Intermediate Scope Readings as Embedded Speech Acts

In our talk, we want to explain the availability and non-availability of (exceptional wide) intermediate scope readings (ISRs) as illustrated in (1).

(1) a. If a student in the syntax class cheats on the exam, every professor will be fired.
   b. Every professor will rejoice if a certain student of his cheats on the exam.
   c. Everyone of them suspected that some (actual) doctor from the hospital was a quack.

(1a), which is an example from (Fodor and Sag, 1982, p. 375), is only two-way ambiguous. It seems to allow for a specific and an unspecified interpretation of a student in the syntax class, i.e. an (apparent) exceptional wide (= island-free) scope reading of the indefinite and a narrow scope reading. It does, however, not seem to allow for an ISR, which is the reading where the indefinite would take exceptional wide scope over the If-clause, but lower scope than the universal quantifier. The minimal variant in (1b) with the bound pronoun (from Ruys, 1992, p. 114) does allow for such an ISR. (1c) is an example from (Kratzer, 1998, p. 187), where no overt bound pronoun is involved. It also allows for an exceptional wide ISR, where the indefinite takes scope out of its scope island over suspect, but is interpreted inside the scope of everyone.

Although it had originally been claimed by Fodor and Sag (1982) that exceptional wide ISRs do not exist, this claim has been disproven by way of counterexamples as in (1b,c) (cf. e.g. Farkas, 1981; Ruys, 1992; Abusch, 1994 and many others). Nowadays, the existence of such ISRs is not called into question any more. However, what is usually not addressed is what it is that makes these readings sometimes available (cf. (1b,c)) and sometimes not (cf. (1a)). Often, people either claim that ISRs are not available (as e.g. Fodor and Sag, 1982) or that they are generally available and should always be derivable (as e.g. Abusch, 1994).

Existing approaches to restrict the availability of ISRs. To our knowledge, there are three (types of) suggestions towards an explanation as for why ISRs are not always available that have been made so far.

1. ISRs are only possible with (overtly realized or implicit) bound pronouns.

According to these approaches, it is the bound pronoun his in (1b) that is decisive to make available the ISR (see Kratzer, 1998; Matthewson, 1999; Schwarzschild, 2002 and many others) – hence the contrast with (1a). The common idea of these approaches is that exceptional wide ‘scope’ and intermediate ‘scope’ readings are no actual scope readings. The indefinite only seems to take wide scope (due to a choice function interpretation or covert domain restriction to a singleton), but, in fact, it takes scope in situ. For the apparent ISR to evolve the indefinite has to be functionally dependent on some c-commanding operator. However, as (1c) shows, one also finds ISRs of indefinites that do not contain any bound pronouns. Furthermore, as Kratzer (1998) points out, it is unlikely that the ISR in (1c) comes about by some kind of covert restriction containing a bound pronoun resulting in some (actual) doctor dependent on him (bound by ‘everyone’). The sentence rather supports a genuine ISR, which says that for every x there is one (possibly different) doctor y such that x suspects that y is a quack. Schwarz (2001) shows that these genuine ISRs are indeed truthconditionally differentiable from (apparent) functionally dependent wide scope readings under certain circumstances. Hence, all approaches that can only account for ISRs as functionally dependent apparent wide scope readings (as e.g. Matthewson, 1999 or Schwarzschild, 2002) cannot account for genuine ISRs and have to be dismissed for this reason.

2. ISRs are ruled out for pragmatic reasons.

Other approaches allow for the derivation of ISRs in all circumstances, but argue that sometimes these readings are ruled out pragmatically, i.e. they seem absent because they reflect odd readings or because the wide or the narrow scope readings are too prominent for the ISR to evolve (see Reinhart, 1997; Winter, 1997). In the following example, this cannot be the reason for the non-availability of an ISR. The ISR would be the only plausible one. Yet, it is not available. The sentence is thus odd.

(2) (Last week, I went to a horse-race every day. It was funny:)
   #All horses won all races that took place on a day/some day/one day.
(2) does not seem to make sense\(^1\). The only reading that would make sense is the ISR: for each horse there was one day such that the horse won all races that took place on that day. But the sentence has no such reading.

3. Genuine ISRs are de re readings.

Kratzer (1998) distinguishes between genuine ISRs and apparent functional wide scope ones in the way already pointed out above. In her view, functional wide scope readings only evolve if functional elements (e.g. bound pronouns) are there or can plausibly be assumed to be accommodated. Genuine intermediate scope readings, however, constitute de re readings in the context of attitude verbs.

Own proposal: ISRs as embedded speech acts. Our own proposal is somewhat similar to Kratzer’s (1998) explanation of genuine ISRs, depending on what Kratzer understands as being an attitude verb, on which she does not elaborate. We want to propose that ISRs exclusively evolve in the presence of topic-comment structure

---

\(^1\)Some speakers might be able to make sense to the sentence in a functional wide scope reading such as: \textit{for each horse there was one lucky day, namely its birthday, such that the horse won all races that took place then.} However, this reading is not very salient.
embedding (= speech act embedding) operators. Note that, among others, Krifka (2001) proposes that speech acts are not necessarily a root-clause phenomenon, but do also appear embedded. To follow our argument, it is important to distinguish between genuine ISRs and functional (apparent) wide scope readings. The latter are only an instance of the usual (apparent) exceptional wide(st) scope readings and hence available whenever exceptional wide scope is available (see Ebert and Endriss, to appear). The former, however, are genuine scope readings and, according to our claim, only derivable when embedded speech acts are involved. In other words, our approach explains why (1c) supports an ISR, namely because it contains the speech act verb suspect, and why (1a) does not support such a reading: precisely because it does not contain such a verb. However, we will not be concerned with readings as in (1b), which we take to lack an ISR, although this is somewhat disguised as it supports a functional wide scope reading.

Our approach directly explains why (3) allows for an ISR much more easily than (2).

(3) (Last week, I went to a horse-race every day. It was funny.)

Of all horses it was reported that they had won all races that had taken place on some/one day.

The decisive difference between (3) and (2) is the presence of the speech act embedding operator report. Consider furthermore the following minimal pair:

(4) a. Every student promised to come to the party if some/one woman comes.

b. Every student will come to the party if some/one woman comes.

While (4a) contains a speech act embedding operator (promise), (4b) does not. As predicted, (4a) allows for an ISR easily, but (4b) does not2.

We follow the approach of (Ebert and Endriss, 2004) for the derivation of exceptional wide scope readings, where it is argued that indefinites which take exceptional wide scope are always topical. The authors derive exceptional wide scope readings as a consequence of the indefinite’s interpretation as topical. Unfortunately, we cannot go into the details of this account here for space reasons. However, crucially, the readings that are derived are genuine scope readings. (Ebert and Endriss, 2004) are not concerned with ISRs. We thus propose to modify their original approach so that it can also account for ISRs in the following way: a topical indefinite always takes wide scope with respect to its topic-comment structure embedding operator. We take it that if there is no overt speech act operator the outermost operator embedding the entire sentence in question is an illocutionary operator (e.g. silent Assert). In this case, the indefinite also takes scope over this operator, but is itself embedded in a separate speech act of topic introduction, which has already been proposed by (Jacobs, 1984). To illustrate this interpretation scheme, we show the derivation of the intermediate scope reading of (4a), where the DP some woman is assumed to be the topic of a topic-comment structure \((T, C)\) (cf. Krifka, 1992) that is embedded by the verb promised.

(5) Assert\((\forall x [\text{student}(x) \rightarrow \text{promised}(x, \langle \text{some/woman}, \lambda G (\text{come} \rightarrow \text{come}(x)) \rangle)]) \) ~⇒

\[\text{Assert}(\forall x [\text{student}(x) \rightarrow \exists y. \text{some/woman}(y) \land \text{promised}(x, (\text{come}(y) \rightarrow \text{come}(x)))]\]

Formula (5) correctly represents the intermediate scope reading of (4a). It follows directly that (4b) cannot have such an intermediate scope reading, because the sentence does not contain any topic-comment structure embedding operator such as promised.

As a first approximation, we hypothesize that those verbs that allow for embedded verb-second clauses in German can be regarded as speech-act embedded verbs (as such clauses are often described as being ‘proto-assertive’). For example, versprechen (to promise), vermuten (to suspect), or glauben (to believe) allow for verb-second embedded clauses, whereas bedauern (to regret) or mitbekommen (to become aware of) do not. Initial investigations seem to support our prediction that verbs of the first group do allow for ISRs (see ex. (1c), (4)) and verbs of the second group do not. Our hypothesis is furthermore supported by findings of Kuroda (2005) in Japanese. As is known, the wa-morpheme can usually indicate topicality or contrastivity. Kuroda (2005, pp. 19f.) now observes that embedded clauses that contain wa-marked constituents differ in interpretation. Interestingly, those sentences embedded under verbs of the first group allow for a non-contrastive, i.e. topical, interpretation of the wa-marked constituents, whereas wa-marked constituents under verbs of the second group enforce a contrastive interpretation. Kuroda thus takes it that verbs such as believe allow for embedded ‘indirect speech contexts’, whereas other verbs such as regret do not and constitute ‘non-statement-making contexts’. We claim that this differentiation is crucial for the availability of ISRs.


2Keep in mind that construing scenarios where (4b) might support a functional wide scope reading constitute no counterexamples to our claim.