Dolby Substitution (where available)

1. Oliver on the Reference Principle

According to Wright's (2001: 73) *Reference Principle*,

(RP) Co-referring expressions are intersubstitutable *salva veritate* in extensional contexts, and *salva congruitate* in all contexts

The first conjunct of (RP) is "the merest tautology, since *extensional* contexts are exactly those in which truth-value is determined by components' reference" (Wright 2001: 89); although which contexts are extensional by this definition is, of course, no trivial matter.

The second conjunct, on the other hand, is no tautology. In fact, despite its long philosophical standing, even its truth is doubtful. One cause for doubt is Frege's notorious "concept *horse* problem": we might be tempted to think that 'ξ is a horse' and 'the concept *horse*' co-refer, but singular terms and predicates are not intersubstitutable *salva congruitate*. However, Oliver (2005: §4) has argued that English is replete with much more humdrum counterexamples to (RP) than that. Take the sentence

(1) Clever Crispin solved Frege's Problem

(1) is well-formed — although its truth-value is up for debate — but the result of substituting 'the referent of "Crispin" ' for 'Crispin' in (1), namely

(2) Clever the referent of 'Crispin' solved Frege's Problem

is not. Given that 'Crispin' and 'the referent of "Crispin" ' co-refer, as Wright (2001: 74) contends, we have a counterexample to (RP). Oliver offers a battery of such counterexamples, but for our purposes we can stop at this one.

I am not convinced by Alex Oliver's counterexamples to (RP). According to the conception of substitution which Oliver employs, which we will call *simple substitution*, to substitute one expression for another we merely cut-out the first and paste the second in its place. While simple substitution is appropriate for formalised languages with straightforward wff construction rules, it is far *too* simple to be of

much use in a natural language like English;[1] Oliver (2005: 184) himself cautions us against the tendency amongst philosophers to underestimate the complexities of English. When asked to substitute 'the referent of "Crispin" ' for 'Crispin' in (1), I expect that most English speakers would not return (2), but something like

(3) The clever referent of 'Crispin' solved Frege's Problem

(Or: The referent of 'Crispin' is clever and solved Frege's Problem)

What is more, they would surely be right to do so.

But while we can undermine Oliver's counterexamples to (RP) by pointing out that they rely on too simple a notion of substitution, it would hardly be satisfying to leave matters there. Unless we are told something about how a more flexible notion of substitution is to work, (RP) is left a (at best) blunt tool. Dolby (2009) has attempted to defend (RP) by giving such an account. In the remainder of this note I will present Dolby's account and then argue that it is viciously circular.

2. Dolby Substitution

Dolby suggests that the rules for substitution in English "are also the rules for the formation of generalisations from particular statements and for the specification of these generalisations" (2009: 290). In particular, to substitute 'the referent of "Crispin" ' for 'Crispin' in (1), we should first generalise (1) in accordance with the grammatical rules of English to

(4) Someone clever solved Frege's Problem

(Or: Someone is clever and solved Frege's Problem)

Then we give the "specification" of (4) for 'the referent of "Crispin" ', which is (3) (2009: 293).

Generally then, Dolby claims that to substitute one expression for another in an English sentence we must first existentially generalise that sentence with regard to the first expression, and then specify the generalisation with regard to the second. As these generalisations and specifications will proceed "according to the grammatical rules" of English, any changes needed to preserve grammaticality will be made in the process of substitution (2009: 290).

3. The Circularity

Dolby's account of substitution in English assumes an understanding of generalisation and specification in English. This will likely give many pause for concern:

[1] In fairness to Oliver, it does seem that Wright (2001: e.g. 80) is also operating with simple substitution.

how exactly quantification works in natural languages remains a notoriously difficult problem for linguistics. Nonetheless, we might think that by collapsing the question of substitution into that of quantification, Dolby has afforded us an economy in our problems. We will see that even this is not true.

What is it that we do when we existentially generalise a sentence with regard to a term? Whatever the details, the following is uncontroversial: we substitute an existentially bound quantifier for that term. (Or, if you prefer, we substitute a quantifier-phrase for that term.) Equally, when we specify a generalisation with regard to a term, we substitute that term for the existentially bound variable (or quantifier-phrase).

There should now be an obvious threat of circularity to Dolby's proposal. He was trying to give an account of substitution for English. But in doing so he appealed to generalisation and specification, which are themselves to be accounted for in terms of substitution. To bring this threat home, we need only note that Dolby cannot be using simple substitution in both his generalisations and his specifications. If he were, then the result of generalising (1) would not be (3) but

(5) Clever someone solved Frege's Problem

And the specification of (5) would not be (3) but the ill-formed (2). In that case, Dolby would not have managed to give an account of substitution which dissolved Oliver's counterexamples to (RP); indeed, he would not have given an alternative to simple substitution at all. So, Dolby must be using a non-simple version of substitution in either his account of generalisation or his account of specification or both. But to repeat, Dolby was meant to be giving us an account of this kind of substitution, not presupposing it.

Perhaps someone sympathetic to Dolby may respond as follows. It is certainly true that if we have a prior grasp of substitution we can account for generalisation and specification, but Dolby has shown us that the converse is also true. The above criticism of Dolby's proposal, then, comes to no more than that Dolby has chosen the wrong starting point. But what reason do we have to even think that there is a "right" or "wrong" starting point?

While I am tempted to agree that in general debates over who has the right primitives are fruitless, I think that this case is an exception. Even if we grant that Dolby's account is materially adequate, it could never be used to introduce substitution in English to someone in the first place. If we wish to existentially generalise (1) for 'Crispin', at some point we must remove the occurrence of 'Crispin' and introduce a bound variable (or quantifier-phrase) in its place: that just is an instance of substitution, whether we describe it as such or not.

It is also worth emphasising that this objection has nothing to do with the details

of any theory of quantification. Any such theory will have to discuss substitution before generalisation or specification.

4. Morals

It is not useful to think of substitution in English as simple substitution. As a result, Oliver's counterexamples to (RP) are not compelling. However, until an alternative account of substitution has been given, (RP) is all but contentless, and so cannot bear any philosophical weight.

I would like to draw two morals from this conclusion. First, Wright (2001: 72–3) introduced (RP) as a premise in the concept *horse* problem. By setting the paradox up in this way, Wright appeared to make it relevant to philosophers who might not be willing to accept the Fregean premises which are normally relied upon. I fully agree that the concept *horse* problem is of more relevance to contemporary philosophy than it is sometimes thought to be, but until Wright gives us an acceptable account of substitution, that cannot be shown by appealing to (RP); this is not because, as Oliver thought, (RP) is demonstrably false, but because without such an account, (RP) does not say anything at all.

Second, those involved in the neo-Fregean project make heavy use of the *Syntactic Priority Thesis*: any expression which functions syntactically like a singular term in true (atomic extensional) sentences refers to an object (Wright 1983: 51). This principle is obviously true of many formalised languages — those languages are constructed so as to guarantee its truth — but when applied to natural languages it embodies the controversial yet attractive thought that the right way to answer questions about the world is via language. Of course, if we are to apply the Syntactic Priority Thesis to natural languages, we need some explanation of what it is to "function syntactically like a singular term" in those languages. Such explanations (e.g. Hale 2001a and 2001b) make free use of substitution. Obviously the notion of substitution which is employed in those explanations must not entail that some singular terms, e.g.'Crispin' and 'the referent of "Crispin" ', belong to different syntactic categories. Until the neo-Fregeans give us an account of such a notion of substitution in natural languages, the Syntactic Priority Thesis cannot be contentfully applied to those languages.

References

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