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RESEARCH ARTICLE

Against the argument from convention

Anders J. Schoubye

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Abstract In recent years, a new argument in favor of Donnellan's (Philos Rev 77: 281–304, 1966) semantic distinction between attributive and referential descriptions has been proposed by Michael Devitt and Marga Reimer. This argument is based on two empirical premises concerning regularity of use and processing ease. This paper is an attempt to demonstrate (a) that these empirical observations are dubious and fail to license the conclusion of the argument and (b) that if the argument were sound, it would severely overgenerate. The general lesson of the paper is that empirical observations about (a) how frequent an expression *E* is used to mean *M* and (b) how easy and fast *M* is processed cannot be taken to provide reliable evidence about the lexically encoded semantic properties of *E*.

Keywords Philosophy of language · Semantics · Pragmatics · Definite descriptions · Reference

1 Referential definite descriptions

In the seminal paper 'Reference and definite descriptions' (1966) Donnellan identifies two distinct uses of definite descriptions, namely *attributive* uses and *referential* uses. According to this distinction, a definite description is used attributively when a speaker's communicative intention is *general*, i.e. when the speaker intends to express a proposition about *whoever* satisfies the descriptive content. When used attributively, the speaker is not required to be acquainted with the individual denoted by the description. In contrast, a definite description is used referentially when a speaker intends to

A. J. Schoubye (✉)
School of Philosophy, Psychology and Language Sciences, University of Edinburgh, Dugald Stewart Building, 3 Charles Street, Edinburgh EH8 9AD, Scotland, UK
e-mail: anders.schoubye@ed.ac.uk

express a proposition about some specific individual. In such cases, the description serves merely as a means of identifying the speaker's intended referent. For example, if a speaker is intending to express a proposition about Herman using 'the *F* is *G*', the truth of the proposition turns only on whether Herman is *G*. The sentence thus expresses a singular proposition when 'the *F*' is used referentially.[1]

One of Donnellan's principal motivations for proposing an ambiguity view is cases involving misdescriptions. Donnellan observes that when a speaker misdescribes an intended referent, she can nevertheless succeed in conveying a proposition *about* that intended referent. He then points out that such cases of communicative success (despite misdescription) are a problem for both the standard Russellian analysis (Russell 1905) and the Frege–Strawson analysis.[2] Since Russell proposed to analyze 'the *F* is *G*' as a complex quantificational statement, his analysis predicts that misdescriptions result in straightforward falsehoods. In contrast, the Frege–Strawson analysis predicts that misdescriptions result in presupposition failures and hence engender truth value gaps. Consequently, neither analysis is in a position to explain why communication often succeeds when a speaker has misdescribed the intended referent.

A solution to this problem—generally attributed to Donnellan—is to conclude that definite descriptions are lexically ambiguous. So in addition to the attributive 'the *F*', English contains a homonym which is effectively a singular term that *refers* to whoever the speaker intends. By positing this lexical ambiguity, Donnellan can now explain why communication often succeeds in misdescription cases—in such cases the speaker directly refers to a particular individual using a referential device that is essentially indexical in nature. When used referentially, 'the *F*' is a directly referential expression and 'the *F* is *G*' thus expresses a singular proposition.

Donnellan's (1966) paper initiated a prolonged and important debate about the semantics and pragmatics of definite descriptions, but several important worries about Donnellan's proposed solution were already raised by Kripke (1977). Kripke noted that cases of successful communication despite misdescription can also occur with e.g. proper names. Consequently, if the best way of explaining such cases is to posit a semantic ambiguity, one should then conclude that proper names are also ambiguous. In other words, Donnellan's suggested solution appears to commit him to semantic ambiguities far beyond what he originally envisioned.

1 Donnellan himself remains somewhat non-committal about the significance of the distinction, but it is natural to interpret him as defending a genuine semantic ambiguity thesis. For the purposes of this paper, I assume that this is what Donnellan intended. One other important point here is that the notion of a referential description is not to be understood simply in terms of semantic typing. One can straightforwardly type 'the' as a function from e.g. a property and a possible world/situation to an individual—as is done on a standard Frege–Strawson analysis, cf. e.g. Elbourne (2005). On such an analysis, 'the *F*' has the semantic type *e* and hence is referential in at least one sense. However, if this is a variable function—i.e. a function which picks out different individuals across different possible worlds/situations—it is only referential in the specific sense of its *semantic type*. On such an analysis, the description is still *attributive* in Donnellan's sense. So, if 'the' is typed as a function from a property and a possible world/situation to an individual, it is referential in Donnellan's sense only if it is constant, i.e. if it picks out the same individual across every possible world/situation.

2 This analysis originates in the seminal work of Frege (1892) and Strawson (1950), but for more modern implementations, cf. Heim and Kratzer (1998) and Elbourne (2005).

As an alternative to Donnellan's ambiguity view, Kripke also argued that cases of misdescribing could be explained by distinguishing between two notions of reference, namely the *semantic* reference of an expression and the *speaker's* reference. On considerations of theoretical parsimony, Kripke concluded that cases of successful communication involving misdescriptions should be explained using this pragmatic distinction rather than by positing wide-spread lexical ambiguities.

Several other worries about a semantic ambiguity thesis have since been raised. For example, if 'the *F*' is used referentially, the predicate *F* appears to play no clear semantic role. A speaker can refer to an individual *a* using 'the *F*'—and so express a proposition about *a*—even when *a* is in fact not *F*. In such cases, the predicate *F* is semantically redundant, because it seems to play no role in the truth conditions of the proposition expressed nor help determine what those truth conditions are. Moreover, it also has the consequence that a sentence of the form 'the *F* is *G*' can be *literally* true even if the extension of *F* is empty, but it is generally agreed that this is in conflict with intuitive judgments about the truth values of such sentences.

Today, the distinction between attributive and referential uses is widely considered to be genuine, but the objections mentioned above convinced many that it is not a proper *semantic* distinction.

1.1 A new argument for referential descriptions

In recent years, several new arguments in support of the semantic ambiguity thesis have emerged. This paper focuses on one of these arguments, namely *the argument from convention*—due primarily to Devitt (1997, 2004, 2007b) and Reimer (1998). This particular argument appears to be gaining in popularity. For example, in his recent dissertation, Pupa (2008) states that it "undermines [Kripke's] pragmatic approach" (p. 108) and "provides a very strong case for adopting [an ambiguity view]" (p. 109). Likewise, in 'Definite descriptions are ambiguous', Amaral (2008) writes that the argument from convention has "seriously weakened" the arguments against a semantic ambiguity thesis (p. 288)—and in a similar vein, Abbott (2010) concludes that "the weight of evidence appears to be in favor of considering the referential use of definite descriptions to be semantically encoded" (p. 152). The argument is also endorsed by Buchanan and Ostertag (2005) who write "there is a conventional regularity whereby a speaker uttering a sentence of the form 'The *F* is *G*' means an object-dependent proposition concerning a contextually salient *F*. If Devitt, Neale and Reimer are correct, then [...] an ambiguity theory remains appealing" (p. 910). Finally, while (Neale 2004) maintains a strictly Russellian account (which he has vigilantly defended earlier, cf. Neale 1990), he nevertheless grants that the argument from convention effectively challenges a standard Gricean explanation of the referential uses and therefore proposes an alternative explanation involving so-called Gödelian completions.

In conclusion, several researchers now maintain that the argument from convention poses a significant challenge to a unitary analysis of definite descriptions and that the argument provides significant support for a semantic ambiguity view.

The aim of the present paper is to demonstrate that this argument (the AFC) is founded on two dubious empirical assumptions and that the argument severely overgenerates. When these facts are properly appreciated, it should then become clear that this argument in itself provides no support for a semantic ambiguity view—and moreover, that it should not compel anyone to abandon or revise their view.

The plan of the paper is as follows. In the next section, I provide a brief presentation of the AFC and the principal empirical assumptions on which the argument relies. I then demonstrate that these empirical assumptions are not only unjustified but also fail to provide support for the desired conclusion. Next, I argue that it follows from the AFC that many widely considered pragmatic phenomena are in fact semantic phenomena, and hence the objection which was originally raised by Kripke (1977) is shown to remain a significant problem. I then conclude the paper with a general discussion of why arguments of this type—arguments that draw conclusions about semantic properties from simple observations about regularity of use and processing speed—are generally problematic.

Before proceeding, it is important to emphasize the limits of the scope of this paper. While Reimer (1998) considers the AFC to be a direct argument for a semantic ambiguity view, it is just one among several arguments given by Devitt (2004, 2007a,b).[3] In this paper, Devitt's additional arguments will not be addressed. However, these other arguments have already been effectively challenged by e.g. Bach (2004, 2007a,b). I reserve a further discussion of Devitt's argument for another occasion.

2 The argument from convention

2.1 Frequency of use

One might think that the mere existence of the referential use of definite descriptions is grounds for assuming that it is semantically encoded, but neither Devitt nor Reimer accept this. The simple fact that descriptions *can* be used referentially does not justify an ambiguity view of definite descriptions, since that as Kripke observed would commit us to ambiguities across a very wide range of expressions, e.g. other determiners. However, Devitt and Reimer argue that there is a different reason for assuming that the referential use is semantically encoded, namely the *frequency* with which this use occurs. The general thought is that if a certain expression is used in a statistically high number of cases to perform some function, i.e. convey some content *C*, then this provides evidence that this is the *conventional* use of that expression—that it conventionally *means C*. Since referential uses of definite descriptions are ubiquitous, there is thus ample reason to think that the referential use is now a conventional use.

> […] the fact that the referential use of definite descriptions is a *standard* (i.e. *statistically* common) use of such expressions, *does* pose a problem for Russell's Theory. (Reimer 1998, p. 89)

[3] The AFC does however figure prominently in several places, e.g. (Devitt 2004, pp. 281–286; 2007b, pp. 9–11) and Devitt also explicitly says that this argument for referential descriptions is one of the considerations that he assigns most weight, cf. Devitt (2004, p. 305).

In other words, referential uses of descriptions pose a problem for e.g. Russell's analysis not just because these uses are possible, but rather because they are statistically frequent and therefore likely to have become conventionalized.[4]

> The basis for [the semantic ambiguity view] is not simply that we *can* use a definite referentially, it is that we *regularly* do so. [...] This regularity is strong evidence that there is a convention of using 'the *F*' to express a thought about a particular *F*, that this is a standard use. This convention is semantic, as semantic as the one for an attributive use. (Devitt 2004, p. 283)

Thus, according to Devitt, regularity of use is strong evidence of conventionalization, and such a convention—Devitt proclaims—is semantic. In other words, the referential use is semantically encoded and 'the' is ambiguous.

Finally, Devitt and Reimer emphasize that when the semantic ambiguity view is motivated along these lines—by appealing to statistical frequency or regularity of use—the argument cannot be extended to other determiners. The reason is that the frequency of referential uses of *other* determiners is significantly lower, so there is no reason to assume that these expressions are *conventionally* used to refer. Since there is no such convention, there is no corresponding justification for positing a semantic ambiguity. For this reason, Kripke's objection about proliferating ambiguities is supposed to be avoided.

> 'Every' and other quantifiers are different. There is no convention of using them to convey a thought about a particular object in mind. With special stage setting they certainly can be used for that purpose, as Neale illustrates. But then Grice shows us that with enough stage setting almost any expression can be used to convey almost any thought. (Devitt 2004, p. 283)

In short, the argument is that because definite descriptions are *regularly* used to communicate object-dependent thoughts, this is compelling evidence that the referential use has become semantically conventional and that the referential meaning is now directly semantically encoded in the meaning of 'the'. Sentences of the form 'the *F* is *G*' therefore *literally* express singular propositions when used referentially.

2.2 Processing

In support of the claim about semantic encoding, Devitt and Reimer raise a worry for purported pragmatic explanations. Researchers who are skeptical of embracing a semantic ambiguity view often assume that the referential uses can be explained in terms of some pragmatic procedure, but Devitt and Reimer argue that there is an immediate problem with such explanations.

[4] As mentioned already, the referential uses are equally problematic for any other unitary analysis of definite descriptions, e.g. the Frege–Strawson analysis. However, since several of the opponents to Donnellan's proposed distinction have aimed to defend a unitary Russellian analysis, it is often tacitly assumed in this debate that Russell's analysis is adequate for attributive uses. In my view, this is a bit unfortunate, as there are significant problems with the Russellian analysis of definite descriptions. I have myself defended an alternative presuppositional view in various places, cf. Schoubye (2009, 2011a). My goal in this paper is not to defend Russell's analysis, but simply to show that the AFC is not a convincing argument for an ambiguity view.

> When a person has a thought with a particular *F* object in mind, there is a regularity of her using 'The *F*' to express that thought. And there need be no special stage setting enabling her to conversationally imply what she has not literally said, nor any sign that her audience needs to use a Gricean derivation to understand what she means. (Devitt 2004, p. 283)

It is often assumed that when some content is grasped via a pragmatic inferential process, the speaker must either violate (or appear to violate) a conversational maxim or the general conversational context must contain information which will prompt the interlocutor to search for an alternative interpretation. Since neither of these appear to be necessary for the communication of object-dependent thoughts using locutions of the form 'the *F* is *G*', this raises an immediate challenge for explanations of referential uses that rely on pragmatic inferential processes. In other words, facts about how meaning is processed count against a pragmatic explanation. Given how effortlessly object-dependent thoughts are communicated using definite descriptions, Devitt and Reimer argue that it is just implausible to maintain that this object-dependent meaning is the result of some elaborate pragmatic derivation. Consequently, we should not accept a merely pragmatic explanation of the referential uses.

> [Speakers] grasp the meaning [of a referentially used definite description] immediately and directly because that is the meaning it conventionally has. (Devitt 2004, p. 285)

> [...] in a linguistic community (such as our own) where [the referential] use *was* standard, it is plausible to suppose that the intended meaning would be grasped *immediately*: that is without the mediation of any Gricean-style inferences. (Reimer 1998, p. 99)

2.3 Constraints on literal meaning

As mentioned earlier, Donnellan's view has the widely considered counter-intuitive consequence that a sentence of the form 'the *F* is *G*' can be *literally* true even when the extension of the restrictor *F* is empty. Devitt and Reimer both agree that this is implausible for the reasons mentioned above, namely that this is inconsistent with our immediate truth value intuitions and that it renders the semantic contribution of the restrictor redundant. In order to avoid this result, Devitt and Reimer argue that one should think of the referential use as constrained by linguistic meaning.[5] Reimer provides the following analogy.

> If (e.g.) I say 'She is tall', and my intended referent does not satisfy the indexical's linguistic meaning (i.e., is not a female), then it seems plausible to suppose that, while I may well have *communicated* a singular proposition, no proposition was *literally expressed* (on account of reference failure). (Reimer 1998, p. 93)

[5] Devitt notes: "In discussing misdescriptions (s. 2), I assumed that '*F*' also contributes to the meaning of 'the *F*', pointing out the prima-facie implausibility of claiming otherwise" (Devitt 2004, p. 291).

To illustrate, suppose *a* intends to refer to a particular individual *b* using the sentence ‘the student wearing a Yankees hat is lazy’. If *b* fails to satisfy the linguistic meaning of ‘student wearing a Yankees hat’, then *a* may succeed in communicating a proposition about *b*, but she will not have *literally* expressed a proposition.

In more generalized form, suppose *S* is a sentence of English and suppose further that *M* is part of the linguistic meaning of *S*. For example, in ‘the student wearing a Yankees hat is lazy’ (S), the meaning of ‘student wearing a Yankees hat’ is part of the linguistic meaning of the sentence as a whole. Hence, if one were to assert *S*, *M* should be part of the proposition literally expressed (or at least constrain what proposition *could* be expressed by *S*). In other words, this constraint is essentially a principle of *linguistic meaning preservation*. The constraint is intended to ensure that if *M* is part of the *linguistic* meaning of *S*, then *S* can *literally* express *P* only if *M* is either part of the literal meaning of *S* or serves as a constraint on the possible meanings of *S*. So, an utterance of ‘the student wearing a Yankees hat is lazy’ can express a proposition about e.g. Herman only if Herman is in fact a (unique) student wearing a Yankees hat. If there is no student wearing a Yankees hat, the description fails to refer—and thus *S* fails to express a proposition.

Let us refer to this constraint on literal meaning as the *linguistic meaning constraint* (*LMC*). Embracing the *LMC* comes with several advantages. First, the aforementioned consequence of Donnellan’s view that ‘the *F* is *G*’ can be literally true when *F* has an empty extension is avoided. In such cases, the definite description simply fails to refer. Second, the restrictor is now never semantically redundant. It plays an important semantic role, namely that of constraining the possible semantic values of the description. But there are further advantages congenial to Devitt and Reimer’s view.

> It would also seem plausible to suppose that the linguistic meaning of every constituent of the sentence uttered must contribute in *some* way (directly or indirectly) to the proposition literally expressed. To illustrate. While sentences of the form *Could you do x*? are standardly used to mean *Do x*, such is not their literal meaning, which concerns a query as to the hearers ability to do *x*. (Reimer 1998, p. 95)

In short, embracing the *LMC* helps Devitt and Reimer avoid a potential and undesirable consequence of the argument from convention, namely the following: If mere frequency of use and effortless processing somehow guaranteed literal meaning, one would then be committed to the consequence that the sentences below are genuinely ambiguous.[6]

(1) a. Bob kicked the bucket.
b. The argument doesn’t get off the ground.
c. You have made your bed.

[6] Idioms such as these are obviously very frequently used to convey a non-literal meaning and several psycholinguistics studies have shown that the idiomatic meaning is processed at least as fast as the literal meaning, cf. Swinney and Cutley (1979), and Gibbs (1985). In fact, studies have shown that the literal meaning is often not processed at all, cf. Gibbs (1986).

The literal meaning of (1a) is that Bob physically kicked a bucket, but the worry is that the AFC could be taken to show that (1a) can *also literally mean* that Bob has died. This would be problematic since on any normal understanding of the notion of literal meaning, that is simply incorrect. (1a) does not *literally* mean that Bob has died, just like (1b) does not *literally* mean that the argument is no good.[7]

Devitt and Reimer avoid this consequence by embracing the *LMC*: For a sentence *S* to literally express *P*, the linguistic meaning (of all the constituents) of *S* must make a non-trivial contribution to the proposition expressed by *S* (or least contrain what *S* could be *used* to express). However, it is quite clear that this is not the case in e.g. (1a): The linguistic meaning of the words *kick*, *the*, and *bucket* are not part the literal meaning of 'Bob died', nor do these words seem to constrain in any obvious sense what is standardly expressed by (1a). These words make no *semantic* contribution to 'Bob died' and hence that Bob died is not the *literal* meaning of (1a). A similar argument applies mutatis mutandis to (1b) and (1c).

3 Problems for the argument from convention

As I hope is clear, the AFC relies crucially on two empirical premises, namely the claim about frequency of use and the claim about processing of pragmatic content. In this section, I argue that neither of these empirical claims are justified and that even if these empirical claims were justified, they would fail to license the intended conclusion.

3.1 Frequency of use and referential intentions

Devitt and Reimer both claim that definite descriptions are *regularly* used to refer and that referential uses occur with a particularly high statistical frequency.[8] However, neither Devitt nor Reimer provide any empirical evidence for this claim and one natural question to raise here is how such evidence is to be acquired. Notice that on Devitt and Reimer's proposed analysis, the truth conditions of (an unembedded occurrence of) 'the *F* is *G*' with 'the *F*' used referentially will quite generally be extensionally equivalent to the truth conditions of 'the *F* is *G*' with the description used

[7] I should mention that Westerståhl (2002) has demonstrated that there is no obvious problem with providing a compositional treatment of sentences such as (1a). Roughly speaking, Westerståhl points out that assuming that the two meanings are derived by applying two different functions to the idiomatic phrase is perfectly consistent with a semantics as a whole being compositional. If Westerståhl is correct, this raises some questions about whether the claims above about literal meaning and idioms can be sustained. However since e.g. Reimer wants to explicitly rule out idioms as semantically ambiguous, I refrain from discussing Westerståhl's view any further here.

[8] While this might seem unobjectionable, this *is* an empirical claim. And should this seem intuitively correct to you, consider how often uses of definite descriptions are anaphoric, superlative, or simply attributive uses. Clearly, intuition is not a particularly reliable method for settling whether this empirical claim is true or not. In short, it is not obvious that Devitt and Reimer's empirical claim about frequency should simply be accepted on faith.

attributively.[9] Consequently, the two uses cannot straightforwardly be distinguished using the method that would normally be used to distinguish between different meanings, namely truth value judgments. This therefore raises the question: what determines whether a use of 'the F' is attributive or referential?

A quite natural answer to this question is that it is what a speaker *intends* that directly determines whether the use of the description is referential or attributive. For example, if the speaker has a specific individual a in mind and intends to convey something about a using 'the F is G', the speaker's use of the description on that occasion is referential. On this assumption, one can then distinguish different propositions relative to relevant intentions, namely an object-dependent proposition when the intention is referential, and a general proposition when the intention is non-referential. The claim about statistical frequency then amounts to the claim that in a statistically high number of cases, speakers use 'the F' with the *intention* of communicating an object-dependent proposition.

Suppose we assume—as empirical fact—that speakers *regularly* (viz. in a statistically high number of cases) use definite descriptions with the *intention* to refer. The question we then need to consider is whether this empirical claim provides a persuasive reason for thinking that the AFC cannot be extended to other determiners. That is, in my view, questionable at best. Consider the following contrast.

> Sue and Mary are at a convention for chiropractors. Sue has been having terrible back pain lately and is hoping to find a good chiropractor at the convention. However, she doesn't know any of the people attending the conference and therefore asks Mary for advice. Mary notices that Bob is sitting alone at the round table and as it happens, she thinks that he is a top notch chiropractor. Hence, she nudges her head towards the round table and says to Sue:

(2) The guy at that round table is an excellent chiropractor.

Since Mary intends to communicate a thought specifically about Bob and she uses a description to achieve this, this looks like an uncontroversial case of a referentially used definite description. Now consider the following variation.

> Sue and Mary are at a convention for chiropractors. Sue has been having terrible back pain lately and is hoping to find a good chiropractor at the convention. However, she doesn't know any of the people attending the conference and therefore asks Mary for advice. Mary notices that Bob, Bill, and Brandon are seated together at the round table and as it happens, she thinks that they (i.e. each of them individually) are top notch chiropractors. Hence, she nudges her head towards the round table and says to Sue:

(3) Every guy at that round table is an excellent chiropractor.

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[9] This is in contrast to Donnellan's view. On Devitt and Reimer's view (for now disregarding incomplete descriptions), 'the F is G' is true in the exact same contexts regardless of whether it is used attributively or referentially. The reason is the *LMC* which ensures that the speaker has referred (in the semantic sense) only if the intended referent is F. So, suppose a is the unique F (it should typically be unique to be felicitous), then $G(a)$ is true iff the corresponding existential claim is true, e.g. $\exists x[F(x) \wedge \forall y[F(y) \rightarrow x = y] \wedge G(x)]$.

It is difficult to see a principled difference between these two cases. In the latter case, Mary clearly intends to communicate an *object-dependent* proposition, namely a proposition which is specifically about Bob, Bill and Brandon. It is the fact that Bob, Bill, and Brandon (and not some other chiropractor) are seated at the round table which prompts Mary's assertion. Moreover, that Bob, Bill, and Brandon happen to satisfy the description *guy at that round table* is ultimately irrelevant to the information that Mary intends to communicate. For example, in this case, it would be strange for Mary to say "Every guy sitting at that round table, whoever they are, is a top notch chiropractor". It therefore seems eminently reasonably to conclude that Mary has a referential intention (in the sense relevant here), and since it is a belief about *Bob*, *Bill*, and *Brandon* that furnishes the grounds for Mary's assertion, this looks as referential as any case involving a definite description.[10] But if the cases in (2) and (3) cannot be clearly distinguished, the AFC could now potentially become an argument for an ambiguity in 'every'.

In order to avoid this consequence, one must now simply insist that the use of 'every' in (3) is statistically infrequent. However, that is *another* empirical claim for which again there is no immediately obvious justification. Also, the use of 'every' in (3) seems perfectly standard and it is quite easy to imagine numerous similar cases, viz. cases where the speaker has several particular individuals in mind and intends to communicate a proposition about those individuals by using a sentence of the form 'every *F* is *G*'. For example, just consider the following contrast pairs. For the (b)-sentences, suppose the context is such that (i) the speaker has a specific group of individuals in mind and (ii) intends to communicate something about those specific individuals.

(4) a. I have dated the man drinking a martini over there.
    b. I have dated every man drinking a martini over there.

(5) a. If you're looking to cheat on the test, the student seated in the back can help you out.
    b. If you're looking to cheat on the test, every student seated in the back can help you out.

(6) a. The wheat beer that they served today was simply awful.
    b. Every wheat beer that they served today was simply awful.

In conclusion, it is quite easy to imagine cases where the speaker's explicit goal is communicating an object-dependent proposition and where the restrictor, viz. *F* in 'every *F*', is chosen only to enable the interlocutor to identify these individuals. Hence, simply insisting that the use of 'every' in (3) is infrequent—or irregular—is simply not convincing. Consequently, if the AFC is a sound argument for an ambiguity in definite descriptions, it is an equally sound argument for an ambiguity in determiner phrases

[10] Notice also that the situation here is analogous to the situations described with definite descriptions. Since Bob, Bill, and Brandon are the only individuals at the table, the truth conditions of a quantificational analysis of 'every guy at that round table' yields extensionally equivalent truth conditions to a potentially referential use.

such as 'every F'.[11] In conclusion, it looks as if Kripke's worry about proliferating ambiguities very much remains a problem.

Before continuing, let me emphasize that biting the bullet here—i.e. assuming that 'every' is also ambiguous—is not a feasible strategy. Assuming that 'every' in (3) is simply referential is problematic for quite familiar reasons. Simply consider the consequences of slightly altering the example (assume the background context is unchanged).

(7) Every guy at that round table has been sued for malpractice by his clients.

The problem with a referential analysis of 'every' should be obvious. There is a bound interpretation of the pronoun 'his', but this interpretation is only possible if 'every guy at that round table' is analyzed as a (non-referential) quantifier phrase.

3.2 Processing

The other crucial empirical premise in the AFC underlies the argument about processing pragmatic content. As noted in previous sections, Devitt and Reimer both object to pragmatic analyses on the grounds that referential uses of descriptions are grasped immediately and effortlessly. This putative empirical fact is supposed to render implausible the assumption that referential meanings are somehow pragmatically derived, e.g. via implicatures.

While there might be reasons against endorsing the view that referential uses are simply Gricean implicatures, it is important to understand what must be tacitly assumed for Devitt and Reimer's argument to be sound. Their argument relies on the assumption that crude intuitions about how quickly people grasp the meaning of various sentences (asserted in context) yields robust and stable data about *literal* and *non-literal* aspects of meaning. But that such crude judgments provide reliable data is not only a highly contentious assumption, it is an assumption that research in psycholinguistics reveals to be false. I have already mentioned data concerning processing of idiomatic expressions (fn. 6) where researchers found that these were often processed even faster than literal meanings. Ironically, one of the examples studied by Gibbs (1985) is precisely an example mentioned by Reimer, namely (8).

(8) Can you pass the salt?

Remember, Reimer explicitly denied that the *literal* meaning of (8) is an imperative. Nevertheless, here is Gibbs (1985).

> [...] people do not always process the literal meanings of indirect requests, such as *Can you pass the salt* (meaning "Pass me the salt"), during comprehension. [...] it is doubtful that people computed the literal meanings of these expressions during understanding. (Gibbs 1985, p. 469)

[11] Even worse, I think that it would be easy to show analogous results with a lot of other determiner phrases, e.g. uses of 'exactly six Fs', 'no Fs', 'all Fs' where the speaker has a 'referential intention' in the sense relevant here.

Even though (8) is uncontroversially used *conventionally* as a request, Gibbs' experiment reveals that its literal meaning—which is an ability reading of the modal 'can'—is rarely processed by speakers. So, while the request-reading of (8) is not its *literal* meaning, the speed and effort with which this meaning is processed clearly provides no reliable information about what its *literal* meaning is. In short, the fact that some meaning is easily and effortlessly processed is not evidence that it is its *literal* meaning.[12]

Similarly, consider the following paradigm case of a pragmatic inference, scalar implicatures, i.e. the inference from (9) to (10).

(9) Bob bought some of the tickets.

(10) Bob bought some but not all of the tickets.

It is generally agreed that (10) is not the literal meaning of (9), but rather pragmatically derived.[13] If one consults various experiments on the processing speed of scalar inferences, one finds conflicting results. Bott and Noveck (2004) claim to have observed a statistically significant difference in processing, but Grodner et al. (2010) claim to have found the opposite. And while I do not wish to comment on the merits of either of these studies, this shows that determining whether there are important differences in processing speed or processing ease is a rather difficult task that even meticulous experimental designs are often incapable of accomplishing. I therefore think it is very clear that brute intuitions about processing speed and processing ease are not a reliable guide to determining literal and nonliteral aspects of meaning. Consequently, Devitt and Reimer's processing argument against pragmatic explanations of the referential uses, i.e. explanations in terms of Gricean implicatures, lacks empirical justification. And more importantly, as the research on idioms shows, even if the empirical claim concerning processing turned out to be correct, this would not automatically license the conclusion.

Devitt and Reimer's processing argument is also problematic with regards to misdescription cases. Recall, Donnellan observed that when a speaker *misdescribes* the intended referent, the communication of an object-dependent proposition often proceeds with *precisely the same ease and effortlessness* as in cases where the intended referent has not been misdescribed. Consider, for example, the case of the speaker referring to a teetotaler drinking water out of a martini glass using the description 'the man drinking a martini' (Donnellan 1966, p. 287). Such examples were considered essential for motivating a semantic ambiguity view.

The problem is that according to Devitt and Reimer's view, a speaker simply fails to refer in a misdescription case. The standard semantic explanation of how communication succeeds is thus unavailable and consequently a pragmatic explanation is required. If the processing argument were sound, then when a referential meaning is conveyed due to some pragmatic process, there should be a manifest difference in processing speed and processing effort. Yet one of Donnellan's main observations

12 Also, accepting that (8) is conventionally used to express a request does not commit one to the view that (8) is semantically ambiguous nor that it *literally* means 'pass the salt'. See the discussion in Sect. 4.

13 Classic references here include Grice (1989) and Horn (1972).

was precisely that the phenomenology of misdescription cases is often identical to that of non-misdescription cases. This is inconsistent with Devitt and Reimer's argument, because if the processing argument were sound, the phenomenology of these cases should be manifestly different.

3.3 Overgeneration: additional applications of the AFC

The conclusion of the AFC is that definite descriptions are ambiguous. However, the argument has a rather disconcerting feature, namely that it licenses this conclusion for a whole range of other expressions which are widely agreed to be perfectly unambiguous. For example, consider (9) and (10) below.

(9) Bob bought some of the tickets.
(10) Bob bought some but not all of the tickets.

It is generally agreed that sentences such as (9) are frequently used to communicate the content literally expressed by (10), and the processing of this implicated meaning of (9) appears to be both quick and effortless. In cases such as these there is *actual* empirical evidence showing that detecting differences in processing is difficult even using complex psychological experiments.

The question is whether such facts about frequency and processing license the conclusion that (9) is semantically ambiguous. Should one conclude from this that (9) can *literally* mean both (9) and (10)? The vast majority of researchers working on issues in philosophy of language, semantics, and pragmatics agree that the answer is 'no'. Yet, the conclusion that definite descriptions are semantically ambiguous is drawn from equivalent premises. Hence, if we assume that the AFC is a sound argument for an ambiguity in definite descriptions, it is also a sound argument for an ambiguity in (9)—and that conclusion is inconsistent with the widely shared assumption that scalar inferences are merely *pragmatic implications*.

In response to this worry about overgeneration, one might try appealing to the *LMC*. The problem is that while the *LMC* can be used to rule out an argument from convention for idioms (cf. Sect. 2.3), it cannot be used to rule out an argument from convention for scalar implicatures. Remember, the *LMC* imposes the semantic restriction that the linguistic meaning of each constituent in a sentence *S* must somehow contribute to the proposition expressed by *S* relative to a context *c*. But that restriction is satisfied above. Each constituent of (9), *Bob, bought, some, of, the, tickets*, make a direct and clear contribution to the truth conditions of (10). So, the *LMC* is satisfied.[14]

In sum, if the AFC is sound, it appears to entail that the notion of a scalar *implicature* is simply a misnomer. What is standardly assumed to be pragmatic (scalar) inferences turn out to just be cases of semantic ambiguity. The AFC therefore commits us to the conclusion that there simply are no scalar implicatures, and so '*p* or *q*' turns out to be ambiguous between '*p* or *q* but not both' and '*p* or *q* and possibly both'. Similarly,

[14] The observation that the AFC overgenerates and extends to implicatures is also made by Bach (2004, p. 227). Bach does however not consider whether an appeal to the *LMC* would solve the problem. Bach also observes that the argument from convention (or 'the argument from regularity' as he more fittingly calls it) is easily extended to conjunctions as discussed below.

it turns out that 'warm' is just lexically ambiguous between 'warm and possibly hot' and 'warm but not hot' etc.

Yet the wide-ranging applicability of the AFC does not end here. Several other expressions that are standardly assumed to trigger pragmatic implications should now also be taken to be ambiguous. For example, 'and' would appear to be multiply ambiguous between a standard commutative conjunction, a non-commutative *causal* conjunction (where the events described are *causally* interdependent, cf. 11), and a non-commutative temporal conjunction (where the events described are *temporally* interdependent, cf. 12) etc.[15]

(11) Sam insulted his boss and was fired.

(12) Sam bought a boat and sailed to France.

Last but not least, the AFC also miraculously resolves a long-standing problem about the nature of presuppositions, since it now turns out that an aspectual verb such as 'quit' as it occurs in sentences such as (14) is simply ambiguous between (14a) and (14b).

(13) Why is Sue so tense?

(14) Perhaps she quit smoking.
   a. She used to smoke and perhaps she quit.
   b. She might have used to smoke, and perhaps she quit.

Of course, these putative ambiguities are rather curious. Notice that no known languages encode the referential meaning of 'the' in some heteronymous expression, so if definite descriptions are lexically ambiguous, this would—as Bach (2004) observes—have to just be a "massive cross-linguistic coincidence" (p. 226). The same would be true for these other putative ambiguities, hence we are committed to not one but multiple massive cross-linguistic coincidences.

In conclusion, even if the empirical premises of the AFC were justified, it seems extremely implausible that natural language is as rife with semantic ambiguities as the AFC appears to entail. It seems much more plausible that an argument from premises about regularity of use and effortless processing to the conclusion that this is evidence for semantic encoding is simply unsound.

4 Inferential leaps

Even though the empirical premises of the AFC have been shown to be dubious, it is instructive to reflect on the more principled problem. The AFC has the following structure.

15 Ironically, and contrary to what Reimer claims, the AFC can also be used to show that (8) literally means "Pass the salt!"—however, since demonstrating this is a bit more involved, I refer the reader to Schoubye (2011b) for a detailed argument.

Empirical Observations

$\downarrow$

$\left.\begin{array}{c}\text{REGULARITY OF USE}\\ \text{PROCESSING EASE}\end{array}\right\} \Longrightarrow \text{CONVENTIONAL USE} \Longrightarrow \text{SEMANTIC ENCODING}$

$\downarrow$

Semantic Ambiguity

The argument thus involves two principal inferential leaps, namely from *regularity of use* to *conventional use* and from *conventional use* to *semantic encoding*. One immediate problem here is that the operative notion of *convention* is not explicated by either Devitt or Reimer. As a result, it is difficult to evaluate why these inferential steps should be considered valid.[16]

What is however clear is that for the argument to be valid, the relevant notion of convention would need to license something like the following principle: if an expression E is regularly used to convey M, this is evidence that there is a *convention* of using E to convey M. Yet, it is not obvious that this is a plausible principle to maintain and given various assumptions about the nature of conventions, it could reasonably be denied.

For example, Bach (1975, 1995, 2004) draws a distinction between *conventionalization* and *standardization* (or *pragmatic regularity*). As applied to definite descriptions, conventionalization of the referential use requires mutual belief on the part of the speakers, namely belief that descriptions are used to refer.[17] In contrast, *standardization* only suggests that referential uses occur with a certain regularity and that the inferential steps normally required of speakers to grasp pragmatically conveyed meaning have been compressed due to this regularity. That is, when a use is standardized, speakers do not in general need to run through the full inferential procedure normally required to grasp the merely pragmatic referential meaning. As Bach's puts it,

> […] where there is standardization, the hearer's inference is compressed by precedent; one does not have to go through all the steps that would be required absent standardization. (Bach 1995, p. 678)

> By turning a speaker meaning not determined solely by the linguistic meaning of the words being used into what Levinson calls a 'default meaning', it streamlines the hearer's inference to what the speaker means. A pragmatic regularity is not a matter of convention.[18] (Bach 2004, p. 228)

[16] I thank an anonymous referee at L&P for pointing out that Devitt and Reimer fail to explicate what notion of convention they are assuming.

[17] See e.g. Bach (1995, p. 684). Bach's explication of the notion of a convention is here given in the context of a discussion of *performatives*, but he suggests in Bach (2004, p. 228) that it can also be applied to the case of definite descriptions. I mention this distinction only to emphasize that the leap from regularity to convention requires substantial justification.

[18] The reference to Levinson here is Levinson (2000).

Insofar as Bach's distinction is sound, then an argument is needed that the referential uses are not simply cases of standardization rather than conventionalization. Absent such an argument, the first inferential leap in the AFC is unwarranted. More generally, for the AFC to be valid, the operative notion of convention must be made explicit and arguments for that particular notion must be provided.

The second leap from *conventional use* to *semantic encoding* is equally problematic. It is perfectly sensible to maintain that there are natural language expressions which conventionally convey a certain meaning, but where that meaning does not have any truth conditional—i.e. semantic—import. One example is *presuppositions*. There is nothing inconsistent in assuming that presuppositionality is lexically encoded in certain expressions, but that the presuppositions do not have any semantic effects, i.e. do not impact the assignment of semantic values. More importantly, assuming that presuppositional meanings are conventional does not necessitate also assuming that these presuppositions are always operative. So-called cases of *local satisfaction* are plausibly construed as cases where a presupposition appears to be non-operative despite the presupposition being lexically (but not semantically) encoded in a relevant expression. For example, consider the iterative adverb 'too'. It is generally agreed that 'too' encodes a presupposition, yet that presupposition appears to be non-operative in sentences such as (15).

(15) If Herman passed the exam, Ernie passed too.

This observation is perfectly consistent with the assumptions that (a) 'too' conventionally triggers a presupposition, (b) this presupposition has no semantic import, and (c) this presupposition is "cancellable" in certain linguistic contexts.[19]

This is of course not to suggest that referential uses should be analyzed in terms of presuppositions, it is simply to point out that the existence of a convention does not automatically license the conclusion that this convention is semantic. Hence, an argument is needed that if there in fact is a convention of using descriptions to refer (again, given a plausible explication of 'convention'), this convention *must be* semantic. Neither observations about regularity of use nor observations about processing ease do anything towards establishing this. And although Devitt (2004, 2007a,b) has also given arguments against implicature-based analyses of referential uses, these arguments do not affect a more sophisticated pragmatic explanation, e.g. Bach's explanation in terms of standardization.

5 Concluding remarks

As a natural language evolves, pragmatic aspects of meaning can become conventionalized and ultimately lexically encoded semantic properties. As Reimer (1998) observes, the existence of dead metaphors is strong evidence of that process. However, determining when and how exactly one aspect of meaning transcends from pragmatically inferred to semantically encoded is rather difficult.

[19] E.g. (Gazdar 1979) proposed solution to the so-called projection problem is precisely a "cancellation" account. For a discussion of issues concerning presupposition and presupposition satisfaction, cf. Beaver (1997).

I have argued here that the general problem with the AFC is that it relies on too naïve criteria for determining what is semantically encoded. That is, even if Devitt and Reimer's empirical observations were correct, those observations would not suffice to establish that a transition from pragmatics to semantics has taken place. The fact that an expression *E* is used regularly to express some meaning *M*, and that *M* is processed with a certain speed, is neither sufficient—nor obviously evidence—for the conclusion that *M* is a lexically encoded semantic property of *E*. If it were, it would follow that we are mistaken about the semantic and pragmatic properties of a whole range of natural language expressions. In addition to this, I have shown that Devitt and Reimer's empirical assumptions are in fact unjustified.

This thus concludes my case against the argument from convention. Since Devitt (2004, 2007a,b) presents a number of additional arguments that might support a semantic ambiguity view, the question concerning ambiguity has not been conclusively settled. Nevertheless, I do hope to have convinced you that the argument from convention *does not* provide any convincing support for an ambiguity view.

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