On Why Philosophers Can Never Run Out of Questions for Angels

In Markosian (Markosian 1997), a paradox is presented. An angel appears at a conference of philosophers and offers to answer only one question truthfully. After careful consideration the philosophers ask Q4[1]:

Q4 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?

The angel responds with A4:

A4 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.

[1]I follow the numbering of other's cited works throughout, and they mostly follow (Markosian 1997).

This is puzzling: Q4 seemed like an excellent question, but produces a useless answer. The paradox is that Q4 appears to be at once the best question to ask, and *not* the best question.

Assume that it is the best question: then there is no question better than it. Assuming that questions are to be evaluated by how informative (or otherwise valuable) their answers are, Q4 surely can't be the best if its answer is A4. So Q4 cannot be the best question.

Assume that Q4 is not the best question: then there must be a question (call it Q4+) which is better than Q4 and will figure in the answer A4. Asking Q4+ will produce the answer A4+, whereas asking Q4 will produce <Q4+,A4+>. The latter is more informative than the former: on top of the answer A4+, it tells us what question Q4+ is *and* that it is the best question to ask. Other things being equal, more informative questions are presumably better than less informative ones (call this the *Principle of Informativeness*). So asking Q4 is better after all than asking Q4+ because it is more informative. Q4 will be better than any question Q4+, so Q4 now appears to be the best question.

In (Sider 1997), Sider solves the paradox: the presumption that there is a best question has produced a contradiction (that Q4 is and is not the best question), so by *reductio* there is no best question. Instead of Q4, Sider suggests Q5:

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

Though it avoids the original problem, this produces the 'real paradox of the question', (structurally similar to the original) that Q5 appears to be at once one of the best questions to ask, and *not* one of the best.

Assume that Q5 is one of the best questions. Q5 could be answered with A5:

A5 <Q5,A5>

This answer is as uninformative as A4 was. Some questions—including first order questions—will only have possible answers better than A5, so must be better than Q5. First order questions are not about other questions, but about ordinary matters like world hunger, so any first order question must tell us something more informative than A5. So Q5 can't be one of the best questions. (Sider 1997: 4)

Assume that Q5 is not one of the best questions: then there must be a question (call it Q5+) which is better than Q5 and will figure in the answer A5. Asking Q5+ will produce the answer A5+. Now that it is not one of the best questions, asking Q5 will produce <Q5+,A5+>. The latter is more informative than the former: on top of the answer A5+, it tells us what Q5+ is *and* that it is the one of the best questions to ask. Asking Q5+ *just* tells us A5+. Then by informativeness, Q5 must be better than Q5+ (which is one of the best questions), so Q5 must be one of the best questions.

This is Sider's 'real 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'.

This paradox no longer supposes that there is *a* best question but is does assume that there are *some* best questions. So in keeping with the solution to the first paradox, we could solve the real paradox by denying that there any best questions. Wasserman and Whitcomb mention briefly that they support this but do not elaborate. (Wasserman and Whitcomb 2011: 151) Sider writes 'it is hard to believe that we could be forced to accept such a conclusion by a priori means'. (Sider 1997: 4)

Instead, Wasserman and Whitcombe offer a different solution, denying that Q5 is problematic and thus rejecting the first horn of the dilemma.

They argue that the 'danger' with asking Q5 is not unique to it, but shared by all (or many) questions. Though the angel could give a useless answer to Q5 (like A5), it could just as well give a useless answer to 'Who is the author of Huckleberry Finn?' (like 'the author or Huckelberry Finn' or 'my favourite author') or any other question. Call the potential for such a useless answer the *problem of pedantry* because these answers would be pedantic in normal conversation. If all questions suffer from this problem then although Q5 does, it might be no worse than than them and still be one of the best questions.

In so far as all questions can be answered in an unhelpful way, clearly Q5 is comparable with many other questions. After all, 'my favourite author' and A5 *are* both unhelpful answers. But Wasserman and Whitcomb's argument requires more: that the disadvantage of asking a first order question (derived from its problem of pedantry) be equal to that of asking Q5.

Only if this is true would Q5 be no worse than a first order question.

The problem with Q5 is that one of its potential answers is <Q5,A5>. Call this the *problem of self-answering* because here Q5 figures in it's own answer.

So Wasserman and Whitcomb's solution requires that the case of the problem of self answering in Q5 is no worse than a case of the problem of pedantry in a first order question. (Wasserman and Whitcomb even seem to suggest that the problem of self-answering may just be a certain case of problem of pedantry.)

This is not so. Q5* could be answered unhelpfully (and so suffers from the problem of pedantry), but cannot receive an answer which includes itself (and *does not* suffer from the problem self-answering)

Q5* What is an ordered pair consisting of one of the best questions we could ask, (apart from this one and Q5) and one of its answers?

Q5* shows that the two problems (or two instances of the same problem) can come apart. If the two problems are distinct, then Q5 has at least one problem which most questions do not. Even if the problem of self-answering is a special case of the problem of pedantry Q5* at least shows that Q5 has two different instances of the problem.

Either way the risk of asking Q5 is greater than that of asking a first order question, so Q5 cannot be one of the best questions and Wasserman and Whitcomb's solution is unsuccessful.

The other natural solution is to follow the same reasoning as with the original paradox and deny that there are any best questions. If the assumption that there is a group of best questions produces a paradox, then by *reductio* reject the assumption. The reasoning is clear but the conclusion seems very counter-intuitive.

I think that although the reasoning above shows us that in the strictest sense there are no best questions, our intuitions can still be accommodated.

A working definition of best: in the argument presented above, a question is precluded from being the best (or among the best) if another question is better than it. So for some question Q to be one of the best questions just is for there to be no better questions than Q. Notice that this allows for a group of best questions, if they are all of equal value, and there are no other questions of greater value.

This does not accurately reflect our actualy use of the concept <best>.

Hence, that there are no best questions just is that for every question there is at least one better question. Thus there is an infinite series of progressively better questions.

Whatever value is used to measure one question against another, I think it is very likely that it will have an upper limit for humans. Take benefit (where Q is better than Q' iff asking Q produces more benefit) Human lives—and eventually human history—are finite, as are the means and resources for improving them and the information (and questions for that information) which informs these means. Although any one question might be more beneficial than another, the questions can't just go on becoming more and more beneficial forever: there is only so much that could possibly be done to benefit humanity. The same stands for any other value used to compare questions.

Since there are an infinite number of questions, the difference in value between one question and the next must decrease as the questions become more and more valuable.

For each actual question in the series, there will an infinite number of questions with greater values than it (further on in the series), which take up the 'space' between the question and the maximum value. With each subsequent question the 'space' becomes smaller by some difference in values d (the difference between the value of one question and the next). But only a finite multiple of d (and thus a finite number of further questions) can be added on top of any value without hitting the maximum. No question *can* have the maximum value, because such a question would be truly the best. So to accommodate more questions d will have to decrease as the number of questions increases (as the available 'space' for questions decreases). There are infinite questions, so d will have to decrease infinitely. So as the series continues through better and better questions, the difference between the questions must decrease.

There must be a group of questions so close to the maximum and to each other (as d decreases to be negligibly small) that the difference is immaterial for a human actually asking a question of the angel. The precision of human perception of qualities like benefit and informativeness is limited (even if it is very fine in some individuals), and eventually the difference d will become so small that it is not noticed. Although the questions above this point do keep on getting better and better, the actual outcomes of asking them are all so close to being on a par that for a human they may as well all be the best.

These questions are the best in two senses. They are the *best*, in that for a normal person they are indistinguishable from questions which provide the maximum possible value. *They* are the best in that there will be many such questions (indeed, an infinite series of them), so the solution to the original paradox remains intact.

This notion of best is actually much closer to the notion we employ in everyday use in sentences like 'she is one of the best in her class'. (and I believe, closer to the intended sense in Sider's Q5) Imagine a runner who places in the top ten in their race in every olympic games from their first entry until their retirement, but never comes first. Over their whole career there will always be at least one person better than them, so they are not *the best* in the strict sense above. But we would not hesitate to call them *one of the best* runners (at least, one of the best *living* runners). This is the notion of best that we most often employ, and it very similar to my solution to the paradox: though the runner is never strictly *the* best, they are still so good that for you or me they may as well be. We express this with phrases like 'one of the best'. The same is true of the questions.

This model answers the real paradox of the question by denying one of its premises. However, it also does justice to our intuitions that some questions are better than others, and that there is a question (or group of questions) we *should* ask the angel. Moreover, there is an infinite group of these 'best' questions, so should the angel ever return, we shall not have to start our search for the next best question all over again. Our next question may even be better.

Bibliography

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