REPLY

Extraction, displacement, and focus

A Reply to Balcerak Jackson (2013)

Thomas Hofweber

In Frege (1884) Frege noted a puzzling relationship between these two sentences:

(1) Jupiter has four moons.

(2) The number of moons of Jupiter is four.

On the one hand they seem to be quite obviously truth conditionally equivalent, but on the other hand they seem to be about different things. Whereas (1) is about Jupiter and its moons, (2) is about numbers. In particular, the word 'four' appears in (1) in the position of an adjective or determiner, whereas it seems to be a name for a number in (2). Furthermore, (2) appears to be an identity statement claiming that what two number terms stand for is the same thing. Several authors have proposed answers to this puzzle, including Frege, by either pinning the issue on the nature of numbers, pretense, fictionalism, or the nature of reference, but all these proposals agreed that (2) is an identity statement and that in it 'four' is a name for an object. In Hofweber (2007) I argued that (2) is not an identity statement and that 'four' in (2) is not a name for an object. The argument for it was this: When we look at what role (2) has in actual communication we can see that (2) has a focus effect on a discourse that arises from the syntax without special intonation. This focus effect is comparable to that of an utterance of (1) with phonetic stress on 'four'. Focus effects tied to the syntax are associated with extraction of the focused material. Furthermore, identity statements do not have a syntactic focus effect. From this I concluded that (2) is not an identity statement and that 'four' is not a name in (2), but extracted from its canonical position as a determiner to achieve a focus effect. The obviousness of the truth conditional equivalence of (1) and (2) was then pinned on our linguistic competence via our

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implicit recognition that (1) and (2) communicate the same information with different structure.

In Balcerak Jackson (2013) Brendan Balcerak Jackson carpet bombs Hofweber (2007) with objections. He raises five main objections besides numerous smaller ones, and he questions my methodology and conclusion in diagnosing (2) with a focus effect, besides outlining an alternative proposal at the end. I hope to briefly respond to the most important objections here.

Some of Balcerak Jackson's objections are based on a misreading of the view defended in Hofweber (2007), while others are not. The most important misunderstanding is his association of 'extraction' with transformational grammar. I hold that in (2) 'four' is extracted and that such extraction is tied to a syntactic, or structural, focus effect. As I say in the paper: "Structural focus is often associated with what is called 'extraction'. Extraction constructions are constructions in which a phrase appears in a position contrary to its canonical position" (Hofweber 2007, p. 17). And a few lines later, discussing a related example, "Using the usual movement metaphor in syntactic theory, we can say that it was moved or extracted…" (Hofweber 2007, p. 17f). However, Balcerak Jackson takes me to propose that the whole sentence (1) is transformed via some syntactic mechanisms into the sentence (2). He attributes to me the view that " …(2) is syntactically derived from (1)" (p. 449).[1] But how is such a derivation supposed to go? Balcerak Jackson says "'Hofweber's proposal asks us to recognize an entirely *sui generis* and quite complex series of syntactic transformations…" (p. 453). And since such transformations are not exactly plausible (after all, where is the 'the number of' coming from? How does 'four' get into post-copula position? etc.) he concludes that "as an empirical hypothesis about the syntax and semantics of (1) and (2) [Hofweber's proposal] fares quite poorly" (p. 450).

But I made no such proposal. I never talk about transformation rules, or deriving (2) from (1) via some mysterious sentence level transformation. In fact, 'transform' or 'transformation' don't even appear in my article. Instead I explicitly contrast my proposal with the view that (2) is a paraphrase of (1), and certainly wouldn't describe my view as 'paraphrastic', as Balcerak Jackson does throughout.[2] Instead I claimed that in (1) 'four' occupies its canonical position, while in (2) it does not, and thus, on the metaphorical understanding of 'extraction' specified just above, we can say that it was extracted as it occurs in (2). Extraction so understood is associated with a focus effect. Metaphors can be cashed out in different ways, but I don't think this one should be spelled out in terms of transformational grammar, where the whole sentence (1) gets transformed, somehow, into sentence (2). And it does not need to be understood this way for my proposal. To bring out the difference, we can say that 'extraction' could be understood either as *displacement* or as *transformation*. Displacement occurs when a phrase appears in a position contrary to where it naturally belongs, that is, contrary to its canonical position. This is still metaphorical, of course, but at least talk of displacement rather than extraction might suggest less that this is to be understood as sentence level transformation. Transformation occurs when one sentence gets turned

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[1] All page references are to Balcerak Jackson (2013).

[2] To take (1) and (2) to be paraphrases is the second of the four standard answers A1–A4 discussed on p. 5 of Hofweber (2007), all of which are contrasted with my own proposal A5 on p. 29.

into another, via some syntactic rules. I proposed that in (2), but not in (1), 'four' is displaced and as a result we can see, in outline, why (2) has a focus effect, while (1) does not. Balcerak Jackson instead takes me to propose that (1) gets transformed into (2). All that is needed for the argument, however, is displacement, not transformation. If there is a connection between displacement and focus, and if (2) indeed has a focus effect, then this is evidence, defeasible evidence, to be sure, but evidence nonetheless, that 'four' in (2) is displaced. This and the claim that identity statements don't have a syntactic focus effect are the crucial parts in the proposal. But why would one think the proposal needs to have the sentence (1) transformed in to the sentence (2) via some syntactic transformation rules? One reason I can imagine is tied to my claim that our linguistic competence explains why we almost universally judge (1) and (2) to be truth conditionally equivalent. But this doesn't require transformational grammar, it only requires an implicit grasp of the syntactic and semantic mechanisms that generate both sentences and their truth conditions. In the same spirt, explaining why we judge active and passive sentences generally to be truth conditionally equivalent doesn't require transformational grammar. It doesn't require that one sentence is a notational variant of the other, but only that we have an implicit grasp of the underlying syntax and semantics, which manifests itself in judgments of equivalence.

Why does Balcerak Jackson attribute to me this rather implausible views about syntax? I am not sure I fully understand this, but I am afraid he is not the first to do so. Friederike Moltmann does the same in her article (Moltmann 2013), which Balcerak Jackson cites approvingly.[3] I have no one but myself to blame for not making my view clearer, but the more important issue is to see whether the proposal requires such a transformational picture of the relationship of (1) and (2). I maintain that it does not, and displacement of 'four', not sentence level transformation, is the proper way to understand their connection.

In Hofweber (2007) I did not propose any particular view of how the syntax for the relevant examples was supposed to work more precisely. I made no proposal about the precise syntactic structure of (2), nor about the relationship between focus and syntax in general, nor did I endorse a particular framework in syntactic theory. I don't say this proudly, I wish I had such views to offer. But the argument that (2) is not an identity statement is rather neutral with respect to the more precise syntactic mechanisms that underlie all this. It is motivated more by the data for a theory than the theory itself. It relied on a notion of extraction/displacement that was metaphorical, but clear for many cases, its connection to syntactic focus, and the relationship between focus and identity statements, but not any particular syntactic theory, certainly not transformational grammar. Even in the simplest cases of a connection of focus to displacement, say

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[3] Moltmann says "Hofweber argues that [(2)] is derived from [(1)] by a syntactic operation of focus movement, …" (Moltmann 2013, p. 523). Just a few lines later she continues "Hofweber maintains that 'the number of' generally has the function of a place-holder for a focus-moved numeral" (p. 523). This is also not correct. Not only do I not say this, I say the opposite. To cite one passage: "Furthermore, since 'number' is a common noun it can be used to form a definite description 'the number', which is perfectly meaningful and a semantically singular term; the same goes for 'the number of moons'" (Hofweber 2007, p. 6). The issue is what is going on in (2) as it is used when we trivially infer it from (1). I maintain that in these uses of (2) 'the number of moons' is not a description and 'four' is not a name. 'The number of moons' can be a description on other uses.

adverb prefixing,[4] one does not have to be committed to transformational grammar and hold that one sentence, with the adverb part of the VP gets transformed into the other one, with the adverb prefixed. They might simply both have equal syntactic standing, maybe related derivations, but they don't require transformational grammar. And this is even more clear for the examples I used as analogous to the connection between (1) and (2): subject-predicate sentences and their corresponding clefts or pseudo-clefts.

Leaving aside Balcerak Jackson's criticisms that are based on an understanding of extraction as transformation, not displacement, what remains? There are several other objections that make good points, but are not as serious as Balcerak Jackson takes them to be. For example, Balcerak Jackson contends that my account does not explain why similar constructions do not seem to work with other determiners. That is true, my account does not explain this, and neither does, I may add, Balcerak Jackson's own account outlined at the end of his paper. But it is an overstatement that my account makes this "mysterious" (p. 451). The account simply leaves this open, but it is certainly compatible with an explanation that comes form a difference in the syntactic behavior among determiners or adjectives in general. That not all determiners behave the same syntactically is a well-known fact. The explanation why that is so is left open by what I have said, but it is not a mystery on my particular account of (2).

A final set of objections is more on target and more serious. Here Balcerak Jackson criticizes what I took to be the main observation that motivated my proposal: that (2) has a syntactic focus effect and that identity statements do not have such a focus effect. In particular, Balcerak Jackson questions the methodology I employ in arguing for a focus effect in (2), namely to rely on judgements about question–answer congruence, and he questions whether identity statements do not have a focus effect. As for the second, he points to a series of examples, found in Brogaard (2007), which show that the order of terms matters for question–answer congruence. This is taken to show that either identity statement do have a focus effect after all, or at least that question–answer congruence is not the proper method for testing for such an effect. As Balcerak Jackson notes, although only in a footnote, I discussed exactly the same examples over several pages in Hofweber (2007), and proposed an account of why sometimes, but only sometimes, the order of terms matters in an identity statement for such a statement to be a congruent answer to a question. My proposal there was that the asymmetry is explained by the salience of the referent of the first term and the placement of the topic in the answer of the question. Balcerak Jackson doesn't dispute this particular account, but rather thinks that this kind of an account gives the game away for me. As he says: "But this reply concedes that intonation-neutral question/answer congruence effects cannot be used as a straightforward diagnostic for structural focus; structural focus is one explanation among others for such effects" (p. 455, footnote 13). But this is not a concession, but a given. No one should hold that question/answer incongruence is always to be understood in terms of a focus mismatch. That the answer is relevant to the question, addresses the topic of the question, and many other things are important here besides focus. I tried to explain certain question/answer incongruences via issues

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[4] I.e. the difference between 'Mary entered quietly' and 'Quietly Mary entered'. The latter has the adverb displaced, away from the VP where it naturally belongs, and it has a syntactic focus effect, while the former does not.

related to topic placement and salience, which is compatible with identity statements being focus neutral. The argument for focus in (2) was not that it leads to some incongruences, but rather that (2) is congruent and incongruent just when (1) with phonetic focus on 'four' is. That (2) affects a discourse similarly to (1) with phonetic focus on 'four' I took to be evidence for there being structural, or syntactic, focus in (2). Balcerak Jackson challenges this last point as well, and he gives examples using 'even' and 'also' to try to bring out that there is a difference between (1) with phonetic focus on 'four' and (2), but I have to confess not to see the same differences in his examples that he sees. My own examples to motivate the similarity were tied to correcting miscommunication of how many moons Jupiter has. So, after I utter (1) and you reply 'Really? I had no idea Jupiter has 40 moons.' I could correct you with either 'No, Jupiter has FOUR moons' or with 'No, the number of moons of Jupiter is four.'

To sum up, I don't agree that the proposal made in Hofweber (2007) fares as poorly as an empirical hypothesis about the syntax and semantics of (1) and (2) as Balcerak Jackson makes it out to be. Much of Balcerak Jackson's criticism aims at a view that takes extraction to be transformation, not displacement. Without question, though, my proposal was only an outline of alternative way of understanding (2) and its relationship to (1). The idea was that the standard way of understanding (2) as an identity statement, a view Balcerak Jackson shares, is not supported by considerations about the syntax, semantics, and discourse effect of (2). It was this that was supposed to motivate that the standard Fregean account fares poorly as an empirical hypothesis about (2). Noting the connection of (2) to focus and the connection of focus to extraction, i.e. displacement, suggests an alternative way to resolve what is puzzling about the pair (1) and (2). And it supports that (2) is not an identity statement.

References

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