

Something else on variables in syntax

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1. Introduction

Culicover & Jackendoff (1995, 2005: Chapter 11) argue that binding (the assignment of reference to a semi-referential element) is regulated not at any syntactic level, but at the level of Conceptual Structure (CS), which precedes syntax in the derivation of a sentence. The argumentation builds on the assumption that expressions like *something else* contain a hidden variable element α (such that *else* = *other than* α) which is interpreted like other semi-referential elements, i.e. through binding.

That the interpretation of expressions like *something else* involves binding is suggested by the observation that such expressions give rise to ambiguities known as ‘strict vs. sloppy identity’. These ambiguities are familiar from binding of pronominal elements, as illustrated in (1):

- (1) John thinks he is a genius, and Bill thinks he is a genius too

In (1), *he* in the second conjunct can be interpreted as *John* (‘strict identity’) or as *Bill* (‘sloppy identity’). (2) illustrates a similar effect with *somewhere else*:

- (2) John went to his house but Bill went somewhere else

Here, *somewhere else* can be interpreted as ‘some place other than his house’, with ‘his house’ receiving either the strict (‘John’s house’) or the sloppy (‘Bill’s house’) interpretation.

The existence of the implicit variable α in expressions like *something else* has been called into question, most recently in Kubota & Uegaki (2009), from a variable-free semantics perspective. However, Kubota & Uegaki concur with Culicover & Jackendoff in treating *else* on a par with ordinary pronouns, whereas this paper argues that *else* is something else.

More precisely, once the relevance of focus to the interpretation of expressions like *something else* is properly understood, reference to a variable element α internal to the element *else* turns out to be superfluous. If so, it no longer follows that the interpretation of expressions like *something else* involves binding, and hence conclusions as to the relevance of syntactic structure to binding are not warranted.

2. Synopsis

In terms of focus, the crucial generalization appears to be that the element *else* forces a demarcation within a set of focus alternatives between two subsets, which are interpreted as being in an obviative relation with respect to each other, and which may hence be designated as an antecedent set and a dependent set. If the antecedent set contains a variably interpretable element, such as *his house* in (2), the dependent set which is interpreted obviatively with respect to the antecedent set of necessity receives a variable interpretation as well. This is what yields the strict vs. sloppy identity readings with expressions like *something else*.

3. Focus

It is a remarkable fact about expressions like *something else* that their interpretation is fixed when there is a clear focus/ground division, but vague in the absence of such a division. Thus, in (3), *someone else* can be interpreted as ‘someone other than John’ or as ‘someone other than [whoever we are thinking about]’, whereas in (4), *someone else* would have to be ‘someone other than John’:

(3) John loves someone else

(4) Mary loves John, but Susan loves someone else

Culicover & Jackendoff (1995: 253–254) take the obviative reading of *someone else* in (3), where *someone else* = ‘someone other than John’, to indicate that interpretation of expressions like *someone else* parallels interpretation of local anaphors like *himself* in (5):

(5) John loves himself

But the crucial observation appears to be that *someone else* in (3) is interpreted depending on what we *construe* to be the alternative against which *someone else* is pitted. In (3), the most natural alternative would seem to be not *John* but a person he is expected to love, e.g. his ‘significant other’. But change *John* into *Narcissus*, and the default interpretation shifts, as in (6):

(6) For once in his life, Narcissus truly loves someone else

Similarly with a sentence like (7), which Culicover & Jackendoff present as instantiating a reciprocal obviative relation with respect to a local antecedent:

(7) Bush and Clinton (both) voted for someone else

Here, the context in which *Bush* and *Clinton* themselves are candidates in the election biases the interpretation such that the alternatives to *someone else* are taken to be *Bush*

and *Clinton*, respectively. But in (8), no such effect occurs, and the alternatives can be taken to be anybody (i.e. a third party candidate, or the candidate they said they were going to vote for, etc.):

- (8) John and Mary (both) voted for someone else

Needless to say, such effects are absent with local anaphor binding.

In contrast, *someone else* in (4) needs to be construed in relation to *John*. The difference between (3) and (4) is that in (4), the coordination of largely parallel clauses entails a division in a *focus* and a 'ground', which I will refer to (following Tancredi 1992) as a *focus related topic*. The focus consists of a set of alternatives, which I will call the *focus alternatives* (which is evoked every time an element receives pitch accent; in (4) there are actually two sets of focus alternatives, one consisting of *Mary-Susan* and another one consisting of *John-someone else*). The focus related topic is the event or situation in which the focused element is situated, which in (4) would be something like *x loves y*. In (3), we may construe a set of focus alternatives as well (since the pitch accent is on *someone else*), but the construction does not force us to include into this set any constituent of (3) other than *someone else*. As a result, we have considerable freedom in construing this set of focus alternatives, hence its variable interpretation.

I take these observations to imply that the properties of elements like *something else* are best studied in contexts where the focus alternatives and the focus related topic are made explicit, i.e. in constructions like (4).

4. The relevance of focus

The relevance of focus to the interpretation of expressions like *someone else* becomes clear from example pairs like the following:

- (9) *John voted for Mary but Bill voted for someone

- (10) John voted for Mary but Bill voted for someone else

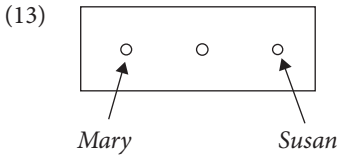
These need to be compared with simple cases like (11):

- (11) John voted for Mary but Bill voted for Susan

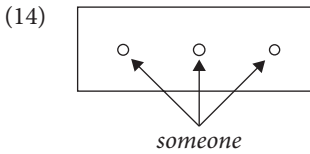
From (11), it is clear that there both *John* and *Mary* give rise to the construction of a set of focus alternatives, with a focus related topic *x voted for y*. *x* then corresponds to the set of focus alternatives in (12a), and *y* to the set of focus alternatives in (12b):

- (12) a. {John, Bill, ... }
b. {Mary, Susan, ... }

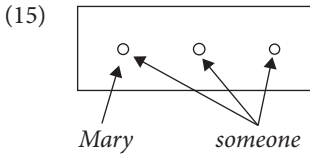
In each case, the set of focus alternatives can be pictured as in (13), with both conjoined clauses picking out members of the set, indicated as circles within a box:



We may then assume that *someone*, when included in a set of focus alternatives, picks out any arbitrary member of the set, as indicated in (14):

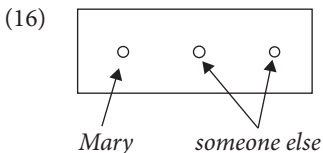


In (9), this implies that the set of focus alternatives associated with *y* in *x* voted for *y* consists of *Mary* and an arbitrary additional number of members, of which *someone* can pick out any member:



Since the conjunction *but* in (9) implies opposition between the two conjoined clauses, and the two clauses share the focus related topic, it must be that the set of focus alternatives is divided in a part applying to the first member and a part applying to the second member. But in (9) such a division within the set of focus alternatives is not realized: *Mary* is included in the set of members that *someone* may be interpreted as referring to.

It now seems clear that *else* effectuates the division within the set of focus alternatives that is needed to make (9) interpretable:



Formally then:

- (17) *else*, when applied to *x*, restricts the range of *x* to the subset of the set of focus alternatives associated with *y* that excludes *y*

It follows that with *and* (*too*) instead of *but*, the need to include *else* is gone:

- (18) John voted for Mary, and Bill voted for someone (*else) too

With *and ... too* the events referred to by the two conjoined clauses must be identical rather than opposed. Hence, the members of the set of focus alternatives picked out by *someone* must at least include *Mary*, hence the ungrammaticality of (18) with *else*.

Without *too*, *and* can easily be construed as implying opposition, and the interpretation goes in the same direction as *but*, with inclusion of *else* required:

- (19) John voted for Mary, and Bill voted for someone *(else)

This is because when two coordinated clauses show a parallel cohesion relation (in the sense of Kehler 2000), opposition is a natural interpretation of the parallelism (Kehler 2000: 543). With narrative or resultative cohesion, where the event of the second conjunct is presented as following after or from the event of the first conjunct, the need to include *else* again disappears:

- (20) John voted for Mary, and then Bill voted for someone

Similar effects as with *someone* can be observed with *everyone*:

- (21) I didn't invite Mary, but I did invite everyone *(else)

Everyone differs from *someone* in picking out all members of a relevant set, as opposed to an arbitrary member. It can then be seen that without *else*, (21) involves a contradiction: since *Mary* is a member of the set of focus alternatives, *everyone* should pick out *Mary* in the same way as *someone* does in (9), see diagram (15). But the opposition between the negative first member and the positive second member realized by the conjunction *but* requires that the two conjuncts pick out opposite members of the set of focus alternatives. Again, *else* creates the division within the set of focus alternatives that is needed.

We get a slightly different effect in cases like (22):

- (22) John invited Mary, but Bill invited everyone (else)

Without *else*, we get an opposition between person A inviting just a single person and person B, not A, inviting every member of a presupposed set of possible invitees. In other words, the opposition plays along the dimension of exhaustiveness. This interpretation disappears when *else* is included: instead, we arrive at the division between the members of the set of focus alternatives illustrated in (16), with *everyone* picking out all members except *Mary*.

We can now begin to understand the contribution of *else* in contexts like (3), repeated here as (23), where there is no clearly defined set of focus alternatives.

- (23) John loves someone else

It is noticeable that *else* attracts the nuclear pitch accent, placing the direct object *someone else* in focus. We can therefore conjecture that the same mechanisms are operative that we described for constructions where the coordination makes the focus/ground division explicit. We take (17) as a starting point, then. Since, according to (17), *else* creates a partition within a set of focus alternatives, we can infer from its use in (23) that there must be a subset to that set of focus alternatives which *someone* is not allowed to pick out. As a result, there must be a referent of *y* that the focus related topic *John loves y* does not apply to. Pragmatically, this only makes sense if there is an expected referent *y* that the focus related topic *John loves y* should apply to. In other words, what *else* conveys is that John loves someone other than he is expected to love. It then depends on the context who he is expected to love, as illustrated above.

We see, then, that *else* creates a division of a set of focus alternatives, such that there is a subset of the set of focus alternatives that is distinct from a given focus alternative. The given focus alternative can then be described as the antecedent of the other subset, and the other subset as the dependent. The division of the set of focus alternatives into two mutually exclusive subsets has the effect of obviation. In explicit focus constructions, the reference of the antecedent is clear, in implicit focus constructions, the reference of the antecedent must be inferred. Importantly, the obviation effect follows directly from the partitioning of the set of focus alternatives brought about by *else*: there is no need to ascribe it to the presence of a variable element within *else*, as proposed by Culicover & Jackendoff (1995).

The partitive nature of *else* finds empirical support from its realization as an explicit partitive (24a) or genitive (24b) phrase, as noted by Isac & Reiss (2004):

- (24) a. *quelqu'un d' autre* (French)
 someone of other 'someone else'
 b. *iemand ander-s* (Dutch)
 someone other-GEN 'someone else'

Isac & Reiss (2004:152) also note that “*else* performs an operation of exclusion, i.e. it excludes the antecedent from the domain defined by [the antecedent] and it picks up its complement set”.

5. Strict and sloppy identity

We have seen so far that the interpretation of elements like *something else* is determined by the relation of complementarity between two subsets within the set of focus alternatives evoked by the focused elements of the construction at hand (one of which is *something else*). The division of the set of focus alternatives in two subsets is effected by the element *else*. The interpretation then follows since the complementarity entails

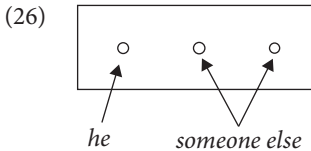
obviation. There is no need to postulate a variable element α inside *else* (such that *else* = *other than* α) in order to arrive at the desired interpretation. In other words, there is no evidence that pronoun binding is involved.

In view of this, we need to consider the observation that led Culicover & Jackendoff (1995) to suppose that the interpretation of elements like *something else* involves binding. The crucial observation in this regard is that elements like *something else* give rise to the type of ambiguity indicated as ‘strict vs. sloppy identity’ (illustrated in (2) above), which is taken to be indicative of pronoun binding.

Consider (25), which we may take to be a representative example of strict vs. sloppy identity ambiguity with elements like *something else* (pitch accent indicated by small capitals).

- (25) John thinks HE is the greatest, but Bill thinks someone ELSE is the greatest

Here, the set of focus alternatives consists of *he* and its complement set:



As a result, *someone else* is interpreted obvially with respect to *he*, but what does *he* stand for? Clearly *he* itself is ambiguous in allowing (at least) a fixed and a variable reading. In the fixed reading, *he* stands for ‘John’ (or someone else known from the discourse), and *someone else* will be interpreted as ‘someone other than *John*’. But in the variable reading *he* stands for ‘the [referent of the] noun phrase on which *he* is depending for its interpretation’. In that situation *he* is a TYPE which may stand for various TOKENS. In the context of the first clause in (25), the token that *he* stands for is ‘John’, but in the context of the second clause, it is ‘Bill’. Thus, on the variable reading of *he*, *someone else* will be interpreted as ‘someone other than *he*’, where *he* stands for ‘Bill’.

If this analysis is correct, the sloppy identity is not the result of binding of a variable element within *else*, but a direct result of the possibility of interpreting the pronoun in the antecedent set as a variable element.

Other cases may receive a similar treatment:

- (27) John voted for himself, but Bill voted for someone else
 (28) John went to his house, but Bill went somewhere else (= (2))

In (27), the set of focus alternatives comprises the antecedent set *himself* and the dependent set *someone else*. *Himself* may stand for ‘John’ (fixed) or for ‘the [referent of the] noun phrase on which *himself* is depending for its interpretation (i.e. the local subject)’ (variable). In the latter case, we get the sloppy interpretation, where Bill voted for someone other than the local subject, i.e. Bill.

Similarly, *his house* in (28), the antecedent set within the set of focus alternatives, may stand for ‘John’s house’ (fixed) or ‘the house of the [referent of the] noun phrase on which *his* depends for its interpretation (i.e. the local subject)’ (variable), and in the latter reading we get the sloppy interpretation, with Bill going to some other place than the house owned by the local subject, i.e. somewhere other than Bill’s house.

In all these cases, the strict vs. sloppy interpretation ambiguity resides in the fact that the antecedent set contains a variable referential element (*he* in (25), *himself* in (27), *his* in (28)). As an expression like *something else* is interpreted obviatively with respect to the reference of the antecedent set, its interpretation varies with the varied interpretations of the element in the antecedent set.

Interestingly, even with referential expressions that are interpreted as types rather than tokens do we get a sloppy interpretation. We see this in examples like (29):

- (29) John loves Mary, but Bill loves someone else

This example has a reading where *Bill* loves someone other than his wife, namely when *Mary* is John’s wife and we are discussing the extent to which the various husbands are faithful to their wives. In that case, *Mary* is a type referring to whatever token may count as ‘the [referent of the] local subject’s wife’. *Someone else*, when interpreted obviatively with respect to this type reading of *Mary*, comes to mean ‘someone other than the [referent of the] local subject’s wife’, i.e. ‘someone other than Bill’s wife’. (Curiously, on this reading, Bill may actually love Mary.)

6. Binding is something else

Crucially, the paraphrase of *someone else* as *someone other than α* does not immediately lead to the desired interpretation in the case of (29). In the analysis of Culicover & Jackendoff (1995), α would be bound by *Mary* and we would not get the sloppy interpretation. In connection with this, we note that (30) cannot mean that Bill thinks that his wife is brilliant, the sloppy reading that is available in (29):

- (30) John thinks Mary is brilliant, and Bill thinks she is brilliant too

This suggests that the sloppy reading of (29) (and other cases with expressions like *something else*) does not come about through binding but through some other mechanism.

There is another difference between the strict/sloppy identity interpretation with expressions like *something else* and with pronouns. As we have seen, expressions like *something else* are invariably in focus. As a result, they affect the interpretation of the set of focus alternatives, forcing a partition in an antecedent set and a complement set. But focused pronouns lose the strict/sloppy identity ambiguity:

- (31) John said HE was the greatest, and/but/and then Bill said HE was the greatest

In (31), *he* in the second conjunct cannot receive a strict interpretation, where *he* refers to the same token (i.e. 'John') as *he* in the first conjunct. The strict interpretation becomes available only under deaccenting of *he* (deaccenting indicated by small print):

(32) John said he was the greatest, and then BILL said he was the greatest

We understand why the strict reading is lost under focusing of the pronoun. The two instances of *he* in (31) come to represent complementary subsets of the set of focus alternatives, therefore they cannot refer to the same entity.

We see, then, that the strict vs. sloppy identity interpretation ambiguity with expressions like *something else* is of an entirely different nature from the strict/sloppy ambiguity with pronouns. With expressions like *something else*, the interpretation is mediated by the construction of complementary sets, whereas with pronouns the strict interpretation is a function of deaccenting.

We therefore conclude that the parallelism between the interpretation of expressions like *something else* and the interpretation of pronouns is illusory.

7. Conclusion

In conclusion, we have seen that the distribution and behavior of expressions like *something else* can be fully understood without postulating an implicit variable internal to these expressions and without reference to binding. It then follows that conclusions as to the nature of binding, based on the properties of expressions like *something else*, are not warranted. But in the context of the present volume, my intention was merely to offer to Jan Koster something else on variables in syntax, rhyming with his own conclusions on the subject (cf. Koster 1982).

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