

Open thinking, closed questioning: Two kinds of open and closed question¹

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Abstract

In this paper, I identify a confusion that follows from how open and closed questions are ordinarily understood. I draw a distinction between two kinds of open and closed question: 'grammatical' open and closed questions and 'conceptual' open and closed questions. I claim that this distinction resolves a confusion identified in the first part of this paper and I reply to anticipated, possible objections to the distinction. The second part of the paper describes a practical questioning strategy called 'the question X' that I have developed, making use of the distinction from the first part of the paper. The question X shows how the best of both closed-ended questioning and open-ended questioning can be combined in classroom questioning to maintain the focus and specificity of closed questioning while also maintaining the richness and invitation to say more of open questioning. In addition, the strategy of the question X also encourages the formulation of standard form thinking and expression in those questioned.

Key words

conceptual questions, grammatical questions, open/closed questions, standard form

Part One: The theoretical aspect

The problem

There is some confusion about what open and closed questions are, illustrated by the following exercise:

¹ This paper was first delivered at ICPIIC and PLATO conferences July 2015 as a talk in which I took for granted that the distinction would be accepted. Many challenges were put to me and I recognised the need to write a paper focusing on the distinction. Many of the objections that I respond to came from the audience members at those two presentations. The title of this piece 'Open thinking, closed questioning' came from a teacher's summary of my presentation. I like it, so I lifted it. Thanks to them.

Are the following open or closed questions?

1. Do you like Marmite?²
2. What is the mind?
3. What can you tell me about Paris?
4. Is the mind the same as the brain?

When I set audiences this exercise³, on the whole, the answers are as follows:

1. closed
2. open
3. open

Though 3 is more divided than 1 or 2, it is 4 that generally elicits the most divisions, many will say 'closed' but many others will say 'open'. We may want to say that 4 is both open and closed but it is difficult to see how.

Philip Cam says, 'An open question does not have a settled answer, whereas a closed question does. If there are facts to hand that settle the answer to a question beyond all reasonable doubt, say, or if the answer is a matter of general knowledge, then the question is normally regarded as closed' (Cam 2006, p. 33). It would appear, then, that 4 is an open question. So, why do so many people, when set this exercise, want to say that it is a closed question? Cam's definition is not how most teachers (that I work with in the UK anyway) would understand an open/closed question. They say something more along the lines of what is found in *Wikipedia*:

A closed-ended question contrasts with an open-ended question, which cannot be answered with a simple 'yes' or 'no', or with a specific piece of information, and which gives the person answering the question scope to give the information that seems to them to be appropriate.⁴

Teachers will often say that a closed question is a question that requires a yes/no or one-word answer, and that an open question is a question that invites you to say more than yes/no or one word. According to the *Wikipedia* definition, then, 4 is a

² Marmite is a malt extract spread popular in the UK with a particularly strong flavour that divides people. It has been said that the world divides into two: those that like Marmite and those that don't.

³ I usually ask audiences, at the same time as each other to make a shape with a hand: a 'C' (for closed) or an 'O' (for open), to indicate which they think the question is.

⁴ Here is a link to a *WikiHow* entry on how to use open-ended questions. This reflects (particularly the advice in section 2: 'Don't ask closed-ended questions') what I find to be a general consensus, that, for anything other than fact gathering, asking open questions is good; asking closed questions is bad: <http://www.wikihow.com/Ask-Open-Ended-Questions>

closed question, as it seems to elicit an answer such as a 'yes' or 'no'. So, is question 4 open or closed? These two definitions of open and closed questions lead to difficulties.

Distinction

Drawing upon the two definitions I've outlined above from Cam and *Wikipedia*, here's a distinction that enables me to explain exactly how question 4 is both open and closed. The distinction will make sense of the confusion and allow me to explain a useful questioning strategy.

Firstly, the distinction is between two kinds of open and closed question:

1. *Grammatically* open or closed questions
2. *Conceptually* open or closed questions

I think both sides of my distinction are extant in the two previously mentioned definitions from Cam and *Wikipedia*, but because the distinction has not yet been drawn between the structural and the conceptual—to highlight that they are two sides of a propositional coin—confusion arises. My claim is that my drawing of the distinction clears up the confusion.

In my distinction, the term 'conceptually open' has been chosen to focus on philosophical questions. To include all kinds of question in other disciplines, such as the open questions of science and history for example, the distinction could be broadened to 'grammatically' and 'substantively' open and closed, drawing upon Splitter and Sharp's 'procedural and substantive closure' distinction (1995). Having pointed this out, I will stay with the term 'conceptually open' during this paper for the reasons that it is more focused in the way that I require for my distinction, but also because practitioners of philosophical enquires often refer to words and ideas within enquiries as 'concepts', therefore the distinction will be more comprehensible to practitioners when expressed in this way. Though philosophy is generally understood to be (at least largely) a conceptual endeavour, I am not committed to the view that philosophy is reducible to conceptual analysis, but I am committed to the view that questions are, and my distinction, though it is concerned with philosophy, is concerned, more specifically, with philosophical questions.

A *grammatically closed question* is one that elicits a short, atomic answer in virtue of its structure, for example 'Is X F?' where the answer is something like 'yes', 'no', 'it depends', 'both', 'neither', 'I don't know' or 'x or y or z etc.' when there's more than one possible answer.

One may object that 'It depends' (conditional disjunctive) or 'x or y or z' (Disjunctive) in response to purported conceptually closed question such as 'Do you like jam?' are evidence that the question is a conceptually open question, as there is more to say. But the 'more to say' is simply a reporting of facts, 'It depends on whether it is apricot or not, I don't like apricot jam,' only in the disjunctive form. This is related to the 'Sentence and propositions' section. In this case the response 'It depends' is not because of any conceptual substance, but because the question is not clear and distinct enough.

A grammatically closed question may also have content: 'What is the capital of France?' where the answer is 'Paris', still a one-word answer. A *grammatically open question* is one that demands more than a one-word or short-phrase answer in virtue of its structure, for example 'Why is X F?' where the answer demands either an explanation of a cause, a purpose or a justification, beginning with the word 'because ...'

A *conceptually closed question* is one that contains or invites no tensions, conflicts or controversies in the concepts contained within the question itself, for example 'Do you like (the taste of) the malt extract spread Marmite?' A *conceptually open question* is one that contains or invites tensions, conflicts or controversies in the concepts contained within the question itself, for example 'Is it possible to make a deliberate mistake?' where there is an internal conflict between the concepts 'deliberate' and 'mistake', or one that has no determinate answer and where the possible answers may lead to conflict, such as 'What is the mind?' where a reductionist (such as physically reductionist) answer may lead to conflicts with the irreducible phenomenal nature of the mental.

Table 1.1 shows how the distinction applies to the questions from the exercise at the start of this paper.

Table 1.1

	Grammatically closed	Grammatically open
Conceptually closed	1. 'Do you like Marmite?'	3. What can you tell me about Paris?'
Conceptually open	4. 'Is the mind the same as the brain?'	2. What is the mind?'

Now it should be clear why question 4 brings about so much divergence. According to this distinction it is both open *and* closed: *conceptually open* (it is not a determinate answer and the concepts of *mind* and *brain* have inherent tensions, for instance between talk of the mental and talk of the physical) but *grammatically closed* (it elicits, in virtue of its structure, a one-word or short phrase answer: ‘yes’, ‘no’, ‘yes and no’, ‘it depends’ etc.).

Sentences and propositions

One may object that a question like ‘Do you like Marmite?’ is conceptually open because one person may take this to mean ‘the taste’ and another ‘the brand’ and therefore answer the question very differently. This is to do with a lack of clarity rather than its *openness* or *closedness*. This is understood better with the well-worn distinction between *a sentence* and *the proposition expressed by the sentence*. For a question to be strictly grammatically closed it must also express a clear proposition. In Table 1.2 the questions are ‘filled in’ to more clearly express the propositions:

Table 1.2

	Grammatically closed	Grammatically open
Conceptually closed	1. ‘Do you like (the taste of the malt-extract spread) Marmite?’	3. ‘What (facts) can you tell me about Paris (the capital of France)?’
Conceptually open	4. ‘Is the mind the same (thing or kind of thing, if it is a thing) as the brain?’	2. ‘What (kind of thing, if it is a thing) is the mind?’

In most cases this kind of clarity is thought not to be necessary, the bracketed parts are usually assumed because of the context in which the question (or statement) is uttered. Sometimes, the need to ‘unpack’ a question—in other words, to make what is ambiguous unambiguous—is mistaken for a question’s openness. So, some ambiguous questions can be taken to be grammatically closed because of the implications from a discussion context. For example, ‘Do you like Marmite?’ in certain contexts can be understood to mean ‘Do you like (the taste of the malt-extract spread) Marmite?’ and in which case could be understood to be a grammatically closed question without the need to express the full proposition.

Question treatment

Imagine a child asks her parent, 'Are penguins in the Arctic?' The parent replies, 'No, they don't live in the Arctic, but they do live in the Antarctic.' 'Okay,' says the child, 'thank you.' Her question was grammatically and conceptually closed. She wanted to know the facts regarding penguins in the Arctic. The next day she says, 'Is God real?' You might think that this is a classic example of a grammatically closed but conceptually open question. However, the parent says, in the spirit of enquiry, 'I don't know, what do you think?' to which the child replies, 'I don't know; that's why I was asking you. So, is he real?'⁵ The child's treatment of the question is *factual*: she wants to know the answer in the same way that she wanted to know the answer to the question about penguins in the Arctic. This does not mean, however, that the question is conceptually closed. Here, we start to see that conceptual considerations also have a relationship to the world. So, it is only because she has insufficient understanding of the concept of 'God' and little experience of applying it in the world that she is treating the question as factual. When she has more experience of the world (for instance, if she goes into a church to find God in a factual way similar to going to the Antarctic to find penguins) she will begin to see that the concept of God and the empirical reality of God is a problematic and contentious relationship. This doesn't mean that she will necessarily begin to philosophise, but that she will be somewhat aware of the question's complex conceptual character. It is at this point that she will begin to treat the question, 'Is God real?' as conceptually open, though it remains grammatically closed. The structure of this question is factual; the logic of the question implies either that God is real or that God is not. Some may legitimately challenge the framing of the question in this way, by saying that this is the wrong question, but the question itself has a structure to it that implies that it is a factual issue. Part of its conceptual openness comes from the fact that there is a tension between its *prima facie* factual character and its complex relationship with experience of the world.

Going beyond the question

One may also object that a question like 'Do you like the taste of the malt-extract spread Marmite?' raises more interesting questions such as, 'What is it to *like* something?' (grammatically and conceptually open?) or 'Is it possible to be *wrong*

⁵ If the parent had said, 'Yes,' and the child had said something like 'But, how will I find him, he's not real like a penguin,' then her treatment of the question would be grammatically closed but conceptually open from the start.

about what you like?’ (grammatically closed but conceptually open), but, if it is the case that these questions are conceptually open, the first question must be considered in its own right, separately from any deeper, related questions. We need to consider the question’s function semantically and syntactically. The question ‘Do you like the taste of the malt-extract spread Marmite?’ *is simply asking for a report of the facts about one’s preference regarding Marmite.* That is what makes it a conceptually closed question. We may go on to problematise the content of the question, but the question (in virtue of the proposition expressed and its structure) does not.

Why all this matters

All this can be tested in the classroom. If you ask a class of children the (semantically incomplete) question ‘Do you like Marmite?’ to children who know what Marmite is and have tasted it, firstly, they will probably understand the question to mean ‘Do you like the taste of the malt-extract spread Marmite?’ and secondly, you are very unlikely to engender a discussion beyond reports about whether they like the taste of Marmite or not. If, on the other hand, you were to ask the same class of children a question such as ‘Is it possible to be wrong about what you like?’ (grammatically closed, conceptually open) it is more likely to engender a more interesting, contestable discussion, though, of course, it is not guaranteed. Good facilitation will be needed, however, to ensure that the students’ responses move beyond yeses and noes and the like (see below).

Divergence is not controversy

Consider the following question: ‘What is your favourite word (to say)?’ It is perfectly possible that, were I to ask this to thirty people, I might receive thirty different answers. However, this question is still a closed question, both grammatically and conceptually, because it requires only a one-word answer and it is simply asking for a report of the facts about one’s preference regarding saying words.

Answers and reasons

One more possible objection may have to do with associating a reason with an answer. One may say that ‘Is the mind the same as the brain?’ is an open question (grammatically) because one may answer as follows: ‘Yes because the mind is just

another word for the brain and ...'. Here, the answer includes much more than a single word or short phrase. However, there is a structural point and a practical one. Structurally, the question itself 'Is the mind the same as the brain?' does not contain a demand for the reason, though we may understand this to be implied; the questioner would need to add 'And why?' to the question for such an understood implication to become explicit.⁶ Practically, children may or may not move to the reason, either because they are confident/shy or because they don't yet realise the need to, but most importantly, they may not *have* a reason, though they may have an *answer*, such as 'yes' or 'no'. This is because we (and especially very young children) sometimes intuit—or have a 'gut feeling'—about an answer without yet being able to articulate a reason for it; that may come later in the discussion, but it's a real possibility that it may not come at all. For these reasons we must separate the structural demand of a question from any psychological associations.

Part Two: The practical aspect

Why is the distinction useful?

The distinction shows how and why certain kinds of question do (2 and 4) or do not (1 and 3) encourage or engender enquiry discussion. It also enables me to introduce a tool (see below) to help further discussions, though closed questions may be used. This will help anyone who actively avoids grammatically closed questions, believing them to be of little use in a class discussion, to rethink their use. In short, it will help to *rehabilitate the closed question*.

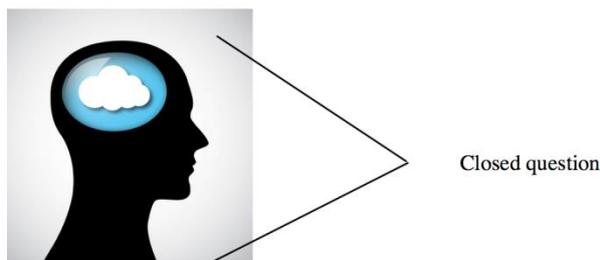
More than this, I will suggest that, contrary to popular opinion, grammatically open questions can be a hindrance in discussions. This is because grammatically open questions tend to lack focus and specificity. 'What can you tell me about numbers?' asks the maths teacher, hoping for something like a definition. Says the child: 'Well, my favourite is 3 because ... I always have three sandwiches'. Given that teachers are generally under the impression that open questions are to be preferred during discussions and that they have probably had (negative) feedback that they ask too many closed questions in class time, it is easy to see how teachers might find running enquiry discussions difficult.

I will return to some already visited examples to see how a particular treatment of grammatically closed questioning can be helpful: 'Is the mind the same as the brain?'

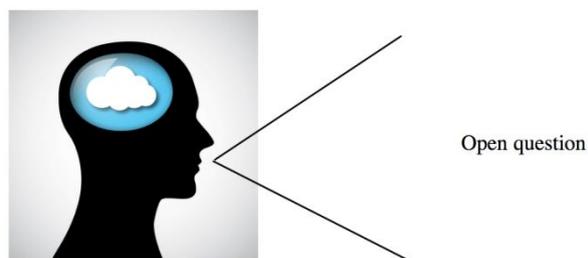
⁶ If a computer was being programmed it would need to be programmed to respond to the second question 'And why?' as well as the first, 'Is the mind the same as the brain?'

and 'Is it possible to be wrong about what you like?' In this paper I am encouraging the use of these kinds of (grammatically closed but conceptually open) questions. However, there is a real danger that your enquiries will simply evaporate into short answers of the sort we see in Socratic dialogues⁷, 'yes', 'no', 'it depends' etc. So, here's a simple tool to give you the best of both worlds; the focus and specificity of closed questioning with the invitation to say more from open questioning.

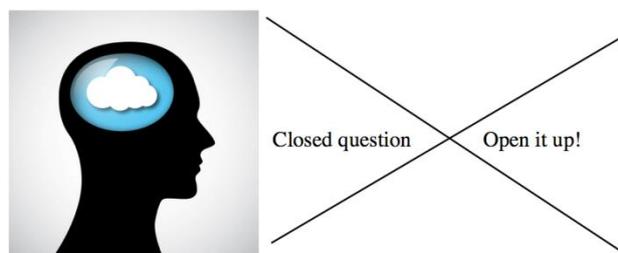
If closed questioning is represented like so:



And open questioning is represented like so:



Then my recommendation can be represented like so:



⁷ I mean here the dialogues by Plato that include Socrates, not (for instance, Nelsonian) Socratic Dialogues. Socrates's concern was open questions, such as 'What is Beauty?', 'What is Justice?' and so on, but he often employs closed questions during his discussions. He is often criticised for his over-use of closed questions, eliciting responses such as 'Certainly', 'Without doubt' and so on. As you will see, I think this practice is good, but for one missing strategy: 'opening up'. The question, 'How many numbers are here?', where '2, 2, 2, 2' has been written up on the board, is a closed question, but loitering very nearby is the open question, 'What is a number?' though, as I have argued in this paper, we must keep them separate, conceptually.

I call this 'the question X'.

For the first part of the 'X', the \succ , one should ask a grammatically closed but conceptually open question like so:

'Is the mind the same as the brain?'

'Should Odysseus drink the juice?'

'Is beauty in the eye of the beholder?'

'Is it possible to be wrong about what you like?'

Then, for the second part of the 'X', the \prec , the facilitator/questioner 'opens it up' again. Opening-up strategies/questions should not be conflated with open questions. 'Can you say why?' is a closed question (grammatically speaking, the answer is 'yes' or 'no'). It has been used—because it is nicer and more inviting—in place of the more basic question 'Why?' And 'Why?' is, arguably, not really a question at all, but a disguised instruction: 'Say your reasons!' However, 'Can you say why?' (or other formulations such as, 'Do you mind saying why?' or 'Would you like to say why?') has the effect that, in most cases, it elicits reasons from the contributor by inviting him or her to speak rather than instructing. They can, after all, always say 'no' (that is their right). And if they do answer the question with a simple 'yes' then it's easy enough to deal with by making use of one of the 'prompts' suggested below, such as by saying 'because ...?' or 'Go on!', rolling your hands, or simply with an expectant silence (Rowe 1972).

How one opens it up will depend on what kind of response is given. Here are some recommendations for opening up strategies to some very common responses⁸ from children that meet the structural demands of the question:

⁸ These are not the only possible responses to this question. For instance, if a child responds by moving to the reason-giving part without explanation, with responses such as, 'The mind is inside the brain,' then I would recommend an 'iffing' (placing the child's contribution into the *antecedent* part of a conditional question) and 'anchoring' (connecting the child's contribution to the main question in the *consequent* part of the conditional question) strategy such as, 'If (antecedent) the mind is inside the brain, then (consequent) is the mind the same as the brain?' (grammatically closed, but conceptually open). For more on 'iffing' and 'anchoring' see Worley (2015).

Child's response	Teacher's 'opening up' strategy
'Yes/no'	'Can you say why?'
'The same/different'	'Can you say why?/In what way are they different?'
'It depends'	'Can you say what it would depend on?'
'Both'	'Can you say how it can be both?'
'Neither'	'Can you say more about that?'
'Yes or no or both' (etc.)	'Could you explain what you mean by that?'
'I don't know'	'Are you able to say why you don't know?'

Here are the main *opening up* strategies generalised, some of which will be useful when the children move beyond the structural demands of the question:

Justification/causation/purpose/motivation: 'Can you say why?'

Clarification: 'Can you say what you mean by X?'

Elicitation: 'Can you say more about that?'

Exemplification: 'Can you give an example?'

Conditional: 'Can you say what that would depend on?'

Implication/entailment/inference: 'What do you think that means?' or 'What do you think that tells us?'

General response: 'Does anyone have anything to say about that?'

Prompts

With older classes or when classes become familiar with the enquiry/discussion context you can 'open up' simply with a prompt. So, instead of saying 'Why?' you can signal to a speaker to provide a justification by saying 'Because ...?' or 'Go on,' and such like after their answer. For example:

Questioner: Is the mind the same as the brain?

Child: No.

Questioner: Because ...?

Child: Because you can't see or touch the mind but you can see or touch the brain.

Sometimes I say nothing but simply revolve my index fingers around each other to signify to the speaker to say more. With groups that are familiar with me and with doing philosophy, this is usually sufficient but, if necessary, I'll employ one of the more explicit opening up phrases. Mary Budd Rowe (1972) suggests simply waiting after a closed response to tacitly invite a child to say more. This will sometimes be sufficient but, in my experience, not in the most part with the children I work with. However, factoring in a good amount of 'waiting time' before trying other opening up strategies will allow for this to work if it's going to. Use any of the other strategies I've outlined if this fails.

The question X and standard form

In a previous paper, 'If it, anchor it, open it up'⁹ (Worley 2015) I made a case for a 'closed, guided questioning technique' saying, 'Linking the students' responses to the main question(s) [...] has a particularly fruitful, and deeper, outcome: it encourages contributors to both think and express themselves in formal arguments, in other words, in premise-and-conclusion form' (p. 134). When using the question X strategy, the children's answer to the grammatically closed question becomes their argument's conclusion: 'No [the mind and brain are not the same thing]' and the reasons they give—either unprompted or prompted by *opening up*—'Because x, y and n ...' are the argument's premises.

Conclusion

My distinction between *grammatical* and *conceptual* open/closed questions clears up a common confusion about open and closed questions, and 'the question X' strategy rehabilitates the closed question in enquiry use. Not only do (grammatically) closed questions become once again acceptable, they become *essential* if the aim of philosophical enquiry is to build structured dialogue following the logical and sequential demands of dialectic, which must include the use and evaluation of formal arguments—something the strategy explained here encourages, both in thought and expression.

⁹ The current paper focuses on the final 'opening up' part of the technique.

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