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English Has Two Copulas

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1 Introduction

There has been some discussion in the literature on the question of whether the copula, *be*, is really a verb. The prevailing view, it seems, is that *be* heads a VP projection, and the (finite) copula that appears in English main clause predicative expressions, such as those in (1) is the inflected form of *be*. In other words, *is* in (1a-b) has raised to Infl by head movement from a lower V position.

(1) a. Rodney is a cat.

  b. Tim is in Australia.

When the copula appears in nonfinite clauses, such as in (2), it occurs in its (underlying) V position.

(2) Rodney seems to be a cat.

In this paper, I argue that while there is a great deal of evidence that *be* is truly a verb, there is no clear evidence that *is* is a verb and that it is derived from *be*. Moreover, I will present some evidence that the inflected copula is not derived from *be* and instead is generated in Infl as the pronunciation of finiteness features. Thus, I draw a categorial distinction between the nonfinite, uninflected copula *be* and the finite, inflected copula. The main evidence I draw on comes from the fact that in certain constructions in adult standard American English, the presence of an uninflected copula (*be*) forces an eventive or active interpretation of the predicate. This sort of interpretation is not available in those same contexts when *be* is absent, nor is it available in indicative main clause predicatives (e.g. *Rodney is a cat*), which contain an inflected copula. The upshot is that the inflected and uninflected copulas are not morphological variants of the same thing. I will also show that in languages that

permit a null copula in (indicative) main clauses, the inflected copula varies with the null copula, not with the uninflected copula.

Before proceeding, let me define what I mean by "copula." I take a copula to be a grammatical item that takes a non-verbal lexical predicate (NP/AP/PP) and links the predicate to the subject.[1] The copula itself may be verb-like or non-verbal (what I'll call "Infl-type"), and languages may have more than one copula, where their distribution can be determined by syntactic properties of the clause (such as tense) or semantic properties of the predicate (such as whether the predicate denotes a "more temporary" vs. "more permanent" property).

The existence of multiple copulas in a language is not unusual. For example, it is well known that Spanish and Portuguese have two copulas, *ser* and *estar*. Although I will not characterize the distinction between the two English copulas along the same lines as the distinction between *ser* and *estar*, it is not unreasonable to think that languages might use copulas in different ways or for different syntactic reasons. The linguistic typology of copulas is quite varied, ranging from West Greenlandic-type languages in which the copula is merely a verbalizing affix (it changes a non-verbal predicate into a verbal predicate), to languages like Spanish or Italian in which copulas display the full range of verbal inflectional morphology found on main verbs.

But I will try to show that English is not alone in its distinction between an Infl-type and a V-type copula. African American English, Hebrew, Irish and child standard English all give evidence of distinguishing a verbal and a non-verbal (Infl-type) copula.

Throughout the paper I will use *be* to indicate only the uninflected/non-finite/verbal copula; the inflected/finite/Infl copula is indicated by *is* (meant to cover all inflected forms: *is*, *am*, *are*; I do not assume that the past tense forms *was* and *were* fall straightforwardly under my analysis of *is*, but I will discuss them briefly in the last section).

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[1] I remain uncommitted at this point as to whether a copula may take a verbal predicate. In some sense, one would like it not to, so that the copula can be seen as something that "verbalizes" the predicate. On the other hand, it may be hasty to claim that *is* is not a copula when it takes a progressive verbal complement (*John is leaving*). The same goes for Spanish *estar* and Italian *stare*, which can take non-verbal complements but are used in forming the progressive (*sta mangiando* '(he/she) is eating').

2 *Be* is a Verb

First I will go through the arguments for claiming that *be* is a verb. Many of these arguments are made by Schütze (2000) and/or Rothstein (1999).

2.1 *Be* Shares Morphosyntactic Properties of Verbs

That *is* and *be* occupy different positions in the structure can be seen by their respective positions above/below negation, as in (3)–(4).

(3) a. John is not tired.

   b. * John not is tired.

(4) a. John will not be late.

   b. * John (will) be not late.

It is clear that *is* occupies a higher position in the structure than does *be*, as it appears before negation, whereas *be* appears after negation (*not*). *Be* in this respect behaves like other verbs, which appear under negation:

(5) a. John does not like bananas.

   b. * John likes not bananas.

Another piece of evidence that *be* is a verb comes from the rather mundane observation that the participial forms of *be* are like the participial forms of other main verbs: *be* can take the progressive -*ing* affix (*being*) as well as the perfect -*en* affix (*been*). Although words bearing these affixes may have properties of other lexical categories (nouns and adjectives, respectively: e.g. *John's [behavior]$_N$/[chastizing]$_N$ of Mary was out of line, He looked [sad]$_A$/[beaten]$_A$*), these affixes may be applied only to verbal stems (e.g. *chastize, beat*).

This property of *be* relates to one of the arguments made by Schütze: *be* is sometimes inserted simply to support these affixes, as in the following passive constructions.

(6) a. Susan was being complimented.

   b. Susan had been complimented.

   c. Susan had been being complimented.

When the aspectual affixes -*ing* and -*en* are present in a structure, they must attach to some verb. Of course, they can attach to a main verb, as in

Susan was complimenting Brian or *Susan was complimented*. But since a verb can bear only one inflectional affix at a time, additional affixes will require additional heads to affix to, and in these cases *be* is inserted. This is what happens in (6a-c).

Another one of Schütze's arguments for *be* being a verb is that it must be overt to provide (abstract) Case in structures in which no other Case assigner is available. Note the contrast in (7) and (8).

(7) a. I consider this crowd (to be) too big for the elevator to hold.

  b. I consider there *(to be) too many people in this elevator.

(8) a. John was considered (to be) the winner.

  b. The winner was considered *(to be) John.

In (7a) the postcopular phrase (*too big for the elevator to hold*) is a predicate and therefore does not require Case (on the standard assumption that only arguments require Case).[2] In (7b) the associate of the expletive subject *there* (the DP *too many people*) is referential and therefore needs Case (Belletti 1988; Lasnik 1992, 1995). *Be*, being a verb, can provide Case to the associate. The grammar thus allows for a structure in which an empty verb (*be*) provides Case for the associate. In (8) the copula is overt for the same reason. In (8a) the postcopular phrase *the winner* is a predicate and so does not need Case. Here, as in (7a) the copula is optional. But in (8b), in which the predicate is inverted with the subject, the postcopular element is referential and so requires Case. Again, the copula is overt to satisfy this formal requirement. See further arguments in Schütze (2000) that *be* is a verb and can assign Case.

Schütze's arguments for analyzing *be* as a verb are syntactic in nature: in each case he cites, *be* is overt to satisfy a formal requirement, and as such, he argues, it is a "lexically empty verb". Rothstein's (1999) arguments for analyzing *be* as a verb relate to a semantic difference between predicates with vs. without *be*. Let's now turn to some of these arguments.

2.2 Interpretational Effects of *Be*

As seen above in (7a) and (8a), there are some syntactic environments in adult English in which the copula may be omitted without the sentence becoming ungrammatical. They are all embedded clause contexts.

Some further examples are given in (9–10).

(9) a. I consider Rodney clever.

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[2]But see Bailyn (to appear) for evidence that predicates need Case too.

   b. I consider Rodney to be clever.

(10)   a. Rodney seems clever.

   b. Rodney seems to be clever.

The meanings of these predicates with or without the copula do not seem to be radically different, although there are subtle differences on closer examination. For example, it has been claimed (Rothstein 1999) that the predicate in (9a) involves a more inherent or individual-level interpretation than the predicate in (9b). My own judgment is that the same subtle difference is found in (10a–b).[3]

There are other constructions, however, in which the presence of an uninflected copula yields a more markedly different interpretation of the predicate. One such construction is that involving *make* plus a small clause complement, as in (11).

(11)   a. Rodney made Zoe polite.

   b. Rodney made Zoe be polite.

Sentence (11a) means that Rodney coached or tutored Zoe and thereby made her into a polite person. Her politeness is now a general property of her. Sentence (11b), instead, means that Rodney forced Zoe to act in a polite way. Her polite behavior may be restricted to that particular occasion (though it need not be, in principle).

A similar, though perhaps less stark effect can be seen in (12).

(12)   a. Zoe made Ben the leader.

   b. Zoe made Ben be the leader.

(12b) seems to imply two events, one of Zoe making Ben do something, and one of Ben becoming the leader. That is, Ben is actively involved in his becoming leader. (12a) lacks this interpretation: it implies a single event of Zoe making Ben the leader (it might be paraphrased 'Ben was appointed leader (by Zoe)').

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[3]There are certainly other semantic differences between infinitival vs. non-infinitival complements of *seem*, as noted by Williams (1983). In particular, there is a scope asymmetry when the subject is an indefinite (thus interpretable under existential quantification). *Someone seems to be sick* means "There seems to be someone sick," while *Someone seems sick* cannot mean this; the indefinite subject cannot be interpreted in the scope of *seem*, so it means "There is someone who seems sick."

Rothstein (1999) adopts the neo-Davidsonian view that *all* verbs, both stative and eventive, project a Davidsonian Event argument (e.g. Parsons 1990). Thus, according to her, it is the fact that *be* is a verb and therefore projects an Event argument that accounts for the interpretive differences between the (a) and (b) examples.[4] More specifically, Rothstein's claim is that *be* "combines with an AP complement, as in *be polite*, in effect creating a complex verb where *be* introduces the eventuality argument and *polite* expresses a property of that eventuality, the [state] which it instantiates. The AP *polite* denotes the politeness property, and the VP expression *be polite* denotes a set of eventualities that instantiate the politeness property," (Rothstein 1999, p. 363).

Thus, while *be* projects an Event argument because it is a verb, adjectival (and probably nominal predicates) do not introduce Event arguments. According to Rothstein, the lack of an eventive interpretation in (11a) and (12a) (in contrast to (11b) and (12b)) comes from the fact that these predicates lack an Event argument.[5]

2.3 Active *Be* Constructions

There is also a main clause context in which *be* can be inserted so as to cause a change in the interpretation of the predicate. This is the so-called "active *be*" construction (Partee 1977), illustrated in (13).

(13)   a. Max is a nuisance/silly.
        b. Max is being a nuisance/silly.

The predicate in (13a) denotes a general property of the subject, while in (13b) it denotes a property that applies to the subject at the moment of utterance. It is normally interpreted as indicating the subject's behavior and can be paraphrased as *Max is acting (like) a nuisance/silly*.

As in the case of *make*-complements, predicates with "active *be*" receive an eventive interpretation. Rothstein uses this fact to support her claim that *be* is a verb. As in the *make*-complements discussed above, the relevant contrast here is that the nominal or adjectival predicates do not have an eventive interpretation because nominal and adjectival predicates do not project an Event argument. All and only verbs do this.

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[4]Rothstein actually does not discuss cases like (12) which have a nominal predicate; she limits her discussion to adjectival predicates.

[5]I believe Rothstein would regard this claim as separate from the issue of whether DPs themselves can contain an Event argument (e.g. *destruction*); her point is rather that in a clause such as *John is a teacher/polite*, the predicate *a teacher/polite* does not introduce an Event argument for the clause.

2.4 VP-Ellipsis

So far the evidence that *be* is a verb comes from the fact that the presence of *be* (where its presence is optional) seems to induce an active or eventive reading of the predicate. These readings are not induced by the presence of *is* (in main clauses). Just as *be*-less embedded clauses lack an eventive reading of the predicate (*Rodney made Zoe polite*), so too are these interpretations absent in present tense matrix clauses, such as (14).

(14)   John is clever.

In fact, as far as I am aware, all of the arguments presented by Schütze and Rothstein (and others) for analyzing *be* as a verb apply only to non-finite copular clauses and do not directly address finite clauses containing the copula.

My point is that if *is* is raised from a V head, one would expect the corresponding eventive meaning associated with V to be forced even in main clauses. But this is not what happens. Therefore, I submit that *is* is present in main clause predicatives (i.e. non-verbal clauses) only as the spell-out of finiteness features in Infl. It is not the derived form of the verb *be*.

Not only is there semantic evidence that *be* is a verb (and a lack of semantic evidence that *is* is a verb), as we have seen above, there is also support from syntax for the claim that *is* and *be* are distinct entities. This support is found in an asymmetry in the grammaticality of VP-ellipsis in the following pair, noted by Warner (1986) and Lasnik (1999, 2000).

(15)   a.   John slept, and Mary will too.

         b.   John slept, and Mary will sleep too.

(16)   a.   * John was here, and Mary will too.

         b.   John was here, and Mary will be here too.

Lasnik accounts for this asymmetry in much the same way as that proposed here, namely by drawing a syntactic/categorial distinction between main verbs and auxiliary verbs. He claims that main verbs enter the derivation of a sentence in V and combine with inflectional affixes by Affix Hopping, while auxiliary verbs are inserted already inflected into the structure. Thus, *slept* is related to *sleep* derivationally, so that the deletion of the bare verb *sleep* can take place under identity to the past tense verb *slept*. However, *is* is not a derived form of *be* and so ellipsis cannot take place: there is no deletion under identity because there is no identity.

The same asymmetry between main verbs and *be/is* is found in comparative deletion.

(17)   a.   John runs faster than Bill will [~~run~~]

        b.   * John is taller than Bill will [~~be~~]

Note that this asymmetry does not result from a general problem with deleting the uninflected copula under VP-ellipsis. As we see in the following example (based on one from Lasnik (1999, p. 66)), it can be deleted when the copula in the first conjunct is likewise the uninflected copula.

(18)   John will be here, and Mary will too.

Roberts (1998) points out that Lasnik's conclusion holds only if VP-ellipsis is contingent on the presence of a V head in the first conjunct. Roberts notes that if, instead, a V containing a trace is insufficient to license VP-ellipsis, then the facts in (16) and (17) do not provide conclusive evidence that *is/was* is not raised from *be*. Because of space limitations, I will not discuss Roberts' argument more fully.

To summarize so far: there is strong evidence that *be* is a verb. It bears verbal participial affixes like other verbs, it is inserted to support such morphology if the main verb is already inflected, it is inserted to assign Case to postcopular DPs if they are referential, and it can give rise to an active interpretation of the predicate, as evidenced in the interpretive difference between predicates with *be* and those without *be*. Moreover, there is an asymmetry between main verbs and the copula in VP-ellipsis: bare main verbs can be deleted under identity to their inflected forms, since the inflected form is a derived form of the bare verb. But the copula cannot do this: *be* cannot be deleted under identity to the inflected copula, because *is* is not derived from *be*. Rather, English has two copulas: a V-type copula (*be*) and an Infl-type copula (*is*).

3 Other Languages With V- and I-Copulas

In addition to standard English, there are other grammars that distinguish a V-type copula from an Infl-type copula.

3.1 African American English

Some of the evidence for calling *be* a verb (V) in standard English came from embedded (nonfinite) clauses and from the progressive form of the copula in main clauses ("active *be*" examples). In African American English (AAE)

there is evidence in main clause nonprogressive contexts that *be* (but not *is*) is a verb.

It is well known that AAE permits the inflected copula to be omitted in main clause predicatives (Labov 1969; Green 1993; Rickford 1999). All of the forms in (19) are grammatical, and there is no change in the meaning of the predicate whether the copula is full, contracted or null (Green 1993, among others).

(19)   a. Sean (is/'s/0) a doctor.

       b. Sean (is/'s/0) tired.

       c. Sean (is/'s/0) in the yard.

In addition to the inflected/null copula, there is an invariant (i.e. non-inflecting) copula, *be*, that occurs in main clauses. This copula is not a variant of the inflected/null copula, in the sense that it is not in free variation with the inflected/null form. Rather, it yields a different meaning of the predicate. Thus, the sentence in (20) does not mean the same thing as (19b).

(20)   Sean be tired.

(20) means that Sean is tired habitually; (19b) does not mean this, rather it means that Sean is tired at the time of utterance.

That invariant *be* is truly a verb, occupying a V position, can be shown by its position with respect to negation (below, rather than above), and the fact that it takes auxiliary *do* in tag questions, as main verbs do (Green 1993, 2000).

(21)   a. Marcus isn't/ain't tired. (=Marcus is not tired now)

       b. Marcus don't be tired. (=Marcus is not habitually tired)

       c. Marcus don't like cake.

(22)   a. Marcus is/0 tired, isn't/ain't/*don't he?

       b. Marcus be tired, *isn't/*ain't/don't he?

       c. Marcus like cake, *isn't/*ain't/don't he?

Since predicates with invariant *be* express properties that apply over a potentially longer period of time than predicates with *is*/0 (i.e. habitually rather than only at the time of utterance), predicates with *be* in AAE are sometimes claimed (anecdotally) to be individual-level predicates (in contrast to predicatives without invariant *be*). Green (2000), however, argues that predicates with

invariant *be* must be stage-level. Her argument is that in order to have a ha-
bitual interpretation, a predicate must be able to iterate (i.e. hold on various
occasions). She proposes a Habitual operator (HAB) which binds a variable
in its scope and gives rise to a habitual interpretation. Adopting Kratzer's po-
sition that stage-level predicates project an Event variable, Green argues that
this Event variable is bound by (HAB). That is, the predicate in (20), *tired*,
is stage-level, and the Event argument of the predicate is bound by HAB.[6]
Thus the predicate has a habitual meaning. Green notes also that it is not the
case that predicates with invariant *be* take on an inherent or permanent sort of
meaning, which is often associated with individual-level predicates.

To illustrate this point further, Green shows that invariant *be* can occur
with normally individual-level predicates, but when it does so, the predicate
is coerced into a stage-level meaning. For example, the predicate in (23) is
forced to mean 'demonstrate knowledge' (stage-level) rather than the more
canonical (and individual-level) 'have knowledge.'

(23)   Sue be knowing that song.

The sentence in (23) means that on an arbitrary number of occasions
(greater than 1), Sue demonstrates in some capacity that she knows the par-
ticular song. The sentence cannot mean that Sue permanently knows the song,
even though we assume that Sue's knowledge of the song is present even on
occasions when she is not demonstrating knowledge of it (i.e. her "permanent"
knowledge of the song is implied but not asserted by (23)). That (23) is not
simply a main clause with progressive aspect is shown by the fact that the
inflected copula or its null variant cannot occur in this context.

(24)   * Sue (is/0) knowing that song.

There are two points made by the AAE facts. One is that the distinction
between the uninflected (*be*) copula and the inflected/null copula in AAE is
one of syntactic category: *be* is a V and *is*/0 is an Infl head, just as I have
argued that the inflected copula in main clauses and the uninflected copula in
embedded clauses in Standard American English differ by category. The sec-
ond point to be made here is that while the *be/is* distinction in AAE is related
to the stage/individual distinction, it is not indicative of this exact distinction.

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[6]For Green, the Event argument is associated with the lexical predicate itself (by
virtue of being stage-level), not with *be. Be*, which Green refers to as "aspectual *be*", is
the sort of thing that requires its complement to have an Event argument (thus in cases
where its predicate is normally individual-level, it is "coerced" into having a stage-level
meaning).

In other words, it is not the case that predicates with *is* are stage-level and predicates with *be* are individual-level. On the contrary, if we follow Green, predicates with *be* must be stage-level in order to receive a habitual interpretation (the property must iterate). But predicates with an inflected (or null) copula may be stage- or individual-level. *John (is) a doctor* is individual-level in AAE just as in SAE.

That the two copulas in AAE do not mark the stage/individual contrast will become relevant again when we return to Spanish and Portuguese below.

3.2 Child Standard English

Another "variety" of English in which there is evidence in main clauses for two copulas is child standard English. Like in adult AAE, there is a stage of child SAE in which the copula may be omitted in main clauses. This stage is a substage of the often-reported "root infinitive" stage, in which children's main verbs may lack inflectional morphology in main clauses (e.g. *Eve sit floor*). Some examples of children's null- and overt-copula utterances are given in (25)–(27). (The data come from CHILDES, MacWhinney and Snow (1985).)[7]

(25) a. He's a dog. (Nina 2;0.24)

      b. Patsy's a girl. (Peter 2;3.24)

      c. She's a crocodile. (Naomi 2;3)

      d. it basket. (Nina 2;2.6)

      e. I big boy. (Adam 2;7)

(26) a. this empty. (Peter 2;3.3)

      b. this is orange. (Peter 2;3.3)

      c. I not tired now. (Adam 3;2)

      d. I'm tired. (Adam 3;2)

      e. her thirsty. (Nina 2;2.6)

(27) a. my pen down there. (Peter 2;0.10)

      b. I in the kitchen. (Nina 2;1.15)

      c. Eric at Cathy house. (Naomi 2;4.30)

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[7]The children whose speech is examined here are Nina (Suppes 1974), Peter (Bloom 1970), Naomi (Sachs 1983), and Adam (Brown 1973). The number after the child's name indicates the child's age at the time of the utterance; age is given in years;months.days.

    d. he's home. (Nina 2;2.6)

    e. a lady's on it. (Nina 2;0.24)

Children at this stage alternately produce finite, inflected predicatives (as in (25a)) and non-finite, bare predicatives (as in (27a)), just as they alternate between finite/inflected and non-finite/uninflected main verbs. Averaged over the four children examined here, the rate of production of finite/inflected main verbs is 42%; thus, 58% of children's main verbs are uninflected (measured over verbs that *could* bear inflectional morphology, i.e. verbs with 3rd person singular subjects).

    What is significant for present purposes is that whenever the copula is overt, it occurs in its inflected form (*is*, etc.). Children produce an uninflected copula (*be*) in main clause predicatives less than 1% of the time (averaged across 4 children).[8]

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Children's Production of the Inflected Copula

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Child	% Inflected Copula	(N)
Nina	100	(231)
Peter	100	(577)
Naomi	99.7	(338)
Adam	97.3	(299)
average	99.3%	

    Thus, while *sit* may be the nonfinite form of *sits* in child English, *be* is not the non-finite form of *is*: instead *is* varies with the null copula.

    In light of the discussion in section 3.1, it is interesting to note that Adam, who had a somewhat higher rate of uninflected *be* in main clauses than the other children, is African American and may have been exposed to African American English (although Brown (1973) reports that Adam's parents spoke only the Standard dialect). Although I would not make a strong claim about this, it is possible that his more frequent use of main clause *be* is due to exposure to habitual *be*. Indeed, some of his uses of *be* in main clauses have a habitual interpretation, as in *Robin always be naughty when he break pens* (Adam, age 3;4).

    The child English data are admittedly only partially supportive of my account. That is, they show that at a stage of development in which children

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[8]N in the table represents the total number of copular utterances with an overt copula. Thus, Adam produced 299 expressions containing an overt copula, and in 97.3% of them the copula was inflected.

produce nonfinite verbs in matrix clauses, they do not produce *be* as the nonfinite form of *is*. Rather, they use a null copula as the nonfinite counterpart of *is*. These data are only partially supportive because children at this stage do not produce any embedded clause predicatives, so there is little chance to observe their use of *be* in contexts where it would be uninflected in the adult grammar. Promising, however, is a recent finding by Carson Schütze (personal communication) that in the few cases where children do produce contexts where the copula must be uninflected (e.g. with *will* or the semi-modals *gonna, hafta,* etc.), children do not omit *be*.

3.3 Hebrew

Apart from varieties of English that show a syntactic distinction between *is* and *be*, there are other languages that show a distinction between a V-type and an Infl-type copula. I will argue here that Modern Hebrew is such a language.

There is a rich literature on the syntax of the Hebrew present tense "pronominal" copula (Doron 1983; Rapoport 1987; Rothstein 1987; Greenberg 1994; Rothstein 1995, among others). Unlike past and future tense predicatives, which contain a verbal copula (*h.y.y*), in Hebrew present tense predicative constructions there is no verbal copula. The item that functions as a copula, referred to as Pron, is identical in form to the 3rd person pronoun (*hu* in masculine singular). Here I will discuss evidence that just as English *be* is a verbal copula and *is* is an Infl-copula, Hebrew *h.y.y* is a verbal copula and *hu* is an Infl-copula.

That the two Hebrew copulas (verbal and non-verbal) differ from each other syntactically can be seen from the fact that *h.y.y* occurs lower in the structure than the present tense pronominal copula (e.g. below Negation, as in (28)-(30) (these and the following data are from Greenberg (1994)).

(28) a. Dani (hu)   lo   more
          Dani (3m.sg) neg teacher
          'Dani is not a teacher.'

      b. * Dani lo   hu   more
          Dani neg 3m.sg teacher

(29) a. Dani lo   haya   more
          Dani neg be-past teacher
          'Dani was not a teacher.'

      b. * Dani haya   lo   more
          Dani be-past neg teacher

(30)   a.   Dani lo   roce banana
            Dani neg want banana
            'Dani doesn't want a banana.'

       b.   * Dani roce ʃo   banana
            Dani want neg banana

A further difference between the verbal copula and Pron is the fact that
the verbal copula, *h.y.y*, like other main verbs, can precede the subject. Pron
cannot do this.

(31)   a.   ha-yom roce Dani banana
            the-day want Dani banana
            'Dani wants a banana today.'

       b.   ha-ʃana haya Dani more
            the-year was Dani teacher
            'Dani was a teacher this year.'

       c.   * ha-ʃana hu   Dani more
            the-year 3m.sg Dani teacher

A final difference between Pron and the verbal copula is that, like in both
adult AAE and child SAE, the Infl-type copula (i.e. Pron) has a null variant,
but the V-type copula does not. Thus, *hu* may be omitted as in (32a) but *h.y.y*
cannot be omitted, as in (32b).

(32)   a.   Dani (hu)   more
            Dani (3m.sg) teacher
            'Dani is a teacher.'

       b.   Dani *(haya/yihye)   more
            Dani *(be-past/be-fut) teacher
            'Dani was/will be a teacher.'

Following Doron (1983), Rapoport (1987) and Rothstein (1995), Green-
berg analyzes Pron as the realization of agreement features in Infl. She claims
that "... when the main predicate of the sentence is not verbal, the agreement
features remain 'unattached' in Infl. In this case Infl contains no specifica-
tion for [tense] or [past] (as in present tense sentences), and realizes as Pron,"
(Greenberg 1994, p.10).[9]

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[9]See Greenberg (1994) for arguments that Pron is not a nominal element, i.e. it is
not a true subject pronoun.

3.4 Irish

Doherty (1996) notes that there are two lexical items in Irish that function as copulas in predicative constructions. One he calls a copula (*is*), and the other he calls a 'substantive verb' (*tá*). They differ from one another in the Case marking on the subject, the type of predicate they occur with (*is* occurs only with individual-level predicates), their position in the structure (*is* occurs in Infl while *tá* is in V), and the word order of other elements in the sentence (*is* occurs with VOS order, while *tá* occurs with VSO order).

(33)   a. Is dochtúir é
             cop doctor   him-Acc
             "He is a doctor."

        b. Tá sé   ar meisce
            is he-Nom drunk
            "He is drunk."

While the 'substantive verb' *tá* occurs with the canonical VSO order, in copular sentences like (33a) the subject occurs clause-finally and with Accusative case. Doherty argues that the copula (*is*) is an I°, not a verb, based on a number of criteria. For example, *is* can be omitted in casual speech (e.g. *(Is) as Carraig Airt é* 'He (is) from Carrigart'), and it is morphologically different from verbs in that it inflects only for past/conditional (*ba*) or present/future (*is*), rather than having separate forms for all four tense/mood distinctions (as verbs do).

Another property of the copula that *tá* does not share is that in interrogative, negative or subordinate clauses the copula is replaced by a complementizer or negation marker. Such a marker normally combines with Inflection, "giving rise to complex forms which include a tense morpheme" (Doherty 1996, p. 9). Thus, in the subordinate clause in (34), the copula is not spelled out separately from the complementizer particle, *gur*.

(34)   Dúirt siad gur   dhochtúir é.
         said they comp-cop-past doctor   him-Acc
         "They said he was a doctor."

Although Doherty does not give examples of *tá* in such constructions, the implication is that *tá* behaves differently, appearing as a verb with the Inflectional particle/complementizer as a separate lexical item.

An interesting fact about nominal predicative sentences, noted by Henry and Tangney (1999), is that while they are grammatical only with *is*, they may

be used with *tá* if the preposition *i* 'in' is used with the predicate, as in the following example.

(35) a. Is   múinteoir é.
         cop teacher   him-Acc
         "He is a teacher."

     b. Tá sé ina   mhúinteoir.
         Be he in-his teacher
         "He is a teacher."

In (35a), the sentence has the expected meaning, i.e. that the subject's profession is that of a teacher. The meaning of (35b), however, is stage-level, so that the subject is asserted to be a teacher "now". This shift in the meaning of the predicate is compatible with the shift caused by putting a normally individual-level predicate in an "active *be*" construction (*John is polite* (in general) vs. *John is being polite* (now)). Thus, the verbal copula seems to have a similar effect in these constructions in the two languages.

3.5 The V-/Infl-copula Split is Not Universal

As noted in the Introduction, there are other languages that have multiple copulas where the difference between the copulas is not the same as the difference argued for here between English *is* and *be*. I will mention only one such copular alternation here.

Spanish and Portuguese have two copulas, *ser* and *estar*. The general distribution of these copulas is that *ser* occurs with individual-level predicates, and *estar* occurs with stage-level predicates, as in (36) from Spanish (see e.g. Sera 1992; Luján 1981; Bull 1965; Roldan 1974; Schmitt 1992).[10]

(36) a. Juan es/*esta   un hombre/grande.
         John is-ser/*estar a man/big
         'John is a man/big'

     b. Juan esta/*es   en la casa/cansado.
         John is-estar/*ser in the house/tired
         'John is in the house/tired'

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[10]In all respects relevant to our purposes here, Spanish and Portuguese behave alike. I will use examples only from Spanish, but the main point can be made for Portuguese as well.

It may be tempting to liken English *be* to Spanish/Portuguese *estar* in that both are linked to the projection of an Event argument (if stage-level predicates project an Event argument, cf. Kratzer (1995)). However, both *ser* and *estar* behave morpho-syntactically like other verbs. Both copulas have an infinitive form, a present participle, and a past participial form, and both fully inflect for person and number agreement, though this inflection is irregular. Both also have past and future tense morphology. In the table below I compare some of the morphological forms of the two copulas (in Spanish) with the forms of a main verb (*vender* 'to sell').

	Ser	*Estar*	*Vender*
infinitive	ser	estar	vender
present participle	siendo	estando	vendiendo
past participle	ha sido	ha estado	ha vendido
1sg. present	soy	estoy	vendo
1sg. past	fui	estuve	vendí
1sg. future	seré	estaré	venderé

Thus, both of the copulas seem to be true verbs (V-type copulas) and not simply the spellout of finiteness or agreement material in Infl. Further support for the view that *ser* and *estar* are V-copulas comes from their occurrence below negation, as in (37).[11]

(37) a. Juan no es   profesor.
          John neg is-ser professor

          "John is not a teacher."

      b. Juan no está   en el jardín.
          John neg is-estar in the garden

          "John is not in the garden."

      c. Juan no come los platanos.
          John neg eat   the bananas

          "John does not eat/is not eating bananas

---

[11]I leave aside the question of exactly "where" Spanish negation resides in the structure, i.e. whether it is higher than in other languages, e.g. English, or whether Spanish *no* 'not' is a clitic. Important here is merely that both copulas behave like main verbs in this respect.

## 4 The Structure of Copular Constructions

The main argument of this paper is that *be* and *is* are different copulas. *Be* is a V-type copula, heading a VP projection, and *is* is an Infl-type copula, heading IP. *Be* displays various properties of verbs, such as assigning Case, taking participial verbal morphology and allowing an eventive meaning. *Is*, like other Infl-type elements (such as modals), displays none of these properties. Now let's look more carefully at what this would mean for the syntax of copular constructions.

Let us start with the assumption that in clauses without *be*, or another verb, no VP is projected. This would be the situation for a main clause like (38).

(38)   John is intelligent.

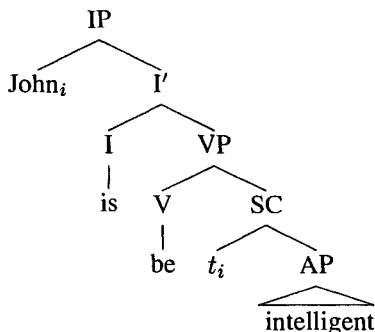Assuming no verb is projected in this clause, the structure of (38) would be that in (39).

(39)
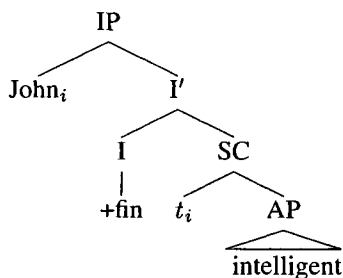
A [+fin] Infl node is pronounced as the inflected copula if no main verb is present in the clause.

If we accept the foregoing arguments for *is* and *be* being separate syntactic entities and not derivationally related, what prevents (38) from having a structure in which both *is* and *be* are projected? In other words, what rules out (40)?

(40)

```
                        IP
                   ┌────────┴────────┐
                John_i             I'
                            ┌────────┴────────┐
                            I              VP
                            │         ┌──────┴──────┐
                            is        V            SC
                                      │        ┌────┴────┐
                                      be      t_i       AP
                                                     ┌───┴───┐
                                                   intelligent
```

Certainly we do not want to claim that the structure in (40) is illicit for any subcategorization incompatibility. IP can of course select a VP complement, as is the normal case in main clauses with main verbs ([IP John [VP left]]).

Instead, we can turn to the observation that *is* never precedes a bare verb. Whenever *is* precedes a main verb, that verb is progressive (thus: *John is *run/running*). So whatever rules out **John is run* should also rule out **John is be intelligent* (e.g. *is* selects a ProgP when the predicate is verbal). Additionally, if *be* introduces an Event argument, then *John is be intelligent* should be disallowed since intelligence is not a predicate that can normally take an agentive subject (*??John is being intelligent*). Predicates that are compatible with an agentive subject (those that denote properties under the control of the subject), e.g. *polite*, can occur in this context. But as with other verbs *be* must be progressive if it follows *is* (thus: *John is being polite*).

5 Loose Ends and an Alternative

There are a number of issues raised by the hypothesis laid out above that require further consideration. I will mention some of them here, concluding with an alternative analysis of the semantic effects of overt *be* discussed above.

5.1 No, or a Different, Interpretive Shift

Perhaps the most obvious loose end involves embedded contexts in which *be* is optionally overt, but where it is overt it does not appear to force an eventive reading. For example, in the complement of *seem* or *consider*, the infinitive copula *to be* is optional, yet its presence does not seem to affect the meaning of the predicate (at least not in the same way as in "active *be*" constructions). Some such examples were seen in (9) and (10) above, repeated here as (41)

and (42).

(41) a. I consider Rodney clever.

      b. I consider Rodney to be clever.

(42) a. Rodney seems clever.

      b. Rodney seems to be clever.

Although, as noted by Rothstein (1999), the predicates in the (a) examples have a more inherent and thus less "eventive" feel to them than in the (b) examples, the (b) examples still do not yield the sort of eventive interpretation we find in *make* complements with *be* or in the active *be* cases. (See also footnote 3 about the semantic asymmetry discussed by Williams.)

It may be worth noting that these constructions contain the infinitive *to be*, rather than the bare verb *be* or progressive *being*. Thus, in these non-eventive cases Infl is spelled out as *to*. It might be argued that here *be* is merely fulfilling a selectional requirement of *to*, namely that it take a (overt) verbal complement. The full infinitive *to be* may be left out, but once *to* is present in Infl, *be must* occur (thus: **Rodney seems to clever*). The idea would be that when *be* is required for selectional reasons, it is acting as a semantically empty V and does not contribute any semantics of its own.

Another issue requiring further attention is the environment of free adjuncts. As seen in the contrast between (43a) and (43b), the presence of *being* has a semantic effect on the interpretation of the free adjunct, although it is a different sort of effect from the one we have seen previously.

(43) a. Clean-shaven, John might impress the dean.

      b. Being clean-shaven, John might impress the dean.

The difference in meaning between (43a) and (43b) is that (43a) can have a conditional meaning (i.e. 'if John is clean-shaven, he might impress the dean'), while (43b) cannot have that interpretation. It must mean 'because John is clean-shaven, he might impress the dean.' As discussed extensively in Stump (1985) the free adjuncts without *being*, such as (43a), can have either the weak (conditional) reading or, less saliently, the strong (non-conditional) reading. Free adjuncts without *being* (cf. (43b)) can only have a strong reading.

It is unclear what it is about *being* that forces the strong interpretation of the predicate, and I leave this for future work.[12]

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[12]That it is the presence of the copula and not the presence of progressive aspect that yields this semantic asymmetry is shown by the fact that the asymmetry still obtains

5.2 Past and Future Tenses

Another issue that has not been discussed thus far is that of the copula in tenses other than present, namely future and past: what about the forms *will be, was,* and *(has) been*? If the category of the copula as V or I depends solely on its lexical form and/or morphological expression of finiteness, then future and present/past perfect forms (*will be, has/had been*) should be analyzed as verbs, but simple past *was* should not be (rather, like *is* it should be analyzed as Infl). (Toward this, note that in Lasnik's example of the VP-ellipsis asymmetry he uses *was* in the first conjunct to contrast with uninflected *be* in the second conjunct.) On the other hand, a sentence like *John was clever* seems much more amenable to an eventive reading ('John was being clever/demonstrating cleverness', especially if a time is specified, e.g. *last night*) than the present tense *John is clever*. (Of course, the inherent or individual-level reading of *clever* is also still available in past tense: *John was clever* can mean 'John was a clever person'.)

Moreover, the existence of an actual tense in the clause (i.e. future or past, as opposed to present, which may not be a real tense at all in English (Enç 1987)) seems to suggest an eventuality or event. Because of this I am inclined to limit my claim that the inflected copula is not derived from a V to the present tense *is*, leaving the analysis of *was* open for now.

Since the future in English is formed with a modal (*will*), a directly related issue is the question of the analysis of *be* under modals in main clauses (e.g. *John might be intelligent/a doctor*). My analysis predicts that the predicate in such a clause should allow an eventive interpretation, but I don't believe it does. These constructions must be investigated more thoroughly in the future.

5.3 An Alternative

There remains an alternative approach to accounting for the semantic asymmetry we have observed between the uninflected and inflected copulas. It is that the environments in which *be* yields an eventive interpretation (e.g. "active *be*", complement of *make*) are environments that require an eventive verbal predicate to begin with. That is, if we substituted *be* with a main verb in these environments, that verb should be eventive, not stative.

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even when comparing two free adjuncts containing verbal predicates:

   i Standing on a chair, John can touch the ceiling. (weak or strong)

  ii Having unusually long arms, John can touch the ceiling. (strong only)

(cf. Stump (1985, p.53ff))

(44)   a.   Sam made Julie eat a banana/??like bananas.

        b.   Julie is eating bananas/*liking bananas.

In these environments a verbal predicate must be eventive, so the apparent eventiveness of *be* may in fact come from something else in the structure (whatever blocks stative verbs from appearing there).

We are still left with the asymmetry with *is* however: what prevents *is* from permitting an eventive interpretation of the predicate? The answer may simply reduce to the fact that the one environment in which *is* appears, the present non-progressive, does not like to have eventive verbs. At least, eventive verbs in the present non-progressive cannot have a here-and-now/ongoing interpretation; instead, they must have a habitual or generic interpretation.

(45)   Sam eats bananas

        a.   = Sam eats bananas habitually, in general

        b.   ≠ Sam is eating bananas at time of utterance

Perhaps the right way to look at these facts is that there are environments in which a verbal predicate must be eventive (not stative), and perhaps there is some Aspectual projection that determines this restriction (e.g. an AspP is projected and it selects only eventive Vs); in these environments, a copula will receive an eventive interpretation. In environments in which there is no such eventive restriction (or: in which eventive predicates cannot receive a here-and-now/ongoing interpretation), the copula will not have an eventive interpretation.

This tack is attractive because it allows us to take care of the apparently problematic cases pointed out above (those in which an overt uninflected copula does not yield an eventive interpretation). These environments (complement of *seem, consider*, modals) are ones that are either unbiased with respect to eventive vs. stative predicates (such as under modals), or they prefer stative predicates (the complements of *seem* and *consider*).

However, by itself it is not a knock-down argument either for or against a derivational relationship between *is* and *be*. It is consistent with the view that *is* is derived from *be* and the semantic properties of its predicate come from other properties of the clause (i.e. whatever regulates the occurrence of stative vs. eventive verbs). But it does not argue against the view that *is* is not derived from *be*. In other words, it provides additional evidence that *be* is a verb, as *be* behaves like other verbs in being eventive in the relevant contexts, but it does not show that *is* is also a (derived) verb. It could be that *is*, being non-verbal, is simply not subject to the same stative/eventive restrictions that verbs are.

5.4 Summary

To summarize, in this paper I have argued for the following points:

- There is clear evidence from English that the uninflected copula *be* is a verb (heads a VP): it can carry verbal participial morphology, it follows negation, its presence appears to yield or allow an active or eventive interpretation of the predicate (where this interpretation is unavailable in the absence of *be*).

- There is no clear evidence that the inflected copula *is* is also a verb: it does not share *be*'s morphosyntactic properties (it can't take participial morphology, it precedes negation), and it does not give rise to an active/eventive interpretation of the predicate.[13]

- There is crosslinguistic evidence that languages may contain two copulas that differ in exactly the ways that *be* and *is* differ: Hebrew, Irish, African American English and (perhaps) child English all show evidence of having a V-type copula that is truly a verb, and an Infl-type copula that is functional/pronominal, not verbal. Taking the view that languages have deep, structural similarities to one another, the crosslinguistic patterns, coupled with the differences we observe between *be* and *is* suggest that *be* and *is* differ along the same parameter: *be* is a V-type copula and *is* is an Infl-type copula.

The analysis presented here of the English copulas allows us both to maintain the traditional Aristotelian view of the copula in main clauses as something that contributes no semantic substance to the sentence, while also incorporating the important insights of Rothstein, Schütze and others that *be*

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[13]The question of whether *is* assigns Case is tricky. If the associate NP in an existential construction (*a man* in *There is a man in the garden*) in fact needs Case, then it is not clear where it should get Case from if not from *is*. The other possibility that has been considered in the literature is that the associate receives Case by transfer or agreement from *there*. But see Schütze (1997) for arguments against this hypothesis. Likewise in so-called "inverse" copular constructions (*The best candidate is John*, inverted from *John is the best candidate*), the postcopular DP is referential and therefore requires Case. *Is* seems a likely candidate for that. Note that in both constructions, *is* may be overt for reasons other than Case assignment, the most obvious of which would be the expression of finiteness features in Infl. However, I concede that it does seem like the only Case assigner in those constructions. Whether its being a Case assigner forces us to conclude that it is therefore a derived verb, I do not know.

displays many properties of the category of Verbs and is "semantically relevant" (Rothstein 1999, p. 347) in a way that the Infl-copula is not. Another potential advantage of this view is that it might allow us to dispense with the stipulation (Chomsky 1957, and much other work) that *be* and auxiliary *have* are the only verbs in English that raise from V to I. That is, the copula that occurs before negation in main clause declaratives and inverts with the subject in interrogatives is generated in Infl, not raised from V. Naturally, more must be said about auxiliary *have*, and I reserve that for future work.

References

Bailyn, John. to appear. The strange case of Slavic predicate case. In *Proceedings of the workshop on predicative constructions*, ed. Gerhard Jäger. Berlin: Zentrum für Allgemeine Sprachwissenschaft.

Belletti, Adriana. 1988. The case of unaccusatives. *Linguistic Inquiry* 19:1–34.

Bloom, Lois. 1970. *Language development: Form and function in emerging grammars.* Cambridge, MA: MIT Press.

Brown, Roger. 1973. *A first language.* Cambridge, MA: Harvard University Press.

Bull, W. 1965. *Spanish for teachers.* New York: Ronald Press.

Chomsky, Noam. 1957. *Syntactic structures.* The Hague: Mouton.

Davidson, Donald. 1967. The logical form of action sentences. In *Essays on actions and events*, 105–148. Oxford: Oxford University Press.

Doherty, Cathal. 1996. Clausal structure and the Modern Irish copula. *Natural Language and Linguistic Theory* 14:1–46.

Doron, Edit. 1983. Verbless predicates in hebrew. Ph.d. dissertation, University of Texas at Austin.

Enç, Mürvet. 1987. Anchoring conditions for tense. *Linguistic Inquiry* 18:633–658.

Fernald, Theodore. 2000. *Predicates and temporal arguments.* Oxford: Oxford University Press.

Green, Lisa. 1993. Topics in African American English: The verbal system analysis. Doctoral Dissertation, UMass Amherst.

Green, Lisa. 2000. Aspectual *be*-type constructions and coercion in African American English. *Natural Language Semantics* .

Greenberg, Yael. 1994. Hebrew nominal sentences and the stage/individual-level distinction. Master's thesis, Bar-Ilan University.

Henry, Alison, and Denise Tangney. 1999. Functional categories and parameter setting in the second-language acquisition of irish in early childhood. In *Language creation and language change*, ed. Michel DeGraff. Cambridge, MA: MIT Press.

Kratzer, Angelika. 1995. Stage-level and individual-level predicates. In *The generic book*, ed. Gregory Carlson and Francis Pelletier, 125–175. Chicago: University of Chicago Press.

Labov, William. 1969. Contraction, deletion, and inherent variability of the English copula. *Language* 45:715–762.

Lasnik, Howard. 1992. Case and expletives: Notes toward a parametric account. *Linguistic Inquiry* 23:381–406.

Lasnik, Howard. 1995. Case and expletives revisited: On greed and other human failings. *Linguistic Inquiry* 26:615–633.

Lasnik, Howard. 1999. *Minimalist analysis*. Malden, MA: Blackwell.

Lasnik, Howard. 2000. *Syntactic structures revisited*. Cambridge, MA: MIT Press.

Luján, Marta. 1981. The Spanish copulas as aspectual indicators. *Lingua* 54:165–210.

MacWhinney, Brian, and Catherine Snow. 1985. The child language data exchange system. *Journal of Child Language* 12:271–296.

Parsons, Terence. 1990. *Events in the semantics of English*. Cambridge, MA: MIT Press.

Partee, Barbara. 1977. John is easy to please. In *Linguistic structures processing*, ed. A. Zampolli. Amsterdam: Holland.

Rapoport, Tova. 1987. Copular, nominal and small clauses: A study of Israeli Hebrew. Doctoral Dissertation, MIT.

Rickford, John. 1999. *African American Vernacular English: Features, evolution, educational implications*. Blackwell.

Roberts, Ian. 1998. *Have/Be* raising, move F, and procrastinate. *Linguistic Inquiry* 29:113–125.

Roldan, M. 1974. Towards a semantic characterization of *ser* and *estar*. *Hispania* 57:68–75.

Rothstein, Susan. 1987. Three forms of English *be*. In *Mitwpl vol. 9*, ed. M. Browning, E. Czaykowski-Higgins, and E. Ritter, 225–237. MITWPL.

Rothstein, Susan. 1995. Small clauses and copular constructions. In *Syntax and semantics 28: Small clauses*, ed. Anna Cardinaletti and Maria-Teresa Guasti. Academic Press.

Rothstein, Susan. 1999. Fine-grained structure in the eventuality domain: The semantics of predicative adjective phrases and *be*. *Natural Language Semantics* 7:347–420.

Sachs, J. 1983. Talking about the there and then: The emergence of displaced reference in parent-child discourse. In *Children's language*, ed. K. E. Nelson. Hillsdale, NJ: Lawrence Erlbaum.

Schmitt, Cristina. 1992. *Ser* and *estar*: A matter of aspect. In *Proceedings of NELS 22*. GLSA.

Schütze, Carson. 1997. Infl in child and adult language: Agreement, case and licensing. Doctoral Dissertation, MIT.

Schütze, Carson. 2000. Semantically empty lexical heads as last resorts. In *Semi-lexical categories: On the content of function words and the function of content words*, ed. Norbert Corver and Henk van Riemsdijk. Berlin: Mouton de Gruyter.

Sera, Maria. 1992. To be or to be. *Journal of Memory and Language* 31:408–427.

Stump, Gregory. 1985. *The semantic variability of absolute constructions*. Dordrecht: Reidel.

Suppes, Patrick. 1974. The semantics of children's languages. *American Psychologist* 29:103–114.

Warner, Anthony. 1986. Ellipsis conditions and the status of the english copula. In *York papers in linguistics*, volume 3, 87–107. York University Linguistics Department.

Williams, Edwin. 1983. Against small clauses. *Linguistic Inquiry* 14:293–.

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