Quantification at the Syntax-Semantics Interface: Greek Every NPs (University of Patras, 2014)

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Abstract

This dissertation offers a thorough examination of the Modern Greek distributive determiner. Specific focus is placed on particular parameters that involve whole sentences, which seem to result in different readings (semantic interpretations). I conclude through my analysis, which is circumscribed within the syntax-lf interface, that a common mechanism of Agree/binding is responsible for the emergence of these different readings.

Keywords
minimalism – quantification – syntax – semantics – interfaces – universal operator – free choice – agree

1 Introduction

A basic tenet of the Minimalist Program is that language connects the sensory-motor (Phonological Form or PF) and conceptual-intentional (Logical Form or LF) systems, innate in all human beings, and that it interacts with them in order to produce a linguistic expression (Chomsky 2000). Grammar or narrow syntax constructs expressions that are fed to the levels of PF (through Spell-Out) and LF. It is the latter, the narrow syntax-LF interface that constitutes the main focus of the present dissertation, in particular with regards to quantification, a phenomenon that is the root cause for the very positing of LF as a (then) “level of representation” (May 1977). Research on this particular two-interface area has not been very extensive, especially with regards to the syntactic analysis of rel-
Quantification at the Syntax-Semantics Interface

Following the standard assumptions of Generalized Quantifiers in logic (Mostowski 1957) and in the ensuing semantic tradition (Montague 1973), universal quantification has been unanimously regarded by linguists as implicating the
presence of a universal operator either within the lexical determiner (as in Barwise & Cooper 1981, Keenan 2003, among many others) or, if not there, at least as a sentential Operator at LF / Syntax (as in Szabolcsi 2010). Under the former view, every and kathe NPs should exhibit a uniform, universally quantified interpretation. However, a closer look at the data indicates that every also exhibits non-universal readings (examples 3 and 4 from Beghelli & Stowell 1997:101:41 and Schwartzchild 1996: 78: 185, respectively):

(1) Every dog has a tail.
(2) Each dog has a tail.
(3) For the most part, John knows which book every student bought.
(4) One out of every three handguns in America is made by Smith and Wesson.

Every NPs may have a kind as well as a universal interpretation (1), an interpretation more close to most as in (3) and a partitive use as in (4). Each NPs, on the other hand, exhibit a Universal-only interpretation as in (2). On the other hand, plural indefinites also exhibit a distributive yet not universal reading:

(5) Two friends had three pizzas and a glass of beer.

All the above data indicate that every NPs are not always interpreted universally and that distribitvity exists independently from universal quantification (as in Beghelli & Stowell’s 1997 “pseudo-distributivity” and Szabolcsi’s 2010 view on every NPs). Modern Greek kathe NP data are more generous in number and clarity of different readings:

(6) Kathe mathitis pire tria vivlia. Universal only every student took 3SG three books.
   ‘Every student took three books.’

(7) Kathe ghata exi tesera podhia. Kind every cat has 3SG four feet
   ‘Every cat has four feet.’

(8) Kathe etisi tha meletithi every petition will be-studied 3SG dhieksodhika. Free Choice any / Universal reading thoroughly
   ‘Any / every petition will be thoroughly examined.’
As observed from the translations, *kathe* NPs in Modern Greek may render three different readings: a universal distributive one as in (6) and (8), a kind reading as in (7) and a Free Choice *any* NP reading as a second reading in (8). A similar situation is attested with *o kathe* (commonly translated as *each*) as in (9), except that the kind reading is not an available option (as in 9), while there’s an extra Indiscriminative Free Choice (Horn 2000) reading available (10):

(9) I kathe ghta exi tesera podhia. *Kind / Universal
the every cat has,3SG four feet
‘Each cat has four feet.’

(10) Stin eurovision bori na tragudhisi o kathe
at the eurovision can,3SG sing,3SG the every
irrelevant
asxetos. FCI indiscriminative
‘Just any amateur can sing at the eurovision (contest).’

Lexical aspect (11, 12) as well as grammatical aspect (for Greek as well as English) and tense (13 and 14) play a role. In (13) we may only have a universal interpretation, whereas in (14) we may have either a universal or a Free Choice interpretation for the expression in question:

(11) *Kathe mathitis ine poliplithis.
Every student is numerous

(12) *Every student is numerous.

(13) Kathe mathitis me pire tilefono.
Kathe student me took.perf. telephone
‘Every student called me.’

(14) Kathe mathitis me eperne tilefono.
kathe student me took-imp. telephone
‘Every / any student could call / had the habit of calling me.’

The analysis leads to the following results and proposals: *Kathe /every* are not endowed with inherent quantificational force. They carry a distributive feature that has to Agree with a sentential distributive operator in c. Distributivity is distinct from Universal Quantification. The latter ensues as a combination of distributivity and definiteness. *Each* is specified for both. *Kathe* NPs quantifica-
tion involves different Operators at c ranging over the whole sentence, the vp as well as the np, giving rise to the different interpretations each time.

3 Conclusion

The analysis suggests that kathe as well as every determiners do not lexicalize a universal operator. Following Szabolcsi (2010) on every nps, I argue that (o) kathe nps are (inherently) indefinite expressions (in the sense of Heim 1982) that make part of a quantificational concord. A distributive operator binds the element variables of their np set and (sub) events variables on AspP; a Definiteness, a Generic or a Modal Operator binds the context set variables of the np, rendering a universal, a kind or an fc reading to the expression, accordingly, and time variables on tp. The presence of different sentential operators under c determines the readings that arise. I argue that binding by these operators corresponds to two Agree operations in syntax: One is between the Distributive operator in c and q on the dp as well as with Aspect on the vP. The other one is between the sentential operator and the relevant feature on Q, but also on TP. The quantificational chains formed are argued to be, to some extent, similar to that of wh-chains.

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