Schaffer on Knowing Wh-

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In a recent paper, Jonathan Schaffer presents an argument against the received view amongst epistemologists that knowledge-wh ascriptions can be analyzed in terms of knowledge-that ascriptions. On the reductive analysis of knowledge-wh, to know Q in a context w, where Q is an embedded question, is to know the true answer to Q in w. The reductive analysis makes the prediction that if two questions Q and Q' have the same answer P in a given context, then knowing Q and knowing Q' should come out semantically equivalent: thus, convergent questions are predicted to yield equivalent ascriptions when embedded under thow. Schaffer objects to that prediction, by pointing out that in a context in which Bush is on TV, I can easily know whether Bush or Janet Jackson is on TV (because distinguishing between the two is easy), and yet fail to know whether Bush or Will Ferrell is on TV (because Ferrell is such a good impersonator of Bush). Thus, although the two questions "is Bush or Janet Jackson on TV?" and "is Bush or Will Ferrell on TV?" have the same actual answer (namely "Bush is on TV"), they do not yield equivalent knowledge claims. On the basis of this and related examples, Schaffer proposes to abandon the reductive analysis, and at the same time to defend the opposite view that knowledge-that claims themselves are relative to questions.

According to Schaffer, the reductive analysis stems from two main sources: the first is the assumption that knowing-that constructions are more primitive than other constructions involving know; the second, according to him, is the idea that know denotes a binary relation between an agent and a proposition. In linguistic circles, however, it may be pointed out that the reductive analysis of knowing-wh in terms of knowing-that is also the dominant view, but primarily because the meaning of (unembedded as well as embedded) questions is itself conceived reductively in terms of the meaning of their answers. On Karttunen's semantics for questions, for instance, a question Q in a context w denotes the set of all true propositional answers to Q in w. On Groenendijk and Stokhof's account, a question Q denotes a function which to each world w associates the true and exhaustive answer to the question Q in w. Although the two theories differ, in both of them the reductive analysis of knowing-wh in terms of knowing-that is itself parasitic on the reductive analysis of the meaning of questions in terms of their propositional answers, together with the principle of compositionality. Thus, if we let $[\![Q]\!]$ stand for the meaning or intension of Q, and [Q](w) the value of Q in w, namely the true propositional answer to Q in w, it may be checked that both Karttunen's semantics and Groenendijk and Stokhof's semantics satisfy the prediction that convergent questions yield equivalent knowledge-wh claims, namely:1

$$(\mathsf{CV}) \ \ \frac{ \ \ \, \llbracket \ Q \ \rrbracket(w) = \ \ \, \llbracket \ Q' \ \rrbracket(w) }{ \ \ \, \llbracket \ XKQ \ \rrbracket(w) = \ \ \, \llbracket \ XKQ' \ \rrbracket(w) }$$

 $^{^1}K$ stands to "know" and X names an agent. The schema (CV) follows in both theories from the assumption of compositionality by which $[\![XKQ]\!](w) = [\![KQ]\!](w) ([\![X]\!](w))$, and $[\![KQ]\!](w) = \lambda x$. $[\![K]\!](w) [\![Q]\!](w)$. The difference is that in Karttunen's semantics, a question is an entity of type s((st)t), while in Groenendijk and Stokhof's semantics it is of type s(st); in Groenendijk and Stokhof's semantics, st0 w is of uniform type st1 (st2); in Karttunen's semantics, the question-embedding variant of st1 know is of type st2.

Our aim in this paper is to challenge Schaffer's analysis of his own counterexample to (CV), and to defend the reductive analysis of knowing-wh to knowing-that (and with it the reductive analysis of questions in terms of the meaning of their answers)². Schaffer's proposed counterexample to (CV) involves two alternative questions of the form "whether A or B" vs "whether A or C". In the first of the paper, we propose a closer analysis of the meaning of alternative questions, and argue that Schaffer's example is in fact not a real counterexample to (CV): we examine several ways of understanding Schaffer's proposal, and show that on all of them, (CV) either remains sound, or simply fails to be correctly instantiated. In the second part of the paper, we argue that there remains a sense in which Schaffer's intuition is correct nevertheless: namely, one ought to distinguish "knowing whether A or B" from knowing the answer to the question "is A or B the case?". More precisely, there may be two ways of understanding "knowing Q": before the question is asked explicitly, and after it is asked explicitly. The second sense, however, is weaker that he first, since it rests on some form of presupposition accommodation.

²As it turns out, objections similar to Schaffer's objection to (CV) have been raised against Groenendijk and Stokhof's theory of questions specifically. In particular, Groenendijk and Stokhof's theory of questions identifies the intension and extension of the two questions: "who left?" and "who did not leave?". Arguably, however, one can know who left without knowing who did not leave. This objection, however, is not an objection against (CV), but rather an objection to a particular way of individuating questions (as involving strongly exhaustive answers). The example, incidentally, is more convincing with verbs like "being surprised about", for which weakly exhaustive readings are more clearly attested (see Heim 1994 and Sharvit 2002). We do agree with Groenendijk and Stokhof that questions after *know*, unlike after *surprise*, have strongly exhaustive readings, but this point is orthogonal to the main issue here.