Answering Implicit Questions: The Case of *Namely*

Scott AnderBois (Brown) & Pauline Jacobson (Brown)

It is well-known that fragment expressions can serve not only as the answers to overt questions as in (1), but also to implicit ones; our focus is on the type in (2b) (cf., Weir, 2014):

(1)   Speaker A: Who (just) coughed? Speaker B. Bill

(2)   Speaker A. Someone coughed.   Speaker B: a. Yup, Bill.   b. Yup, namely Bill.

There are two main theories as to how the dialogue in (1) leads A to conclude that Bill coughed. (i) The answer is elliptical for a full sentence *Bill coughed* (e.g., Morgan 1973, Merchant 2004). (ii) The answer *Bill* has no hidden material, but combines with the question to yield the relevant proposition (the "Qu-Ans analysis"- e.g, Groenendijk and Stokhof 1984, Jacobson 2016). We expand the debate by examining the *namely* construction (2b). Building on prior work on German *nämlich* by Onea and Volodina 2011 and Onea 2015, we show that *namely* only addresses questions which are implicit and specificational. But this challenges any analysis in which the complement of *namely* is clausal and where material is elided under some kind of identity (formal, semantic, or both) with an 'antecedent'. In contrast, the Qu-Ans approach extends naturally: *namely* has as part of its semantics a direction to combine the meaning of its complement with a function derived from a particular kind of implicit question in the context.

The obvious clausal analysis of the complement of *namely* is that (2b) is *namely, Bill* ~~*coughed*~~ where ellipsis is licensed by the implicit question *who coughed* raised by A's utterance. Indeed, this is the clausal source proposed in Onea and Volodina 2011. But we provide arguments below that *Who coughed?* is not the actual implicit question answered by *namely*. Before turning to those, note two immediate problems with the above clausal analysis. One is that there are cases like (3) where the clause that would be posited under the above approach has a different meaning from the contribution of *namely*. The second is that the full clausal versions are not grammatical (as in (4)) rendering ellipsis obligatory here (Jacobson 2009):

(3)   Fred scaled the tallest building in the world, namely Burj Khalifa.

(4)   John knows who coughed, *namely Bill coughed

Leaving these aside, suppose that the implicit question answered by *namely* in (2b) is *Who coughed?*. This means that this is the same as the implicit question which licenses Sluicing (e.g., B could follow this with *Who?*). At first glance, this might seem to actually be a benefit to the claim that (2b) is *Bill* ~~*coughed*~~. For an ellipsis approach to Sluicing independently needs to posit some kind of identity condition between the antecedent in (2) (*Someone coughed)* and the sluiced 'source' (*Who coughed)* - either formal identity, convergence of the implicit and explicit question, or some combination. If so, *namely* ellipsis could be licensed in the same way that Sluicing is, and nothing new is needed. Indeed, this connection gains initial plausibility from the observation in AnderBois (2014) that Sluicing is licensed in (5a) but not (5b); *namely* is similar:

(5) a. Someone passed the course - (i) namely Sue / - (ii) and I know who.

    b. It's false that no one passed the course, - (i) *namely Sue/ - (ii) *and I know who.

But in fact, *namely* has striking differences from Sluicing. As Onea 2015 points out for *nämlich*, *namely* occurs with definite antecedents, as in (3), and it also does not occur with implicit arguments (see (10) below). Sluicing has the opposite behavior. Moreover, *namely* is licensed by embedded questions as in (6a). Strikingly, though, Sluicing is not supported here:

(6)   John couldn't sleep. His therapist finally discovered what was bothering him

        a. namely - his fear of being fired. b. *but he himself has not yet figured out what.

Note that (*b) is not due to MaxElide, since *he has not yet figured out* is also bad.

The differences between Sluicing and *namely* are thus problematic for an analysis where (2b) is *Bill coughed* and ellipsis is licensed under some sort of identity/convergence with the implicit question *who coughed*. Before fleshing out our proposal, note one further striking fact: *namely* is not always supported by embedded *wh*-questions (this poses a serious challenge to pure formal identity, and also to the account in Jacobson 2010):

(7) a. John figured out who I plan to give the prize to, namely Sally.
   b. *John hasn't figured out who I plan to give the prize to, namely Sally.

Rather than a requirement for identical clausal material, the generalization is that *namely* is licensed only by preceding elements which support a discourse referent. *Namely X* then answers a question to further identity/specify this referent. (2b) answers (roughly) the question *What is the identity of the one who coughed?*. Of course, this is similar to *Who coughed?* - an answer to one will often be an answer to the other, but the ordinary *wh*-question crucially diverges from the specificational one in cases like (3), as we have seen. Note too that not only does *namely* answer only a specificational question, but in fact the question <u>must</u> be implicit too (cf. (8)), casting further doubt on the claim that *namely* makes use of a clausal antecedent.

(8)   A. Hey my slippers are missing. Do you know who (it was who) stole them?
   B. (a) Yup, Bill.   (b) *Yup, namely Bill

Our proposal is in line with insights in previous literature to the effect *namely* is 'specificational' (e.g., Onea 2015, Condoravdi 2015). But it leads us to conclude that there is no obvious semantically appropriate clausal source (with some sort of identity to an antecedent) for the complement of *namely*. Note that the contrast in (7) follows from this analysis: (7a) but not (7b) introduces a discourse referent, as verified by the possibility of subsequent anaphora in (9):

(9)   a. John figured out who I plan to give the prize to. She deserves it.
    b. John hasn't figured out who I plan to give the prize to. ?*She deserves it.

The contrast between (5a) and (5b) with *namely* also follows (but for a different reason as the Sluicing contrasts). It is well known that indefinites introduce discourse referents that can be referred to with a pronoun. But (5b) is a classic '*marbles*' case (Partee, cited in Heim, 1982), and so cannot be followed by *She did so easily*. Moreover, implicit arguments don't introduce discourse referents; *namely* fails in (9a) for the same reason that anaphora is impossible:

(10)   Sally was murdered. (a) *Namely, by Jack. (b) *He had used a knife.

Note an apparent challenge to the claim that *namely* cannot 'sprout' an implicit argument:

(11)   Fido has a very silly fear, namely of the left side of the bridge.

But the complement of *namely* need not be analyzed as a sprouted argument; it further specifies/identifies the fear, exactly as in an overt specificational case like (12) (Higgins, 1973):

(12)   His fear is of the left side of the bridge.

One final attempt to save a clausal analysis of how the *namely* complement makes its contribution is to posit that these involve ellipsis from specificational 'short clefts' or identity statement (in (2b): *namely, it is Bill)*. But we show that this has no advantage over a Qu-Ans approach and still leaves unexplained the fact that ellipsis is obligatory:

(13)   Someone coughed. *Namely, it was Bill.

Rather than ellipsis, we show that an extension of the Qu-Ans analysis is straightforward. The complement of *namely* is not a hidden proposition. But the semantics of *namely* is a direction to combine the meaning of its complement with a function into propositions (as in the Qu-Ans analysis) derived from the relevant question about identity. (See Groenendijk and Stokhof (1989) on the relationship between a question as a set of propositions and the function needed in the Qu-Ans analysis; their observations about main clause questions extend readily to

implicit questions.) If *namely* requires the tools of the Qu-Ans analysis already, this gives new support for the non-ellipsis (Qu-Ans) analysis of direct question-answer pairs as well.

References:

AnderBois, Scott (2014). The semantics of sluicing: beyond truth-conditions. *Language* 90(4), pp. 887-926.

Condoravdi, Cleo (2015). Ignorance, indifference, and individuation with *wh*-ever. In *Epistemic indefinites*, Oxford University Press, pp. 213-243.

Groenendijk, Jeroen and Martin Stokhof (1984). *Studies in the semantics of questions and the pragmatics of answers*. Ph.D thesis, University of Amsterdam.

Groenendijk, Jeroen and Martin Stokhof (1989). Type shifting rules and the semantics of interrogatives. *Properties, types and meaning, vol. 2: Semantic issues*, ed. by Gennaro Chierchia, Barbara Partee, and Raymond Turner, pp. 21-68. Dordrecht: Kluwer.

Heim, Irene (1982). *The semantics of definite and indefinite noun phrases*. Ph.D. Dissertation, University of Massachusetts.

Higgins, Roger (1973). *The pseudo-cleft construction in English*. Ph.D. Dissertation, MIT.

Jacobson, Pauline (2009). The short answer. And what it answers. Paper presented at 16th annual HPSG Conference, Göttingen, Germany.

Jacobson, Pauline (2016). The short answer: Implications for direct compositionality (and vice versa). *Language* 92(2), pp. 331-375.

Merchant, Jason (2004). Fragments and ellipsis. *Linguistics and Philosophy* 27, pp. 661-738.

Morgan, Jerry (1973). Sentence fragments and the notion 'sentence'. *Issues in linguistics: Papers in honor of Henry and Renée Kahane,* ed. by Braj Kachru et. al, pp. 719-751. Urbana: University of Illinois Press.

Onea, Edgar (2015). *Potential questions at the semantics-pragmatics interface*. Brill.

Onea, Edgar and Volodina (2011). Between Specification and Explanation. About a German Discourse Particle. *International Review of Pragmatics* 3.1, pp. 3-32.

Weir, Andrew (2014). *Fragments and clausal ellipsis*. Ph.D. Dissertation, University of Massachusetts.