

On the Paradox of the Question

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Ned Markosian [in this issue of *Analysis*] tells a story in which philosophers have an opportunity to ask an angel a single question. In order to circumvent their ignorance of what question would be most beneficial to have answered, they hit upon:

Q4: what's the ordered pair $\langle x, y \rangle$, where x = the best question to ask, and y = the answer to that question?

(I will understand the goodness of a question to be measured by how much the human race would benefit from having it answered. Note that it's unclear why Q4 should count as just one question, given that in Markosian's story, 'what is the best question to ask, and what is its answer?' didn't count as just one question. But no need to settle this matter of question counting; we can restate the puzzle: let the philosophers be granted 15 seconds in which to ask questions (in English).)

In response to Q4, the angel answers: 'it is the ordered pair consisting of the question you just asked, and the answer I am now giving' -- that is,

A4: the ordered pair $\langle Q4, A4 \rangle$

But A4 is obviously useless; the puzzle is, as Markosian puts it, to determine what went wrong in the philosophers' quest to learn something beneficial.

We should begin the diagnosis by noting that the 'angel' is an imposter, for he gave the

wrong answer to the philosophers' question! Suppose otherwise -- suppose A4 is the right answer to Q4. Then Q4 is in fact the best question to have asked, and A4 is the answer to that question. But that means that Q4 wasn't the best question to have asked after all. Learning that A4 is the answer to Q4 is useless; the philosophers would have been better off asking about the best way to change a car's oil.

Note what this does, and doesn't, establish. It does establish that A4 isn't the right answer to Q4; it doesn't establish that Q4 wasn't the best question to ask. For Q4 asks for an ordered pair; a mistaken answer to Q4 will be an ordered pair, at least one of whose members is mistaken. So one of A4's members is mistaken. The first member of A4 says that Q4 is the best question; the second says that A4 is the answer to Q4. One of these is mistaken. We've already seen that the second is mistaken. But we cannot yet conclude that the first is mistaken as well.

We can, however, go on to argue that Q4 isn't the best question. Suppose otherwise. Then it must have an answer (a question without an answer would be a very poor choice for the philosophers to ask -- better to ask about changing oil). Call that answer X. X must be an ordered pair consisting of Q4 and Q4's answer. That is, $X = \langle Q4, X \rangle$. Some would argue that there can be no such X, on the grounds that X contains itself as a member.¹ Maybe this would be rash, since there are consistent set theories that allow such things. Anyway, we needn't settle this question, for we can continue the argument as follows: if X is the answer to Q4, then since X is useless as an answer, Q4 couldn't be the best question. Our reductio assumption is thus contradicted.

¹ More carefully, given the familiar reductions of ordered pairs to sets, X will contain itself in its transitive closure.

This is not to say that the philosophers made an awful blunder by asking Q4. True, Q4 isn't the very best question they could have asked. (And what's more, they could have known this, by duplicating the reasoning in the previous paragraph.) But we can't be too hard on them for not coming up with a perfect question. Coming up with and agreeing on the very best question to ask would surely have been an unprecedented philosophical triumph.

It may be objected that, in light of the catastrophe with the angel, Q4 was worse than non-perfect: it was nearly the worst question to ask. But this wouldn't follow from what has been said. The fault, as I've said, in part lies with the 'angel', for he gave the wrong answer to the question. For all we've said, Q4 may have been a perfectly reasonable question to ask. The argument that Q4 had an 'unfounded' answer of the form:

X: <Q4,X>

depended on the assumption that Q4 was the best question to ask. When that assumption is dropped, the answer to Q4 may very well be perfectly informative. It will have the form

X: <Q,Y>

where Q is the best question, and Y is its answer. Since X and Y are answers to different questions (Q4 and Q, respectively), they may very well be distinct, and hence X may very well be useful.

But there is a further challenge to the wisdom of the philosophers, according to which Q4 was quite a foolish question to ask. The argument that Q4 might have a useful answer depended on the assumption that Q4 is not the best question, for in that case the answer to Q4 might look

something like this:

<'What is the solution to the problem of world hunger?',Y>

But how could 'What is the solution to the problem of world hunger?' be a better question than Q4, given that the answer of each gives the solution to world hunger? If anything, Q4 seems a better question than 'What is the solution to the problem of world hunger?', because in learning its answer we learn, not only the solution to the problem of world hunger, but also something additional: that it would have been best to ask about world hunger.

Here, in more careful form, is the argument that Q4 is quite a bad question to have asked. Suppose otherwise -- suppose that Q4 is a somewhat reasonable question to have asked. Then it must have an answer, for any question that has no answer would be completely useless to ask. Then there must be such a thing as *the* (one and only) best question, for that question would be the first member of the ordered pair that is Q4's answer. Call it Q. Because of the reasoning in the previous paragraph, it seems that Q4 is at least as good a question as Q. So Q isn't *the* best question after all; at best, it is *a* best question -- one of the questions such that there are no better questions.

This suggests that the philosophers might have better modified Q4 along the following lines:

Q5: What is an ordered pair consisting of one of the best questions we could ask and one of its answers?

This sort of question does not have a unique answer, but rather has many answers; since some of

its answers may be hoped to be useful ordered pairs of questions and their answers, Q5 might seem to be a reasonably good question for the philosophers to have asked.

A curious fact about Q5, however, is that it generates a paradox, which for me is the real paradox of the question, and a paradox that I do not know how to resolve. Whether this is simply a variant of one of the more familiar semantic paradoxes, I do not know. Either Q5 is, or it is not, one of the best questions; but either supposition leads to contradiction. Suppose first that Q5 is one of the best questions. It cannot be the only best question, because then its only answer would be a useless, unfounded ordered pair of the form:

X: <Q5,X>

So it must be tied with other, presumably 'first order' questions, such as 'What is the solution to the problem of world hunger?'. (If all the best questions were like Q5, then all their answers would be useless.) But now the problem is that there seems to be a danger in asking Q5: one of Q5's possible answers is a useless, unfounded ordered pair. Since first order questions lack this trouble, Q5 would seem, after all, not to be one of the best questions. So let us consider the other supposition, that Q5 is not one of the best questions. Then there is no such danger: the first member of an answer to Q5 must be one of the best questions and thus could no longer be Q5, and thus there's no danger that an answer to Q5 would be unfounded. But with this danger removed, it's hard to see why Q5 wouldn't be one of the best questions. An answer to Q5 would presumably give us an answer to one of the first order best questions, and thus it's hard to see how Q5 would be inferior to that first order question.

That, then, is the paradox of the question: Q5 cannot be consistently supposed to be one

of the best questions to ask, but neither can it be supposed to not be one of the best questions. It is no solution to reject the possibility of the angel, for the angel's existence is not required to generate the paradox: in our present, angel-less state, we simply need to consider the value of having various questions answered. One could reject the notion that there are any such things as best questions: perhaps for every question there is a better. But it is hard to believe that we could be forced to accept such a conclusion by *a priori* means. Moreover, if we restate the paradox as I suggested above, so that the angel gives a fixed time period for the question, then there will only be finitely many questions stateable by humans in English.

What should we do if we are ever confronted by such an angel? One is tempted to simply avoid the paradoxical question Q5. This reaction seems irrational since the paradox is generated simply by the question's existence, and not by its being asked. Nevertheless, if I were among the philosophers in the story, I would have suggested something like this:

Q6: What is the true proposition (or one of the true propositions) that would be most beneficial for us to be told?

In the original story, the philosophers hesitated to ask:

Q3: What is the answer to the question that would be the best question for us to ask?

because Q3 might have an answer like 'seven' that would mean nothing to them. Q6 has no such danger, since any proposition not containing enough information to make its import clear wouldn't be one of the true propositions that would be most beneficial for us to be told.²

² To make Q6 foolproof, it should probably be worded to avoid its answer being given in useless form, say as 'the proposition that would be most beneficial for you to know' or 'the

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proposition that I'm now thinking of'. Perhaps some 'canonical name' of the proposition should be requested. This difficulty is not particular to Q6; the question 'What is the solution to the problem of world hunger?' might be perversely answered 'the solution to the problem of world hunger'. I would like to thank Ned Markosian, Earl Conee, and especially Rich Feldman for their comments on this note.