish scoop? I'd like to borrow it.'
  - b. Ø-Po-owit oku dara dikaw do=sigup.
     AV-CAUS-bring 1SG.NOM FRUST 2SG ACC=tobacco
     'Please bring me a little tobacco.' (lit: 'I cause you to bring tobacco dara.')
  - c. Ki-sayat ko do = batad oy, moki-anu oku **dara**. EXIST-seed 2SG.NOM GEN = veg.spec Q AV.PET-take 1SG.NOM FRUST 'Do you have any *kundur/timun tikus* seed? Please give me some.' (lit: 'I ask for some *dara*.')

# 8 The meaning of dara

This section and the next outline a preliminary attempt at describing the meaning of *dara*. Since the frustrative use of *dara* appears to be much more common than the optative use, I will focus primarily on the former. However, I believe that the analysis I propose should in principle be able to account for the optative reading as well.

<sup>&</sup>lt;sup>6</sup> In discussing this example with my primary consultant, he seemed to accept either of these readings; but I felt a higher degree of uncertainty in these judgements than is normally the case.

<sup>&</sup>lt;sup>7</sup> Hale (1969: 206) notes a similar use of the Tohono O'odham frustrative particle *cim*, which he refers to as the "polite desiderative".

A frustrative clause is one that expresses a frustrated expectation or intention. Expectation and intention are modal concepts, so I propose a modal analysis, stated in terms of quantification over possible worlds. I assume that expectations and intentions are derived from a CONVERSATIONAL BACKGROUND in the sense of Kratzer (1981, 1991). This conversational background is determined by the context of the utterance and consists of two parts: a modal base which identifies "accessible worlds", and an ordering source which ranks those worlds according to contextually relevant criteria, as discussed below. I propose the core meaning for *dara* shown in (28), and I hypothesize that (i) is asserted, while (ii) is presupposed.

# (28) dara indicates that:

some salient proposition is true in all optimal (i.e., highest-ranked) accessible worlds;

this salient proposition is not actualized in the real world at the time of speaking.

This proposal is very similar to Copley's (2005) analysis of the frustrative particle in Tohono O'odham, and to analyses by Davis & Matthewson (2016) and Matthewson (2016 ms.) for the "counter-to-expectation" particle in St'át'imcets. I will refer to the "salient proposition" mentioned in (28) as the "unrealized" proposition. The remainder of Section 8 focuses on the interpretation of the clause that contains *dara*, and how this interpretation is affected by tense, aktionsart, and topic time. In Section 9 the modal analysis of the frustrative is applied to the interpretation of frustrative sentences as a whole.

# 8.1 Frustrated intention vs. frustrated expectation

Expectation seems closest to epistemic modality, while intention seems closest to bouletic modality. Following Kratzer's analysis, I will tentatively assume that expectation readings arise from an epistemic modal base (accessible worlds are those which are consistent with what is known about the reference world) plus the stereotypical ordering source (highest-ranked worlds are those in which the normal, expected course of events is followed as closely as possible, given the known facts). I will assume that intention readings arise from a circumstantial modal base (accessible worlds are those in which relevant circumstances of the reference world hold true) plus an ordering source based on the "ideal list" of an agent (Grosz 2011), which includes the agent's wishes and intentions.

In the default case, the unrealized proposition will be the base/prejacent proposition expressed by the clause that contains *dara*. However, in certain cases the base proposition must be interpreted as being actualized, so some other salient proposition must be interpreted as unrealized. This salient proposition may be inferred from context, and typically describes a successor event or result state of the situation described in the *dara* clause. Examples of this type will be discussed in Section 8.3.

Example (29) illustrates the default pattern. The clause that contains *dara* expresses the unrealized proposition, specifically a frustrated intention. The relevant ordering source in this case is the "ideal list" of the agent: accessible worlds are ranked according to how completely Mother's desires or intentions are fulfilled. *Dara* indicates that the actual world is not an optimal world as defined by this conversational background, because the salient proposition ('Mother binds the fish trap') is not true in the actual world. The second clause of the sentence indicates the specific factor (lack of materials) which prevents the agent's intentions from being fulfilled. I will refer to such factors as "frustrating circumstances". Their contribution to the meaning of the sentence as a whole will be discussed in Section 9.

(29) Momolit i=iyay di=bubu **dara** nga' asot wakaw. AV.TR1.bind NOM=mother ACC=fish.trap FRUST but NEG.EXIST rattan 'Mother would/wants to bind the fish trap (that she built), but she is out of rattan.'

The *dara* clauses in (30a–b) describe situations in which no volitional agent is involved. They express frustrated expectation (in these examples, expected events which failed to occur) rather than a frustrated intention. The relevant ordering source here is the stereotypical ordering source: worlds are ranked according to how completely the normal, expected course of events (given the known facts) is followed. Once again *dara* indicates that the actual world is not an optimal world as defined by this conversational background, while the second clause of each sentence indicates the "frustrating circumstance" which prevents the expected event from taking place.

- (30) a. O-liwan dara'ay<sup>8</sup> it=kurita ku sid=sokid, nga' n-i-bontol NVOL-fall FRUST NOM=car 1SG.GEN DAT=hill but PST-IV-block ku sid=pampang tagayo.

  1SG.GEN DAT=rock big
  'My car was about to fall off the hill dara but I ran it into a big rock.'
  - A-sarasay-an no dara it=rilik ya nga'
     NVOL-spread-DV COMPL FRUST NOM=clearing 1PL.EX.GEN but s<in>ansab-an doalo i=tapuy.
     PST>douse-DV 3PL NOM=fire
     'The fire would have spread into our field dara, but they doused it.'

# 8.2 TU<TT: The optative use

The meaning proposed for dara in (28) specifies that some salient proposition is true in all optimal worlds, but is not actualized in the real world at the time of speaking. In example (29) the time of speaking overlaps with the Topic Time of the dara clause, while in (30) the Topic Time of the dara clause is in the past relative to the time of speaking. In both cases, the speaker could be in a position to know the reality status of the salient proposition. However, when the Topic Time of the dara clause is in the future relative to the time of speaking, the frustrative interpretation is not available. The prejacent proposition is unrealized but not frustrated, because it cannot be known yet whether or not the proposition will be true at Topic Time. Thus the interpretation is optative rather than frustrative. In contrast to frustratives (see Section 9), optative sentences are typically monoclausal, as we saw in Section 7. This is not surprising because with optative statements about the future, no additional factors or explanations need to be mentioned as to why the described situation is unrealized at the time of speaking. Optative statements select the bouletic ordering source (relating to the desires and wishes of the speaker). Perhaps the use of dara with a future epistemic interpretation is blocked by the availability of other, more specific particles: *mari* for epistemic certainty, *dati*' for epistemic likelihood.

Clearly there are many unanswered questions about the optative which will need to be addressed in future research.

#### 8.3 Realis dara clauses

As mentioned above, there are some contexts in which the salient proposition referred to in (28) cannot be the *dara* clause itself. Certain factors seem to cause the prejacent proposition to be interpreted as being actualized, so the unrealized proposition must be

<sup>&</sup>lt;sup>8</sup> dara'ay is a variant form of dara; the factors which determine its occurrence are not yet known.

something else. Often this unrealized proposition is not explicitly stated, but would be understood as involving a successor event or result state of the situation described in the *dara* clause.

One context in which the *dara* clause usually cannot be interpreted as unrealized is when the verb in that clause is overtly marked for past tense, and another is when the *dara* clause asserts that a certain state is true in the past or present. In this section we discuss each of these contexts in turn.

#### 8.3.1 Realis events: Past tense inflection

There are a number of syntactic environments, including dara clauses, certain kinds of temporal adverbial clauses, and emphatic reduplication (Kroeger & Johansson 2016), in which a verb that is unmarked for tense can be used for talking about times in the past, present, or future. For this reason, the Topic Time in many of the examples presented above may be either past or present, given the appropriate context. For example, (1a) (repeated below as (31a)) could mean either 'I was going to kill that cobra, but Father forbade me' (TT = past) or 'I would kill that cobra (that we are looking at right now), but Father forbade me' (TT = present).

However, when the verb in the *dara* clause is overtly marked for past tense, the described situation cannot (in most cases) be interpreted as being unactualized. In other words, past tense inflection usually blocks an irrealis interpretation. This constraint may be related to the historical source of the past tense marker, which was probably a marker of realis mood as it still is today in Tagalog and various other Philippine languages (see Section 4.2 above). Some examples illustrating this effect are presented in (31–32).

- (31) a. Patay-on ku **dara** ilo' masalong nga', tiniag oku di=ama. kill-OV 1SG FRUST that cobra but PST.forbid.OV 1SG GEN=father 'I was going to kill that cobra, but Father forbade me.'
  - b. ?\*P<in>atay-Ø [<PST>kill-OV] ku dara ilo' masalong nga' tiniag oku di ama.
- (32) a. Timbak-on oku no **dara** dialo tu' m<in>ang-atur shoot-OV 1SG.NOM COMPL FRUST 3SG because <PST>AV.TR1-aim no dogo.

  COMPL 1SG.ACC

  'He was about to shoot me, because he had aimed right at me.'
  - b. \*T<in>imbak-Ø [<PST>shoot-OV] oku no **dara** dialo tu' minangatur no dogo.

The suggestion that the past tense infix preserves a realis component of meaning in *dara* clauses is supported by the observation that a negated *dara* clause cannot be marked for past tense (33b, 34b). In many languages which have an irrealis mood, negated events must be encoded as irrealis.

- (33) a. Amu ku dara **onuw-on** it=siin n-i-taak dialo nga', NEG 1SG.GEN FRUST take-OV NOM=money PST-IV-give 3SG but n-i-jojol dialo.

  PST-IV-force 3SG
  - 'I would not have taken the money he gave me, but he forced it on me.'9
  - b. ?\*Amu ku dara **n-anu-Ø** [PST-take-OV] it siin nitaak dialo nga', nijojol dialo.

 $<sup>^{9}</sup>$  As discussed in Section 8.4, the frustrative always takes scope over clause-level negation.

(34) a. Ami=i' dara yalo **mongoo** nga', j<in>ajal-an di=tama. NEG=EMPH FRUST 3SG.GEN AV.agree but <PST>force-DV GEN=father 'She would not have agreed (to marry), but her father forced/pressured her.'

b. ?\*Ami=i' dara yalo **m** < **in** > **ongoo** [< PST > AV.agree] nga', jinajalan di tama.

When the verb in the *dara* clause is marked for past tense, the situation described by the *dara* clause cannot be interpreted as being unactualized, so the frustrated expectation is assumed to relate to a successor situation. Examples of this type were seen in (1g) and (20). In some of these examples the second clause explicitly states the non-occurrence of the expected outcome, as in (20a) (repeated here as (35a)). In other cases the second clause specifies the circumstance which prevented the expected outcome but leaves the expectation implicit, as in (20b) (repeated here as (35b)). When such examples involve a volitional action, as in (1g) and (35a–b), the *dara* clause describes an action that is done in vain.

- (35) a. N-o-bobog-Ø ku **dara** it=tasu nga', amu m<in>atay pST-NVOL-beat-OV 1SG.GEN FRUST NOM=dog but NEG <PST>AV.die 'I (managed to) beat the dog, but it didn't die.'
  - b. Naka-sambat oku **dara** dit = orang.tua nga' magaago yalo.

    PST.NVOL.AV-meet 1SG.NOM FRUST ACC = head.man but hurry 3SG.NOM

    'I managed to meet with the village chief but he was in a hurry (so I didn't get to talk with him much).'

Copley (2005) points out a similar effect in Tohono O'odham: when the frustrative clause is inflected for perfective aspect, it must be interpreted as describing an event that actually happened, but did not lead to the expected outcome; that is, something that was done (or happened) in vain.

Both of the examples in (35) employ the common frustrative sentence pattern: p dara but q. In both cases the situation described by the dara clause must be interpreted as actualized, because of the past tense morphology. Therefore, under the definition proposed in (28), the presence of dara indicates that some other salient proposition is unrealized, and an immediate successor to the situation described by the dara clause is a natural choice.

In (35b), the intended successor situation (the speaker speaks with the village chief) is not explicitly mentioned, but can be inferred based on knowledge about the world together with contextual cues, especially the frustrating circumstance described in the 'but' clause (the village chief was in a hurry). The frustrated expectation in this example might be stated as a conditional: 'If I meet with the village chief, I will be able to discuss certain issues with him'.

In (35a) the non-realization of the intended successor situation is explicitly stated in the 'but' clause: the dog didn't die. The frustrated expectation is something like: 'If I beat the dog, it will die'. A similar example was seen in (1g), 'I said *Shii!* to the dog *dara*, but I got bitten anyway'. The frustrated expectation in this example is something like: 'If I say *Shii!* to the dog, it will leave me alone', and the non-realization of the consequent is explicitly stated in the 'but' clause.

As noted above, the unmarked (non-past) tense form can be used in *dara* clauses for unrealized situations in either the past or the present, while the past tense form is used in *dara* clauses only for realized situations in the past. Thus we see a kind of shift in the function of the tense morphology: it marks a contrast between past vs. non-past time reference in main clauses and similar contexts, but realis vs. irrealis in *dara* clauses. (Of course, the past tense form imposes a constraint on the Topic Time in *dara* clauses as

well.) Examples (36–39) contain (near) minimal pairs that illustrate the contrast between non-past (irrealis) vs. past (realis) verb forms with *dara*. Note in particular the difference in the continuations (the 'but' clauses) suggested by my consultant for the past vs. non-past versions in (38–39).

(36) a. **I-soliwan** ku dara it=batol nga', aso ot engin IV-bring.out 1SG.GEN FRUST NOM=rice.wine but NEG.EXIST NOM want monginum(m-poN-inum).

AV-TR1-drink

(context: describing a large group of visitors the previous evening) 'I was going to bring out the rice wine, but no one wanted to drink.'

- N-i-soliwan ku dara it batol nga', aso ot engin monginum.
   PST-IV-bring.out (context: as above) 'I brought out the rice wine, but no one wanted to drink.'
- (37) a. **O-rulun** no dara i=talud ku, nga' awasi tu'

  NVOL-drift already FRUST NOM=canoe my but good because

  noko-bo-bontol no dot=kayu.

  PST.NVOL.IV-DUP-block already ACC=wood

  'My canoe would have drifted away, but fortunately it got caught on a log.'
  - N-o-rulun no dara i talud ku, nga' awasi tu' nokobobontol no dot kayu.
     PST-NVOL-drift
     'My canoe drifted away, but fortunately it got caught on a log.'
- (38) a. **M-ongoy** oku to dara diti moki-gangot nga' oruol AV-go 1SG.NOM PRTCL FRUST this AV.PET-firewood but hurt at = tulu ku.

  NOM = head my
  'I would/want to go out to look for firewood, but my head hurts.'
  - b. **M-in-ongoy** oku dara moki-gangot nga' m-in-uli oku AV-PST-go 1SG.NOM FRUST AV.PET-firewood but AV-PST-return 1SG.NOM tu' d<um>arun. because <AV>rain
    'I went out to look for firewood, but I came back home because it started raining (implied: so I didn't get any wood).'
- (39) a. **O-jiil-Ø** dara yalo nga', j<in>amin-Ø di=tobpinee yo NVOL-jail-OV FRUST 3SG.NOM but <PST>guarantee-OV GEN=sibling his dot=siin.

  ACC=money
  'He would have been put in jail, but his brother posted the bond for him.'
  - b. **N-o-jiil-Ø** dara yalo nga'n-i-labus kembagu. PST-NVOL-jail-OV FRUST 3SG.NOM but PST-IV-set.free again

'He was put in jail, but then they let him out again.'

As indicated above, the claim that past tense inflection in a *dara* clause blocks an irrealis interpretation holds as a strong tendency, but not as an absolute generalization. I have found a few examples where past tense morphology occurs with what seems to be an unrealized event. Example (40) is identical to (31), except that the root *patay* 'kill' has been replaced with the root *tibas* 'slash'. But in contrast to (31b), the past tense form of

the verb in (40b) is reported to be fully acceptable and does not change the meaning of the sentence.

- (40) a. Tibas-on ku **dara** ilo' masalong nga', tiniag oku di=ama. slash-ov 1sg frust that cobra but pst.forbid.ov 1sg gen=father 'I was going to slash that cobra, but Father forbade me.'
  - b. T<in>ibas-Ø [<PST>slash-OV] ku **dara** ilo' masalong nga' tiniag oku di ama. (acceptable with same meaning.)

Another exceptional case is presented in (41). My analysis predicts that (41) should be acceptable only as a description of an event in which the child was taken onto the agent's lap but refused to stay there. However, my consultant says it is more likely to mean that the agent's attempt was unsuccessful, and that the child never actually reached the lap. As in (40), the corresponding non-past form *kibiton* could be used in this context to express an identical meaning.

(41) K<in>ibit-Ø dara dialo i tanak ku nga', rumosi i=tanak ku. <PST>hold.in.lap-OV PRTCL 3SG NOM child 1SG but afraid NOM=child 1SG 'She (tried in vain to) hold my child in her lap, but the child was afraid.'

At this point I am not sure how to explain these exceptions to the general tendency.

#### 8.3.2 Realis states

Another situation in which the *dara* clause apparently cannot be interpreted as unrealized is when it describes a state in the present or past. I do not have a good explanation for this, since it is not logically impossible to refer to an unactualized state in the past, e.g. *John would have been happy*. But I have (so far) not found any such examples marked with *dara* in Kimaragang, though I have not yet tried systematically to elicit them.

Stative predicates cannot normally bear tense morphology, so the TT for a state will come from time adverbials and/or contextual factors. When TT is in the present or past, states that are asserted to hold at TT are not interpreted as unactualized, even when they are marked with dara. Rather, the frustrated expectation relates to a connection between the dara clause and some successor situation, which must often be inferred from context. Again, the frustrated expectation can be stated as a conditional: *if* p *then* p', where p corresponds to the dara clause and p' to its expected successor.

For states in the past, the relevant expectation is often simply the continuation of the state: 'If *p* is true at time t, it will still be true at times in the (near) future relative to t'. Examples of this type are seen in (1d) 'I did have some money *dara* but I used it to pay off my debt'; and in (1e) 'There were five of us siblings *dara*, but only three are still here; two have "slipped through the cracks" (i.e., have passed away)'. The same pattern is seen in (21), repeated here as (42). Notice that all three of these examples include an explicit description of some frustrating circumstance which caused a change of state, but the noncontinuation of the state is explicitly mentioned only in (1e).

(42) Ogumu dara tuwa dat=mangga di=Soyinsin nga' m-in-(p)upor kikiawi. much FRUST fruit GEN=mango GEN=Soyinsin but AV-PST-cast.fruit all 'There was a lot of fruit on Soyinsin's mango tree *dara*, but they all fell off before they got ripe.'

For states in the present, the frustrated expectation cannot be simply the continuation of the current state. It cannot be known at the time of speaking whether or not the state

will persist into the future, so the expectation of continuation cannot be known to be frustrated at the time of speaking. Rather, the relevant expectation will be determined by cultural and pragmatic factors. This is perhaps the situation where the distinction between "expectation" vs. "inertia" is the clearest: the inertial tendency for a state would typically involve simple persistence, but the frustrated expectation could be something quite different. The analysis proposed in (28) allows for a wide range of factors to determine the relevant expectation, as these data seem to require.

An example of this type was seen in (1f) 'We love each other *dara*, but her father doesn't like me', where the circumstance of the father's disapproval frustrates the unstated expectation ('If a couple loves each other, they will get married'). A similar example is seen in (43), where the skinniness of the chickens frustrates the expectation ('If we have some chickens, we have something to eat with our rice').

(43) Asot rinapa diti owo, ki-manuk **dara** nga' ongo = garagas.

NEG.EXIST viand this VOC EXIST-chicken FRUST but PL = skinny

'We don't have any viand (side dish to eat with the rice); we have some chickens dara, but they are all very skinny.'

# 8.4 Evidence for presuppositional content

We have adopted the hypothesis that the second clause of (28) (some salient proposition is not actualized in the real world at the time of speaking) is presupposed rather than asserted. Supporting evidence for this hypothesis comes from the fact that this part of the meaning cannot be questioned or negated.

As illustrated in (44), the inference of non-realization is preserved in questions. The Whquestion in (44a) presupposes not only that the addressees were trying to go somewhere, but also (because of the presence of the frustrative particle) that they did not succeed in getting there. The focus or at-issue content of the question is the intended destination. The focus of the yes-no question in (44b) is the intention of the agent, but the presence of the frustrative particle triggers the presupposition that the putative result state is not realized, i.e., that the speaker is not frightened. (The form *dara'ay* seems to be preferred in questions, for reasons that remain mysterious).

- (44) a. Siombo ot ongoy-on duyu dara'ay?

  where NOM go-LV 2PL.GEN FRUST

  'Where were you trying to go?'

  (e.g., to someone who has met with an accident or gotten lost)
  - Indorosiy-on oku dara'ay dikaw oy?
     frighten-ov 1sg.nom frust 2sg Q
     'Are you trying to scare me?' (implied: you can't scare me!)

Next we observe that the frustrative always takes scope over clause-level negation. The expectation that is frustrated in (1i), repeated here as (45a), is that goat would not be caught. The intention that is frustrated in (33a), repeated here as (45b), is the agent's intention not to take the money. The intention that is frustrated in (34a), repeated here as (45c), is the agent's intention not to agree to an unwanted engagement. The meaning contributed by *dara* is never a part of what is negated by clause-level negation.

(45) a. Amu **dara** a-gamit-Ø i=kambing ong konoko' g<in>ipit-Ø sid=susut.

NEG FRUST NVOL-catch-OV NOM=goat if not <PST>trap-OV DAT=below

'The goat could not have been caught if we hadn't trapped it under the house.'

- b. Amu ku dara onuw-on it=siin n-i-taak dialo nga', NEG 1SG.GEN FRUST take-OV NOM=money PST-IV-give 3SG but n-i-jojol dialo.
  PST-IV-force 3SG
  'I would not have taken the money he gave me, but he forced it on me.'
- c. Ami = i' dara yalo mongoo nga', j < in > ajal-an di = tama.

  NEG = EMPH FRUST 3SG.GEN AV.agree but < PST > force-DV GEN = father

  'She would not have agreed (to marry), but her father forced/pressured her.'

Finally, it appears that in at least some contexts the inference of non-realization which is triggered by *dara* can be suspended. One such example is seen in (46). My consultant explained the likely context for this example as one in which the speaker has not had time to inspect the rice plants closely, but judges that the plants have reached the age at which it would be expected for there to be flesh in the grains.

(46) Ki-ongo-silaw=i' dara i=paray nga' amu ela'an ong ki-onsi EXIST-PL-ear=EMPH FRUST NOM=rice but NEG know if EXIST-flesh ko' tongo.

or what

'The rice plants have produced heads/ears, but I don't know whether there is flesh in the grains or not.'

I mention this for completeness, but it is not immediately clear what to make of this fact, since different types of presupposition may differ in terms of their suspendability.

# 9 The interpretation of frustrative sentences

In this section we discuss the interpretation of sentences which contain the frustrative particle. In Section 8 we focused on the interpretation of the *dara* clause itself, but the vast majority of frustrative examples in naturally occurring speech appear within multi-clausal sentences.<sup>10</sup> One or more of the other clauses in these sentences often explains why the intended or expected situation is not actualized. This section discusses the contributions of these other clauses, beginning with counterfactual conditionals.

# 9.1 Counterfactual conditionals

Clearly it is no accident that the consequent of a counterfactual conditional in Kimaragang is marked with *dara*, as seen in (1h–i). Example (1h) is repeated here as (47).

Ong n-o-guring-Ø no koniab ino, a-tanam-an no if PST-NVOL-plow-OV already yesterday that(NOM) NVOL-plant-DV already do=paray benoy dara.

ACC=rice today FRUST
'If that (field) had been plowed yesterday, it could have been planted with rice today.'

This counterfactual conditional has the form: *if p, then q dara*. Because the consequent is marked by *dara*, it gets interpreted (following clause (i) of definition proposed in (28)) as a statement of modal necessity, in this case epistemic necessity. In other words, the consequent expresses a claim that the base/prejacent proposition is true in all worlds

<sup>&</sup>lt;sup>10</sup> According to Davis & Matthewson (2016), this is true in St'át'imcets as well.

of a certain type. As discussed in Section 8, the set of worlds of the "right type" (i.e., optimal accessible worlds) is defined by a modal base in combination an ordering source. Together these constitute the restriction on a universal quantification over possible worlds.

Following Kratzer's (1986) analysis of conditionals, the antecedent clause p gets interpreted as part of this restriction. Specifically, it gets added to the epistemic modal base. So in this example, accessible worlds w are those which are consistent with what is known about the real world except for the fact that 'the field was plowed yesterday' is true in w. The real world does not count as an accessible world because 'the field was plowed yesterday' is presupposed not to be true in the real world. The resulting interpretation might be informally stated as in (48):

(48) Asserted: for all worlds *w* which are consistent with what is known about the actual world, except that *p* (the field was plowed yesterday) is true in *w*, and in which the normal, expected course of events is followed as closely as possible, *q* (the field can be planted with rice today) is true in *w*.

Presupposed: the field was not plowed yesterday and cannot be planted with rice today.<sup>11</sup>

# 9.2 p dara but q

We have seen how the interpretation of a counterfactual conditional can be derived from a compositional rule that governs the interpretation of *if* clauses. The interpretation of other types of sentences that contain frustrative clauses is generally derived pragmatically. As discussed in Section 8, the *dara* clause expresses an assertion of modal necessity which can be thought of as quantification over possible worlds. Kratzer (1981, 1991) states that the conversational background which restricts this quantification is determined by context. The other clauses in the sentence are part of the linguistic context of the *dara* clause, and thus frequently contribute to the determination of the conversational background.

The most common frustrative sentence pattern is: p dara but q. Example (29), repeated here as (49), is a typical example.

(49) Momolit i=iyay di=bubu **dara** nga' asot wakaw.

AV.TR1.bind NOM=mother ACC=fish.trap FRUST but NEG.EXIST rattan

'Mother would/wants to bind the fish trap (that she built), but she is out of rattan.'

As discussed above, the dara clause ('Mother binds the fish trap dara') expresses a proposition which is asserted to be true in all optimal worlds, i.e., worlds in which relevant circumstances of the reference world hold true and in which the desires or intentions of the agent are fulfilled as completely as possible. The 'but' clause q ('she is out of rattan') describes a frustrating circumstance which explains why the expected proposition p remains unrealized in the real world, i.e., why the real world is not optimal. The circumstantial modal base which is chosen must be one that blocks worlds in which this frustrating circumstance is true; such worlds must be classified as inaccessible. So what gets added to the modal base is the negation of the 'but' clause. The resulting interpretation of (49) might be informally stated as follows:

<sup>&</sup>lt;sup>11</sup> The first half of this presupposition is an inherent part of the counterfactual reading of the conditional, the second is triggered by the presence of the frustrative particle.

(50) Asserted: Mother is out of rattan, and for all worlds *w* in which the relevant circumstances of the actual world hold true, except that *not q* (so Mother is not out of rattan in *w*), and in which the desires and intentions of the relevant agent (Mother) are fulfilled as closely as possible, *p* ('Mother binds the fish-trap') is true in *w*.

Presupposed: Mother does not bind the fish trap (at topic time).

This same pattern of modal inference applies in examples in (1a), (1c), (22a), (23a), (33a), and (34a). The same sentence pattern (p dara but q) is employed in examples (30a-b), and again the 'but' clause expresses a frustrating circumstance whose negation is added to the modal base. However, because no volitional agent is involved in those examples, they are interpreted as expressing frustrated expectation rather than a frustrated intention. Example (30a) is repeated here as (51a), and an informal statement of its interpretation is offered in (51b).

- (51) a. A-sarasay-an no **dara** it=rilik ya nga' NVOL-spread-DV COMPL FRUST NOM=clearing 1PL.EX.GEN but s < in > ansab-an doalo i = tapuy.

  < PST > douse-DV 3PL NOM = fire

  'The fire almost spread into our field *dara*, but they doused it.'
  - b. Asserted: they doused the fire, and for all worlds *w* which are consistent with what is known about the actual world, except that *not q* (so they did not douse the fire in *w*), and in which the normal, expected course of events is followed as closely as possible, *p* ('the fire spreads into our field') is true in *w*. Presupposed: the fire did not spread into our field.

In example (36b), repeated here as (52), the past tense inflection blocks an irrealis interpretation of the *dara* clause, so the unrealized proposition must relate to an expected or intended successor to the situation described by the *dara* clause.

(52) N-i-soliwan ku dara it=batol nga', aso ot engin PST-IV-bring.out 1SG.GEN FRUST NOM=rice.wine but NEG.EXIST NOM want monginum(m-poN-inum).

AV-TR1-drink (context: describing a large group of visitors the previous evening) 'I brought out the rice wine, but no one wanted to drink.'

Suppose that the unrealized proposition in such cases describes not the successor situation itself but the natural connection between the dara clause and its successor: if p then p'. Our analysis in (28) then predicts the following interpretation for a sentence of the form p dara but q which contains a realis dara clause:

(53) Asserted: p, and q, and [in all optimal worlds, if p then p']. Presupposed: if p then p' is not true in the real world.

Since *if* p *then* p' is false just in case p is true but p' is false, and since p is asserted to be true, I will make the simplifying assumption that what is presupposed is simply that p' is false in the real world.

The intended successor situation in (52) is implicit but clearly suggested by the frustrating circumstance described in the 'but' clause (no one wanted to drink), which prevents the desired outcome from being realized. The unrealized proposition can therefore be expressed as a conditional something like the following: 'If I serve rice wine, my guests

will drink it'. Applying Kratzer's analysis to this conditional, we can propose the following interpretation for the sentence as a whole:

(54) Asserted: I brought out the rice wine, and no one wanted to drink, and for all worlds *w* in which I serve rice wine to my guests, and in which other relevant circumstances of the actual world hold true except that it is not the case that no guest wants to drink in *w*, and in which the normal, expected course of events is followed as closely as possible, 'my guests drink rice wine' is true in *w*. Presupposed: in the real world, my guests did not drink.

The *p* dara but *q* sentence pattern is also used in sentences like (1g), repeated here as (55a). In this case the 'but' clause does not express a frustrating circumstance, but only the negation of the expected outcome. The frustrated expectation in this example is: 'If I say *Shii!* to the dog, it will leave me alone'. Because no frustrating circumstance is stated, there is no reason to assume that the real world is not an accessible world; it is simply not one of the highest ranked worlds for this conversational background, for whatever reason. An informal statement of the sentence meaning is suggested in (55b).

- (55) a. N-o-sii-Ø ku no **dara** it = tasu nga'n-iit-an oku = i'. PST-NVOL-shoo-OV 1SG already FRUSTNOM = dog but PST-bite-DV 1SG = EMPH 'I said *Shii!* to the dog, but I got bitten anyway.'
  - b. Asserted: I said *Shii!* to the dog, and it bit me, and for all worlds *w* in which I say *Shii!* to the dog, and in which other relevant circumstances of the actual world hold true, and in which the normal, expected course of events is followed as closely as possible, 'the dog leaves me alone' is true in *w*. Presupposed: in the real world, the dog did not leave me alone.

# 9.3 Other sentence patterns

The following two examples illustrate other frustrative sentence patterns. In both of these sentences, *dara* occurs within a subordinate clause and expresses a frustrated intention. The subordinate clause in (56a) could be analyzed as either a purpose clause or an extraposed relative clause, while (57a) involves a circumstantial adverbial clause. In both sentences, the main clauses express a frustrating circumstance, and thus contribute to the meanings of their sentences in two ways: they are asserted to be true, and they also constitute part of the context which determines the modal base for the content of the *dara* clause. Interpretations are suggested in (56b) and (57b).

- (56) a. Amu atarom i = gunting owo, pongogunting ku **dara** do = tokobuk.

  NEG sharp NOM = scissors VOC IV.TR1.cut 1SG.GEN FRUST ACC = hair

  'The scissors are not sharp; I was going to use them to cut hair.'
  - b. Asserted: the scissors are not sharp, and for all worlds *w* in which the relevant circumstances of the actual world hold true, except that the scissors are sharp in *w*, and in which the desires and intentions of the speaker are fulfilled as closely as possible, 'I use the scissors to cut hair' is true in *w*. Presupposed: I did not use the scissors to cut hair.
- (57) a. Tila'ay di=tusing i=pinggan pinangakan ku dot lick.DV.ATEMP GEN=cat NOM=plate IV.PST.eat 1SG.GEN COMP mangakan oku po dara.

  AV.TR1.eat 1SG.NOM yet FRUST 'The cat licked the plate that I ate from, when I still intended to eat some more.'

b. Asserted: the cat licked my plate, and for all worlds *w* in which the relevant circumstances of the actual world hold true, except that the cat did not lick my plate in *w*, and in which the desires and intentions of the speaker are fulfilled as closely as possible, 'I eat some more' is true in *w*.

Presupposed: I did not eat any more.

While most frustrative clauses occur in multi-clausal sentences, this is not obligatory. <sup>12</sup> A monoclausal frustrative sentence is seen in (58a). In the absence of additional contextual cues, the modal assertion for this example would be determined by the default conversational background for intentions, as described in Section 8.1: a circumstantial modal base plus an ordering source based on the "ideal list" of the agent.

- (58) a. Minaan da=tanak **dara** sosoropunguto' at=mato da=tusing. PST.AUX GEN=child FRUST seal.with.pitch.OV.ATEMP NOM=eye GEN=cat 'The child tried to seal the cat's eyes closed with pitch.'<sup>13</sup>
  - b. Asserted: for all worlds *w* in which the relevant circumstances of the actual world hold true, and in which the desires and intentions of the agent (i.e. the child) are fulfilled as closely as possible, 'The child seals the cat's eyes closed with pitch' is true in *w*.

Presupposed: the child did not seal the cat's eyes closed with pitch.

The sentences in (59) both contain more than one clause, but the additional clauses do not seem to contribute to the conversational background of the *dara* clause. In (59a) *dara* occurs within a purpose clause. The sentence structure is similar to (56a), but in (59a) the main clause does not provide a reason for the non-realization of the *dara* clause. In (59b), which is repeated from (32), *dara* occurs within the main clause. It is followed by a reason subordinate clause, but this subordinate clause explains the reason for the expectation, not the reason for its frustration. In both of these examples, as in (58), the modal assertion is determined simply by the default conversational background for intentions.

(59) a. Nonus yo no i=gampa ponibas di=wulanut PST.unsheathed.OV 3SG.GEN COMPL NOM=bushknife IV.slash GEN=snake dara.

**FRUST** 

'He had already unsheathed his bushknife to slash the snake with.'

 Timbak-on oku no dara dialo tu' m<in>ang-atur shoot-OV 1sg.NOM COMPL FRUST 3sg because <PST>AV.TR1-aim no dogo.

COMPL 1SG.ACC

'He was about to shoot me, because he had aimed right at me.'

# 10 Conclusion

I have argued that the Kimaragang data presented in Sections 5–6 above cannot be adequately accounted for under any analysis that posits the same semantic basis for non-culminating accomplishments and frustrative clauses. Both of these constructions involve some kind of interruption in the "normal" or "expected" flow of events, but in

 $<sup>^{\</sup>rm 12}$  Again, the same is true in St'át'imcets.

<sup>&</sup>lt;sup>13</sup> This is one of the examples mentioned in Section 8.3.1, which appear to be exceptions to the general rule of tense marking in *dara* clauses. I hypothesize that the past tense in this example is used to indicate that the act was actually attempted, not just intended.

the case of non-culminating accomplishments what is interrupted (or truncated) is a lexically determined event structure, whereas the frustrative involves a much broader kind of expectation.

The frustrative particle indicates that a situation which was expected or intended is unrealized at the time of speaking. I have suggested an analysis of frustrated expectation in terms of epistemic modality, and frustrated intention in terms of bouletic modality. These two "flavors" of modality are distinguished by the conversational backgrounds which are invoked, based on contextual features, to identify the set of optimal accessible worlds. The frustrative clause asserts that some proposition would be true in all optimal worlds, and presupposes that it is not true in the real world. Other clauses in the same sentence are part of the linguistic context for the frustrative, and so frequently contribute to the conversational background.

# **Abbreviations**

<x> = infix, 1 = first person, 2 = second person, 3 = third person, ACC = accusative, ATEMP = atemporal, AUX = auxiliary, AV = Active Voice, CAUS = causative, COMP = complementizer, COMPL = completive aspect, DAT = dative, DESID = desiderative, DUP = reduplication, DV = Dative Voice, EMPH = emphasis (polarity focus), EX = exclusive, EXIST = existential, FOC = focus, FRUST = frustrative, GEN = genitive, IMPER = imperative, INCL = inclusive, IV = Instrumental Voice, LNK = linker, LV = Locative Voice, NEG = negation, NOM = nominative, NVOL = non-volitive modality, OPT = optative, OV = Objective Voice, PET = petitive, PL = plural, PROX = proximal, PRTCL = particle, PST = past tense, Q = interrogative, REAL = realis, RECIP = reciprocal, SG = singular, TR1 = transitive paradigm 1, TT = Topic Time, TU = Time of Utterance, VOC = vocative

# **Competing Interests**

The author has no competing interests to declare.

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 $\label{eq:gloss} \big] u \big[ \qquad \begin{array}{ll} \textit{Glossa: a journal of general linguistics} \text{ is a peer-reviewed open access journal} \\ \text{published by Ubiquity Press.} \end{array}$ 

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