Nobody (Anything) Else

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Abstract

Information structure is the term designating a very lively and active branch of work, which deals with various topics such as anaphora, topical restriction, questions, congruence and exhaustion. This work tends to diverge in many directions which hardly can be seen to be compatible with one another. In this paper we attempt to improve the situation by trying to develop the minimal formal tools required to study the logical properties of the various issues involved and integrate them step by step. We successively deal with anaphoric connections between pronouns and other terms in terms of individual satisfaction by possible witnesses; with questions and topics in terms of sets of possible witnesses; with topical restriction and answerhood in terms of topical satisfaction; we conclude with a compositional deconstruction of Henk Zeevat's exhaustion operation.

Introduction

If we want to put it quite simple, the target of this paper is a compositional analysis of a locution like “else” as it occurs in an example like the following:

(1) Who gave what to whom? John a book to Mary, Jane a funny hat to some hippie, somebody else all her recordings of “Friends” to Denise, and nobody anything to anybody else.
It may be clear that an adequate interpretation of “else” cannot stand on its own. The term is used in an anaphoric way in (1), it is used in a constituent answer, and it relates to a previously raised issue. In this way “else” participates in quite a number of issues all having to do with information structure. Our tour towards a compositional analysis of “else” will therefore guide us through a number of various topics such as anaphora, topical restriction, constituent answerhood and exhaustification. The approach will be goal-driven though, as we want to lay bare the minimal conceptual tools to deal with these issues.

We take our start from a classical, Tarskian, satisfaction semantics for a language of first order predicate logic. In the first section the system is extended with a treatment of pronouns, which, although it obviously stands in the tradition of systems of discourse representation and dynamic semantics, involves a most minimal and fully conservative extension with witnesses. In the second section we define topically restricted quantification. This is a formalization and generalization of Westerståhl’s contextually restricted quantification, and at the same time a minimal reformulation of the type of topically restricted quantification developed by Gawron (1996), Aloni et al. (1999). In section three we use topical restriction to account for constituent answers in a compositional way. Quantifiers are interpreted in a classical way; they are taken to denote sets of sets of individuals, possibly parametric upon witnesses and witness functions. Section four next presents an interpretation of “else” from which a proper interpretation of in particular “somebody else” and “nobody else” can be derived in a compositional fashion. Section five summarizes the results.

Some issues are not discussed in full detail. For an extensive treatment of indefinite noun phrases and anaphoric pronouns we have to refer the reader to Dekker (2002a); an elaborate treatment of the dynamics of presupposition and quantification is offered in Dekker (2003); an update semantic account of the process of raising and resolving issues is presented in (Dekker, this volume). All this work heavily builds upon the seminal Groenendijk (1999), Roberts (1995), Zeevat (1994b).

7.1 Predicate Logic with Anaphora

The system of PLA has grown out of the tradition of discourse representation and dynamic interpretation but it deviates from a classical semantics only minimally (cf., Dekker (2002a)). It is inspired by (van Rooij (1997a), Stalnaker (1998)) and formally develops the idea that indefinite noun phrases can be used with referential intentions and that anaphoric pronouns can be coreferential with these indefinites by