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Lexical mismatches in ellipsis and the identity condition

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1.   The identity condition

It is well-known that ellipsis is subject to an identity condition, according to which the content of an ellipsis site E needs to be 'recoverable' from a linguistic antecent A in the discourse. In recent years the nature of this identity relation has been the subject of much discussion in the literature, with some authors taking the relation to be semantic (Merchant 2001, Hartman 2009, AnderBois 2011) and others taking it to be syntactic (Chung, Ladusaw and McCloskey 1995, Chung 2005, Merchant 2008).

Arguments for the semantic approach are often substantiated by evidence for non-isomorphism between E and A; for instance, Merchant (2001: 22) observes that gerunds can antecede sluices in infinitival clauses, even though E and A mismatch with respect to verbal morphology and the presence of infinitival auxiliary *to*.

(1)   [Decorating for the holidays]$_A$ is easy if you know how [~~to decorate for the holidays~~]$_E$

To account for such syntactic non-isomorphisms, Merchant proposes a semantic identity condition called *eGIVENness*, where identity holds under mutual entailment: A entails E and E entails A, modulo ∃-type shifting. This allows A and E to differ from each other with respect to lexical content, while still imposing a high degree of semantic isomorphism upon them. Such lexical mismatches are difficult to account for in approaches that impose syntactic identity upon ellipsis: if identity is defined over phrase markers, then non-identity in terms of lexical items would typically entail non-identity between E and A.

Arguments for a syntactic identity condition have tended to focus on cases where the relation between A and E is seen to be quite strict, with slight syntactic differences

which would not normally affect the calculation of eGIVENness apparently causing identity failures. For instance, Chung (2005) shows that in languages with p-stranding, sluicing cannot leave prepositions stranded in E that are not also found in A:

(2)   Mary was flirting, but they wouldn't say *(with) who.

Given that the choice between pied-piping and p-stranding doesn't seem to have clear semantic consequences (mutual entailment holds in both cases), the obligatoriness of pied-piping in (2) is somewhat mysterious for a semantic identity approach. Chung argues that such data motivate a lexical condition on ellipsis identity: the numeration that forms E must be a proper subset of A. Given that numerations are syntactic constructs, we may say this is a syntactic identity relation.

   Proponents of the syntactic identity approach may account for lexical mismatches between E and A by showing that syntactic identity does in fact hold between E and A at some level of abstraction. An example of this reasoning can be found in Merchant's (2010) analysis of mismatches with respect to polarity items, as in (2):

(3)   John didn't [see anyone]$_A$, but Mary did [~~see someone~~]$_E$.

Merchant adopts the proposal in Giannakidou (2007), in which the indefinites in E and A are in effect different morphosyntactic realizations of the same polarity-unvalued indefinite DP in different syntactic contexts. This DP spells out as the PPI *someone* in polarity positive contexts – defined by features on a higher polarity projection, ΣP – and as the NPI *anyone* in negative contexts; given this, the two DPs are sufficiently similar to ensure that syntactic identity holds between E and A. If lexical mismatches like (1) and (3) can be explained in these terms, and examples like (2) are taken to motivate a lexical identity condition above and beyond semantic identity, it would be tempting to conclude that syntactic identity should indeed be imposed by something like Chung's lexical identity requirement.

       In this paper I argue against lexical identity as a strong requirement on ellipsis, and instead I motivate an alternative semantic identity requirement. The empirical focus of this paper is tolerated lexical mismatches between E and A, where the mismatches in question cannot be explained away in terms of environment-specific alternations (as with 3) or semantic identity in terms of mutual entailment; this includes cases where lexical items are in E but not in A and cases where lexical items are in A but not in E. These mismatches argue strongly against strict syntactic identity as imposed by the lexical identity requirement (Chung 2005) or the LF Copy theory (Chung, Ladusaw and McCloskey 1995), as well as the strict semantic isomorphy imposed by eGIVENness (Merchant 2001). I argue instead for a semantic identity relation that compares neo-Davidsonian representations of meaning in order to calculate ellipsis identity (developing proposals in Hardt 2005). This has similar effects as the lexical identity condition, in that it restricts cases where additional elements are introduced in E that are not in A; however, I argue that additional antecdents may sometimes be *accommodated* into the context by a process that manipulates the semantic representation of A (Fox 1999).

2.   Lexical mismatches between E and A
2.1   In E but not in A: modals

As noted by Merchant (2001), the ellipsis site in sluicing can differ from its antecedent not just with respect to the presence of infinitival *to* (as in 1), but also with respect to the presence or absence of other auxiliary-like elements such as modal verbs. Consider:

(4)   A: Amuse me!
         B: What with ~~should I amuse you~~?

Here the inversion of preposition and wh-phrase ('swiping') unambiguously diagnoses sluicing in B's reply (Lasnik 2001), and it is clear that the interpretation assigned to the sluice is one where the modal verb *should* is present in the ellipsis site. The antecedent for this sluice is an imperative that lacks this lexical item entirely; although the imperative may contain a covert modal operator that has a similar semantic import to the modal auxiliary in the sluice (see e.g. Schwager 2006), it is clear that the two are different lexical items given that they have different phonological and syntactic properties.

Sluices with imperative antecedents thus present clear examples of lexical mismatches between E and A where an element in E is not found in A. Merchant (2001: 23) shows that a similar phenomenon can be seen with antecedents other than imperatives: in German subjunctive clauses provide antecedents for sluices that include modals that are not present in A:

(5)   Poltiker   würden   gern helfen aber sie wissen nicht, wie Δ.
          politicians would.subj prt   help   but they know   not   how

 "Politicians would like to help but they don't know how"
      a. Δ ≠ *wie zu helfen
              how to help
      b. Δ ≠ wie sie gern helfen würden
            how they prt help   would.subj
      c. Δ ≠ wie sie gern helfen sollten
            how they prt help   should
      d. Δ = wie sie helfen sollten
            how they help should

(5a) is ruled out because German lacks wh-infinitives (cf. English 1), and (5b) is ruled out as possible interpretations for the ellipsis site; rather, the only licit interpretation is (5d), where E contains a modal not contained in A.[1] The subjunctive form of the auxiliary in A provides the same sort of semantic import as the finite modal auxiliary in E (both are operators that introduce quantification over possible worlds), so the possibility of ellipsis with such lexical mismatches is not surprising under a semantic identity approach.

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[1] Note that the the unavailability of (5c) and preference for (5d) provides evidence for the kind of mismatch discussed in the next subsection, where a lexical item is in A but not in E; here, the element in question is the particle *gern*.

All of these cases of modal mismatches constitute direct counterexamples to Chung's lexical identity approach to ellipsis licensing, since in all cases the numeration of E is not a proper subset of the numeration of in A. It is hard to see how these mismatches may be explained in terms of environment-specific syntactic alternations (as with Merchant's account of 3), since there are a number of non-trivial syntactic differences between the mismatching auxiliary elements that are not obviously derived from the surrounding syntactic environments.

2.2   In A but not in E
2.2.1   Missing adverbs

It is typically assumed that the identity relation between E and A is total; that is, all constituents contained within A are interpreted in E, since the ellipsis identity relation is one of isomorphy. Thus in examples like (7), the ellipsis sites are interpreted as having the same adverbial modification in them as the antecedents:

(7)   a. John always turns up late, and I want to know why ~~he *(always) turns up late~~
          b. Someone shouted loudly, and I want to know who ~~shouted *(loudly)~~

There are some cases of VP-ellipsis where VP-adjuncts can be left out of the interpretation of the ellipsis site, as in (8a); this is presumably because the identity relation can select a lower segment of the VP (to the exclusion of the segment where the adjunct is adjoined) for ellipsis-identity (see Sag 1976, Merchant 2000). Interestingly, these intepretations are only licit when the adjunct in question is contrasted with an analogous adjunct in the antecedent; when this condition is not met, the option to interpret the ellipsis site as omitted the adverbial is lost, as in (8b).

(8)   a. John called the police on Sunday, and I did on Tuesday.
          b. John called the police on Sunday, and I did ~~call the police *(on Tuesday)~~, too.

One possible analysis is that the default choice is to interpret the maximal segment of the VP; when this interpretation is illicit (as it would be for 8a), one can select the lower segment as the antecedent.

While this analysis in terms of lower and higher segments may account for the VP-ellipsis facts, there are a number of related cases where adjuncts are omitted from E even though there is not a segment of A that can be selected that omits the adjunct. This is seen in (9)-(10):

(9)   a. Children always learn a language without knowing how.
          b. Prime Minister Tony Blair of Britain... announced that Britain would blindly follow America into Afghanistan without questioning why.
(from http://guardian.150m.com/hufschmid/Manipulation.html)

(10)   John is probably running late, although I don't know why.

First consider (9), which are both examples of what Yoshida (2010) calls "antecedent contained sluicing." In these examples the antecedents contain the VP-adverbs *always* and *blindly*, and yet it is clear from interpretation that the sluices are not interpreted as if they are modified by these adverbs: the sluice in (9a) may be paraphrased as "how they learn it," and the one in (9b) as "why they following them into Afghanistan." The situation is familiar from (8b): interpreting the sluice as being modified by the adjunct would be infelicitous (e.g. one cannot question why one does something blindly), so the interpretation for the ellipsis site is one that excludes it. However, this example cannot be given a segment-based analysis, since the antecedent is minimally an IP in sluicing and the adverb is a VP-modifier; rather, it seems that the adverb has just been missed out.[2]

The same sort of missing adverb effect is seen in the more straightforward sluice in (10). It is clear from the interpretation that the ellipsis site does not contain the adverb contained in the antecedent: it is interpreted as "… why he is running late." As with (9), this seems to obtain because interpreting the adverb in the ellipsis site would lead to ill-formedness; questions are generally resistant to hosting epistemic adverbs (Jackendoff 1972), as can be seen from the oddness of (11):

(11)   ??Why is John probably running late?

As with (9), (10) is not amenable to a segment-based reanalysis, since the adverb is adjoined to a position below the auxiliary in T. This is straightforward evidence against any approach to ellipsis identity that assumes that the relation is isomorphic, whether syntactic (e.g. Chung et al 1995) or semantic (e.g. Merchant 2001, Hartman 2009).

2.2.2   Missing PPs

A similar set of mismatches between E and A can be seen in certain classes of fragment answers, where XPs contained in the question seem to be omitted from the structure of the fragment answer. The background for this is Merchant's (2004) ellipsis approach to fragment answers: Merchant provides a wealth of evidence for analysing fragment answers as elliptical sentences, where the fragment has been fronted to a sentence-initial position and the full TP has been elided under identity with the question. Evidence for this comes from connectivity effects, such as bound variable readings of pronouns:

(12)   Q: Which of his$_i$ relatives does [every boy]$_i$ like?
        A: His$_i$ mother.
        A': His$_i$ courage [every boy]$_i$ likes t

It is typically assumed that bound variable readings are only available when the pronoun can be c-commanded by the binding QP at LF; this may hold after A-bar reconstruction, as in the question in (12). Given this, the availability of the bound reading in the fragment answer indicates that the proper analysis for the fragment is (12A'), where it has undergone A-bar focus-fronting followed by ellipsis. Further empirical arguments for the

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[2] But see Yoshida (2010) for something like a segment-based analysis of sluicing cases where something smaller than an IP is interpreted as the antecedent. I leave it for future work to explore how exactly Yoshida's data may be handled by the approach to ellipsis identity developed here.

movement and ellipsis account come from Case-matching, p-stranding, selection and island sensitivity.

With this as background, consider question-answer pairs like (13)-(14):

(13) Q: What do you admire about John?
    A: His courage.
    A': His courage ~~I admire t~~

(14) Q: What does every boy's$_i$ mother dislike about him$_i$?
    A: Only his$_i$ ego.
    A': Only his$_i$ ego ~~every boy's$_i$ mother dislikes t~~

On the ellipsis analysis, the questions provide the linguistic antecedents for the clausal ellipsis in the fragment answers in (13)-(14); (13) is a simple case, and (14) is a case where variable binding ensures that an ellipsis analysis is required.[3] However, these both seem to involve mismatches between E and A, since the *about* PPs in the questions do not seem to be part of the fragment answers: such PPs cannot co-occur with the DPs corresponding to the fragment answers in the corresponding full declarative.

(15)   a. *I admire his courage about John.
        b. *Every boy's$_i$ mother dislikes only his$_i$ ego about him$_i$.

Given that the PPs are contained within the VP in the question, and the TP is the minimal antecedent for clausal ellipsis, this seems to be another situation where an adjunct in E is not retained in A. The well-formedness of (13)-(14) thus provides further evidence against strict identity between E and A, where lexical items in A are not present in E.

2.2.3   Expressive modification

The final case of lexical mismatches between E and A that I will consider involve expressives, in particular adverbial modifiers like *fucking*. Potts (2007) argues that expressives are indexicals, with the expressive force of the term typically anchored to the speaker in the same way as person, and he proposes that the semantic contribution of such expressions must be located in a dimension of meaning that is additional to that which defines truth-conditional content. The point of interest here is that the expressive force of an antecedent does not need to be borne by a dependent elliptical element. To see this, consider the following dialogues:

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[3] The *only* modification of the fragment ensures that the fragment answer must be given a clausal ellipsis analysis and not one where the fragment is underlyingly an elided reverse pseudocleft; such an analysis for (13) is illustrated in (i). *Only* modification is not compatible with the pivot position of a pseudocleft (Heycock 2008), as shown by (ii) so the well-formedness of (14) indicates that such an analysis is not possible. This needs to be ruled out since reverse pseudoclefts tolerate the presence of the *about* PP, cf.(i); otherwise the argument for the "missing PP" may be undermined.

(i) His courage is what I admire about John.
(ii) ?*Only his ego is what every boy's mother dislikes (about him).

(16)   A: You should fucking fire that asshole John!
       B: I know you think I should Δ, but I won't Δ as I like him.

(17)   A: You should tell that fucking dog to shut the hell up?
       B: Why Δ? The poor little pup just wants some attention.

In both of these dialogues, B is not committed to the expressive force encoded by A's statement, as evidenced by the felicity of the empathetic follow-ups. This indicates that E lacks the expressive content of A in both cases, thus implicating significant lexical mismatches with respect to expressive content. It is important to note that the mismatches seen here cannot all be attributed to the mechanisms of "vehicle change" (Fiengo and May 1994), since this only applies to the indexical properties of nominals. Given that the modifier *fucking* and *the hell* are adverbial modifiers in these contexts, these expressions cannot be exchanged for corresponding pronominals by vehicle change in the same way as nominals. It should be noted that the lexical mismatches in (16)-(17) are not a problem for semantic approaches to ellipsis identity like Merchant's (2001) eGIVENness, at least if Potts' multidimensional approach to expressives is correct: eGIVENness is defined over truth-conditional meaning, so it correctly allows for mismatches with respect to expressive content. However, it is so well not handled well by the LF Copy approach to syntactic identity, as this imposes strict syntactic isomorphy between E and A.

2.3   Summary

In this section I have presented data that demonstrates that an ellipsis site E can differ substantially from its antecedent A with respect its lexical content. We have seen both cases where there are lexical items in E that are not present in A, and cases where lexical items are in A but not in E. We have also seen that this data presents problems for all the major theories of ellipsis identity: Chung's (2005) lexical identity condition cannot handle the data from modals; Merchant's (2001) semantic isomorphy approach cannot handle the missing adverb and missing *about* PP data; Chung et al's (1995) LF Copy approach cannot handle any of the data, at least not without significant revision.

Given that Chung's lexical identity condition is supplemented by the semantic eGIVENness condition (see Chung 2005: 11), we can surmise that, of the three theories reviewed here, the purely semantic identity condition is best suited to dealing with the lexical mismatches. An important characteristic of the data that troubles the semantic identity approach is that the mismatches between E and A occur when strict isomorphy would lead to ungrammaticality or infelicity in the ellipsis sentence; for instance with the cases of missing epistemic adverbs in (10), including the adverbs in E would lead to semantic ill-formedness. It seems, then, that although the default is for semantic isomorphy, non-isomorphy is allowed as a "last resort" when isomorphy fails. In the next section I develop a specific implementation of the semantic identity condition which is able to account for this "last resort" accommodation of non-isomorphy.

3.   Reformulating semantic identity
3.1   Identity and entailment

As a starting point, let us consider again Merchant's (2001) eGIVENness proposal in more detail. Recall that a constituent E is eGIVEN if its existential closure is in a *mutual entailment* relation with the existential closure of an antecedent constituent A; that is, A entails E and E entails A. An important characteristic of this proposal is that part of it – in particular, the first part of the biconditional – has generality beyond ellipsis, since eGIVENness is an ellipsis-specific version of the general relation of GIVENness, as defined by Schwarzschild (1999) (building on Rooth 1992). GIVENness is the condition that needs to be met for a constituent to be deaccented, and Merchant (2001) shows that this condition is weaker than the one that applies to ellipsis: A must entail E for a constituent to be GIVEN, while E must *also* entail A for a constituent to be eGIVEN. This difference between ellipsis and deaccenting is shown by the difference between the two with respect to what is called *implicational bridging*, as demonstrated by the following (from Merchant 2001: 27):[4]

(18) a. JOHN was reading the book while BILL was *reading*, too.
　　 b. JOHN was reading the book while BILL was Δ, too.
　　 Δ ≠ reading
　　 Δ = reading a book

(18a) demonstrates that deaccenting allows for non-isomorphism between the antecedent and the deaccented constituent with respect to argument structure, where the deaccented constituent D is an optionally intransitive version of the antecedent A; this is allowed the entailment relation that defines GIVENness allows for such loosness (that x was reading something entails that x was reading).[5] However, this is not available for ellipsis, as indicated by (18b): here the intransitive reading is not available, and so implicational bridging seems to be unavailable. Merchant's proposal to deal with this asymmetry between deaccenting and ellipsis, while retaining the intuition that the two are ultimately derived from common mechanisms, is thus to impose for ellipsis the additional condition that E must entail A; this results in the biconditional of mutual entailment, where "A entails X" is defocussing-general and "X entails A" is ellipsis-specific.

　　　While Merchant's reasoning is sound, we may still question the choice to define the ellipsis-specific condition in eGIVENness in terms of entailment. There are a few reasons to do so. First, Hartman (2009) shows that, in the domain of ellipsis identity, mutual entailment is somewhat problematic, since it predicts identity between constituents which logically entail one another but which otherwise bear no syntactic resemblance to each other. This is the case with relational opposites:

(19) *John will beat someone at chess, and then Mary will ~~lose to someone at chess~~.

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[4] Small caps indicate focal stress and small-type italics indicate deaccenting.
[5] The approach in Fox (1999) is different: Fox argues that syntactic isomorphy is required between A and D, and proposed instead that *accommodation* is responsible for making available additional antecedents, where accommodation is an inferencing process that proceeds on the basis of accommodation-seeking material in the discourse. I adopt a version of Fox's accommodation theory in what follows to account for the availability of additional antecedents for ellipsis identity; however I do not think it is necessary to adopt Fox's approach to deaccenting (where the A implies D/E relation is abandoned).

Mutual entailment between E and A holds in (19) – someone being beaten entails someone losing and vice versa – ellipsis is not possible with the interpretation shown. This indicates that the semantic relation of entailment is somehow too loose to properly describe the ellipsis-specific part of the ellipsis identity relation,[6] even though it has utility in describing deaccenting. Second, we can see that the cases of lexical mismatches that were not handled by eGIVENness typically involved failure of the ellipsis-specific condition E entails A. Consider again (9a), where an adverb is present in A but not in E:

(9a)   Prime Minister Tony Blair of Britain... announced that Britain would blindly follow America into Afghanistan without questioning why.

Informally, the proposition denoted by A, that Britain would *blindly* follow America into Afghanistan, entails the proposition denoted by E, that Britain would follow America into Afghanistan, but the opposite does not hold: that x does something does not entail that someone does it *blindly*, and so E does not entail A in (9a), even though ellipsis identity is possible. Thus it seems clear that the data discussed here requires a reformulation of the second part of the semantic identity relation, not the first part. Finally, we may note that other arguments that have been assimilated for a semantic approach to ellipsis identity implicate the A entails E relation but not the E entails A relation. For example, AnderBois (2011) argues for a specific implementation of eGIVENness where the relevant semantic isomorphy holds not just over truth-conditional meaning, but also over *issues* in the sense of Groenendijk and Roelofson (2009). AnderBois argues for this on the basis of ellipsis identity failures in cases where the antecedents are double negatives or contained in appositives,[7] where mutual entailment holds over truth-conditional content and yet ellipsis identity is not possible; he argues that the failure obtains because in the relevant cases, A does not entail E in terms of issues (specifically, the relevant content of the antecedent is not *at issue* content). I will not dwell on AnderBois' arguments here since they may take us too far afield, but what is important is that the E entails A relation again plays no role, in that his theory does not invoke this relation in its description of the data.[8] We may conclude, then, that the E entails A relation is what needs to be replaced in our reformulation of the ellipsis identity relation.

3.2   The proposal

I retain the assumption that ellipsis and deaccenting are both subject to the condition of GIVENness, which holds that the antecedent A must entail the reduced constituent E/D. Adopting ideas in Hardt (2005), I propose that the ellipsis-specific condition of the

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[6] Hartman (2009) proposes a return to the two-part condition on ellipsis licensing proposed by Rooth (1992), where strict semantic identity is imposed for some variable assigment. The proposal that I develop here is very similar, although I employ different notation for the sake of making the treatment of accommodation much simpler.

[7] AnderBois also considers voice mismatches and argues that a large cut of this data also follows from this approach. I do not consider this data here since I take the analysis of voice mismatches to be an open and thorny issue.

[8] Anderbois' theory thus predicts that the identity failures he describes for ellipsis should also obtain for deaccenting. This seems correct to me, although the data is not as clear as it is in the case of ellipsis.

ellipsis identity relation is a strict semantic identity condition that holds over neo-Davidsonian representations of meaning (Parsons 1990, Pietroski 2005). However, adopting proposals in Fox (1999), I propose that the identity relation may hold either between E and A or between E and A', where A' is an additional antecedent that is accommodated into the context on the basis of manipulation of A by a process Hardt (2005) calls *Conjunct Elimination* (which I return to shortly). This is in (20):

(20)   For a constituent E to be elided,
         a. an antecedent A must entail E (i.e. E must be GIVEN)
         b. E = A or A', where A' is an accommodated variant of A
         (where E, A and A' are neo-Davidsonian representations under existential closure)

To see how this is implemented, consider the simple example in (21) and the illustration of the relevant information in (22):

(21)   John [kissed the dog]A and Mary did [kiss the dog], too.

(22)   A: KISS(e) & Patient(*dog*,e)
         E: KISS(e) & Patient(*dog*,e)
         A → E and E = A

Since A entails E and the meaning of E is identical to that for A, both conditions of (20) are satisfied and ellipsis is possible. This has the same effect as other semantic identity relations, such as those invoked in Rooth (1992) and Hartman (2009). This approach captures all of the basic results of Merchant's semantic identity relation: it imposes semantic identity, not identity over phrase markers or lexical items; it imposes identity over truth-conditional meaning, thus allowing for mismatches between E and A with respect to expressive content; it accounts for phenomena like vehicle change in broadly the same way.[9] However, it has two additional benefits which are not shared by the mutual entailment approach: (i) it imposes a strict semantic isomorphy that has broadly the same effect as a lexical identity condition, and (ii) it allows us to define clearly an operation for deriving additional antecedents from the linguistic context provided by the antecedent. I will illustrate these two points in turn.

3.2   Semantic identity as lexical identity

One immediate outcome of (20) is that it correctly rules out the cases of relational opposites like (19), which we saw were not ruled out by eGIVENness. To illustrate, consider the simplified representations for E and A in (19):

(23)   A: BEAT(e) & Patient(x,e) & AT-CHESS(e)
         E: LOSE-TO(e) & Patient(x,e) AT-CHESS(e)   A → E, E ≠ A,

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[9] I assume that the implementation of slightly more complex representations (such as ones involving pronouns and bound variables) is trivial; I leave interrogation of this assumption for future work.

What this illustrates is that the condition in (21) imposes some degree of lexical identity between E and A, since at the very least the two must contain the same basic predicates in order for the identity relation to be satisfied. This also has the effect of ruling out cases of implicational bridging like (24), which are possible for deaccenting but not for ellipsis (Merchant 2001: 15):

(24)   a. *ABBY ate a sandwich after BEN did ~~eat lunch~~
       b. ABBY ate a sandwich after BEN *ate lunch*

Identity does not obtain in (24a) because the arguments of the verbs are semantically distinct in E and A, thus producing non-identity between E and A as defined in (20). The condition thus has the effect of standardly ruling out semantically contentful lexical mismatches between E and A, at least in standard cases. Of course, (20) does not impose *strict* lexical identity between E and A; for instance, it would allow for identity between an ellipsis site containing an imperative and an antecedent containing a modal, so long as the imperative contains some form of operator that derives the same sort of interpretation as the modal (Schwager 2006). The important thing is that the lexical items in E must be matched by items in A that provide the same contribution to truth-conditional meaning; mismatches with respect to inflectional morphology and semantically inert functional categories are thus predicted not to affect whether or not identity is possible.

      An important outcome of this strict semantic identity condition is that it may give us an explanation of the p-stranding data from Chung (2005), illustrated in (2) and repeated here:

(25)   Mary was flirting, but they wouldn't say *who ~~she was flirting with~~.

This shows that the sluice is ungrammatical when a preposition that is not present in A is stranded in E; the well-formedness of its pied-piped equivalent ("sprouting," 2) shows that the problem here is just with the preposition in the ellipsis site. The analysis here is simple: the neo-Davidsonian representation of E would contain a conjunct *& WITH(x)* which would have no counterpart in A, so condition (20b) would not be satisfied, while the same would not obtain in the pied-piping case since the preposition in question is outside of the ellipsis site.[10]

3.3   Mismatches and accommodation

The key to explaining the lexical mismatches between E and A which were discussed in section 2 is condition (20b) of the identity relation, which allows for the *accommodation* of additional antecedents into the discourse context. The notion of accommodation is borrowed from Fox (1999), where it is conceived of as a strategy for deriving legitimate antecedents for a discourse anaphora relation (i.e. the need for an antecedent for deaccenting) when the current discourse context is not adequate. Fox (1999: 7) states the following conditions on accommodation:

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[10] This necessarily assumes that the prepositions involved are not functional elements or semantically inert, but rather semantically contentful lexical items that may distinguish semantic representations.

(28)   a. Accommodation of a new antecedent for S, AC, must have a trigger.
         b. Accommodation has a trigger when S contains accommodation-seeking material, i.e. when S contains pronounced non-F[ocus]-marked material which is absent in A.

Fox argues that this explains the difference between ellipsis and deaccenting with respect to implicational bridging examples like (24): in the deaccenting example, the pronounced non-F-marked *lunch* provides a trigger for accommodation, which in turn produces a relevant antecedent (i.e. *x ate lunch*). Fox argues that this process is constrained by economy: it is only invoked in the presence of a trigger, and only when necessary.

     Here I would like to propose that, in addition to non-F-marked material, the antecedent itself can also suffice as a trigger for accommodation. In most cases, where E and A are sufficiently similar for identity to hold, accommodation is not required and is thus not invoked. However, if E is not semantically identical to A as per (21), then accommodation is triggered and inferencing produces additional antecedents on the basis of A and other linguistic material in the discourse context, in order to provide an appropriate antecedent. Importantly, I propose that accommodation on the basis of A is restricted to manipulation of the semantic representation of A, and I propose that this manipulation is typically done by process which Hardt (2005) calls *Conjunct Elimination* (CE). Informally, CE involves elimination of a conjunct in a neo-Davidsonian representation, as in (29):

(29)   A & B & C   »»»»»*Conjunct Elimination*»»»»»   A & B

I assume that the semantic representations provided by CE must be well-formed in themselves; thus CE could not eliminate the object of a transitive verb, since the resultant representation would not satisfy the theta criterion (or some manifestation of it).

     Finally, I assume that as a semantic-pragmatic strategy (probably derivable from Gricean principles), accommodation constrains not only the production of antecedents but also the kinds of constituents that are silenced: if E' could have been used instead of E without triggering accommodation (whereby E' must be identical to A), while conveying the same amount of information, the discourse is infelicitous; that is, the availability of E' blocks the use of E. The effect of this overall discourse condition is that accommodation is only triggered when semantic isomorphy would lead to ill-formedness: accommodation is only triggered when A is not a legitimate antecedent and E' is not available as a better interpretation for the ellipsis site because it would cause ungrammaticality or infelicity.

     This is the effect we saw in sections 2.2.1 and 2.2.2, where an additional non-isomorphic antecedent A' was made available because strict isomorphy failed to obtain between E and A. To illustrate, consider (9a) once more, repeated here as (30) with minor elaboration; (31) provides simplified schematics of the representations of E and A, and (32) schematizes how CE produces the additional antecedent A':

(30)   … Britain would blindly follow America into Afghanistan without questioning why ~~Britain would follow America into Afghanistan~~

(31)   A: FOLLOW(e) & Agent(*Br*,e) & Theme(*Am*,e) & INTO(*Afghan*,e) & BLINDLY(e)
        E: FOLLOW(e) & Agent(*Br*,e) & Theme(*Am*,e) & INTO(*Afghan*,e)

(32)   A: FOLLOW(e) & Agent(*Br*,e) & Theme(*Am*,e) & INTO(*Afghan*,e) & BLINDLY(e)
        »»»» *CE of BLINDLY(e)* »»»
        A': FOLLOW(e) & Agent(*Br*,e) & Theme(*Am*,e) & INTO(*Afghan*,e)
        A → E, E ≠ A.   *BUT*   A → E, E = A'   *so ellipsis possible*

The non-accommodation-seeking E', which is strictly identical to A, does not block use of E here, since E' is infelicitous and thus not available; as a result, accommodation is possible and hence Conjunct Elimination produces the additional antecedent A' by eliminating the conjunct which specifies the adverbial that is present in E but not in A.

    This derives the missing adverb phenomenon and the fact that it is restricted to applying only when strict identity is infelicitous. The same explanation can be carried over for the missing PP data, the other remaining challenge for semantic identity. The mechanisms of accommodation as implemented here thus allow us to account the lexical mismatch data which troubled the semantic identity approach, thus providing us with a full account of the lexical mismatches in §2.

4.   Conclusion

In this paper I have shown that ellipsis sites and their antecedents can differ substantially with respect to lexical content, and I have argued that the data reviewed present strong challenges to a number of standard approaches to ellipsis identity, especially those that propose that the identity relation is syntactic in nature. On the basis of this I have developed an alternative semantic theory of ellipsis identity, where (i) A must entail E, and (ii) E must be identical to A or an additional accommodated antecedent A', where A' is derived by inferencing on the basis of A. I proposed that this semantic identity relation holds between neo-Davidsonian representations of meaning, and I showed that such an implementation allows us to derive a semantic identity condition that has much of the force of a lexical identity condition, while also providing a small degree of flexibility which allows us to account for the semantic non-isomorphisms demonstrated by the lexical mismatch data.

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