

# What is Paradoxical in the Paradox of Question?

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## Abstract

In this essay I argue for the claim that what is paradoxical in the paradox of the question is Sider's Paradox. The essay begins with presenting the original paradox of the question, which is also called Markosian's Paradox. Then, I shall illustrate how Ted Sider showed that Markosian's Paradox is ill-formulated, followed by presenting what Sider viewed as the true paradox of the question, i.e. Sider's paradox. Finally, I will evaluate two attempts to solve Sider's Paradox, one targeted on its assumption that there exist some best questions to ask and the other based on the claim that every question can be answered in a truthful but unhelpful way, and argue that they fail to solve Sider's Paradox.



## 1. Markosian's Paradox

In the paper *The Paradox of the Question*, Ned Markosian told the following story: during an international conference of leading philosophers, an angel miraculously appeared. The angel claimed to be the messenger from God and granted philosophers with an opportunity to ask one question and he would then answer it truthfully. Philosophers immediately started discussing what they should ask – they wanted to ask the best question to ask. Finally they agreed on the proposal from one young logician:

(Q1)<sup>1</sup>: What is the ordered pair whose first member is the question that would be the best one for us to ask you, and whose second member is the answer to that question?  
(Markosian, 1997)

This indeed seems to be a very good question, for, by asking (Q1), we can ask the best question indirectly and receive its answer, without violating the angel's rule to ask only one question. So, when the angel appeared again, philosophers presented (Q1) to the angel. The angel replied:

(A1) It is the ordered pair whose first member is the question you just asked me, and whose second member is this answer I am giving you (Ibid., 96).

Then the angel disappeared, leaving philosophers in frustration. The philosophers asked a seemingly very good question but received an answer which is totally useless. Markosian asked: What went wrong? This is the original paradox of the question. I shall call it Markosian's paradox, following Wasserman and Whitcomb's terms of use (Wasserman & Whitcomb, 2011).

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<sup>1</sup> In this essay, I use (Qx) to denote questions and (Ax) to denote answers. This question is originally denoted by (Q4) in Markosian's paper, but I reorder the numerals in my essay.

## 2. Sider's Paradox

However, Markosian's Paradox was shown to be ill-formulated by Theodore Sider (Sider, 1997). Sider showed that the angel is a cheater – on the one hand, (A1) is not a correct answer to (Q1). Because if it is, then (Q1) is indeed the best question to ask. And, as (A1) does not provide any useful information, (Q1) is a question whose answer is useless. A question with useless answer can hardly be regarded as a good question. Then we arrive at a contradiction. Hence (A1) can not a correct answer to (Q1) – the angel did not answer the philosophers truthfully. On the other hand, (Q1) is not the best question to ask. For if it is, the answer to (Q1), whatever it may be, must take the form

$$X = ((Q1), X)^2$$

which is a useless answer. Hence (Q1) cannot be the best question. Thus, the philosophers in the conference have taken up the wrong belief that (Q1) is the best question to ask due to lack of the above reasoning. And they rely on the imposter angel to give them an answer. As a result, they end up with Markosian's Paradox. Therefore, Markosian's Paradox is not truly a paradox – the scenario is not properly-designed, for in fact the angel does not tell the truth at all and the philosophers have not actually come up with the best question to ask. In other words, the Markosian's Paradox is ill-formulated, and we were led to the paradoxical situation because of our lack of crucial reasoning which can reveal the ill design of the situation.

For the answer given by the angel is wrong, what would the true answer to (Q1) be like? Let's denote the best question, which is shown to be different from (Q1), by Q. Let's also denote the answer to Q by Y. A truth-telling angel's reply to (Q1) will be in the form

$$(A2): X = (Q, Y)$$

For example, Q may denote the question that what is the solution to the problem of world hunger and Y in turn denotes the solution to world hunger. However, Sider argues that (A2) generates further paradox. Since the answer (A2) to (Q1) contains the both information that Q is the best question to ask and the information in Y, which is more than the information that Y

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<sup>2</sup> Consider X as a variable representing answers.

contains, asking (Q1) is better than asking Q. Further, as Q is the best question by stipulation, (Q1) cannot be a better question than Q, so (Q1) must be as good as Q. This means that there does not exist the unique best question to ask. Instead, there are some best questions to ask, which Q and (Q1) are two of. Hence, we should replace (Q1) which asks for the best question to ask and its answer by

(Q2): What is the ordered pair whose first member is one of the best questions to ask, and whose second member is the answer to that question?

Let's consider whether (Q2) is one of the best questions to ask. Suppose it is, then one of the possible answers to (Q2), denote this answer by Z, takes the form  $Z = ((Q2), Z)$ , which is a useless answer, therefore (Q2) cannot be a good question, let alone one of the best questions. We arrive at a contradiction. Suppose (Q2) is not one of the best questions to ask, then the answer to (Q2) will take the form of  $(Q^*, Y)$  where  $Q^*$  is different from (Q2). By the same reasoning as above, (Q2) must be as good as  $Q^*$ , then (Q2) is indeed one of the best questions, which leads us again to a contradiction. (Q2) must either be or not be one of the best questions to ask, but both cases end with a contradiction. Sider claimed that now we are confronted with the genuine paradox of the question. I shall call this paradox Sider's paradox.

### 3. Two Attempts to Solve Sider's Paradox

In this section I will evaluate two attempts to solve Sider's paradoxes. The first solution questions the existence of best questions to ask and the second solution suggests that every question can be answered in a useless way.

#### 3.1 There are no best questions to ask?

A closer look at Sider's paradox should reveal us an important assumption Sider presupposes in his paradox: that there are some best questions to ask. One could raise an objection to this assumption that there may not exist the best questions – it may be the case that for any question, there is a better question to ask – and hence solve the paradox. Sider has considered this

objection and responds that we can come up with another scenario where the angel requires philosophers to ask only one question which can be stated in English within 15 seconds. In this scenario there are only finitely many possible questions eligible, the objection does not hold anymore but the paradox still endures (Sider, 1997).

A more radical further objection can be raised against this assumption that Sider presupposes is that questions are not comparable with respect to goodness. Let's denote the relation that  $x$  is a better question than  $y$  by  $xRy$ . It is worth noting that for the assumption to hold it is sufficient for the relation  $R$  to be a partial order on the set of questions which can be stated in English within 15 seconds. That means, we do not require the best questions to be better than any questions else, we just require that no questions are better than any one of best questions. Using these notations, this radical further objection argues that for any two questions, they are incomparable with respect to the relation  $R$ . Namely, we are not able to claim one is better than the other. This radical objection is motivated by the fact that people cannot always arrive at an all-agreed answer to a question on whether question  $A$  is better than question  $B$ , which is originated by that there lacks a definition for the notion of one question being better than another. So, it is conceivable that there may not exist such a relation of one question being better than another.

Nevertheless, the problem of lacking a precise definition of the notion is not as fatal as the objectors think. The relation of one question being better than another is a vague predicate, as predicates 'observable' and 'moral', which we may not be able to give a clear definition but are totally entitled to use, as long as there are clear cases and counter-cases (van Fraassen 1980, 16). For example, it would be ridiculous to say that we should doubt whether any two actions are morally comparable for there is no definition for being moral. And we are fully entitled to use the notion of being moral in any reasoning because we know some clear cases and counter-cases of being moral. The same applies to our notion of one question being better than another – we should not hasten to reject the notion based on its lack of definition, for there are cases which we clearly know that one question is better than another.

Consider the following two questions:

(Q3): What is the solution to the problem of world hunger?

(Q4): What is the ordered pair whose first member is the solution to the problem of world hunger and second member is the solution to the climate change?

(Q4) is a better question than (Q3) as its answer provides with one more piece of information. Some people may be still unsatisfied with the above example and further argue that the reason why we prefer (Q4) to (Q3) assumes that there are answers to (Q3) and (Q4) which may not be the case. To avoid this unsatisfaction, we can replace the question of world hunger and the climate change by some other questions for which clearly there exists at least one answer, for example, the first question of 2019 real analysis exam at LSE.

### 3.2 Every question can be answered in an unhelpful way?

Wasserman and Whitcomb propose another attempt to solve Sider's paradox from a different angle (Wasserman Whitcomb, 2011). They claim that every question can be truthfully answered in unhelpful ways. For example, suppose we ask the angel:

(Q5): Who is the author of Huckleberry Finn? The angel can respond truthfully with the answer:

(A3): My favorite author.

If the angel's favorite author is Mark Twain. Or

(A4): A

If he introduces 'A' as proper name for Mark Twain. Or

(A5): The author of Huckleberry Finn.

(A3) - (A5) do not provide us with useful information we want – they are useless answers. Nevertheless, Wasserman and Whitcomb argue that they are all true answers. Following their lines of thought, Sider's first horn of his paradox that (Q5) cannot be one of the best questions

to ask due to its risk to have useless answer does not hold, as every question runs the risk to have useless answer (Wasserman Whitcomb, 2011).

In my opinion, Wasserman and Whitcomb's claim that every question can be truthfully answered in unhelpful ways is not cogent. For one thing, (A3) and (A4) are not truthful answers unless they are accompanied with the assumptions that the angel's favorite author is Mark Twain and that 'A1' is a proper name for Mark Twain. And when we extend (A3) and (A4) to include their assumptions, they are no longer useless answers. Thus, (A3) and (A4) are truthful answers to (Q3) only when they are not useless.

For another, (A5) can hardly be regarded as an answer to (Q5). (A5) is essentially a tautology stating that the author of Huckleberry Finn is the author of Huckleberry Finn. There are other tautological answers such as that

(A6): The answer of the question you asked is the answer of the question you asked.

Nevertheless, when a question is asked, it can hardly be the case that the inquirer will accept such a tautology as an answer. I believe most people will respond to such answers saying: "you didn't answer my question!" Tautological answers do not provide any information to the inquirers. Wasserman and Whitcomb go on to insist that not every question is asked to gain information, for example, teachers ask students question to test their understanding while they already know the answers. However, I believe that answers like (A5) and (A6) are more "dangerous" than not providing new information to the inquirer and thus they cannot be accepted as legitimate answers in general<sup>3</sup>. If (A5) is a legitimate answer to (Q5), then there is no reason to resist the claim that (A6) is a legitimate answer to all questions, which implies any question can be answered by any one person truthfully. This is a counter-intuitive, if not ridiculous, claim. It is impossible for one person to be able to answer all questions truthfully – after all, one cannot know everything. One may further object that knowing the answer is not

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<sup>3</sup> Though they could be legitimate answers to questions like "what is an example of a tautological proposition", the discussion in the essay is focus on more general questions which *should* be answered non-tautologically.

necessarily required for truthfully answering a question, for one could accidentally answer a question truthfully by guessing. But accidentally answering a question truthfully is different from our situation here. As in our case, the statement that one can answer all questions truthfully is a tautological truth given our definition of answers which embraces (A5) and (A6). While it is possible that one can in principle answer all the questions truthfully, in an accidental way, the probability of its happening is so low that it is negligible. Even if we leave the above argument aside, the implication that one is able to answer all questions truthfully is by itself ridiculous and far more paradoxical than Sider's paradox! Therefore Wasserman and Whitcomb's solution is not successful.

#### 4. Conclusion

In conclusion, the original paradox of question, i.e. Markosian's Paradox is ill-formulated, and the real paradoxical situation embedded is Sider's Paradox. Moreover, two suggested solutions to Sider's Paradox, one rejects that there exist some best questions to ask and the other claims that every question can be answered in a truthful but unhelpful way, are not successful.

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