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# A CONTINUUM OF MEANING IN THE COPULA

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Background.[1] Bloomfield (1933: 270) noted that the grammatical categories of a language "are so pervasive that anyone who reflects upon his language at all, is sure to notice them." This, Bloomfield supposed, is the reason that much of "'logic' and 'metaphysics'" is "merely a restating of the chief categories of the philosopher's language." Bloomfield further noted that "a task for linguists of the future will be to compare the categories of different languages and see what features are universal or at least widespread." The purpose of this paper is to propose a "discovery procedure" for doing just that.

Probably most grammarians have noticed that grammatical particles nearly always are capable of marking several different grammatical categories. Starosta (1972) built an interesting article around this obvious fact, and observed (page 72) that because of the "neglect of the study of the ways case relations can be realized on the surface ... important generalities and fruitful lines of inquiry have been missed as a result." After noting the polysemy inherent in such morphemes as the English preposition to (i.e., a directional that also marks the dative and serves as a complementizer), Starosta concluded that "it is not surprising to find that homonymy of realization occurs in other languages as well. It is, however, rather striking to find the same groupings of case relations being homonymously represented in a number of different languages as well." Of course, the grammatical morphemes of every language do not share the same exact polysemies, but they do to a significant degree. On the other hand, Sloat (1975) proposed that an examination of the differences in polysemy in the derivational/inflectional systems of different languages should be the criteria for "isolating semantic units," and thereby linguists can avoid inventing ad hoc grammatical categories. In addition, Sloat suggested that "the meanings expressed by the closed morphological classes ... in the languages of the world are important elements in lexical entries as well."

In a study of the grammatical functions of the Nez Perce copula (for a seminar), I compared the copulas of Twi and Spanish, and was intrigued to see that some of the meaning in these verbs seemed to be structured along a continuum. The structuring was such that any one

copular morpheme in these languages was polysemous only contiguously on a common scale of meaning. That is, no morpheme had meanings that were discontinuous on the continuum. But what is even more amazing is that the same generalization has held true for approximately 30 randomly selected languages.

It is of course true that grammatical morphemes change in meaning over time. In view of this, if the polysemy permissible in grammatical morphemes truly is restricted, then defining these restrictions would not only constitute a valuable descriptive mechanism, but also a model for historical change. Thus the implications of this kind of structuring are immediately both synchronic and diachronic.

Many have contributed to the development of the descriptive mechanism I am proposing, but I mention Starosta (1972) and Sloat (1975) as my immediate input. Starosta suggested the means for discovering the horizontal structure implied in Fig. 1. Sloat showed that grammatical categories are justifiable in a principled way for those regions between the vertical lines of Fig. 1. Thus categories are determined by observing where various languages make distinctions

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Mandarin | 做 | 收 | 有 | 在 | – | | 是 |
| Spanish | hacer | obtener | tener | estar | | ser | |
| Twi | yɛ | gye | wɔ | | – | (yɛ) | yɛ |
| Persian | کردن | | داشتن | هستن | | | |
| Amharic | ሠራ | ተቀበለ | አለ | | ነ | | |
| Tamil | ፍሥ | ሰማ | ፆሮ | | | | – |
| Swahili | tengeneza | pata | na | ko | ni | | |
| Korean | 만들다 | 받다 | 있다 | | 이다 | | |
| Quiche | banic | | c'olem | | – | | |
| English | make | get | have | be | | | |
| Malagasy | tao | azo | anana | – | | | |
| Nez Perce | haní | ʔinipí | wé· | | | | |
| Arabic | عمل | أخذ | (كان) | | | | |

Fig. 1. By requiring that identical morphemes in every language examined be contiguous on the above grid a tentative continuum of meaning began to emerge. The procedure is analogous to that which archeologists employ in piecing together a historical continuum by examining wood samples for common tree rings.

morphologically and in closed classes, and the continuum emerges when we note the various homonymies manifested in these morphemes.

At the 1977 Linguistics Institute I found Derek Bickerton's "principle of contiguity"[2] perfectly descriptive of the contiguity in my continuum. This principle states that no morpheme or word in any language may encode meaning from discontinuous regions of a meaning continuum, and conversely that a morpheme may manifest polysemy with respect to any of the categories on such a continuum as long as they are contiguous. Bickerton hypothesized a two dimensional "semantic space", but in this paper I am suggesting the practicality of constructing one dimensional meaning continua. Such continua prove to be finitely bounded because there is always eventual discontinuity reached in some languages. For example, the Twi verb yɛ is discontinuous on the continuum in Fig. 1. But if the continuum is made circular, as illustrated in Fig. 2, the principle of contiguity is maintained and the continuum becomes finitely bounded.

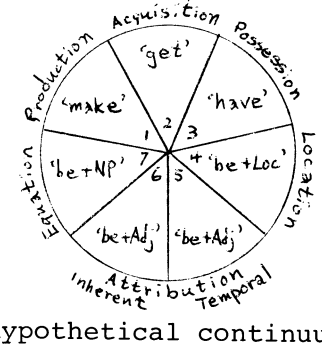


Fig. 2. A hypothetical continuum of meaning

The procedure. To develop the example illustrated in this paper I began by listing several grammatical functions of the copula in vertical columns and then filled the columns horizontally with the appropriate verbs for each language under consideration. Then I juggled the columns so that all identical morphemes were contiguous, as Fig. 1 shows. Fig. 1 is at this point still a very tentative structure. As more language data is considered, some categories may have to be removed from the grid if they violate the "principle of contiguity". It is better to remove a category from the continuum than a language if our goal is a universal structure. Also, other grammatical categories are likely to belong in the continuum. Sloat (personal communication) has recently suggested that 'keep' ought

to be somewhere in the continuum. A Korean speaker has partially confirmed Sloat's prediction by noting that in his language 'keep' is issta. Fig. 1 would thus seem to indicate that 'keep' should be sought for between 2 and 3 or between 3 and 4, but not between 4 and 5 because this would break the contiguity in English be. Thus a continuum is discovered, both deductively and inductively, as we explore our intuitions and are led by real languages. Categories are distinguished where natural languages dictate, relationships are revealed by the homonymy inherent in the grammatical morphemes of natural languages. For the moment, the significant point I wish to make is that instead of destroying the theory, 30 real languages have seemed to give it support. Note that instead of charting all these languages on the grid in Fig. 1, I list only examples from each of the different ways the continuum was divided.[3]

The categories in Fig. 1 are defined, with English examples, as follows. Languages generally have many verbs that fit these categories but with more specialized meanings. Any polysemy in them should also be contiguous on this continuum.

1. make, in the sense of 'produce' or 'bring into being'
   John made a table
2. get, in the sense of 'receive'
   John got (received) a book (from Mary)
3. have, in the sense of general possession
   John has a book; (or stronger) John owns a book
4. be+Locative
   John is in California
5. be+Adjective (temporal)
   John is happy today
6. be+Adjective (inherent or permanent)
   John is tall; John is chronically ill
7. be+Noun Phrase
   John is a doctor

The kind of data I use to build the continuum is as follows. a) In some languages there are morphemes that show polysemy not expressed in English, b) other languages make morphological distinctions where English does not, and c) there are languages that complete the circularity of the continuum. In the following examples I begin with the category 'make' and conclude with the category 'be+NP', and then unite the two with a single morpheme in Twi. Persian seems to justify the connection between 'make' and 'get'.[4]

(1) a. Pærvīn yek miz dorost kærd 'Parvin made a table'
    b. Pærvīn yek ketab dæryaft kærd 'Parvin received a book (from a distance)'

Note also that in English make sometimes expresses 'get'.

(2) a. John makes (earns) five dollars per hour
b. John made (acquired) a lot of friends in Hawaii
c. John made (got) good grades -- all A's

Spanish unites 'get' and 'have' as follows.

(3) a. Juan obtiene libros 'Juan receives books'
b. Juan tiene libros 'Juan has books'

In colloquial English got can mean either 'receive' or 'have' in such a sentence as I got a book. English is one language that distinguishes between possession and location verbally, with have and be, but many languages do not. Consider Twi.

(4) Kofi wɔ efie a. 'Kofi has a house'
b. 'Kofi is in a house'

The postposition mu 'in' removes the ambiguity of the copula wɔ; Kofi wɔ efie mu can mean only 'Kofi is in a/the house'. In America sales people often seem to equate being in with possession, as when they offer, for a price, to "get you into this house (or car)".

Many languages distinguish between location and attribution in the copula. Mandarin, for example, does not have a copula for attribution but does for location.

(5) a. qiáng shēng zài tái-běi 'Qiang Sheng is in Taipei'
b. qiáng shēng hěn gāo 'Qiang Sheng (is) very tall'

The copula of attribution can be split in this continuum into temporal and inherent categories, the division is justified by Spanish.[5]

(6) a. Juan está enfermo 'Juan is (temporarily) sick'
b. Juan es enfermo 'Juan is (chronically) ill'

Although Twi seems to make no distinction if the attribute is obviously inherent, the copula yɛ is required for adjectival predicates that necessitate an adverb to distinguish permanence from temporality.

(7) a. Kofi so 'Kofi (is) big'
b. Kofi yare 'Kofi (is) sick'
c. Kofi yɛ yare foɔ 'Kofi is always sick'
d.*Kofi yare foɔ

In Mandarin, as we noted, no copula co-occurs with predicate adjectives. But there is a copula required for predicate nouns.

(8) a. tā hěn gāo 'He (is) very tall'
b. tā shì yí ge-yī-sheng 'He is a doctor'

Just the opposite is true in Tamil.

(9) a. Kaṇṇan makiḻcci-yāka iru-kkiṛ-ān 'Kannan is happy'

b. Kaṇṇan oru manitan 'Kannan (is) a man'

Lastly, the continuum forms a circle with Twi, where yɛ is both the verb 'make' and the identity copula.

(10) a. Kofi yɛ ɔsɔfoɔ 'Kofi is a priest'
b. Kofi yɛ abodoo 'Kofi made cornbread'

In English also make can serve as an identity copula.

(11) a. John makes a good teacher
b. Two and two makes four

Implications. Suppose we discover a circular continuum such as I have described, and have included all categories that never cross classify in any language and excluded all those which do, then what have we found? Or suppose we find no discontinuities in a hundred or so languages; of what significance is it? In such a case I propose that what we would have is a natural class of grammatical categories all of which share a feature, as suggested by Fig. 3. Of course, such a feature should be independently justifiable, by its syntactic behavior as well as in logic.

The continuum in Fig. 3 is by no means a complete and final product, but when and if it ever is, I suggest that it will embody a feature of meaning that I might call 'existence'. At that point all we will have demonstrated is that every category on the continuum shares this one feature. The validity of the other features would be affirmed if a continuum can be found for each of them. To affirm the componential nature of grammatical categories, as shown in Fig. 3, it will be necessary that for each feature, a category will have a place on a separate continuum, in a natural class based on that particular feature. For example, if there

| | 'make' | 'get' | 'have' | 'be+Loc' | 'be+Adj' | 'be+Adj' | 'be+NP' |
|---|---|---|---|---|---|---|---|
| Existential | + | + | + | + | + | + | + |
| Causative | + | | | | | | |
| Mutative | + | + | | | | | |
| Possessive | | + | + | | | | |
| Inclusional | | + | + | + | + | | |
| Attributive | | | | | + | + | |
| Identitive | | + | | | | | + |

Fig. 3. A tentative feature designation for a natural class of grammatical categories.

really is a feature 'inclusion' then we ought to discover a continuum for which that will be the binding component. At this point, of course, it is impossible to know if such a continuum of meaning as I have suggested in this paper will include every category that entails the feature implied by that continuum. That is, will one of these wheels include every member of a natural class or only a subset of a natural class?

Obviously one can hypothesize universal grammatical categories by noting where real languages make grammatical distinctions. One can also obviously relate these categories by noting the polysemy inherent in the grammatical particles of real languages. And although such a tedious task remains to be accomplished; as Bloomfield noted, it should be attempted. But can we build bounded continua on the basis of Bickerton's "principle of contiguity"? That we do not yet know. Fortunately, however, this hypothesis is empirically testable, since any proposed continuum can be reduced in size for every discontinuity found in any language. If no continuum survives of sufficient size to be interesting then the principle of contiguity becomes uninteresting.

In conclusion, I see no reason to arbitrarily limit this model. Last summer Derek Bickerton was doing some very impressive work with a definiteness wheel. And I have had some success with wheels dealing with relational cases. Syntactic, semantic, and pragmatic categories ought to be considered. Where the model's usefulness is limited real languages will tell us so. But as can be seen, this model demands an enormous amount of work. Its beauty, as noted however, is that it can be refuted. But if it is not refuted, then what we will learn is not only what the categories of grammar are but also their relationship to one another as well as the nature of their component features. Such findings should be of value to descriptivists, historical linguists, and even perhaps prove insightful to psychologists and logicians.

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1: Both Colette Craig and Clarence Sloat read this paper as it was in progress of writing and made helpful suggestions. The data was elicited from many different individuals, mostly students, who were native speakers of these languages. The comment from Bloomfield was brought to my attention by Sharon Taylor.

2: Bickerton credited Eve Clark for the discovery of the principle of contiguity.

3: Other languages I have considered are Estonian, Finnish, French, German, Greek, Hebrew, Hindi, Ika, Indonesian, Japanese, Marshallese, Moru, Russian, Serbo-Croatian, Xhosa, and Yoruba. It must be realized that in eliciting examples from so many languages, errors are bound to occur. I would very much appreciate having them brought to my attention.

4: If the Persian auxiliary kærd lexicalizes any meaning inherent in this continuum then that meaning must be contiguous on it. And any other categories distinguished by compounds with kærd should be fitted into the continuum if they do not break the contiguity of the polysemy in morphemes of other languages. Any pro-verb, such as English do, must be substitutable only contiguously for verbs on the continuum. Without somehow limiting the "principle of contiguity", even (legitimate) paraphrases of the meaning of these categories (e.g., 'come to have' for 'get') must not find any component morphemes discontinuous on the continuum with regard to any other verb or paraphrase of a verb that is on the continuum. For example, 'come to have' is contiguous with 'have'. 'Make', which is contiguous in the other direction, can be paraphrased as 'cause to come to be/exist'. But one cannot paraphrase 'have' or 'be' with 'come ...'. At this point I also wish to claim, since the claim is refutable, that any areas of the continuum with co-occurrence restrictions (as to tense, aspect, voice, etc.) in any language must be contiguous as well. As an example, 'make' and 'get', which are contiguous, allow the progressive in English, and those areas of the continuum where the progressive is "strange" are thus also contiguous.

Sometimes a language does not have a generalized verb covering a category on the continuum but forces a choice between several morphemes of more specialized meaning. If this is the case then either a) there are finer linear distinctions along the continuum in question, or b) these distinctions are not represented by this continuum but should be sought for on another. Finer distinctions along a continuum are valid if they do not introduce discontinuity in morphemes of other languages. Morphemes that encode general meaning implied in a meaning continuum and also specialized meaning that is implied by another continuum must not violate the principle of contiguity on either. For example, a morpheme meaning 'to make a long cylindrical object' must not have polysemy that would in this manner violate a continuum with a category for 'make', nor ( if one exists) a continuum with a category for 'long cylindrical objects'.

5: It may be that this continuum is not the place to introduce temporal features. I suspect that Yoruba and Nzema may occasion their removal, but circumstances have prevented me from investigating further.

References

Bickerton, Derek. 1977. My notes from Bickerton's class in "Natural Semantax" held during the Linguistics Institute at the University of Hawaii.

Bloomfield, Leonard. 1933. Language. New York: Holt, Rinehart and Winston.

Sloat, Clarence. 1975. "Isolating semantic units," in The Berkeley Linguistic Society Papers, Vol. 1. Berkeley: University of California.

Starosta, Stanley. 1972. "The faces of case," in Working Papers in Linguistics, Vol. 4 No. 1. Honolulu: University of Hawaii.