

Moore's Problem

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Abstract: Moore's problem, or Moore's paradox, arises from the fact that the holding by someone of consistent propositional contents of the form of (1) and (2) below:

- (1) It is raining but I believe it is not raining
 - (2) It is raining but I don't believe it is raining
- strike us as being absurd.

Different attempts to trace the etiology of this experienced absurdity have led to the formulation of two main diagnoses: the linguistic diagnosis and the doxastic diagnosis.

The linguistic diagnosis is based on a plausible analysis of the conversational constraints underlying the rules that define an interpersonal linguistic game of information transfer and persuasion. Within such a game, a move displaying an instantiation of a sentence of the forms Moore highlighted does violate the rules that constitute it.

However, a number of philosophers and logicians have voiced their dissatisfaction with the intrinsic limitation of this diagnosis to cases in which such linguistic games are actually being played. They claim that only a diagnosis produced at a deeper level of analysis will do justice to our intuition, namely, a diagnosis produced at a doxastic rather than at a linguistic level. Among them, Sorensen holds the more promising view.

Sorensen claims that a different number of propositional attitudes have scopes smaller than the class of consistent propositions. Thus, some consistent propositions are inaccessible to the exercise of those propositional attitudes. According to his terminology, inaccessible consistent propositions are blindspots. In particular, Moore-like propositions are the blindspots for belief. The upshot of Sorensen's view is then the claim that Moore-like contents are unbelievable.

In opposition to this view, I contend that the doxastic diagnosis is not able to pin down a plausible constraint in terms of the reference to which belief in contents of the forms Moore identified is adequately criticized as violating some constitutive condition of meaningful thought. Thus, I contend that there

is no reason why such contents ought to be labelled as unbelievable.

Keywords: Moore's paradox, assertion, assertability, belief, believability, desiderata of belief formation, logical consistency, rationality.

1. Moore's Original Version of Moore's Problem

G. E. Moore first presented the problem now known either as 'Moore's Problem' or as 'Moore's Paradox' in 1942. It was introduced by means of the following example:

(1) Although it may be true both that I went to the pictures last Tuesday and that today I don't believe that I did, it would be 'perfectly absurd' for me to assert the sentence 'I went to the pictures last Tuesday, but I don't believe that I did' (cf. A Reply to my Critics. In Schilpp's *The Philosophy of G.E. Moore*, 543).

Later, in another essay, he used a different sentence, both in terms of content as well as structure, to build another example of the absurdity involved in its assertion. The sentence in question was the following:

(2) 'I believe he left, but he didn't do it' (cf. Russell's "Theory of Descriptions". In Schilpp's *The Philosophy of Bertrand Russell*, 175-6).

2. The Oddity of the Absurdity

According to Moore's own view, the 'absurdities' he identified by means of the examples above were to be generalized to all cases in which we produce an assertion either of the form 'p and I don't believe that p' (as in (1) above), or of the form 'p and I believe that not p' (as in (2) above).

At the same time, Moore also pointed out that the identification of these absurdities cannot fail to strike a critical thinker as being somehow odd.

This oddity manifests itself in the fact that, as soon as we identify the assertions of the forms above as absurd, we are led to ask ourselves the following question: How can the assertion of a meaningful conjunctive sentence, the conjuncts of which may both be true simultaneously on many an occasion, be absurd?

In order to get a clear view on Moore's problem, we need to be able to find a plausible answer to this question; if we are not able to do that, then the oddity Moore detected is probably best seen as a symptom that something is not right with the original intuition of absurdity.

3. The Most Travelled Route

In general, philosophers dealing with Moore's problem followed the route of assuming the intuition of absurdity associated with the actual use of sentences of the form 'p and I believe that not p' or 'p and I do not believe that p' to be legitimate (i.e., they assumed that the actual use of sentences of these forms really instantiates a paradox). They then proceeded from there in order to determine where the contradiction-like aspect of the problem that might justify such a diagnosis lay.

Their standpoints differed only in the different stories they presented in order to account for the emergence of this contradiction-like aspect. These stories admit being divided into two categories: those of a linguistic bent and those of a doxastic bent.

A. THE LINGUISTIC ANALYSIS

4. Moore's Own Way of Travelling the Most Travelled Route

Moore himself believed that the intuition of absurdity revealed the way in which assertion implies belief. His contention was that,

whenever a speaker asserts that p , he also implies both that he believes that p and that he does not believe that not p .

This being the case, producing assertions of the above-mentioned forms would be absurd because what their second conjunct states *explicitly* contradicts what the first conjunct *implies*.

5. What is the Nature of the Implication? Moore's Reply

As a matter of fact, the contradiction Moore claimed to have detected does not follow immediately from the implication he claimed there to obtain between assertion and belief. Besides the implication, some further assumptions need to be made in order for such a contradiction to be effectively derivable.

But, more importantly, to state that an implication exists linking the assertion of p with the belief that p and the absence of the belief that not p is not enough. The *nature* of such an implication must be clarified.

All the more so because, as Moore was the first to point out, such an implication is obviously not a matter of logical entailment. So, on what grounds are we to establish that a speaker who explicitly asserts p implicitly believes p and implicitly does not believe not p ?

Moore's reply was that this implication is to be brought back to an *inductive inference*. According to him, we all learn from experience that, in the vast majority of cases, a man making an assertion believes what he asserts; i.e., lying, although possible, 'is largely exceptional'.

6. What is Wrong With Moore's Reply

Moore's reply does not seem to be a correct analysis of the problem. If it were, the uttering by a speaker of an assertion of

one of the two problematic forms mentioned above would be perceived by his interlocutors as clashing against nothing more than an expectation based on a previously observed empirical regularity.

However, the consequence of the perception of such a clash would probably be a reaction of surprise, followed or not, depending on the strength of the evidence, by a revision of the interlocutors' empirical expectations concerning the frequency of lying; hardly the conviction that they had witnessed the uttering of an absurdity.

Indeed, a genuine absurdity should result from a violation of a conceptual connection and not from a clash between the observation of an unexpected case and previously existing empirically based expectations.

7. The Wittgensteinian Analysis

A more promising account of the nature of the connection between assertion and belief underlying the absurdity Moore detected comes from the Wittgensteinian tradition.

According to Wittgenstein's later philosophy, an important distinction in the deep grammar of ordinary language needs to be made between first-person singular present tense sentences with psychological content and third-person present tense sentences with psychological content. Whereas the latter are *descriptive* of the psychological reality of the person referred to by the personal pronoun, and thus susceptible of being true or false, the former are merely *expressive*; as such, they *vocalize* the psychological reality of the speaker; they don't describe it (cf. [28]). Vocalizations may be genuine or fake, but not true or false.

Thus, according to a number of philosophers belonging to this tradition (cf., e.g., [12], [15], [16]), an assertion of the form 'I believe that p' merely *expresses* the speaker's belief that p; it doesn't *describe* it. The assertion of such a sentence by a speaker is then

nothing but a semantically inert variant of the assertion by him of the sentence ‘p’.

8. The Oddity Explained Away

Under these circumstances, the truth-conditions associated with the assertions of ‘p’ and ‘I believe that p’ would be exactly the same. Both would be about the *world* and not about the speaker’s *psychological life*. They would, namely, be about that segment of the world described by the proposition ‘p’. And both would express (although not with the same force) the speaker’s belief in the truth of the latter.

Therefore, an assertion of the form ‘p and I don’t believe that p’ or of the form ‘p and I believe that not p’ would be the assertion of a plain contradiction; in spite of the surface grammar of the propositions contained in them, both of these assertions would be of the form ‘p and not p’. The intuition of absurdity Moore detected would thus be easily justified as a consequence of the underlying presence of a logical contradiction.

Thus, if the Wittgensteinian doctrine about the meaning of first-person singular present tense psychological sentences is to be accepted, no oddity associated with Moore’s absurdity diagnosis will remain. The oddity will have been explained away.

9. What Happens When the First-Person Pronoun Is Used Referentially?

The main criticism the Wittgensteinian account invites us to make is that it contains an illegitimate generalization. That is, it is indeed true that there are cases in which an assertion of the form ‘I believe that p’ is used in the way the Wittgensteinian says it is; but there are also lots of other cases in which ‘I believe that

p ' is used in order to *refer* to the fact of the speaker's believing in p and not merely to *express* the speaker's belief in p .

Assuming that such cases exist, as they clearly do seem to, how can we account for the absurdity Moore detected when one such sentence is conjoined in an assertion with the sentence 'not p '? Obviously, the Wittgensteinian solution, as it was expressed above, cannot tell us anything of significance about these cases.

10. The Speech-Act Analysis

An alternative both to the Moorean and the Wittgensteinian analyses of the nature of the implication is provided by the speech-act analysis (cf. e.g. [6], [17]). This analysis may be summarized through the following sequence of steps:

(1) It is constitutive of the speech-act of assertion that p that it be accompanied with the intention of providing the audience with information that p through their recognition that that is the speaker's intention. (2) A speaker cannot be recognized by his audience to have the intention to provide them with the information that p , unless he is believed by them to believe that p . That is, a speaker's being believed by his audience to believe that p is *constitutive* of his being recognized by them as having the intention to provide them with the information that p . (3) Therefore, it follows, from (1) and (2), that it is constitutive of the enactment of a speech-act of assertion that p that the speaker strives to provide his audience with information that p by making himself believed by them to believe that p .

In other words, if a speech-act of assertion is performed, the audience should recognize that it is the speaker's intention that they should end up believing both the proposition that it is explicitly asserted by him and the proposition that he believes what he has asserted.

Now, given the analysis presented above concerning the na-

ture of a speech-act of assertion, let's see what happens when the speaker asserts sentences of the form 'p and I don't believe that p' or sentences of the form 'p and I believe that not p'.

11. How Does the Absurdity Come About?

In the case of the assertion of a sentence of the form 'p and I don't believe that p', the propositions that the audience should recognize that it is the speaker's intention that they should believe are: 'p and I don't believe that p' and 'I believe that *p and I don't believe that p*'. Now, if we assume both the truth of the asserted sentence (remember that, by itself, the sentence is consistent) and that the belief in a conjunction entails belief in each conjunct, an overt contradiction is derivable from them, namely, that the speaker believes that p and that he doesn't believe that p.

In the case of the assertion of a sentence of the form 'p and I believe that not p', the propositions that the audience should recognize that it is the speaker's intention that they should believe are: 'p and I believe that not p' and 'I believe that *p and I believe that not p*'. Assuming the truth of the asserted sentence and that the belief in a conjunction entails belief in each conjunct, although no overt contradiction is derivable from these propositions, an ascription to the speaker of two inconsistent beliefs is (namely, that he believes that p and that he believes that not p).

12. The Nature of the Absurdity

In either case, the propositions that the audience should recognize that it is the speaker's intention that they should end up believing have consequences that clash with each other. Thus, an audience guided by rational rules of conversational intercourse will be unable to make sense of the speaker's supposed assertion, given

the fact that they will be unable to elicit from it any consistent intention of the speaker to make himself believed by his audience to believe the content of his own assertion.

This proof of how the inconsistency is produced is actually not the one the above-mentioned authors themselves present. But I think it is the right one. Anyway, and regardless of the details, this is why, according to this analysis, the production of Moore-like assertion-attempts is supposed to be self-defeating.

13. The Nature of the Implication and of its Violation

Now, although the speech-act analysis agrees with the Moorean analysis to the effect that assertion implies belief, it disagrees with it regarding the nature of such an implication.

What the assertion of the problematic sentences violates, according to the speech-act analysis, is thus not an established empirical expectation but rather a set of conditions which are conceptually constitutive of the production of a legitimate speech-act of assertion. The absurdity is then the outcome of the speaker's use of the external indicators of the speech-act of assertion together with his violation of the internal conditions that constitute such an act.

The sentences of the form Moore identified are then deemed by the speech-act analysis to be *unassertable*, not in the sense that they cannot be uttered with an assertive tone of voice (which they obviously can), but in the sense that it is not possible to utter them and simultaneously fulfill the conditions that define the performance of a speech-act of assertion.

B. THE DOXASTIC ANALYSIS

14. Unbelievability

More recently, a number of philosophers put forth the claim that it is misleading to view Moore's problem as having to do solely with linguistic expression (namely, with the violation of the conceptual conditions that are constitutive of the production of a particular kind of speech-act, viz., that of assertion). They feel that this diagnosis does not go deep enough.

They wish to make a stronger claim concerning Moore's problem, namely, the claim that contents of the form 'p and I don't believe that p' or of the form 'p and I believe that not p' are actually *unbelievable*, and not only unassertable (cf. [23], [24], [25], [26], [27]). *A fortiori*, they wish to claim that it is *because* these contents are unbelievable that they are unassertable.

Thus, according to these philosophers, having the contents exemplifying Moore's problem as the objects of a propositional attitude such as belief violates conditions that are constitutive of meaningful *thought*. And this is why a legitimate intuition of absurdity is generated.

15. Logic as a Criterion of Doxastic Admissibility

Their idea is then to replace with inner intrapersonal constraints of doxastic admissibility the interpersonal constraints that regulate, within the speech-act analysis, what is to count as an assertive move within the context of a theory of overt linguistic games.

But this is easier said than done. How are we to discover what these purely inner criteria of doxastic admissibility might be? This is a difficult problem brought about by this idea.

The view all these philosophers share regarding the nature of these intrapersonal constraints of doxastic admissibility is that

they are of a logical nature. In particular, that it is the criterion of logical consistency that should do the job.

16. Inconsistency as a Criterion of Unbelievability

Now, if logical consistency is the criterion in terms of which putative belief contents are to be assessed regarding their believability, then, if it is possible to show that a certain belief content is inconsistent or generates an inconsistency, then it has been shown that such a belief content is actually unbelievable.

Thus, the strategy followed by these authors in order to show that the propositions exemplifying Moore's Problem are unbelievable is the strategy of showing that their admission as putative belief contents violates the criterion of logical consistency.

Contrary to Shoemaker's or Williams's, Sorensen's approach has the merit of not using the following two principles in his proof of the unbelievability of contents exhibiting the forms Moore highlighted: i) If $B(p)$, then $B(B(p))$ (i.e., if the agent believes that p , then he believes that he believes that p); and ii) If $B(B(p))$, then $B(p)$ (i.e., if the agent believes that he believes that p , then he believes that p). I deem this aspect to be a merit of Sorensen's approach, because I take these principles to be highly contentious. They assume, namely, that belief is self-intimating. But this assumption seems to me to be plainly false. Thus, I think that Sorensen's views on this subject are those which best represent the standpoint I am now addressing.

Let us see then how his deductive strategy is supposed to work.

17. Proof of Inconsistency

Let us consider first the case of my considering whether or not to accept a content of the form 'p and I don't believe that p' as the

content of a putative belief of mine. If we assume both the truth of the proposition that defines this content, and the basic principle of doxastic logic according to which belief in a conjunction entails belief in each conjunct, then an overt contradiction is derivable from my putative belief in this true proposition, namely, that the proposition ‘I believe that p and I don’t believe that p ’ is true.

Let us consider next the case of my considering whether or not to accept a content of the form ‘ p and I believe that not p ’ as the content of a putative belief of mine. Again, if we assume both the truth of the proposition that defines this content and the basic principle of doxastic logic according to which belief in a conjunction entails belief in each conjunct, then, although no overt contradiction is derivable from my putative belief in this content, the holding by me of two strongly inconsistent beliefs is (namely, the holding by me of the belief that p and the holding by me of the belief that not p).

18. Blindspots for Belief

Thus, in either case, if I am a rational and deductively competent believer, I will not accept holding belief contents as these.

As a matter of fact, if we assume logical consistency to be a criterion of belief admissibility, the conclusion to be drawn from the analysis displayed above must actually be stronger than the one that is expressed by the formulation contained in the previous paragraph. In fact, the conclusion must be that such contents are actually *unbelievable*, regardless of my idiosyncrasies as a believer.

Note that we need to assume the truth of the propositions defining Moore’s examples in order to derive their unbelievability. According to Sorensen, this fact reveals that they mark out a particular type of propositions, namely, those he calls ‘blindspots’ for belief. Still according to him, Moore’s main philosophical merit was twofold: the discovery that there are blindspots for belief and

the discovery of what they are (cf. [24]).

Moreover, the existence of such blindspots for belief is supposed to be a proof that the domain of the believable is only a proper subset of the domain of the true, and, therefore, that truth cannot be defined in terms of belief.

19. How About the Non-Obvious Cases?

But can logical consistency really be the standard by means of which we assess believability?

Bear in mind that a belief in a content of one of the forms Moore identified as problematic is not a contradictory belief *per se*. It is rather a belief from which either a contradiction or a strong inconsistency is *derivable*.

However, the contents of the forms Moore identified are not alone in being of this kind. For instance, there are contents from the belief in which a belief in a content of the forms Moore identified is derivable. Are those contents also unbelievable?

Consider the following two examples of such contents:

(1) The lottery paradox. The man who refuses to gamble believes of each lottery ticket that it is not a winner; however, he is aware that one of them will be a winner. Thus, he can be represented to believe a content that entails the content L such that $L = \text{'W(1) or W(2) or ... W(n) and I believe that not W(1) and not W(2) and ...not W(n)'}.$ L is, of course, of the form 'p and I believe that not p'.

(2) Sorensen's own atheism example. A more or less convoluted story can be concocted according to which it makes sense to imagine someone ending up believing the following content: 'The atheism of my mother's nieceless brother's only nephew angers God'. But belief in this content implies belief in the content 'My atheism angers God' which, in turn, implies 'God exists and I do not believe that God exists', which, of course, is of the form 'p and

I do not believe that p' (cf. [24])

20. How Many Unbelievable Contents Are There Actually?

Now, I claim that although it may be epistemically wrong to believe in the truth of the contents above (as it certainly is), it is highly implausible to claim of them that they are unbelievable.

In order to strengthen my case, I ask you now to consider the case of other contents not related to Moore's propositional forms but that are also generators of inconsistencies.

As a classical example of one such case, consider the propositional content defining Axiom V of Frege's *Grundgesetze der Arithmetik*. As Russell showed in 1902, this axiom generates a contradiction. But are we supposed to infer from Russell's proof that the Axiom V is actually unbelievable and that, therefore, between the 1880s and 1902, Frege was actually mistaken concerning his belief in the truth of Axiom V? I.e., that he only believed he believed in Axiom V but that, in reality, he didn't (because he couldn't)? This does not sound right.

21. Deductive Distance

A possible way out of this conundrum might be to try to define a metric of deductive closeness and to identify within it a point separating small from large deductive distances. Thus, if a contradiction were deducible within a small deductive distance from a putative belief content, such a content would be unbelievable; if it took a long deductive distance to infer a contradiction from such a content, then it would be believable, despite the inconsistency it would lead to. This way we might get the means to distinguish in a rigorous way between acceptable and unacceptable forms of

inconsistency.

The expectation would then be that the contents having the forms Moore highlighted would, according to this criterion, fall within the side of the barrier containing the unacceptable forms of inconsistency.

However, the very idea that there could be an absolute metric of deductive distance seems not to make much sense (cf.[7]).

22. Sorensen's Way Out

The idea of using logical consistency as a criterion of *empirical* belief ascription seems thus not to be very promising. Aware of this problem, Sorensen retreats to a normative standpoint according to which it is up to the rational observer to criticize the belief claims of the speaker. Such criticism is, in turn, to be developed in light of the desiderata of belief formation.

Sorensen's view in this regard is that *avoiding error* is the primary of these desiderata. And the structural constraint the fulfilment of which best serves it is logical consistency. This is therefore the criterion the following of which entitles us to criticize those who claim believing in contents from which inconsistencies are derivable and to urge them to revise their belief claims in order to eliminate the inconsistencies and preserve the consistency of their belief sets.

However, avoiding error and getting truth are not exactly congruent desiderata. This explains the existence of 'blindspots' for belief, i.e., true contents, the belief in which generates inconsistencies. The having of beliefs with these contents would violate the structural constraint put in place by the need to follow the primary desideratum of avoiding error. Therefore, such true contents cannot constitute any of our belief contents.

23. Actual Desiderata of Belief Formation

But is it indeed sensible to imagine that the cognitive architecture of complex creatures should be best served by a mechanism of belief formation that strives first and foremost to avoid error?

I believe it is highly doubtful that this is so. Let me introduce what I take to be two counterexamples to this thesis.

Counterexample (1) is provided by the fact that living creatures in general (and not only humans) are prone to err on the side of caution. Arguably, this makes evolutionary sense. The following of rigorous processes of belief formation primarily aimed at avoiding error would, in many circumstances, simply be too costly and time-consuming. Presumably, for a whole range of creatures having to live, act and react quickly in the real world, the following of such a cognitive strategy would frequently be suicidal.

24. Usefulness and Truth

Counterexample (2) is more parochial. It is provided by psychological research on belief in the hot hand in sports (cf. [4]). Burns found out that belief in the hot hand is widespread among basketball players. He also found out that having this belief leads playmakers to pass the ball to a player with a higher scoring average in the game relative to his average performance and thus increases the chances of his team winning. The having of such belief seems thus to lead to the adoption of an adaptive behavioral strategy (cf. [5]).

But ‘hot hand’ is defined as the higher probability in sports to score again after two or more hits compared with two or three misses; now, given the fact that each throw of the ball is actually independent of any other, belief in the hot hand is belief in a fallacy. The hot hand is, basically, an inverted version of the famous gambler’s fallacy.

Thus, counterexample (1) pointed out circumstances in which following the cognitive strategy of avoiding error is presumably detrimental to the belief holder. And counterexample (2) above presented circumstances in which not following the cognitive strategy of avoiding error seems to be beneficial to the belief holders and the group to which they belong.

Taken together, counterexamples (1) and (2) suggest that the question of how useful a belief is in achieving some desirable goal should not be confused with the question of what its truth value is.

25. Cognitive Processes Ought to be Judged by Adaptive Criteria

In reality, we simply don't know what are the general structural constraints for belief formation set by our cognitive architecture. This fact notwithstanding, counterexamples (1) and (2), and countless others in the literature (cf., e.g., [14]) lead us to conclude that a structural constraint aimed primarily at avoiding error is not, both empirically as well as normatively, a serious contender for the job of determining belief admissibility. Cognitive processes, such as belief generation, ought to be judged by *adaptive criteria*. And adaptability is connected to the success of the actions beliefs do trigger in relevant contexts.

In fact, and *for good reasons* (namely, computational ones), it is likely that, for creatures similar to us, most processes of belief formation are of a fast, frugal and dirty nature and are responsive to localized structural constraints only (cf. [10]). As a consequence, inconsistencies are to be expected to emerge within the belief system taken as a whole.

This being the case, it seems to be a bad move in cognitive thinking to assume, as Sorensen does, that the mechanism of belief formation of an autonomous living system should ideally obey first

and foremost the structural constraint of avoiding error, even if this is not the way things appear to have empirically evolved.

26. Conclusion

The linguistic diagnosis of the Moorean absurdity is based on a plausible analysis of the conversational constraints underlying the rules that define an interpersonal linguistic game of information transfer and persuasion. Within such a game, a move displaying a Moorean content seems indeed to be defying the rules that constitute it.

The doxastic diagnosis, however, does not seem to be able to pin down a plausible constraint in terms of which belief in referential contents of the forms Moore identified could actually be criticized as violating some constitutive condition of meaningful *thought*. Thus, I see no reason why such contents ought to be labelled as ‘unbelievable’.

Finally, I would like to conclude by saying that, *as far as we now know*, and despite their potential for generating inconsistency, we cannot rule out on purely *a priori* grounds the possibility that true referential beliefs of the form ‘p and I believe that not p’ or ‘p and I don’t believe that p’ may actually be usefully believed in a number of contexts.

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