The Crosslinguistic Defaultness of BE

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1. Introduction/Background

- There is a long-standing intuition in linguistic analysis that auxiliaries such as *be* are in some sense **default verbs**.
- Here I present a formalization of this intuition: auxiliary *be* is not present in syntax but is instead a **morphological** default inserted to realize "stranded" inflectional material.
- This provides a **unified** analysis of previously-undiscussed variation in the distribution of auxiliary constructions.

2. Variation in Auxiliary Use

A familiar pattern:

Some inflectional categories require auxiliaries. Combinations of such categories require **two** auxiliaries:

(1) a. Progressive: The children **were** eating the cake.
b. Passive: The cake **was** eaten.
c. Progressive passive: The cake **was being** eaten.

A different pattern: Bantu, Latin

Individual inflectional categories do not require auxiliaries, but some *combinations* do:

Kinande: past tense and aspect (progressive, incompletive, or inceptive) require an auxiliary *only* in combination:

(2) a. Progressive: tu-nému-húma, 'We are hitting'
b. Past: tw-á-húma, 'We hit (recently, not today)'
c. Past Progressive: **tw-á-bya** i-tu-nému-húma, 'We were (recently, not today) hitting.'

Latin: passive and perfect categories require an auxiliary *only* in combination (Embick, 2000)

(3) a. Perfect: amavi, 'I loved, I have loved.'
b. Passive: amor, 'I am loved.'
c. Perfect Passive: amatus **sum**, 'I was loved, I have been loved.'

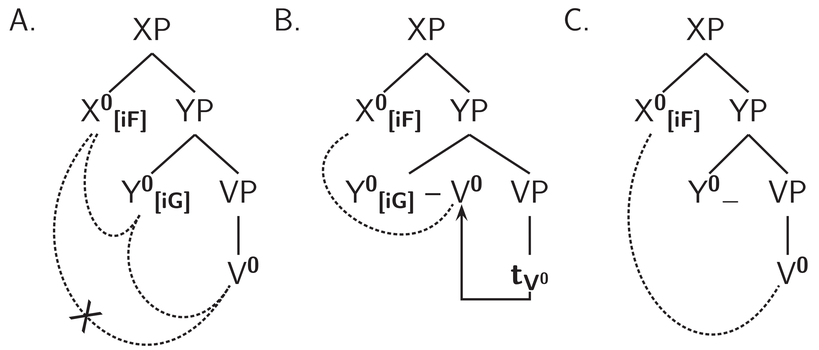
Evidence for Default Auxiliaries:

Latin and Kinande would require complex licensing for *be* in an AuxP: projected *only* in the presence of **two** other categories, never by either individually.

* [AuxP [XP]]
* [AuxP [YP]]
✓ [AuxP [XP [YP]]]

An alternative: no AuxP; complex structures give rise to auxiliaries in the **morphology** (cf. Schütze, 2003; Cowper, 2010)

3. A Simple Theory of Inflection



A. Inflectional features are manipulated by **Agree** (Chomsky, 1998), not head raising or lowering. Agreement is **local**: all heads with inflectional features are potential targets for Agree.
B. **Head movement** (HM) is dependent on a pre-existing Agree relation. Movement of the lexical verb can cause it to be accessible to Agreement from previously non-local inflectional heads. Languages differ in which instances of head movement exist in their inflectional systems.
C. Only **non-default** ('marked': Jakobson, 1939; Comrie, 1976) inflectional features are **visible** for the purposes of Agree. Heads without such features can be skipped both by local Agreement and head movement.

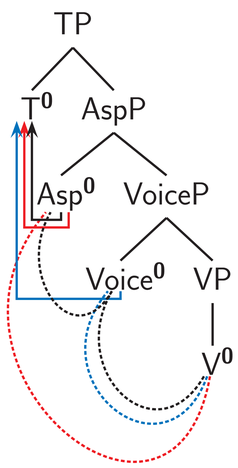
Auxiliaries (i.e. *be*) occur to support inflectional features that have not Agreed with $V^0 \longrightarrow$ [iF] in Tree (A)

4. Illustration

1. ENGLISH

Head movement: T^0 attracts $Voice^0$ and Asp^0

Default (∴ non-visible): Non-progressive Asp^0 and active $Voice^0$



Progressive: were eating
- Asp^0 and V^0 Agree for [Prog]
- T^0 Agrees with Asp^0 for [Past] + HM
- [Past] is stranded → auxiliary *were*

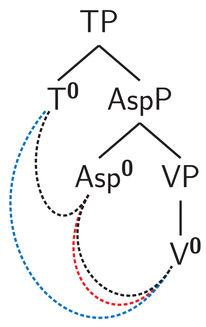
Passive: was eaten
- $Voice^0$ and V^0 Agree for [Passive]
- T^0 and $Voice^0$ Agree for [Past] + HM
- [Past] is stranded → auxiliary *was*

Progressive Passive: was being eaten
- $Voice^0$ and V^0 Agree for [Passive]
- Asp^0 and $Voice^0$ Agree for [Prog]
- T^0 and Asp^0 Agree for [Past] + HM
- [Prog] is stranded → auxiliary *being*.
- [Past] is stranded → auxiliary *was*.

2. KINANDE

Head movement: none

Default (∴ non-visible): Present T^0 and perfective Asp^0



Progressive: tu-nému-húma
'we are hitting'
- Asp^0 and V^0 Agree for [Prog]
- No stranded features

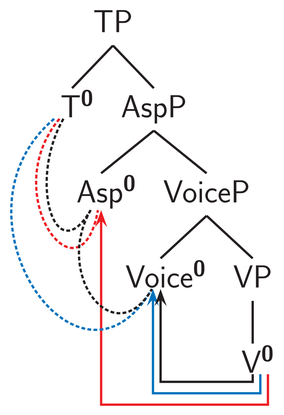
Past: tw-á-húma
'we hit (recently)'
- T^0 and V^0 Agree for [Past]
- No stranded features

Past Progressive: tw-á-bya i-tu-nému-húma
'we were (recently) hitting'
- Asp^0 and V^0 Agree for [Prog]
- T^0 and Asp^0 Agree for [Past]
- [Past] is stranded → auxiliary *twábya*

3. LATIN

Head movement: $Voice^0$ and Asp^0 attract V^0

Default (∴ non-visible): Imperfective Asp^0 and active $Voice^0$



Perfect: amavi 'I (have) loved.'
- Asp^0 and V^0 Agree for [Perf] + HM
- T^0 and Asp^0- V^0 Agree
- No stranded features

Passive: amor 'I am loved'
- $Voice^0$ and V^0 Agree for [Pass] + HM
- T^0 and $Voice^0$- V^0 Agree
- No stranded features

Perfect Passive: amatus sum
'I was/have been loved'
- $Voice^0$ and V^0 Agree for [Pass] + HM
- Asp^0 and $Voice^0$- V^0 Agree for [Perf]
- T^0 and Asp^0 agree for [Past]
- [Past] is stranded → auxiliary *sum*

5. Implications: Reduced Relatives

Reduced relative forms exist only for participles that take *be* (so-called *Whiz*-deletion in English; extended further by Iatridou et al., 2003)

(4) a. The cake eaten by the children
b. The children eating the cake
c. *The children eaten the cake

This is exactly an environment in which we would **expect** an auxiliary not to occur, assuming that reduced relatives lack higher inflectional structure and so never have stranded inflection.

The restriction to *be* follows if other auxiliaries (i.e. *have*) arise in structures with additional features (Freeze, 1992; Kayne, 1993), requiring verbal realization.

If *be* occupied AuxP, why would relevant inflectional categories fail to select *be* in reduced relative environments? → **support** for the default *be* analysis.

Please see the handout for full references.

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