

# Lexical and Viewpoint Aspect in Kubeo\*

Thiago Costa Chacon

Center for American Indian Languages – University of Utah  
thiago.chacon@utah.edu

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## 1. Introduction

In this paper I explore how lexical aspect (stative vs. non-stative), understood as a semantic and grammatical property of verb roots and stems in Kubeo<sup>1</sup>, correlates with viewpoint aspect (imperfective vs. perfective).

I follow Smith (1997) in using the term **viewpoint aspect**, instead of the traditional term **grammatical aspect**, because of two reasons: **(i)** In Kubeo, there is no morpheme or syntactic construction that can be analyzed exclusively as a perfective or imperfective marker. Hence, they are not a grammatical category in the way described by Dahl (1985). They are rather a conceptual category that can be inferred from the meaning of predicates. **(ii)** More recently in the theoretical literature, perfectivity and imperfectivity have been used as **semantic notions** to describe properties of predicates in languages with very different grammatical facts from Russian or Latin – where perfective and imperfective have been traditionally used. Therefore, the term viewpoint aspect achieves two goals in this paper: it captures an important fact internal to Kubeo grammar and make the analysis of this language available for cross-linguistic comparison.

The specific way that lexical and viewpoint aspect correlate in the language is stated in (1) below:

**(1) A predicate that is headed by a stative stem has an imperfective grammatical aspect; while a predicate headed by an eventive stem has a perfective grammatical aspect.**

An introduction to the Kubeo data to support the analysis above will be given in section 1.1 below. In section 2, when I deal more closely with the typology and theory of aspect, the parallelism between lexical aspect of verbs and viewpoint aspect of predicates as whole will be better motivated. In section 3 and 4 I return in more detail to the Kubeo facts. Section 5 is the conclusion of this paper.

Throughout this paper I present arguments against previous analyses of Kubeo. More specifically, in my description of the Kubeo facts below I argue against the analysis of Morse & Maxwell (1999) and Hollinger et al. (2000). They have argued for a split tense system, where stative verb stems when combined with tense-evidentiality-mood-person<sup>2</sup> morphemes (henceforth

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<sup>1</sup> Kubeo is an Eastern Tukanoan language (Mason 1950), spoken by 4,000 people on the Vaupés and Ayari rivers, at the Brazilian and Colombian border area. Data for this study was collected with the southern most Kubeo dialects during two fieldwork seasons (Summer 2008 and 2009). This study is part of an ongoing investigation towards the completion of a reference grammar of Kubeo, which is also my PhD dissertation topic.

<sup>2</sup> Kubeo verbal inflectional morphology has a high degree of fusion, where a single morpheme refers to more than one inflectional category. Inflectional categories in Kubeo verbs include Tense, Evidentiality, Mood and Person. I will use the acronym TEMP to refer to the collection of inflection categories in Kubeo verbs. There are two contrastive inflectional paradigms in Kubeo verbs based on the tense system: non-past and past. Since tense is always coded in combination with other inflectional categories, I will use the terms ‘non-past TEMP’ and ‘past TEMP’ to refer specifically to each set of forms, or just TEMP to refer to the verbal inflectional morphemes in general.

TEMP) yield present tense, and eventive verb stems plus TEMP morphemes yield past tense.

I argue for a split aspectual system, which seems to be a more natural explanation for the Kubeo facts, instead of a split tense analysis, for theoretical, typological and Kubeo-internal grammatical reasons that will become clear in the course of this paper.

### 1.1 Introduction to Kubeo data

The categories of tense and aspect are coded within the VP in Kubeo. There are, however, many points that make Kubeo tense and aspect system typologically uncommon. A brief introduction to how these categories correlate in Kubeo is necessary before we proceed to a more detailed account.

Verb roots in Kubeo can be divided into two classes, depending on the lexical aspectual properties of their meaning: stative and eventive (non-stative) classes<sup>3</sup>. When combined with specific TEMP morphemes (stative root + TEMP, or eventive root + TEMP) there is a clear distinction in meaning at the predicate aspectual level between the two constructions. Consider (2) below, where verbs are combined with non-past TEMP<sup>4</sup>:

- |        |   |                        |
|--------|---|------------------------|
| (2) a. | da-bi <sup>5</sup><br>he come-N.PST.3.MSC<br>'he has arrived' | <br>eventive verb root |
| b.     | ĩ toro-hi-bi<br>he clourful-VBLZ-N.PST.3.MSC<br>'he is happy' | <br>stative verb root  |

As it can be seen, the combination of an eventive root plus non-past TEMP morphemes in (2a) yields a predicate with **perfective** meaning and a situation time reference in the past – although tense is morphologically unmarked, therefore non-past (also, in section 4.6 I show how perfective predicates with non-past TEMP can also code situations with future time reference). On the other hand, the combination in (2b) of a stative verb root plus the same TEMP morphemes as in (2a) yields a predicate with **imperfective** meaning and a situation time reference in the present.

For an eventive verb root to code a situation time reference in the present, it must be combined with some derivational device, which derives a **stative stem**<sup>6</sup>. In (3) below, the derivational morpheme *-i* 'stative' assumes this function, yielding a non-progressive stative predicate<sup>7</sup>:

- (3) da-i-bi  
come-ST-N.PST.3.MSC

<sup>3</sup> Verb class can also be defined also by grammatical criteria (such as morphological selection, cf. section 3 below).

<sup>4</sup> A note on the orthography of this paper: <ç> = /tʃ/; <y> and <ñ>/j/; nasal syllables are marked by a tilde over the vowel or by a nasal consonant <m, n, ñ>. Stress is marked on unpredictable syllables, otherwise it falls in regular iambic intervals, parsed from the left to the right. Primary stress falls in the left most stressed syllable.

<sup>5</sup> 1 '1<sup>st</sup> person', 2 '2<sup>nd</sup> person', 3 '3<sup>rd</sup> person', AN 'animate class', ANPH 'anaphoric', ANT 'anteriority nominalizer', C 'inanimate count', CAUS 'causative', C 'classifier', CLT 'clitic', CONV 'converb', COP 'copula', DIM 'diminutive', DUR 'durative', DYN 'dynamic', EXCL 'exclusive', FEM 'feminine', FOC 'focus', HAB 'habitual', IF 'if/conditional', IMPR 'imperative', IN 'inanimate class', INCL 'inclusive', INTRJ 'interjection', IRR 'irrealis', LOC 'locative', MS 'inanimate mass', MSC 'masculine', MY '1<sup>st</sup> singular possessive', N 'non-', NEG 'negative', NMZ 'nominalizer', OBL 'oblique case', ORG 'origin', PASS 'passive', PERF 'perfective', PERM 'permissive', PL 'plural', POSS 'possessive', POST 'posteriority nominalizer', PSNT 'present', PST 'past', Q 'question marker', RSLT 'resultative', S 'singular', SIM 'simultaneous', ST 'stative'.

<sup>6</sup> See section 3 for the distinction of roots and stems.

<sup>7</sup> For a better treatment of the function and meaning of the morpheme *-i* 'stative', see section 3 and 4 below.



(grammatical) and lexical aspect<sup>8</sup>. In discussing lexical aspect, I will focus primarily in the distinction of **states** and **non-states**, due to its relevance for the Kubeo tense and aspect system. Later, in 2.4 I will try to motivate a semantic natural link between the notions of **stativity** – **imperfectivity**, and **eventivity** - **perfectivity**, in order to support the correlation between lexical and viewpoint aspect in Kubeo theoretically.

## 2.1 On the relation of TIME, tense and aspect

**Tense** and **aspect** are two grammatical categories that function to express the semantic notion of TIME in languages (cf. Comrie 1976; Dahl 1985; Binnick 1991; Klein 1994). Comrie's (1976:5) semantic distinction between aspect and tense uses two parameters for presenting a situation in time: aspect refers to the "situation internal time", i.e. how a situation is described in relation to its temporal internal constituency; tense refers to "situation external time", i.e. how a situation is presented in relation to an external point of view, such as the speech time. According to Comrie's definition, tense systems are distinct from aspect systems by being primarily a deictic category.

There is an important distinction between tense and **time reference** in Comrie's 1985 proposal. While tense is a grammatical category, time reference is a broader semantic operation to locate any linguistic expression in time. So temporal adverbs, such as *today* or *tomorrow*, are devices of time reference, but not of tense. The fact that time reference and tense are distinct entities can be easily demonstrated by the English present tense, which may have both present (6a), (6b) and (6c), and future time reference (6d), or even performative meaning (6e):

- (6) a. I see your point  
b. I am now writing you a letter.  
c. I am writing letters on Tuesdays.  
d. I am writing a new letter tomorrow.  
e. I promise to write you.

This correlates with the distinction between **situation time** and **the linguistic statements** made by speakers about a situation (Klein 1994). While situations are the real-world facts, the linguistic statements are representations of real-world facts. Suppose an event that took place in the past can be 'neutrally' conceptualized as MONKEY EAT BANANAS. This event can be either described as a progressive event *The monkey was eating bananas*, or as a perfective event *The monkey ate bananas*. Therefore, there is in some degree an arbitrary link between the real world event time and the event description made by speakers (cf. Binnick 1991:184 for a more profound way to motivate this distinction). It seems that the classical Sussurean concept of *linguistic sign* stems from a similar observation.

Aspect simply refers to the description of the event itself, whether it is completed or not, whether it is punctual or continuous, etc.

- (7) a. When you arrived, I was leaving home.  
b. When you arrived, I left home.

In (7) the main clauses describe the event of *leaving* in respect to the punctual event of *arriving*. Since *arriving* is a single point in the discourse time, the main clauses can either overlap or not overlap (precede/follow) it temporally. In (7a) *leaving* was taking place **during** the moment when there was an *arriving* event, hence overlapping with the *arriving* event. In (7b) the basic interpretation is that there was an event of *leaving* **after** the event of *arriving*, hence not

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<sup>8</sup> Unfortunately, due to space limitations, I will not be able to show full examples of all the languages surveyed in the literature that are important for illustrating and supporting my analysis. This will be done in a future study, though.

overlapping. This is due to the fact that the progressive form in (7a) has enough ‘temporal extension’ to allow overlapping, while this is not the case with the perfective form of (7b).

Dahl’s 1985 study showed that distinctions such as **perfective** and **imperfective** are typologically universal. A fair number of tenseless languages has been described, where TIME information is coded by aspectual rather than by tense (Comrie 1985). Olsen (1997:5) notices ‘few languages lack aspect distinction, while many languages lack tense’. These facts can be indirectly related with the fact that, diachronically, aspect systems seem to feed tense systems (cf. Comrie 1985, Klein 1994).

## 2.2 Aspectual categories

With the general background from previous section in mind, I turn now to address relevant issues about aspect and tense that will give us the basis for an analysis of Kubeo.

According to Binnick (1991), as a conceptual category, aspect was a familiar topic to classical grammarians, as for example in Varro’s distinction between Latin *perfectum* ‘complete action’ and *imperfectum* ‘incomplete action’. Later, Slavists adopted an analogous distinction for Slavic languages (Binnick 1991:136).

In discussions of aspectual categories, **perfective** and **imperfective** are taken to be the most basic categories, both typologically and semantically. Comrie (1976:16) defines perfective and imperfective aspects as two bipolar ways of describing situations: perfective describes a situation as a complete event; imperfective describes a situation with internal temporal structure. Smith (1997:65) talks about families of aspectual ‘viewpoints’. Perfective viewpoints are defined by presenting a situation closed informationally, while imperfective viewpoints present situation open informationally. Dahl 1985 defines perfective aspect as describing situations as “a single event, seen as an analyzed whole” (1985:78), though he does not give any positive definition of imperfective aspect.

With respect to the notion of **perfectivity**, Comrie 1976 emphasizes the difference between “describing a situation as a complete event” from “a completed event”. Contrary to “completed”, a complete event does not necessarily imply that the event culminated or was successfully completed. Comrie (1976:18) states that in Russian and Ancient Greek there are situations with future time reference that are expressed by the perfective/aorist.

In other cases, the issue of completion (telicity) or non-completion of predicates with the perfective aspect seems to be due to **lexical aspect** (or to situation type as defined by Smith (1997:68)). Telic situations, such as accomplishments tend to exhibit completion, while atelic situation tend to exhibit termination, but not completion. Nevertheless, every predicate with the perfective aspect tends to exhibit “initial and final points” (Smith 1997:66).

Smith (1997:110) argues that there is a pragmatic principle that constraints situations with present time reference to include the endpoints of the situation, which can explain Dahl’s (1985) observation that the perfective aspect is absent in present time reference typologically. This can also explain the Kubeo facts introduced in section 1.1 (cf. Table 1).

Closer to our interest in this paper is Smith’s (1997) interpretation of ‘non-canonical’ use of the perfective aspect with stative verbs. She argues that in some languages an inchoative interpretation is available for the combination of STATIVE VERB + PERFECTIVE, while in some other languages this interpretation is not available, and the combination results in describing a ‘closed state’ (Smith 1997:69). French is mentioned by Smith as one kind of language in which the combination of STATIVE VERB + PERFECTIVE codes a closed state, as in the example below:

- (8) a. Marie a vecú à Paris  
Marie lived in Paris
- b. # Marie a vecú à Paris et elle y vit encore  
Marie lived in Paris and she still lives there.

Cuzco Quechua (personal data) seems to be the type of language where the combination of STATIVE VERB + PERFECTIVE entails a change of state. Welmers (1973:347-8) present evidence that many Niger-Congo languages behave similar to Cuzco Quechua.

However, it turns out that the two interpretations – closed states and inchoatives - are available within the same language as well, as we can see on the Portuguese examples below:

- (9) a. Ela dormiu a noite inteira  
 she slept the night entire  
 ‘She slept for the entire night’
- b. Silêncio! A criança dormiu agora  
 Silence the child slept now-DIM  
 ‘Silence! The child fell asleep just now’

In Kubeo, there seems to exist the two possibilities as well. I show a stative predicate in (10a) and its non-inchoative, closed state interpretation in (10b). In (10c), the same verb form describes an inchoative situation, which is similar to the Portuguese example above. Compare sentences (2b) and (4) (above) for another inchoative interpretation with a stative verb or see section 4.1 for additional examples:

- (10) a. yɨ-re hɨhɨ-wɨ  
 I-OBL cold-N.PST.N.3.AN  
 ‘I am cold’
- b. kari yãmi-ne yɨ-re hɨhɨ-te-wɨ  
 current.time night-OBL I-OBL cold-DYN-N.PST.N.3.AN  
 ‘I felt cold last night’
- c. kari yãmi hɨhɨ-te-wɨ  
 current.time night cold-DYN-N.PST.N.3.AN  
 ‘this night got cold’

Notice that the constituent ‘night’ in (10c) is the subject and it does not have the oblique marker that was present in (10b) when it was not a core argument. In (10a) the argument ‘I’ has an oblique marker, and it is not the subject. It is in fact some kind of dative argument, like the Spanish dative constructions as in *me gusta Juan* ‘I like John’ (lit. ‘John pleases me’), where *me* ‘I’ is not the subject.

**The Perfect** is classified by Dahl 1985 as a kind of grammatical category that needs an imprecise definition, as some point in between aspect and tense. In general, the Perfect is characterized as describing situations that occurred prior to the reference time. Comrie (1976) defines the perfect as a kind of aspect that presents ‘some past situation with present relevance’, the latter being vaguely defined. This is related to notions that usually involve the Perfect, as **resultative**, **subject experiencer**, etc. Moreover, Smith (1997:108) defines situations marked by the Perfect as denoting a **resultant state**, although the aspect is perfective. For her analysis, the Perfect would be similar to habituals marked by perfective aspect, i.e. a *derived state*.

Dahl (1985:139) states that the perfect is usually marked by syntactic morphemes, usually some type of copula or ‘have’ auxiliary in present tense plus a participle verbal form. This composition corresponds to Comrie’s notion of ‘past situation’ (coded by the past participle) with ‘present relevance’ (coded by the tense in the auxiliary form).

Kubeo has some forms that may resemble the Perfect category cross-linguistically, both in form and meaning (cf. section 4.1)

**Imperfective** and its correlates code predicates with no delimited temporal boundary, thus the information they code is open for interpretation with respect to both or either of its terminal and starting points (cf. Smith 1997:73).

The most common types of imperfective aspects are the progressive and the imperfective proper. Sentences in the non-progressive present tense are usually analyzed as imperfective. In Russian, the imperfective aspect is the only one available for the description of present situations (cf. Comrie 1976; Smith 1997). Contrasts of imperfective and perfective aspects mostly occur in past tense (what could be due to the pragmatic constraint in relation to the use of perfective aspect in present time reference). Smith (1997:74) states that progressives have “meanings that do not arise for other types of imperfective. Nuances of activity, dynamism [...] are often associated with the [progressive]”. This could be the reason why progressives and states are usually in conflict (though Mufwene 1984 has a different opinion).

Comrie (1976:26) supports his analysis of *habitual* as a subcategory of imperfectivity from evidence in several languages that have a single imperfective marker to code both continuous and habitual events. Smith (1997:50-51) argues that habituals are derived states. They have semantic properties of states, but sometimes can have in addition syntactic properties of events, for instance *Susan rode her bike during the whole summer*, where perfective aspect is used to describe a habitual sentence. Comrie 1976 also gives similar examples. However, this would argue against the analysis of habituals as a subcategory of imperfective.

There is evidence that habitual might not be an aspectual category at all (cf. Flip & Carlson 1997). Comrie (1985:51) reports that in Burmese and Dyirbal, both tenseless languages, habituals are distinctly coded by realis and irrealis mood, respectively. The connection between irrealis modality and imperfective categories is well discussed in the literature (cf. Comrie 1985; Fleischman 1995; Smith 1997). Kubeo seems to support this too (cf. section 4.1).

From several languages, there is evidence that habituals, generic and imperfective belong to the same category. Filip & Carlson (1997:17) states that ‘generics are aspectually stative [...] and the aspectual character of imperfectives seems to be more semantically compatible with stativity than that of perfectives’. They also claim that generics are a category of its own (1997:1). Accordingly, Smith (1997:33) analyzes generic predicates as one kind of *derived states*.

From the Kubeo perspective, habituals and generics are different grammatically and semantically. The latter is a kind of stative predicate, while the former is grammatically perfective (cf. section 4).

### 2.3 Lexical Aspect

Early insights of lexical aspect can be traced back to the Aristotelian classification of situations (Binnick 1991:170). Binnick (1991, chapter 6) shows that lexical aspect belongs to a totally different tradition of studies from Aktionsarten, and both are also conceptually different, despite the fact that some scholars use the terms as synonyms.

Lexical aspect, on the other hand, relates to the much-debated classification of eventualities, such as in Vendler’s (1957) seminal classification of situations in **states**, **achievements**, **accomplishments** and **activities**. Vendler’s (1957) basic idea is that ‘the fact that verbs have tenses indicates that considerations involving the concept of time are relevant to their use. [...] [T]here is another, a more subtle dependence on that concept: the use of verb may also suggest the particular way in which that verb presupposes and involves the notion of time’ (Vendler, 1957:143). By what he calls *verb schemata*, verbs can be defined in 4 classes depending on how the concept of time is relevant to particular verbs, as he states:

Table 2: Vendlerian classification of lexical aspect

Lexical Aspect	Time Definition	Examples
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STATES	nonunique <b>and</b> indefinite time <b>instants</b>	Peter <b>loves</b> Mary. She <b>is sick</b> .
ACTIVITIES	<b>not</b> unique <b>or</b> definite time <b>periods</b>	I <b>pushed the cart</b> for two hours. He <b>ran</b> in the park.
ACHIVEMENTES	unique <b>and</b> definite time <b>instants</b>	John <b>reached</b> the top of the hill. He <b>arrived</b> late.
ACCOMPLISHMENTS	unique <b>and</b> definite time <b>periods</b>	The kid ate a sandwich.

Kubeo seems to give grammatical relevance to two types of situations: state and events. Events are a superordinate class that covers all non-stative situations: activities, accomplishments and achievements. Sometimes the class of events goes with another name, such as Mourelatos' (1978) *occurrences*; *dynamic* as in Comrie (1976); or more commonly and inexactly as *activity*. However, usually event is used as a 'negative category' - that of **non-states**.

On the other hand, it seems that every language has stative and non-stative as the most important lexical aspectual classes in its grammar. For instance, Western European languages also tend to oppose states and non-states, such as the contrast in the interpretation of the sentences below with present tense:

- |      |    |                       |                |                                      |
|------|----|-----------------------|----------------|--------------------------------------|
| (11) | a. | Susan owns a farm.    | STATE          | <i>PRESENT AND ONGOING SITUATION</i> |
|      | b. | Peter rides horses.   | ACTIVITY       | <i>HABITUAL</i>                      |
|      | c. | My wife arrives late. | ACHIEVEMENT    | <i>HABITUAL</i>                      |
|      | d. | I build houses.       | ACCOMPLISHMENT | <i>HABITUAL</i>                      |

The data shows that all classes of non-states behave similarly with respect to the predicate interpretation, as opposed to the stative predicate. This also seems to be the case for many other languages. For instance, Cuzco Quechua (personal data) also distinguishes states from non-states, but in a slightly different manner: in non-past tense, non-stative predicates unmarked for aspect can present either a habitual interpretation, past or future time reference. Welmers (1973:346) gives evidence that most Niger-Congo languages distinguish two types of verbs, states and events, where eventive predicates in non-past tense have usually a Perfect interpretation, with the past time reference. This also seems to be the case with a number of Creole languages (cf. Mufwene 1984).

Smith (1997) and Binnick (1991) state that the key feature that distinguishes states from events is that the latter have intrinsic temporal boundaries. Even activities or other durative events have temporal boundaries, as Smith (1997:35) states "the initial endpoint is a change from a state of rest; the final endpoint is change into a state of rest, even if the event is telic or atelic".

The property of temporal boundaries is also the key factor that can apply to what Smith calls *derived states*, such as progressive, habituais, and others. Crucially, the progressive is understood as a derived state, though it has a dynamic meaning, hence its notion as one type of derived state (or "grammatical stativity" as Mufwene 1984 calls it) is mostly due to the fact that the progressive does not give explicit information about its onset or terminus.

#### 2.4 The correlation of lexical and viewpoint aspect

Mourelatos 1978 states that traditional studies of lexical aspect "had [not] realized that the distinctions they sought to articulate had long been studied by linguists under the heading of 'verb aspect'" (Mourelatos 1978:418).

He emphasizes that lexical aspectual distinctions in terms of the Vendlerian classification "will be misdescribed if it is thought that they arise mainly from the semantics of individual

<sup>9</sup> Where Mourelato's term 'verb aspect' corresponds to grammatical or viewpoint aspect.



verbs, when in fact they involve fundamental linguistic categories reflected *partly at the lexical level and partly* [...] at the morphological and syntactic level” (1978:419) (my emphasis). He mentions Vendlerian stative verbs such as *know* (1978:419) and *see* (1978:422), which seem to act strangely in their aspectual behavior in past tense. Compare the stative use in the sentence *I know him* and its achievement use in *Suddenly, I knew the answer*. What Mourelatos suggests is that there is no change in the verb itself, but a change in the tense and aspect from one sentence to the other (from imperfective to perfective), which is responsible for the ‘change’ in the lexical aspectual category of the verb.

Mourelatos (1978:429) argues for an interesting correlation of perfective aspect with eventive predication and count nouns, and imperfective aspect with stative predication and mass nouns.

Disregarding the generalization over the noun domain, the correlation between stative/eventive predication and imperfective/perfective aspect seem to be very suitable for the analysis of Kubeo (cf. section 1.1). Interestingly, the pair of examples (2b) and (4) is analogous to the *know/knew* distinction drawn by Mourelatos. This is mostly because some stative verbs in perfective aspect can code inchoative predicates (cf. Smith 1997:69).

In section 2.2 and 2.3 I showed cases in the literature that point to a correlation of *stativity* with imperfective, progressive, habitual and generic predicates (also called by Smith 1997 as *derived states*).

All of these considerations seem to show that the parallelism between lexical and grammatical aspect in Kubeo is well founded in typological and theoretical literature. The explanation for these facts can be stated semantically as:

- (12) a. **Events are definite and discrete situations. Perfective aspect describes situations with definite and discrete temporal boundary in the discourse timeline.**
- b. **States are indefinite and non-discrete situations. Imperfective aspect describes situations with indefinite and non-discrete temporal boundaries in the discourse timeline.**

While this is both a theoretical generalization and an analysis proposed for Kubeo, this interpretation can also be supported from facts in unrelated languages, such as the languages mentioned in previous sections and also in Igbo. Emananjo (1991) states that in Igbo there is a past vs. non-past tense distinction, and in verbs with non-past and “neutral aspect” the perfect is the default interpretation for non-stative verbs, while stative verbs have a timeless interpretation (1991:135). Stative verbs, such as ‘to be big’, ‘to be beautiful’, when combined with completive (perfective) suffix, describe a change of state or inchoative situation. In sum, the lexical aspect of the head of the predicate, whether a stative or eventive verb, implies the grammatical aspect, defining it either as imperfective or perfective, respectively. Emananjo’s (1991) analysis of Igbo is very similar to the one proposed for Kubeo, and neatly matches the generalizations in (12).

#### 2.4.1 Tense and correlation of lexical and grammatical aspects

Tense alone cannot be understood to be a factor for giving a definite time schema for an eventuality. For instance, Hataf 1989 says that stative verbs may or may not be part of a narrative sequence, depending on how the temporal limit of the situation is coded. She argues that in order for a state to be part of a narrative sequence, the stative verb must be delimited either by perfective aspect or some time adverbial, such as *for X hours* (Hataf 1989:497-8).

Consider the contrasting sentences below:

- (13) a. He lived in China for ten years and moved to Japan  
 b. #He lived in China for ten years when I met him  
 c. He was living in China when I met him.

All of the sentences above are in the past tense. Sentence (13a) has both clauses in the perfective aspect, and hence both are understood as a sequence of events. Sentence (13b) is not accepted when the main clause cannot code a time interval, at which a second event took place. If the conjunction were *before* or *after* and did not allow overlapping, the sentence would be felicitous. On the other hand, (13c) has the main clause in the progressive aspect, with indefinite temporal boundaries, which allows for a second event to take place within its (loose) time interval.

This shows that tense alone is not crucial to make eventualities more or less definite and discrete. This is related to the ontological properties of tense, more crucially to the fact that “tense describes the situation time from an external point of view” (Comrie, 1976), i.e. by always describing situations in respect to a deictic center that is external to the situation itself, tense does not contribute to the notion of definiteness.

This is another argument for not ascribing the Kubeo facts described in 1.1 to a split tense system, as it was mistakenly argued for by Morse & Maxwell (1999) and Hollinger et al. (2000). In fact the Kubeo tense is very simple and similar to the majority of languages with a past/non-past distinction once one realizes that the most important elements in this system are not related to tense, but to aspectual relations and time reference constraints. One difference between Kubeo non-past tense and Western European languages non-past tense category is that in Kubeo this tense can have past time reference, as explained in 1.1. There are additional idiosyncrasies in Kubeo past tense that can contribute to a general theory of tense systems, though – of course – they are not mysterious in any ways.

### 3. Lexical Aspect and Grammatical Facts in Kubeo

In this section, I discuss in 3.1 how a three level distinction in Kubeo grammar can be motivated based on the semantic and grammatical facts of stative and eventive situations: the lexical, the grammatical and the predicate levels.

#### 3.1 Morphological selection

Stative and eventive verbs in Kubeo fall into semantic and grammatical classes that encompass all verbs in the language. A basic grammatical distinction between stative and eventive verbs is seen in their behavior with respect to nominalizations, which in Kubeo involves three types of time reference in general: *anteriority*, *simultaneity* and *posteriority*. (consider Table 3 below)<sup>10</sup>.

The distribution of each set of forms and verb roots is asymmetrical. For instance, stative verbs do not get combined with nominalizers of *simultaneity*. To refer to a present state of a referent, stative verbs must get combined with *anteriority* nominalizers (14), while eventive verbs take the *simultaneity* set (15). For the *posteriority* set there is no restriction on verb root class.

Table 3 Nominalizers based on temporal reference, verb root class and gender categories

TEMPORAL REFERENCE	ANTERIORITY		SIMULTANEITY	POSTERIORITY
	STATIVE	EVENTIVE	EVENTIVE ( <i>only</i> )	BOTH
MASCULINE	-kɨ	-kɨ	-yɨ	-kɨyɨ
FEMININE	-ko	-ko	-yo	-koyo
ANIMATE PLURAL	-riwɨ	-rã	-iwɨ	-rãhiwɨ
INANIMATE COUNT	-rõ		-ino	-kino

<sup>10</sup> Kubeo has a very complex set of deverbalizers that also have homophonous forms in noun and adjective inflectional paradigms. The particular nominalizers in Table 3 are the ones used as complements of copulas in the language.

INANIMATE MASS	-e	-re	-iye	-kiye
INAN. + CLASSIFIER	-ri-cl.		-i-cl.	-ki-cl.

So, a stative verb takes a nominalizer of *anteriority* to refer to a present state of its referent (14), while an eventive verb takes a nominalizer of *simultaneity* (15):

- (14) a.    mea-ko=be                            nomi-o  
           good-ANT.FEM=3.AN.SG.COP woman-FEM  
           ‘the woman is beautiful’
- b.    bia=ka                            hime-ni=ka  
           chili-cl.SM.RND green-IN.NMZ=CL.SM.RND  
           ‘a green chili’
- (15) a.    ð            kore-yo=be  
           she        wait-SIM.FEM=3.AN.SG.COP  
           ‘she is waiting/taking care of’ or ‘she is the one who waits/take care of’
- b.    wĩ-i=kũ  
           fly-ST=CL.BIG.HOLLOW  
           ‘an ariplane’

One can see that the forms of simultaneity in Table 3 are marked by *-i* ‘stative’, except for the masculine and feminine singular forms, where *-i* ‘stative’ has grammaticalized, fused as a glide with the gender forms. The fact that *-i* ‘stative’ is pervasive in the simultaneous nominalizer forms and the fact that only eventive verbs get combined with this set of nominalizers are intrinsically related to lexical aspect and time reference, i.e: **eventive verbs need to get combined with some stative element in order to refer to present, ongoing situations**<sup>11</sup>.

A second factor from morphological selection that corroborate the grammatical distinction of states vs. events is the fact that the morpheme *-te* ‘dynamic’ can only get combined with a stative root, stative stem or a noun, but not with an eventive root or eventive stem. This a diagnostic implicit in the analysis in section 4, when I will refer to stative or eventive stems based in this criteria and others presented in section 3.1, 3.2 and 3.3.

### 3.2 A three level distinction: root, stem and predicate

In Eastern Tukanoan languages, bare verb roots and stems may coincide in their form. While Kubeo verb roots are monomorphemic, verb stems can be monomorphemic or plurimorphemic, depending whether there is or not a derivational morpheme (not a nominalizer) before inflectional TEMP morphology. The morphological template of Kubeo verb is given in (16):

- (16) [INCORPORATED NOUN[[[**ROOT**STEM]]INFLECTIONAL MORPHEMES]=CLITICS
- 

The derivation morphemes adjacent to the root may alter its semantics, valency, modality, etc., but not its grammatical category as verbs. Since they only derive verbs from other verbs, they are a type of non-category changing derivational process. On the other hand, they can make a stative stem from an eventive root, as well as an eventive stem from a stative root. This is

<sup>11</sup> If negation, another stativizer morpheme, follows an eventive the stativer anteriority set of nominalizers is used.

illustrated in examples from (2) to (5) above for the function of *-te* ‘dynamic’ and *-i* ‘stative’.  
Other verb class changing morphemes are given in the Table below:

Table 4: class changing morphemes

Grammatical Function	Derive eventive stems	Derive stative stems
Causative	X	
Authoritative	X	
Benefactive	X	
Habituals	X	
Irrealis		X
Negation		X

A **negative** suffix that gets combined with a **stative** root does not change its verb class, neither does the **causative** change the verb class of an **eventive** root. In the absence of the morphemes in Table 4, or *-i* ‘stative’ and *-te* ‘dynamic’, the lexical aspect of the stem is the same as the lexical aspect of the root, as it was illustrated in section 1.1.

In this regard, one must distinguish two levels of semantic and grammatical classes of verbs in Kubeo: one is the **root level**, where roots are divided into two **lexical classes**, stative and eventive roots. The other is the **stem level**, where stems are divided into two **grammatical classes**, stative and eventive stems.

The reason for calling the root level distinction **lexical class** is because this division is ultimately important to the type of morphology that depends on lexical selection, such as nominalization, word formation, etc. On the other hand, **grammatical class** is the distinction on the stem level because it has implication into deeper grammatical levels, such as grammatical aspect, valency, phrase heads, syntax, etc.<sup>12</sup>

A third level is the **predicate level**, which is ultimately semantic, since this is the propositional level, but it relies on the grammatical facts from the stem plus TEMP morphemes. It is at the predicate level that one can refer to imperfective and perfective aspect.

### 3.3 Some on the syntax of stative and eventive verbs

A **stative** verb functioning as an **auxiliary** verb requires the main verb to be marked by *-i* ‘stative’. An **eventive** verb functioning as an **auxiliary** verb requires the main verb to be marked by the **converb suffix** *-rĩ*.

For instance, the ‘frustrative’ construction is formed by the auxiliary eventive verb *dú* (which when occurring independently has the meaning of ‘to release’, ‘to escape’), while the main verb is formed by the verb root plus a converb suffix, as in (17):

- (17) kũ-rĩ      dú-ame                      yĩ-re  
 bite-CONV FRUST-PST.3.MSC I-OBL  
 ‘he tried to bite me (but he did not)’

On the other hand, the ‘desiderative’ construction is formed by the stative verb *ĩ* ‘to want’, functioning as an auxiliary, while the main verb is followed by *-i* ‘stative’:

- (18) karĩ-de      hãrãwĩ      hoa-rõ      ỹyei      ã-i      ỹ-te-wĩ  
 current.time-OBL day                      long-IN.C grape eat-ST want-dyn-N.PST.3.AN  
 ‘I wanted to eat grape for the whole day’

<sup>12</sup> I use the term ‘grammatical’ closer to the classical use of this term.

We thus have evidence that the stative vs. eventive distinction is pervasive in Kubeo grammar, from the semantics of verb roots, to the morphology, syntax and the meaning of predicates.<sup>13</sup>

#### 4. Kubeo tense and aspect system: a deeper look

In this section I focus on Kubeo predicates. The discussion will be based in the following topics: in 4.1 I discuss the contrast of states, generic sentences and habitual predicates; in 4.2 I show how the progressive contrasts with states of ongoing events marked by *-i* ‘stative’; in 4.3 resultatives (constructions that resemble the Perfect cross-linguistically) are discussed in contrast to perfective events; in 4.4 I give a more detailed account of the morpheme *-te* ‘dynamic’; section 4.5 discuss the connection of negation, states and inchoative predicates; section 4.6 describe issues related to temporal reference, aspect and tense<sup>14</sup>.

##### 4.1 States, Generic and Habitual

Kubeo grammar has distinct constructions for stative, generic and habitual predicates. A basic distinction between stative and generic predicates is that the former is marked by non-past TEMP morphemes, while the latter is marked by past TEMP.

A stative stem using non-past TEMP can code three types of states: **stable states**, **transitory states** and **states of ongoing events** (the former will be discussed in section 4.2). Situations that code **transitory states** have a stative root as the head of a stative stem. Consider the examples below:

- (19) a. **ih**i-Ø-**d**i            kari-de            **ih**i-**w**i  
 pain-N.PST-Q    curr.time-OBL    pain-N.PST-N.PST.3.IN  
 ‘does it hurts? Now it hurts’
- b.    ape-no    ð-kí-rĩ bí            **mea-wĩ**            çia!  
 other-IN.C    want-ANT.MSC    good-N.PST.1SG    msc.vocative  
 ‘do you want some more (another one)? No I am fine, man’

The set of forms of the non-past tense above requires witnessed or sensorial experience of the speaker; therefore, it is suitable for the description of present, momentaneous situation. This interacts with the semantics of stative roots, reducing their lexical time to hold transitorily or momentaneously.

Stems headed by a stative root can also appear in predicates of more **stable states**. This is a **shift** in the more common interpretation. The sentences in (20) below present the verb *ih* ‘to be in pain’ with non-transitory, stable state meanings. They contrast with the transitory meaning in (19a). In (20a) the stem is headed by a stative root; in (20b), the stem is headed by *-i* ‘stative’ which follows **the present habitual suffix**:

- (20) a.    ð    ã-yo-re            kai=nimí-a    **yapi-bi**            **iji-vi**  
 she eat-SIM.FEM-OBL    every=day-PL    stomach-CL.TUBE    pain-N.PST.3.AN  
 ‘when she eats, her stomach hurts’
- b.    bia    ð-i            ã-ru    ùmedí            **iji-va-i-vi**            ðre  
 spice she-POSS    eat-IF    air-CL.BIG.ROUND    pain-HAB-ST-N.PST.3.AN    she-OBL

<sup>13</sup> Morse & Maxwell (1999) add ‘desiderative’ and ‘frustrative’ as morphemes that derive stative and eventive stems, respectively. I do not include these morphemes in (27) because they are not suffixes, but full verbs, what is clear by their syntactic characteristics.

<sup>14</sup> Unfortunately, due to space limitations I will be unable to show the full set of forms for the TEMP categories.

‘she always has indigestion if she eats chili’  
lit. ‘if eating chili, her heart always hurts to her’

The logical relation between “eating” and “hurting” is the same for both sentences, with and without the habitual. An explanation for this aspectual shift can be related to the fact that the form headed by a stative verb root (20a), that lacks the habitual morpheme, has an adverbial adjunct that causes the semantic shift from the more common interpretation in (19a) to the marked interpretation in (20a).<sup>15</sup>

**Stable states** are more commonly formed by two types of constructions. Below I show examples of the type marked by a copula, where the meaning of the forms corresponds to Portuguese and Spanish use of the copula *ser*<sup>16</sup>.

- (21) a. i-ye      ã-i-ye      heme-bo      hia=bu  
this-IN.MS eat-ST-IN.MS agouti-CL.OVAL flesh=n.3.COP.AN  
‘this food is agouti meat’
- b. i-ko      bikĩ-hĩ-ko      hí-yěkõ=me  
this-FEM old-DIM-FEM MY-grand.mother=3.AN.SG.COP  
‘this little old woman is my grand mother’

The second construction type of stable states is formed by an eventive verb root, *-i* ‘stative’ and non-past TEMP morphemes. This structure is the same used for **states of ongoing events** (cf. section 4.2), although they have clear semantic differences, which justifies a separate treatment of them. The following sentences are stable states:

- (22) a. hí-makĩ      mea-rõ      upa-i-bi  
MY-son      good-IN.C      sing-ST-N.PST.3.MSC  
‘My son sings well’
- b. õ      pami-e      yáwa-i-biko  
she      kubeo-IN.MS      speak-ST-N.PST.3.FEM  
‘She speaks Kubeo’
- c. yãĩ      yawi      hĩóiyē      hebe-i-bi  
this.MSC      jaguar      heal-ST-IN.MS      finnish-ST-N.PST.3.MSC  
‘this shaman masters every healing’

The forms above are generic statements about a particular subject, which do not need to be tied to a specific event, but are seen as a general property of the subject. This is an interesting fact for cross-linguistic comparison, since forms in (22) are usually homophonous with habituals or generic sentences cross-linguistically.

In Kubeo, they are different in form and meaning from **habituals**: semantically, the latter must be based in an observation of constant, routine and regular event. It is a generalization over a set of a customarily repetition of an event. Grammatically, habituals are coded by specific morphemes and are perfective predicates (see examples further below).

Also, forms in (22) are distinct from generic sentences in Kubeo. Semantically, generics have a meaning that implies an universal statement and are not tied to a specific event nor to

<sup>15</sup> Shift of this kind is common with Kubeo aspectual categories. Actually, aspectual semantics is notoriously open to semantic shifts and meaning coercions (cf. Moens & Steedman, 1988).

<sup>16</sup> Which only codes stable states.

specific referents. It is generally used to code information about classes of beings, such as birds, animals, human beings, spirits, etc. Generic sentences are also grammatically distinct from habituals and stable states in Kubeo. They are formed from a stative stem and past tense TEMP suffixes. Consider the examples below:

- (23) a. yawi hau **a-be-ame**  
 jaguar bark do-NEG-PST.3.MSC  
 ‘jaguars do not bark’
- b. ð-i kuã-yo aru ð-i hipo-bĩ-re **hapu-i-ama**  
 she-POSS bone-cl.long and she-POSS head-CL.TUBE-OBL blow-ST-PST.3.PL  
 na bĩkĩ-wa  
 they old-PL  
 ‘our elders/ancestors play songs with her (a deer’s) bones and skull’
- c. kaparo **ã-i-ame** yaimĩ heĩ-ye-de aru yoka-re  
 wooly.monkey eat-ST-PST.3.MSC vine fruit-IN.MS-OBL and leaf-OBL  
**ã-i-yame** ĩ  
 eat-ST-PST.3.MSC he  
 ‘the wooly monkeys eat vine fruits and leaves’

Interestingly, sentences (23b) can have one interpretation that is limited to past time reference, as with the meaning of *bĩkĩwa* referring to ‘ancestors’ instead of elders. If this is so, then either past or present generic sentences have the same structure. This reinforces the claim that the meaning of generic sentences in Kubeo is not limited by specific nominal or temporal referents, but implies a universal statement over classes of beings and things.

Kubeo distinguishes two types of **habituals**. One is concerned with relative present time habitual activities and the other with relative past habits. In fact, the latter can be analyzed simply as a durative morpheme for past situations. Both have different morphological makeup and will be discussed separately.

First, it must be said that habituals in Kubeo are treated as some kind of perfective category, since stems formed by the habitual morphemes present the same aspectual semantics of other eventive stems, as in the English sentence ‘I worked in that factory for twenty years’.

The present habitual is formed by a verb root, the habitual suffix *-wa* and non-past tense suffixes. The habitual morpheme precedes every other verbal suffix, except for the negative suffix. Consider the forms below:

- (24) a. hi-pakĩ kai=nĩmĩ-a moa **boa-wa-i-bi**  
 MY-father every=day-PL fish kill-PSNT.HAB-ST-N.PST.3.MSC  
 ‘My father is always/usually fishing’
- b. ĩhĩ ba-e-de wekĩ-wa hia ĩra-re korika **dá-wa-ma**  
 summer be-MS-OBL tapir-PL river big-OBL middle come-PSNT.HAB-N.PST.3.PL  
 ‘during the summer, the tapirs usually come to the Vaupes river’

There is subtle difference between the habitual activities above: while (24a) has a stative suffix (24b) do not. This seems to be related to a contrast in the **situation type** description, rather than in a different type of habitual activity. For instance, to say that ‘my father fishes every day’ is slightly different from saying ‘my father is out fishing every day’. The sentences below can illustrate this from another perspective:

- (25) a. -ye-de mi-pako **yá-wa-ri** koeda-yo ?  
 what-OBL YOUR-mother do-PSNT.HAB-N.PST.Q awake-SIM.FEM  
 -waru-bo **toahi-yá-wa-biko**  
 fish.soup-CL.WET hot-MAKE-PSNT.HAB-N.PST.3.FEM  
 lit. ‘What does your mother usually do when she is awake? She usually warms up the fish soup’
- b. áipe yá-wak-ĩ -rĩ mĩ koeda-yĩ  
 what do-PSNT.HAB-ANT.MSC-2.Q you awake-SIM.MSC  
 yĩ **kuya-wa-i-wĩ**  
 I bathe-PSNT.HAB-ST-N.PST.N.3.AN  
 ‘I am usually bathing (when I am awake)’

Since both questions do not have the stative suffix they do not frame the answer to be related to a particular kind of habitual activity described as stative, what shows that the use of *-i* ‘stative’ in (25b) describes not a type of habit, but a type of situation.

The fact that the habitual suffix forms an eventive stem is attested by the ungrammaticality of using *-te* ‘dynamic’ after *-wa* ‘habitual’ within the same stem. As it is shown in section 4.4, *-te* ‘dynamic’ can only be combined to stative stems and nouns.

Habitual activities in the **past** are formed by the durative suffix *-reha* and past TEMP suffixes. Consider the forms below:

- (26) a. **beha-reha-ima** pai-wa  
 go.down-PST.HAB-PST.3.PL priest-PL  
 ‘The priests used to go down river (a long time ago)’
- b. hi-pakĩ-re **káte-deha-kakĩ** řre ř-yř-re  
 MY-father-OBL help-PST.HAB-PST.1.SG pupunha get-SIM.MSC-OBL  
 ‘I used to help my father to collect pupunha (fruit sp.)’
- c. yĩhã **nĩ-reha-karã** no bue-kiye hipoka  
 we.EXCL go-PST.HAB-PST.1PST.EXCL there study-POST.IN.MS before  
 ‘We used to go there before classes started’

Despite the fact that all of the sentences above code some kind of habitual activity in the past that are no longer taking place, *-reha* ‘past durative’ not only codes habituality, but also other types of durative predicates. This is desirable since the past TEMP forms do not leave open the possibility for stative stems to code durative situations, since all stative stems with past TEMP suffixes always code generic predicates. The reason why durative situations are perfective and not imperfective in Kubeo is a problem of temporal reference, which is discussed in section 4.6.

#### 4.2 Progressive vs. states of ongoing events

Progressives in Kubeo are formed by an eventive verb with simultaneity nominalizers (cf. section 3) and a copula. States of ongoing events are formed by an eventive verb root plus *-i* ‘stative’ and non-past TEMP morphemes. Consider first the progressive forms in (27):

- (27) a. moá boa-yĩ=be  
 fish kill-SIM.MSC=3.AN.SG.COP  
 ‘he is fishing’



- b. kawa ðm̄-i wi-ȳ-re hã-ȳ=mu  
vulture high-LOC fly-SIM.MSC-OBL see-SIM.MSC-N.3.AN.COP.  
'I am looking at a vulture flying in the sky'
- c. hió eda-yo=bu ðeti-yo  
garden arrive-SIM.FEM=N.3.AN.COP tired-SIM.FEM  
'I am arriving tired from the garden'
- d. hí-pak̄i buçi nu-ȳ=me  
MY-father tobacco suck-SIM.MSC=N.3.AN.SG.COP  
'My father is smoking'

In (27a) and (27d) one finds atelic activity events with incorporated object<sup>17</sup>. In (27b) the English translation captures the semantics of the particular Kubeo verb form, since 'looking at' describes the situation with stages (as Vendler 1957 use the term to defines activities).

(27c) is a very interesting example. The subject is already in the place of his/her arrival, but there is something more in the meaning of 'arriving' than just getting into the designated arrival place. The progressive with the achievement verb *eda* 'to arrive' describes the stages that correspond to the pragmatic intuitive knowledge after 'arriving', such as opening the house's door, leaving yucca in the kitchen, greeting people, putting the shotgun on the wall, etc.

Therefore, in (27c) the Kubeo progressive differs from the common interpretation of progressives and achievements cross-linguistically, which usually imply a **preparatory** stage before the telic point. This is one point where the progressive is different from the forms of **states of ongoing events**, since the latter describes events prior to its telic point (see further below).

**States of ongoing situations** describe particular instants of a situation before its terminus or telic point. There is a difference in meaning depending on whether the verb root is telic (as in (28)) or atelic (as in (29)). Consider the examples below:

- (28) a. ʔ moa boa-i-bi  
she fish kill-ST-N.PST.3.MSC  
'he is about to catch a fish'
- b. kari-de eda-i-biko  
curr.tiem-OBL arrive-ST-N.PST.3.MSC  
'she is about to arrive now'
- c. ʔ nomi ea-i-bi  
he woman find-ST-N.PST.3.msc  
'he is persuading/attracting a woman'
- (29) a. oko koaka-i-w̄i  
water boil-ST-N.PST.N.3.AN  
'the water is almost boiling'
- b. ȳt hã-i-w̄i kawa-re ðm̄-i  
I look-ST-N.PST.N.3.AN vulture-OBL high-LOC  
'I see a hawk in the sky'

<sup>17</sup> In (26a) and (26d) the lack of case marking and a particular pitch contour between the incorporated noun and the verb (the same contour that occurs with compounds) support this analysis.

- c. oko da-i-wɨ  
 water come-ST-N.PST.3.AN  
 ‘rain is coming’

A crucial point about the sentences above is that despite the fact that translations express some kind of progressivity or dynamicity, they are all states. One good reason for making this claim is that progressives can be used as answers to the question ‘what is x doing?’, while states of ongoing events cannot be possible answer to that question, what suggests that progressives are essentially dynamic, while states of ongoing events are essentially stative. Moreover, cross-linguistically imperfective aspect in general can be used as answers to the question of ‘what is X doing?’, such as the imperfective past tense forms in Romance languages. This makes the morpheme *-i* ‘stative’ a particularly interesting case for typological and theoretical studies of aspect.

As states, the sentences above refer to a particular **instant** of the situations being described, as Vendler (1957) uses the term instant to classify states in general. In (28), all situations are described as **imminent**, as a point in the time structure of the verbs **prior to the telic event**, but at some point in the progress of the activity. They are all atelic, and there could be some independent event that could cancel the completion of the situation.

Therefore, (28a) refers to a point in the fishing activity exactly when the fisherman feels the fish in the hook or just before from pulling it from the water<sup>18</sup>. Fishermen usually say *boa-i-wɨ* (kill-ST-N.PST-N.3.AN) ‘I got it’ when a fish pulls the hook (even though the fish is still in the water and had not been “completely caught”). Sentence (28b) refers to a moment where there is visible sight of a person coming to a particular place, though that person has not arrived yet.

Sentence (28c) is particularly interesting: without *-i* ‘stative’ it would mean that the man has already found and persuaded a woman to be his wife, though the particular form above refers to a moment where he is still trying to persuade or attract her.

The situations in (29) are all non-telic and refer to particular moments or a single stage in the activities. Sentence (29a) is interesting in respect to evidentiality: if a person is present in the place where ‘boiling’ is happening, he must use the construction in (28d). However, if the person has moved away from the place where he had observed ‘the water boiling’, than he must use a sentence without *-i* ‘stative’. The verb form in (28b) is usually used when there is a group of people searching for something, and then the first person to catch sight of that thing would say *hã-i-wɨ* ‘I see it’. Therefore, it refers to the very first stage of ‘seeing’ something. (28c) refers to the moment when a person see black clouds in the sky.

It is an interesting fact that Kubeo distinguish true progressives as in (27) from states of ongoing events, as in (28) and (29). This is a remarkable fact for theories of aspect.

### 4.3 Resultatives vs. non-past perfective events

Resultatives in Kubeo are of two types: non-past and past resultative. Non-past resultatives are formed by the an eventive verb and a set of anterior nominalizers (cf. section 3) plus a copula. Past resultative is formed by the finite suffix *-kemawɨ*.

There are two types of **non-past resultative** constructions: the **experience resultative**, which highlights the subject as an experiencer or agent; and the **contingent resultative** that highlights more the resultant state of a prior event, rather than the referent argument as an experience, which has a low or zero agentivity status.

The former only occurs with animate beings and always agrees with the gender and person of the subject. I will first discuss the experience resultative. Consider the examples below:

<sup>18</sup> The particular interpretations of this and other sentences in (48) were extensively discussed with Kubeo consultants during fieldwork.

- (30) a. yawimi aip̄t̄-k̄i            **ea-k̄i=be**                            k̄i rami-i  
 dog    alive-ANT.MSC    get-ANT.MSC=3.AN.SG.COP    house-LOC  
 ‘the dog arrived in the house alive (after being shot)’
- b.    oro **ea-k̄i=bu**  
 gold get-ANT.MSC=N.3.AN.COP  
 ‘he has found gold’
- c.    mahe    yĕkūyo            **yai-k̄i=be**                            enoa-re  
 our.INCL grand.father    die-ANT.MSC=3.AN.SG.COP    yesterday-OBL  
 ‘Our grand father died yesterday’

While (30a) and (30b) have agent subject, (30c) has a patient of a state. Nevertheless the form above highlights it as an experiencer.

Interestingly, the structure of the experiencer resultative is homologous to the Present Perfect forms cross-linguistically, where the main verb is nominalized with a past participle form, and the auxiliary has present or non-past tense.

On the other hand, the contingent resultative **does not necessarily agrees** with the gender and person of the referent argument. It is marked an eventive verb root, followed by oblique case marking (the inanimate marker of the eventive verbs paradigm of anterior nominalizer in section 3.1) and an invariant clitic copula, homophonous with the clitic copula used for non-3<sup>rd</sup> person animate subjects.

This type of resultative is more commonly found with inanimate argument referents. This also corresponds to the fact that inanimates are low-class arguments on the agentivity scale, so there are possibly semantic constraints on using inanimate referents as subjects of the *experiencer resultative*. Consider the sentences below:

- (31) a.    ĩyei **ñemi-ne=bu**  
 grape black-OBL=3.AN.SG.COP  
 ‘the grape has ripened’
- b.    òp̄ò-yĩ    po-be-Ø-wĩ                            **ame-te-de=bu**  
 gun-cl.? explode-neg-N.PST-N.3.AN    bad-DYN-OBL=N.3.AN.COP  
 ‘the gun does not shoot, it has damaged’
- c.    phĩ    wea-re    **ãri-me-te-de=bu**  
 INTRJ corn-OBL think-NEG-DYN-OBL=N.3.AN.COP  
 ‘Oh, I have forgotten the corn!’
- d.    ñĩhã    **kã-rĩ**            **ni-re=bu**                            paĩ-de    hápi-kari  
 we.EXCL sleep-CONV go-OBL= 3.AN.SG.COP    priest-OBL listen-ANT.NMZ  
 ‘we have slept after listening to the priest’

The sentence in (31a) is a pattern used commonly for ripening, blooming and other similar natural phenomena. The sentence in (31c) is interesting for giving descriptions of two types of situations: in the first sentence there is a present momentary statement about a gun, which is followed by conclusive statement about its state. Sentence (31c) and (31d) have **animate first person** referent arguments, though there is no agreement between them and the verbs. In all cases, referent arguments have no control of the events.

The **past resultative** has strong similarities with the contingent non-past resultative. Both have no distinct agreement pattern for animate and inanimate referents.

This is particularly important because Kubeo (and Tukanoan languages generally) have systematic nominative-accusative agreement marking at NP and VP levels.

Consider the following past resultative sentences below:

- (32) a.    yu-i       kĩ-há-kĩ       aru-ta       ñ̃ha       **kĩ-te-kémawĩ**  
           here-LOC exist-IMPR-MSC and-FOC   we.EXCL exist-DYN-PST.RSLT  
           ‘stay here!’ he said, so we stayed’
- b.    na   **da-kemawĩ**   moã-wĩ  
           they come-PST.RSLT fish-an.pl  
           ‘they came as fish’

Comrie (1976:20) mentions that while a resultative interpretation can be inferred from the perfective aspect, this is not required to occur. In Kubeo, this also true, but the resultative constructions contrast semantically with perfective forms with non-past tense forms. This contrast can be illustrated by the following sentences:

- (31) a.       eda-rã-ma  
           arrive-ANT.PL.AN-3.PL.COP  
           ‘they have arrived’
- b.       eda-ma  
           arrive-N.PST.3.PL.AN  
           ‘they have arrived’

Although both are near synonyms, Kubeo speakers assert they are different. The way native speakers express the contrast is the following: (31b) can be uttered when one sees the arriving people in the river port, while (31a) is uttered when some one sees the people that he/she was expecting to arrive in a house, in the village center, or in some place and time not immediate to where and when the arrival took place. This sense of non-immediate experience is because the resultative forms refer to the resultant state after the situation took place and not necessarily with the situation itself.<sup>19</sup>

#### 4.4 The morpheme *-te* ‘dynamic’

It could be wrongly supposed that the morpheme *-te* ‘dynamic’ is a marker of perfective aspect<sup>20</sup>. This ‘suffix’ actually functions as an independent verb too, with roughly the same meaning as the English verb ‘to do’ with a weak transitive meaning, such as in the sentence “I am going to **do** the roller-coasters and you are going to **do** shopping”. In Kubeo, there is a similar use of **te** as an independent verb, illustrated in (32):

- (32) a.       hio-i                   te-wĩ

<sup>19</sup> Morse & Maxwell (1999) have analyzed resultatives as *Assumed Evidential*. This is because in resultatives there is a sense of temporal and spatial distance between the situation and its resultant state. However, they are by no means an evidential category. There are two main reasons against an evidential analysis: there resultatives about the speaker, who has both uttered and experienced the situation. Also both resultatives and non-past perfective forms are statement based on first hand experience of the speaker; they just describe the situations in two different ways.

<sup>20</sup> Likewise, it wrongly be thought that *-i* ‘stative’ is a marker of imperfective aspect. However, we have already seen that *-i* ‘stative’ function in other domains of Kubeo grammar, and not exclusively on aspect, such as in syntax and nominalizations.

garden-LOC                      do-N.PST.N.3.AN  
 ‘I have worked in the garden’

The fact that *te* ‘do’ can function independently and also as a bound morpheme is a peculiarity of Kubeo agglutinating grammar and diachronic processes. Morphophonologically the two functions are distinct: *te* as a verb is stressless, while *-te* as suffix can be stressed depending on the metrical structure of the word it belongs to.

As a suffix, *-te* ‘dynamic’ can only get combined with stative verb roots, stative stems and nouns. The following examples illustrates this latter use:

- (33) a.      pika-rã              pōé-te-ma  
             two-AN.PL          person-DYN-N.PST.3.PL  
             ‘two babies have been born’
- b.      biki-kĩ              wei-te-bi  
             old-ANT.MSC      black.paint-DYN-N.PST.3.MSC  
             ‘the old man has gotten painted black’

The dynamic suffix interacts with the meaning of the noun root in creating an inchoative predicate. In contrast, in the causative predicate below, what was once the subject of the inchoative sentence in (33a), becomes the object:

- (34) a.      pika-rã-re              pōé-te-wa-biko  
             two-PL-OBL          person-DYN-CAUS-N.PST.3.FEM  
             ‘she gave birth to two babies’

Therefore, while the semantics of *-te* indicates dynamism, it does not indicate anything related to agentivity. From examples (34) it is also excluded the possibility of analyzing *-te* ‘dynamic’ as an exclusive perfective marker.

#### 4.5 Stative stems, negation and inchoative predicates

A stem that is headed by the negative suffix *-be* has the same semantic and grammatical pattern of other stative stems. For instance, an eventive verb that normally yields a perfective interpretation, as in (35a), with negation it yields an imperfective interpretation, as in (35b). Also, in (35c) one finds a negated predicate with a stable state meaning. In (36) negation is the head of a stem in a predicate with generic meaning:

- (35) a.      kari      hawe-hi-na-re      oka-wĩ  
             curr.time already-DIM-?-OBL rain-N.PST.N.3.AN  
             ‘it has rained this morning’
- b.      kari-de              oka-be-wĩ  
             curr.time-ACC      rain-NEG-N.PST.N.3.AN  
             ‘it is not raining now’
- c.      koki-be-wĩ              di-ye-de  
             like-NEG-N.PST.N.3.AN ANPH-IN.MS-OBL  
             ‘I don’t like that’
- (36) i-be-ni              ki-ri      hãrãwi-re      yãwa-be-ame              pamu-rĩ

want-NEG-CONV exist-NMZ day-OBL speak-NEG-PST.3.MSC armadillo-CL.ROUND  
 mīa-i-ta yáwa-i-yame  
 spring-LOC-FOC speak-ST-PST.3.MSC  
 ‘although he does not sing every time of the year, he sings during the armadillo’s spring season’

It is possible to make eventive stems after a negation suffix. We can compare (37) below, marked by negation followed by *-te* ‘dynamic’, with sentence (35b) above:

(37) kari hawe-hi-na-re oka-be-te-wi  
 current.time already-DIM-?-OBL rain-NEG-DYN-N.PST.N.3.AN  
 ‘it has not rained this morning’

It is also possible to add *-i* ‘stative’ and then the predicate would be imperfective:

(38) da-be-te-i-ma  
 come-NEG-DYN-ST-N.PST.3.pl  
 ‘they have not been coming’

As one can see, the predicate aspect is compositional: *-te* ‘dynamic’ indicates a relevant left boundary of the event in the past, while *-i* ‘stative’ codes durativity. This type of compositional meaning support Smith 1997 approach, and suggest that while the right most head of a stem has wider scope over the preceding head, it does not cancel the aspectual properties of the previous head, but the predicate shows a composition of aspectual meaning from the two heads. This can be better illustrated with the inchoative predicates below:

(39) a. kari-de toahi-te-i-wi  
 curr.time-OBL hot-DYN-ST-N.PST.N.3.AN  
 ‘it is getting hot’  
 b. ihi-mi má-ki mahi-ye mea-te-i-wi yi  
 pain-PASS.MSC be-ant.msc little-in.MS good-dyn-st-N.PST.N.3.AN I  
 ‘I was sick, but I am getting a little better’

Without the stative suffix, the sentences above would imply a perfective meaning, such as ‘now it got hot’, or ‘I got healed’, respectively. However, with the stative suffix the predicates show a composition of INCHOATIVE + IMPERFECTIVE, i.e not a full culmination of the inchoative predicate, but its starting point and progress towards the culmination point.

Inchoatives always occur in the composition of stative root or noun and *-te* ‘dynamic’. However, it is possible to have also a closed state interpretation as illustrated in (10) above. Below, I give three examples with the same verb form that code a Perfect predicate (40a), a closed state (40b) and an inchoative predicate (40c).

(40) a. yi ihi-ye-te-wi yóbekiri hārāwi-wa aru ihi-Ø-wi  
 I pain-IN.MS-DYN-N.PST.N.3.AN three day-PL and pain-N.PST-N.3.AN  
 yi-re kari-de  
 I-OBL current.time-OBL  
 ‘I have been sick for three days and I am (still) sick’  
 b. yóbekirā hārāwi-wa ihi-ye-te-wi enoamare-de  
 three day-PL pain-IN.MS-DYN-N.PST.N.3.AN yesterday-OBL

hĩo-Ø-wĩ  
 heal-N.PST-N.3.AN  
 ‘I was sick for three days. Yesterday I got better’

- c. **ihĩ-ye-te-Ø-wĩ** enoamare-de oko ihĩya-ke-de ũkũ-yĩ  
 pain-IN.MS-DYN-N.PST-N.3.AN yesterday-OBL water Vaupes-ORG.MS-OBL drink-SIM.MSC  
 ‘I got sick yesterday drinking water from the Vaupes river’

#### 4.6 Temporal reference

There are no clear temporal boundaries between past and non-past TEMP morphemes when the situation time is in the **recent past time reference**. The following sentences have the same temporal reference, nevertheless they have different TEMP forms:

- (41) a. ð-i nĩ-ki hipoka moa hĩyĩ-wa-rĩ te-wĩ  
 she-POSS go-POST before fish smoked-CAUS-CONV do-N.PST.N.3.AN  
 ‘before she went, I smoked fish (for her travel)’
- b. ð-i nĩ-ki hipoka ĩra-rõ yĩ-re hĩtĩra karo-rĩ hĩ-ako  
 she-POSS go-POST before big-IN.C I-OBL flour toast-CONV give-PST.3.FEM  
 ‘before she went, she gave me a lot of toasted flour’

It is hard for now to give a precise definition of temporal reference between the two TEMP categories. It could be that in non-past TEMP there is a feeling of present relevance, while there is not for the past TEMP. In narratives of historical or mythological times, it is more common to find past TEMP markers instead of non-past suffixes. Also, in generic sentences, the past TEMP forms can also appear in atemporal predicates.

Moreover, non-past TEMP forms have a vague temporal reference definition, and depending on the context they can appear in present, past or future time reference. Consider the sentence below, where an eventive stem marked by non-past tense may have an interpretation similar to a present Perfect meaning<sup>21</sup>:

- (42) hĩ-makĩ ĩre moa boa-bi  
 MY-son very fish kill-N.PST.3.MSC  
 ‘my son has caught a lot of fish’

An eventive verb root with past TEMP forms always code a situation in the past. However, with non-past TEMP forms it can also code situations in the future:

- (43) a. hawena ĩ-i kerari nĩ-i-ye-de ũkũ-i-no má-te-wĩ  
 tomorrow he-POSS Querari go-ST-IN.MS-OBL drink-ST-IN.C be-DYN-N.PST.N.3.AN  
 ‘Tomorrow when he goes to Querari there will be a party over there’  
 lit. ‘Tomorrow at his going to Querari there will have been a party (over there)’
- b. hawena yĩhã waru-e-de mia-wã eda-ma  
 tomorrow we-EXCL fish.soup-IN.MS-OBL mosquito-PL arrive-N.PST.3.PL  
 ‘tomorrow during our (morning) fish soup, mosquitos will arrive’

<sup>21</sup> One crucial difference, perhaps, between the Kubeo form above and those reported for Niger-Congo languages is that in Kubeo such a statement implies that the speaker was a witness of the situation. This is due to the implicit evidentiality in non-past forms.

The only time reference constraint of perfective forms is present time, which follows from pragmatic constraints as it was discussed in section 2 above.

Forms with copulas can also have future time reference, as in (44a) and (44b):

- (44) a.    *nĩ-ñĩ=mu*                      *kopai da-be-kĩ=bu*  
           go-SIM.MSC-N.3.COP return come-NEG-ANT.MSC-N.3.AN.COP  
           ‘I am going and I am not coming back’
- b.    *yĩhẽ*      *kã-rĩ*              *koeda-i-ye-de*      *oyo-wa eta-i-na-ma*  
           our.EXCL sleep-CONV wake-ST-IN.MS-OBL bat-PL    leave-ST-ANT.AN.PL-3.PL  
           ‘when we wake up the bats will be leaving’

This shows that these forms resemble imperfectives cross-linguistically in being able to refer to a future situation. The similarity of the resultative form in (44b) with the Perfect is clear where the situation of ‘bats leaving’ will have started before the event of ‘our waking up’, and it will still continue after that.

Imperfective predicates in Kubeo can only have present and future meaning, while perfective predicates can have past, Perfect and future meaning, i.e. anything but not present. It is remarkable that forms in the past must all have a perfective meaning. Durativity in the past TEMP is marked by an eventive stem.

The interaction of the aspect of the stems and the TEMP categories suggest that non-past is a finite set of person, evidentiality and mood categories that has no constraint in time reference. Therefore, time is underspecified, which suggest its negative classification as **non-past TEMP**<sup>22</sup>. Aspect, adverbials and the context are the main factors responsible for time reference in non-past TEMP.

Time seems to be specified for past TEMP, but there some problems. First, stative stems with past TEMP code generic predicates. Second past TEMP seems to code not only temporal distance from the speech time, but also **spatial distance** from the speech place. I have observed the use of past tense forms for situations that are true for the moment of speech, but the person that is being spoken about is far away in another city, village, etc. Consider the sentence below, which was used by a Kubeo speaker to correct a statement that I did using the non-past tense:

- (45) *hĩ-ma-re*                      *pako mika-te-ako*  
       my-children-OBL mother be.pregnant-DYN-PST.3.FEM  
       ‘my wife is pregnant’

Other morphological evidence suggests that the forms that mark past TEMP have close morphological relations to noun and adjective forms<sup>23</sup>. This morphological facts and the correlation of spatial and temporal distance in the meaning of past TEMP forms might explain the fact that generic sentences and past situations are coded by the same TEMP paradigm. More investigation on these issues is extremely necessary.

## 5. Conclusion

In this paper I presented a correlation in Kubeo grammar of the lexical aspect of verb stems and the viewpoint aspect of predicates. It was shown that Kubeo does not have

<sup>22</sup> Future constructions using non-finite forms will not be discussed in this paper.

<sup>23</sup> For instance, the morpheme *-ka* appears in several forms of the past TEMP and also in constructions that express the place of origin of something. Also, person endings in past TEMP are also found in non-finite forms and noun and adjective inflection.



grammaticalized aspect, so notions such as perfective and imperfective are inferred from the meaning of predicates. The sole grammatical fact responsible for aspect in Kubeo is the stem level, which is formed by the composition of the lexical aspectual properties of verb roots and non-category changing derivational morphemes in the stem.

A correlation of stativity with imperfectivity, and eventivity with perfectivity (cf. (12)) was proposed semantically and demonstrated grammatically in Kubeo.

Kubeo predicates have a wide range of aspectual categories and situation descriptions. The correlation of root semantics, morphological heads (*-i* 'stative' and *-te* 'dynamic'), modality, valence and copular constructions in a complex aspectual system is an interesting convergence of grammatical and semantic factors in the study of aspect in general. The grammatical function of *-i* 'stative' (and also *-te* 'dynamic') and the types of predicates it code are unique typologically and relevant for a theory of aspectuality.

Tense is a category in the language that does not seem to be so grammaticalized as lexical aspect, although there is a binary past/non-past tense opposition. The language is an interesting case for the study of the diachronic evolution of tense systems. More broadly, temporal reference is achieved by several grammatical and lexical devices, especially lexical aspect.

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## **6. Final Note**

Center for American Indian Languages  
University of Utah  
255S. Central Campus Dr.  
Linguistics, Rm. 2300  
Salt Lake City, Ut 84112-0492