Review of Regina Pustet:

*Copulas. Universals in the Categorization of the Lexicon.*

(Oxford University Press 2003; 262pp)*

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1. Introduction

The renowned Grimm Dictionary (1854-1961) makes the statement that the German copula *sein* (‘to be’) is “the most general and colourless of all verbal concepts” (‘der allgemeinste und farbloseste aller verbalbegriffe’). A more concise summary of the linguistic issues surrounding the copula is hardly possible. These two properties (and the latent tension between them!) make copulas a particularly interesting and vexing subject of linguistic research. Copulas appear to be almost colourless, i.e., devoid of any concrete meaning, thus leading to the question of why such expressions exist at all, not only in German but in the majority of the world’s languages. And at the same time copulas presumably provide the best window into the core of verbal concepts thereby telling us what it actually means to be a verb – at least in a language like German or English.

While there is a rather rich body of research on copulas in philosophical and formal semantics including several in-depth studies on the copular systems of individual languages, copulas have received comparably little attention from a typological perspective. The monograph of Regina Pustet sets out to fill this gap. She presents an extensive cross-linguistic study of copula usage based on a sample of 154 languages drawn from the language families of the world. The analysis is embedded in the theoretical framework of functional typology.

The study aims at uncovering universal principles that govern the distribution of copulas in nominal, adjectival, and verbal predications. Its major objective is the development of a “semantically-based model of copula distribution” (p.62) by means of which the presence vs. absence of copulas can be motivated through the inherent meaning of the lexical items they potentially combine with. Drawing mainly on the work by Givón (1979, 1984) and Croft (1991, 2001), who provide a functional foundation of the traditional parts of speech, Pustet identifies four semantic parameters which, if taken together, are claimed to support substantial generalisations on copula distribution – within a given language as well as cross-linguistically. These parameters are DYNAMICITY, TRANSIENCE, TRANSITIVITY, and DEPENDENCY. Pustet goes on to argue – and this is in fact the driving force behind the overall monograph – that the distributional behaviour of copulas, in turn, yields a useful methodology for developing a general approach to lexical categorization. Thus, in the long run Pustet aims at contributing to a better understanding of the traditional parts of speech, noun, adjective, and verb by defining them in terms of “semantic feature bundles, which can be arranged in [a] coherent semantic similarity space” (p.193).

2. Overview

The book is organised into 5 chapters and an extensive body of appendices. The latter supply additional information about the sample of languages under consideration, the questionnaire employed within the field work carried out for the individual languages discussed, statistical data, etc.

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Chapter 1 outlines the current state of the art concerning copulas and lexical categorisation within the functionalist paradigm. Pustet’s understanding of copulas rests crucially on the assumption of their semantic emptiness. In accordance with e.g., Hengeveld (1992) and Stassen (1997), but without really motivating this decision in depth, copulas are defined as follows:

(1) A copula is a linguistic element which co-occurs with certain lexemes in certain languages when they function as predicate nucleus. A copula does not add any semantic content to the predicate phrase it is contained in.

Pustet (2003: 5)

I will come back to the copula’s putative lack of meaning in section 3.

Pustet goes on to show that predicate formation with the help of a copula (in her terms “copularization”) is intimately connected with the parts-of-speech issue. Most important for the subsequent discussion are two assumptions:

(a) a prototype-based semantic definition of the traditional parts of speech in terms of associating prototypical nouns, adjectives, and verbs with object concepts, property concepts, and event concepts, respectively,1 and

(b) Givón’s (1979, 1984) time-stability hypothesis according to which prototypical nouns encode the most time-stable concepts, prototypical verbs encode the least time-stable concepts and the time-stability of prototypical adjectives lies in between. This leads to the implicational hierarchy given in (2), which is exploited in the course of the book in several ways.

(2) Implicational hierarchy: NOUNS > ADJECTIVES > VERBS

Chapter 2 discusses copulas in a cross-linguistic perspective. The survey shows that use of copulas is “an extremely widespread phenomenon in human language, and it involves considerable cross-linguistic variation” (p.39).2 Languages may differ, e.g., in the number of copulas they make use of, whether these are free or bound morphemes (the latter often being called predicate markers), which lexical classes copulas belong to,3 and under what conditions copulas may or must be dropped. Most important for Pustet’s approach is the fact that languages also differ as to which lexical categories copulas combine with.

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1 Pustet does not comment on her understanding of the notions of ‘object’, ‘property’, and ‘event’ any further. Given her aim of providing a semantically based definition of the parts of speech it would have been useful to give an independent semantic explanation of these notions.

2 In evaluating existing grammars for her cross-linguistic survey Pustet is faced with several methodological problems. Many languages had to be excluded because sufficiently explicit and clear statements concerning the use of copulas could not be found. The final sample from which cross-linguistic generalisations were derived in Chapter 2 comprises 131 languages; cf. Pustet (2003: 63). In view of this, it is all the more surprising that Pustet does not refer to Wetzer’s (1996) study on the typology of adjectival predication (apart from one short note on page 13). The remarkable parallels to this study wrt. both the empirical issues dealt with and the overall theoretical framework definitely would have deserved at least some comments like Pustet’s discussion of the similarities and differences between her approach and Stassen’s (1997) work on intransitive predication; cf. Pustet (2003: 78ff).

3 Besides mentioning the well-known cases of copulas belonging to the formal class of verbs (e.g. German; see the above quote from Grimm’s dictionary) and pronominals (e.g. Hebrew), Pustet mentions Korean as a language whose copula ita belongs to the formal class of adjectives (p.41). This observation would have deserved some more discussion on the possible morpho-syntactic properties of copulas in the languages of the world. Unfortunately, not even an illustration is given for this claim and Pustet’s main source, Sohn (1994), is missing in the references.
Focusing on the behaviour of nouns, adjectives and verbs, Pustet distinguishes four basic patterns of copula distribution (p.63ff): (a) any one of these three lexical categories might be used predicatively without the need for an (overt) copula (e.g. Tagalog); (b) only predicatively used nouns require a copula (e.g. Burmese); (c) predicative nouns and adjectives need a copula (e.g. German); and (d) all of these categories require the presence of a copula (e.g. Bambara). With the possible exception of Jacaltec, in which only adjectives seem to require a copula (p.66f), none of the remaining logically possible patterns is attested in Pustet’s sample. (I will return to the problematic case of Jacaltec in section 3.)

Besides these four common patterns of copula distribution there are less frequent split-systems, in which the need for a copula cuts across one lexical class. Examples for split-N, split-A, and split-V patterns are provided by Lakota, Japanese, and Basque, respectively (p.67f). The following table summarises the observed patterns of copula distribution; cf. Pustet (2003: 64; 67).

(3) Patterns of copula distribution

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(+ = copula used in predicate position; - = copula not used in predicate position)

Pustet systematises these distributional patterns with the help of the implicational hierarchy in (2): “Any lexeme that is located to the left of the cut-off point between copularizing and non-copularizing lexemes in the lexicon of a given language receives a copula; any lexeme that is located to the right of this cut-off point does not combine with a copula” (p.73).

Chapter 3 is devoted to uncovering the factors that control the global distribution of copulas summarised in (3). According to Pustet, these factors are to be sought in the semantic properties of the lexical items that copulas combine with.

First, Pustet presents the results of an earlier pilot study on five languages (German, Japanese, Lakota, Mandarin, and Spanish) showing that time-stability is in fact a crucial factor in predicting copula distribution. Lexical items which express time-stable concepts are more likely to combine with a copula in predicate position than items whose time-stability value is indeterminate or low.

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4 In a short remark on adpositions, Pustet proposes to subsume copula sentences like (i)-(ii) under the nominal case, more specifically, to treat them as nominals with an oblique case marker (p.32f).

(i) he is in the kitchen
(ii) the gift is for him

However, none of Pustet’s subsequent generalisations concerning the combination of copulas with nominals carries over to the case of adpositional phrases. The latter occupy quite distinct positions on the time-stability scale and they also display different values for the semantic parameters TRANSIENCE and DEPENDENCY (see below). This is one of several places in the book where the reader realises that Pustet’s true interest is not devoted first and foremost to copulas and their combinatorial behaviour as such. Instead, Pustet takes the distribution of copulas as a useful method to gain new insights into her real objective, viz. the definition of the lexical categories, nouns, adjectives, and verbs.
Further insights on other potentially relevant factors are gained by an in-depth investigation of minimal pairs such as the English verbal-adjectival pairs *to sleep vs. asleep* or *to smell vs. smelly*.

A lexical minimal pair is defined as a pair of lexemes which differ wrt. copula usage but which are semantically similar such that they can be substituted for each other *salva veritate* in at least one context. Pustet’s line of reasoning behind the minimal pair method is as follows: “if specific semantic differences between members of partial minimal pairs recur with a sufficient degree of regularity across languages, these differences can be interpreted as semantic primitives governing copularization at the cross-linguistic level” (p.91). To give an example: *smell* and *smelly* are interchangeable in (4a/b) but not in (5a/b) thus constituting a partial minimal pair the members of which differ wrt the realisation of arguments (Pustet’s TRANSITIVITY factor; see below). (The examples are taken from Pustet 2003: 91.)

(4)  
  a.  this cheese smells  
  b.  this cheese is smelly

(5)  
  a.  this cheese smells of garlic  
  b.  * this cheese is smelly of garlic

Example (6) (taken from Pustet 2003: 92) illustrates the case of a monolexemic minimal pair in Indonesian. The members of this pair differ wrt Pustet’s DEPENDENCY factor (see below). If the lexeme *perak* (‘silver’) is combined with the copula, as in (6a), an object reading is obtained; if the copula is missing, as in (6b), *perak* has a property reading.

(6)  
  a.  ini adalah perak  
      this COP   silver  
       ‘this is silver’  
  b.  ini perak  
      this silver  
       ‘this is made of silver’

The minimal pair method is applied to a sample of 22 languages. Pustet summarises the results as follows: “the distinction between copularizing and non-copularizing lexemes in partial and monolexemic minimal pairs can in fact be characterized by just a handful of semantic parameters which are, obviously, effective at the cross-linguistic level. The parameters which could be identified are DYNAMICITY, TRANSIENCE, TRANSITIVITY, and DEPENDENCY” (p.92).5

As it turns out, the distribution of the semantic parameter values among the members of minimal pairs is not arbitrary but governed by the following principle.

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5 For the purposes of this review, the following characterisation of the four semantic parameters should suffice. The DYNAMICITY parameter captures the difference between processes/events vs. states; TRANSIENCE, i.e. the distinction between temporariness vs. permanence, largely coincides with Givón’s notion of time-stability; TRANSITIVITY is used to refer to the presence of two arguments; and DEPENDENCY coincides basically with the traditional distinction between object concepts and property concepts; cf. Croft’s (1991) notion of relationality.
Principle of Unidirectionality:

Within a given lexical minimal pair, the feature value of the copularizing member with respect to any one of the four semantic dimensions dynamicity, transience, transitivity, and dependency never exceeds the feature value of the non-copularizing member.

Pustet (2003: 131)

Moreover, statistical analyses of large lexical samples that were compiled by means of consultant work with native speakers for 10 genetically diverse languages show that copula distribution in a given language can be predicted quite reliably on the basis of these parameters. Besides TRANSIENCE (alias time-stability) DEPENDENCY and DYNAMICITY yield the highest number of correct predictions; many times they even outperform the TRANSIENCE parameter in predictive power. But, Pustet concludes, none of the four parameters, if taken in isolation, yields fully satisfying predictions of copula use. There always remains a residual class of counterexamples.

In Chapter 4, Pustet proposes a solution to this drawback in terms of a multi-factor model of copularization. Lexical items are arranged in semantic classes within a three-dimensional semantic space defined by the parameters of VALENCE (a conflation of TRANSITIVITY and DEPENDENCY), TRANSIENCE, and DYNAMICITY. The figure in (8) shows the location of object concepts, i.e. prototypical nouns, property concepts, i.e., prototypical adjectives, and event concepts, i.e. prototypical transitive and intransitive verbs within this semantic space; see Pustet (2003: 169).

Additionally, there are several minor lexical classes whose semantic profile does not coincide with those of the lexical prototypes. Pustet conjectures “(a) that in any one language in which both copularizing and non-copularizing lexemes exist, there is a bipartite segmentation of the lexicon into a copularizing vs. a non-copularizing part which is defined by a single cut-off point in semantic space, and (b) that any item located to the left of this cut-off point copularizes, while any item located to the right of the cut-off point is incompatible with copulas” (p.177). In all sampled languages, mixed classes, which do not display a uniform behaviour wrt. copulas turn out to be located in categorial grey zones, i.e., areas between exclusively copularizing and exclusively non-copularizing sections of the lexicon. Residual
cases of unpredictable copula behaviour will be found exactly in these grey zones and hence may be viewed as a rather natural manifestation of category overlap (p.181).

In the concluding Chapter 5, Pustet speculates that the proposed semantically-based model of copularization not only provides an adequate explanation for the distribution of copulas but also might offer a promising analytical tool for the challenging task of developing a universally valid theory of lexical categorisation.

All in all, Pustet takes her monograph to confirm the functionalist tenet of the non-autonomy of linguistic form. Linguistic form, more specifically the presence vs. absence of copulas, is motivated by linguistic function in terms of semantic parameter settings of lexical items.

3. Evaluation

Pustet’s monograph is a very impressive, carefully worked-out, and clearly written typological study which will surely find many interested readers within the functionalist paradigm as well as outside. While I consider many of Pustet’s findings very interesting and thought-provoking, I have some questions and objections concerning certain background assumptions as well as methodological issues. These will be addressed in the following.

First and foremost, Pustet’s definition of copulas as semantically vacuous expressions is in need of justification. As mentioned in section 2 above, Pustet adopts the pre-theoretic view that copulas are meaningless as part of her definition given in (1). This claim about what is, after all, her central subject of investigation is neither substantiated any further nor is there any reflection on the notion of meaning it relies on. Clearly, copulas have no lexical semantic content comparable to the meaning of, say, common nouns, locative prepositions, or action verbs. Yet, there are good reasons to assume – and, actually, Pustet’s study can be taken to provide further evidence for this assumption – that copulas are nevertheless meaningful natural language expressions.

One kind of argument in support of this view is provided by multi-copula systems, which Pustet discusses in Chapter 2. If a given lexical item can combine with two or more copulas thereby yielding distinct interpretations, we should – rather than assuming otherwise unmotivated semantic indeterminacy or, even worse, polysemy on the part of the lexical item – at least entertain the possibility that the observed meaning difference goes back to the respective semantic contribution of the copulas at issue. I will elaborate this point below when discussing Pustet’s TRANSIENCE parameter in connection with the Spanish ser/estar distinction.

In the same vein, the most natural way to deal with Pustet’s monolexemic minimal pairs (illustrated in (6)) would be to trace the observed meaning difference back to the presence vs. absence of the semantic contribution of the copula.

What kind of meaning can copulas possibly be associated with? In what Pustet calls “mainstream linguistics”, there is an ongoing intensive debate about this question. One currently quite common answer says that the genuine meaning contribution of a copula like English to be consists in introducing a referential argument for a state of the copula’s subject referent displaying the property expressed by the given predicate; e.g. Bierwisch (1988), Kamp & Reyle (1993), Dölling (1999), Rothstein (1999), Maienborn (2003). That is, while the adjective tired in (9) expresses the property of being tired, the copula sentence in (9) expresses that there is a state of Sally being tired. Such states differ from the mere properties

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6 Several variants of this approach have been proposed, which differ mainly wrt the exact nature of the referential argument introduced by the copula. See Maienborn (2003, 2004) for a discussion as well as an overview of alternative accounts of copula semantics.
they are manifestations of in having a certain location in time, in being a potential target for specific anaphoric processes, etc.

(9) Sally is tired.

Put in more general terms, there are good reasons to assume that the semantic contribution of, e.g., English be, German sein, etc. consists in turning a property description into a state description.

If the meaning of copulas is to be defined somehow along these lines, some of Pustet’s decisions concerning the scope of her investigation need to be revised. For instance, Pustet excludes existential constructions (p.31f) as well as copulas like English become and remain (in Pustet’s terminology “semi-copulas”; p.5f) from her study arguing that these expressions add some semantic content to the predicate and therefore do not fall under the definition of copulas in (1). Of course, it is legitimate (and might be wise) to focus first on the more basic copula cases and leave existentials and more complex copula expressions for subsequent research. Still this would be a different kind of motivation.8

More importantly, the remarks on the meaning contribution of copulas presented above also call for rethinking Pustet’s explanation of some apparent counterexamples to her generalisations concerning the distribution of copulas. One such case is Jacaltec. As mentioned above, Jacaltec appears to use a copula only in combination with adjectives. This runs counter to the implicational hierarchy in (2), which would predict that the copula should also appear with nouns; see the discussion in section 2. Pustet’s way of dealing with this counterexample is based on an observation by Craig (1977: 22f), who notes: “The copula -eyi ‘to be in a certain way or condition’ expresses a state which either is a transient state of health or mood or is the result of an action”. Pustet goes on to argue that -eyi, having apparently semantic content, should actually not count as a copula.9 However, in view of my remarks on the semantic content of copulas this is not a possible way out. In fact, Craig’s observation on -eyi fits perfectly with the general characterisation of copulas as introducing state referents.10

There might be another solution to the Jacaltec problem. Pustet’s generalisations might still turn out to be universally valid in the end. I do not want to draw this into doubt at all. Yet, her present attempt of explaining away these counterexamples is unconvincing.

In sum, in my opinion Pustet was too hasty in concluding that copulas are “mere morphosyntactic ballast” (p.189). Their overall meaning contribution might seem quite inconspicuous (and therefore “colourless”) at first. Nevertheless, copulas definitely have a distinctive semantic function that can be associated with their linguistic form – an idea that should be welcome also from a functionalist point of view.

A second remark concerns the minimal pairs approach as a tool for (cross-)linguistic research. As Pustet’s monograph shows, this is a very efficient heuristics for detecting fine-grained semantic differences. In fact, I think that a broader application of this method could possibly uncover even more deep-seated semantic contrasts. More specifically, I would suggest to extend the approach by comparing minimal pairs not only wrt. their lexical meaning but also wrt. their combinatorial behaviour. Take, for instance, the minimal pair

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7 Opinions differ as to whether the states to which copula sentences refer also have a location in space; see Maienborn (2003, 2004) for a discussion of the pros and cons.
8 Note, by the way, that the Turkish copula olmak may translate into both be and become (e.g. Lewis 1967: 141), thus underlining the intimate relationship holding between these copula expressions.
9 Pustet (2003: 66): “Craig’s translation ‘to be in a certain way or condition’, however, seems to imply that the ‘copula’ -eyi might not be entirely devoid of meaning. If -eyi is meaningful, however, this element does not qualify as a copula according to the definition employed for the purpose of the present study”.
10 Similar objections apply to Pustet’s account of two apparent counterexamples to her principle of unidirectionality in (7) provided by, once again, Jacaltec and Berbice Dutch Creole (p.132).
made of to sleep and asleep, which according to Pustet (p.181) are completely synonymous. If we examine their combinatorial potential it turns out that these expressions differ sharply as to the admissibility of certain modifiers. While the verb to sleep combines with manner adverbials and the like as in (10a) no such modifiers are tolerated in the case of asleep plus copula; see (10b).

(10) a. Sally slept restlessly / without dreaming / a little bit.
    b * Sally was asleep restlessly / without dreaming / a little bit.

Maienborn (2003, 2004) takes this kind of data as evidence that there is a need for distinguishing semantically the states referred to by copula sentences from the states referred to by verbs like sleep, wait, sit etc. Be this as it may, the different combinatorial behaviour suggests that the members of a minimal pair like to sleep vs. asleep are not fully synonymous, and it would be interesting to see whether such a semantic differentiation has some cross-linguistic validity. It seems to me that the minimal pairs approach, if properly extended, would make a promising means to study such issues in more detail.

Finally I want to comment on one of the semantic parameters Pustet’s generalisations are based on: TRANSIENCE. As Pustet notes elsewhere “any aspiring language universal will only be worth as much as the descriptive primitives it is based on” (p.88). So let us have a closer look at the explanatory value of the TRANSIENCE parameter. While the definition of this parameter in terms of temporariness vs. permanence seems rather straightforward and thus fairly well-grounded (although closer inspection would reveal several complications), the question I want to address here is whether this opposition is really reflected by natural languages as expected.

The probably most famous case mentioned in this context is the ser/estar distinction in Spanish and Portuguese. It has been repeatedly claimed – and Pustet (2003: 49ff) subscribes to this view – that the general principle underlying the alternation between the copulas ser and estar is that ser is used for permanent properties while estar is reserved for temporary properties. Yet, despite its popularity, hispanists have always emphasised that this generalisation can be nothing more than a mere rule of thumb for selecting ser or estar. It must be admitted that all attempts to expand this rough correspondence into a full-fledged explanation of the ser/estar puzzle have failed up to now. One of the most remarkable empirical facts that resist such an approach is the following. The copula estar appears to be appropriate when expressing a first sensorial experience, independently of whether the observed property turns out to be permanent or non-permanent; s. Querido (1976), Clements (1988), Maienborn (2005). For instance, the colour of the leaves of a newly discovered tree may be described by using estar as in (11) without carrying any commitments as to the temporary or permanent nature of this colouring. (This example is adapted from Querido (1976).)

(11) (Mira:) Las hojas de este árbol están amarillas.
    (Look:) The leaves of this tree are yellow.

Cases like (11) are highly problematic for any approach to the ser/estar distinction that is based somehow on the temporary-permanent dichotomy. Example (11) suggests that the real difference governing the distribution of ser and estar must lie elsewhere.

Maienborn (2005) proposes a discourse-based account of ser/estar according to which estar-predications are connected to a specific discourse situation whereas ser-predications hold without such a restriction. One way, and in fact the pragmatically preferred way, of making sense of estar’s discourse-boundedness is by interpreting the predicate as expressing a
temporary property. Yet, as the above discovery scenario shows, there are other options as well.

Whatever the right solution to the *ser/estar* puzzle may be, what is crucial here is that the temporary-permanent dichotomy is not a semantic opposition that is grammatically encoded in *ser-* and *estar*-predications but rather seems to have the status of a pragmatic preference. Thus, Spanish and Portuguese *ser/estar* actually do not provide convincing evidence for the popular assumption that the difference of temporary vs. permanent properties is reflected by linguistic structure. It would be interesting to see whether this reservation carries over to other multi-copula systems which are considered to be more or less analogous to *ser/estar* – Pustet (2003: 51) mentions Barasano, Ndyuka, Limbu, Maltese, and Nigerian Pidgin.

In sum, a more thorough look at *ser/estar* casts serious doubts on the legitimacy of Pustet’s (and Givón’s) TRANSIENCE parameter as a genuinely semantic parameter and raises the question of whether the temporary-permanent opposition is the right candidate to draw on when searching for “aspiring language universals”.

Inspite of their different tradition, aims, and methodology, functional typology and formal semantics can, now as ever, profit from one another. Pustet’s monograph provides an excellent basis for such an “interdisciplinary” exchange.

**References**


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