Questions and Explanations

The problem

In this paper we present a new analysis of the German particle *nämlich*. The interesting thing about this particle is that, depending on its syntactic environment, it seems to have two completely different semantic functions: on the one hand, if *nämlich* appears in a whole clause, it will be interpreted as an explanation of the previous clause, on the other hand, if *nämlich* appears in a non-clause orphan constituent (Haegeman 1991) structure it lacks this explanative function and rather specifies an underspecified discourse referent of the previous clause. This is exemplified in (1) vs. (2).

- (1) Peter₁ geht nach Hause: Er₁ ist nämlich hungrig. Peter goes to home he is NÄMLICH hungry 'Peter goes home, since he is hungry.'
- (2) Es gibt nur einen Fortschritt: nämlich in der Liebe. There is only one Progress NÄMLICH in the love 'There is only one progress, namely in love.'

Previous accounts

In the literature it has been generally assumed that *nämlich* semantically encodes its explanation/causal function (cf Pasch et al. 2003), however it has never been shown how examples like (2) could actually be derived under such an assumption. What has been said starting from Granito (1984) is that *nämlich* can encode some kind of speech act level causality, such that in some sense specifying a referent from the previous clause also delivers an explanation for that clause. The argument is, however, firstly not precise enough for having clear falsifiability conditions and, second, if specifying a discourse referent of a clause is a way of explaining the clause, then, (3), in which exactly this happens in a whole-clause construction, should be acceptable, which is contrary to the fact.

(3) ?? Peter hat ein Auto. Er hat nämlich einen Ferrari. Peter has a car. HE has NÄMLICH a Ferrari 'Peter has a car. He has a Ferrari'

Of course, another way to deal with the problem would be to assume that there are two different lexical items *nämlich* in German, but doing this is a last resource solution, we assume to be unnecessary.

Analysis

Our analysis derives the contrast between (1) and (2) by assuming that:

- nämlich introduces an implicit question about the previous clause into the discourse
- the constituent *nämlich* is attached to delivers a short answer to this question

We assume that a question can be represented as the set of all possible answers, which is common in semantic theory (e.g. Büring (2003), Beaver & Clark (2008)). At the same time we assume that – as an equivalent way of representation, a question can also be represented as a lambda-abstract over the wh-variable (cf. Jacobson (2009)).

We assume that a question about a clause means that the main event of that clause is present in each possible answer to that question. This is one particular way to make precise what in Asher & Lascarides (2003) is understood under discourse subordination, which, arguably involves that the main event of a clause is the topic of the subordinate clause.

Finally, by the term *short answer* we mean answers like the one in (4a) as opposed to the one in (4b). We assume that a short answer is not elliptical in the sense that there is no hidden or covert material in the syntactic structure of (4a), i.e. (4a) and (4b) are not identical at LF. Further, we assume that such a short answer semantically combines with a question-asbract and directly delivers the answer proposition.

- (4) Who did John kiss?
 - a. Mary.
 - b. John kissed MARY.

Under these assumptions it immediately follows, that *nämlich* in a whole-clause can only provide answers to questions which accept whole clauses as short answers (like (5)), while *nämlich* in orphan constituents can only provide answers to constituent questions like (6).

- (5) Why did Mary kiss John? She loves him.
- (6) Who did Mary kiss? John.

Of course, from this it still does not follow, that *nämlich* in whole clauses must always play an explanative function. This is so, because there are quite different possible questions about a sentence which can accept whole clauses as short answers. Nevertheless, the missing piece of the puzzle comes for free if we assume a simple salience hierarchy of questions: while such a hierarchy can be elaborated (and probably we need that anyway in formal pragmatics), here it is already enough to assume that fully lexicalized questions are more salient than not fully lexicalized questions. If so, it is easy to see that why-questions are pretty much the only alternative we deal with, and answers to why-questions are generally explanations. (q.e.d)

Of course, this is only a defeasible derivation, since a salience hierarchy can be overridden in context. And indeed, it is possible to find counter-examples for *nämlich* in whole clauses in which they do not actually explain the previous clause but specify some modality or other optional t-type arguments or adjuncts.

References

Asher, N./Lascarides, A. (2003): Logics of Conversation. Cambridge/New York. (= Studies in Natural Language Processing).

Beaver, D/ Clark, D. (2008) Sense and sensitivity. How Focus Determines Meaning. Oxford: Blackwell Büring, D. (2003): "On D-Trees, Beans, and B-Accents". Linguistics & Philosophy 26:5. 511-545.

Granito, Marius E. (1984): *Nämlich*, *und zwar*: Étude syntaxique et sémantique (deuxième partie). In: Cahiers d'Études Germaniques 8, 165-209.

Haegeman, Liliane (1991). "Parenthetical adverbials: the radical orphanage approach". In: Chiba, Shukin et al. (eds.). Aspects of modern English linguistics. Papers presented to Masamoto Ukaji on his 60th birthday. Tokyo: Kaitakushi, 232-254.

Pasch, R./Brauße, U./Breindl, E./Waßner, U. H. (2003): Handbuch der deutschen Konnektoren. Berlin, New York: de Gruyter. (= Schriften des Instituts für Deutsche Sprache 9).