Complex Copula Systems as Suppletive Allomorphy

1 Overview. This talk shows that complex copula systems display a cross-linguistic morphological profile consistent with their being cases of suppletive allomorphy (as suggested by Gallego & Uriagereka 2016; Myler 2014; Roy 2013, many others). There is only one BE at the level of the syntax; apparent differences in meaning between copulas come from different Pred heads in the complement of BE (Adger & Ramchand 2003; Bowers 1993; i.a.). In addition, HAVE verbs are allomorphs of BE in the context of a transitive Voice head (Myler 2014).

2 The Problem. A traditional approach to the semantics of nonverbal predication, found in Bach (1968), Lyons (1969), Partee (1986, 1989), Williams (1980), and many others, assumes that copular verbs themselves make no contribution to the semantics, or only a trivial one (for instance, denoting an identity function). An apparent problem for this tradition comes from languages that exhibit more than one verb corresponding to English BE. A famous case of this sort comes from Spanish, which has two predicative copula verbs ser and estar, and a separate existential copula haber (derived from a former HAVE verb, but not synchronically identical to the verb used in possession sentences—compare (3) and (4)). The problem is clear: if copular verbs are meaningless, ser, estar, and haber should be interchangeable, contrary to fact (see Welch 2012 for a detailed version of this argument, illustrated from numerous languages).

(1) Juan es feliz. (2) Juan está feliz. (3) Hay personas felices aquí. (4) Juan tiene hijos.

However, such complex copula systems need not force a retreat from the traditional approach to the semantics of copulas, given a Late Insertion approach to exponence along the lines of Distributed Morphology (Halle and Marantz 1993). Gallego & Uriagereka (2016), Myler (2014), and Roy (2013) have suggested such suppletive allomorphy analyses for individual languages. This talk goes further by showing that the suppletive allomorphy approach makes correct predictions concerning the cross-linguistic morphological profile of copula systems.

3 Predictions of the Suppletive Allomorphy Approach. Three types of prediction of the suppletive allomorphy approach can be identified; I dub these (i) decomposition, (ii) possible and impossible syncretisms, and (iii) impoverishment. These are each defined and illustrated in turn.

3.1 The decomposition prediction is that any syntactically present material which is silent in one language might be spelled out in another. Hence, it ought to be possible to find languages with overt morphemes corresponding to the syntactic heads which condition copula allomorphy. This prediction is confirmed: Balusu (2014) shows that in Telugu, an overt morpheme —gaa marks stage-level predicates in copula sentences, supporting the idea of a stage-level Pred head (Pred Stage) whose presence will condition the insertion of estar rather than ser with stage-level predicates in Spanish.

(5) Naaku koopam-gaa undi. (Telugu) (6) Naaku koopam undi. (Telugu)

I.DAT anger-gaa BE I.DAT anger BE

‘I am Stage angry.’ ‘I am indiv angry.’

Following Balusu (2014) and Markman (2008), I will assume that there are separate stage-level and individual-level Pred heads. I will also follow Irwin (2016) in assuming an existential Pred head, Pred Exist, which introduces a locative in its specifier (this locative is overt in some languages, I claim—see below). Pred Exist has the semantics of McNally’s INSTANTIATE predicate (McNally 1997). Finally, in possession sentences I assume that the semantic relation comes from the possessees itself (Beavers, Ponvert, & Wexler 2009; Myler 2014; Partee 1999), and that HAVE sentences are syntactically transitive. The structures of the verb phrases in (1), (2), (3), and (4) will then be as shown in (7), (8), (9), and (10) respectively. Schematic Vocabulary Insertion rules for the Spanish copula system are given in (11). The presence of a silent expletive in spec-VoiceP in (9) is motivated by invariant 3rd sg agreement in Spanish existentials.

(7) [VoiceBE Voice [vP vBE [PredP Juan [Pred Pred indiv [AP feliz ] ] ] ]]

(8) [VoiceBE Voice [vP vBE [PredP Juan [Pred Pred Stage [AP feliz ] ] ] ]]


(10) [VoiceBE Juan [VoiceP Voice [vP vBE [DP hijos ] ] ] ]]
Existential sentences vary cross-linguistically in terms of whether they involve an expletive in spec-VoiceP, and therefore whether their existentials are structurally transitive. This explains why some HAVE languages use HAVE in existentials (like French), whereas other HAVE languages use BE (like English). The structure of the French sentence in (12) is shown in (14); that of its English translation is in (15). The distribution of HAVE and BE in each language is then explained if they share the schematic Vocabulary Insertion rules in (13).

(12) Il y a des personnes heureuses ici.                  (13) \( \text{vBE} \leftrightarrow \text{HAVE} / \text{Voice}_{\text{trans}} \)  

It there has of the people happy here \( \text{vBE} \leftrightarrow \text{BE} \)  
‘There are happy people here.’

(14) \([\text{VoiceP il} [\text{Voice} [\text{VP} [x.p \text{vBE} [\text{PredP y1} [\text{Pred} \text{Pred}_{\text{exist}} [\text{dp des personnes heureuses}] ]]] [\text{pp ici}] ]]]\) \([\text{VoiceP Voice} [\text{VP} [x.p \text{vBE} [\text{PredP there} [\text{Pred} \text{Pred}_{\text{exist}} [\text{dp happy people}] ]]] [\text{pp here}] ]]]\)  

3.2 The possible and impossible syncretism prediction is that, given this decompositional syntax, complex copula systems will show commonalities in which subtypes of predication can be marked identically cross-linguistically, and which ones never are. This is because Vocabulary Insertion rules must be conditioned by coherent sets of features, or else be ‘elsewhere’ rules. I show that the present system successfully rules out two typological gaps identified by Clark (1978) (these gaps hold of HAVE languages and languages in which predicative possession is marked by existential BE):

(16) In no language does the existential copula take the same form as the individual-level copula, while stage-level locatives and possession sentences take a second, different copula.

(17) In no language do possession sentences take the same form as the individual-level copula, while stage-level locatives and existentials take a second, different copula.

These systems are correctly ruled out because neither of the groupings (e.g. existential+individual level on the one hand and stage-level+HAVE on the other, in the case of (16)) can be picked out by a coherent feature specification. The full talk will lay out all of the systems predicted to be possible by my approach, and show that they are all either attested or plausible; this cannot be done here for space reasons. 3.3 The impoverishment prediction is that complex copula systems might undergo morphological neutralization in certain marked environments. This is predicted by the suppletive allomorphy approach to complex copula systems, given the existence of Impoverishment (Bonet 1991). That this prediction is also correct is shown by a case-study from Cochabamba Quechua. In the present tense and in infinitives, this language has an existential copula tiya- (also used in an existential-BE-based possession construction), and another copula ka- used in all predicative environments. This pattern is exemplified in (18)-(21), and Vocabulary Insertion rules deriving it are given in (22).

(18) Libru-s mesa-pi ka-nku.  (19) Tom-pata libru-n tiya-n.  (20) Libru-s mesa-pi ka-nku.  

‘The books are on the table.’
‘Tom has a book.’
‘The books are on the table.’

(21) Libru-s Tom-pata ka-nku.  (22) \( \text{vBE} \leftrightarrow \text{tiya-} / \text{Pred}_{\text{exist}} \)  

‘The books are Tom’s.’

However, in the past and future tense, these distinctions are collapsed in favor of ka-. This has the profile of a typical case of impoverishment since (i) past and future are relatively marked feature values, and (ii) neutralization is in favor of ka-, which is the elsewhere allomorph in (22). Examples showing this neutralization in the past tense are given in (23) and (24), and (25) gives the impoverishment rule, which deletes Pred_{exist} at PF in marked tenses, before Vocabulary Insertion.

(23) Libru-s mesa-pi ka-nku.  (24) Tom-pata libru-n ka-nku.  (25) Pred_{exist} \( \rightarrow \emptyset / \text{T}_{\{\text{past/future}\}} \)  

‘There was a book on the table.’
‘Tom had a book.’

4 Conclusion. Complex copula systems are caused by suppletive allomorphy affecting a single BE verb, as shown by crosslinguistic morphological evidence. Therefore, complex copula systems do not in themselves threaten the idea that copulas are meaningless (pace Welch 2012).