

## Bare sentences\*

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### 1. The meaning of bare sentences

A bare sentence is a sentence with no overt (morphological) tense, e.g. (1) from Haitian.

- (1) Msye renmen Titid. 'He likes Titid'  
3sg like Titid

A standard assumption in the literature (e.g. Enç 1981: 103f.; Comrie 1985: 50-52; Hornstein 1990: 216, *fn.* 25) is that in the absence of tense morphemes, the temporal reference of a sentence like (1) is determined only by context (e.g. via covert tense operators) or by an overt temporal adverb. This view cannot be maintained, however. In 'tenseless languages' like Fõn-Gbè, Haitian, Igbo and Vãtã, a bare sentence is not temporally ambiguous; instead, its temporal reference is determined by inherent aspectual properties of the predicate, specifically by the eventive/stative distinction.

I adopt the hypothesis that the interpretation of a bare sentence is computed from local syntactic relations: the interaction of inflectional (Infl), verbal (V), and nominal (D/N) projections. A general consequence of this approach is that there is no need to posit tense operators to derive the interpretation of bare sentences.

The rest of section 1 presents a range of data (mostly from Haitian) showing how the eventive/stative distinction affects the interpretation of bare sentences. Section 2 observes that the eventive/stative split is relevant for a number of other syntactic phenomena of Haitian. An account for the source of temporal reference in bare sentences is given in section 3; sections 4 - 5 draw some consequences of the analysis for Haitian intransitive verbs and for the preverbal element *ap*. Section 6 closes with speculations on the Davidsonian event argument, quantificational force and 'present tense'.

#### 1.1 Bare sentences in Haitian

In Haitian bare sentences, Damoiseau 1982 observes a systematic difference between eventive and stative predicates. As illustrated in (2), a bare eventive predicate (e.g. *vann* 'sell') is generic with a bare NP object, and past with a specific NP object. As shown in (3), a bare stative predicate (e.g. *renmen* 'like') is consistently non-past, regardless of the specificity of the object.

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- (2)a. Pyè vann bèf. Pyè sell cattle 'Pyè sells cattle'<sup>1</sup>  
 Pyè sell cattle  
 b. Pyè vann bèf yo. 'Pyè sold the cattle'  
 Pyè sell cattle Det
- (3)a. Sisi renmen chat. 'Sisi likes cats'  
 Sisi like cat  
 b. Sisi renmen chat mwen. 'Sisi likes my cat'  
 Sisi like cat 1sg

In bare sentences, prepositional (4), adjectival (5), and nominal (6) predicates have the same temporal reference as do stative verbs: non-past.<sup>2</sup>

- (4)a. Timoun yo nan lakou a. 'The children are in the yard'  
 child Det Loc yard Det (Damoiseau 1982: 16)  
 b. Vèdye ak Sisi. 'Vèdye is with Sisi'  
 Vèdye with Sisi
- (5)a. Vèdye fò. 'Vèdye is smart'  
 Vèdye smart  
 b. Pyè bouke. 'Pyè is tired'  
 Pyè tired
- (6)a. Pyè doktè. 'Pyè is a doctor'  
 Pyè doctor (Damoiseau 1982: 13)  
 b. Sisi bòs ebenis. 'Sisi is a carpenter'  
 Sisi master carpentry

In the Africanist literature, the sensitivity of temporal interpretation to the eventive/stative distinction has been dubbed the *factative construction*:

The construction rather refers simply to the most natural or obvious *fact* about the particular verb used. (Welmers & Welmers 1968: 76)

The idea behind the term *factative* is that the temporal reference of a bare sentence is determined by lexical properties of the predicate. In some sense, it is a "natural or obvious fact" about events that their temporal reference is past, while it is a "natural or obvious fact" about states that their temporal reference is non-past.

## 1.2 Bare sentences in other languages

The *factative* effect has been reported in other languages, e.g. by Thomas (1869: 54ff.) for "Trinidad French Creole", cf. (7), and by Avolonto (1991) for Fòn-Gbè, cf. (8).

<sup>1</sup>Bernabé cites a Guadeloupéen/Martiniquais example where a bare noun complement of an eventive verb is interpreted existentially and the predicate is interpreted as past:

- (i) Pyè vann bef. 'Pyè sold some cattle'  
 Pyè sell cattle (Bernabé 1987: 191)

<sup>2</sup>(Here I set aside the question of whether Haitian includes the category Adjective.)

Parallel facts are noted by Thomas (1869) for "Trinidad French Creole":

When the subject of a proposition is followed by a simple attributive, by an adverb of place — in short, by any word denoting its *quality, situation, or posture* — no substantive verb is employed... as a connective, if present time is intended. (Thomas 1869: 76)

- (7)a. Moèn manger. 'I ate' OR 'I have eaten'  
1sg eat
- b. Moèn aimer. 'I love'  
1sg love
- (8)a. Sika d̩à wǒ. 'Sika prepared the paste'  
Sika prepare paste (Avolonto 1991, ex. 4)
- b. Lili tùn Kòkú. 'Lili knows Koku'  
Lili know Koku (Avolonto 1991, ex. 9)

The *factative* verbs in (7) - (8) are completely bare.<sup>3</sup> The same effect occurs if tense is deleted for stylistic reasons: in the "Abbreviated English" used in newspaper headlines, Stowell (1991) observes that bare eventive verbs such as *beat* have only a past reading, while bare stative verbs such as *love* are interpreted as non-past:

- (9)a. MAN BEATS DONKEY  
b. MAO SECRETLY LOVES RED GUARD

In other languages, however, the *factative* is morphologically marked. In Igbo, the *factative* verb bears a toneless *-rV* suffix, consisting of [r] plus a copy of the rightmost vowel of the verb stem. An eventive verb plus *-rV* denotes past events (10a); a stative verb plus *-rV* denotes a present state (10b).<sup>4</sup>

- (10)a. Ó rí - rí ñ à. 'S/he ate this food'  
3sg eat-rV food this (Éménanjo 1985: 121; Òwéré dialect)
- b. Ó vù - ru ívù. 'S/he is fat'  
3sg be.fat-rV fatness (Éménanjo 1985: 121; Òwéré dialect)

Similarly in Vātà (Kru), when combined with a morpheme consisting of a low tone [̀], an eventive verb has a past reading (11a), and a stative verb is non-past (11b).

- (11)a. N lí sàkà. 'I ate rice'  
1sg [eat-̀] rice (Koopman 1984: 28)
- b. N gblì nā... 'I know that...'  
1sg [know-̀] Comp (Koopman 1984: 28)

Comparable facts are observed in other Kru languages (Marchese 1979: 132ff.).

<sup>3</sup>Edit Doron (p.c.) points out that nominal sentences in Modern Standard Arabic and Modern Hebrew have no overt marking for tense, and are interpreted as non-past, showing a *factative*-type effect; cf. Fassi-Fehri (1982), Doron (1983), Rapoport (1987).

<sup>4</sup>Some authors (Green & Igwè 1963: 54ff, Winston 1973:143ff, Nwáchukwu 1976) posit two homophonous forms of the *-rV* suffix, respectively [-past] and [+past], in order to account for doubly-suffixed past tense stative verb forms such as that in (i):

- (i) Ó mā - (r)ā - ra yā. 'S/he used to know it'  
3sg know-rV-rV 3sg (Ézikeojlaku 1979: 115)

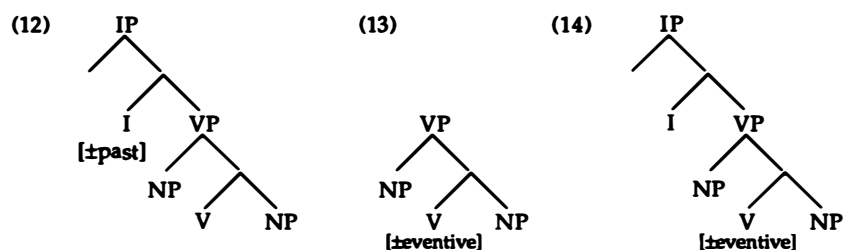
However, if these two *-rV* suffixes were truly independent, one would expect to find eventive verbs bearing the [-past] *-rV*, and that combination is impossible. Moreover, the [+past] *-rV* is never directly affixed to a stative verb, unless that verb is one of the few which fails to take the [-past] *-rV*, e.g. *dí* 'descriptive copula', *jí* 'hold', *nò* 'locative copula', *wù* 'equational copula', cf. Òwálàáká (1988: 52-54).

### 1.3 The Infl of bare sentences

If bare sentences lack tense, at least three possibilities arise regarding the syntactic status of Infl.<sup>5</sup> First, bare sentences might have a covert tense operator with features like [ $\pm$ past], as in (12). But this view cannot account for the sensitivity of bare sentences to the eventive/stative distinction, whereby eventive predicates are associated with [+past], while stative predicates are associated with [-past].

Alternatively, bare sentences might have no Infl projection whatsoever. The representation in (13), which treats bare sentences as matrix small clauses (Rapoport 1987), predicts that temporal reference could be determined by inherent properties of the predicate. However, on the assumption that overt inflectional material is evidence for a functional head, a small clause analysis does not extend to languages such as Igbo and Vāṭā, where the *factative* construction is overtly marked.

A third possibility is that bare sentences have an Infl projection with no inherent features, as in (14). This claims that the eventive/stative distinction is relevant for the interpretation of bare sentences, and that there is a syntactic Infl position which lacks featural content. Evidence for these claims is given in the next two sections.



## 2. The eventive/stative split

In addition to bare sentences, the eventive/stative split shows up in (at least) two other areas of Haitian grammar: in the interpretation of the preverbal particle *ap*, and with transitivity alternations. I consider each of these in turn.

### 2.1 *Ap*: progressive vs. future

With eventive predicates *ap* marks the progressive (15a); with stative predicates it marks the future (16).<sup>6</sup>

<sup>5</sup>Replacing IP with a different functional projection such as T(ense) P(hrase), or eliminating VP-internal subjects, does not alter the range of possibilities in (12) – (14).

<sup>6</sup>Similar facts are reported by Thomas (1869: 54) for Trinidad French Creole, where progressive *ca* combines only with eventive verbs:

- (i) Moèn *ca* manger. 'I am eating'  
1sg Prog eat
- (ii) \*Moèn *ca* aimer.  
1sg Prog love

- (15)a. *Pyè ap vann bèf.* 'Pyè is selling cattle'  
*Pyè Prog sell cattle*  
 b. *Pyè ap vann bèf yo.* 'Pyè is selling the cattle'  
*Pyè Prog sell cattle Det*  
 (16) *Msye ap renmen Titid.* 'He will like Titid'  
*3sg Fut like Titid*

As before, prepositional (17), adjectival (18), and nominal (19) predicates pattern with stative verbs: *ap* marks future.

- (17)a. *Timoun yo ap nan lakou a.* 'The children will be the yard'  
*child Det Fut Loc yard Det*  
 b. *Vèdye ap ak Sisi.* 'Vèdye will be with Sisi'  
*Vèdye Fut with Sisi*  
 (18)a. *Vèdye ap fò (si li vwayaje anpil).* 'Vèdye will be smart (if he travels a lot)'  
*Vèdye Fut smart if he travel much*  
 b. *Sisi ap bouke (si li travay di).* 'Sisi will be tired (if she works hard)'  
*Sisi Fut tired if 3sg work hard*  
 (19)a. *Pyè ap doktè \*(lòt ane).* 'Pyè will be a doctor next year'  
*Pyè Fut doctor next year*  
 b. *Sisi ap bòs ebenis \*(lòt ane).* 'Sisi will be a carpenter next year'<sup>7</sup>  
*Sisi Fut master carpentry next year*

The standard analysis of *ap* posits accidental homophony between *ap*<sub>1</sub> 'progressive' and *ap*<sub>2</sub> 'future' (e.g. Magloire-Holly 1982, Spears 1990). However, homophony fails to explain why 'progressive' *ap* occurs just with eventive verbs, and 'future' *ap* just with stative predicates. Recall that the same problem arises in languages where the *factitive* is morphologically marked, e.g. Igbo and Vata. Alternatively, there is a single *ap* whose interpretation is determined by whether it combines with a state or an event.

## 2.2 Transitivity alternations

The eventive/stative split interacts with transitivity, as in Haitian 'unaccusative shift' or 'middle formation' (cf. Massam 1987). The external argument of a transitive verb can be suppressed, with the internal argument appearing in subject position. Although this alternation is not morphologically marked, it induces a change in temporal reference, as shown in (20) - (21). A transitive verb is interpreted as a past event; its intransitive counterpart is interpreted as a non-past state.

- (20)a. *Ti gason an mare bourik la.* 'The boy tied the mule'  
*dim boy Det tie mule Det* (Damoiseau 1982: 28)  
 b. *Bourik la mare.* 'The mule is tied'  
*mule Det tie*

<sup>7</sup>With nominal predicates such as *bòs ebenis*, *ap* must co-occur with a temporal adverb like *lòt ane* 'other year'. I don't know why this extra requirement holds.

- (21)a. Timoun nan kraze vè a. 'The child broke the glass'  
 child Det break glass Det  
 b. Vè a kraze. 'The glass is broken'  
 glass Det break

Transitivity also interacts with *ap*: with a transitive (eventive) verb *ap* marks progressive, but with the intransitive counterpart *ap* marks future, cf. (22) - (23).

- (22)a. Ti gason an ap mare bourik la. 'The boy is tying the mule'  
 dim boy Det Prog tie mule Det  
 b. Bourik la ap mare. 'The mule will be tied'  
 mule Det Fut tie (Damoiseau 1982: 29)  
 (23)a. Timoun nan ap kraze vè a. 'The child is breaking the glass'  
 child Det Prog break glass Det  
 b. Vè a ap kraze. 'The glass will break'  
 glass Det Fut break

### 3. The source of temporal reference in bare sentences

These Haitian data pose questions as to the source of temporal reference in bare sentences. Why does an eventive verb get a generic reading with a bare noun complement, but a past reading with a specific noun? Why is a stative predicate interpreted as non-past? Why is *ap* progressive with eventive verbs, but future with stative verbs? How do transitivity alternations interact with temporal reference? This section sketches an analysis of the eventive/stative split and its consequences for transitivity. Section 4 proposes an account of *ap*.

#### 3.1 Eventive/stative vs. stage/individual-level

I have described some temporal interpretive contrasts among bare sentences in terms of the distinction between eventive and stative predicates. Another potential source of these contrasts is the distinction between "stage-level" and "individual-level" predicates, which Carlson (1977) shows to be relevant for the interpretation of bare plurals. Loosely, an individual-level predicate corresponds to a permanent property, while a stage-level predicate corresponds to a transitory property:

A stage is conceived of as being, roughly, a spatially and temporally bound manifestation of something. [...] An individual, then, is (at least) that whatever-it-is that ties a series of stages together to make them stages of the same thing.  
 (Carlson 1977: 115)

With an individual-level predicate, bare plural subjects are generically quantified (24a), but with stage-level predicates they are existentially quantified (24b).

- (24)a. Cats like fish.  $\text{Gen}_x$  cat(x) & like-fish(x)  
 Cats are for catching mice.  $\text{Gen}_x$  cat(x) & for-catching-mice(x)  
 Cats are fast.  $\text{Gen}_x$  cat(x) & fast(x)  
 b. Cats tip over the garbage.  $\exists_x$  cat(x) & tip-over-the-garbage(x)  
 Cats are in the yard.  $\exists_x$  cat(x) & in-the-yard(x)  
 Cats are hungry.  $\exists_x$  cat(x) & hungry(x)

A cross-classification of predicates according to the individual/stage-level and eventive/stative split is given in (25). Evidently, the distinction relevant for bare sentences, as well as for *ap*, is the eventive/stative split.

	INDIVIDUAL-LEVEL		STAGE-LEVEL
	know, like have blue eyes for fast, tall	in with	hungry tired tie, cover, hit buy, sell die, fall, run dance, laugh, sing
	STATE		EVENT
bare sentences:	non-past		past/generic
<i>ap</i> :	future		progressive

### 3.2 Deriving the *factative* effect

Davidson (1967) proposes that eventive predicates have an argument which stative predicates lack. The event argument need not be directly represented in syntax, to have syntactic and semantic effects. For example, in Haitian bare sentences, noneventive (i.e. stative) predicates are non-past, while eventive verbs are past with a specific noun and generic with a bare noun. The relevant examples are repeated below:

- (1) Msye renmen Titid. 'He likes Titid'  
3sg like Titid
- (2)a. Pyè vann bèf. 'Pyè sells cattle'  
Pyè sell cattle
- b. Pyè vann bèf yo. 'Pyè sold the cattle'  
Pyè sell cattle Det

I propose that the *factative* effect comes from the interaction of independent properties of the predicate, of Infl, and of the nominal projection. For the predicate, I adopt Verkuyl's (1989) characterization: an event is bounded (i.e. has a beginning, a middle, and an end); a state is unbounded. Schematically, a state corresponds to an unbounded region in time (26a), while an event corresponds to a bounded region (26b).

- (26)a. *state*: .....
- b. *event*: e

Suppose that Infl obeys both syntactic and semantic well-formedness conditions. With respect to syntax, Infl must be lexicalized: in the absence of a Tense morpheme or an Auxiliary, the verb obligatorily raises to Infl (cf. Koopman 1984). Semantically, Infl must be referential or "anchored" relative to some moment: in the absence of a Tense operator, Infl is evaluated relative to the *moment of utterance*,  $t_0$  (cf. Enç 1991). Stative predicates, which are unbounded, are non-past relative to the moment of utterance, cf. (27a). Eventive predicates, being bounded, are generic (roughly, iterative) if non-delimited (27b), and past if delimited (27c).

- (27)
- |                          |                                  |
|--------------------------|----------------------------------|
| a. <i>state:</i>         | ————— t <sub>0</sub> —————       |
| b. <i>generic event:</i> | ...—————...<br>... e e e e e ... |
| c. <i>past event:</i>    | e                                |

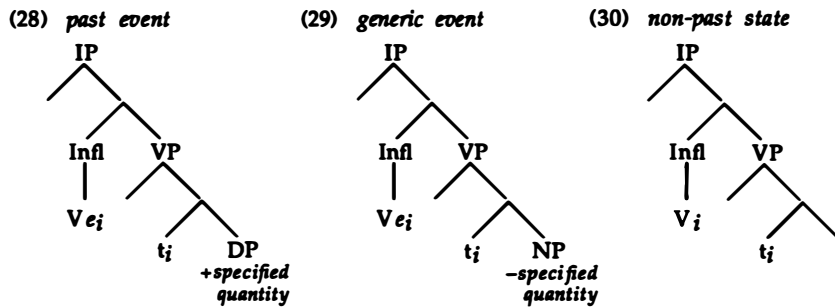
In Haitian, whether an event is delimited depends on the nominal complement: a bare noun projects NP and is [-specified quantity]; a specific noun projects a DP and is [+specified quantity] (cf. Verkuyl 1972). (This effect is absent in languages such as Igbo and Fõn-Gbè, where bare sentences don't get a generic interpretation.) The nominal complement participates in "aspect composition" (Verkuyl 1989): if the complement of an eventive verb is [+specified quantity], then the event is terminative, or "delimited", in Tenney's (1987) terminology. If the complement is [-specified quantity], the event is non-delimited. In bare sentences, non-delimited events are generic. By definition, non-bounded predicates (= states) are not sensitive to [ $\pm$ specified quantity].

**3.3 The event/state split revisited**

With delimited events, the complement of V is [+specified quantity], cf. (28). By the lexicalization requirement, *Ve* raises to Infl and is evaluated relative to the moment of utterance. Relative to the moment of utterance, a delimited event is past: e .

With generic events, the complement of V is [-specified quantity], so the event is non-delimited, cf. (29). *Ve* raises to Infl and is evaluated relative to moment of utterance. A non-delimited event, which is nevertheless bounded (i.e. an interval), is interpreted as an ongoing repetition of events: ... e e e e e ....

A stative predicate is unbounded so not sensitive to [ $\pm$ specified quantity], cf. (30). V raises to Infl; relative to the moment of utterance an unbounded state is non-past.



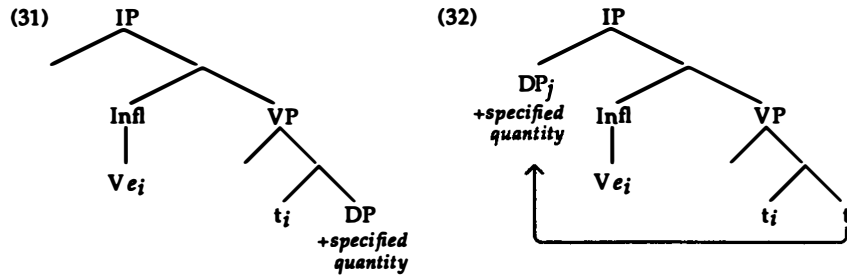
**3.3 Transitivity alternations revisited**

If something along the lines of (28) - (30) is correct, then the temporal shift that correlates with transitivity alternations counts as evidence that the interpretation of bare sentences is read off of S-structure representations. Recall from above that with a transitive eventive verb a bare sentence is interpreted as past (20a), but the intransitive form of the same verb in a bare sentence is non-past (20b).

- (20)a. Ti gason an mare bourik la.  
dim boy Det tie mule Det  
b. Bourik la mare.  
mule Det tie

'The boy tied the mule'  
(Damoiseau 1982: 28)  
'The mule is tied'

As discussed above, if the complement of an eventive verb is [+specified quantity], then the event is delimited, and relative to the moment of utterance, a delimited event is past, cf. (31). With a derived intransitive, the internal argument is in subject position at S-structure, cf. (32). Even with a specific NP, derived intransitives are interpreted as non-past resultant states.



This outcome suggests that the sensitivity to [ $\pm$ specified quantity] is determined by S-structure configuration. If the D-structure configuration were driving the interpretation, then one would expect derived intransitives to pattern exactly like their transitive counterparts. Since they have a specific noun in complement position at D-structure, they should be interpreted as delimited events.

This point still holds even if the transitivity alternations are not derived via syntactic NP-movement, but by a lexical operation on argument structure. It can then be restated as a distinction between the lexicon and the syntax. What is relevant for the interpretation of bare sentences is the syntactic configuration and not just the lexical properties of the predicate.

#### 4. Three classes of intransitive verbs

This analysis of bare sentences gives insight into otherwise puzzling properties of intransitive verbs, and also provides indirect evidence for a syntactic distinction between unaccusative and unergative verbs in Haitian.

In many languages, intransitive verbs split into two classes: unergative verbs like *dance* are analyzed as having a single external argument, while unaccusative verbs like *come* are analyzed as having a single internal argument. It is generally assumed that unaccusative verbs do not assign Case to their complement, which then raises to subject position so as to be Case-marked. In many languages (e.g. French, Italian, Dutch, German) the two verb classes differ according to the auxiliary they appear with: unergative verbs take the 'have' auxiliary (*avoir, avere, hebben, haben*), but unaccusative verbs take the 'be' auxiliary (*être, essere, zijn, sein*). French examples:

- (33)a. Lucie a dansé. 'Lucie has danced'  
 Lucie have.3sg dance.participle  
 b. Lucie est arrivée. 'Lucie has arrived'  
 Lucie be-3sg arrive.participle

Haitian makes no overt morphological distinction between unergative and unaccusative verbs (Filipovich 1987), but there is still a difference in interpretation: in a bare sentence, an unergative verb is generic (34), but an unaccusative verb is past (35).

- (34)a. Sisi danse. 'Sisi dances'  
 Sisi dance  
 b. Sisi chante. 'Sisi sings'  
 Sisi sing  
 c. Sisi ri. 'Sisi laughs'  
 Sisi laugh  
 (35)a. Vizitè yo vini. 'The visitors came'<sup>8</sup>  
 visitor Det come  
 b. Vèdye ale lekòl. 'Vèdye went to school'  
 Vèdye go school

With both unergative and unaccusative verbs, *ap* is progressive:

- (36)a. Sisi ap danse. 'Sisi is dancing'  
 Sisi Prog dance  
 b. Sisi ap chante. 'Sisi is singing'  
 Sisi Prog sing  
 c. Sisi ap ri. 'Sisi is laughing'  
 Sisi Prog laugh  
 (37)a. Vizitè yo ap vini. 'The visitors are coming'  
 visitor Det Prog come  
 b. Vèdye ape ale lekòl. 'Vèdye is going to school'  
 Vèdye Prog go school

The interpretive properties of the two classes of verbs are summarized in (38):

	<i>bare sentence</i>	<i>ap</i>
(38) <i>unergative</i>	generic	progressive
<i>unaccusative</i>	past	progressive

A transitive verb with a specific complement is interpreted as a past event. This is an effect of delimitedness: a [+specified quantity] complement delimits the event, and a

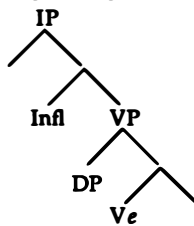
<sup>8</sup>Unaccusative verbs such as *vini* are interpreted as past even with bare NP subjects (which are interpreted as existentially quantified), cf. (i).

- (i) Vizitè vini. '[Some] visitors arrived'  
 visitor arrive

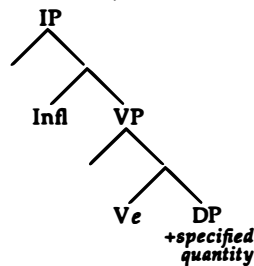
This past interpretation is probably related to the fact that these verbs are inherently telic, i.e. delimited (cf. Levin & Rappaport 1989: 320).

delimited event is interpreted as past relative to the moment of utterance. The difference between unergative and unaccusative is consistent with the idea that the internal argument delimits the event. With an unergative verb, the sole argument is external and so cannot delimit the event, cf. (39). As before, a non-delimited event is interpreted as a repetition of events relative to moment of utterance. With an unaccusative verb, its sole argument is internal and so can delimit the event, giving rise to a past interpretation in a bare sentence, cf. (40).

(39) *unergative: generic*



(40) *unaccusative: past*



There is a third class of intransitive verbs which are ambiguous between past and non-past in a bare sentence: *kanpe* 'stand', *tonbe* 'fall', cf. (41). With just these verbs, *ap* is also ambiguous between progressive and future, cf. (42). One way of understanding these correlated ambiguities is to say that these intransitive verbs may be either eventive (volitional/ agentive) or stative (non-volitional/non-agentive).<sup>9</sup>

- (41)a. Sisi tonbe. 'Sisi fell' OR 'Sisi falls'  
Sisi fall
- b. Sisi chita. 'Sisi sat' OR 'Sisi sits'  
Sisi sit
- (42)a. Sisi ap tonbe. 'Sisi is falling' OR 'Sisi will fall'  
Sisi AP fall
- b. Sisi ap chita. 'Sisi is sitting' OR 'Sisi will sit'  
Sisi AP sit

Derived intransitives show the same ambiguity. The verb *kanpe* is past when transitive, cf. (43a) and (44a). The corresponding intransitive is non-past in a bare sentence (43b), and future with *ap* (43c), just if the subject is non-volitional. If the subject is volitional, then the bare intransitive is ambiguous between past and non-past (44b), and *ap* is ambiguous between progressive and future (44c).

<sup>9</sup>This contrast affects auxiliary selection in many languages: *be* takes telic/nonagentive predicates, *have* takes nontelic/agentive predicates (cf. Hoekstra 1984, Rosen 1984, Levin & Rappaport 1989). E.g. from Hoekstra & Mulder (1990: 8 ex. 13a):

- (i) ...dat Jan in de sloot gesprongen is '...that John jumped in(to) the ditch'  
(ii) ...dat Jan in de sloot gesprongen heeft '...that John jumped (around) in the ditch'

- (43)a. Vèdye kanpe poto a. 'Vèdye stood the [telephone] pole up'  
 Vèdye stand pole Det  
 b. Poto a kanpe 'The [telephone] pole is standing'  
 pole Det stand  
 c. Poto a ap kanpe. 'The [telephone] pole will be standing'  
 pole Det Fut stand
- (44)a. Sisi kanpe pitit la. 'Sisi stood the child up'  
 Sisi stand child Det  
 b. Pitit la kanpe. 'The child stands/stood'  
 child Det stand  
 c. Pitit la ap kanpe. 'The child is standing/will stand up'  
 child Det AP stand

Thus, bare sentences distinguish three classes of intransitives: unergative, unaccusative and a third class (ambiguously eventive/volitional vs. stative/non-volitional).

### 5. Single *ap*

Given this account of bare sentences, we can take another look at *ap*. With eventive verbs *ap* marks progressive (45), with stative verbs it marks future (46).

- (45) Vèdye ap bati yon kay. 'Vèdye is building a house'  
 Vèdye Prog build a house  
 (46) Madanm nan ap gen sis pitit. 'This woman will have six children'  
 woman Det Fut have six child

### 5.1 Òweré Ìgbo

A similar link between progressive and future is found in Òweré Ìgbo (Éménan)ò 1985). As a main verb *gá* means 'go' (47); as a verbal suffix (predictably toneless) it gives a progressive interpretation (48); preverbally it yields a future reading (49).<sup>10</sup>

- (47) Ó gá-ra Óweré. 'S/he went to Òweré'  
 3sg go-rV  
 (48)a. Ó rí - gá rí à. 'S/he is eating this food'  
 3sg eat-Prog food this (Éménan)ò 1985: 122  
 b. Ó vù - gá ívù. 'S/he is becoming fat'  
 3sg be.fat-Prog fatness (Éménan)ò 1985: 123  
 (49)a. Ó gá e-rí rí à. 'S/he will eat this food'  
 3sg Fut pro-eat food this  
 b. Ó gá e-rí-ma rí à. 'S/he will be eating this food'  
 3sg Fut pro-eat-Dur food this

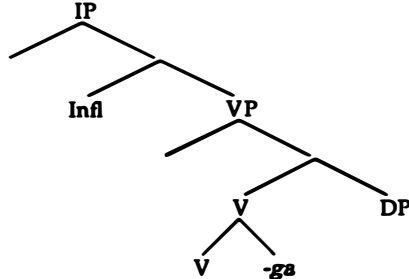
Whereas Haitian *ap* marks progressive only with eventive verbs, and future only with stative verbs, Ìgbo *gá* freely combines with both eventive and stative predicates:

	Haitian		Ìgbo
	eventive verb	stative verb	eventive or stative verb
progressive	<i>ap</i>	*	- <i>gá</i>
future	*	<i>ap</i>	<i>gá</i>

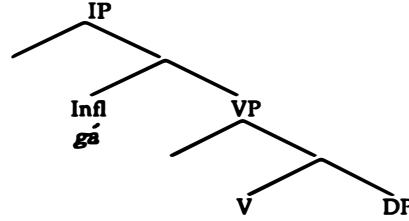
<sup>10</sup>The low tone of *gá* in (47) and (49) is predictable from its position in Infl.

In Igbo, suppose there is a single *gá* whose meaning reflects its scope with respect to the verb. Suffix *-ga* is adjoined to V, marking progressive aspect in the scope of V as in (51). In pre-verbal position, *gá* marks future modality with scope over V as in (52).<sup>11</sup>

(51) aspectual *-ga*



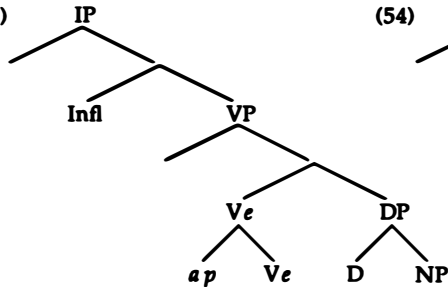
(52) modal *gá*



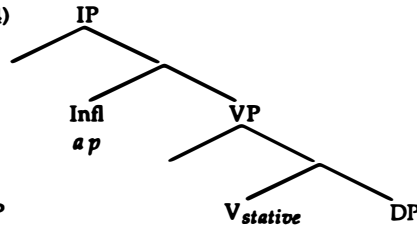
## 5.2 The scope of *ap*

Suppose that Haitian *ap* is similar to Igbo *gá*. If *ap* is in scope of V, *ap* marks progressive aspect (53); if V is in the scope of *ap*, *ap* marks future modality (54).

(53)



(54)



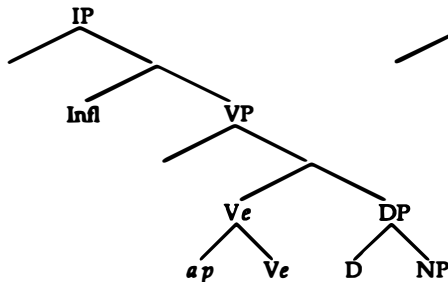
A problem with this idea is that in Haitian (53) is possible only with eventive verbs, and (54) is possible only with stative verbs.

<sup>11</sup>M. Bamba (p. c.) has drawn my attention to a morpheme in Mahou (Mandekan) which denotes either progressive or future, depending on its scope. Phrase-final *ná*, with a metrically conditioned low tone, contributes the meaning of progressive aspect, cf. (i), (iii). As a suffix in Infl, *ná* adds future modality, cf. (ii), (iv).

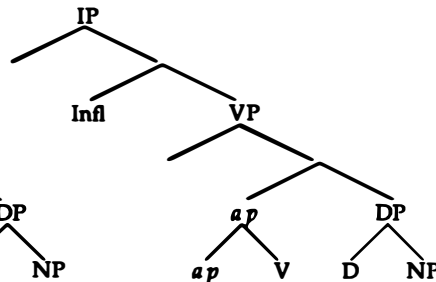
- |       |      |         |      |      |      |                              |
|-------|------|---------|------|------|------|------------------------------|
| (i)   | Músa | yé      | báá  | bóó  | ná.  | 'Musa is eating rice'        |
|       | Musa | is      | rice | eat  | Prog |                              |
| (ii)  | Músa | yé-ná   | báá  | bóó. |      | 'Musa will eat rice'         |
|       | Musa | is-Fut  | rice | eat  |      |                              |
| (iii) | Músa | téé     | báá  | bóó  | ná.  | 'Musa was eating rice'       |
|       | Musa | was     | rice | eat  | Prog |                              |
| (iv)  | Músa | téé-ná  | báá  | bóó. |      | 'Musa would have eaten rice' |
|       | Musa | was-Fut | rice | eat  |      |                              |

Since *ap* only occurs pre-verbally, its attachment is evidently more restricted: either *ap* is in the scope of V (55), or V is in the scope of *ap* (56).

(55) progressive *ap*



(56) future *ap*



The configuration in (55) is not possible with stative verbs in Haitian because a 'progressive stative' must be inchoative, in which case *ap vin* is used, cf. (57-58).

- (57)a. Pen an di kou yon wòch. 'The bread is hard as rock'  
bread Dem hard like a rock (Valdman 1981: 148)
- b. \*Pen an ap di kou yon wòch.  
bread Dem Fut hard like a rock
- c. Pen an ap vin di kou yon wòch. 'The bread'll become hard as rock'  
bread Dem Fut come hard like a rock
- (58)a. Vèdye gwo. 'Vèdye is big'  
Vèdye big
- b. \*Vèdye ap gwo.  
Vèdye Fut big
- c. Vèdye ap vin gwo. 'Vèdye will become big'  
Vèdye Fut come big

As for (56), *ap* cannot mark future with eventive verbs because aspect composition requires a local relation between *Ve* and D (i.e. [±specified quantity] must be visible to V). This locality requirement would not be met in (56) if V were eventive.

In Haitian, Igbo and Mahou the same morpheme marks progressive and future. Rather than positing homophony, I propose that there is a single *ap/gá/ná* / and that the scope properties of modals and aspect (a modal has scope over V, V has scope over aspect) interact with language-particular morphological properties to provide a syntactic account of the relationship between progressive and future.

## 6. Consequences

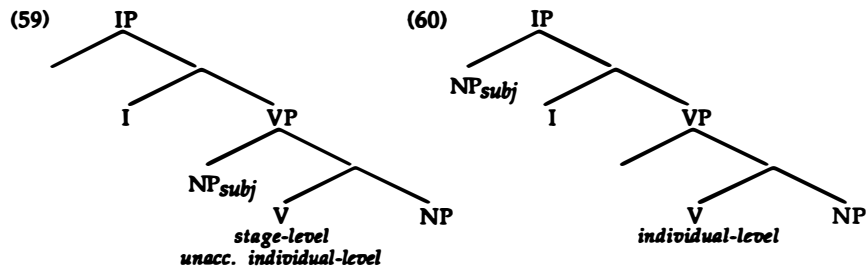
This final section considers whether the event argument is present in syntax; how tenselessness is related to quantification; and the status of 'present tense'.

### 6.1 Is the event argument projected?

To account for the interpretation of bare sentences, I have appealed to the distinction between eventive and stative predicates. In some recent analyses, eventive and stative

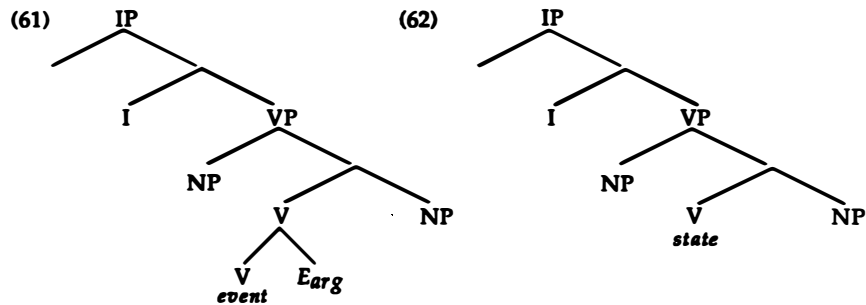
predicates are structurally distinct. Given the role of the eventive/stative distinction in determining the temporal reference of bare sentences, it is relevant to ask how bare sentences bear on two current proposals: that the event argument is projected as an external argument, or as an internal argument.

Kratzer 1989 projects the Davidsonian event argument as an implicit external argument for stage-level, but not individual-level, predicates. (Diesing 1989 implements the same idea somewhat differently.) Stage-level and unaccusative individual-level predicates have a base-generated subject within VP, as in (59). All other individual-level predicates base-generate their subject outside of VP, as in (60).



If this system is modified to refer to the event/state distinction, then eventive predicates would have the structure in (59), and stative predicates that of (60). This difference would correlate with the distribution of Haitian *ap*, progressive in (59) and future in (60). In order to account for the temporal reference of bare sentences compositionally, the representations in (59) - (60) need to be supplemented. Further, it is unclear how this system extends to the ambiguous intransitives in (41) - (44).

The other hypothesis is that the event argument projects as an implicit internal argument. Enç (1991) suggests that event predicates have a time argument which stative predicates lack. The time argument is a clitic on the verb, obligatorily bound by a Tense or Generic operator, cf. (61). Stative predicates lack a time argument, cf. (62).



If Enç's analysis is carried over to bare sentences, then eventive verbs are predicted to be generic. However, we have observed that bare sentences with eventive verbs are

generic only exceptionally; the more usual case is for them to be past. To account for the temporal force of bare sentences, both versions of the event argument hypothesis must be supplemented. This suggests that the status of the event argument as a syntactic position is independent of the properties of bare sentences.

### 6.2 Temporal and quantificational force

Another puzzle concerns an unexpected restriction on the quantificational force of bare noun objects. In Haitian, a bare noun complement of an eventive verb is always generic, cf. (2a) repeated here. One might expect (2a) to be ambiguous between generic and existential readings, but it isn't.

- (2)a. Pyè vann bèf. 'Pyè sells cattle'  
 Pyè sell cattle [#'Pyè sold some cattle']

Haitian contrasts with Fòñ-Gbè, where bare nouns with an eventive verb are interpreted either as discourse-linked or as existentially quantified, cf. (64).

- (64)a. Sika já lán. 'Sika cut the meat'  
 Sika cut meat (Avolonto 1991, ex. 13a)  
 b. Sika dó átín. 'Sika planted a tree'  
 Sika plant tree (Avolonto 1991, ex. 14a)

The difference between Haitian and Fòñ-Gbè suggests that the temporal force of bare sentences and the quantificational force of bare nouns are not independent effects.<sup>12</sup>

### 6.3 True tenselessness?

Although I have discussed bare sentences only in languages that have the *factative* effect, there are also languages where bare sentences are indeed ambiguous. For example, Yorùbá has no morphological tense (Oyèláràn 1982, 1989b), and in a bare sentence an eventive verb is temporally ambiguous between past and nonpast (63a). Stative verbs in bare sentences have an unambiguous non-past interpretation (63b).

- (63)a. Ọkọ́ ọ́ -fò. 'The aircraft took off' OR 'The aircraft is taking off'  
 vehicle Agr-fly (Oyèláràn 1989a)  
 b. Ayọ́ ọ́ -mọ́ ọ́. 'Ayọ́ knows her/him/it'  
 Agr-know 3sg (Abraham 1958: 424)

Fòñ-Gbè, Haitian, Ìgbo and Yorùbá all have bare sentences. Of these, only Yorùbá lacks the *factative* effect, and only Yorùbá has morphological agreement between the subject and the verb. Manfredi 1989 suggests that, Infl always being lexicalized in Yorùbá either by subject agreement or by an auxiliary, there is no V-to-I movement and hence no *factative* effect in that language.<sup>13</sup>

<sup>12</sup>A related issue is the interaction of quantification with case-marking. In Japanese and Korean, a topic-marked bare NP (with *-wa* in Japanese, *-n $\pm$ n* or *- $\pm$ n* in Korean) is generically quantified, while a nominative-marked bare NP (with *-ga* in Japanese, *-ga* or *-i* in Korean) is existentially quantified, cf. Kuno 1973, Lee 1985.

<sup>13</sup>The absence of V-to-I movement in Yorùbá has syntactic consequences, e.g. with respect to the licensing of verb focus and verb serialization (cf. Déchaine 1990).

The analysis of bare sentences as lacking any temporal force of their own calls for a reappraisal of tense as a syntactic category, even in languages which are widely assumed to distinguish 'past', 'present' and 'future' tenses. For example, in her discussion of English 'present tense', Enç (1991) observes that stative verbs are interpreted as non-past, but eventive verbs are interpreted generically, cf. (65):

- (65)a. Sally knows the answer.  
b. Sally sings.

On the basis of this contrast, Enç argues that English does not have 'present tense':

Suppose we assume that the present tense denotes some interval including the time of utterance (or more generally, the time of evaluation). Then we expect it to be able to bind the temporal argument of the verb and to yield a reading for this sentence which is true if Sally sings during the time of utterance. Such a reading, however does not exist for [65b]. (Enç 1991: 7)

In the absence of a tense operator, the time argument of an event verb is bound by a generic operator. (For Enç, stative verbs have no time argument, cf. previous section).

A generic interpretation for eventive verbs in the absence of tense also occurs in Chinese, which has no morphological tense. Chinese bare sentences display the same contrast as English: stative verbs are non-past, eventive verbs are generic, cf. (66).

- (66)a. Jǐngqǐ xǐhuān mǎnbāo. 'Jingqi likes bread'  
Jingqi like bread  
b. Jǐngqǐ chī píngguǒ. 'Jingqi eats apples'  
Jingqi eat apple

In Enç's analysis, a generic interpretation is assigned to eventive verbs in the *absence* of a tense operator. This predicts that if a language has a genuine present tense, eventive verbs should not receive a generic interpretation. French meets Enç's criteria for present tense: both eventive and stative verbs are interpreted as holding at the time of utterance, cf. (67). However, in addition to this, eventive verbs are ambiguous between present and generic interpretations, cf. (67a).

- (67)a. Lucie chante. 'Lucie sings' OR 'Lucie is singing'  
b. Lucie connaît la réponse. 'Lucie knows the answer'

The ambiguity of (67a) suggests that whatever mechanism is responsible for the generic interpretation of eventive verbs, it is available independently of tense, since it is found in languages with (French) and without (English, Chinese, Haitian) present tense.

This quick survey yields the picture in (68). For all the languages discussed, bare stative predicates are interpreted as non-past, suggesting that this half of the *factative* effect holds by default. What varies cross-linguistically is the interpretation of bare eventive predicates, but this variation falls within narrow bounds: generic, past, non-past, or some combination of these.



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