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Head Movement, Binding Theory, and Phrase Structure

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Introduction

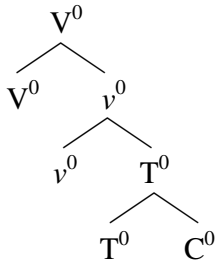
This paper proposes a novel model of head movement that solves two seemingly independent problems.

The first problem concerns the syntactic characteristics of head movement. Head movement appears to move a head and adjoin it with a non-root node of the syntactic tree. In the minimalist framework, however, only the root node is accessible for syntactic operations and the condition that a moved element should c-command its trace is a direct consequence of this assumption. Thus, head movement poses a serious problem to minimalist syntax.

The second problem concerns the binding constraint discussed by Percus (2000). Percus observes that the world variable of the main predicate, if syntactically present, always has to be bound by the nearest λ operator. In addition, I discuss that we can make a similar generalization regarding Tense as well. However, configurationally, it is conceivable that such a variable might be bound long-distance, and it is not clear why such a binding may not obtain.

To solve these problems, I propose a derivation model in which heads are combined to form a complex head that looks like something like (1) and derivation proceeds as heads move out of the head complex by head movement.

(1)



Thus, merger of heads is done before head movement, and therefore the first problem mentioned above is obviated, since the moved head does not adjoin to another head after head movement and thus the moved head is always going to c-command its trace. The idea is that moving heads are quantifiers and have to move out to remedy a semantic type mismatch just like QR. I develop semantics in which the functional heads denote

quantifies over non-individual elements, and given the semantics, we see that Percus's generalization is automatically derived by this model. I explore the appropriate locality condition for head movement in my model, and show that the non-attested long-distance configurations are excluded because that would have to involve non-local head-movement.

The organization of the paper is as follows.

Chapter 1 explains the two above-mentioned problems in detail.

In Chapter 2, I show the outline of my derivation model. I then show how various word orders in different languages can be derived in my model. In the last part of this section, I discuss a possibility of eliminating the head-directionality parameter.

In Chapter 3, I develop semantics that is compatible with my derivation model. Particularly, I consider interpretations of presuppositional and cardinal noun phrases and determine the internal structure of noun phrase. More precisely, I propose that while presuppositional noun phrases have their own quantifications over situations, cardinal noun phrases take a situation variable that is an anaphor.

In Chapter 4, I develop the syntax of my model in detail. I propose a new phrase structure according to which phrases are formed only by virtue of Internal Merge and an axiom that only maximal projections may move. I determine the locality for head movement and derive properties of head movement as theorems. Finally, I show how Percus's generalization follows from my model.

Finally, Conclusion gives the conclusion.