DEFERENTIALISM

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Abstract. There is a recent and growing trend in philosophy that involves deferring to the claims of certain disciplines outside of philosophy, such as mathematics, the natural sciences, and linguistics. According to this trend – *deferentialism*, as we will call it – certain disciplines outside of philosophy make claims that have a decisive bearing on philosophical disputes, where those claims are more epistemically justified than any philosophical considerations just because those claims are made by those disciplines. Deferentialists believe that certain longstanding philosophical problems can be swiftly and decisively dispatched by appeal to disciplines other than philosophy. In this paper we will argue that such an attitude of uncritical deference to any non-philosophical discipline is badly misguided. With reference to the work of John Burgess and David Lewis, we consider deference to mathematics. We show that deference to mathematics is implausible and that main arguments for it fail. With reference to the work of Michael Blome-Tillmann, we consider deference to linguistics. We show that his arguments appealing to deference to linguistics are unsuccessful. We then show that naturalism does not entail deferentialism and that naturalistic considerations even motivate some anti-deferentialist views. Finally, we set out deferentialism's failings and present our own anti-deferentialist approach to philosophical inquiry.

1   Introduction

There is a recent and growing trend in philosophy that involves deferring to the claims of certain disciplines outside of philosophy, such as mathematics, the natural sciences, and

linguistics. Now naturalism is a well-known and widespread philosophical movement that regards the sciences as especially valuable sources of knowledge that can inform philosophical debate. The above trend of deference, however, goes well beyond this. According to this trend – *deferentialism*, as we will call it – certain disciplines outside of philosophy make claims that have a decisive bearing on philosophical disputes, where those claims are more epistemically justified than any philosophical considerations just because those claims are made by those disciplines. Deferentialists take their thesis to have great methodological significance for philosophy. They believe that certain longstanding philosophical problems can be swiftly and decisively dispatched by appeal to disciplines other than philosophy. These philosophers variously believe that such philosophical problems as whether numbers exist, whether composition is unrestricted, or whether ethical sentences are declarative sentences are settled once and for all by evidence drawn from outside of philosophy. They claim that since this evidence comes from certain authoritative disciplines, philosophy has no grounds for redress.

In this paper we will argue that such an attitude of uncritical deference to any non-philosophical discipline is badly misguided. Although the evidence drawn from some non-philosophical disciplines is relevant to many philosophical debates (as naturalism claims), such evidence cannot alone settle any philosophical debate. Scientific claims, for example, take their place as only one kind of data in such debates, and they are not necessarily the most important or the most strongly established kind. Which data attain such status will depend on the debate in question, and it should not be assumed that scientific claims (for example) are entitled to such status in any debate *just because they are scientific claims*. We will conclude that there is no royal road to resolving philosophical debates, as the deferentialists would have us believe. Resolving those debates involves weighing up many kinds of data and many methodological considerations by means of an often protracted and difficult cost-benefit analysis.

Since deferentialism is particularly explicit in some philosophical appeals to mathematics and linguistics, we will scrutinize deference to these two disciplines. In §2 we will consider deference to mathematics. There is a philosophical problem about whether numbers exist. David Lewis, John Burgess and others think that this problem is easily solved because mathematics says that there are numbers. In §3 we will consider deference to linguistics. There is a philosophical problem about whether any ethical sentences are declarative sentences. Michael Blome-Tillmann thinks that this problem is easily solved because some ethical sentences have certain features, and linguistics says that all sentences with those features are declaratives. In each case, we will show that the deferentialists' arguments are unsuccessful. In §4 we will discuss the relation between deferentialism and naturalism, draw conclusions, and present our own anti-deferentialist approach.

2   Deference to mathematics

Perhaps the most famous expression of deferentialism is this passage from David Lewis, known as the 'Credo':

> Mathematics is an established, going concern. Philosophy is as shaky as can be. To reject mathematics for philosophical reasons would be absurd … Even if we reject mathematics gently – explaining how it can be a most useful fiction, 'good without being true' [Lewis here footnotes a reference to Field 1980] – we still reject it, and that's still absurd. …
>
>   That's not an argument, I know. Rather, I'm moved to laughter at the thought of how *presumptuous* it would be to reject mathematics for philosophical reasons. How would *you* like the job of telling the mathematicians that they must change their ways, and abjure countless errors, now that *philosophy* has

discovered that there are no classes? (Lewis 1991: 58–59, his italics)

Presumably Lewis does not think that we should believe both mathematics and a philosophical theory that is inconsistent with it: something must go, and, according to Lewis, the mathematics must not. Thus, in this passage, Lewis endorses (Deference to Mathematics):

(Deference to Mathematics) If a philosophical theory is inconsistent with mathematics, then we should reject the philosophical theory for that reason.

Mark Colyvan (2001: 13) endorses Lewis's Credo word for word. Plenty of other philosophers affirm (Deference to Mathematics), including John Burgess (2004), Thomas Hofweber (2009: 263), Jonathan Schaffer (2009: 357, n. 8), and Kit Fine (2009: 158). In addition, Stewart Shapiro (1997: 30) flirts with (Deference to Mathematics), and Penelope Maddy appears to advocate something very similar when she writes: 'if our philosophical account of mathematics comes into conflict with successful mathematical practice, it is the philosophy that must give' (Maddy 1997: 161; cf. 184). In this section, we will argue that (Deference to Mathematics) is implausible, and that the principal argument offered in support of it – the 'track record' argument – is a failure.

At first sight, (Deference to Mathematics) has some appeal. For it enshrines a respectful attitude towards mathematics, and we all agree that mathematics deserves our respect. But on further reflection, we see that this line of thought is mistaken: one can respect whilst refusing to defer. It is consistent to agree that mathematics deserves the respect of philosophers whilst denying (Deference to Mathematics). For instance, one might cash out one's respect for mathematics as follows: if a claim is included in one of our best mathematical theories, that provides us with a strong reason to believe it. That is

consistent with denying (Deference to Mathematics). Similarly, the maxim might be thought to gain some credibility from the fact that mathematics is a very valuable activity, or from the fact that it is one of humanity's greatest intellectual achievements. However, one can consistently believe both those things whilst rejecting (Deference to Mathematics). The maxim goes beyond the view that mathematics deserves great respect from philosophers, replacing it with the view that mathematics deserves unquestioning subservience. The strength of the claim makes it difficult to justify. How can you convince philosophers that some human activity does *not* deserve critical scrutiny? As Stewart Shapiro writes (in one of his less deferential moods):

> No practice is sacrosanct. As fallible human beings, mathematicians do occasionally make mistakes, even systematic mistakes; and some errors can be uncovered by something recognisable as philosophy. So perhaps a reasonable anti-revisionist position is that any given principle used in mathematics is taken as correct by default, but not incorrigibly. (Shapiro 2000: 14; see also Priest 2006: 202)

A point of clarification is in order here. We must distinguish the content of mathematics from the mathematical beliefs of mathematicians: mathematicians may sometimes be in error as to what mathematics claims. But it is not plausible to think that the content of mathematics differs very significantly from the content mathematicians take it to have. If mathematicians are making systematic mistakes – for instance, by relying on axioms we ought not to believe – then we should expect these mistakes will be reflected in the content of mathematics. Critical scrutiny of mathematical practice leads to critical scrutiny of the content of mathematics. Since we would expect philosophers to hold that mathematical practice is corrigible by philosophy, we would also expect philosophers to

hold that the content of mathematics is philosophically corrigible. But this is just what (Deference to Mathematics) denies. So (Deference to Mathematics) is implausible; it cannot be regarded as the default view. Mathematical deferentialists have the uphill task of explaining why mathematics is exempt from the usual critical scrutiny.

Moreover, there is a second reason why (Deference to Mathematics) is implausible: if is to be useful, it requires philosophers to have greater respect for mathematics than mathematicians do! To see this, note that the main task of mathematical deferentialism is the refutation of *mathematical fictionalism*. According to mathematical fictionalism, there are no numbers, classes, or any other mathematical objects, so the sentences of mathematical discourse are either false (e.g. '2+2=4') or vacuously true (e.g. 'All numbers are prime'). Lewis's Credo explicitly targets Hartry Field's fictionalist account of mathematics. More recently, John Burgess (2004) has attempted to deploy (Deference to Mathematics) against Field's fictionalist successors. (Deference to Mathematics) is not the same as the negation of fictionalism: rather, (Deference to Mathematics) is often used as a premiss in an argument against fictionalism which runs as follows:

> (Deference to Mathematics) If a philosophical theory is inconsistent with mathematics, then we should reject the philosophical theory for that reason.
> Mathematical fictionalism is inconsistent with mathematics.
> Therefore, we should reject mathematical fictionalism.

The second premiss of this argument is highly plausible: our best mathematical theories include (for instance) the claims that 2+2=4 and that not all numbers are prime; and fictionalism denies both of these claims. Thus the deferentialist argues that we should reject fictionalism on the grounds of its incompatibility with our best mathematical theories. But notice that, although fictionalism is inconsistent with the *contents* of our best

mathematical theories, the internal *standards* of mathematics do not rule out fictionalism about mathematics. The internal standards of mathematics demand, for instance, that results be supported by proofs, and that the proofs be logically valid; but they do not demand that mathematicians *believe* their results. A card-carrying fictionalist who proved sufficiently interesting mathematical results would be lauded as a great mathematician, irrespective of their philosophical views. You can consistently be a great mathematician whilst denying the contents of our best mathematical theories. (Perhaps many successful mathematicians are actually fictionalists.) Thus (Deference to Mathematics) requires more of philosophers than the internal standards of mathematics require of mathematicians (Liggins 2007). That makes (Deference to Mathematics) particularly implausible. Van Fraassen (1980: 82–3, 198–201) has argued that a successful working scientist can be a fictionalist about science. In his words:

> …it is possible even after total immersion in the world of science to distinguish possible epistemic attitudes to science, and to state them, and to limit one's epistemic commitment while remaining a functioning member of the scientific community – one who is reflective, and philosophically autonomous as well. (1980: 82–3)

The same goes for mathematics. Because (Deference to Mathematics) bars us from denying the contents of our best theories, but the internal standards of mathematics do not, (Deference to Mathematics) requires philosophers to have greater respect for mathematics than the internal standards of mathematics require of mathematicians.[1]

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[1] A point of clarification. One might argue that the possibility of a mathematically successful fictionalist shows that mathematics and fictionalism are consistent. But that is not our argument.

(Deference to Mathematics) is often presupposed without argument. Since it is sometimes known as 'mathematical naturalism', we suspect that confusion with other (more plausible) doctrines known as 'naturalism' partly accounts for this. There is a dearth of argument for (Deference to Mathematics) (Paseau 2008: section 4.2). When an argument is cited, it is almost always Lewis's Credo. (Of the mathematical deferentialists mentioned above, the Credo is cited by Burgess, Colyvan, Hofweber, Schaffer, and Shapiro.) As the quotation above makes plain, Lewis claims not to be offering an argument – but these citations tell us that he is often taken to have established mathematical deferentialism, and it is easy to see how his Credo suggests an argument for that conclusion. We will now sketch the argument and explain why it fails.

The argument appeals to the respective track records of mathematics and philosophy. The comparison is intended to show that mathematics is less 'shaky': it has a better track record of uncovering truths than philosophy has. Lewis mentions heroic philosophical failures such as the ontological argument, and the view that time is unreal (presumably an allusion to McTaggart's argument). The conclusion, in Burgess's words, is that:

> the historical record of philosophical 'corrections' to mathematics and science … has been pretty dismal. … [G]iven the historical record, on simple inductive grounds it seems extremely unlikely that philosophy can do better than

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Indeed, we think it is little better than the (naïve) argument that, because some scientists are fundamentalist Christians, fundamentalist Christianity is consistent with the content of science. We have said that fictionalism is inconsistent with the content of mathematics. Rather than trying to show that they are consistent, we have argued that the internal standards of mathematics do not require mathematicians to believe that content; and that (Deference to Mathematics) therefore goes beyond respect for those standards. (Thanks to an anonymous referee.)

mathematics in determining what mathematical entities exist, or what mathematical theorems are true, and much more likely that for the $(n + 1)^{st}$ time, philosophy has got the nature of truth and existence wrong. (Burgess 2004: 13)

Any reply to this argument must be a piece of philosophy. To see why, notice that there are two broad strategies for replying: either show that philosophy's track record is better than Lewis says, or show that mathematics' track record is worse than Lewis says. The first strategy requires arguing that some philosophical theses or arguments are better than Lewis thinks they are; such an evaluation would be a piece of philosophy. Turning to the second strategy, how might one try to show that mathematics' track record is worse than Lewis thinks it is? There would seem to be no good mathematical argument for this conclusion. If mathematics made empirical claims, we could appeal to observation to evaluate its track record; but since it makes no empirical claims, we have no chance of assessing its track record through observation. (Mathematics contrasts with astrology in this respect.) It is hard to see on how one could argue that mathematics has a poorer track record than Lewis thinks, other than by mounting a philosophical argument. So whichever strategy we choose, any reply to Lewis's credo will have to be a piece of philosophy.

That is a curious feature for the track record argument to have, since the argument also tells us that philosophy is untrustworthy compared to mathematics. This feature confers on the argument a 'remarkable immunity to philosophical prosecution' (Daly 2006: 210) which should raise our suspicions concerning its quality. In our view, these suspicions are justified: the track record argument fails. Since the argument has already been roundly criticized in the literature, and these criticisms have received no rejoinders from deferentialists, we can be brief.

We will mention three objections. The first is a direct attack on the argument, whereas the second and third show that, if (Deference to Mathematics) is motivated by the track record argument, it cannot be used to refute mathematical fictionalism.

According to the first objection, the track record argument is a crude induction. It overlooks the *total evidence requirement* (Carnap 1950: 211): that we should use all the evidence we have to assess inductive arguments. For each of the discredited arguments from philosophy's past, we can identify the flaws in its reasoning and show that the best arguments for mathematical fictionalism do not share them. To take one of Lewis's examples: philosophers agree that Zeno's arguments for the impossibility of motion are invalid; but the best arguments for mathematical fictionalism are not invalid. Once we take into account the reasons why the heroic failures were failures, the track record argument is seriously weakened.

The second objection maintains that, once the comparison is framed correctly, the track record argument is revealed to beg the question if used as part of an attack on fictionalism. It would beg the question against fictionalism to assume at the outset that mathematics produces any (non-vacuous) truths and that its methods justify its mathematical results (Daly 2007). Whether mathematics and its methods furnish these results is precisely what is at issue in the debate with fictionalism. Thus the deferentialist cannot assert that mathematics is a superior source of truths to fictionalist philosophy, on pain of circularity.[2] If (Deference to Mathematics) is to be used in an argument against mathematical fictionalism, then it cannot be supported by the track record argument.[3]

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[2] One might worry that this objection to the track record argument conflates (Deference to Mathematics) with the denial of fictionalism. But this worry is unjustified. As we mentioned earlier in this section, the doctrines are distinct. Deferentialism is often invoked in arguments against

The third objection is that the argument exploits an ambiguity. As we have seen, Lewis says that that he is 'moved to laughter' at the thought of 'telling the mathematicians that they must change their ways … now that philosophy has discovered that there are no classes' (Lewis 1991 p.59). Lewis's claim exploits an ambiguity in the phrase 'mathematicians changing their ways'.

Suppose that 'changing their ways' means that the mathematicians should stop reasoning as if there are classes because philosophy has discovered that there are no classes. Now maybe such a view is so ludicrous as to be funny. But it is not the view of mathematical fictionalists such as Field. They seek to show how mathematics can be good without being true – how it is useful to reason as if there are classes even if (thanks to philosophy) we know otherwise. On this reading of Lewis's phrase, then, his Credo has no bearing on mathematical fictionalism. The situation here is like that with Micronesian navigation. When they were out of sight of land, the Micronesians would navigate by imagining the rower, the canoe and the stars to be stationary while the islands ahead of them move toward them. This known false assumption pays off: it makes it easier to compute the locations of canoe, islands and the stars with respect to one another, and so helped the Micronesians get from island A to island B. Here again a theory is useful without being true. (For details, see Hutchins 1983 pp.196-8).

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fictionalism; our criticism is that the track record argument for (Deference to Mathematics) begs the question in this dialectical context.

[3] One might try to evade this objection by phrasing the track record argument in terms of what conclusions should be *accepted*, thereby ignoring issues about the truth and interpretation of mathematical claims. But such a move would fail. 'Accept' here cannot mean 'accept as true' – for the deferentialist was hoping to avoid questions of mathematical truth. And if 'accept' means 'accept as following from the relevant axioms', then the track record of mathematics is compatible with mathematical fictionalism, and the argument against fictionalism collapses.

Suppose instead that by 'changing their ways' Lewis means that the mathematicians should abandon any belief that is ontologically committed to classes. Then what's the joke? If philosophy can come up with good reasons of its own for at least some claims, it would be special pleading to assume at the outset that it cannot come up with good reasons against the existence of classes. Mathematical fictionalism has supporting arguments and they deserve to be considered on their own merits rather than laughed out of court. If the deferentialist responds by denying that philosophy can come up with good reasons of its own for any claims, that would be over-kill. The deferentialist wanted to reject only the case for mathematical fictionalism, not every case that has ever been made for a philosophical theory. Yet the track record argument does seem to commit the deferentialist to over-kill. What the argument would show isn't something specifically to do with mathematical fictionalism. The argument tries, by induction, to discredit the reliability of philosophical grounds for believing anything. So the argument would show that we shouldn't believe any claim on philosophical grounds – and that's overkill.

In short, Lewis's Credo fails. It is a crude induction, and it refutes fictionalism only if it proves too much. (See Leng 2005, Paseau 2005 and Balaguer 2009 for further discussion).

There is one line of attack on the track record argument we would distance ourselves from. It runs as follows: "The track record argument is a philosophical argument against all philosophical arguments. But any such argument is self-refuting, so the track record argument fails." This self-refutation objection is naïve: there is nothing untoward in using philosophical argument in a *reductio* of philosophical argument. We emphasise that our objections to the track record argument are distinct from this self-refutation objection.

To avoid the objections we have put forward, deferentialists might try to run a refurbished track record argument, one that compares mathematics and philosophy by

appealing not to their track records of uncovering truths, but to some other feature of the disciplines. For instance, it might be claimed that mathematicians' arguments have greater rigour than philosophers'; or that there is a greater convergence of opinion among mathematicians than among philosophers; or that mathematicians' opinions change less frequently than philosophers' do (see Chihara 1990: 172-3 for a related argument). Any of these might be appealed to in support of the claim that mathematics is a superior source of (non-vacuous) truths to philosophy. It is clear how fictionalists will reply to such arguments. Since they deny that mathematics is a source of truths, fictionalists will either deny that the alleged phenomena are genuine, or will argue that they do not establish that mathematics is a source of truths. For instance, they will say (plausibly) that a rigorous argument does not prove its conclusion unless all its premises are true, and they will deny any (non-vacuously true) mathematical axioms that mathematicians might take as their premises. Moreover, fictionalists will say that, in view of this denial, neither convergence nor stability of opinion is good evidence that mathematics uncovers truths, as opposed to uncovering consequences of the axioms. And this again is plausible. So the refurbished track record argument has little prospect of establishing a version of deferentialism which has the power to refute fictionalism.

It is worth mentioning another possible argument for (Deference to Mathematics). It begins by noting that, before we reflect philosophically on mathematics, we have a high degree of belief in many mathematical claims – for instance, we have little doubt that 2+2=4 – and concludes that we should reject any philosophical theory which is inconsistent with these beliefs. This (Moorean) argument fails to establish (Deference to Mathematics). The premiss does not entail the conclusion because claims about what degrees of belief we have do not entail any claims about what we should not believe. The argument can be made valid by adding the following extra premiss:

(*)   If we have a high degree of belief in a mathematical claim, then we should reject any philosophical theory which is inconsistent with that claim.

But it is hard to see how this premiss could be justified. One might argue for (*) on the ground that any argument against, say, the claim that 2+2=4 must be based on premises which are less certain than the negation of their conclusion. But we see no reason to believe this. Opponents of belief in mathematical objects appeal to broadly scientific considerations in support of their view: they claim that if numbers existed, we would not be able to gain any information about them (see Daly and Liggins 2010, section 10.) And it is eminently plausible that even strongly held pre-theoretical beliefs can be overturned by scientific considerations. So it is far from clear that our most strongly held pre-theoretic beliefs should *always* be retained in the face of countervailing philosophical argument.

It may be appropriate to rebut some particular philosophical arguments against mathematics by pointing out that their premisses are collectively less credible than the mathematical claims they target. But such responses do not invoke (Deference to Mathematics) and therefore do not count as deferentialist.

In summary: mathematical deferentialism is not only implausible, but lacks secure argumentative support. We must reject every argument which relies on it.

3   Deference to linguistics

In an ingenious recent paper, Michael Blome-Tillmann offers a new argument against metaethical non-cognitivism, one which appeals to our best theories in linguistics. In this section, we'll introduce non-cognitivism, set out Blome-Tillmann's argument against it, and show that the argument fails.

Blome-Tillmann introduces the notion of an *illocutionary force marker* ('IFM' for short). An IFM is a feature of a sentence which determines the illocutionary force with which the

sentence is used. For instance, the French phrase 'Est-ce que' is an IFM, since its inclusion in a sentence indicates that the sentence can be used to ask a question. Moreover, it can be used to ask a question directly – not via the performance of some other speech act. Since 'Est-ce que' is a lexical item, it is a *lexical* IFM. Features other than lexical ones can be IFMs too: syntax, punctuation, and phonology can determine the force with which a sentence can be used.

Blome-Tillmann defines non-cognitivism as the claim that moral expressions are lexical IFMs, indicating that the direct illocutionary function of each sentence they are part of is to express attitudes (such as emotions, imperatives, or wishes). Now we sometimes express our attitudes indirectly. For instance, we can express approval by saying 'That's wonderful news': through describing the news as wonderful we can express our approving attitude towards it. Non-cognitivists deny that moral talk is like this. In their view, we use moral sentences (sentences containing moral vocabulary) to express our attitudes directly, not through the performance of some other speech act.

We note that this definition is idiosyncratic. Presumably it is intended to agree in extension with the usual definition of non-cognitivism: that moral *judgements* express attitudes. (Proponents of this view include Blackburn 1984 and Gibbard 1990.) But it is not clear that it does agree, since it is not clear that non-cognitivists intend their thesis to apply to *every* moral sentence: they may intend to exclude those moral sentences which appear to be questions or commands. Be that as it may, we will work with Blome-Tillmann's definition of non-cognitivism, for two reasons. First of all, Blome-Tillmann's main argument targets the view that apparently declarative moral sentences express attitudes, and so it is not affected by his idiosyncratic definition. And, second, even if Blome-Tillmann's argument turns out to be directed at a straw man, it also exemplifies a dubious methodology. Or so we will argue.

Non-cognitivism has some surprising consequences. Pre-theoretically, we tend to

think that we use sentence (a) to state that murder is wrong:

(a)   Murder is wrong.

Moreover, it is natural to think that we can use (a) to make this statement directly – not in virtue of performing another speech act. But according to non-cognitivism, that is false: non-cognitivism implies that the direct function of (a) is the expression of attitudes. Similarly, it is natural to think that we use (b) to ask whether air travel is morally permissible, and to do so directly:

(b)   Is air travel morally permissible?

But non-cognitivism implies that the direct use of (b) is the expression of attitudes. These consequences are surprising. Perhaps they are theoretical costs. In response, non-cognitivists will maintain that any such costs are outweighed by the theoretical benefits non-cognitivism brings.

Blome-Tillmann claims that linguistics refutes non-cognitivism. He argues as follows. Linguistics has established *Form-Function Correlation'*:

(FFC′)   In natural languages, a sentence's grammatical type correlates with its direct illocutionary function. (2009: 291)

'Grammar' here includes phonology. Citing König and Siemund 2007, Blome-Tillmann claims that (FFC′) has been verified beyond reasonable doubt (2009: 292); it is 'empirically incontestable' (2009: 307). Call a sentence *declarative* iff its direct illocutionary function is that of making a statement. Principle (FFC′) tells us that there are

grammatical conditions which suffice for being a declarative sentence. In English these include ending with a full stop, having the subject come before the verb, and lacking the rising intonation characteristic of questions. (This is a harmless approximation of the actual conditions proposed by linguists.) Any English sentence meeting these conditions must be declarative.

Now consider the sentence:

(a)   Murder is wrong.

This meets all the grammatical conditions which suffice for being declarative: so (a) is a declarative sentence. But since (a) contains the moral term 'wrong', non-cognitivism entails that its direct illocutionary function is to express our attitudes and thus that (a) is not declarative. So non-cognitivism is false (2009: 293). (Evidently, there are countless seemingly declarative moral sentences which could play the role of (a).) More formally, the argument runs as follows, where C consists in the grammatical conditions which suffice for being a declarative sentence:

(A1)   All sentences meeting C are declarative sentences.

(A2)   Some moral sentences meet C.

(A3)   So some moral sentences are declarative sentences.

(A1) is supported by (FFC').

In addition, Blome-Tillmann offers some subsidiary arguments against non-cognitivism; we'll consider just one of them. According to Blome-Tillman, linguistics has discovered that all lexical IFMs are *particles* – that is, 'lexical items that cannot be inflected, graded, nominalised or tensed' (294). But some moral expressions can be

subjected to all of these transformations: for instance, the moral predicate 'is wrong' can be inflected ('is / are wrong'), graded ('is very wrong / is completely wrong'), nominalized ('wrongness'), and tensed ('was wrong / is wrong / will be wrong'). So some moral expressions are not particles. It follows that some moral expressions are not lexical IFMs. And that contradicts non-cognitivism.

We'll now show that Blome-Tillmann's arguments fail to refute non-cognitivism. In short: the problem is that, since linguists' arguments for (FFC′) presuppose the falsity of non-cognitivism, Blome-Tillman's appeal to (FFC′) begs the question. Let us explain this in more detail.

To the best of our knowledge, linguists argue for (FFC′) inductively. Starting off with a natural language, they make judgements about the direct illocutionary functions of its sentences and about their grammatical features, and notice that the two are correlated. They do the same for many other languages, discovering that in each language, direct illocutionary function is correlated with grammatical features. And thus they infer (FFC′).

The linguists' argument relies on judgements about the direct illocutionary function of particular sentences. Yet there is no suggestion that they have considered or evaluated non-cognitivist claims about the functions of moral sentences; indeed, linguists seldom focus on *moral* sentences as a topic of inquiry. Instead, the linguists have relied on their own judgements about the function of particular sentences, classified according to grammatical type rather than subject matter. Sentences with the grammatical features of (a) are most naturally thought of as declaratives; without any further investigation, the linguists took them to be so. The most natural thought about sentences with the grammatical features of (b), is that their direct illocutionary function is to ask questions; without any further investigation, the linguists classified them as such. Many of these judgements contradict non-cognitivism, since (as we have seen) non-cognitivism contradicts our pre-theoretical judgements about many moral sentences: for instance, it

rules that (a) and (b) are used for the direct expression of attitudes, and thus are not directly used for making statements or asking questions.

In short, the premises of the linguists' argument for (FFC′) include claims about the functions of particular sentences – and many of these claims contradict non-cognitivism. For that reason, any argument against non-cognitivism which rests on (FFC′) thereby begs the question against non-cognitivism. Blome-Tillman's main argument is of this type.

To make the point more vivid, suppose one were agnostic concerning the truth of non-cognitivism. Then one would be agnostic as to the direct illocutionary function of moral sentences. But then one would not be able to endorse the linguists' argument for (FFC′), as that argument relies on judgements about their direct illocutionary function. So one would not regard (FFC′) as empirically verified. That need not mean that the linguists were wasting their time: one could claim they have verified the non-trivial conditional thesis that *if* our folk judgements about the illocutionary functions of sentences are correct, then (FFC′) is true.

We are happy to allow that there could be a refutation of non-cognitivism which relies on (FFC′). Our point is that the particular way in which (FFC′) is argued for in linguistics means that it cannot be used for that purpose at present. To refute non-cognitivism using (FFC′), one would have to supply a different argument for the principle, one in which each premise was consistent with non-cognitivism.

We mentioned above that Blome-Tillmann offers subsidiary arguments against non-cognitivism. One of these rests on the thesis that all lexical IFMs are particles: this argument fails for essentially the same reason. Linguists conclude that all lexical IFMs are particles on the basis of their theories about which lexical items are IFMs; and they infer these theories from their judgements about the direct illocutionary force of particular sentences. Since some of these judgements contradict non-cognitivism, the thesis that all lexical IFMs are particles cannot be used in an argument against non-cognitivism without

begging the question. Although we will not argue the point here, we believe that the other subsidiary arguments against non-cognitivism Blome-Tillmann offers suffer from the same flaw.

In response to our criticism, Blome-Tillman might respond by reformulating his argument. So far we have read him as offering a deductive argument against non-cognitivism; we accept its validity but regard it as question-begging. But perhaps Blome-Tillmann would prefer to put forward the following argument instead:

(B1)   All non-moral sentences meeting C are declarative sentences.

(B2)   Some moral sentences meet C.

(B3)   So, probably, some moral sentences are declarative sentences.

This is an inductive argument. Like any inductive step, the step from (B1) and (B2) to (B3) is defeasible by empirical or philosophical considerations. Assume that all the relevant empirical (here, linguistic) evidence is in and that it supports (B1). Nevertheless, that still leaves any philosophical considerations to be reckoned with. Note that the relevant philosophical considerations go beyond metaethics: for instance, philosophical arguments that apparently declarative epistemic, probabilistic, mathematical, aesthetic, psychological or conditional sentences express attitudes will bear on (B1). (See Sinclair 2009: 144 for references.) Until all those considerations are weighed, the jury remains out on how much overall evidential support there is for (B3). Yet Blome-Tillmann does not address any such philosophical considerations. But this deliberate policy of neglect means that he is unwarranted in claiming that the empirical data of linguistics provides *decisive* evidence for (B3) and against non-cognitivism. The 'empirically incontestable' is still philosophically contested.

In the final paragraph of his paper, Blome-Tillmann writes:

Surely, a very general but rather important question concerning philosophical methodology must remain unanswered in this paper: how seriously ought we to take results from the empirical sciences in our philosophical theory building? In the particular case at issue I am inclined towards a radical response: we should let the sciences – and in this case empirical linguistics – provide a framework that restricts the options for viable philosophical theories. (2009: 307)

Blome-Tillmann's view appears to amount to the following maxim:

(Deference to Linguistics) If a philosophical theory is inconsistent with linguistics, then we should reject the philosophical theory for that reason.

Burgess (1983: 97), Burgess and Rosen (1997: 207), Wagner (1982: 258), and Szabó (1999: 108) also endorse this maxim. Blome-Tillmann's arguments against non-cognitivism follow (Deference to Linguistics): he rejects non-cognitivism because it is inconsistent with (FFC'), and because it is inconsistent with the principle that all lexical IFMs are particles. So Blome-Tillmann's arguments conform to his preferred methodology. But, as we have seen, at least two of those arguments beg the question. They are question-begging because they include (Deference to Linguistics).

Why think that (Deference to Linguistics) is the culprit, rather than some other component of Blome-Tillmann's arguments, though? As far as we can see, Blome-Tillmann succeeds in showing that non-cognitivism is inconsistent with (FFC'). His argument becomes question-begging only when he concludes from this that non-cognitivism is to be rejected. But that step is precisely the application of (Deference to Linguistics). Similarly, it seems to us that Blome-Tillmann has established that non-

cognitivism contradicts the thesis that all lexical IFMs are particles. His argument begs the question once it makes the further step of inferring the falsity of non-cognitivism. So once again it is (Deference to Linguistics) which is responsible for the fallacy.

In defence of his radicalism, Blome-Tillmann asks rhetorically:

[W]hat alternative is there, given that we are far from agreeing on metaethical issues relating to the open-question argument, moral motivation, moral realism and moral knowledge? Isn't it methodologically irresponsible to argue from one's highly controversial metaethical theory to an empirically refuted and absurd linguistic conclusion? (2009: 307)

Two comments are in order. First, the 'empirically refuted and absurd' conclusion is presumably non-cognitivism. Since we have argued that non-cognitivism has *not* been empirically refuted, we do not think that Blome-Tillmann can appeal to that claim to back up his methodology. We are prepared to agree that non-cognitivism is counter-intuitive in some respects; but we think that is far from establishing that it deserves rejection. If that is what he means by calling non-cognitivism 'absurd', we do not think the case has been made. (And if it could be made, the appeal to linguistics would be redundant.)

Second, it appears from these brief remarks that Blome-Tillmann is relying on a false dichotomy: either we should derive metaethical conclusions from linguistics, or we should derive linguistic conclusions from metaethics. There is another option: to use all the available data to form the best overall theory, with neither philosophy nor linguistics taking priority. Though we see no reason to accept (Deference to Linguistics), we still think that linguistics can inform metaethics. But philosophical appeals to linguistics must be made with great care, lest they prove fallacious.

4   Conclusion

In this concluding section, we discuss the relation between deferentialism and naturalism, set out deferentialism's failings, and present our own anti-deferentialist approach to philosophical inquiry.

Naturalism says that science and philosophy are continuous and that scientific findings and theories can have a bearing on philosophical problems. Anti-deferentialism is compatible with naturalism so understood. So naturalism, the view that science should inform philosophy, does not entail deferentialism, the view that philosophy should uncritically 'rubber stamp' every scientific claim.

To illustrate the distinction between deferentialism and naturalism, let us consider the following argument (based on Roskies 2003):

According to *motivational internalism*, when someone judges that they morally ought to φ, they are motivated to φ. There is psychological evidence that individuals with damage to the ventromedial cortex make moral judgements but are not motivated to act on them. Thus motivational internalism is false.

Is this argument an example of deference to psychology? There are two ways of understanding the argument. On the first way, the principle (Deference to Psychology) plays an essential role in reaching the conclusion. On such a reading, the argument is deferentialist. On the second way, the argument runs as follows: the balance of evidence tells against internalism because the philosophical evidence for internalism is outweighed by the psychological evidence against it. On this reading, the argument is naturalistic but not deferentialist, because it does not take psychology to be indefeasible by philosophical argument. Such claims of indefeasibility are what distinguish deferentialist appeals to science from non-deferentialist ones.

Naturalism and anti-deferentialism are not only compatible: naturalistic considerations about the bearing of science on philosophical problems even motivate some anti-deferentialist views. To see this, here are two familiar speeches. (We offer them to illustrate the point, not because we endorse them).

Naturalism motivates moral non-cognitivism. If the primary illocutionary function of moral sentences were descriptive, those sentences would describe features very unlike any discovered by science, and which we could not know about by any means familiar to science. Better, then, to take those sentences' primary illocutionary function to be expressive, not descriptive.

Naturalism motivates revolutionary mathematical fictionalism. If mathematical sentences are construed as describing Platonic objects, those sentences would describe objects that we could not know about by any means familiar to science. Better, then, to take those sentences as failing to describe Platonic objects.

Something these speeches bring out is that naturalism seeks to integrate scientific and philosophical claims – to reach a 'synoptic view', in Sellars' phrase (Sellars 1963 §1). Since not all of these claims are compatible, some of them have to be rejected. Anti-deferentialism rejects some scientific or mathematical claims in order to preserve some philosophical claims, but this is done in the interest of achieving the overall best integration of the totality of our claims.

This point disposes of a complaint against fictionalism about science made by Putnam in the following passage:

… it is silly to agree that a reason for believing that *p* warrants accepting *p* in all

scientific circumstances, and then to add 'but even so it is not *good enough.*' Such a judgement could only be made if one accepted a trans-scientific method as superior to the scientific method; but this philosopher, at least, has no interest in doing *that.* (Putnam 1971 p.356.)

So far as reasons for belief go, a fictionalist about the claim that *p* thinks that there are no good reasons to believe that *p* whatever the scientific circumstances. And this judgement is not the product of a trans-scientific method, but the same method of cost and benefit, refinement and coherence that guides science.

Deferentialism has a number of weaknesses, some of which we have already touched on.

First, deference principles are implausible: they go beyond respect for the discipline in question. Respecting a discipline involves at least acknowledging that there is some reason to believe that its claims are true. Deferentialism about a discipline means that the discipline's claims are indefeasible by philosophy. Respect does not entail deference so understood.

A second and related point is that deferentialism about mathematics, linguistics, or science is not an internal standard of any of these disciplines. Deference principles are not extracted from these disciplines; they are philosophical impositions. Track record arguments in support of these impositions are, as we have seen, question-begging, in view of the use to which these principles are put.

Thirdly, deference to more than one discipline might yield contradictory results. For instance, the conclusions of a philosophical argument involving deference to psychology might contradict those of a philosophical argument involving deference to linguistics. Suppose that linguistics is about abstracta (as Katz 1981 argues), and that psychology told us we can have no knowledge of such things. Then (Deference to Psychology) and

(Deference to Linguistics) would support conflicting conclusions. Unless a situation can be ruled out, one should adopt at most a single deference principle. But it is hard to see how to choose which discipline deserves deference. Moreover, even this policy is risky: for how can we eliminate the possibility that a single discipline might contain inconsistent claims and thereby land the deferentialist in contradiction?

Fourthly, and relatedly, we discriminate between disciplines. Notwithstanding what is licensed by its internal standards, we reject the claims of astrology in their entirety. So why should we have a different attitude to the claims of (say) mathematics? Deferentialism owes us an answer to this 'authority problem': the problem of saying which disciplines deserve deference and which do not (Rosen 1999; Rosen 2001: 81-2). This problem drives the demand to justify deference principles.

To tackle this problem, Penelope Maddy appeals to what she calls 'successful disciplines':

a successful discipline, be it science or mathematics … should not be subject to criticism from, and does not stand in need of support from, some external supposedly higher point of view (Maddy 1997 p.184).

This, however, does not advance matters. Almost every discipline will count as successful because, on Maddy's view, what counts as success, and what a given discipline's measure of success is, are determined by the discipline's internal standards. And even where a discipline is not initially successful, it can judiciously downgrade its standards until it does count as successful. If Maddy is to extricate herself from this relativist swamp, she needs to specify the basis on which we can discriminate between different standards of success. And this means that the original problem of authority – the problem of what the basis is for discriminating between disciplines – has only been shifted back a stage.

Those, then, are some of the weaknesses of deferentialism. How should we conduct philosophical inquiry without deference? We recommend the model of cost-benefit analysis. Instead of looking to scientific, linguistic or mathematical results to sever at a stroke knotty philosophical problems, we should deploy a wealth of data and theories to unpick these problems. Different proposed solutions should be weighed against each other in terms of their relative costs and benefits, and the solution that offers the most benefits for the least cost should be our preferred choice. By deploying philosophical considerations alongside scientific ones, this method treats philosophy as continuous with science and ordinary thinking. Unlike them, however, philosophical problem-solving cannot ignore philosophical considerations on the grounds that they are the proper subject of another discipline.

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