

STRUCTURED NOMINAL AND MODAL REFERENCE

by

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ABSTRACT OF THE DISSERTATION

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The dissertation argues that discourse reference in natural language involves two equally important components with essentially the same interpretive dynamics, namely reference to values, i.e. non-singleton sets of objects (individuals and possible worlds), and reference to structure, i.e. the correlation / dependency between such sets, which is introduced and incrementally elaborated upon in discourse.

To define and investigate structured discourse reference, a new dynamic system couched in classical (many-sorted) type logic is introduced which extends Compositional DRT (CDRT, Muskens 1996) with plural information states, i.e. information states are modeled as sets of variable assignments (following van den Berg 1996a), which can be represented as matrices with assignments (sequences) as rows. A plural info state encodes both values (the columns of the matrix store sets of objects) and structure (each row of the matrix encodes a correlation / dependency between the objects stored in it).

Given the underlying type logic, compositionality at sub-clausal level follows automatically and standard techniques from Montague semantics (e.g. type shifting) become available.

The idea that plural info states are semantically necessary is motivated by examples with morphologically singular anaphors, in contrast to the previous literature that argues for plural info states based on plural anaphora.

Plural Compositional DRT (PCDRT) enables us compositionally account for a variety of phenomena, including: (i) mixed weak & strong donkey anaphora, e.g. *Every person who buys a^u computer and has a^u credit card uses it_u to pay for it_u*, (ii) quantificational subordination, e.g. *Harvey courts a^u girl at every^u convention. She_u always_u comes to the banquet with him* (Karttunen 1976), (iii) modal anaphora and modal subordination, e.g. *A^u wolf might^p come in. It_u would_p eat Harvey first* (based on Roberts 1989) and (iv) naturally-occurring discourses exhibiting complex interactions between modalized conditionals, donkey anaphora, modal subordination and the entailment particle *therefore*, e.g. *[A] man cannot live without joy. Therefore, when he is deprived of true spiritual joys, it is necessary that he become addicted to carnal pleasures* (Thomas Aquinas).

The PCDRT account of these phenomena explicitly and systematically captures the anaphoric and quantificational parallels between the individual and modal domains.

Acknowledgements

The first thing I wanted these acknowledgements to show is that they are not just another one of those "thank you and good night" things that people sometimes say on their way out mostly because that is what they are expected to say. I wanted them to show that they really are a heartfelt thank you addressed to everyone that made this dissertation possible and the last five years and a half of my (academic) life so fruitful and enjoyable.

So, I tried to make them look different and fancy and, after many unsuccessful attempts, I realized (duh!) that the canons of this literary species have the particular form that they have for a reason. I will therefore follow the canons and – like everyone else, I'm sure – mean each and every word. Here it goes.

This dissertation would not have been possible without my advisors Maria Bittner, Hans Kamp, Roger Schwarzschild and Matthew Stone.

Maria Bittner has been my semantics teacher ever since I came to Rutgers and my main advisor for the last three years and a half. She taught an "Introduction to Dynamic Semantics" topics course during my very first semester at Rutgers and a "Compositional Dynamic Semantics and Centering" seminar the following one. By the end of that year, I knew that dynamic semantics was what I wanted to do. Maria taught me and helped me so much over the years that it is pointless to try and say how much I owe her: I am her student through and through. I'll only mention here that less than four months ago, I returned to Rutgers from Stuttgart with several (quite sizeable) drafts but, technically speaking, no dissertation. It took only a couple of meetings with Maria and, lo and behold, where there was only a pile of drafts, a dissertation started to take shape.

Roger Schwarzschild is the other semantics teacher I had the good fortune of having during my first semester at Rutgers – and my friend ever since. His way of thinking about semantics and its relationships to the other sub-disciplines of linguistics and about how data and theory (should) come together and illuminate each other in any given analysis pervade my entire education and research. His insight and originality of thought have many a time cleared a path from a vague "this is kind of interesting" to a real, incisive question and from a seemingly unassailable problem to a surprisingly simple solution.

Matthew Stone has provided constant and very generous academic guidance and moral support for the last three years and a half of my doctorate. My intellectual debt to him becomes obvious upon the most cursory examination of the contents of this dissertation; in fact, one only needs to read the title. From our very first conversation, he taught me that semantics research receives its full significance only when properly located within the larger field of cognitive science and only when the detailed investigation of this or that phenomenon or formal system is systematically brought to bear on broader cognitive issues. His very generous help and constant encouragement were, especially over the last two years, one of the main forces that kept me going.

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Alexandra Cornilescu was, literally, a godsend. By a series of fortunate accidents, I ended up enrolled in the masters program of theoretical linguistics at the University of Bucharest, where she introduced me to generative linguistics. Since then, I have never looked back. She was the one to show me Montague's and Gallin's books for the first time and, despite considerable evidence to the contrary, she believed that I would some day be able to understand them.

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As wiser people reportedly said (I am indebted to Jane Grimshaw for passing on these words of wisdom), one never finishes writing a dissertation – one only stops. It is with great reluctance that I have to stop now and I hope the reader will be able to forgive the many ways in which the present dissertation is still a working draft and the remaining errors of form and content. These errors are, of course, solely my own responsibility.

Dedication

*Din ceas, dedus, adâncul acestei calme creste,
Intrată prin oglindă în mîntuit azur,
Tăind pe înecarea cirezilor agreste
În grupurile apei un joc secund, mai pur.*

(Ion Barbu)

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