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The distribution of object bare singulars

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Περίληψη

Στην εργασία αυτή εξετάζονται οι άναρθρες Ονοματικές Φράσεις σε θέση αντικειμένου στα Ελληνικά. Ερευνάται η κατανομή των άναρθρων Ονοματικών Φράσεων και προτείνεται ότι (α) αυτές εμφανίζονται με συγκεκριμένη ρηματική κατηγορία, την κατηγορία των τελειώσεων (accompishments) σύμφωνα με την κατηγοριοποίηση των Vendler (1967) και Dowty (1975), ως ορίσματα με φωνολογικά κενό Προσδιοριστή (Προδ°), και (β) ότι είναι Φράσεις Προσδιοριστή που δηλώνουν είδος (kind-denoting DPs).

0. Introduction

By the term bare singular count nouns (BSCNs) I refer to determinerless nouns as in (1):

(1)	a. grafo gramma write-1sg letter _{ACC} 'I write a letter'	VS.	grafo to gramma write-1sg the letter _{ACC} 'I write the letter'.
	b. diavazo efimerida	VS.	diavazo tin efimerida
	read-1sg newspaper _{ACC}	VS.	read-1sg the newspaper _{ACC}
	'I read a newspaper'		'I read the newspaper'
	c. htizo spiti	VS.	htizo to spiti
	build-1sg house _{ACC}		build-1sg the house _{ACC}
	'I build a house'		'I build the house'.

The phenomenon which is not much discussed in the literature, is not found in languages like English, French. Bare singular arguments are impossible in Germanic and Romance (if the noun is not mass) (Chierchia 1998:341), while bare plurals and bare mass nouns are grammatical in Germanic. Kamp (1981), Heim (1982), Kratzer (1989, 1995), Diesing (1992) a.o., proposed that English bare plurals are ambiguous: a) they denote kinds (cf. also Carlson 1977), and b) they are (weak) indefinites. I hypothesize that the reason why bare singular count nouns (BSCN) appear in Greek may be found in the existence of a null indefinite article in Greek. In Chomsky (1965) articles are introducted in the following way: Art: [+/- Definite].

In Greek the definite article is o ('the'), which is [+specific], the indefinite article is enas ('a'), with further categorization [+/-specific]. There is also a zero (\emptyset) article of type [-definite] [-specific]. The emphasis in this paper will be on this infefinite unrealized determiner. It must be noted that BSCNs can not appear with all verb classes (2a), and a specific verb class can not appear with all BSCNs (2b,c):

(2) a. agorazo spiti vs.
buy-1sg house_{ACC}
'I buy a house'
b. grafo gramma/vivlio vs.
write-1sg letter/book_{ACC}
'I write a letter/a book'
c. diavazo efimerida
read-1sg newspaper_{ACC}
'I read a newspaper'

pulo * spiti sell-1sg *house_{ACC} 'I sell a house'. Grafo *(tin) askisi write-1sg the homework_{ACC} 'I do the homework' vs. diavazo ?periodiko/?vivlio diavazo-1sg magazine/book_{ACC} 'I read a magazine/book'.

Next, I will examine the nature of the categories that can be followed by a BSCN.

1. Bare singular count nouns and verbal categories in Greek

The unaccusative/inchoative verbs like *liono* (melt), *vrazo* (boil) seem to admit both articulated and articless mass nouns, but only when they appear in the causative form¹ (3a,b):

(3) a. liono (to) vutyro/keri melt-1sg (the) butter/candle_{ACC} 'I melt the butter/canlde' b. vrazo (to) nero boil-1sg (the) water_{ACC} 'I boil the water' vs. eliose *(to) vutyro/keri
melt-1sg (the) butter/candle_{NOM}
'The butter/candle melted'
evrase *(to) nero
boiled (the) water_{NOM}
'The water boiled'.

Subcases of unaccusative/inchoative pairs like *anigo* (open), *klino* (close), *spao* (break) that appear with a definite object, seem not to accept a singular BN neither in the causative nor in the inchoative form (4):

(4) anigo/klino/spao *(tin) porta vs. anikse/eklise/espase *(i) porta open/close/break-1sg*(the) door_{ACC} opened/closed/broke*(the) door 'The door opened/closed/broke'.

It is cases with transitive verbs that seem to be of particular interest. If we follow the classification of Vendler (1967) and Dowty (1979) then from the four classes of his system, i.e. activities, achievements, states and accomplishments, only the class of "accomplishment" verbs seems to admit an object bare NP².

Let's start by considering activity verbs. Although these verbs can appear with a complement too, they don't form grammatical sentences with a BSCN (5). The achievements (6a,b), and some cases of state verbs (7a,c,d) do not form grammatical sentences with BSCNs either, while the majority of the verbs of the "accomplishment" class seem to be compatible with a determinerless object (8a-d):

(5) treho/ kolimpo/perpato *(ena) hiliometro activities/accompl. run-1sg/swim-1sg/walk-1sg (one) km
'I run/swim/walk (one) km/

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(6)
         a. ehasa/ vrika
                                 *(to) vivlio
                                                                   achievements
            lost-1sg/found-1sg *(the) book
            'I lost/found *(the) book'
         b. kerdisa *(ton) agona
            won-1sg *(the) race
            'I won the race'.
                      agapo *(tin) poli
(7)
         a. miso/
                                                                   states
            hate-1sg/love-1sg *(the) town
            'I hate/love the town'
         b. eho/
                       thelo (ena) aftokinito
            have-1sg/want1sg (a) car
            'I have/want a car'
         c. ksero
                      *(mia) taverna
            know-1sg *(a) tavern
           'I know a tavern'
         but
         d. ksero
                          (*to) skaki/(*tin) geografia
            know-1sg/g *the chess/*the geography
           'I know chess/geography.
         a. htizo
                                                                     accomplishments
(8)
                      spiti
                                                htizo to spiti
                                      VS.
            build-1sg house<sub>ACC</sub>
                                                build-1sg the house<sub>ACC</sub>
            'I build a house'
                                                'I build the house'
         b. ftiachno keik
                                      VS.
                                                ftiachno to keik
            make-1sg cake<sub>ACC</sub>
                                                make-1sg the cake<sub>ACC</sub>
            'I make a cake'
                                                'I make the cake'
         c. grafo
                      gramma/vivlio vs.
                                                grafo to gramma/to vivlio
            write-1sg letter/book ACC
                                                write the letter/the book<sub>ACC</sub>
           'I write a letter/a book'
                                                'I write the letter/the book'
         d. diavazo efimerida/?(ena) periodiko/?(ena) vivlio
            read-1sg newspaper<sub>ACC</sub>/?(a) magazine/?(a) book
           'I read a newspaper/ a magazine/a book'
            diavazo tin efimerida
            read the newspaper<sub>ACC</sub>
            'I read the newspaper'.
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2. Bare singular count nouns and the accomplishment verb class

It seems that the BSCN is part of the semantics of the verb. In these cases "the direct internal argument is the argument which can measure out the event to which the verb refers" (Tenny (1994:11)). The 'measuring-out' of the event appears with verbs taking incremental theme arguments (eat an apple, build a house). The eating event is understood to progress through the internal argument, the apple, until the end of the apple and of the eating event are achieved. So, the delimitedness of an event described by a verb depends not only on the verb alone, but on the object as well. Mass nouns (ice cream) or bare plural objects (apples) lead to non-delimited readings, since they describe something of undefined extent or quantity, whereas specific or count noun objects (the apple) lead to delimited reading; they refer to

something that has some fixed quantity³. But what happens with bare singular count nouns? If I say: troo ena milo ('I am eating an apple') I finish eating it when it is eaten, but when I say: troo milo ('I am eating apple') do I finish it when it is eaten? Rather the BN functions as a mass noun, as I can continue eating the apple for an indefinite period of time, because there is an indefinite quantity of apple. It is not about the number of apples but on the kind 'apple'. As Veloudis (1998) has observed, when a sentence like troo milo is pronounced, we are interested in the process itself rather than the action and the objecta as distinct categories. Thus, BSCNs appear with the accomplishment class of verbs which a) go on in time but they proceed toward a terminus (Vendler 1967), and b) they consist of an activity plus a resulting state (Grimshaw 1990:26). BSCNs in combination with an accomplishment verb class lead to non-delimited readings. They are on a par with mass nouns or bare plurals (cf. note 3). BSCNs do not appear either with unaccusative verbs, which denote only the state or change of state of an event, (i.e. correspond to the 2nd partition of the accomplishment) (10a), or with unergatives, whose structure corresponds to the activity, i.e to the first part of the accomplishment class and not to a state or to a change of state (10b) (Grimshaw 1990):

This means that BSCNs need both the activity and the state/change of state in order to be licensed:

- 3. Analysis

Carlson's (1977) hypothesis, revised by Chierchia (1998), is that BNPs in argument positions are unambiguously kind-denoting (contra Dobrovie-Sorin & Laca (1997) for Romance) and that BSCNs are predicates and not quantificational. They come directly as predicates of type <e,t> and they are interpreted narrow scope (for bare arguments see van Geenhoven 1996, Giannakidou 1997, Chierchia 1998 a.o). Following this assumption I propose that BSCNs in Greek are kinddenoting⁴ and that they contain a null determiner⁵. D is null⁶ and acts semantically as a type shifter shifting the NP to the semantic type of an argument (Partee 1987). Longobardi (1994) argues that only DPs but not NPs can be arguments. According to Chierchia (1998:386) "the licensing conditions for null D° in Italian are either licensing by a lexical head (perhaps by a process of LF incorporation) or by the functional head of a Focus Phrase, via Spec-Head Agreement. This takes place either before Spell-Out, in which case the dislocated constituent has to have focal stress, or after Spell-Out (at LF) in which case the moved constituent is subject to a somewhat looser condition of prominence (satisfied by making it 'heavy')". Semantically then, the null D° shifts the semantic type of the NP to that of an argument 7.

Chierchia's licencing conditions for null D° hold for the Greek cases of BSCNs , too, since the null D° can be licensed a) by the lexical head (the verbal predicate by government) or b) by the head of a focus phrase:

(11) a. EFIMERIDA/EFIMERIDES diavazo, ochi vivlio NEWSPAPER/NEWSPAPERS ACC read_{PERF-1sg}, not book b. GRAMMA/GRAMMATA, egrapsa LETTER/LETTERS ACC, wrote_{PERF-1sg}.

If the BSCN is a DP with a null D° and not an NP, then word orders like (12) can be explained:

(12) diavaze efimerida o Jannis otan mpika ⁸ was reading newspaper_{ACC} the-Jannis_{NOM} when came-1sg past 'John was reading newspaper when I came'.

I assume, (as in Mahajan (1990) and Laka (1993) a. o.), that only full DPs can occupy [Spec, AgrO]. If bare singulars were bare NPs involving no DP projection, and under the hypothesis that only DPs can occupy [Spec, Agr], these arguments must remain internal to VP. The case of (12) shows that there is scrambing, i.e. the object moves to a higher position, resulting in a VOS order. According to Alexiadou (1997) VOS order is analyzed as involving object shift which instantiates movement of a light element out of a focus domain. Light elements move across the subject. Such an analysis can be explained if we analyse bare singulars as being DPs which have an empty D, which in these cases allows them to move across the subject to AgrO.

BSCNs as kind-denoting should display scopelessness (Carlson (1977), Chierchia (1998)). BSCNs, just like mass nouns and bare plurals are kind-denoting, since a) they admit an opaque reading and they exhibit narrow scope⁹ (13), (13'), b) they have differentiated scope (14), (14'):

(13) Prepi na diavaso efimerida; # ine pano sto trapezi must conj. read newspaperACC; # is on the table 'I must read a newspaper; # it is on the table'.

VS.

(13') Prepi na diavaso efimerida; tha tin exi afisi o Janis pano sto trapezi must conj. read newspaper $_{ACC}$; conj. $_{FUT}$ it $_{CL}$ has left the John on the table 'I must read a newspaper; John will has left it on the table'.

In (13) "efimerida" (newspaper) is interpreted in the scope of the intensional verb "prepi" (must). That's why the continuation without a modal particle is ungrammatical. But if we have a modal particle as in (13'), then the sentence is fine. In (13') "efimerida" (newspaper) is interpreted in the scope of the future operator "tha". The future is intensional. Anaphora is modally subordinate. That means that the clitic "tin" in (13') refers to the hypothetical newspaper, and not to the real one. If the future operator is not present, then the clitic will pick up referent in the actual worlds and it will be ungrammatical. In other words, we are dealing with modal subordination (Farkas 1985).

(14) diavazo efimerida sixna (I) read newspaper frequently

The logical form is (14'), where s is the situation variable (cf. Krifka et al. 1995):

(14') SIXNA x, s [read (I,s) & newspaper (x) & read (I,x,s)]

Here we have narrow scope of the bare N and binding by the adverbial O-operator "sixna".

Another criterion that can be used in support of the claim that BSCNs are kind denoting is the use of the adjective "specific" as well as the WH-word "which". If we insert "specific" in a nominal argument with a null D, the resulting sentence is ungrammatical; the sentence will be grammatical if the indefinite article *ena* ('a') is added (15):

(15)#egrapsa siggekrimeno vivlio vs. egrapsa ena siggekrimeno vivlio wrote_{RERF} specific book vs. wrote_{PERF} a specific book.

The same result is obtained when the wh-question word *pios* ('which'), which denotes specific DPs implying a choice, is used to form a question on a bare DP:

(16) ehtisa spiti
build_{PERF} house
#pio spiti/ti spiti
which house/ what kind of house?

These tests show that BSCNs are kind denoting. The kind-denotation is related to the accomplishment verb classes because of the semantic of that verbs.

Conclusions

a) BSCNs are arguments that are kind-denoting, b) this kind-denotation is compatible with a specific verb class, i.e the accomplishment, c) the object BN appears with a null D which turns it into argument: in short it is a DP and not an NP. This also gives support to Hale & Keyser 's analysis (1996, 1999) who discuss cases of verb-complement constructions like *make trouble, write a poem* which involve "creation" or "production". Verbs of this class take complements that belong to the category DP in sentential syntax, i.e. they select NP complements realized as DP in sentential syntax. They are similar to the "light verb" constructions (Grimshaw & Mester 1988, Kearns 1988). So, Hale & Keyser (1996, 1999) treat this extra adverbial increment as integral parts of the lexical entries, which have no effect on the syntactic projections of category and argument structure. They characterize these verbs as "lp-monadics", i.e. the lexical projection contains just one argument, the complement.

It must, of course be explained why specific verbs (*grafo gramma* 'I write letter', *diavazo efimerida* 'I read newspaper') may appear with object BSCNs while others like *poulo spiti 'I buy house' may not. I leave this issue to a further study.

Notes

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¹ These cases do not fall within the main topic of this paper.

² Cases with existential and intentional verbs as well as interrogative contexts with BSCNs are not discussed in this paper.

³ Tzevelekou (1995) argues that in Greek a nominal of the category *discret* like 'apple' appears with an indefinite article and is delimited. It can also function as a nominal of the category *dense* (like the nouns *blood* etc) when it appears in a context like "I put apple in the cake".

⁴ The distinct uses that BSCNs can have fall outside the scope of this paper.

⁵ Roussou & Tsimpli (1993:70) also assume that in such determinerless Ns there is a null D head which must be present in order to be assigned Case and that to satisfy Visibility.

⁶ To a same conclusion comes Marinis (1999) with data of First Language Aqcuisition.

⁷ See Szabolcsi (1987), Stowell (1991) for the well-established assumptions that DPs, but not NPs can be arguments.

⁸ I thank Elena Anagnostopoulou for bringing this example to my attention.

⁹ According to van Gennhoven (1996) indefinites that are always interpreted narrow scope are predicative indefinites. She argues that all narrow scope indefinites are interpreted as properties.

References

Alexiadou, Artemis (1997): *Adverb Placement. A Case Study in Antisymmetric Syntax*. John Benjamins. Amsterdam.

Carlson, Creg (1977): *Reference to Kinds in English*. PhD thesis. University of Massachusetts, Amherst MA.

Chierchia, Gennaro (1998): "Reference to Kinds Across Languages". *Natural Language Semantics* 6. 339-405. Kluwer Academic Publishers.

Chomsky, Nooam (1965): Aspects of the Theory of Syntax. MIT Press.

Diesing, Molly (1992). *Indefinites*. Cambridge Mass.: MIT Press.

Dobrovie-Sorin, Carmen & Brenda Laca (1997): "La Genericite entre la Reference a l' Espece et la Quantification Generique". *Proceedings of Langues et grammaire*. (to appear).

Dowty, David (1979): *Word Meaning and Montague Grammar*. Reidel. Dordrecht.

Farkas, Donka F. (1985): *Intensional Descriptions and the Romance subjunctive mood.* Outstanding Dissertations in Linguistics. Garland. New York.

van Geenhoven, Veerle (1996): Semantic Incorporation and Indefinite

Descriptions: Semantic and Syntactic Aspects of Noun Incorporation in

West Greenlandic. PhD thesis. University of Tuebingen.

Giannakidou, Anastasia (1997): *The Landscape of Polarity Items*. PhD thesis. University of Groningen.

Grimshaw, Jane (1990): Argument Structure. Cambridge. MA: MIT Press.

- Grimshaw, Jane & Mester (1988): "Light Verbs and Theta-marking". *Linguistic Inquiry* 19:205-232.
- Hale, Ken & Samuel Jay Keyser (1996): "On the Complex Nature of Simple Predicators". *Complex Predicates* A. Alsina, J. Bresnan & P. Sells (eds.). CSLI Publications. 29-66.
- Hale, Ken & Samuel Jay Keyser (1999): "A Response to Fodor and Lepore "Impossible Words?"". *Linguistic Inquiry* 30, 453-466.
- Heim, Irene (1982): *The Semantics of Definite and Indefinite NPs.* PhD thesis. UMass. Amherst.
- Kamp, (1981): "A theory of thruth and discourse representation". *Formal Methods in the Study of Language*. J. Groenendijk, Th. Janssen & M. Stokhof (eds). Mathematical Center. Amsterdam.
- Kearns, K. (1988): Light Verbs in English. Ms. MIT.
- Kratzer, Angelika (1988): "Stage-level and individual-level predicates". *Genericity in General Language*. M. Krifka (ed.). SNS-Bericht. University of Tuebingen. 247-284.
- Kratzer, Angelika (1995): "Stagel-level and individual-level predicates". *The Generic Book*, G. Carlson & F.J. Pellletier (eds.). Chicago University Press. 125-176.
- Krifka, Manfred, Francis Jeffry Pelletier, Gregory N. Carlson, Alice ter Meulen, Gennaro Chierchia & Godehard Link (1995): Genericity. An introduction. *The Generic Book, ed. by G. Carlson & F.G.Pelletier. 1-* 124. Chicago University Press.
- Laka, Itziar (1993):"Unergatives that Assign Ergative, Unaccusatives that Assign Accusative". *MITWPL*. J. D. Bobaljik & C. Phillips (eds.) 18.
- Longobardi, Giuseppe (1994): "Reference and proper names: A theory of N-Movement in syntax and Logical Form". *Linguistic Inquiry* 25. 609-665.
- Marinis, Theodor (1999): "Minimal Inquiries and the Acquisition of the Definite Article". *Proceedings of the 34th Colloquium of Linguistics*. Johannes Gutenberg Universitaet. FASK Germersheim. September 7-10.1999. Peter Lang Verlag. (to appear).
- Mahajan, Anoop (1992): "The Specificity Condition and the CED". *Linguistic Inquiry* 23. 510-516.
- Partee, Barbara (1987): "Noun phrase interpretation and type-shifting principles. In: *Studies in Discourse Representation Theory and the Theory of Generalized Quantifiers*. J. Groenendijk, F, de Jongh & M. Stokhof (eds). Foris. Dordrecht.
- Roussou, Anna & Ianthi M. Tsimpli (1993): "On the Interaction of Case and Definiteness". *Current Issues in Linguistic Theory* 117. *Themes in Greek Linguistics*. (I. Philippaki-Warburton, K. Nicolaidis & M.Sifianou (eds.). John Benjamins. 69-76.
- Stowell, Timothy (1991): "Determiners in NP and DP". In: K. Leffel & D. Bouchard (eds). *Views on Phrase Structure*. Kluwer. Dordrecht. 37-56.
- Szabolcsi, Anna (1987). "Functional Categories in the Noun Phrase". *Approaches to Hungarian*. Istvan Kenesei, Jate Szeged (eds). 167-189.
- Tenny, Carol L. (1994): *Aspectual Roles and the Syntax-Semantic Interface*. Studies in Linguistics and Philosophy. Kluwer Academic Press.

Tzevelekou, Maria (1995): Categorisation lexicale et aspect- Le systeme aspectuel du grec moderne. These pour le diplome de doctorat. Paris. Veloudis, Jannis (1998): "Introduction to Semantics". Lecture Notes. Vendler, Zeno (1967): Linguistics in Philosophy. Cornell University Press.