Fragment answers and the Question under Discussion
Andrew Weir, University of Massachusetts Amherst

Introduction. This paper considers the identity conditions on ellipsis in fragment answers such as (1).


The ELLIPSIS theory of fragments (Merchant 2004 a.o.) proposes that they are generated by clausal ellipsis, i.e. \( [\text{FP Natto } [\text{CP <John ate t> }]] \). This is supported by syntactic evidence; e.g. fragments obey Merchant 2001’s P-stranding generalization. By contrast, the MEANING-IN-ISOLATION account (Stainton 1998, 2006; see also the DIRECT COMPOSITIONALITY approach of Ginzburg & Sag 2000, Jacobson 2013) argues that fragments are not covertly clausal, but are simply expressions of type e or \(<\text{et},t>\); the meaning is recovered by combining this expression with a contextually salient property, as in (2) (Stainton 1998).

(2) \[ [\text{A points at an empty chair at a roundtable meeting and raises his eyebrow;} B responds: ] \]

An editor of Natural Language Semantics. ( = \( [\lambda P \exists x : \text{NALS-editor}(x) \& P(x)] \))

(contextually salient property: \( [\lambda x : \text{for}(x)(\text{the Seat})] \); combines with GQ to provide proposition)

Both of these accounts, however, are challenged by the example in (3).

(3) Q: Who did John say left? a. *Well, MARY \(<\text{left}>\), but I don’t know what John said.

b. Well, MARY did \(<\text{leave}>\), but I don’t know what John said.

Ellipsis of the VP leave is licensed in (3b), but clausal ellipsis is not licensed in (3a), providing a challenge to an account in which fragments are ellipsis \text{ simpliciter}. In addition, however, Stainton’s account is challenged by (3a); the property \( [\lambda x : \text{left}(x)] \) is surely salient in the context and could be applied to the fragment Mary, but the fragment in (3a) is not licensed with this meaning. In this paper I propose an analysis which vindicates the intuitions of both accounts. Sentences like (1, 2) do contain clausal ellipsis (accounting for Merchant 2004’s syntactic evidence for this conclusion), and are subject to whatever condition regulates ellipsis (e.g. e-gIVENNESS or similar). However, there is also a second, more stringent condition: namely, that the answer to the Question under Discussion (QUD; Roberts 2012/1996) must entail the denotation of the elided clause. The proposal is similar to AnderBois (2010)’s ‘anaphora to issues’ proposal for sluicing, but differs in implementation. I argue that this condition captures the data in (1, 2, 3), as well as making various other welcome predictions.

Semantic proposal. I assume, following Merchant 2004 and Krifka 2006, that fragment answers are elliptical utterances of focus movement constructions, of the form \( [\text{FocP} X [\text{CP <… t}_X <… >]] \). I also assume that Questions under Discussion can be modeled as functions from worlds \( w \) to the proposition which is the true answer to the question at \( w \) (Groenendijk and Stokhof 1984). The condition on ellipsis is in (4).

(4) An elliptical utterance of the form \( [\text{FocP} X [x <… t}_X <… >]] \), interpreted with respect to a Question under Discussion \( Q \) and world \( w \), asserts \( [[\text{FocP}](w)] \) and presupposes that \( Q(w) \rightarrow [[\text{FocP}]] \).

I illustrate how this system works by deriving the fragment answer in (1). The presupposition in (5) is trivial, but as will be shown below, there are cases in which it is needed to capture the full range of data.

(5) What did John eat? 
\( Q(w) = \lambda w’ : \text{John ate natto in w’} \)

— Natto \(<\text{John ate t}>\) \text{ Asserts: } [[\text{FocP}](w), i.e. John ate natto in w } 

\text{ Presupposes: } Q(w) \rightarrow [[\text{FocP}]], \text{ i.e. } [\lambda w : \text{John ate natto in w’}] \rightarrow [\lambda w : \text{John ate natto in w}] 

Adopting the Question under Discussion (rather than linguistic material) as the antecedent material referred to by the presupposition allows us to derive ‘out-of-the-blue’ fragments such as (2). I argue that in these cases, there exists an ‘implicit’ QUD (something like \text{Who is that chair for?}), the answer to which entails the meaning of the elided clause. The material in the ellipsis site does not have an explicit antecedent, but can be accommodated on the basis of the guidance provided by the QUD.

(6) QUD (implicit): \text{Who is that chair for? } \( Q(w) = \lambda w’ : \text{that chair is for a NALS editor in w’} \)

Answer: A NALS editor \(<\text{that chair is for t}>\) \text{ Asserts: that chair is for a NALS editor } \text{ presupposes: } [\lambda w : \text{that chair is for a NALS editor in w’}] \rightarrow [\lambda w : \text{that chair is for a NALS editor in w}]

There must also, however, be syntactic restrictions on clausal ellipsis over and above the presupposition that the elided clause be entailed by the answer to the QUD. Voice mismatch cases like (7) show that if linguistic antecedents are available, then the syntax of the elided clause must match the antecedent.
(7) Who ate the cake? — *By Mary <the cake was eaten>.

I propose that this follows from an economy constraint on accommodation, along the lines of Fox (2000); if linguistic antecedents are available, then they must be used in the construction of structure in an ellipsis site. In cases without linguistic antecedents such as (2), accommodation is forced as a ‘last resort’ (and the QUD is used to guide the construal of the structure of the ellipsis site).

**What the presupposition buys us.** The presupposition that the answer to the QUD must entail the denotation of the elided clause explains the failure of cases like (3). As shown in (8), the answer to the question – a proposition of the form *that John said Mary left* – would not entail that Mary actually left. The ellipsis is therefore not licensed.

(8) Who did John say left? \( Q(w) = \lambda w'. \) John said that Mary left in \( w' \)

— *Mary <t left>.

\[ \text{Asserts: Mary left.} \]

Presupposes: \( Q(w) \rightarrow [\text{FocP}], \) i.e. \( [\lambda w'. \) John said that Mary left in \( w' ] \rightarrow [\lambda w: \) Mary left in \( w] \)

Entailment does not go through; presupposition not met, and ellipsis therefore not licensed.

If the elided content is interpreted as *John said x left*, the presupposition is (trivially) met:

(9) — Mary <John said t left>. \[ \text{Asserts: John said that Mary left.} \]

Presupposes: \( [\lambda w'. \) John said that Mary left in \( w' ] \rightarrow [\lambda w: \) John said that Mary left in \( w] \)

In addition, the presupposition captures the contrast shown in (10) (due to Jeremy Hartman, p.c., after examples by Polly Jacobson). In cases where the question presupposes a restricted domain of answers, clausal ellipsis is not licensed if this presupposition is violated (10c) (while VPE is licensed, (10b)).

(10) Which Brontë sister wrote *Emma*? a. Jane Austen wrote *Emma* (you fool.)

b. Jane Austen did (you fool.) c. #Jane Austen (you fool.) (intended: J.A. <wrote Emma>)

The failure of (10c) follows from (4), as shown in (11). The answer to the question (in Groenendijk and Stokhof 1984’s technical sense) is the proposition *that no Brontë sister wrote Emma*, and this clearly does not entail that Jane Austen wrote Emma; the condition on ellipsis is therefore not met.

(11) Which Brontë sister wrote *Emma*? \( Q(w) = \lambda w': \) no Brontë sister wrote *Emma* in \( w' \)

— *Jane Austen <t wrote Emma>.

\[ \text{Asserts: Jane Austen wrote Emma.} \]

Presupposes: \( [\lambda w': \) no Brontë sister wrote *Emma* in \( w' ] \rightarrow [\lambda w: \) Jane Austen wrote *Emma* in \( w' ] \)

Entailment does not go through; presupposition not met, and ellipsis therefore not licensed.

**Syntactic proposal.** I assume, following Merchant 2004, that a left-Peripheral head is endowed with a feature licensing the ellipsis of its complement, such as Merchant’s E-feature. Focused constituents must raise out of ellipsis sites for reasons of Recoverability (see e.g. Yoshida et al. 2013), but I assume reconstruction at LF. The structure of fragment answer sentences is that in (12).

(12) \( \text{[Foc} \text{Natto Foc]}[\text{Foc]}[\text{Foc]} \text{[TP John ate t]}>]] >]] \]

I propose that the presupposition that elided clauses must be answers to Questions under Discussion is encoded directly in the denotation of the E-feature as a presupposition (as in Merchant 2001’s proposal to encode c-Givenness in the E-feature). The E-feature, defined in (13), denotes an identity function over propositions, as in Merchant 2001 et seq., but contains a presupposition that the answer to the QUD must entail the meaning of the elided clause. An example is given in (14).

(13) \( \text{[[E]}^{\text{QUD} = \lambda p: (w_p, p(w'_p) \rightarrow p; otherwise undefined.} \]

(14) \( \text{[[Foc} \text{Foc]}[\text{Foc]} \text{[TP John ate natto] } ] = \lambda w'. \) John ate natto in \( w' \)

Only defined if QUD(w') \( \rightarrow [\lambda w': \) John ate natto in \( w' ] \)