

## On *NEEDING* propositions and *LOOKING FOR* properties

Florian Schwarz  
University of Massachusetts at Amherst

The intensional transitive verbs (ITVs) *look for* and *need* are shown to differ in their behavior to an extent that requires distinct analyses. Looking at these differences in detail, I show that two prior analyses (intended to cover all ITVs) only work for one sub-class each: a property analysis (Zimmermann 1993) can only account for *look for*, and a propositional analysis only for *need*. Assuming that *need* takes a propositional complement, we need to derive this proposition compositionally. I propose that it is introduced by a small clause headed by a contextual relation R, rather than by a covert infinitival clause complement (as in Larson et al. 1997).

**Differences in Q-scope.** A central argument for the property analysis is the absence of low scope readings with truly quantificational DPs (Zimmermann 1993) (which are possible with DPs that can have type (s,et), cf. Partee 1987). Consider 1) and 2) in a context where Matt is running the book tables at a conference and has to have enough change available:

- 1) *Matt is looking for most of the small bills that were in the cash-box.*
- 2) *Matt is looking for some of the small bills that were in the cash-box.*

1) is odd, because it can only mean that Matt is looking for particular bills [most bills x are s.t. Matt is looking for x], and not that Matt simply wants to find the majority of the bills [in all worlds where Matt's search is successful, he has found most of the bills]. But 2) with *some* can mean that Matt simply is looking for change. Now compare 1) to 3) with *need*:

- 3) *Matt needs most of the small bills that were in the cash-box.*

3) does not require Matt to need any particular bills; it is true if Matt simply needs to have plenty of change available [in all worlds where his needs are met, he has most of the bills]. So *most* can take scope below *need*, but not below *look for* - a real puzzle for a unified analysis.

**Differences in adverbial scope.** Verbs like *need* display a scope ambiguity with temporal adverbials (Partee 1974, McCawley 1974), suggesting that its complement is a proposition:

- 4) *Matt (needed/ was looking for) some change before the conference started.*

With *need*, the *before*-clause can either modify the matrix IP [the time at which Matt needed change preceded the conference] or what appears to be the covert clausal complement of *need* [his need was to have change before the conference]. With *look for*, 4) can only mean that Matt's search for change preceded the conference (a similar contrast arises with *no*+NP).

Larson et al. try to explain this contrast in pragmatic terms (one cannot look for something at time t with the goal of finding it at a later time t'). However, *seek* (which is nearly synonymous to *look for*) DOES display the relevant ambiguity (see 5)):

- 5) *The inventor sought a patent before the end of the 1-year 'grace period'.*

5) can mean that the inventor's goal was to have a patent before the end of the grace period. This hitherto unnoticed contrast of *seek* vs. *look for* is another puzzle for a unified analysis.

Further evidence for distinguishing *need/seek* vs. *look for* comes from *again* and *too*. Consider 6) in the following context: For his first trip to New York, John booked a room through Priceline (so he didn't know and didn't care where in New York he would stay). The room ended up being in Williamsburg, which he really liked. For his next visit,

6) *John is (seeking/ # looking for) a room in Williamsburg again.*

With *seek*, we get a ‘low’ reading where he had a room in Williamsburg before (but hadn’t sought one there before), but with *look for*, the only reading is that he had looked for one before.

Similarly with *too*, we can get a ‘low’ reading with *need*, but not with *look for*. Imagine the following context: Maria’s dad gave her his old camera to take pictures at the party; Maria really didn’t need it, since she had a nice new digital camera, but she didn’t want to be impolite, so she promised him she would take some pictures with his camera.

7) *Now she (needed/ # was looking for)[a roll of FILM for the camera]<sub>F</sub> too.*

With *need*, 7) can presuppose that she has sth. else (which she does: the camera) or that she needed sth. else (which she doesn’t in the context). With *look for*, the only presupposition is that she had looked for sth. else (which she hasn’t). There is no reading on which 7) presupposes that she has found something else (as would be expected on a clausal analysis with a covert *find*). This contrast is even more clear with German *auch* in 8) (assuming the same context), which can appear before the object.

8) *Jetzt (brauchte/ #suchte) Maria auch [einen FILM für die Kamera]<sub>F</sub>.*

Now needed/ looked for Maria also a film for the camera

**All of these contrasts are easily explained if we assume that *need* and *seek* take a proposition as their complement, while *look for* takes a property complement.** If the complement of *look for* is a property it follows that neither true quantifiers nor adverbials can take low scope. And if *need* takes a propositional complement it follows that adverbs can modify this proposition and that the type of DPs occurring inside of it is unrestricted.

**Where does the proposition come from?** Larson et al. propose that *need* takes a covert infinitival clause as a complement. But 9), which is grammatical if the DP and the adverbial clause are clefted, but ungrammatical if the overt infinitival clause is clefted, as well as the contrast in 10) vs. 11) with German *brauchen* (‘*need*’) show that the complement in these cases is not of the same kind as the one occurring as an overt infinitival complement:

9) *It was (\*to have) a beer before the meeting that I needed.*

10) *Hans braucht \*(keine) Angst zu haben. [Hans needs (no) fear to have]*

11) *Hans braucht (kein) Geld [Hans needs (no) money]*

Complements with *zu haben* have to contain a ‘negative’ element (similar to *need not worry*), whereas DP complements are unrestricted in this regard. Hence 10) and 11) cannot be structurally identical, as the clausal analysis would predict. So we need to derive the implicit propositional complement of *brauchen* in 11) (*Hans has money*) in some other way. Further evidence that the overt and the covert complements are not of the same kind comes from conjunction, which should be able to apply to two expressions of the same type. The overt and the covert complements of *need* cannot be conjoined, which would be unexpected if they were of the same type:

12) *John needed \*(to have) a beer and to sleep.*

**A small clause analysis.** Although a covert infinitival clause account cannot be the right analysis, we do need a full proposition as a complement, given that *again* and *too* can target that proposition (see 6), where John had a room in Williamsburg before, and the presupposition that M. has sth. else in 7)). Crucially, assuming that *again* is a propositional modifier, we furthermore have to assume that the embedded proposition contains the matrix subject in some form, since this is the only way that allows us to derive the presupposition that John had a room in Williamsburg before (a similar argument can be made for *too*). We can get this by

assuming that *need* (+DP) takes a small clause headed by a contextually supplied relation R (with a PRO subject) as its complement (cf. Harley 2003 for a similar proposal that assumes a PP complement with a null preposition as its head). This avoids the problems of the covert infinitival clause analysis, but still gives us a proposition. We have to allow R to be supplied by the context, because even though the default interpretation for this relation seems to be an implicit *have* (at least for verbs like *need* and *want*), this is too restrictive for a number of cases. The ITV *choose* allows contextually salient relations, e.g. *draw* in 13), and *need* in 14) cannot be paraphrased as *need to have*:

13) (Context: Task in an art class, draw an animal) *John chose an owl.*

14) *John needs a marathon.*

[*John needs to run a marathon*, not #*John needs to have a marathon*]

In 13) and 14), the relation to the object seems to be contextually supplied. There is a striking similarity here with possessives [*John's team (the one he plays on)* vs. *John's house*], for which Partee & Borschev 2001 argue that sometimes we need a contextual R<sub>i</sub> and sometimes a possessive R<sub>POSS</sub> (which is very similar to Harley's P<sub>HAVE</sub>). We seem to need exactly the same for ITVs. Note that R can be modified by temporal adverbials in possessives too (*John's house before the war*). Another place where R<sub>POSS</sub>/P<sub>HAVE</sub> has been argued to occur is in double object constructions (cf. Beck & Johnson 2004), and the adverbial scope facts with respect to *again* there are parallel to the ones found for ITV here.

**Summary.** My proposal provides a better understanding of ITVs than previous analyses by distinguishing two types of ITVs. Furthermore, the analysis of *need* as taking a small clause complement, headed by a relation R<sub>i</sub>/R<sub>POSS</sub>, provides a different perspective on clausal complement accounts of ITVs and relates them to phenomena also found in double object constructions and possessives.

### References:

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