

10.1 Introduction

In this chapter, I reexamine McCawley's (1988/1998) analysis of the English copula *be* as a semantically empty auxiliary analogous to auxiliary *do*. Like *do*, copular *be* is not represented in his syntactic deep structure but is inserted transformationally, in order to create a verb phrase where the actual predicate phrase is headed by a nonverb. Following Dik (1983), I argue that the same kind of analysis can be extended to all instances of *be* identified as progressive, passive, modal, and existential; they are all copular and the copula itself is an auxiliary verb. I submit that *be* is in complementary distribution with auxiliary *do*: the latter combines with verb phrases or is used elliptically for them, whereas the former combines with nonverbal predicates or is used elliptically for them. Nonverbal predicate phrases are those headed by nouns, adjectives, prepositions, or, in some cases, locative adverbs (e.g., *outside* and *outdoors*). They also include "weird things like *up to no good*" (Jerry Sadock, pers. comm., August 2003).

An ancestor of this chapter was presented at the 40th meeting of the Southeastern Conference on Linguistics (SECOL), at Old Dominion University, VA, in 1989. Although I discussed the ideas a couple of times with Jim McCawley, I never got around to writing them up for publication. Jim saw the point of this alternative but perhaps did not find it compelling enough to revise his discussion of the subject matter in the 1998 corrected version of *The Syntactic Phenomena of English*. Since I joined the faculty at the University of Chicago in January 1992, I have presented my position on the copula in English a few times in my Syntax-1 classes as an alternative worth considering. It is in the same spirit that I am publishing it here to celebrate the legacy of a teacher, mentor, and friend who encouraged me to read critically, pay attention to as much relevant data as possible, and speak my mind after careful consideration of the issues. I am grateful to Elaine J. Francis, Jerry Sadock, Rebecca Wheeler, and an anonymous reviewer for constructive comments on an earlier version of this chapter. Remaining shortcomings are my sole responsibility.

The analysis proposed below is a bit more abstract than Jim McCawley may have wanted it, especially in the case of “modal” and “existential” *be*, which would require positing underlying predicates that do not surface as verbs, hence the insertion of *be* in the s-structure. In his later work, Jim seems to have shied away from his earlier, more abstract representations of the Generative Semantics days. However, the analysis is quite consistent with his acknowledgment of mismatches, or lack of isomorphism, between deep structure and surface structure configurations, similar to the analysis in Sadock 1991 and later, improved versions of Autolexical Syntax. I defend my theses within McCawley’s own syntax framework, perhaps to show indirectly, as was McCawley’s own practice, that it is not so much the particular framework of one’s analysis that matters but the particular insights it articulates—which can be translated into any other framework—that deserve attention, especially now when approaches to syntax have proliferated.

It is perhaps not by accident that I have already invoked three frameworks that could enable me to defend the same theses equally successfully. Sometimes the choice of a particular framework is more a matter of which one a researcher has greater facility with for expressing his or her ideas than a matter of which one will yield the most significant insights. This is also in keeping with McCawley 1977, which highlights some insights captured in Montague Grammar, shows how they are equally captured, or can be, in Generative Semantics, and explains why McCawley felt he did not have to abandon his own framework. He wrote *The Syntactic Phenomena of English* (1988/1998) in the same spirit. The book is marked in part by an impressive theoretical eclecticism regarding the origins of ideas that inspired his discussions of various aspects of English syntax. I try to do the same here, and I conclude the chapter with some theoretical considerations.

10.2 Background

Syntacticians have traditionally distinguished between the following kinds of *be* in English: the progressive, the passive, the copular,¹ the modal (as in *He was to come*), and the existential *bes*. Although they are all distinguished from each other by their morphosyntactic peculiarities (viz., by how their complements are inflected or introduced), the progressive, the passive, and the modal *bes* have all been considered as auxiliary verbs, whereas the copular and existential *bes* have been assumed to be main verbs. Even studies as recent as Rothstein 1999 assume this position. One of the facts that require explanation is that these main verbs behave like auxiliary verbs in the following constructions:

- (1) a. Is Paul tall?
- a'. *Does Paul be tall?²

- b. Is there a book on the coffee table?
- b'. *Does there be a book on the coffee table?

Since the 1970s, the literature on the topic has generally favored a position suggesting, or claiming, that the copular and existential *bes* behave like auxiliary verbs simply because they are homophonous with the auxiliary *bes*.³ This is basically the position advocated particularly by Akmajian and Wasow (1975), Emonds (1976), and Iwakura (1977). Akmajian and Wasow are aware of the inconsistency of the proposed analysis in relation to modal and main verb *haves*, which undergo Subject-Auxiliary Inversion and Auxiliary Ellipsis in some dialects of English but not in all, as illustrated in (2).

- (2) a. I have not to go.
- a'. I don't have to go.
- b. I have not many books.
- c. I don't have many books.

In this respect, they are similar to the modal verb *need*, which in some dialects, notably of American English, selects auxiliary *do* and behaves like a regular main verb.

- (3) a. I need not go.
- b. I don't need to go.

Nowadays, one may explain such inconsistent grammatical behavior by claiming that the modals *have* and *need* are not fully grammaticalized yet and continue to behave like main verbs by selecting auxiliary *do*. Copular and existential *bes* can be said to have evolved at a faster pace than modal *have* and *need* toward the status of "auxiliary verbs" (items that behave syntactically like main verbs—and carry tense markers in finite clauses—but function semantically as modifiers of their syntactic complement verbs, those typically identified as "main verbs"; see Mufwene 1994). However, "Standard Theory" syntacticians, who subscribed to extrinsic ordering of ad hoc transformational rules designed to account for the well-formedness of surface structures, stuck to the *Be-Shift* transformation (a precursor of V-to-I movement in Government-Binding syntax; Elaine J. Francis, pers. comm., 2003), which moves copular and existential *bes* from their main-verb position in the deep structure into AUX (the ancestor of INFL) when this node dominates no modal or other auxiliary verb.

Like Bach (1967), Rosenbaum (1967), and Dik (1983), McCawley (1988/1998) sought his solution to this issue in the fact that, unlike main-verb *have*, copular *be* is a semantically empty constituent required by the surface combinatoric principles of English syntax to head a predicate phrase otherwise headed by a nonverbal constituent (viz., an adjective, a noun, a preposition, or an adverb). Typologically, English

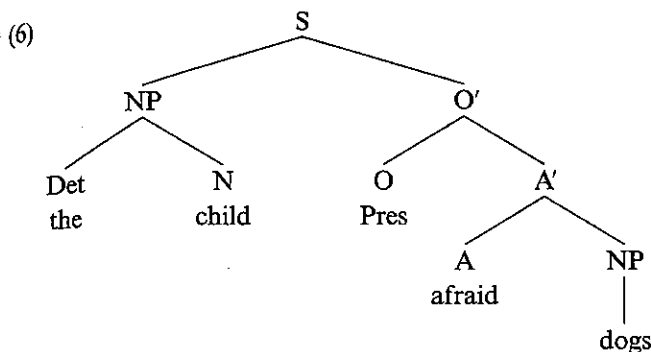
is different from languages such as Russian, Chinese, and several creoles, in which even main clauses can also have predicate phrases that are not headed by verbs and have copulaless constructions in which English would require a copula.⁴ In English, this surface combinatoric requirement is not restricted to main verbs, because there are nonfinite clauses other than small clauses that also require a copula.

- (4) a. Mary always wanted to be an astronaut.
b. Being an astronaut is something that Peter never dreamt of.

Therefore, the presence of the copula is not required just for holding tense and agreement marking in finite clauses, as has typically been argued, but is needed to meet the surface phrase-structure requirements of English in both finite and nonfinite clauses. Small clauses such as those in (5) can thus be considered exceptional in that they do without the copula. However, they play a central role in determining whether copulaless deep structures should (or should not) be preferred to the conventional alternative of representing the copula underlyingly, even though they apparently contribute nothing to the semantics of the relevant sentences.⁵

- (5) a. John found *Susan smart*.
b. The police wanted *the criminal in jail|there*.
c. The students wished for *Alice as their teacher*.

In his syntax framework, McCawley (1988/1998) posits a deep structure that, under the influence of his earlier practice of Generative Semantics, represents all the semantically relevant information for understanding an utterance and nothing that is semantically empty.⁶ Thus, items such as *of* in *the development of a hypothesis* and copular *be* have no place in his deep structure. He posits transformations that have the power to generate new structures and therefore to account for discrepancies between the surface and the deep structures. He also sees no point in using exactly the same kind of lexical categories in the deep structure as in the surface structure. A consequence of having structure-building transformations is to assign particular lexical categories to constituents that are unspecified for lexical category in the deep structure but function as predicates. Accordingly, McCawley devises an unspecified syntactic category O' that is headed by an unspecified lexical category O with which some nonverbal predicates such as tense markers are associated. He posits rules that convert English tenses to suffixes in finite clauses but the marker of PAST to the lexical verb *have* in nonfinite clauses. For some reason, in the case of predicate phrases headed by adjectives, prepositions, nouns, or adverbs, he departs from the Generative Semantics abstract representations and resorts to the compromise of having underlying phrase structures such as (6) (for *The child is afraid of dogs*), in which the lexical categories are clearly identified.



The application of McCawley's *Be*-Insertion rule, similar to Dik's (1983) Copula Support (see below), has the effect not only of generating a verb phrase headed by the copula in the surface structure but also of providing a carrier for tense.⁷ An advantage of the Dik-McCawley approach is the seemingly elegant way in which it handles VP-Deletion or VP-Ellipsis in the following example:

(7) Jim was tall but George is/was not \emptyset .

As noted above, the application of the rule in this particular case seems exceptional if one considers the fact that main verbs leave an auxiliary *do* behind if they do not follow an auxiliary verb in the antecedent clause.

(8) a. Bill plays the harmonica, and Larry does \emptyset too.

b. Phil has bought a new car, and Jane has \emptyset too.

The way McCawley (1998) handles the whole proposal regarding *Be*-Insertion and V'-Deletion in chapters 5, 6, and 8 is unfortunately not fully consistent. He identifies nonverbal predicates as acceptable governors of transformations, including *Tough*-Movement and Extraposition, which must apply before *Be*-Insertion (1998, 141). Whether or not the latter transformation applies postcyclically, in a way similar to *Do*-Insertion (= *Do*-Support), he states that it must apply after V'-Deletion (1998, 171)—my Predication Phrase Deletion—which he refuses to treat as a precyclic rule (1998, 172). He lists *Do*-Support but not *Be*-Insertion among postcyclic rules. Despite the following observation, he proceeds in the rest of the book with deep structures that include verb phrases headed by *be*, a practice that leads him away from the insight that he did not want to miss:

A second way requires a significant alteration of our underlying structures but provides insights that would otherwise be missed. Suppose that copula *be* were not included in deep structures (and thus that there was a transformation inserting copula *be*). Predicate adjectives would be in the same deep structure position as any other governors, that is, the governor would in every case be the head of the X' of a [_S NP X'] structure. (1998, 141)

If one follows this appealing insight (as I do below) and what McCawley also proposes about the interaction of *Be*-Insertion with cyclic rules, there is every reason to infer that he assumes *Be*-Insertion to apply after Predicate Phrase Deletion simply because he espouses Akmajian and Wasow's position that "V's whose head is extracted retain the status of V'" (McCawley 1998, 208). This entails that deleted nonverbal predicate phrases leave behind a copy that triggers *Be*-Insertion, on the model of *Do*-Support, at some level of the derivation. Without this assumption, McCawley's proposal would require that Predicate Phrase Deletion apply after *Be*-Insertion; otherwise, there would be nothing to trigger the insertion. Thus, as an inserted auxiliary, *be* would have to undergo Attraction to Tense, unlike support *do*.

However, in the rest of the book McCawley actually reopens the door to the problem that Akmajian and Wasow's analysis created: because he posits, or simply represents, a main-verb *be* (or at least he does not identify it as an auxiliary verb) in the deep structure, he lets it undergo Attraction to Tense before the application of Predicate Phrase Deletion. As I show below, the insight being lost is that there is no evidence that the grammar of English has such isomorphism between its deep and surface structures or that the copula as a semantically empty verb is a main verb in the same capacity as verbs such as *become* and *go*. Nor is there evidence that the copula is distinct from all those other forms of *be* identified as "auxiliary" or "existential."

It is also interesting that McCawley does not stick to an alternative analysis that he considers very briefly:

It is thus necessary to revise the above characterization of "governor" to allow for predicate adjectives as governors. One way of doing this is simply to give a disjunctive definition: the governor in a structure [_S NP [_{V'} V X]] is the V unless the V is *be* and the X is A', in which case it is the A of the A'. (1998, 141)

This approach to the problem is consistent with my own position (Mufwene 1992b) that grammars are not monolithic, that syntactic rules need not all be triggered by syntactic factors, that "V'-Deletion" is a misnomer for Predicate Phrase Deletion, and that its application conditions are semantic rather than syntactic, at least not exclusively so. However, because copular *be* is not clearly identified as an auxiliary verb, the inconsistency problem that arises from Akmajian and Wasow's analysis survives this solution too. If copular *be* were assumed to be an auxiliary, then McCawley would have to adopt a different kind of deep structure showing that the auxiliary combines not with a V' but with a nonverbal predicate phrase. (It is immaterial now how different this conceivable deep structure would be from the *be*-less alternative that I favor.)

To be sure, it makes sense to assume that like main-verb, or possessive, *have* in British English, the copula behaves like an auxiliary verb in interrogative, emphatic,

negative, and elliptical constructions because it is phonetically similar to auxiliary *be* or *bes* in progressive, passive, and modal constructions. However, it would really be informative to determine whether there is no other, more plausible explanation. The same is true of existential *be*. And indeed, every piece of evidence presented below in section 10.3 militates for Dik's (1983) position that copular *be* is nothing more than an auxiliary verb. Copular and existential *bes* are one and the same auxiliary verb and their syntactic behavior is consistent with this identification.

Claiming that *be* is not present in the deep structure but is inserted transformationally has the advantage of providing a unified solution for copular, existential, and other auxiliary *bes*, suggesting that they are all the same, namely, auxiliary constituents (Dik 1983). Here too, one would wish that McCawley had stuck to Dik's conclusion, from which he departs by maintaining a conservative distinction between progressive *be* (which is represented in the deep structure), passive *be* (which is transformationally inserted during the formation of the passive construction), and copular *be* (also transformationally inserted for the reasons discussed above). In chapter 8, McCawley (1998) chooses to distinguish progressive *be* from passive *be* in two ways: first, by representing the former in the deep structure (p. 218) but inserting the latter transformationally (p. 228), and second, by considering the form *be* sufficient in all of the underlying structures and inserting the appropriate suffix on the modified verb in the s-structure. Transformations intended to satisfy English surface morpho-syntactic requirements attach the suffix *-ing* to verbs modified by progressive *be* and the suffix *-en* (to be reinterpreted phonetically into the relevant past participial form) to verbs modified by passive *be*.

McCawley's solution is consistent with the identification of modal *be* as an auxiliary verb distinct from the copula, because it combines with an infinitival clause (a matter that I discuss below) but not with a nonverbal predicate.

- (9) a. John was to meet Mary here but didn't make it.
 b. John was to *(be) with Mary here but is nowhere to be found.

The meaning of (9b) obviously changes if *to* is also omitted, which can certainly lead to the conclusion—questionable, as I argue below—that modal *be* is different from copular *be*. One winds up with the impression that it is only the copula that McCawley (1998) considers to be semantically empty and that there are as many auxiliary *bes* in English as there are syntactic functions. There is as yet no particular reason why a language would not use the same morpheme, *be* in the case of English or *être* in the case of French, for all the different functions associated with the copula. Nor is there any a priori reason why a morphological distinction must be made between the different syntactic functions that *be* is associated with, or even only between auxiliary *bes* and copular or main-verb *be*. After all, one of McCawley's own assumptions about syntactic representations is that surface structure

distinctions need not be isomorphic with deep structure distinctions. In the case of English, he shows that there are many more possibilities in the deep structure than in the surface structure, and norms of well-formedness are not identical for both levels of representation. Thus, *afraid dogs* (or some more abstract representation) may be well formed in the deep structure but not in the surface structure.

In the next section, I argue that McCawley could have chosen a more reductionist approach, in which one and the same copular auxiliary *be* could be inserted transformationally in progressive, passive, modal, and copular constructions, and perhaps also in existential ones.

10.3 Evidence for a Reductionist Analysis of *Be* in English

English does not seem short of evidence for reducing auxiliary and main-verb *bes* to one single, copular case of a semantically empty verb inserted to form a verb phrase out of a predicate phrase headed by a nonverb. If, after examining facts of English discourse, one were to choose intuitively which of the surface discontinuous markers of a progressive construction is for all practical purposes more basic or critical, one's candidate would be the participial suffix *-ing* rather than *be*. That is, some abstract representation such as *-ING* or *PROGRESSIVE* would be the ideal candidate in McCawley's kind of deep structure, with *be* inserted in the surface structure only to satisfy the surface combinatoric requirement that he invokes to explain the insertion of copula *be*. Following Ross (1972), the rationale for this is that the participial suffix makes the verb less "verby," or (somewhat) adjective-like; therefore, another item that is more "verby" (and could carry tense in a finite clause) should head the predicate phrase without changing the meaning of the construction. A copula is the designated morphosyntactic item for this function. There are, however, plenty of constructions that indicate that the copula can be omitted under specific pragmatic or sociolinguistic conditions.

In casual speech and in nonstandard varieties such as African American Vernacular English (AAVE), the suffix is retained (albeit with an alveolar, rather than velar, nasal: *-in*) whereas *be* is typically reduced or omitted, as evidenced in Labov 1969 and several studies on copula absence since then. Constructions such as (10a) are common, whereas (10b) is unattested.

- (10) a. The boys ('re) goin' there.
b. *The boys are go there.

Headlines and photo captions are more likely to contain a copulaless construction with a present participial form, such as in (11a), than the alternative in (11b).

- (11) a. Bush Heading for the Middle East
b. *Bush Be Head for the Middle East

How Many *Bes* Are There in English?

The same is true of passive *be*, as illustrated in (12) and (13).

- (12) a. Larry('s) *Buried Here*/(*Being*) *Driven out of Power*
 b. *Larry's *Bury Here*/Drive out of Power⁸
- (13) a. Prince *Driven out of Power*
 b. *Prince *Be Drive out of Power*

In the case of the modal *be* construction, the choice is between, on the one hand, a *be*-less alternative with *to* alone marking the modal function (consistent in some ways with Radford's (1997, 49–54) analysis of this *to* as a nonfinite modal auxiliary) and, on the other, a *to*-less alternative, with *be* alone marking the function.

- (14) a. John \emptyset *to Be* with Mary Here⁹
 b. *John \emptyset *Be* with Mary Here
 c. *John $\emptyset\emptyset$ with Mary Here

Construction (14b) cannot be interpreted modally, though one may choose to interpret *be* here as a consuetudinal auxiliary in relation to, for instance, Hiberno/Irish English, or as "invariant *be*," as in the literature on AAVE. Unlike all the other instances of *be* discussed so far, this one would not be interpreted as semantically empty. As observed in note 2, the verb would be identified here as a specific aspectual marker, which, consistent with Green's (1998) analysis, does not have the same syntactic behavior as tense and modal auxiliaries. It is used in interrogative, emphatic, and negative constructions with the semantically empty auxiliary *do*.

Construction (14c) cannot be assigned a modal interpretation either. The only conceivable interpretation in this case is 'John is/was with Mary here'. Likewise, (15a) is a conceivable headline or caption whereas (15b) is not, at least not with the intended modal meaning and with *meet* intended as an infinitive. Interestingly, (15c) reports an event that has already taken place, the tense of *meets* having the value of historical present.

- (15) a. President Bush *to Meet* Prime Minister Blair
 b. ?President Bush *Meet* Prime Minister Blair
 c. President Bush *Meets* Prime Minister Blair

All these examples illustrate the fact that in headlines and captions, writers select the surface structure parts of predication that preserve the essential meaning and dispense with those that are not essential to interpreting the meaning, including all cases of *be* in would-be finite clauses. The constraints that bear on the above cases also seem to bear on cases of predication traditionally associated with the copula, to the extent that the omission of the copula does not affect the interpretation of the construction, as can be extensively observed in the literature on the absence of the copula in AAVE.

- (16) a. Larry is out.
 b. Larry's out.
 c. Larry out.
 d. *Larry is.
 e. *Larry's.

(16d-e) cannot be used nonelliptically with the meaning associated with (16a-c). However, the constructions in (17) would be well-formed photo captions.

- (17) a. Crown Prince Out of Power
 b. Bill Tall, Smart, and Highly Appreciated
 c. "The Rock" Fit and Brimming with Enthusiasm

All these examples show that the absence of *be* does not affect the overall meaning of the construction and that it is a kind of "cosmetic constituent" needed to meet a specific target construction in the surface syntax of English, namely, to form a verb phrase where one is needed in finite and nonfinite clauses other than small clauses. *Be* in all these cases seems to be the same morpheme connecting a non- or less-"verby" predicate to the subject noun phrase. It is indeed plausible to assume that the present participial form of the progressive is less "verby." This participial form can carry neither tense nor agreement markers, though it is not fully adjectival either. For instance, in comparative constructions, it behaves like a verb in being followed by its modifier phrase, but not like an attributive adjective, whose modifier precedes it.

- (18) a. We heard kids singing louder/more than adults.
 a'. We heard kids sing louder/more than adults.
 b. We heard louder/more kids.
 b'. *We heard kids louder/more singing.
 c. A new gang of kids, noisier than the earlier cohort, passed by.
 c'. *A new gang of kids, more noisily singing than the earlier cohort, passed by.

Adjectives sometimes display a pattern similar to verbs and present participial forms in following, without a copula and in the style of secondary predication, the noun phrase they modify, as shown in (18c-c'). However, they remain different in that their own modifiers must precede them. We can thus safely conclude that the verb *be* used in the progressive is the same copular *be* used before adjectival, prepositional, nominal, adverbial, and less "verby" predicates. The same conclusion can be drawn about the past participial form of the passive construction, which actually displays more similarities with adjectives.

- (19) a. Lynn's arguments (were) more easily accepted (by the audience).
 b. Lynn's arguments (were) more easily acceptable (to his audience).

The question about the modal construction is whether *to* is a complementizer or a modal in its own right that requires a bare infinitive. Is it different from the *to* that combines with *able* and *have* in the alternative modal constructions illustrated in (20)?

- (20) a. Surprisingly, I could reproduce the narrative intact from my dream.
 a'. Surprisingly, I was *able to* reproduce the narrative intact from my dream.
 b. Andrew must resign.¹⁰
 b'. Andrew *has to* resign.

Incidentally, (20b) can function as a headline, though it is less clear whether (20b') can. If it can, the omission of *to* would produce an ill-formed headline. Recall, however, that McCawley's conception of syntax allows deep structure material to surface as zero markers. This is true of, for instance, preposition phrases without preposition heads, as in *John wrote a poem (*on/*at) last Tuesday*. Could we therefore assume that modal constructions with *be to* are derivations from some deep structure non-verbal modal material that must combine with an infinitival clause when the complementizer *to* and *be* are inserted to form a verb phrase? Or is it more plausible to assume, like Radford (1997, 49–54), that *to* is a nonfinite modal? As Elaine J. Francis reminds me (pers. comm., September 2003), the modal analysis of *to* (which seems to apply to all cases where it has been identified as a complementizer) is justified, partially at least, by the fact that *to* always combines with a verb phrase, not with a sentence. Much to the credit of the proposed alternative, the relevant, modal *be* precedes *to* (unlike the *be* that sometimes follows the same modal to form a verb phrase out of its complement). Radford's analysis also entails acknowledging the lexical status of modal *to* as nonverbal.

Both analyses have their own merits and undoubtedly some shortcomings that need not be discussed here. What is particularly significant is that neither analysis speaks against treating modal *be* as a copula qua semantically empty auxiliary. There is thus ample support for the reductionist approach that I argue McCawley (1998) could have considered. Although McCawley (1976) also cautions linguists against speciously claiming "significant generalizations" that seem to lack psychological realism, my hypothesis is justified by uses of the same phonetic form, *be* (and its conjugated variants), for what appears to be the same syntactic function.

Dixon (2002, 7) seems to propose a similar reductionist analysis for existential *be*. He states:

[I]n other languages, there is an alternative copula construction in which the C[opula]-C[omplement] is omitted. This applies to Ancient Greek (where one can say 'god is' with the meaning 'god exists, there is a god'), and also to Jarawara.

The analysis seems quite applicable to English, except that the inversion rule associated with *There*-Insertion must apply. However, McCawley (1998, 94–97) reminds

us that *There*-Insertion is not restricted to existential *be*. It also applies to several other verbs when the subject has an "existential interpretation" and the verb "ascribes existence or 'visibility' to the subject" (1998, 95), as in (21b–d).

- (21) a. There is a Santa Claus.
 a'. *A Santa Claus is.
 b. There arose a commotion.
 b'. A commotion arose.
 c. Yesterday there occurred a tragic event.
 c'. Yesterday a tragic event occurred.
 d. There barked a dog.
 d'. A dog barked.

What makes the existential construction with *be* different is the fact that *There*-Insertion applies obligatorily, a behavior that McCawley seems to associate with its "pure existential" interpretation (1998, 96). There are, in any case, two good reasons for not treating existential *be* as a regular, intransitive main verb: (1) in elliptical constructions, it may not be replaced by the supportive *do* (unlike the verb *exist*); (2) if it is a one-argument predicate, it does not behave like one in most cases where it is used—it cannot be used alone, nonelliptically, after an indefinite subject, as shown in (21a').

The evidence seems to suggest that existential *be* is a copula, in other words, a semantically empty support/auxiliary verb that should not occur clause-finally unless the construction is elliptical, as in (22).

- (22) Was there a car in the driveway? —Yes, there was.

The syntactic behavior is similar to what can also be observed in the following example in which a different verb is used:

- (23) Did there arise a commotion after the speech? —Yes, there did/*arose.

The evidence shows that existential *be* behaves like an auxiliary verb and may in fact be one—that is, the copula.

It is difficult to argue strongly for or against the above proposal, even if we can assume a lexically null variant of *exist*. As in the case of modal *be*, the evidence is rather weak, lying essentially in the fact that there is no strong argument against the proposed analysis, which is very reductionist. Support for this reductionism also comes from the fact that the same phonetic form is used for a syntactic function that is the same in all cases, namely, to form a verb phrase where the surface syntax of English requires one. And one particular consideration that seems to favor the conclusion that one and the same copular *be* is used in all the cases considered so far is this: it is curious that in a language that has lexicalized fine distinctions in the semantics of auxiliary verbs (e.g., different ways of expressing obligation), so many differ-

ent functions would be associated with what appears to be one and the same verb *be*. The case would seem peculiar even under the nonmonolithic conception of grammar outlined in Mufwene 1992b, which cautions that grammatical principles of a language need not be consistent with each other. I conclude that all the *bes* traditionally identified as copular, progressive, passive, modal, and existential are all the same copular *be*; moreover, as pointed out by Elaine J. Francis (pers. comm., September 2003), the meanings associated with these different functions can be attributed to other elements present in each construction.

The remaining question is whether copular *be* is a main verb or an auxiliary verb. I have suggested so far that it is an auxiliary, because, like other auxiliary verbs in English, it is used elliptically and as a support element in inverted, negated, emphatic, and tag question constructions. I have also pointed out analogies with the auxiliary *do*, with which it seems to be in complementary distribution,¹¹ and I have highlighted the fact that it is a semantically empty surface-structure constituent, at least in the functions traditionally identified as a copula and as progressive and passive auxiliaries, and conceivably also as a modal auxiliary and as an existential verb. It can be omitted without loss of meaning in the predicate phrase in small clauses and in headlines. In the present modification of McCawley's (1988/1998) conception of syntactic derivations, it is after the formation of the verb phrase that *be* in any of the above functions can also be used elliptically to stand for the nonverbal predicates that it would otherwise appear with.

One can see why Akmajian and Wasow (1975) had to devise a *Be-Shift* rule to move copular *be* from its main-verb position to an auxiliary position. However, this was an approach that must have also had to invoke a more ad hoc deletion rule to account for the absence of *be* in headlines and photo captions, as well as in small clauses, especially in those contexts where there is no conceivable alternative in which the secondary predicate phrase would be headed by *be*.

- (24) a. Mary caught *Larry*_i \emptyset _i *naked in her room*.
 a'. *Mary caught *Larry*_i \emptyset _i *be/was naked in her room*.
 b. *Bill*_i could be seen \emptyset _i *standing on the table*.
 b'. **Bill*_i could be seen \emptyset _i *be/was standing on the table*.
 c. *John*_i stood on the platform \emptyset _i *singing the national anthem*.
 c'. **John*_i stood on the platform \emptyset _i *be/was singing the national anthem*.
 d. *The body*_i lay on the ground \emptyset _i *covered with blood*.
 d'. **The body*_i lay on the ground \emptyset _i *be/was covered with blood*.
 e. He wiped *the dust*_i \emptyset _i *off the table*.
 e'. *He wiped *the dust*_i \emptyset _i *be/was off the table*.

The proposed analysis is admittedly quite abstract, of the kind that syntacticians have been moving away from since the late 1970s, and I can see why McCawley

(1988/1998) would have avoided it. Truly, the complication in the analysis arises only with regard to modal and existential *be* that some linguists may prefer to treat as exceptional. On the other hand, the argument that there must be some good reason why the same phonetic form *be* (and all its allomorphs) is used for all these seemingly different functions is not without its merits. In the next section, I will articulate more benefits to be gained from this analysis.

10.4 Conclusions

One of the peculiarities of McCawley's (1988/1998) syntax is its dual interest in, on the one hand, language-particular facts and, on the other, typological and language-universal considerations. One can recognize this strength also in Dixon's (2002) discussion of the copula in Australian languages, which starts with typological considerations, some of which were discussed above. I conclude this chapter with such observations. The most significant difference between English and languages that allow nonverbal predicate phrases is that English requires a verb phrase in all but small clauses. It differs from some languages that likewise show a strong preference for VP-orientation (like Swahili) in using what appears to be one and the same verb, *be*, identified in the proposed analysis as a copula. It behaves in all respects like a semantically empty auxiliary verb and is thus similar to *do*, with which it seems to be in complementary distribution. The latter combines with, or replaces, verb phrases, whereas *be* combines with, or replaces, nonverbal predicate phrases.

The proposed analysis also helps us understand why in English creoles and others that have developed from Western European languages (whose predication pattern is VP-oriented), the copula has been lost especially before adjectival and prepositional predicates. Concurrent with their tendency to dispense with redundant and/or semantically empty surface-structure fillers, they have also dispensed with the copula. Like languages such as Mandarin Chinese, these new vernaculars prefer that adjectives and prepositions not combine with a copula when they head a predicate phrase. One can say that they are PredP-oriented in the sense that whatever heads the predicate phrase in the deep structure remains its head in the surface structure. The exception is noun phrases, which in most of these languages must then be headed by a copula. In the case of creoles such as Jamaican, there is also a specialized locative copula, as in (25c), which can be argued not to be semantically empty and can be treated as a regular verb.¹²

- (25) a. Kieti taal.
 Katie tall
 'Katie [is] tall.'

- b. Ingrid (de) ina di hows.
Ingrid be in the house
'Ingrid [is] in the house.'
- c. Maria de huom.
Maria is home
'Maria is home.'

Sentence (25b) illustrates the same point, although *de* is optional before a locative preposition, simply because it becomes redundant before a more specific locative marker. This optionality is a consequence of the fact that a predicate phrase can also be headed by a preposition in the surface structure.

Regardless of whether substrate influence is taken into account, an important factor in this particular evolution from the English system is the loss of the finite/nonfinite distinction (Mufwene and Dijkhoff 1989) and the expression of tenses with periphrastic markers rather than with verbal affixes, which would certainly make the copula useless. It has been retained most in equative/identificational clauses, where it is typically followed by a noun phrase, and, as noted above, in locative contexts. In both cases, it carries no tense inflections. In some creoles, the forms are also different. For instance, in Jamaican Creole, the identificational copula is *a* (pronounced [a]), whereas the locative one is *de* (pronounced [de]).

These creole data confirm a reason why the English verb *be* has been identified by so many different names. It has been associated with different syntactic functions, which in some languages are served by different lexical items. From an evolutionary point of view, the data also show that even these grammatical distinctions bore on language-restructuring processes that produced creoles, regardless of whether substrate influence is invoked. Syntacticians may have seen all such typological evidence as justification for positing so many different *bes* in English. Yet the language-specific evidence adduced in section 10.3 is compelling enough to posit one and the same *be*, a copula or a semantically empty auxiliary, in all the contexts. It is actually sound typology to show that not exactly the same surface-syntactic distinctions are made from one language to another.

My analysis also enables us to take a closer look at previous analyses of the variable absence of the copula in AAVE. First, it was not necessary for Labov (1969) to discuss copula absence in terms of "low-level," phonological deletion. As argued in Mufwene 1992b, a Copula-Insertion rule, subject to the same phonological constraints as the Copula-Deletion rule, can also account adequately for the same facts. One must remember that the distributional patterns of copula absence are not parallel to those of copula contraction; and, contrary to Labov's claims, the copula is not "deleted" just in a subset of those contexts where it can be contracted. A redisplay of Labov's own statistics shows copula absence to be in inverse proportion to

both the full copula and contractions (Mufwene 1992a; for a more elaborate discussion, see Kautzsch 2002, chap. 4).

To be sure, Labov was influenced by syntactic analyses of the 1960s that all represented *be* underlyingly. However, it is now obvious that copula insertion analyses of *be* could perhaps account more insightfully, or just less ad hoc-ly, for the behavior of the copula in standard English itself, especially in regard to Predicate-Phrase Deletion (traditionally identified as Verb-Phrase Deletion) and Subject-Auxiliary Inversion. What Labov needed then is what he accomplishes in Labov 1998 with the notion of “coexistent systems”—that is, a conception of grammar that, like the non-monolithic grammar proposed in Mufwene 1992b, allows two or more (partial) grammars, with different typological orientations, to coexist and therefore compete with each other in the same language variety. In the present case, this view holds that speakers alternate between dominant VP orientation, typical of standard English, and PredP orientation, also attested in some English creoles (among others), thus accounting for the variation that has been the subject of so many investigations in variationist sociolinguistics (see Rickford 1998).

Second, Labov (1969) need not have apologized for lumping all instances of *be* (progressive, passive, and copular) together. It appears that they all belong together in English (a dialect of which is AAVE, after all): they are all copular, according to the definition given by Dixon (2002, 8):

[F]or a verb to be identified as a copula, it must occur with two core arguments, C[opula]S[subject] and C[copula]C[omplement], with CC including at least the identity/equation relation, (a), or the attributive relation, (b).

Assuming that present and past participial forms function as CCs, as they are not fully “verby,” we can reexamine why the rate of copula absence is the highest before progressive verbs. The discussion in section 10.3 suggests that the present participle is more “verby” than the past participle, which is more adjectival. The copula would thus seem maximally redundant before it, the *-ing* suffix being sufficient to express the progressive meaning. Since the different grammatical principles of a language need not be monolithically integrated, some may be semantically motivated and others may be motivated by purely syntactic factors (Mufwene 1992b). In AAVE, progressive constructions may be the cutoff line in patterns of predication between VP orientation and PredP orientation, the fact that there is strong variation between absence and presence of the copula notwithstanding.¹³

We must bear in mind that predication is also an area of considerable nonmonolithicity in the sense that VP orientation, marked by copula presence, and PredP orientation, allowing copula absence, coexist significantly in AAVE, although the variationist literature clearly shows that in the case of predicative adjectives, prepositions, and noun phases, instances of copula absence are in the minority relative to

instances of full and contracted copula combined. The fact that the rate of copula absence is the lowest before predicative noun phrases is something that AAVE shares not only with English creoles but also with Mandarin Chinese, in which the predicative noun phrase is almost obligatorily linked to the subject by a copula. All these cross-systemic considerations appear to support the analysis proposed in this chapter.

Notes

1. According to the same tradition, the copula applies to functions that are identificational (e.g., *Monica is the lady he wanted to meet*) and equative (e.g., *Vesper is the Evening Star*), and it also links adjectival and locative predicates to the subject. (See also Dixon 2002.) I assume the *be* of cleft-focused constructions to be identificational too, although there are languages in which a specialized focus marker is used for this function, in a construction that is not a literal translation of the English. One such language is Kikongo-Kituba (spoken in the Democratic Republic of Congo), in which the focus marker *si* is clearly different from the copula *ké(l)e*, as illustrated in (i) and (ii).

(i) *Si Mobútu (ya) bantu zól-áká vé.*
 FOC Mobutu (CON) people like-PAST not
 'It's Mobutu (that) people didn't like.'

(ii) *Péteto ké(l)e muntu ya mubúlú.*
 Peter COP person CON trouble
 'Peter is turbulent/Peter causes trouble.'

2. There are nonstandard English dialects, such as African American Vernacular English (AAVE), in which it is possible to ask questions similar to those identified as ill formed in (1a') and (1b').

(i) Do Paul be loud?

(ii) Do Paul be talkin' a lot?

This *be* is known as "consuetudinal," denoting repeated processes. As Green (1998) explains it, in the case of AAVE consuetudinal *be* is an aspectual marker, which is not subject to the Subject-Auxiliary Inversion rule. In such varieties, the copula still undergoes Subject-Auxiliary Inversion, as in (iii) and (iv).

(iii) Is Paul tall?

(iv) *Do/Does Paul be tall?

Consistent with the position to be defended in the text, *be* in (i)–(ii) is considered as the (primary) marker of the relevant aspect, not as a copula. The construction changes its meaning, and is therefore no longer the same, once consuetudinal *be* is omitted. Sentences (v) and (vi) are not synonymous.

(v) Paul be loud. (i.e., 'Every time I visit or see Paul, I find him speaking loud, though he may not be a loud person.')

(vi) Paul (is) loud. (i.e., 'Paul speaks loud—that's his characteristic.')

3. Some studies (e.g., Dowty 1979; Partee 1977, 1986) have suggested even more distinctions, recognizing for instance an equative or identificational *be*, which raises the same syntactic problem as the copular and existential *bes*. See Dixon 2002 for a fuller catalogue of the

distinctions. They are relevant typologically, to the extent that there are languages such as Swahili that indeed use different verbs for some of the meanings conveyed by these putatively different *bes*. However, the reductionist conclusion of this chapter makes it unnecessary to consider the full range of these distinctions here, at least in McCawley's (1988/1998) transformational framework, in which the surface structure sometimes contains forms that correspond to no particular constituents in the deep structure, as in the case of *of* in *the development of a hypothesis*.

4. For a history of the role of the copula in the debate on predication since Aristotle, see Lenci 1998. I wish to underscore the fact that copular *be* in particular is not used in English constructions to carry tense, contrary to what has often been suggested in the syntax literature. Rather, its function is to form a verb phrase where one is required, in both finite and nonfinite clauses. (For a similar observation, see also Dixon 2002, 9.) The only exception seems to be small clauses, in which a copula is not used and which appear to give us an idea of what the required elements of predication are in English. What makes my observation significant here is the fact that nonfinite clauses, such as those in (i) and (ii), do not seem to carry any particular tense, at least not morphologically, even if one invoked McCawley's (1988/1998) own Tense Replacement rule, which would allow for a "zero morpheme."

(i) Everybody wants to be happy.

(ii) Jane wouldn't mind being alone during the next few months.

Considering (ii), one might want to argue that the role of the copula is actually to carry verbal inflections, without which predication would be incomplete (Lenci 1998). Such a position makes sense only if one also assumes that *be* in (i) is inflected as well (say, with a null form). Otherwise, the position I advocate makes more sense, assuming that secondary predication is as informative as primary predication, with some temporal information having to be inferred from semantic properties of the main verb. My position is further supported by the common assumption since Emonds 1976 that modal verbs and other auxiliary verbs take verb phrases as their objects. Copular *be* can be interpreted to play precisely the role explained above, to avoid ill-formed constructions such as (iv).

(iii) Billy can be noisy.

(iv) *Billy can noisy.

This is the kind of explanation that McCawley (1988/1998) provides in chapter 8—namely, nonfinite *be* occurs where the preceding verb requires a VP complement, regardless of whether the infinitive is introduced by the complementizer *to* or not.

5. Rothstein (1999) argues against the position that the copula is a semantically empty constituent that is motivated only by the surface syntax of typologically English-like languages. According to her, sentences like (i) and (ii) are not completely synonymous, because "it has often been commented that small clauses like in [(i)] 'feel' more 'individual level', inherent, or general than their inflected verbal [i.e., infinitival] counterparts" in (ii), which "[are] used [simply?] to make an individual level predication" (p. 349).

(i) Mary believes/considers Jane very clever.

(ii) Mary believes/considers Jane to be very clever.

Yet the following alternatives suggest that this putative semantic difference may have more to do with specific semantic or pragmatic properties of the predicate *clever* or its particular

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co-occurrence with the matrix verbs *believe* and *consider* than with the alternation of small and infinitival clauses per se:

(iii) I expect Jane *(to be) very nice.

(iv) I believe/consider the duty nurse *(to be) Rina.

In any case, although these contrasts are relevant to understanding when copulaless constructions are permitted in English, Rothstein's basic position is peripheral to the main arguments of this chapter. Since I do not find her arguments compelling, I will leave the matter alone and focus here on insights that can be gained from studying what I will identify as the Dik-McCawley syntactic approach to the copula.

6. Until he gets to chapter 8, which plays a kind of "magical role" in the articulation of his framework, he is apologetic about including *be* in some deep structures:

... however, copula *be* will be included in the deep structures presented below even though it strictly speaking need not—in fact, should not—be there. (McCawley 1998, 142)

7. Had McCawley opted to remain closer to the more abstract representations of Generative Semantics, the meaning of FEAR in *afraid* would be represented in a rather abstract way that captures the partial synonymy between the adjective *afraid* and the verb *fear* and only the syntactic derivation, under specific pragmatic specifications, would determine the choice of *afraid* and its identification in the surface structure as Adjective. This would motivate the insertion of the semantically empty preposition *of* between this surface adjectival predicate head and its object. Thus, *of*-Insertion prevents violating a surface combinatoric constraint of English that does not allow an object complement to combine directly with an adjective, contrary to what happens in the case of verbs. Likewise, the deep structure of *development* in *development of a hypothesis* would be something that captures its partial synonymy with the verb *develop*. A nominalization transformation, under specific pragmatic conditions, would yield the surface form *development*. As surface combinatoric principles of English disallow combining a noun directly with its direct object, except in compounds (in which case the object precedes the noun), the preposition *of* is inserted between the noun and its object.

8. In the case of *bury*, it is possible that the final consonant could be omitted here in AAVE, but this is also one of those environments where the omission rule is the least likely to apply, because the word-final consonant is not part of a consonant cluster. Also, because semantically empty elements are more likely to be deleted than morphemes that carry meanings, it would be surprising to see the past participle marker omitted while the copula is retained even in the contracted form.

9. The *be* that is retained in these examples is not modal *be*. Although it is a copula, it is not the item under discussion in these examples. It must occur here because the complementizer *to* (for this seems to be the identity of *to* that follows modal *be*) must combine with an infinitival clause. It is thus a second *be* that is inserted in the complement clause. The full clause contains two *bes*: *John was/is to be with Mary*.

10. It is worth noting that modal auxiliaries behave differently from the nonmodal auxiliary *have*, which McCawley characterizes as a lexicalization of PAST tense in nonfinite contexts (including the present perfect, where PAST is underlyingly in the scope of PRESENT). Modal auxiliaries are typically retained in headlines, whereas the tense auxiliary is omitted. For instance, one could not form headlines (i) and (iii), rather than (ii) and (iv), corresponding to sentences (v) and (vi).

- (i) House (Finally) Passed Gun Control Bill
- (ii) House (Finally) Passes Gun Control Bill
- (iii) Harper Elected Mayor (with the intended meaning corresponding to ((iv) and (vi))
- (iv) Harper to Be Elected Mayor
- (v) The House has finally passed the gun control bill
- (vi) Harper will be elected mayor

The fact that (ii) rather than (i) is the correct headline for (v) indicates that the present perfect definitely bridges the past and present tenses, bearing in mind that (ii) can also be interpreted to mean 'The House finally passed the gun control bill'. Headline (ii) cannot refer to a future (irrealis) tense. Note also that the correct headline for (vi) is (iv) but not (iii) and that *will* is replaced in such cases by something reminiscent of modal *be*, which is omitted in (iv). Passive *be* is retained here only because *to* must combine with a verb phrase, as observed in note 9.

11. The anonymous reviewer asks why, unlike auxiliary *do*, the copula is obligatory in affirmative constructions (except of course in small clauses). That it is obligatory in standard English (but not in some nonstandard dialects, at least not in all environments) is a consequence of VP orientation, as opposed to PredP orientation, in the surface structure combinatoric rules of English. That *Do*-Support is required in interrogative sentences, for instance, is a consequence of the fact that English, unlike French, does not allow the inversion of main verbs. There are simply so many different principles that interact in a grammar.

12. I am aware of positions such as Lenci's (1998, 234) that claim a "copulative function" applicable to a wide range of verbs (e.g., *become*) and identify *be* as the copula par excellence (in Lenci's own words, "*primus inter pares*"), because it is semantically empty. It is not clear to me that my statement that the "locative copula" can be treated as a regular, noncopular verb is at odds with this view.

13. Things are certainly more complex in AAVE, where phonological considerations cannot be completely ignored. Labov (1969) was correct in highlighting the phonological constraints that seem to apply the most when the copula has the form *is* and are so similar to those that apply also to genitive 's and to third person singular verbal forms in the present tense. This all shows how nonmonolithic the structure of a language can be.

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