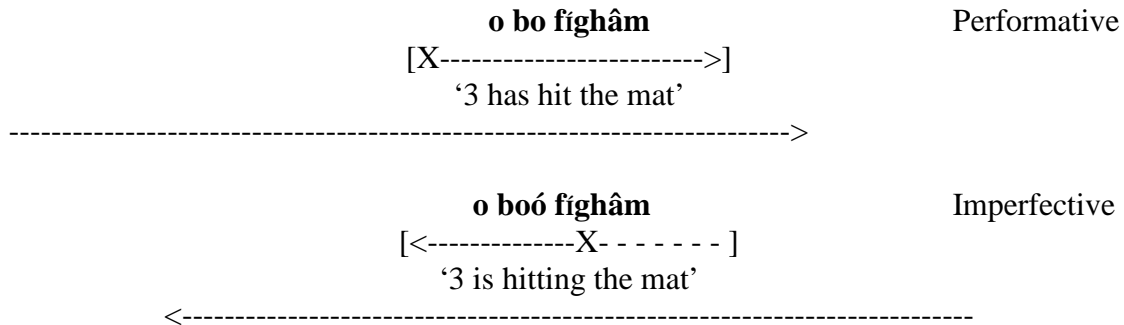


2

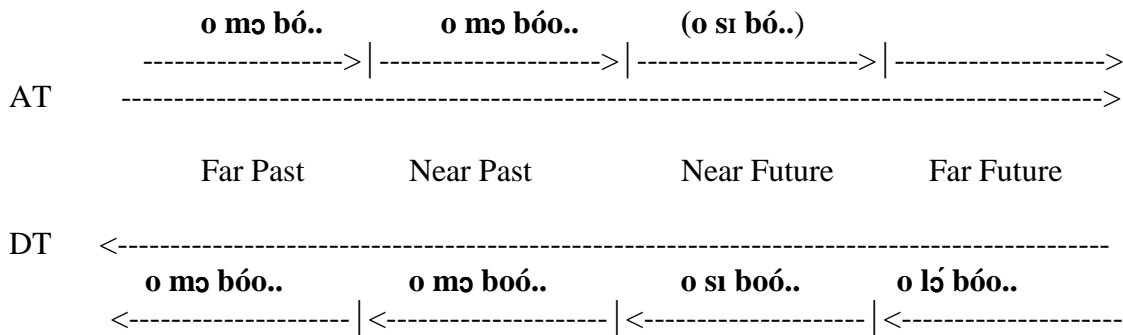
Aghem

(Bantoid, Grassfields Bantu)

Stage 1 (Vast Present)



Stage 2 (Tense contrasts)



1. With stative verbs the VP Performative represents the experiential present: **o ki fíghâm** “3 has a mat”.
2. The Near tenses are hodiernal; the Past is pre-hodiernal and the Future post-hodiernal. They are extensions of the Present: the Memorial Present and the Non-Memorial Present.
3. The Non-memorial Performative is a Subjunctive, with underlying subjunctive **é** deleted after **sɪ** but its tone transferred to the **bó**.
4. This system is of a typical Bantu pattern: a Vast Present followed by a set of tense contrasts.

3

Bambara

(Manding, Mande)

1. Participles

| | |
|-------------------------------|---------------------------------------------------------------------------------------------------------|
| Imperfective | <p style="text-align: center;">-to</p> <p> <-----X----- </p> <p>partially completed event</p> |
| Perfect (Retrospective) | <p style="text-align: center;">-len</p> <p> <-----x X</p> <p>completed event</p> |
| Situative ("Anticipatory") | <p style="text-align: center;">-ta</p> <p> <X----- </p> <p>potential event</p> |

2a. Intransitive finite forms¹

| | |
|-------------|---------------------------------------------------------------------------------------------------|
| Progressive | <p style="text-align: center;">à bɛ́ ná</p> <p>[-----X----->]</p> <p>'3s is coming'</p> |
| <-----> | |
| Perfective | <p style="text-align: center;">à ná-na</p> <p>[<-----X]</p> <p>'3s came/has come'</p> |
| Prospective | <p style="text-align: center;">à bɛ́ na ná</p> <p>X[x----->]</p> <p>'3s will come'</p> |

Notes

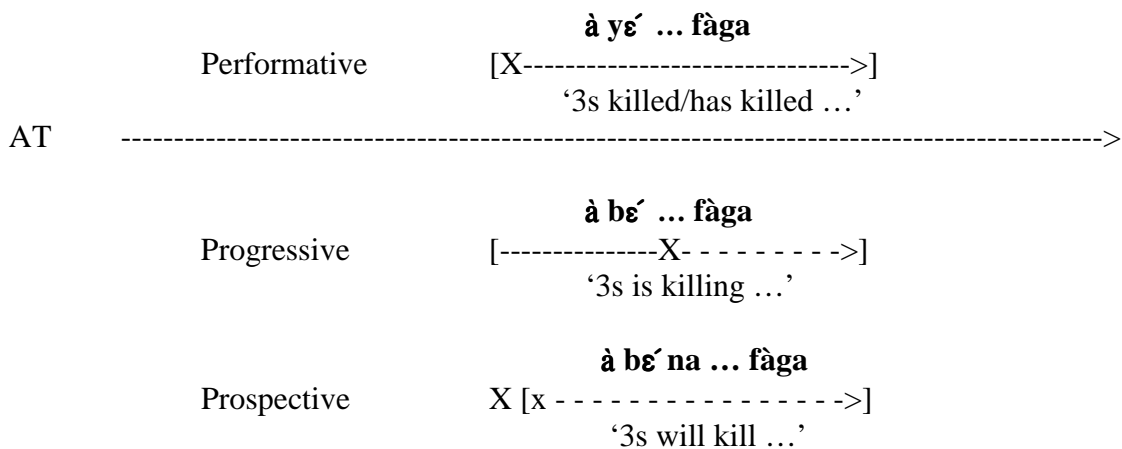
1. The use of an auxiliary is a good justification for describing **à bɛ́ ná** as Progressive rather than as Imperfective. Progressives are typically formed by the use of some kind of an auxiliary element.

¹The form **nána** is underlying **ná-ra**. Each of the three finite forms can form compounds with the shifter **tùn**, which shifts the event represented to an earlier moment of time.

2. The suffix of **à ná-na**, which parallels the participial suffix **-len**, and contrasts with the Performative auxiliary **yε'** is also a justification for considering this form as a Perfective rather than as a Performative. Further research is needed to confirm this analysis.

3. These forms at Level 2a are finite, and show a relationship between the representation of Event Time and that of Universe Time. As a result the Progressive represents the ongoing present, the Perfective represents the past (time coeval with the memory), and the Prospective represents the future (time coeval with the imagination).

2b. Transitive Finite forms

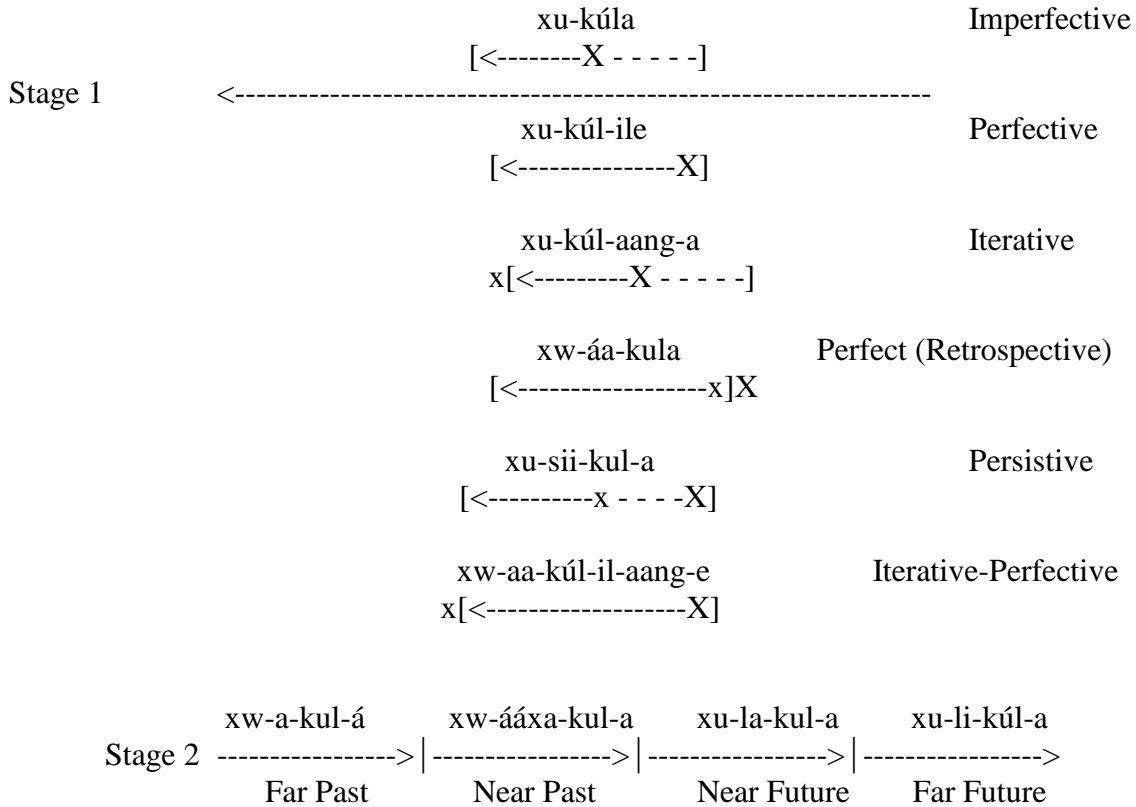


1. Each of the three finite forms can form compounds with the shifter **tùn**, which shifts the event represented to an earlier moment of time.

4

Bantu Narrow (Bantoid, E. Benue-Congo)

BUKUSU VERBAL SYSTEM



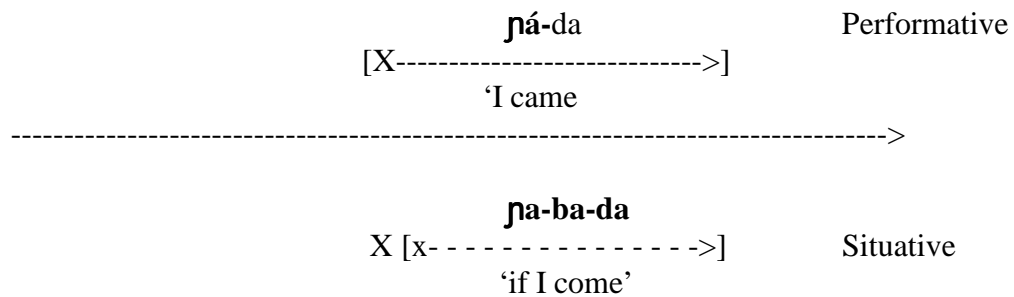
1. Excluded: Subjunctives, which are found in tense function but would require a separate representation (Imaginary Time).
2. From the forms above, the extended paradigmatic array of Lu-bukusu can be derived. Systemic tense contrasts are marked only in pre-stem position. Contrastive tenses may not be used in second position in compound forms.
3. Of the six aspectual forms of the Vast Present, 1 is unmarked, 2,3 have suffixes; 4-6 are marked in pre-stem position; and 7 has a double suffix.
4. Of the four contrastive tenses the Near Past represents the time of the working memory (just now), beyond which is the Past; the Near Future represents the time of the working imagination (later today), beyond which is the Future.
5. Aspectual forms are also used in tense function: the Perfective to represent earlier today (hodiernal), and the Retrospective to represent yesterday (hesternal).

5

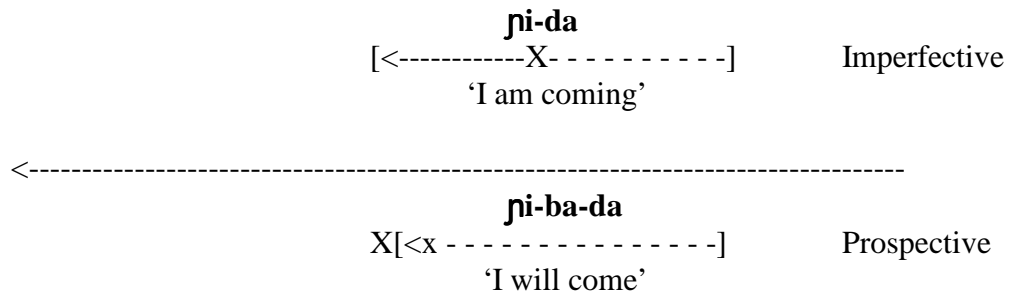
Bijago

(Central, (West) Atlantic)

(i) Forms in Ascending Time



(ii) Forms in Descending Time



1. The Performative has the normal distribution of Past with Active verbs and Present with statives. It appears to be unmarked: the vowel attached to the subject marker is a copy of the following root vowel, whereas the Imperfective is marked by the vowel **i** attached to the subject marker.

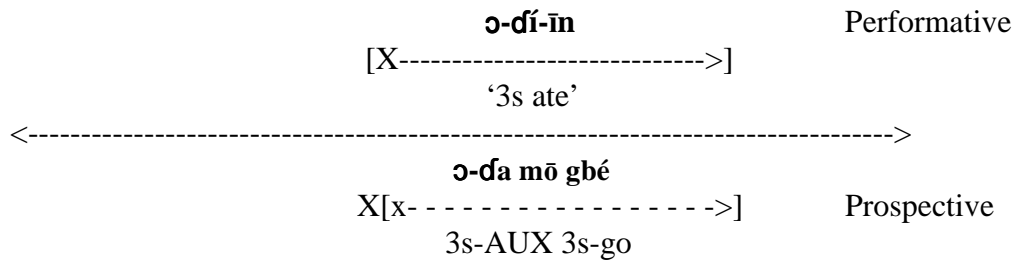
2. The marker **ba** may be attached to either of these forms. It turns the Performative into a Situative, and the Imperfective into a Prospective. The parallelism of these two forms reveals that each could, functionally, replace the other, reflected also in the fact that it is not unusual for languages to use the same conjunction for *if* and *when*.

6

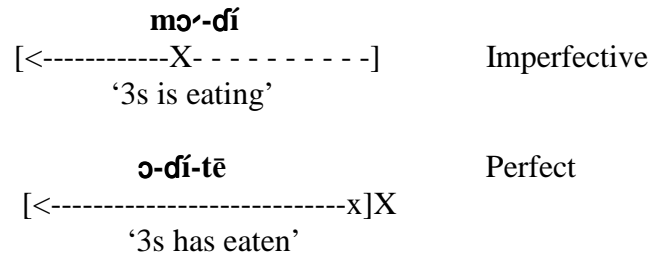
Degema

(Delta, Edoid, Atlantic-Congo)

(i) Forms in Ascending Time



(ii) Forms in Descending Time

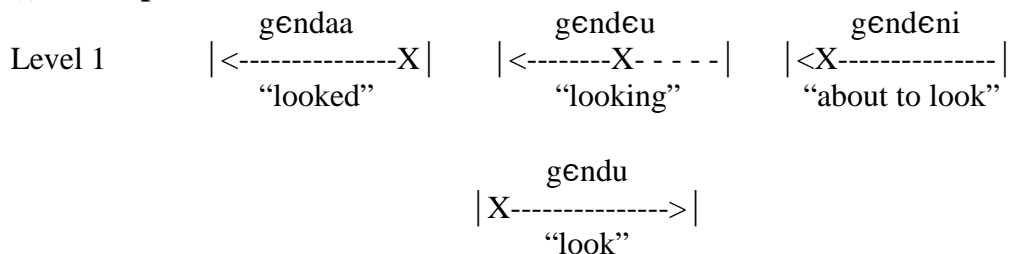


1. The language has many other auxiliaries, both modal and aspectual; the Prospective illustrated above is Inceptive in sense: ‘he is about to go’.

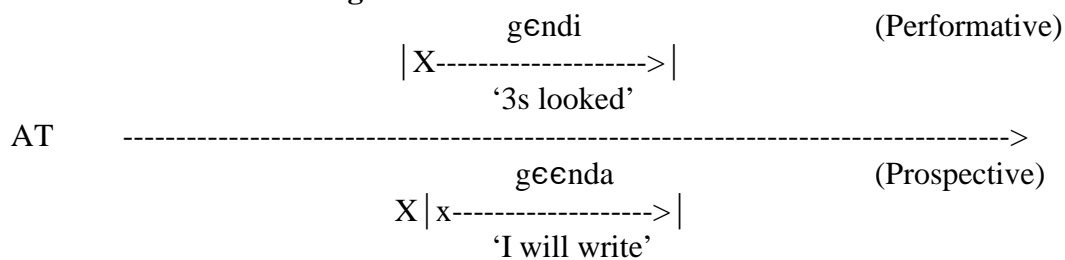
7

Donno So (Dogon)
(Volta-Congo, Atlantic-Congo)

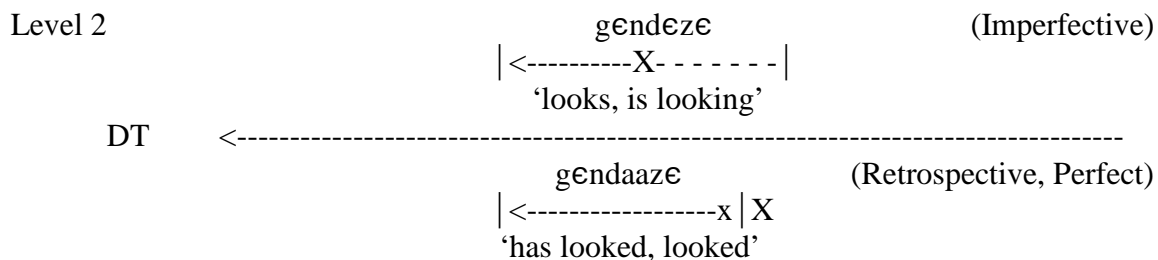
(i) Participles



(ii) Finite forms in Ascending Time



(iii) Finite forms in Descending Time



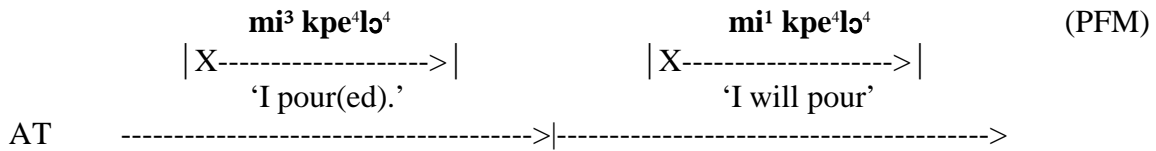
1. This sketch has been constructed using only the simple forms of the language.

8

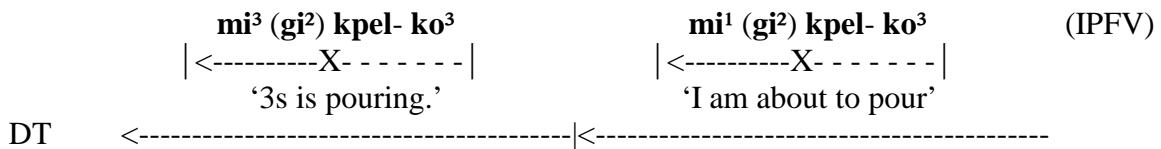
Doyayo

(Duru, Adamawa, Adamawa-Ubangi)

(i) Forms in Ascending Time



(ii) Forms in Descending Time



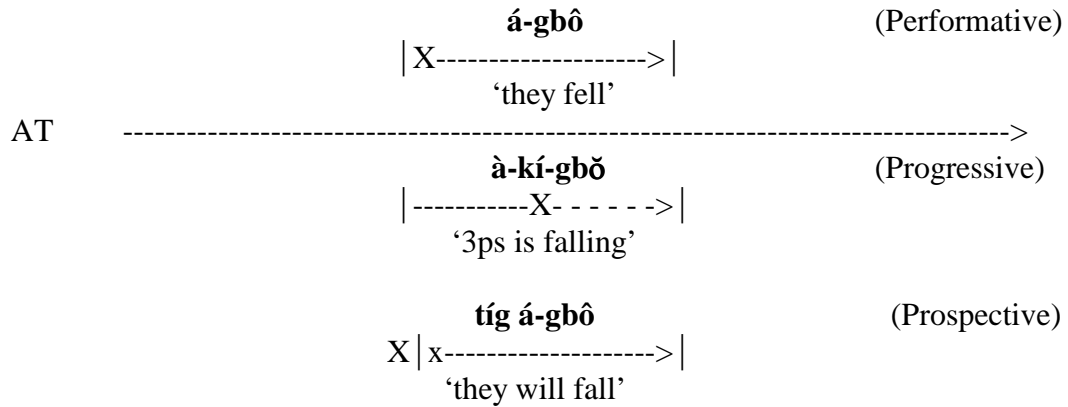
1. The Performative is the unmarked form of the paradigm.
2. The Imperfective is marked by the suffix - **ko³**- on the root.
3. The Progressive is marked by the auxiliary **gi²**.
4. The Future is marked by High Tone on the subject pronoun.
5. This is a very unusual four-square system of two tenses and two aspects.

9

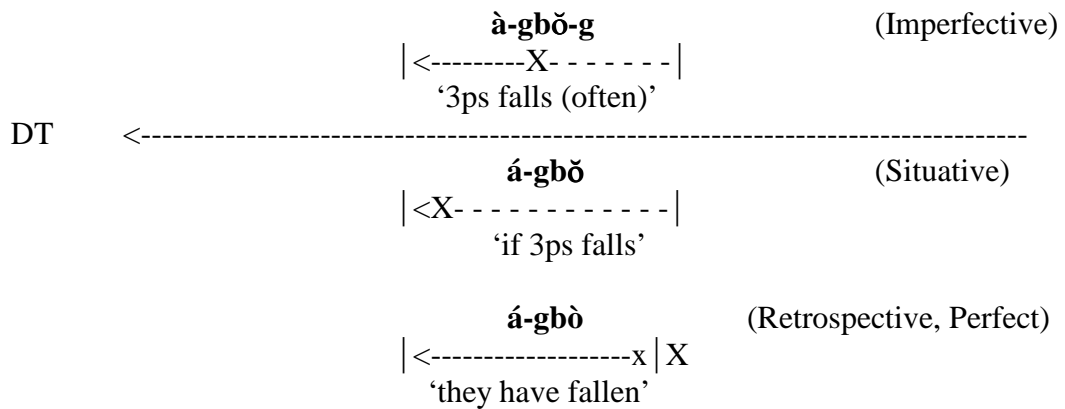
Ejagham

(Ekoid Bantu)

(i) Forms in Ascending Time



(ii) Forms in Descending Time



1. A neatly balanced system of six aspectual forms Ejagham reflects a common pattern for West African Niger-Congo languages.

10

Ewe

(Kwa, Benue-Kwa)

(i) Forms in Ascending Time

| | | |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| | $\begin{array}{c} \acute{e}=\text{ku} \\ \text{X} \text{-----} \text{>} \\ \text{'3s died'} \end{array}$ | (Performative) |
| AT | -----> | |
| | $\begin{array}{c} \text{me}=\text{le } \text{d}\acute{o} \text{ } \text{w}\text{ɔ}-\text{m}' \\ \text{-----X-} \text{-----} \text{>} \\ \text{'I'm working'} \end{array}$ | (Progressive) |
| | $\begin{array}{c} \text{m}=\text{a } \text{yi} \\ \text{X} \text{x} \text{-----} \text{>} \\ \text{'I will go'} \end{array}$ | (Prospective) |

(ii) Forms in Descending Time

| | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| | $\begin{array}{c} \text{me}=\text{w}\text{ɔ}-\text{a } \text{d}\acute{o} \\ \text{<-----X-} \text{-----} \text{>} \\ \text{'I work'} \end{array}$ | (Imperfective) |
| DT | <----- | |

1. The full meaning of the Progressive is given as 'I=be work do-PRG'
2. A completive BE is used for the Past **me=le dɔ' wɔ-m'** 'I was working'.
3. The full meaning of the IPFV is 'I=do-IPFV work'.

11

Fula

(Northern, Senegambian, Atlantic)

(i) Forms in Descending Time

| | | | |
|----|--------|----------------------------|----------------|
| | | 'e-mi-wind-a | (Imperfective) |
| | | <-----X----- 'I write' | |
| DT | <----- | | |
| | | mi-wind-ii | (Perfective) |
| | | X-----> 'I wrote' | |
| | | mi-wind-a-t-a | (Situative) |
| | | <X----- 'I will write' | |

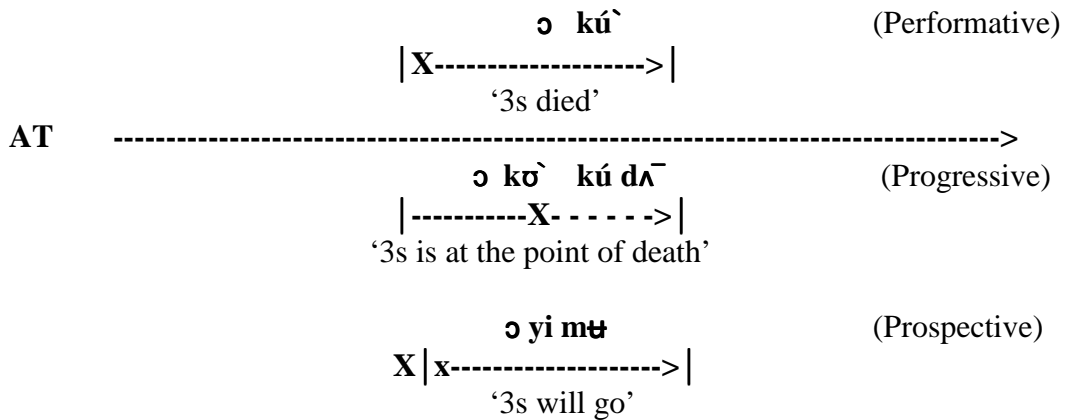
(i) Forms in Ascending Time

| | | | |
|----|--------|--------------------------------|---------------|
| | | mi--ɗon-wind-a | (Progressive) |
| | | -----X-----> 'I'm writing' | |
| AT | -----> | | |

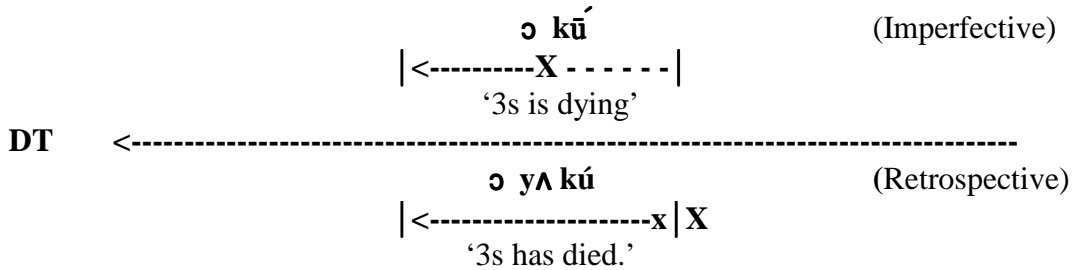
1. The **-a** of the active resembles the FV of Bantu, the form typically unmarked for aspect, carrying the basic aspect of the system, in this case the IPFV.
2. **'e** appears to be a preverb, since it doubles as a preposition meaning 'with'. It may be an element of focus to reduce the scope of the Vast Present, where a bare Imperfective often has a generic sense.
3. The marked completive corresponding to the Imperfective appears to be a Perfective, since there is no evidence to show that this form has present reference with stative verbs.
4. The status of **--ɗon** in Fula is an interesting question that requires further research.

12 Godié

(i) Forms in Ascending Time



(ii) Forms in Descending Time



1. The full meaning of the Progressive is given as 'He is in the process of dying'. (He be-at die place).
2. Both Prospective and Retrospective use auxiliaries.
3. The foundational forms of the paradigm are the unmarked Performative and the marked Perfective (the Imperfective suffix has disappeared leaving a mid tone).

13

Ijo

(Kolokuma dialect, Ijoid)

(i) Forms in Ascending Time

| | | | |
|----|--------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| | | $\dot{\text{i}} \text{ b}\acute{\text{o}}\text{-m}\acute{\text{i}}$ X-----> 'I came' | (Performative) |
| AT | -----> | | |
| | | $\text{a b}\acute{\text{o}} \text{ t}\acute{\text{i}}\text{m}\acute{\text{i}}\text{-m}\acute{\text{i}}$ -----X-----> 'she was coming' | (Progressive) |
| | | $\text{a b}\acute{\text{o}}\text{-}\eta\acute{\text{i}}\text{m}\acute{\text{i}}$ X X-----> 'she will come' | (Prospective) |

(ii) Forms in Descending Time

| | | | |
|----|--------|----------------------------------------------------------------------------------------------------------------|-----------------|
| | | $\acute{\text{i}} \text{ b}\acute{\text{o}}\text{-yem}\acute{\text{i}}$ <-----X----- 'are you coming?' | (Imperfective) |
| DT | <----- | | |
| | | $\text{a b}\acute{\text{o}}\text{-d}\acute{\text{o}}\text{s}$ <-----x X 'she has come' | (Retrospective) |

1. The use of **-mí** with statives showing present meaning, as in **akó -mí** 'it is bitter', is an indication of its status as a Performative.
2. The status of the Progressive is not clear: the example has a past reference. The auxiliary **timi** also forms combinations with Prospective and Retrospective.
3. There appears to be an alternate form of the Retrospective with a different auxiliary, **erí bó-nimì**, and a stative gloss, 'he is here'.

14

Jukun

(Jukunoid, Central Nigeria)

(i) Forms in Ascending Time

| | | | |
|----|--------|-------------------|----------------|
| | | ku-yak | (Performative) |
| | | X-----> | |
| | | ‘he went’ | |
| AT | -----> | | |
| | | ku-yak naa | (Progressive) |
| | | -----X-----> | |
| | | ‘he was going’ | |
| | | ku-rí-yak | (Prospective) |
| | | X x-----> | |
| | | ‘he will go’ | |

(ii) Forms in Descending Time

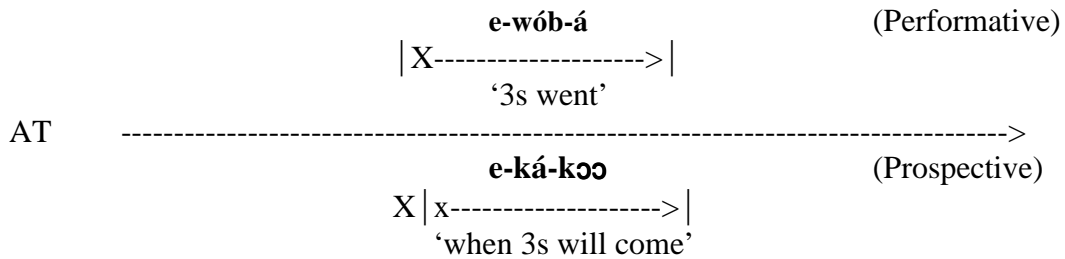
| | | | |
|----|--------|--------------------|-----------------|
| | | ku-tí-yak | (Imperfective) |
| | | <-----X----- | |
| | | ‘he is going’ | |
| DT | <----- | | |
| | | ku-ń-rì-yak | (Retrospective) |
| | | <-----x X | |
| | | ‘3s has gone.’ | |
| | | ku-máá-yak | (Situative) |
| | | <X----- | |
| | | ‘when he goes’ | |

15

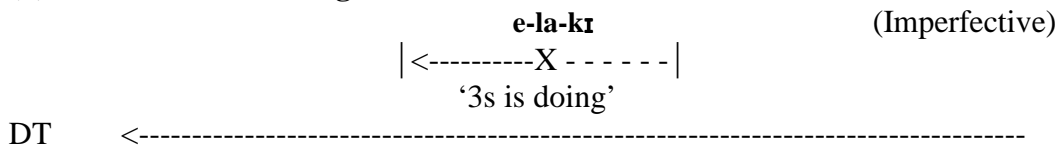
Kabiye

(Gur, Grusi)

(i) Forms in Ascending Time



(ii) Forms in Descending Time



1. The Performative has present reference with stative verbs: **e-piyi-a** '3s is black, **e-sool-á** '3s loves'. It is also unmarked (no suffix) in some negative forms, in subordinate clauses, and in the Imperative.
2. The sketch here is incomplete. The Prospective form given is a subordinate clause, and there are other Prospective and Progressive forms the details of which are not clear.

16

Kisi

(Bulom, Mel, Southern, Atlantic)

(i) Forms in Ascending Time

| | | |
|----|----------------------------------------------------------------------------|---------------------------|
| | \dot{o} cìmbù X-----> '3s left' | (Performative) |
| AT | -----> | |
| | \dot{o} cò cìmbò ó' -----X-----> '3s is leaving' | (Progressive) |
| | \dot{o} wà cìmbò ó' -----X-----> '3s was leaving' | (Completive Progressive) |
| | \dot{o} cò wà cìmbò ó' -----X-----> '3s will be leaving' | (Prospective Progressive) |
| | \dot{o} cìmbù níŋ x X-----> 3s already left | (Retrospective) |

(ii) Forms in Descending Time

| | | |
|----|---------------------------------------------------------------|----------------|
| | \dot{o} cìmbù <-----X----- '3s leaves' | (Imperfective) |
| DT | <----- | |
| | \dot{o} cò cìmbù X x-----> '3s will leave' | (Prospective) |

- (i) The completive aspect is Performative: with active verbs it represents the past, and with stative verbs the present.
- (ii) The Retrospective is formed lexically by means of the adverb **níŋ**. The form is a Performative, comparable to English *he already left = he has gone*.
- (iii) There are three versions of the Progressive, one with the Incompletive form of the auxiliary (**cò** = Present), one with the Completive form of the auxiliary (**wà** =

- Past), and one where **cò** occupies the present and **wà** consequently represents the future.
- (iv) The auxiliary **cò** has two functions, one as auxiliary of the Progressive (with a nominal form of the verb (**cìmbò'ɔ'**), and one as the Prospective auxiliary with the Imperfective form of the verb (**ò cò cìmbù**).
 - (v) The form that is described as Habitual is a classic Imperfective of the Vast Present, as found in systems that have only aspectual contrasts and no tense contrasts. These forms, which represent ongoing activity in the whole expanse of Universe Time (the Vast Present) normally have a generic sense, which has led to their being described as aorists, the Greek term for a Perfective, when in fact they are Imperfectives.

17 Makaa

(Narrow Bantu, Bantoid)

(All forms have 1st person subject pronoun **mə̀**)

Stage 1
Vast Present

| | | |
|--------|------------------------------------------|------------------------------------------|
| | mə̀ ʼ wííng [X----->] | Performative ‘I am about to chase’ |
| -----> | | |
| | mə̀ ʼ ngè wííng [-----X----->] | Progressive ‘I am chasing’ |
| -----> | | |
| | mə̀ ʼ dɛ wííng [<-----X-----] | Habitual\ IPFV? ‘I (regularly) chase’ |
| <----- | | |
| | mə̀ mə̀ ʼ wííng [<-----x]X | Retrospective (PFT) ‘I have chased’ |

Stage 2
Tense contrasts

| | | | |
|----------------------|-----------------------|----------------------|-----------------------|
| mə̀ a ʼ wííng | mə̀ ámə̀ wííng | mə̀ e ʼ wííng | mə̀ bá ʼ wííng |
| -----> | -----> | -----> | -----> |
| Far Past | Near Past | Near Future | Far Future |

1. This is a typical Bantu pattern of a Vast Present with aspectual contrasts, followed by a later, derived level of tense contrasts. It may be compared with the pattern of Bukusu in Chapter 4, and to Aghem in Chapter 1.
2. The Performative is the unmarked aspect, and the form that is utilized for the tense contrasts.
3. It is normal for the Imperfective of the Vast Present, unless it is marked for some kind of focus, to have a generic sense.

18

Obolo

(Lower Cross, Delta Cross, Cross River)

(i) Forms in Ascending Time

| | | | |
|-----------|--------|-------------------|----------------|
| | | ń-ge | (Performative) |
| | | [X----->] | |
| | | ‘I wrote’ | |
| AT | -----> | | |
| | | n-gâ-kí-gé | (Progressive) |
| | | [-----X----->] | |
| | | ‘he was going’ | |
| | | mâ-ge | (Prospective) |
| | | X[x----->] | |
| | | ‘I will write’ | |

(ii) Forms in Descending Time

| | | | |
|-----------|--------|------------------|-----------------|
| | | n-kí-ge | (Imperfective) |
| | | [<-----X-----] | |
| | | ‘I am writing’ | |
| DT | <----- | | |
| | | ń-ra-í-gé | (Retrospective) |
| | | [<-----x]X | |
| | | ‘I have written’ | |

1. An Habitual is created by the reduplication of /-kí-/ under the form /-ké-kí-/.
2. The pattern of the system recapitulates that of Ejagham in Chapter 9.

19

Otoro

(Central Heiban, Kordofanian)

(i) Forms in Ascending Time

| | | | |
|----|--------|-------------------------|----------------|
| | | ɲi gwu-man-u | (Performative) |
| | | [X----->] | |
| | | ‘I saw’ | |
| AT | -----> | | |
| | | ɲi gwɔ gwu-man-u | (Progressive) |
| | | [-----X----->] | |
| | | ‘I am cooking’ | |
| | | ɲi gw-a-man-i | (Prospective) |
| | | X[x----->] | |
| | | ‘I will cook’ | |

(ii) Forms in Descending Time

| | | | |
|----|--------|---------------------|-----------------|
| | | ɲa-man-a nɔ | (Imperfective) |
| | | [<-----X-----] | |
| | | ‘Don’t (you) cook!’ | |
| DT | <----- | | |
| | | ɲi gwu-man-i | (Retrospective) |
| | | [<-----x]X | |
| | | ‘I have cooked’ | |

- i. Initial **gw(u)-** marks concord with the Subject Marker.
- ii. There are two forms of auxiliary *be*: Imperfective **gw-ɔ** and Completive **gwu-jɔ**.
- iii. Completive **gwu-jɔ** is used for Past reference: **ɲi gwu-jɔ gwu-man-u** ‘I was cooking’.
- iv. The Imperfective is restricted in its usage to the Infinitive, Negative Imperative and Ventive. The latter is often axial: **man-a** ‘cook and return’, where the meal is the axis for the return.
- v. Final vowel **ɔ** or **u** marks Performative; **a** or **o** Imperfective; **ɛ** or **i** Subjunctive (which includes a variety of secondary or dependent usage).

20

Supyire

(Senúfo, Gur)

(i) Forms in Ascending Time

| | | |
|----|----------------------------------------------------------|----------------|
| | u fágá [X----->] '3s grabbed' | (Performative) |
| AT | -----> | |
| | mù nyɛ na yu [-----X----->] 'I am speaking' | (Progressive) |
| | pi sí ù bò X[x----->] 'they will kill him' | (Prospective) |

(ii) Forms in Descending Time

| | | |
|----|--------------------------------------------------|-----------------|
| | u fágá-li [<-----X-----] '3s grabs' | (Imperfective) |
| DT | <----- | |
| | u a kàrè [<-----x]X 'I have cooked' | (Retrospective) |

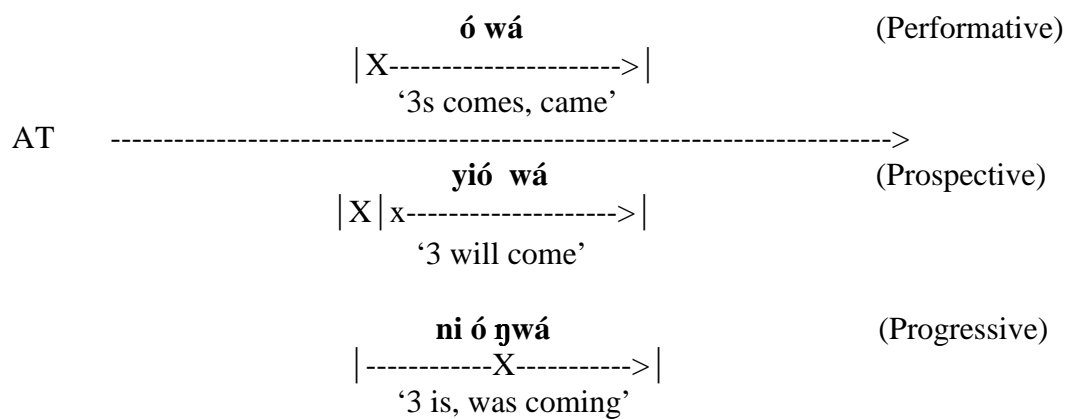
1. There is a suggestion of tense markers, **ná** Remote Past, **nî** Recent Past; but they can only be used with Performative forms of the verb, indicating an adverbial rather than tense function.
2. The Progressive auxiliary is **na; nyɛ** = 'be'.
3. There are allophones of **-li**: **-ni**, **-re**, **-ge**, and changes of tone.
4. The Prospective auxiliary is **sí; ù** is the Direct Object.

21

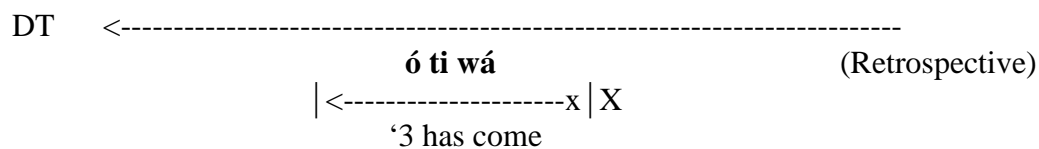
Yoruba

(West Benue-Congo)

(i) Forms in Ascending Time



(ii) Forms in Descending Time



1. Yoruba is strongly analytic, and the TA system contains only basic aspects.

22 Zande (Ubangi)

Level 1 (aspect only)

| | | |
|--|------------------|----------------|
| | (ká) pásà | (Imperfective) |
| | <-----X----- | |
| | ‘to cook’ | |

Level 2 (Vast Present)

| | | |
|----|-------------------|----------------|
| | mò ná-pàsà | (Imperfective) |
| | <-----X----- | |
| | ‘I am cooking’ | |
| DT | <----- | |
| | mò pasì | (Performative) |
| | X-----> | |
| | ‘I cooked’ | |
| AT | -----> | |

Level 3 (Past vs Non-Past)

| | | | |
|----|-------------------|--------|------------------|
| | mó aa-pàsà | | mó á-pàsà |
| | <-----X----- | | <-----X----- |
| DT | <----- | <----- | |
| | mó à-pásí | | mó pásí |
| | X-----> | | X-----> |
| AT | -----> | -----> | |

Notes.

1. The past tense **mó aa-pàsà** has the meaning ‘I was cooking’.
2. The non-past tense **mó à-pàsà** has the meaning ‘I cook, am cooking’.
3. The past tense **mó à-pásí** has the meaning ‘I cooked’.
4. The non-past tense **mó pásí** has the meaning ‘may you cook’ or just ‘cook!’
5. This is an unusual pattern, but it still shows a staged system, with a Vast Present leading to a set contrastive tenses.