



**UNIVERSIDAD DE CÓRDOBA**

---

---

**ALFINGE**

---

---

**FACULTAD DE FILOSOFÍA Y LETRAS**  
**SECCIÓN DE FILOLOGÍA - AÑO 1997 - Nº. 9**

**SERVICIO DE PUBLICACIONES**  
**UNIVERSIDAD DE CÓRDOBA**

DIRECTOR  
MIGUEL A. GARCÍA PEINADO

SECRETARIO DE REDACCIÓN  
LUIS COSTA PALACIOS

CONSEJO DE REDACCIÓN  
ASCENSIÓN SÁNCHEZ FERNÁNDEZ  
*Departamento de Filología Española y sus Didácticas*

MIGUEL RODRÍGUEZ-PANTOJA MÁRQUEZ  
*Departamento de Ciencias de la Antigüedad*

MIGUEL ÁNGEL GARCÍA PEINADO  
*Departamento de Filología Francesa e Inglesa*

LUIS COSTA PALACIOS  
*Departamento de Filología Francesa e Inglesa*

# ALFINGE

Año 1997 - Núm. 9

ALFINGE, revista de publicación anual editada por la Sección de Filología de la Facultad de Filosofía y Letras y por el Servicio de Publicaciones de la Universidad de Córdoba.

Precio de suscripción: 1.500 pts. (15 \$).

Envío de originales y solicitud de intercambio con otras revistas:

LUIS COSTA PALACIOS  
Secretario de Redacción

Facultad de Filosofía y Letras  
Plaza Cardenal Salazar, 3. 14071 Córdoba

Suscripción y distribución de la Revista:  
SERVICIO DE PUBLICACIONES DE LA UNIVERSIDAD DE CÓRDOBA  
Avda. Menéndez Pidal, s/n. 14701 Córdoba  
Teléfono: (957) 202250.

### 1. Introduction

In lexicology and lexicography lexical units are primarily considered as units of meaning. The concept of meaning is not taken to be equivalent to the meaning definition given for a lexical unit in its entry in the dictionary, but involves both paradigmatic and syntagmatic aspects. As Martín Mingorance (1990: 227) states: '... in its essence, a natural language is but a communication code consisting of a set of symbols (lexicon) and a set of combinatory rules (syntax) in a relationship of interdependence: syntactic rules depend to a varying degree on the structure of lexical units; on the other hand, lexical units are built along a paradigmatic and a syntagmatic axis, the intersection of which constitutes their meaning; the combinatorial properties of lexical units constitute as much a part of their meaning as their lexico-semantic structure.'

There is a certain group of words, known as copulas, which, even within this wider interpretation of the concept of meaning, are hard to assign a meaning definition, both paradigmatically and syntagmatically. I will discuss these two aspects one by one.

The 'paradigmatic meaning' of these words emerges from the specific combination of elements with which they combine rather than being intrinsic to them (Dik 1980: chapter 4; Hengeveld 1992: chapter 3). Consider the following example:

---

(\*) This article is based on the material presented in Hengeveld (1992: chapter 10), in which an account of the treatment of the various construction types in Functional Grammar may also be found.

Turkish (Ersen-Rasch 1980: 203)

- (1) I siz-Ø-im  
unemployed-PRES-1.SG  
'I am unemployed'

One of the meanings often listed for the verb *to be* in dictionaries of English is 'have state or quality', and this would probably be the most appropriate description for the 'meaning' of this verb in the translation of the Turkish example (1). Yet, as the Turkish original shows, it is perfectly possible for a language to express this same meaning without the intervention of a verb 'to be'. This shows that it is the application of a specific type of non-verbal predicate (here *i siz/unemployed*) to a specific type of argument (here *-im/I*) that gives rise to the interpretation of property assignment, rather than that this interpretation would form part of the meaning of the verb *to be*. Given the fact that copular verbs often combine a great variety of non-verbal predicates with a great variety of argument types, it comes as no surprise that dictionary entries for copular verbs often enumerate a whole series of meanings for these verbs.

Syntagmatically, copular verbs cannot be assigned a specific meaning either. First of all, they cannot be said to impose any selection restrictions on the elements with which they combine. Consider the following examples:

- (2) a. Sheila is ill.  
b. \*This table is ill.  
(3) a. \*Sheila is round.  
b. This table is round.

The property *ill* in (2) cannot be predicated of inanimate arguments, the property *round* in (3) cannot be predicated of animate arguments. Each of the sentence pairs (2)-(3) shows different possibilities, yet each pair contains a form of the copula *be*. This shows that the selection restrictions which are at stake in (2)-(3) are imposed by the non-verbal predicates, not by the verbal copula. Secondly, copular verbs cannot be said to have a predetermined valency. In constructions based on a non-verbal predicate it is this predicate that determines the number of obligatory constituents, i.e. arguments, in the predication. Compare the following sentences:

- (4) This book is fascinating.  
(5) a. This book is identical to that one.  
b. \*This book is identical.

The adjective *fascinating* requires one argument, the adjective *identical* requires two. Both adjectives combine with the copula *be*, which shows that the number of arguments is determined by the non-verbal predicate, not by the verbal copula.

From these facts it may be concluded that neither from a paradigmatic nor from a syntagmatic perspective copular verbs can be considered lexical elements. Rather, they are auxiliaries the main function of which is to express a predicative relation between a non-verbal predicate and its argument(s).

Languages which lack a copula or are dissatisfied with the one they have cannot directly introduce a new meaningless word in such a function. Meaningless words can simply not be created as such. Rather, these languages have to take recourse to elements which do have a lexical status, that is, elements which impose selection restrictions and have a predetermined valency, which through a gradual process of grammaticalization lose their meaning and acquire the status of a copula. In this article I will give an overview of the kinds of lexical elements that may enter into such a process of grammaticalization, or rather, copularization. The study of a wide range of languages (see Hengeveld 1992) reveals that the elements that most frequently enter in such a process of grammaticalization are of three different types: (i) positional verbs, (ii) verbs meaning 'become', and (iii) pronominal elements. Each of these types will be discussed separately in the following sections. In this discussion I will pay particular attention to the restrictions that partially grammaticalized instances of these types may impose along both the syntagmatic and paradigmatic axis.

## 2. Positional verbs

### 2.1. Introduction

Positional verbs may develop into copular verb in a process of grammaticalization within which the following situations may obtain: (i) the positional verb has to compete with a copular verb in locative constructions; (ii) the positional verb is the only possibility in locative constructions; (iii) the positional verb is combined with adjectival and/or nominal predicates as well. These various situations will be discussed one by one in the following sections. I will then integrate the findings into a single scenario and look at the behaviour of Spanish *estar* from this perspective.

## 2.2. Positional verb and copula in locative constructions

In several languages, such as Dutch and the Australian languages Ngalakan and Ngiyambaa, the use of a copula in locative constructions is restricted. Consider the following Dutch examples:

<i>Dutch</i> (Indo-Hittite)				
(6)	*Jan	is	op	de bank.
	Jan	COP.PRES.3.SG	on	DEF sofa
	'Jan is on the sofa.'			
(7)	Jan	zit	op	de bank.
	Jan	sit.PRES.3.SG	on	DEF sofa
	'Jan is sitting on the sofa.'			
(8)	Jan	is	in	Frankrijk.
	Jan	COP.PRES.3.SG	in	France
	'Jan is in France.'			
(9)	Jan	zit	in	Frankrijk.
	Jan	sit.PRES.3.SG	in	France
	'Jan is in France.'			

The general tendency in Dutch seems to be that, in those cases in which the location itself is an object (e.g. a sofa) rather than a certain amount of space (e.g. France), positional verbs rather than verbal copulas are used. Apart from specifying a posture, these verbs serve to express tense, mood and aspect distinctions which in copula constructions would be marked on the copula. This latter function may be the primary one when the positional verb is used in sentences in which the location is an amount of space, as in (9). In this example it is not implied that the subject is in a sitting position, and the positional verb has a copula-like status.

## 2.3. The locative copula

Many languages have a separate verbal copula which is used in locative constructions only. This copula originates in a positional verb, as can be derived from the fact that in the grammars of these languages there are explicit indications that the verbal copula used in locative constructions may also be found as a lexical verb meaning 'stay', 'live', or 'sit', or that it is etymologically related to such a verb. The latter situation obtains in Pipil, where the localizing copula *nemi* is etymologically related to Classical Nahuatl *nemi* 'live' (Campbell 1985: 365); the former in Gilyak, where the

localizing copula *pî* can also be used to mean 'live', as in the following examples:

<i>Gilyak</i> (Isolate; Nakanome 1927: 31, 21)				
(10)	Tyo	tyax	mi	pî-nt.
	fish	water	LOC	COP-FIN
	'The fish are in the water.'			
(11)	Cin	ršas	pî-nt.	
	2.PL	where	live-FIN	
	'Where do you live?'			

These facts indicate that positional verbs may develop into copulas within locative constructions in the course of time.

## 2.4. The locative copula with adjectival and nominal predicates

Several languages lack a copula in constructions based on an adjectival or nominal predicates. In order to express verbal categories such as tense, mood, and aspect, they have to resort to alternative strategies. One such alternative is illustrated in (12) and (13):

<i>Tamil</i> (Elamo-Dravidian; Asher 1982: 49)				
(12)	Avaru	daktar.		
	3.SG.M	doctor		
	'He is a doctor.'			
(13)	Avaru	distrikt	inspektar-aa	iruntaara.
	3.SG.M	district	inspector-ADVR	COPPAST.3.SG.H
	"He was (there) being a district inspector."			
	'He was a district inspector.'			

Example (12) shows that in Tamil constructions with a nominal predicate are expressed without the intervention of a copula. Verbal tenses are expressed by means of the verbal copula that is used in locative constructions, as in (13), the result being a locative construction in which the location itself is left unspecified, and in which the nominal predicate is adverbialized by means of suffixation of the adverbializer *-aa*, i.e. gets the treatment which is characteristic for predicative adjuncts.

The adverbial status of the non-verbal constituent is not only signalled by the presence of the adverbial suffix, it is also reflected in the fact that the adverbial constituent is optional, i.e. the locative construction may occur without it, as in the following example:

Tamil (Elamo-Dravidian; Asher 1982: 52)

- (14) Kannan iru-kkar-aar-aa.  
 Kannan COP-PRES-3.SG.HON-INT  
 'Is Kannan in?'

Now, in constructions of the type discussed here the adverbial constituent may lose its adverbial nature and, consequently, the locative copula develops into a copula of wider application. This change may be observed in Basque, where the two constructions occur side by side:

Basque (Isolate; Saltarelli 1988: 63)

- (15) Gu nekatu-ak g-a-u-de.  
 1.PL.ABS tired-PL.ABS 1.PL.ABS-PRES-COP-ABS.PL  
 'We are tired.'
- (16) Gu nekatu-ta g-a-u-de.  
 1.PL.ABS tired-ADVR 1.PL.ABS-PRES-COP-ABS.PL  
 'We are (there) being tired'  
 'We are tired.'

In Basque the verb *egon* 'be, exist, reside', which as a copula is normally used with locative predicates only, is sometimes combined with an adjectival predicate, as in (16). Saltarelli (1988: 63) notes, however, that "... these sentences are usually questionable, the common alternative being to treat *nekatu* 'tired' as a derived adverb bearing the adverbializer *-ta ...*". The latter situation is illustrated in (16).

## 2.5. Spanish *estar*

The following general stages may now be recognized in the development from positional verb to copular verb:

- (17) (i) Lexical positional verb;  
 (ii) Positional verb used as a copula in locative constructions, either with certain limitations (Dutch, examples (6)-(9), or without any restriction (Gilyak, examples (10)-(11));  
 (iii) Positional verb used as a copula in constructions with a nominal or adjectival predicate (Basque, examples (15)-(16)).

The history of Spanish provides an interesting illustration of these various stages (see Pountain 1985, Hengeveld 1991). In this language a descendant of the Latin positional verb *stare* (stage i) is used as a copula. Whereas in Medieval Spanish it is used virtually exclusively in locative constructions

(stage ii), in Contemporary Spanish it is used in constructions with an adjectival predicate (stage iii) as well.

Yet, despite the advanced stage of its development, Spanish *estar* still betrays its lexical origin in interesting ways (see Olbertz 1996), both paradigmatically and syntagmatically.

Paradigmatically, the fact that *estar* is not entirely void of meaning appears from the fact that with adjectival predicates it may occur most often in opposition with *ser*, as in the following examples:

- (18) Rosa es guapa.  
 'Rosa is pretty'
- (19) Rosa está guapa.  
 'Rosa is pretty'

The fairly abstract difference in meaning between these examples is that in (18) the property *guapa* is presented as intrinsic, whereas in (19) it is presented as contingent.

Syntagmatically, the fact that *estar* is not entirely void of meaning appears from the fact that it imposes a selection restriction, again at a fairly high level of abstraction, as illustrated in (20)-(21):

- (20) Juan es/está feliz.  
 'Juan is happy.'
- (21) La reunión \*está/es aburrida.  
 'The meeting is boring.'

The general restriction that is behind these examples is that *estar* may not be used in those cases in which the first argument refers to an event rather than to an object.

From these facts it may be derived that the process of copularization goes hand in hand with the gradual loss of meaning, whereby the most concrete aspects of meaning are lost earliest, and the most abstract aspects of meaning retained longest. Further grammaticalization would lead to the loss of even these most general aspects of meaning, a situation that obtains in the case of the copula *ser* in Spanish, part of the paradigm of which goes back to an original positional verb too, in this case Latin *sedere* 'be seated'.

## 3. 'Become'

In some languages a verbal element with inchoative meaning has taken on copular function in some tenses. Compare the following examples from

Ngalakan:

*Ngalakan* (Gunwinyguan; Merlan 1983: 57-58)

- (22)  $\emptyset$ - olko- $\emptyset$ .  
3.SG-big-PRES  
'He is big.'
- (23)  $\emptyset$ - olko-men- $\emptyset$ .  
3.SG-big-become-PRES  
'He is getting big.'
- (24)  $\emptyset$ - olko-meñ.  
3.SG-big-become.PAST.PF  
'He got big.'
- (25)  $\emptyset$ - olko-men-iñ.  
3.SG-big-COP-PAST.IMPF  
'He was big.'

In the morphologically unmarked present tense Ngalakan does not require a copula, as in (22). If in that tense the verbalizing suffix *-men* is used it has inchoative meaning, as in (23). In the perfective past this suffix may be used with the same meaning, as in (24). But in the imperfective past it has lost this meaning and is used as a copula, as illustrated in (25). It can be used in this way, since in this tense inchoative meaning would be incompatible with imperfectivity.

In the future tense both the inchoative and non-inchoative readings are possible, as in (26). The prefix *gu-* which appears in this example is required with certain tenses and is difficult to analyze (see Merlan 1983: 107):

*Ngalakan* (Gunwinyguan; Merlan 1983: 109)

- (26) Gu- $\emptyset$ -o?o?-men-a.  
gu-3.SG-small-become/COP-FUT  
'It will become small.'/'It will be small.'

Note that the statement that something will *be* small in the future generally involves the *becoming* small of that same item at some point posterior to the moment of speaking, so that the opposition is not as clearly present as in other tenses.

All in all, one might say that the element meaning 'become' in Ngalakan supplies an alternative to a copula in past and future, i.e. in those tenses in which verbal categories cannot be expressed directly on a non-verbal predicate, and thus fills the gap caused by the absence of a copular element in this language.

In a similar way the verb *olmak* 'be, become, happen, mature' in Turkish

fills a gap in the system of non-verbal predication in this language. Lewis (1967: 141-142) shows that, if the verb *olmak* is used in one of the tenses that can be expressed directly on non-verbal predicates, it has the meaning 'become'. If it is used in any of the tenses that can be expressed on verbal predicates only, it means either 'become' or 'be'. Thus, the verb *olmak* neatly "supplements the deficiencies" (Lewis 1967: 141) of the verbless strategy.

The opposition between (22) and (23) shows that from a paradigmatic perspective at least in certain contexts the element *-men* in Ngalakan should be considered a meaningful element, whereas in other contexts, such as the one illustrated in (25), it is a meaningless element. Syntagmatically, *-men* does not display any traces of its being a meaningful element, which may have to do with the fact that even in its original meaningful use it can hardly be said to impose any restrictions. Similar things could be said about Turkish. Thus, the newly created copulas in these languages can be said to display partial grammaticalization.

#### 4. Pronouns

Many languages have copulas which go back to original pronouns. Li & Thompson (1977) argue that this type of copula originates in an anaphoric pronoun used in a topic-comment construction, and illustrate this by tracing the history of the pronominal copula *shi* in Mandarin Chinese.

The three fundamental stages in the development of pronominal copulas distinguished and illustrated with a wealth of examples by Li & Thompson (1977) may be illustrated by means of the Pseudo-English examples given in (27)-(29), each meant as expressing the meaning 'Charles is my best friend':

- (27) Charles my best friend.  
(28) Charles, that my best friend.  
(29) Charles that my best friend.

In (27) two term phrases are juxtaposed without the intervention of a copula. In (28) the former term phrase occurs as a topic, which precedes a clause in which it is resumed by an anaphoric pronoun. In (29) the intonation break characteristic of topic-comment constructions has disappeared and the pronominal element functions as a copula. In Mandarin Chinese this pronominal copula originates in a demonstrative, but a personal pronoun may be the source of a pronominal copula as well, as for instance in Hebrew (Junger 1981).

Examples from Chinese illustrating the development sketched in (27)-(29) are given in (30)-(32):

Chinese (Sino-Tibetan; Li—Thompson 1977: 421, 424, 426)

- (30) Wáng-Tái wù zh ye.  
 Wang-Tai outstanding person DECL  
 'Wang Tai is an outstanding person.'
- (31) Jì yù qí shé ng yòu yù qí sì  
 alreadywish 3.SG live also wish 3.SG die,  
 shì huò ye  
 DEM indecision DECL  
 'Wishing him to live while wishing him to die, that is indecision.'
- (32) Yù shì suo jià fu-rén zh fù ye  
 1.SG COP NR marry woman GEN father DECL  
 'I am the father of the married woman.'

Sentences (30)-(31) occurred side by side around the 5th century B.C.. The use of *shi* illustrated in (32) was fully productive around the 1st-2nd century A.D.

The most crucial step in this development is that in which the anaphoric pronoun comes to be interpreted as a copula. This step goes hand in hand with a reinterpretation of the topic-comment construction as a subject-predicate construction (Li & Thompson 1977: 420). That sentences of the type illustrated in (32) can no longer be considered topic-comment constructions does not only manifest itself in the absence of an intonation break, but in syntactic differences as well. Thus, in Hebrew (Berman & Grosu 1976, in Li & Thompson 1977: 429) themes can not be indefinite, but the subject in sentences like (32) can.

One of the primary functions of pronominal copulas is to disambiguate between a noun-phrase and a sentence reading, since two juxtaposed terms are easily interpreted as being in an appositive relation. This also explains why a pronominal copula is most often found in identifying constructions. Both terms of an apposition are usually either both definite or both indefinite. Since subjects are usually definite, the need to disambiguate occurs most often in constructions containing two definite terms, i.e. the identifying ones.

The development of a pronoun into a copula is not restricted to non-Indo-European languages. Shields (1978), following Benveniste (1966), argues that the Indo-European verbal root *\*es-*, the reflections of which may be found in the paradigms of verbal copulas in many Indo-European languages, particularly in the third person singular, present tense, goes back to a pronominal form. This pronominal form, then, has been incorporated

into a verbal paradigm that goes back itself to several positional verbs (Lehmann 1982a: 27). Thus, two processes of copularization meet here. This example at the same time shows that originally pronominal copulas may acquire verbal characteristics. The same phenomenon may be observed in Mandarin Chinese as well, where the copula *shi*, which is normally optional, occurs with the verbal negator *bu*, and is then obligatorily present.

Whereas in the case of Indo-European and Mandarin Chinese the original pronoun can be said to be grammaticalized to a high degree, in other languages the ongoing nature of this process can be observed in synchronic facts. Consider the following Hebrew examples:

Hebrew (Junger 1981: 117-130)

- (33) Dan (hu) gadol.  
 Dan (COP) big  
 'Dan he big.'  
 'Dan is big.'
- (34) Sara (hi) mora.  
 Sara COP teacher  
 'Sara she teacher.'  
 'Sara is a teacher.'
- (35) Yossi ve Dan (hem) xaverim.  
 Yossi and Dan (COP) friends  
 'Yossi and Dan they friends.'  
 'Yossi and Dan are friends.'
- (36) Ata (hu) hexasud.  
 you (COP) suspect  
 'You he the suspect.'  
 'You are the suspect.'

In Hebrew a pronominal copula, agreeing in number and gender with the argument term, is used optionally in the present tense in certain types of non-verbal predication. That this pronominal form is not a full pronoun may be derived from the fact that, although it does show agreement in number and gender, as illustrated in (33)-(35), it does not show agreement in person (36). Since the choice of the different forms nor the opposition between constructions with and without a pronominal copula creates a meaningful opposition in Hebrew, the pronominal copulas cannot be considered meaningful elements from a paradigmatic perspective. From a syntagmatic perspective, however, the cooccurrence restrictions illustrated in (33)-(35) demonstrate that these elements are not entirely meaningless either. We here thus find a case of partial grammaticalization that is the opposite of the one encountered for the 'become' copula discussed above, which showed paradigmatic restrictions only.



## 5. Conclusion

In analyzing three scenarios of grammaticalization of original lexical elements into meaningless copulas, I have applied paradigmatic and syntagmatic criteria in order to detect cases of partial grammaticalization within each of the scenarios identified. The two types of criteria directly relate to the two aspects of meaning identified in the statement from Martín Mingorance (1990: 227) quoted in the introduction. Thus, the two types of criteria serve to detect remnants of the two faces of the original meaning in newly created copulas. The relevance of applying both types of criteria is apparent if we compare three sample cases discussed in this article: Spanish *estar*, originally a positional verb, Ngalakan *-men*, originally an element meaning 'become', and the Hebrew copulas, originally pronouns. Table 1 shows the outcome of the application of the syntagmatic and paradigmatic criteria to these three cases of partial grammaticalization:

Criteria	Positional verb (Spanish <i>estar</i> )	'Become' (Ngalakan <i>-men</i> )	Pronoun (Hebrew copulas)
Syntagmatic	+	-	+
Paradigmatic	+	+	-

Table 1. Syntagmatic and paradigmatic criteria

As Table 1 shows, Spanish *estar* shows both syntagmatic and paradigmatic restrictions, Ngalakan *-men* only paradigmatic restrictions, and the Hebrew pronominal copulas only syntagmatic restrictions. Thus, in the latter two cases the partial grammaticalization could only be detected by virtue of the fact that both types of criteria were applied.

## REFERENCES

- Asher, R.E.  
1982 *Tamil* (Lingua Descriptive Studies 7). Amsterdam: North-Holland.
- Benveniste, Émile  
1966 "«Être» et «avoir» dans leurs fonctions linguistiques", in: Émile Benveniste, *Problèmes de linguistique générale*. Paris: Gallimard, 187-207.
- Berman, Ruth—Alexander Grosu  
1976 "Aspects of the copula in Modern Hebrew", in: Peter Cole (ed.), *Modern Hebrew syntax and semantics: the transformational generative approach* (North Holland Linguistic Series 32), 265-285. Amsterdam: North Holland.
- Campbell, Lyle  
1985 *The Pipil language of El Salvador* (Mouton Grammar Library 1). Berlin: Mouton de Gruyter.
- Dik, Simon C.  
1980 *Studies in Functional Grammar*. London: Academic Press.
- Ersen-Rasch, Margarete I.  
1980 *Türkisch für Sie. Grammatik*. München: Max Hueber Verlag.
- Hengeveld, Kees  
1991 "Tipología, sincronía, diacronía", in: Henk Haverkate, Kees Hengeveld, Gijs Mulder & Hella Olbertz (eds.), *Exploraciones semánticas y pragmáticas del Español (Foro Hispánico 2)*, 81-94. Amsterdam: Rodopi.
- 1992 *Non-verbal predication: theory, typology, diachrony* (Functional Grammar Series 15). Berlin: Mouton de Gruyter.
- Junger, Judith  
1981 "Copula constructions in Modern Hebrew", in: Teun Hoekstra, Harry van der Hulst & Michael Moortgat (eds.), *Perspectives on Functional Grammar (Glot 3.3-4)*, 117-134. Dordrecht: Foris.
- Lehmann, Christian  
1982 "Thoughts on grammaticalization: a programmatic sketch", Vol.I. *Arbeiten des Kölner Universalien-Projekts* 48.

Lewis, G.L.

1967 *Turkish Grammar*. Oxford: Oxford University Press.

Li, Charles N.—Sandra A. Thompson

1977 "A mechanism for the development of copula morphemes", in: Charles N. Li (ed.), *Mechanisms of syntactic change*, 419-444. Austin: University of Texas Press.

Martín Mingorance, Leocadio

1990 "Functional grammar and lexematics in lexicography", in: Jerzy Tomaszczyk & Barbara Tomaszczyk-Lewandowska (eds.), *Meaning and lexicography* (Linguistic and Literary Studies in Eastern Europe 28), 227-253. Amsterdam: Benjamins.

Merlan, Francisca

1983 *Ngalakan grammar, texts, and vocabulary* (Pacific Linguistics B89). Canberra: Australian National University.

Nakanome, Akira

1927 "Grammatik der Nikbun Sprache (des Giljakischen)", *Research Review of the Osaka Asiatic Society* 5.

Olbertz, Hella

1996 *Verbal periphrases in a Functional Grammar of Spanish*. Dissertation, University of Amsterdam.

Pountain, Christopher

1985 "Copulas, verbs of possession and auxiliaries in Old Spanish: the evidence for structurally interdependent changes", *Bulletin of Hispanic Studies* 62, 337-355.

Saltarelli, Mario

1988 *Basque*. London: Croom Helm.

Shields, Kenneth

1978 "Speculations concerning the I.E. root \*es-", *Archivum Linguisticum* 9.1, 73-78.