

COPULATION AND EXISTENCE

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0.0 Introduction. There is a venerable tradition in linguistics and philosophy which distinguishes a verb whose function it is to 'predicate' from one which expresses 'existence'. Numerous works have adopted this point of view (especially in the traditional frameworks), referring to the one as the copula and to the other as the existential (or substantive, when contrasted with the copula). The role of the copula is usually thought to be to join the subject to the predicate, while the existential verb asserts the existence of its subject. In functioning as a copula, verbs like English BE are often characterized as 'meaningless', since they serve merely to fill a gap between two equated entities.

Recently, however, there have been efforts to alter this view of copulas as 'meaningless' elements. Langacker 1979a has shown that BE in English has a complex semantic effect in expressing aspect. Fife 1979a argued that BE verbs have a wide range of possible interpretations in addition to their aspectual uses. This paper is another contribution to this line of research.

The purpose of this work is (1)to examine the semantic structure of copulation and existence, and (2)to determine how these functions relate to one another. In particular, I hope to show that copulation is a complex semantic notion. Although copulas express only basic relations between entities, they subsume a number of subtypes of these basic relations. The same will be claimed of existentials. Far from being meaningless particles, BE verbs are rather intricate linguistic entities. The relation between these notions is discussed and it is argued that neither one can follow from the other, but most likely they are manifestations of a single schematic relation-function.

The first two sections will describe and define the copulative and existential functions, their subtypes, and their semantic structures. Section 3 is devoted to the relationship between these two. The last section has some concluding remarks.

1.0 Copulation. When a language is described as possessing a copula, it is generally taken to mean that there is in that language some (small) predicating element which 'links' the subject to the complement (containing a noun phrase, an adjective, or a locative/prepositional expression). But in carrying out this 'linkage', it is usually thought to have no specific meaning of its own. In some cases copulas have been described as 'placeholders'. They are also sometimes said to be a semantic 'equals' sign. Before turning to the characterization proposed here, let us examine these two traditional descriptions of copulas.

1.1 English BE has often been considered an example of a copula. One version of the traditional definition of copulas is that they serve merely to join the two parts of the sentence together while satisfying the requirement that all sentences have a verb. In transformational accounts, BE is sometimes introduced as a meaningless marker by some transformation (as in Passive), and is just a marker of that rule's application. These analyses do not assign meanings to BE, viewing them as mere props for the real content of the sentence. The other traditional description is that BE is a semantic "=" between subject and predicate. I will argue that neither of these views is acceptable.

1.1.1 Saying that BE is a meaningless element leads to a number of unnecessary, ad hoc statements in the grammar¹, brings up certain impasses, and leads ultimately to an absurd situation.

Initially, it seems intuitively strange (at least) to claim that a language can possess a 'meaningless' lexical item. Obviously, as language is foremost a communication system, this cannot be typical of lexical items, and such entities would be considered rare and non-canonical. But BE-like verbs are very common and occur in widely-divergent languages (genetically and typologically). Calling BE verbs 'meaningless' makes meaningless items a fairly wide-spread phenomenon in language, something not a priori felicitous. Even if we do not allow this proliferation of meaningless lexical items to bother us, it still leads to a number of real problems for grammatical description.

If BE is 'meaningless', then it appears to be 'less meaningless' than some other traditionally 'meaningless' elements, such as particles. One reason for this is that BE inflects, while particles are typically frozen morphologically. Particles are also often clitics, but BE (which does show encliticizing behavior², at times) is not so firmly established in certain sentential positions.² The difference in 'frozen-ness' among supposedly meaningless elements suggests that two levels of 'meaninglessness' must be distinguished. Such a distinction would be sophistic hair-splitting at best, requiring a number of ad hoc statements in the grammar.

Related to this last fact is the existence of what appear to be semantic restrictions on BE. These restrictions deal with selectional restrictions and subcategorizations, which are generally considered at least partially semantic in origin. So, parallel to the famous selectional violation of *Sincerity admires John, we find *Sincerity is John (even ??John is sincerity). We can see subcategorizations at work in the constraint of adverbs as the complement of BE, as in *This man is reluctantly and *He is tremendously.³ A number of other restrictions could be adduced. The point is, one would not expect a semantic cipher to be so recalcitrant in combining with other elements, especially when these constraints parallel others which are thought of as semantic in origin.

Another clear example of the breakdown of the 'meaningless' description of BE is seen in BE imperatives. It is perhaps consistent with a null-content description of BE to find that Quiet! is (roughly) synonymous with Be quiet!, where the addition of BE seems to add no appreciable content. But how does one then explain the difference between Be happy! or Be there! and ?Happy! and ?There!, which are not at all synonymous with the forms with BE, even when fully acceptable (not all are).

There is no doubt that a die-hard traditionalist might come up with an adequate number of restrictive statements to account for these facts of distribution, the selectional restrictions, the subcategorization constraints, and the anomaly of the BE imperatives without assigning a meaning to BE. The question however centers on how much ad hoc machinery is needed to do it. In these cases the posited restrictions would apply to BE alone, out of all the lexical items of the language. One cannot help but wonder why so much for so little for a semantic null-entity. If the purpose of BE is to act as a dummy verb when no other verb is present, why so many idiosyncratic restrictions on it?

Another type of argument against a zero-meaning view of copulas is that it leads to an impasse over defining grammatical categories. If the use of BE is to fill a vacant, but required, verbal slot in the clause, it would seem that BE must qualify as a verb. As it does take verbal inflections, BE appears to be classified as a verb. BE then has at least one bit of content, namely the feature [+V], which explains its insertion and morphological behavior.

But this leads to a problem in defining lexical categories. Even the most dyed-in-the-wool autonomous syntax advocate would not try to define lexical categories without some semantic parameters. The category VERB is usually defined by some semantic criteria, such as expressive of action or process. But however we define the class of VERB, the definition will be disrupted by the inclusion of BE in this class. What sort of definition of VERB will include all the desirable semantic features of verbs and all the intuitive examples, while also allowing for a 'meaningless' token? How can this be done without opening the door to inclusion of such non-verbal items as nouns? Are we forced to circularly define VERB as anything that is marked [+V] in the lexicon? Treating BE as a meaningless exemplar of the verbal class greatly complicates the mechanics of assigning and defining lexical categories.

Finally, the analysis of BE as a meaningless verb leads to an absurd situation in the morphology. BE, like any verb, has certain inflectional and derivational alternates. Normally, the inflections are taken to be a modified version of the base verb's semantics, as when WALK + ED indicates a past episode of walking. But what can it mean to have a tense ending on a meaningless verb? Does that mean that the 'meaninglessness' occurred in the past? What does it yield to put a present participle inflection on a semantically null stem? How does the noun BEING derive its meaning, if the base verb is devoid of content (assuming that we can demonstrate that there is only one BE in English)? We would apparently be reduced to treating BEING as a frozen form, as the semantic part of the rule of -ING would not derive the proper output. Either we must have a different -ING in this case, use an entirely ad hoc derivational rule, or view it as an idiom, none of which coincides with the obvious regular derivation of BEING from BE + ING.

All these problems (ad hoc restrictions, categorization problems, and morphological opacity) are artifacts of the 'meaningless' analysis of BE. To avoid them, we must assign BE some semantic value.

1.1.2 The other traditional characterization of copulas is as meaning something like 'equals' or 'is identical to'. I have argued in Fife 1979a that

this view is untenable for two reasons: (a) there are numerous cases like I'm the onion soup (when spoken to a waiter) where strict identity is clearly not intended; and (b) the logical properties of BE do not point to a symmetrical relation like 'equals' as its meaning.

This second traditional description of copulas is also faulty. We are now left with the conclusion that BE has a meaning, but that meaning is not strict identity. We may perhaps begin to wonder at this point whether the traditional notion copula is justified at all. There is an alternative to throwing out the entire notion with the former faulty analyses. I will describe in the following sections a notion of copula that captures the uses of copulas in various languages, while maintaining their status as minimal predications. This description of copulas subsumes the most typical features of the class of copulas, but still assigns them a definite meaning which does not violate their logical behavior.

1.2 In Fife 1979a, I characterized BE as having a number of possible senses and certain logical properties. Taking these into consideration, I felt that the best paraphrase for BE is something like 'elaborates', and that the function of BE is to assert that the subject instantiates or elaborates on the content of the complement (elaborate is here used in the sense found in Langacker 1979b). It would be too presumptuous to assume that this description of BE holds for all copulas in all languages. The 'elaboration' sense is just one subtype of copula, and the category copula actually subsumes a number of related notions.

A general description of the category follows along the line of the traditional definitions, for, although the traditional grammars were mistaken to call BE meaningless, the traditional accounts seem to have nonetheless captured many of the essential features of copulas. If we abstract away from the issue of meaningfulness, then we have the basis of a useful understanding of these verbs.

Leaving aside the issue of semantic content, the other main elements of the traditional definitions specify that copulas are verbs whose function it is to join or relate two entities in the clause, the subject and the complement, or predicate.⁴ I will assume that most linguists will agree on this point, that copulas are elements which join (or 'copulate') other elements. As a first approximation, we can define a copula as a predicate which proposes a relation between two states (where 'state' means any stative predicate). It is easy to see how this definition captures some of the points already discussed about copulas, namely that copulas mediate between two entities and yet have a meaning of their own. The copula may propose a number of different relations between its arguments, and this constitutes its semantic content.

One thing that stands out when dealing with copulas is their semantic schematicity, in that they propose only minimally-specified relations. This fact is what accounts for their being considered 'small', 'meaningless' entities. Copulas do not propose more than very basic relations, and this is often seen as typical of copulas. The most prototypical copulas express little more than some very basic relations between the arguments in a highly schematic fashion. One way of capturing this trait in the discussion of copulas is to restrict copulas to proposing only the most basic sorts of relations between their arguments. As these basic relations are highly

abstract and schematic, the copulas will be deemed minimal predicates, which is why they are often confusedly described as 'meaningless'. But being abstract or schematic in semantic content is not the same thing as being devoid of meaning. In this way we can capture the minimal nature of prototypical copulas while avoiding the problems involved in viewing them as ciphers.

The qualifier prototypical was used because it is plain that there is a range of copula-types across languages, and different systems may use more or less minimal propositions. If we take expression of only basic relations as a defining characteristic of copulas, then a predicate in a particular language will be judged more or less close to the canonical form of copulas to the extent that it is a minimal predicate: more elaborate predicates are deemed less prototypically copulative; the more minimal the predicate (the more it expresses only basic relations between its arguments and nothing more), the more canonical an example of copula it is.

It is time we looked at the character of these basic relations.

1.2.1 There are three logical possibilities when dealing with the most basic ways (in their most schematic forms) in which two entities can be said to be related. The first of these is a relation of non-correspondence, where there is in essence a negative relation between the two entities. Their relation is precisely that there is no relation between them, or only an inverse, or disjoint-correspondence relation. I will call this the disjunctive relationship between entities. This is because the two entities involved in the relation are conceived as completely disjoint, having no features or subparts, etc. in common. The diagram in Figure 1 illustrates this, where the two circles representing the related entities (the arguments of the copula) are non-intersecting.

[FIGURE 1]

1.2.2 The second possible relation between two entities or states is the opposite of disjunction. This is the case where the two stative entities coincide totally, where one subsumes the other, or the two are considered identical. In all these cases, one state contains all the content of the other. I will call this relation the equative basic relation, as all the elements constituting one of the entities is equated with some subportion of the other entity. Varieties of this sort of relation are illustrated in Figure 2.

[FIGURE 2]

Figure 2 illustrates an incursion relation, an identity relation, and a correspondence relation. For reasons discussed below, we will take all of these to be variants of the correspondence subtype, since strict identity is here viewed as linguistically infelicitous. Diagram (c) in Figure 2 shows two entities with independent existence set in correspondence, one subcase of which is where the two coincide in all points (identity).

1.2.3 The third possible relation between two entities is a cross between the first two, that of an overlap or junctive relation. This is the case where the two states are seen to correspond partially, but are not fully disjoint or fully equated, or where there is only a partial inclusion or correspondence. This is the case of similarity, or approaching equation. We may symbolize this as in the diagrams in Figure 3.

[FIGURE 3]

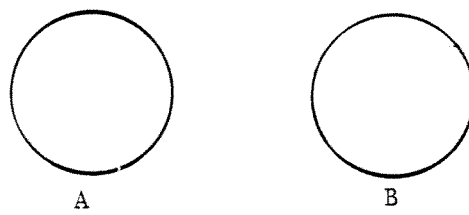


Figure 1.

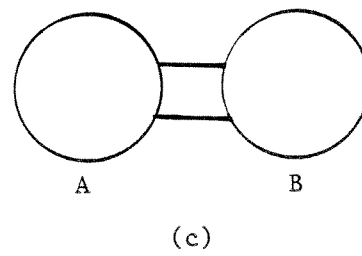
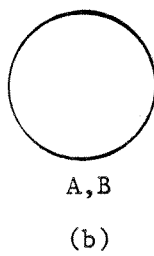
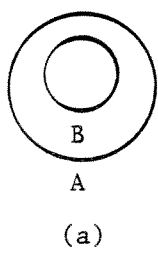


Figure 2.

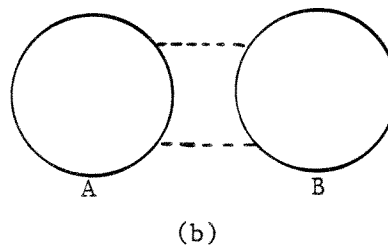
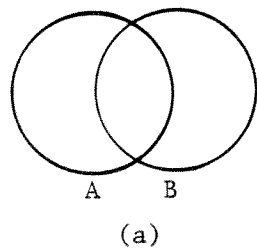


Figure 3.

1.2.4 These are the possible minimal, basic relations which can be proposed between entities. Any relations more elaborate than these would be less minimal, and so less prototypically copulative. Any more elaborate relation can be subsumed under one of these three basic types. To the extent that a certain predicate in a language expresses only these schematic relations between its arguments, to that extent it will be deemed a copula under the proposed definition.

However, one important item has been left out of the discussion so far. It was noted that copulas are canonically verbal predicates, and so express temporal profiles (see Langacker 1979b). Non-verbal predicates are stative and have no extension in time. Verbs on the other hand have temporal extension. There are two types of temporal profiles with extension: perfective (alters over time) and imperfective (remains constant over time). In order to capture the fact that copulas are typically verbal, we must allow them to have one or the other of these temporal profiles, and not count this as making them less minimal. Copulas will still be minimal only to the extent that they express the basic relations described above. Beyond this, copulas can have one of the two temporal profiles of a verbal predicate without affecting their minimality vis-à-vis the definition of canonical copula. This refinement allows us to formulate a more precise definition of copula, which is given in (1).

- (1) A copula is a temporally-valued predicate which minimally proposes a relation between two states.

The definition in (1) covers all the traits of copulas observed so far. It gives copulas semantic content, as they propose either disjunction, equation, or junction between their arguments. They are 'copulative' in the traditional sense since they propose a relation between two states. They are semantically minimal predicates, expressing little beyond simple basic relations in a very schematic fashion, accounting for the impression of 'smallness' in traditional descriptions. Finally, because they are specified as being temporally-valued, the notion of verbalness is built into the definition.

1.2.5 As was noted in the last subsection that copulas are verbal, and so temporally-valued. It was also noted that there are two temporal profiles with verb-like extension in time, and that a copula can be in theory of either type. We must therefore recognize two more subtypes of copulas which correspond to perfective views of basic relations between two states. The relations discussed so far can be thought of as imperfective senses of basic relations, as they do not propose any sort of change in the relation: they simply set up a configuration and leave it at that. A perfective version of a basic relation would propose some sort of 'movement' between the two states, a transition between them, a dynamic relation. This is because a perfective always expresses change over time. There are two subtypes of a perfective copula, since there are two possible aspectual viewpoints on this transition, depending on which of the states is the more focused or profiled semantically.

If one focuses aspectually on the second state (B in the diagrams) in the proposed transition from state A to B, we have a telic perspective, i.e. we are viewing the transition from the endpoint. I will call this relation the inchoative relation, which is illustrated as in Figure 4. The dotting of state A indicates that it is out of focus and that the endpoint state B is in focus, lending a telic orientation.

[FIGURE 4]

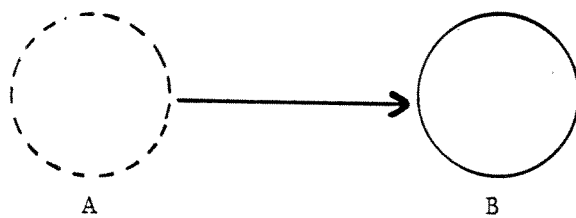


Figure 4.

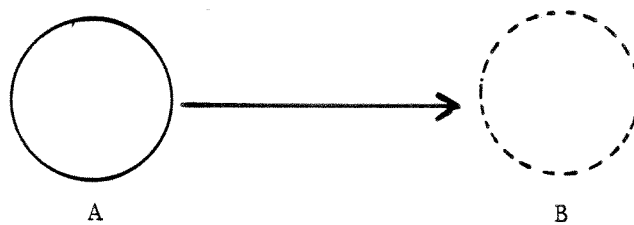


Figure 5.

The inverse of this relation is one which views the transition from the perspective of the initial state, the 'movement' being seen to depart from the viewpoint. This is an atelic perspective and the relation will be named the echoative relation. We might think of the differences between these two relations as analogous to two ways of viewing a train traversing a tunnel. The telic view would be one where we see the train emerge from the tunnel and continue on its path from the exited end. The atelic view of this event places us at the entrance to the tunnel and we see the train enter and leave our view. In either case we are fully aware of what the complete trajectory of the train must be; our knowledge of trains and tunnels tells us that in both instances the train enters one end and emerges out the other. But the difference in positions derives a different experience. The same is true of linguistic expressions: a different aspectual viewpoint derives a different semantic interpretation/experience, even when both add up to the same logical conclusion. The echoative relation can be illustrated using the conventions of Figure 4. Note that in Figure 5, it is the final state (state B) which is unfocused and the initial state which is most salient, hence an atelic perspective.

[FIGURE 5]

Perfectivity, though more elaborate than imperfectivity, cannot be fruitfully treated as less minimal than the latter; it seems more proper to think of them as coequal root categories on the same level of complexity. For that reason, perfective versions of the basic relations will not be considered to derive less minimal propositions, and so causing such predicates to be considered less copular. But to mark their fundamental difference from the basic relations lacking 'movement', I will refer to these latter two relations as 'secondary' basic relations, and the predicates which express them as 'secondary' copulas. The exact relationship between the 'secondary' and 'primary' types of copulas is not yet clear, but linguistic evidence does seem to indicate that the 'primary' copulas are indeed the more basic (or unmarked) type of copula, the 'secondary' forms being less common or clearly derived structures.

1.3 To illustrate the various sub-types of copulas discussed so far, I will use approximate English expressions. It must be borne in mind that these examples are illustrative only of the relations, and I do not intend that the English predicates are necessarily examples of minimal propositions, and so fully copular under the definition in (1). In fact, in all but one of the illustrations below, the example structures are far from minimal, and so not prototypically copular. English happens to be more periphrastic, but closer research into BE-verbs in languages will undoubtedly discover more minimal expressions of these categories.

One English example which is fairly minimal in its expression of these basic relations is the equative relation proposed by BE. In its copulative role, BE proposes little more than that its arguments stand in an equative relation to one another (see Fife 1979a). Though BE proposes such diverse relations as identity, instantiation, ownership, association, logical equivalence, etc., all these are subsumed by the equative basic relation, since in all these cases some subportion of one argument is equated to the other argument. This characterization corresponds to the notion of 'elaborates' which is the overall meaning ascribed to BE in Fife 1979a: one entity elaborates on the other through correspondence with some subpart of the former's semantic make-up. This may be illustrated with the examples below, where the two nominals are clearly equated by a correspondence of some

part of the semantic bases of the nominals.

- (2) Sam is our mayor.
- (3) Joan is a nurse.
- (4) Who's the green Mazda parked behind my van?
- (5) The summit is the top, Henry!

In this case it is easy to see that some sort of equation is intended. But Fife 1979a cautions against treating BE as identity, since there are numerous uses of BE which cannot be strict identity (e.g. (4)). This finding is supported by the use of BE with semantically dependent complements (like adjectives and prepositional phrases), where an identity relation is not proposed, but an elaborative relation between subject and complement, one that critically involves equation of functionally identical substructures (see Langacker (to appear)).

- (6) This bread is hard.
- (7) My 1947 Nash is pink.
- (8) Calvin is in the back yard.
- (9) These cookies are for the children.

The complements in (6)-(9) all contain as their head element items which are semantically dependent and so normally require a supporting argument to function independently (*Pink, *In the back yard); that is exactly the purpose of BE, to propose the elaborating support for the complement. In this way the subject is equated with a schematic subportion of the complement's profile and so elaborates on it. This sort of elaborative function is easily subsumed under the equative basic function, whose primary image is of correspondence of subparts.

Turning now to the disjunctive relation, we will see that this function is clearly non-minimal in English (i.e. there is not single, simplex predicate which proposes a disjunctive relation). Instead, we find that disjunction is built up by the combination of BE and a negative element. Other languages may propose this relation in a non-syntagmatic fashion. The pure disjunctive relation is one sense of the negation of BE.

- (10) Grover is not a busdriver.
- (11) I am not insane.
- (12) Curt is not the man you want for this job.

One interpretation of these sentences is the narrow-scope reading, where what is asserted is a negative relation. This is difficult to tease-out in some uses of BE. In (10), the narrow-scope sense is probably more likely expressed as Grover is a non-busdriver. The narrow-scope reading is not so difficult to obtain in (11) (which then would be equivalent to 'I am sane' [I BE NOT-INSANE]). In (12), the narrow-scope seems to be the preferred reading; what it asserts is not so much that [CURT ≠ MAN'], but that he is the negation of the sort of man desired (MAN'): [CURT = NOT-MAN']. This is a very fine-grained distinction in English, but other languages may well encode this sense in a separate, minimal predicate. The sense is at least seen to exist in one possible interpretation of negated BE in English.

The junctive relation is also non-minimal in English and usually involves much circumlocution. Expression of junctive status between two states is

accomplished in English through use of predicates such as SORT OF, SOMEWHAT, and LIKE.

- (13) Maggie is somewhat daft.
- (14) Grover is sort of for Reagan.
- (15) Neil is sort of a feminist.
- (16) A Whirlpool is like a Frigidare.

Each of these examples expresses in a non-minimal fashion a junctive relation between subject and complement: some of the features of each coincide, but not totally. Another clear example of a more minimal expression of a junctive relation is with metaphorical uses of BE where there is partial immanence (see Langacker 1979b) between the arguments of BE.

- (17) The fourteenth hole is a dog-leg to the left.
- (18) Will is a pig!

At this point, the junctive function of BE shades indistinguishably into liberal uses of equative function. This is perhaps expected, since junctive relation is merely an improper version of equation (partial inclusion, see Figures 1 and 3).

As for the 'secondary' relations, both telic and atelic perspective can be encoded fairly minimally by BECOME, though the inchoative relation seems to be less marked or more natural with BECOME. The difference between the two relations can be seen by comparing (19) and (20).

- (19) The stove is becoming cooler.
- (20) The stove is becoming less hot.

Practically the same objective situation is described in both sentences, but they differ in their aspectual viewpoint. (19) describes the situation from the telic endpoint towards which the stove is transiting; it is an inchoative relation between STOVE and COOLER. (20) focuses on the initial state of the subject and describes the transition as atelic oriented from that state; it is an echoative relation.

As stated, the inchoative relation seems more natural with BECOME. So, we can use the inchoative relation fairly easily in (21) and (22).

- (21) I finally became a linguist.
- (22) Prentice is becoming belligerent.

CHANGE is a predicate that also prefers the telic viewpoint. Its use with an atelic perspective requires more juggling of predicates, as with BECOME.

- (23) The Ugly Frog changed into a prince.
- (24)?The Prince suddenly changed from (being) an ugly frog.

There are, however, some non-minimal expressions of echoative relations; these use the predicates QUIT, STOP, and LEAVE (OFF).

- (25) Curt quit drinking.
- (26) Lori stopped her canabalistic ways.
- (27) I left off work long enough to help Grover.
- (28) Henry gave up his membership in the D.A.R.

As all these expressions have, in addition to their transition sense, a sense of cessation; they are clearly non-minimal propositions of the echoative relation, so they are not copulas under the definition given above.

We can now tabulate the types and examples of the copular categories; this is shown in Figure 6.

[FIGURE 6]

1.4 It is interesting to note that the basic relations proposed above are mirrored by those proposed in Langacker (to appear). Langacker's basic relations are shown in Figure 7.

[FIGURE 7]

Langacker treats disjunction as a derived relation apparently, but one easily formed by the inverse of the inclusion relation. More recent work of his suggests that the relation OUT is taken to be basic in contrast to IN. The other relations in Figure 7 can be collapsed. The CONTACT relation is merely a subcase of the OVERLAP (my junctive) relation, one where the elements of coincidence are limited to peripheral points. Likewise the IDENTITY relation can be treated as a special case of INCLUSION (my equative relation). This is for two reasons. First, identity in a physical or mathematical sense is just the improper inclusion of one entity in another. In this case, the subpart of A in Figure 1 to which B is equated (equate is not the same as identify) happens to be all-inclusive of A. Second, generally, but especially in linguistic uses, identity is a myth. It is not really possible to treat two things as identical, since they would not therefore be two. This is the problem of the Identity of Indiscernibles (see Black 1952) where it is contradictory to speak of entities being identical and independent. Identity is thus a myth, something popularly believed in, but which is actually or logically false. In any case, linguistic evidence shows that items are not identified in a strict sense, but are merely equated (thus preserving their independence).

Langacker's list of basic relations serves to confirm the claim here that most conceptual configurations can be subsumed under the schemata of some very minimal, abstract configurations. To insure that copulas remain highly abstract in their prototypical uses, the definition in (1) restricts copular classification to those predicates which simply propose only these basic relations, though some languages may propose similar relations using more elaborate semantic configurations (as in English disjunctive, junctive, and echoative).

2.0 Existentials. I have now proposed a definition for copulas, shown the nature of the various subtypes, and provided some approximate examples from English for these types. The discussion of existentials need not be so involved, as they have not been the subject of the same sort of vague and varying characterization. The notion of an existential rests on being and existence, concepts that have somewhat more substance than a vague relation predicate like a copula. The traditional definitions of existentials are therefore more adequate and specific. My definition will consist of little more than refinement and formalization.

2.1 I think it is felicitous to speak of existence in terms very much like those used to describe basic relations between entities. This is seen when we consider the ways in which^a a particular entity can be said to exist. In the first case, entities can obviously be said to either exist or to not exist. These two possibilities correspond in image to the equative

I. COPULAS

TYPE	TEMPORAL PROFILE	EXAMPLES
A. Equative	Imperfective	BE
B. Disjunctive	Imperfective	NEG + BE (narrow-scope)
C. Junctive	Imperfective	BE + SORT OF SOMEWHAT LIKE metaphor
<u>Secondary Copulas</u>		
D. Inchoative	Perfective	BECOME CHANGE (INTO)
E. Echoative	Perfective	BECOME CHANGE (FROM) QUIT, etc.

Figure 6.

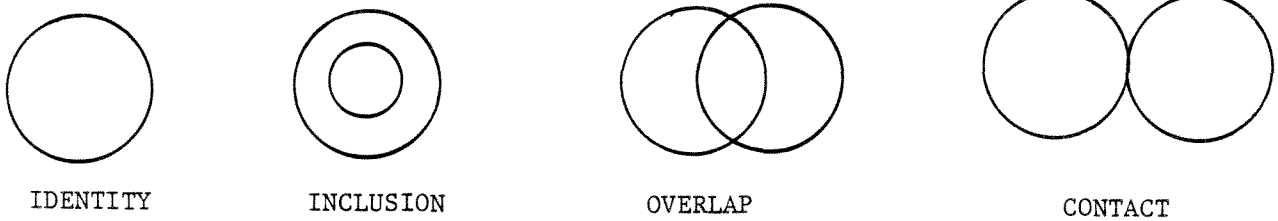


Figure 7.

and disjunctive relation between entities. Existence is the full positive value for the notion, one where the extant entity is fully contained in existential space. Non-existence is the inverse: the full negative value of non-inclusion within existential space. It appears that the basic split in existential classification can be treated in terms analogous to relations between entities already extant: full coincidence ('in existence') and full non-coincidence ('out of existence').⁸

There is even a correspondent to the junctive relation between entities. This is the case of contingent existence. This is the type of existence specified by supernatural existence, coincident existence (possession or multiple-plane existence), anti-existence (black holes and anti-matter), and probably the world of hypothetical existence (things whose existence is immaterial: they exist only as concepts).

We can also see examples of perfective versions of these modes of existence, like the perfective 'secondary' copulas. These are the cases of incipient or transient existence, things coming in and passing out of existence. These categories seem to cover all the basic types of existence. We can see that there is a one-to-one correspondence between the basic types of relational predicates and the basic types of existential modes.

Of course a definition of existence must carry with it some notion of what it means to 'exist'. This is a broad question, but for linguistic purposes, the problem is quite straightforward. In the framework which is developed in Lanagcker (to appear), something can be said to exist if it can be distinguished from its background, i.e. it is prominent enough to stand out against the base of perception. Evidence for this is seen in cognitive development, where it is believed that children perceive things as entities in the world only to the extent that they separate them from the universal background of EGO (the basic perceptual base for infants; see Flavell 1963:129-35). In this case, existence can be thought of as having a value of prominence which accords the entity a threshold of perception in some domain such that it is discernible from its background. Put more simply, things which are stark enough to be perceived against their background are said to 'have existence'. The notion existence then describes a certain salience relation between an entity and a threshold of perception (or being). Non-existence means that the entity lacks sufficient salience to be perceptible in the domain in question. Full existence would describe a relation of entity and threshold such that the entity is to the positive (perceptible) side of the threshold. The perfective existentials obviously describe a transition from one side of the threshold to the other, viewed either telically or atelically. But the description of the existential equivalent of junction points out a need for further elaboration in this definition.

What does it mean to exist and yet not exist in a junctive fashion under this definition of existence? The solution lies in the fact that, for linguistic purposes, existence does not always have a universal domain of application. Consider the sentence There are no horses. At first we might be tempted to say this sentence is false, as there are such things as horses described in the real world. The operative part of this reply is the phrase in the real world. My sentence is not false if I were referring to the existence of horses in my office or in this paper. Again, though it is true that there are no horses physically in this paper, the fact that I have mentioned horses here allows someone to say felicitously that there are horses in this paper. And a stalwart non-materialist might insist that

unicorns do exist in the physical world because they exist in the world of concepts of someone who exists in the physical world. The important point is that statements of existence are not always made against a fixed, universal backdrop. The threshold of being which defines an entity's existence may in turn be defined relative to a number of possible domains (though it is plain that the physical world has some pre-eminence). It is not, therefore, a contradiction to name something and say that it does not exist, since existence is relative to the domain defining the threshold of being. It merely means that in domain X, entity Y does not have the prominence needed to place it above a certain threshold of perception. In this context we can now understand the junctive existential relation: overlapping existence (which I will call the bisubstantive mode of existence) means simultaneous existence in more than one domain. Thus, hypothetical entities like unicorns are asserted not to exist in physical reality, but they may exist at the same time in the domain of concepts. This is the domain we evoke when we use modality in sentences: a proposition is given existence in some unreal world divorced from reality. Non-existence, then, can be further refined as not being perceived in the domain in focus (the base domain of the utterance, which may vary). Thus There are no horses in my office asserts the non-existence of horses in the existential space of MY OFFICE, which is the focused domain of discourse; it says nothing about the existence or non-existence of horses in some other, unfocused domain. Utterances often carry information identifying the proper domain, but many times this is left implicit, especially when the pre-eminent domain of REALITY-PHYSICAL WORLD is selected.

Adding to this discussion that existentials in language are normally verbal predicates and they, too, are usually minimal propositions (and so a morpheme will be considered more existential to the extent that it says nothing else beyond its mode of existence), we can propose a definition for existentials as in (29).

- (29) An existential is a temporally-valued predicate which minimally proposes the relation between a state and some threshold of being.

'Temporally-valued' specifies a verbal predicate and allows for different aspectual viewpoints. 'Minimally proposes' does the same work here as in (1), namely insuring that only very basic sorts of categories are expressed by the most canonical examples of existentials. 'Threshold of being' is itself shorthand for 'threshold of perception for a domain': the existential expresses whether the subject exceeds, falls short of, or traverses this threshold. The qualifier 'some' is needed to show that the domain need not be universal and that non-existence in one domain does not preclude existence in another (unfocused) domain.

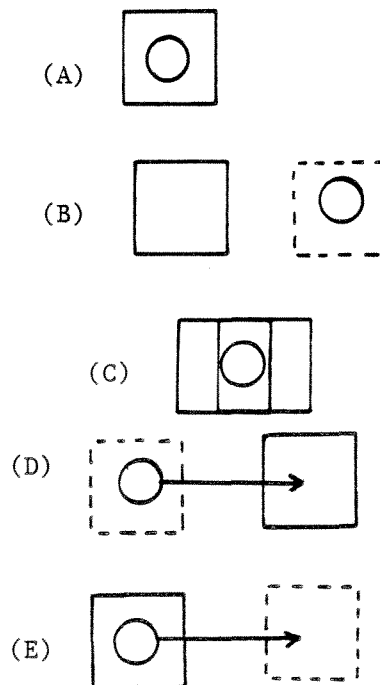
2.2 The following chart tabulates the discussion of existential subtypes. Approximate English examples are also given, as with copulas, all mostly non-minimal. The boxes represent a level of perception in a domain, and the dotted boxes indicate unfocused domains. English has only very rough circumlocutions for some of these (e.g. the bisubstantive); other languages could conceivably have a minimal predication for this mode of existence. Some of them are reasonably minimal. Most Indo-European languages have some fairly minimal expression of substantive existence, even more minimal than the predicate EXIST. As with the copula, English tends to build more complex relations out of the fully positive version (equatives and substantives respectively).

[FIGURE 8]

II. EXISTENTIALS

MODE	TEMPORAL PROFILE	EXAMPLES
A. Substantive	Imperfective	THERE + BE
B. Insubstantive	Imperfective	THERE + NEG + BE
C. Bisubstantive	Imperfective	?POSSESS (of spirits) hypotheticality
<u>Secondary Existentials</u>		
D. Incipient	Perfective	BREAK OUT CROP UP
E. Transient	Perfective	DIE (OUT) PERISH DISSOLVE

Figure 8.



3.0 Their Relation. Now that we have considered the nature and definition of copulas and existentials, are they really two separate notions? What is the relation between them?

First we can consider some logical problems involved in collapsing existentials and copulas. In sections 1 and 2 I described both of these predicate types as involving minimal propositions with five subtypes. Given the fact that existential and copulative notions are frequently formally related in language, is there some way to collapse the two into a single characterization? There are three possibilities for collapsing them: (1) existentials are derived from the notion of copulation; (2) copulas are derived from the notion of existentials; (3) the two are independent concepts, but are related through a schematic hierarchy to a superordinate schema which subsumes them both.

Both alternatives (1) and (2) are inverses of each other: both claim that one of these notions follows logically from the other. There are a number of linguistic problems which prohibit this approach, and these are discussed below. In addition, we can discuss some logical difficulties involved in such a collapsing. In Alternative 1, existentials are claimed to derive from copulas. This means that the features of existentials and the features of copulas overlap in significant fashion such that all the features of the former are derived/follow from those of the latter. This is what 'derived from' means in a linguistic sense, that the features of a copula have as a subset the features which specify an existential. But there is no obvious way to collapse the definitions in (1) and (29) in a way that makes (29) a subset of the elements making up (1). The two definitions are the same except that copulas relate entities to other entities, whereas existentials relate them to a threshold of being. These are non-equivalent features, and there seems no reason to treat the definition in (1) as schematic for that in (29). It is true that the notion "threshold of being" could be thought of as an elaborated version of "entity" in definition (1), but there is no explanation of why the schematic notion "entity" should be elaborated in such a way as to define a "threshold of being". There is no explanatory power to this sort of collapsing, and in fact it raises more questions than it answers. For the existentials to be derived from copulas we would expect some sort of logical entailment between the features of the notions; there is none. Treating the features of copulas as schematic for those of existentials merely leads to more intransigent problems which are artifacts of this analysis.

The same problems arise for Alternative 2, since there is no logical entailment between the features of existentials and copulas such as would derive the features of the latter from the former. Treating existentials as schematic for copulas is even more awkward, as there is not any clear way to view "threshold of being" as schematic for "entity". There was some motivation for the inverse in Alternative 1, but here it does not even make intuitive sense to view the derivation from a schematic existential.

Both alternatives deriving one notion from the other lead to similar problems. There is no sort of entailment/inclusion/immanence relationship between the operative parts of (1) and (29) which will allow one to be derived from the other. Neither can one be thought of as schematic for the other, as we run into problems explaining why subordinate derivatives were elaborated as they were, or, in the case of Alternative (2), there is not even a logical way to treat the one as schematic for the other. These considerations suggest that the notions are independent and coequal,

on the same level of structure and not related by a 'parental-filial' relation. In addition to these problems of logical equation, there are substantive linguistic reasons for not collapsing existence and copulation along the lines of Alternatives 1 and 2.

3.1 If copulas and existentials are truly independent notions, with neither derived from the other, then one would expect no correlation between the use of one or the other in languages. One would expect all possible distribution of the two notions. Conversely, if they are related in the manner of Alternatives 1 and 2, then one would expect a skewed distribution, since all the features of one derive from the features of the other, and so a special co-occurrence distribution should be observed. In fact, the former situation prevails, as all types of distribution of copula and existential are seen across languages. There are five possibilities for the distribution of these notions: a languages having both a copula and an existential, but encoded in different predicates; having both, but encoded in the same predicate; having one or the other only; having neither. All five patterns are illustrated in various languages. Examples of this are given below.

(1) An example of the first pattern (both notions encoded in different predicates) is Spanish, with ser and hay (copula and existential, respectively). Old Irish is and tá are another pair of this type (Thurneysen 1946). The sentences in (30) show that the functions of copulation and existence in Spanish are proper only to the respective forms.¹⁰

(30)a. Hay cinco tacos (para los niños).

'There are five tacos (for the children).'

b. Lopez es muy alto.

'Lopez is very tall'

c. *Lopez hay muy alto. (≠ (30a))

d. *Son cinco tacos (para los niños). (≠ (30b))

(2) The second pattern (both functions in the language, but encoded in the same predicate) is exemplified by English be and Welsh bod. Some Welsh examples are given in (31).¹¹

(31)a. Mae Gwynfor yn dal iawn.

'Gwynfor is very tall.'

b. Mae bleiddiau (ger y tŷ).

'There are wolves (near the house).'

The existential pattern in (31b) is less minimally expressed in English (and sometimes in Welsh) by use of THERE.

(3) The third pattern, having only an existential predicate and no copula, is partially illustrated by Russian, which lacks a copula in the present, though it does have one in other tenses. The same situation is found in Choctaw.¹² Both languages have an existential.

(32)a. Russian: U minya yest' kniga.

'I have a book.' (lit. there is a book to me)

b. On soldat.

'He is a soldier.' (lit. he soldier)

c. Choctaw: Skolit amasha.

'I have money.' (lit. money to-me-exists)

d. Sa chaha.

'I am tall.' (lit. I tall)

(4) Mandarin is an example of the fourth category, where the language has a copula, but no existential. Mandarin does have a predicate yeou which has existential functions, but its primary meaning is 'have', and sq is non-minimal. It does not qualify as a full existential under (29).¹³

(33)a. Ta sh hweuijiawtwu.

'He is Moslem.'

b. *Fann sh.

= 'There is rice.'

(5) The final pattern, languages where neither predicate exists as a minimal proposition, is exemplified by Samoan.¹⁴ In this language there is neither a predicating element nor one that asserts existence in the way defined by (1) and (29). American Sign Language is another example of this type, having no copula and only non-minimal expression of existential notions.

(34)a. 'O le faia'oga le teine.

'The girl is the teacher.' (lit. ABS the teacher the girl)

b. E i ai se foma'i i le fale?

'Is there a doctor in the house?' (lit. PRES at-it some doctor in the house)

The facts of (30)-(34) indicate that there is no special distributional relationship between copulation and existence. The two notions appear independently in languages in a way that argues against viewing them as derived from each other.

3.2 Another argument against deriving one from the other involves the divergence of the semantic nature of the two sorts of predicates. For instance, copulas are, by definition, two-place predicates; existentials typically have only one argument. Copulas relate two entities which are unspecified in the semantic base of the verb; existentials relate an entity to an already-partially-specified entity in its semantic base, namely a threshold of being in some domain. Consequently, copulas tend to have two valence relations, but existentials only one. This divergence of behavior, illustrated in (35) with some predicates from section 3.1, argues that the two are not as closely related as Alternatives 1 and 2 claim.

(35)a. *Prentice is.

b. *Ta sh. '*He is'

c. *Hay perros gatos. '*There are dogs cats.'

d. *Ni yest' l'udi mašint. '*There are no people cars.'

(35) shows that copulas are not acceptable usually with only one argument, nor are existentials used with more than one argument. This suggests a major divergence in semantic nature of the two types of predicates.

Similarly, a difference in the restrictions on choice of argument type suggests a basic semantic divergence between copulas and existentials. Copulas are fairly free to combine with most types of arguments in expressing relations. Existentials are more restricted in allowable arguments. For example, it is much easier to allow adverbial subjects with a copula than with an existential. A categorizational divergence exists between the two notions.

(36)a. Faultlessly is the manner in which he always performs.

b.*There is faultlessly in his performance.

c.*Faultlessly exists in their recital.

3.3 Collapsing the two notions in the manner of Alternative 1 or 2 causes problems for specific linguistic structures. These problems show that there is a real difference between the copulative and existential functions.

3.3.1 In Fife 1979b I argued that we must recognize in Welsh a difference between an attributive and a predicative use of the preposition YN 'in'. It was shown that, given a string of YN-phrases, all would be interpreted adnominally up to a certain point, but then one would be allowed to 'rise up' and be treated as an argument of the main verb (BOD). This demonstrates that the predicative environment is linguistically significant. Unless a copulative environment is recognized separately from an existential function, there would be no reason to distinguish a predicative structure. This would prohibit an explanation of the different interpretations of Welsh YN-phrases.

(37)a. Mae'r dyn yn y gadair.

'The man is in the chair.'

b. Mae'r dyn yn y gadair yn y tŷ.

'The man is in the chair in the house.'

c. Mae'r dyn yn y gadair yn y tŷ yn cysgu.

'The man in the chair in the house is sleeping.' (lit. is in sleeping)

3.3.2 If English BE were derived in its copular use from a basic existential sense, then it is difficult to explain the function of THERE in existential statements. If BE is primarily existential, what purpose does THERE serve in (38a)? Usually this is thought of as a false subject, like the IT of It's raining. If that is so, then the deletion of THERE should not greatly affect the existential reading of BE, since it is a dummy element and the verb is inherently existential. But in fact, the difference between (38a) and (38b) is much greater than the deletion of a dummy locative would predict. The first sentence suggests that there are exactly five cupcakes, while the second more strongly implies that there are more than five cupcakes. The difference is clearly that (38a) is existential, and (38b) is copular. Deletion of a dummy THERE from an existential structure should not so drastically alter the meaning; (38) shows that there are two independent structures involved, only the true existential taking the THERE marker as part of its specifications.

(38)a. There are five cupcakes for the children.

b. Five cupcakes are for the children.

3.3.3 Coming back to a point made in section 3.3.1, a number of languages

exhibit behavior that argue for the copulative construction in that they clearly distinguish attributive from predicative environments. On such example is the contrast in sense of the attributive adjective in (39a) and the predicative use in (39b). In the first sentence, the adjective tall is used in relation to a different semantic scale than in the second sentence. TALL in (39a) describes the building as being above the normal range in height in relation to other buildings. (39b) however implies that the building is tall in regards to a scale of comparison based on a more ego-grounded criterion. (39a) claims that the building is tall, even when compared to the class of buildings; (39b) merely states that (compared to EGO) the building is tall, but not necessarily taller than buildings tend to be. This difference in the basis of adjectival scales coincides with the difference in syntactic environment. This evidence argues that a predicative environment must be distinguished. Given that predicative environments are significantly different, it stands to reason that a language may use a special predicate whose purpose it is to create such environments, i.e. a copula.

(39)a. this tall building.

b. This building is tall.

Some languages show a similar strong marking of predicative vs. attributive environment. In Lakota, only permanent qualities can be used attributively. Temporary qualities must be used predicatively, i.e. as the main verb of the clause (Williamson 1977).

(40)a. Šukakhə kuža wə wəblake.

'I saw a sickly horse.' (lit. horse sick SPEC I-saw)

b. Šukakhə wə kuža wəblake.

'I saw a sick horse.' (lit. horse SPEC sick I-saw)

Lakota attaches a strong interpretation difference to predicative vs. attributive environments and even results in some hard restrictions. For example, adjectives of inherent qualities (like 'black') cannot easily occur predicatively. Southern Paiute shows a similar patterning. A conflation of copulative and existential function would ignore the often important distinction between these adjectival environments. The centrality of this distinction in many languages argues instead for the establishment of an independent copulative function in language.

3.4 We have now seen several items of evidence arguing against the conflation of copulation and existence in a way that derives one from the other. There are inherent problems in the mechanism of such a collapsing, there is a demonstrable independence of these notions in language, a divergence in the behavior of the two notions, and a need to distinguish copulation from existence on account of certain linguistic problems. The Alternative 1 and 2 methods of collapsing are unacceptable. What about Alternative 3?

This alternative relates copulation and existence not through a derivational 'parental-filial' relation, but on a 'sororal' basis. This alternative views the two notions as derived from a single schematic notion which subsumes them both. This sort of arrangement captures the noted similarities between existentials and copulas. Also, it allows us to generalize some of the redundant features of (1) and (29). The sort of structure posited is illustrated by the diagram in Figure 9.

[FIGURE 9]

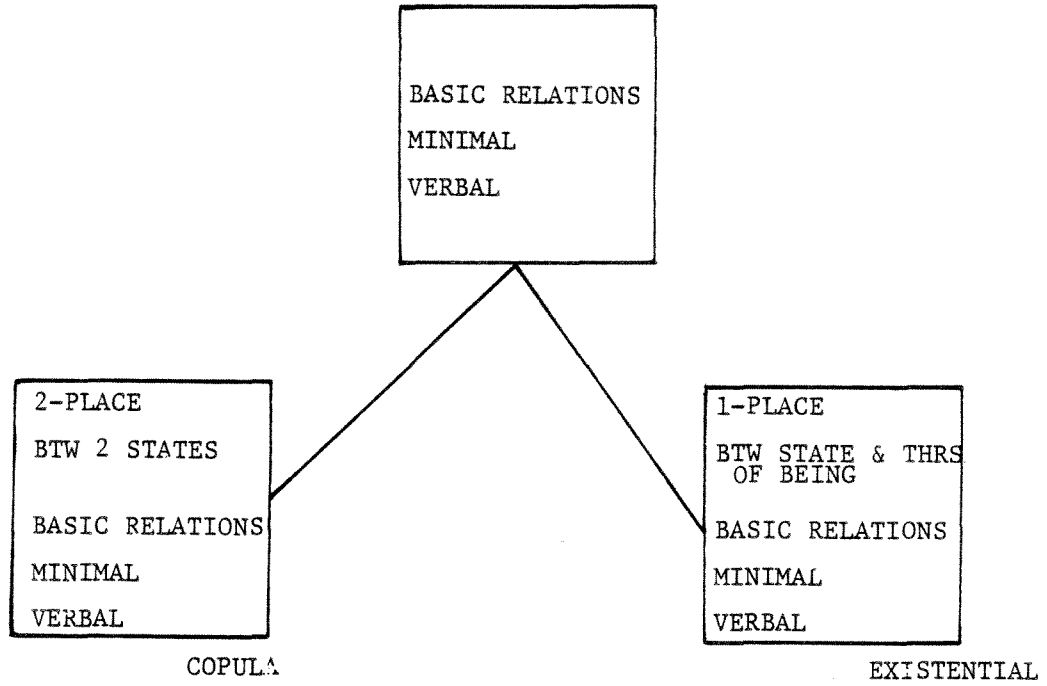


Figure 9.

This alternative relates the two notions in a natural and integrated fashion without conflating them to the point of their losing their independence. This alternative then has the advantage of avoiding the problems raised by the other alternatives and capturing the close relation of copulation and existence in language. Such a hierarchy can explain why, despite their fundamental independence, the two types of predicates tend to associate in various languages. The answer offered here is that they are closely-related alternates of a schematic relation predicate which unites them by their common features. Positing such a super-ordinate schema explains why some languages can even encode these notions in the same predicate (as in English and Welsh).

4.0 Conclusions. I have shown that the traditional descriptions of copulas, though faulty, can be revised to include all the noted behavior of copulas in a fairly explicit definition. This definition allows for certain subtypes, which were described and illustrated. A similar treatment was made of existentials. The relationship between these two notions was shown to be one of elaboration of a common schematic relation predicate. Neither notion is felicitously derivable from the other. Besides providing a definition for these fundamental predicates and a basic taxonomy of subtypes, this paper has hopefully demonstrated both the semantic complexities of BE-verbs as well as directions for further study of such predicates in the world's languages.¹⁵

FOOTNOTES

¹These arguments apply equally to the transformational view of BE in addition to the traditional view.

²For example, BE can prepose in certain constructions. Question formation is a case in point.

³When there is no pause between the verb and the adverb, and the adverbial ending -ly is not used adjectively.

⁴The word predicate would be multiply ambiguous in this paper if some new terminology were not used. I will use this word only in the sense of Langacker (to appear), where it signifies the meaning of a morpheme. For 'predicate' in the traditional sense of the second half of a sentence, I use complement. For the verb 'predicate' [prɛdɪkət], I will use propose, with proposition for the corresponding nominal.

⁵Remember that copular quality is scalar, so that different predicates show greater or lesser coincidence with the prototype.

⁶One must distinguish between perfective vs. imperfective versions of copulas and the same distinction in basic relations. The first deals with the aspectual qualities of surface predicates in a language, and the other with the semantic nature of the relation described. So an imperfective view of a basic relation could be perfectivized in some language by addition of a morpheme. This is the case of Latin fui: the verb esse is normally an imperfective expression of equation, but in the preterite form fui, this relation is viewed as a perfective event. The inchoative and echoative basic relations discussed below are inherently perfective, since they express a change over time. See Langacker 1979a for discussion of temporal profiles.

⁷This is the narrow-scope interpretation of the negation. It can be paraphrased as "It is the case that NOT-X". The wide-scope reading is "It IS-NOT the case that X". The former asserts a non-relation; the latter denies a relation.

⁸The use of IN and OUT in these expressions is not fortuitous.

⁹Verbs such as English EXIST, Welsh BODOLI, Spanish EXISTIR, or German BESTEHEN are not so minimal as some other expressions of existence in these languages. This is shown by the fact that these verbs are more restricted in environment/co-occurrence than the more minimal forms; restricted behavior is to be equated with more elaborate semantic structure.

(i)a. There are two cupcakes for each of us.

b. ??Two cupcakes exist for each of us.

(ii)a. Hay cinco manzanas para los niños.

'There are five apples for the children.'

b. ??Cinco manzanas existen para los niños.

'??Five apples exist for the children.'

¹⁰The Spanish data has been reviewed for me by Nora Gonzalez.

¹¹Examples of these **types** are found in Jones and Thomas 1977:51-2.

¹²There is some difficulty in locating examples of this subtype. I am confident this is due only to lack of source material available to me. The Russian data has been reviewed for me by John Sheedy. The Choctaw data is from fieldwork.

¹³Mandarin sentences are from Chao 1970 and courtesy of Chi-lin Shih.

¹⁴Samoan data is drawn from Marsack 1962, Churchward 1951, and courtesy of Sandy Chung.

¹⁵I wish to acknowledge the comments and suggestions of Ron Langacker, Bruce Hawkins, and Evan Norris. They are in no way responsible for my errors.

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