SHOICHI TAKAHASHI

MORE THAN TWO QUANTIFIERS*

ABSTRACT. Comparative quantifiers, such as more than three books, cannot take scope over any quantifier in subject position if they occupy object position. This is clearly different from the behavior of other quantifiers (e.g., universal quantifiers). This paper argues that this scope puzzle is due to a more complex internal structure of comparative quantifiers than other quantifiers. In the decompositional approach that I pursue, comparative quantifiers are decomposed into two generalized quantifiers (i.e., in the case above, the comparative operator er than three and the DP many books). In this approach, obligatory narrow scope of comparative quantifiers in object position is a consequence of the interplay of the independently motivated principles of grammar that also constrain other quantifiers. On the basis of the scope puzzle, I specifically argue for two constraints on Scope Shifting Operations (SSOs): a locality condition on SSOs and Scope Economy, proposed by Fox (2000), which prohibits SSOs that have no effect on semantic interpretation. Thus, I argue that the apparently peculiar facts of comparative quantifiers are, in fact, additional evidence for the core properties of SSOs.

1. Introduction

According to a widespread view, two quantificational phrases (QPs) can interact freely in a single clause (May 1985). This is based on representative examples like (1), in which an existential and a universal QP are in subject and in object position, respectively.

(1) Some student read every book. ($\exists > \forall$) ($\forall > \exists$)

Upon close scrutiny, however, this generalization turns out not to hold up, as Beghelli (1995), Beghelli and Stowell (1997), Liu (1990, 1997), Szabolcsi (1997), among others, point out. For instance, if the universal QP in (1) is

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replaced with the quantificational DP *more than five books*, which I refer to as a comparative QP (or CQP), following Hackl (2000), wide scope of the comparative QP is not available:\(^1\)

(2) Some student read more than five books. (\(\exists > \text{CQP} \)*\((\text{CQP} > \exists)\))

(Beghelli 1995:48)

At first sight, this scope fact seems unexpected. On the assumption that comparative QPs are, like universal QPs, unanalyzable generalized quantifiers, there is no obvious way to prohibit only comparative QPs from outscoping the subject QP, short of stipulation.

The goal of this paper is to show that the scopal contrast between (1) and (2) is a natural consequence of general principles of grammar, once we acknowledge that comparative QPs are structurally more complex than other QPs. Specifically, I pursue a decompositional view of comparative QPs, originally proposed by Bresnan (1973) and defended and elaborated by Hackl (2000), among others. I argue that comparative QPs are actually composed of two generalized quantifiers, namely, the comparative operator and the generalized quantifier many NP (e.g., *er than five* and *many books*, respectively, in (2)). Wide scope of an object comparative QP thus requires the subject QP to take scope below both of the QPs composing the comparative QP. I argue that a locality condition on Scope Shifting Operations (SSOs) prevents the subject QP from taking scope below the comparative operator and many NP in one fell swoop, forcing an intermediate step where the subject QP takes scope between the two QPs of the comparative QP. However, I demonstrate that this intermediate step is always ruled out by independently motivated principles, thus preventing wide scope readings of the object comparative QP. The argument in this paper can be taken as an argument for a derivational characterization of SSOs. In other words, an SSO proceeds in steps, each of which must be licensed by the principles of grammar. In the end, it turns out that the apparent peculiarity of comparative QPs provides additional evidence for the core properties of SSOs.

The paper is organized as follows. In section 2, I present the scope facts exhibited by comparative QPs, which constitute the primary empirical concern of the paper. Section 3 presents the three components of my analysis. First, I present a decompositional approach to comparative QPs and some arguments in favor of it. Second, I introduce a locality constraint on SSOs that forces an intermediate step in the derivation of wide scope of comparative QPs. Finally, I demonstrate that this intermediate step produces a

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\(^1\) As we will observe in subsequent sections, comparative QPs show scopal interaction with other QPs in certain cases. In this respect, they behave similarly to other QPs.