What is a Question

LANI WATSON

Abstract
Questions are, in many respects, the hallmarks of the philosopher's trade. They are passed down from one generation to the next and yet, throughout history, philosophers have had relatively little to say about questions. In particular, few have asked or tried to answer the question 'what is a question'. I call this the 'Question Question' and I offer an answer to it in this paper, furnishing philosophical analysis with the results of a large online survey, which has been running for more than a decade.

Philosophers are well known for dealing in questions. They are, in many respects, the hallmark of the trade. It is surprising, then, to find that philosophers have had relatively little to say *about* questions throughout intellectual history. Socrates, for instance, the provocative street philosopher of ancient Athens and great-grandfather of Western philosophy, was, among other things, renowned for his distinctive questioning style. Yet, as far as we know, Socrates never asked what a question is. The same can be said of many other philosophical greats, at least according to their surviving works. In fact, there exists no sustained examination of questions in the philosophical canon at all (or, as far as I have found, in any 'non-canonical' philosophical works). There is plenty to be said about this surprising lack of philosophical attention and I will not distract us with a discussion of that here. It is nonetheless worth noting, at the outset, that throughout history philosophers have simply not asked or tried to answer the question 'what is a question'.

I call this the 'Question Question' and I offer an answer in this paper. As a philosopher, I have been thinking and writing about questions for about ten years and I believe that the answer I offer here is a good one. That being said, I am more interested in prompting philosophical thinking about questions – their value and significance in our lives – than I am in providing a final or definitive account of what they are. Readers should, therefore, view the following as a provocation for further thought and discussion about questions and an invitation to engage critically with the analysis on offer. There are many ways to cut the conceptual cake when constructing a definition of questions and I am presenting just one; perhaps it will inspire others to do the same. At the least, it seems there is room for a more sustained,

doi:10.1017/S1358246121000114 © The Royal Institute of Philosophy and the contributors 2021

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

philosophically-informed public discussion of the Question Question. I hope that by offering an answer, I can play a worthwhile role in stimulating, advancing, or opening up that discussion.

1. Answering the Question Question

The Question Question first presented itself to me when I started thinking and writing about questions. At that time, I was primarily occupied by work on questions in logic and the philosophy of language. For, while it is true that philosophers throughout history have not attempted to answer the Question Question, there is, nonetheless, a specialised field dedicated to the study of questions in logic and linguistics, which emerged in the twentieth century.[1] In general terms, a question is defined by theorists working in this field, in terms of the propositions that answer it (also known as the question's 'answer-set'). As one theorist observed in the late 1990s:

> 'The most influential proposals…have, in fact, proposed a very specific characterisation of what a question is: namely, that a question is a property of propositions, that property which specifies what it is to be an exhaustive answer' (Ginzburg, 1997, p. 386).

We will not be grappling with the details of this analysis in what follows. However, two things are worth noting about the quotation, for present purposes. Firstly, it is one of a relatively small number of instances, in any philosophical literature, where an answer to the Question Question is articulated. Secondly, in order to understand it, one must have a relatively advanced grasp of various technical notions in logic and linguistics. In other words, it is far from intuitive. This is not something that logicians or linguists need to worry about in order to do valuable work on questions. However, when it comes to answering the Question Question, I think it is problematic.

That is because I believe a satisfying answer to the Question Question should reflect an everyday conception of questions. It should reveal the idea of a question that we learn to use as infants

[1] For a range of seminal work in this field, see Whately (1826; 1828), Cohen (1929), Prior and Prior (1955), Harrah (1961), Åqvist (1965), Belnap (1966), Bromberger (1966), Hamblin (1973), Belnap and Steel (1977), Karttunen (1977), Groenendijk and Stokhof (1984), Hintikka (1985; 1989), Kiefer (1988), Groenendijk (1999), Wisniewski (2003), Aloni (2005), Jaworski (2009), Ciardelli (2010), Roelofsen (2013).

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

and carry around with us in daily life: the concept that is embedded in our cognitive architecture, so to speak. The 'logician's answer' quoted above, is not this (and arguably it is not intended as an answer the Question Question, in the sense I intend). At any rate, my aim here is to present an answer that anyone familiar with questions can understand and recognise. Questions are, after all, part of the stock of the world and a ubiquitous feature of human life. Any answer to the Question Question that seeks to capture the value and significance of questions in our lives should respond to and reflect the everyday conception we have of them. It is undeniable, I think, that there is a gap between this conception and work on questions in logic and linguistics.

In response to this gap, I began constructing a definition of questions. It was also at that time that I began collecting questions and initiated what is now an extensive and unruly question collection. As it turns out, this has also played a role in answering the Question Question. I started the collection by asking one hundred people to write down the first ten questions that came into their head. With the exception of 'how are you', none of the resulting one thousand questions were the same ('how are you' was repeated four times). The questions ranged from 'do you want cashback' to 'do you love me', and include gems such as 'am I getting uglier', 'is a giraffe bigger than an elephant', and 'how long does a pack of cheese last'. To these, I added the first one hundred questions that came into my own head, the first one hundred questions that I found in the philosophy books on my bookshelves, the top one hundred questions typed into Google that year, and one hundred quiz show questions. Since then, I have added questions that I have been asked, have heard asked, and have read or witnessed in a whole variety of settings, from supermarket queues to newspaper headlines.[2]

As you might expect, the question collection contains a dizzying variety of questions. This is one of the most intriguing things about it. Moreover, it constitutes a valuable data-set when answering the Question Question. Indeed, curating the collection is itself an exercise in conceptual analysis. In order to determine what should and shouldn't be included in the collection, one must determine what, if anything, serves to unify such a seemingly diverse array. In other words, one must decide what counts as a question. Even with an answer in mind, the question collection continues to serve as a valuable resource in refining the contours of the analysis. Importantly,

[2] You can visit the question collection at: www.philosophyofquestions.com/questioncollection/.

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

the collection contains many questions from everyday life; the questions that people ask and answer on a daily basis. This is what makes the collection particularly valuable to me in arriving at a satisfying answer to the Question Question.

A second loosely empirical method that has shaped my answer to the Question Question is an online survey. The survey, which has been running via my website, again for about ten years, aims to provoke reflection on the nature of questions and expose some basic intuitions (aka 'folk intuitions') about what they are. It focuses on understanding what questions look and feel like from the perspective of everyday questioners (aka 'the folk'). The survey describes ten short scenarios, revolving around a day in the life of an imagined school teacher called Sarah. In each case, survey participants are asked to make a judgment about whether or not the scenario contains a question. They are also invited (but not obligated) to explain their response. The results offer a valuable insight into the way that people identify and conceptualise questions, again providing an important data-set when it comes to answering the Question Question.[3]

Like the question collection, the survey, which has received over 6,000 responses to date (as of 23 Oct 2020), has played a role in constructing a definition of questions. Both of these methods have encouraged analysis via a process of elimination: examining what a question isn't, rather than what a question is. Consequently, I will follow this process in the remainder of the paper, beginning by ruling out some plausible answers and then constructing the answer at which I have arrived. I will discuss the results of the survey along the way. Readers who have not taken part in the survey may wish to complete it before continuing. The survey takes an average of twelve minutes to complete and can be accessed at: www.philosophyofquestions.com/questionnaire/.

2. What a question is not

The process of elimination just described has to start somewhere and there are many places one could start: a question is not a cup of tea, or

[3] A large proportion of the current survey responses were collected when the survey was included as an optional introductory task as part of the University of Edinburgh's free 'Introduction to Philosophy' Massive Open Online Course (MOOC). Since then, the survey has been open and free for visitors to my website. Survey participants are 49% female, 51% male, 62% are under 40, and 51% have never studied philosophy.

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

a waterfall, or a night sky. Of course, it makes sense to start with an answer that has some initial plausibility. An examination of definitions offered in reference sources, such as dictionaries and reference websites, provides a useful starting point. The Oxford English Dictionary (3rd edition, 2010), for example, defines a question as 'a sentence worded or expressed so as to elicit information' (p.1455). The same definition is found when typing the phrase 'what is a question' into Google (as of 23 Oct 2020). Wikipedia defines a question as 'an utterance which typically functions as a request for information, which is expected to be provided in the form of an answer' (as of 23 Oct 2020). Dictionary.com defines a question as 'A sentence in an interrogative form, addressed to someone in order to get information in reply' (as of 23 Oct 2020). Likewise, the Merriam-Webster Online Dictionary defines a question as 'a sentence, phrase, or word that asks for information or is used to test someone's knowledge' (as of 23 Oct 2020). Finally, the Collins Concise English Dictionary (8th edition, 2012) defines a question as 'a form of words addressed to a person in order to elicit information or evoke a response; interrogative sentence' (p. 1359, emphasis added).

Notably, in all of these, a question is defined in terms of its manifestation as some form of linguistic expression: a word, sentence, phrase or utterance. I will start, then, with the idea that a question is a specific type of sentence: an interrogative sentence. An interrogative sentence is precisely a sentence that asks or expresses a question. Interrogatives are one of the basic sentence types. As such, defining a question as an interrogative sentence is a neat way to categorise questions as a fundamental feature of language (which they are). Despite this, I argue that questions are not always interrogative sentences. As such, we must look beyond interrogatives for a definition of questions. Moreover, I argue that questions are not always expressed in language. As such, we must ultimately look beyond language entirely, in order to answer the Question Question.

2.1 Questions are not always interrogative sentences.

Interrogatives are distinguished from other basic sentence types, such as declaratives, in virtue of their grammatical form. Consequently, defining a question as an interrogative sentence is akin to defining a question in terms of its grammatical form. This can be classed as a *formal* approach to the Question Question: one that prioritises question form as a means of identifying and analysing questions. I will return to the formal approach later. Before doing so, it will be

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

instructive to take a first look at two key results from the survey. These will help to establish the conclusion that questions are not always interrogative sentences.

The first result comes in response to a scenario I call GOOGLE. In this scenario, our protagonist, Sarah, is attempting to find out where the nearest butchers to her house is, on behalf of a friend. As she is a vegetarian, Sarah herself has no interest in this information but, nevertheless, she types 'local Edinburgh butchers' into Google and notes down the location. In response to this scenario, 72% of the survey participants (to date) judge there to be a question (3,515 participants), 20% judge there to be no question (996 participants), and 8% are unsure (365 participants). Those judging there to be a question constitute a sizable majority.

Sarah, like most of us, does not type out an interrogative sentence when she conducts her internet search. She does not, for instance, type 'where is the nearest butchers to my house.' The phrase Sarah searches with is an approximately arranged string of three words, related to the information she is looking for. It is not an interrogative sentence (in fact, it has no formal linguistic structure). Nonetheless, the majority judge there to be a question in this scenario. Notably, if Sarah had typed an appropriate interrogative sentence to conduct her search, she would probably have got the same results from Google. That is because, in both cases, Google assumes the same thing: that Sarah is trying to find the location of butchers near to her in Edinburgh. Google doesn't, in general, differentiate between searches like the one Sarah conducted and those constituting full interrogative sentences; both types of searches are conducted with the same basic aim and that is all Google needs to know.

In this respect, at least, it seems that Google imitates life. The fact that Sarah's search is not an interrogative sentence does not deter the majority of survey participants identifying a question in the GOOGLE scenario. The optional open comment section of the survey, where participants are invited to explain their response, provides an additional layer of insight. Among those who said yes, there is a question, participant comments reflect everyday experiences of internet searching and the language surrounding it. One participant, for example, writes, 'Searching on Google would be a question. It's used in speech as well 'let me ask Google''. Another comments, 'Searching for information on the internet is a form of question asking. The answering is done by algorithms rather than a person.' A third observes, 'We say, 'ask Google' and we have that shared understanding in English.'

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

Our common experiences of internet searching suggest that we do not rely on the interrogative form in order to either ask a question or to identify when one has been asked. The survey results reflect this. Notably, this is by no means the only context in which we identify questions without the use of interrogative sentences. We will see other examples of this throughout the paper. The case of internet searching is nonetheless helpfully illustrative, given the familiarity, indeed ubiquity, of this activity in the daily lives of many (of course, not all), in the twenty-first century. Our common experience shows that there are questions that do not take the form of interrogative sentences. Questions are not always interrogative sentences.

It is interesting, also, to look at a related, parallel conclusion: interrogative sentences are not always questions. Just as there are questions that do not take the form of interrogative sentences, so there are, arguably, interrogative sentences that do not amount to questions. This is suggested by a second key result from the survey, involving two further scenarios. I call these scenarios RAIN and DISINTERESTED. In RAIN, Sarah has just woken up and opened the curtains to discover that it is raining again, as it has been for the past two weeks. On seeing this she exclaims out loud 'will it ever stop raining'. Her partner, who is still in the bed behind her, shrugs. In response to this scenario, 35% of the survey participants judge there to be a question (2,115 participants), 58% judge there to be no question (3,432 participants), and 7% are unsure (406 participants).

In DISINTERESTED, Sarah has arrived at school and is walking to her classroom down a long corridor. She spots a particularly disliked colleague approaching from the other end. As they pass, despite having no interest whatsoever in his wellbeing, Sarah glances up and mutters 'morning, how are you'. In response to this scenario, 38% of the survey participants judge there to be a question (1,955 participants), 54% judge there to be no question (2,804 participants), and 8% are unsure (407 participants).

The results in response to both of these scenarios are remarkably similar. It is fair to say that they are also significantly less clear-cut than GOOGLE. That being said, it is interesting to note that these are the only two scenarios in the survey where the majority judge there to be no question. Again, the open comments provide an insight into the participants' responses. Among those who said no, there is no question in the RAIN scenario, one observes, 'It is a rhetorical response to the environment in the form of a statement that is not meant to be answered'. A second writes, 'Sarah's utterance seems like an expression of frustration to me. Don't think she is looking for a particular response from her partner.' A third notes, simply, 'it is a

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

rhetorical question'. This last succinctly captures a plausible interpretation of the scenario in which the interrogative sentence, 'will it ever stop raining', is treated as a rhetorical question.

A similar set of comments accompanies the DISINTERESTED scenario, with many participants observing, in particular, that the interrogative sentence, 'how are you', in this context, serves as a convention of language reflecting a form of 'British politeness'. One participant who said no, there is no question in the DISINTERESTED scenario, writes, 'It's just a stock phrase, there isn't any inquiry here'. Another notes, 'Again, she wasn't really asking a question or seeking an answer. Her brief friendliness was more just the accepted way of conversing with a colleague'.

Significantly, in most (although not all) cases where the interrogative sentence in these scenarios is judged to be rhetorical or conventional, the majority also judge there to be no question. One participant, in response to DISINTERESTED, captures this neatly: 'Once again, a rhetorical question or formality, *not a question*' (emphasis mine). The participant here appears resolute. That said, intuitions certainly do diverge in this (and the previous) scenario. One participant who answered yes, writes: 'Still a question even if she couldn't care less about the answer or was doing it as just a formality'. However, for at least a notable proportion of the participants, these utterances are not judged to be 'real' or 'genuine' questions, even though they are expressed in the interrogative form. This suggests that, according to these participants at least, there are interrogative sentences that do not amount to questions.

The small margins in these last two scenarios render this conclusion tentative, as far as the survey is concerned. Intuitions diverge even to the extent that the same reading - that a question is rhetorical - can lead to directly opposing judgements. Nonetheless, these scenarios provide interesting grist for the mill when it comes to answering the Question Question. I will return, in particular, to discuss rhetorical questions in due course. For the time being, it is worth emphasising that, no matter how conclusive one takes the results of RAIN and DISINTERESTED to be, they are not necessary for establishing the conclusion we are after, given that GOOGLE was already sufficient for this. Questions are not always interrogative sentences.

In addition, there are, I think, many good reasons for holding that questions are not always interrogative sentences, beyond those discussed here. Consequently, despite mention of the interrogative form in several of the widely-used reference sources that I cited at the start of this section, I do not take this conclusion to be particularly

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

contentious. One might happily concede that questions cannot be narrowly defined as interrogative sentences but nonetheless maintain that questions are a fundamental feature of language and are, therefore, always expressed in spoken or written word. Recall that all of the reference sources defined a question as some form of linguistic expression: a word, sentence, phrase or utterance. I will argue, however, that this is misguided. Just as questions are not always interrogative sentences, questions are not always expressed in language.

2.2 Questions are not always expressed in language.

Two further scenarios from the survey help to establish that questions are not always expressed in language. I call these scenarios DICTIONARY and ROAD. In DICTIONARY, our protagonist, Sarah, has arrived in her classroom and is checking through her teaching resources for the day. She notices a word that she is not familiar with and, in order to find out what it means, she looks it up in a dictionary. In response to this scenario, 81% of the survey participants judge there to be a question (4,119 participants), 14% judge there to be no question (725 participants), and 5% are unsure (260 participants). In ROAD, Sarah is trying out a new route to school. Along the route she comes to the side of a busy, unfamiliar road with no pedestrian crossing. She looks both up and down the road before crossing to check if there are any vehicles coming and then proceeds to cross safely. In response to this scenario, 66% of the survey participants judge there to be a question (3,670 participants), 28% judge there to be no question (1,589 participants), and 6% are unsure (352 participants).

In both scenarios, the majority judge there to be a question. This is despite the fact that Sarah uses no language, either written or spoken, in either case. This indicates that, for the majority, a question does not need to be expressed in spoken or written language in order to be a question. As before, the participants' comments add a layer of insight to their responses. Among those responding yes to the DICTIONARY scenario, for example, one participant comments, 'It is a clear attempt to find out something that was unknown to her'. A second writes, 'She needs to find the answer to something she does not know. That is questioning'. A third views the scenario as an almost paradigmatic instance of questioning: 'This seems to be quite a straightforward format of asking and answering a question: unknown information is indentified[sic] and a familiar, organised source is used to obtain it.' These comments reflect a common

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

impression among participants who responded yes to this scenario. They, in turn, represent a sizable majority (81% - the largest we have seen so far). The fact that Sarah does not use any spoken or written language, does not deter the majority from identifying a question.

Interestingly, many of those responding yes to the ROAD scenario reflect on the absence of language explicitly. One participant, for example, writes:

> 'You could think about this scenario as Sarah asking herself: is there traffic coming from the right? no. The left? no. And even if she does not verbalize this in her head (or out loud for that matter), the underlying process is still the same.'

A second observes, 'Sarah checked to see if it was safe to cross the road, 'are there any cars coming?', could be an unspoken question in this scenario'. Another states simply, 'the non-verbal question: are there any vehicles on the road'. Again, the fact that a question is 'non-verbal' does not deter these participants from identifying a question in the scenarios. For the majority, at least, it seems that a question does not need to be expressed in language in order to be a question.

I think that this is the right result. However, it is fair to say that this conclusion is somewhat more contentious than the last. The participants' comments in response to ROAD and DICTIONARY reflect this. Some are less certain about the status of 'non-verbal questions'. For example, one participant, who answered unsure in response to ROAD, writes:

> 'Depends. Did she silently manifest a thought in a question form, 'Are there vehicles coming?' if she did then it was a question. if she just automatically, unreflectively scanned the street, then no, she did not ask a question.'

Similarly, in response to DICTIONARY, a different participant, who answered unsure, comments:

> 'Again, as with the crossing example, you could think of this process as Sarah verbalizing in her head 'hmmm, what does this word mean?'. And again, even if she doesn't, the process and the outcome are still the same. Does a question need to be verbalized in order to be a question? Does it need language to exist?'

These are certainly intriguing and relevant provocations in response to the scenario. One might argue that questions rely for their existence on some form of language, even if that language is expressed

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

only internally or unconsciously. While this is fascinating in its own right, delving into this issue will take us well beyond the present investigation and into a further set of fundamental questions about the nature of language, consciousness and thought. Our focus on the Question Question will be lost. Bracketing these concerns for our purposes, then, the claim that questions are not always expressed in language is on relatively solid ground. Further support for this will emerge shortly when we turn to the positive thesis in Section 3.

Before doing so, one final observation is worth noting here. Readers will no doubt have noticed the lack of question marks in this paper. This is a practice that I adopted, again, about ten years ago, when I started thinking and writing about questions. The aim of the practice was, initially, to find out whether removing question marks from my writing, in all contexts from text messages to published work, affected anything in my life: my ability to ask questions, to communicate, to express sentiment, or to be understood by others. On the whole, I have found that it has not affected any of these things (with the one, intriguing exception that it is harder to express a sarcastic and typically rhetorical question in written form). One pleasing and unanticipated consequence of this practice has been its value as a provocation for talking with others about questions, especially those who find the lack of question marks itself intriguing or, in some cases, disquieting.

At any rate, in line with this practice, I included no question marks in the online survey. Notably, few survey participants, over the course of ten years, have referenced the fact that there are no question marks in the survey, including in any of the scenarios. As we have seen, the participants nonetheless judge there to be questions in many of the scenarios as described. This indicates, in line with my own experience of removing question marks from my writing, that questions do not require question marks in order to be identified as questions. Indeed, I have not yet come across anyone who considers the question mark a deal-breaker in this regard. I take this to be one minor, but further point in favour of a definition of questions that does not rely on their manifestation in language.

I have argued that a question is not always an interrogative sentence (and an interrogative sentence is not always a question), and that a question is not always expressed in language (nor does a question require a question mark to be a question). Consequently, in order to answer the Question Question, I believe we must look beyond language entirely. This is especially pertinent if the goal is to find an answer to the Question Question that responds to and reflects an everyday conception of questions, which has been my goal from the

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

start. The survey results, in particular, indicate that many people see questions in everyday scenarios that do not involve interrogative sentences, linguistic expressions, or question-marks. What, then, are they seeing.

3. What a question is

In order to construct a satisfying answer to the Question Question, a shift in perspective is needed. I said earlier that defining questions as interrogative sentences represents a formal approach; one that prioritises question form as a means of identifying and analysing questions. This approach, broadly speaking, is also the one adopted by those working on questions in logic and linguistics; it is the source of the 'logician's answer', which we encountered at the start. While there is plenty to be said in favour of formal analysis, it is, I believe, not possible to derive a satisfying answer to the Question Question in this manner. The formal approach restricts analysis of questions to analysis of their form (be it their overt linguistic or underlying logical form). Yet, as we have seen from the preceding discussion, questions come in a multitude of forms. The questions I have in my question collection, and those identified in the survey scenarios, provide a broad illustration of this. What's more, we typically know questions when we see, hear and feel them, regardless of whether they come packaged up as neat interrogative sentences or as something else entirely. In everyday life, we do not identify questions by their form. Rather, I argue, we identify them by their *function*.

This shift in perspective can be articulated as a shift from formal to functional analysis. One makes the shift by changing the starting point. Instead of starting with questions as a feature of language (which, of course, they are), one starts with questions as a feature of everyday life (which, of course, they are). These two perspectives are not mutually exclusive – indeed, they overlap in interesting and important ways. But, as the starting point of analysis, they are distinct and lead to different lines of argument. By starting with questions as a feature of everyday life, it is more natural to focus on the role or function of questions (what do questions do), rather than on their logical or linguistic form (what form do questions take). In this respect, the Question Question is as much about what a question does, as what a question is. I construct my definition of questions with this in mind, beginning with an examination of questions as *acts* and proceeding to investigate what kind of act a question is. Ultimately, I argue that *a*

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

question is an information-seeking act. This is my answer to the Question Question.

3.1 A question is an act.

What does it mean to say that a question is an act. In the first instance, it will help to elucidate this using speech act theory. Central to the idea of speech act theory is the thought that certain kinds of utterances are more than mere sentences but are, in themselves, acts. The philosopher of language, J. L. Austin (1962) writes of speech acts:

> 'to utter the sentence…is not to *describe* my doing of what I should be said in so uttering to be doing or to state that I am doing it: it is to do it' (Austin, 1962, p. 6, emphasis original).

Speech acts differ essentially from statements, or propositions, in the sense that the latter are used to describe or refer to states of affairs in the world, whilst the former are ways of acting in the world. Austin introduced the term 'performative' to describe a speech act in which, as he explains, 'the issuing of the utterance is the performance of an action' (1962, p. 6). A familiar instance of a performative utterance can be seen, for example, in the proclamation, 'I now pronounce you married'. Contrast this with the statement 'Lynn is my wife'. The statement describes a state of affairs whilst the performative, in virtue of its utterance, performs an act.

Spoken questions are performative speech acts. Another scenario from the survey will help to illustrate this. In this scenario, Sarah, is listening to a colleague describing a lesson he has just given on countries of the world. While he is talking, Sarah realises that she doesn't know how many countries there are and, as she is interested to know, she interjects saying 'how many countries are there'. Various colleagues respond with several different figures. I call this scenario COUNTRIES. COUNTRIES is by far the least contentious scenario in the survey. In response to this scenario, 95% of the survey participants judge there to be a question (4,711 participants), 3% judge there to be no question (147 participants), and 2% are unsure (94 participants). The vast majority judge there to be a question in this scenario.

Sarah's question is a performative speech act. By asking 'how many countries are there', Sarah is expressing a desire for information about how many countries there are, and requesting that her colleagues respond by providing the information if they have it. In other

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

words, Sarah is not merely making a statement, she is performing an act. In contrast, imagine one of Sarah's colleagues recounting the staffroom conversation later in the day and saying, 'I think there are 192 countries but Julia thinks there are 196'. Sarah's colleague is making a statement; he is describing a state of affairs. A statement of this kind is not a performative speech act. Sarah's question is.

It is not, I think, surprising that a large majority responded yes to COUNTRIES (indeed, I find it surprising that 147 respondents judge there to be no question in this scenario, but I will leave that for another time). Most people see a question in this scenario. Interestingly, however, we can reasonably infer from GOOGLE, RAIN and DISINTERESTED, that the presence of an interrogative sentence in this scenario is not the determining factor for most people who judge there to be a question. If Sarah had expressed her desire for information without employing an interrogative sentence (as in GOOGLE), the majority would still see a question. On the other hand, if Sarah had, for some reason, employed this interrogative sentence as a matter of convention or rhetorical flourish (as in DISINTERESTED and RAIN), the majority would *not* see a question. Moreover, I have argued that questions are not always expressed in language. This was illustrated in DICTIONARY and ROAD. This suggests that, even if Sarah had avoided language altogether, for example, if she had consulted an encyclopaedia in order to find out how many countries there are, many (the majority) would still see a question in the scenario.

With each hypothesised scenario we move further and further from the interrogative sentence that Sarah uttered in COUNTRIES and yet, it seems reasonable to infer from the survey results that the majority would still see a question in each case. What explains this. What are the survey participants seeing. Speech act theory tells us that questions are performative speech acts. But, we have seen that questions can also occur without spoken or written language, as non-linguistic acts. So, questions can be both linguistic and non-linguistic acts. In other words, *questions are acts*. It is an act, I maintain, that the survey participants are seeing and this is what causes them to judge that there is a question in the scenarios discussed. Likewise, in the series of hypothesised scenarios just described, it is an act that would cause people to identify a question in each case. Sarah is, in essence, doing the same thing every time: she is trying to find out how many countries there are. It is, ultimately, this act that constitutes the question.

As noted earlier, the survey results are only intended as a prompt for reflection. They illustrate and support the underlying theoretical point, which is driven by the shift in perspective advocated earlier.

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

Questions are better defined in terms of their function, rather than their form. The survey results support this by indicating that we do indeed identify questions by function, rather than form. As per the functional approach, defining a question as an act forces us to move beyond the characterisation of questions as a linguistic expression. Now that this move is made, a further layer of analysis is required to complete the definition. It is clear, after all, that not all acts are questions; a question is a particular kind of act. But what kind of act is it. I argue that a question is an information-seeking act.

3.2 A question is an information-seeking act.

A question is an act and when we act we 'do'. So, what is it that we do when we ask questions. This question is brought about by the shift from formal to functional analysis. I argue that the answer to this question is information-seeking: when we ask questions, we seek information. It is this information-seeking act that is seen in the survey scenarios when a question is identified by participants. When Sarah asks 'how many countries are there', she is seeking information. Likewise, when she types 'local Edinburgh butchers' into Google, when she checks the dictionary for the meaning of a word, and when she looks both ways on an unfamiliar road. In all of these scenarios, Sarah is seeking information, and in all these scenarios the majority judge there to be a question.

Notably, this judgement is not affected by the success of Sarah's information-seeking attempts. In COUNTRIES, Sarah asks for information about how many countries there are and her colleagues respond with several different figures. As such, she does not receive a definitive answer to her question. Sarah may quite rightly feel that she has not actually acquired the information she was looking for. This isn't necessarily a failure of her information-seeking abilities or of her colleagues' general knowledge. Indeed, there is arguably no definitive answer to this question. Even among official sources, the number of countries ranges between 189 and 196, and most acknowledge the contentious nature of the topic. However, despite the fact that Sarah does not (and perhaps cannot) acquire the information she is looking for, the vast majority judge there to be a question in the scenario. This is because Sarah's utterance is an information-seeking act. A question is an information-seeking act. I call this the information-seeking account of questions.

Another scenario in the survey helps to add detail to the information-seeking account. In this scenario, Sarah is teaching her students

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

basic arithmetic. One student shows her his answer to a question and she sees that it is wrong. In order to correct him, rather than telling him the answer, Sarah counts out ten pencils on the table in front of him, removes two and says 'how many pencils are left on the table'. I call this scenario PENCILS. In response to this scenario, 84% of the survey participants judge there to be a question (4,223 participants), 12% judge there to be no question (583 participants), and 4% are unsure (215 participants). A large majority judge there to be a question in this scenario.

This scenario is interesting because Sarah, of course, already knows the answer to the question that she asks. The majority, nonetheless, judge her to be asking a question and, indeed, I think that this result aligns with the information-seeking account. There is nothing in the account that requires a questioner to be seeking information for themselves. Questions often form part of an interaction between individuals and the information-seeking task is shared among those involved. The interaction between Sarah and her student in PENCILS illustrates this: the information-seeking task is distributed between the two parties. As such, by asking a question, Sarah is seeking information that she has but her student does not. She is asking in order to make this information manifest for the student; seeking on his behalf, as it were. Again, Sarah's utterance is an information-seeking act. A question is an information-seeking act.[4]

4. Objections considered

Having made the move from formal to functional analysis, I have arrived at the information-seeking account of questions with relative ease. One might be concerned that this is all too quick. In order to substantiate the account, I will address a series of relevant, interrelated objections. These all centre around the reasonable observation that we do not always have information-seeking in mind when we

[4] Note that I am relying on a commonplace understanding of key terms in the information-seeking account, namely, 'information', 'seeking' and 'act'. A more in-depth analysis would address and define each of these in turn and require a substantially longer (or supplementary) paper. I am, however, comfortable relying on a commonplace understanding of these terms given that my goal is to provide an answer to the Question Question that reflects an everyday conception of questions and I do not intend for any of these terms to be remotely technical. I will, therefore, leave detailed analysis of the component elements of the information-seeking account for another time.

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

ask questions. Indeed, we ask questions for a whole variety of different reasons: to demonstrate concern or care for another person, for example, or to provoke a response such as surprise or embarrassment. As such, one might argue that, while information-seeking is a common goal of question asking, it is not the only goal: questions are not always asked in order to seek information. Consequently, just as I have argued that a question is not always an interrogative sentence, a critic might contend that a question is not *always* an information-seeking act.

This objection is especially appropriate in light of COUNTRIES. In this scenario, Sarah is described as being 'interested to know' how many countries there are. As such, her information-seeking motive is written into the scenario and the dice are loaded, so to speak, in favour of the information-seeking account. Indeed, the account lines up perfectly with the survey results in this paradigmatic case. But the alignment is arguably too neat. There are a multitude of less paradigmatic, but no less familiar, scenarios in which most of us would identify questions without any overt information-seeking motive in sight. Further still, there are many scenarios in which most of us would identify questions where an entirely different, non-information-seeking motive is overtly in play.

A scenario of the latter kind is tested in the survey. In this scenario, Sarah is attending a staff meeting in which a colleague she doesn't particularly like (the one that provoked the disinterested 'how are you' from earlier) is being unhelpfully rude and obstructive regarding a particular issue. Sarah knows that he has not read the minutes from last week's meeting, which he did not attend, and in order to expose this she interjects at the end of his comments, saying, 'what did you think of the suggestion Julia made last week to address this issue'. I call this scenario EXPOSE. In response to this scenario, 62% of the survey participants judge there to be a question (3,038 participants), 29% judge there to be no question (1,391 participants), and 9% are unsure (430 participants). The majority judge there to be a question in this scenario.

Unlike in COUNTRIES, there is no information-seeking motive written into this scenario. In fact, the scenario attributes a different motive to Sarah; that of exposing the disliked colleague. One can imagine that she does this in order to embarrass him into dropping the subject about which he is being rude and obstructive, or force him to modify his behaviour in some way. At any rate, it seems that Sarah's motive for interjecting is explicitly not information-seeking. Despite this, the majority (albeit relatively small) judge there to be a question in the scenario. As such, EXPOSE appears to

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

provide support for the objection that not all questions are information-seeking acts.

As with all the scenarios discussed, I think the majority are right in this case. There is a question in the scenario, despite the absence of an overt information-seeking motive. How can one make sense of this, given the information-seeking account of questions. The answer to this relies on a relatively subtle point. Put simply, to say that a question is an information-seeking act is not to attribute an overt or conscious information-seeking motive in every instance of question asking. In other words, I am not claiming that information-seeking is the only thing we do with questions or that we always have information-seeking on our minds, when asking questions. These would indeed run counter to an everyday conception of questions. Nonetheless, I maintain that a question is defined by its information-seeking function.

To elucidate, it is useful to think of a question as a tool. Tools are typically identified in terms of a defined function. A wrench, for example, is a tool for tightening and untightening screws. A hammer, on the other hand, is a tool for hammering in nails. These different functions are what makes one piece of metal a wrench and another, a hammer. This, however, does not mean that wrenches and hammers are only ever used to (un)tighten screws and hammer in nails. They can and are used for numerous other purposes: to prop open doors, to smash through glass panes, to display in sculptural art. These alternative uses do not change what it is to be a hammer or a wrench. To define a thing in terms of its function is not to determine every instance of its use. Rather, it is to identify the thing that makes it what it is, as opposed to something else. A question is a like a tool for seeking information; a cognitive tool, if you like. It is defined by its information-seeking function. This is what makes a question a question, as opposed to something else.

We can interpret EXPOSE with this in mind. Sarah is still engaged in an information-seeking act, even though her overt intention is not to seek information but to expose her colleague. In fact, she has chosen to expose him precisely by seeking information from him. The goal of exposing him is achieved by means of the information-seeking act; the question. Sarah could have chosen an alternative means, an assertion for example, in which case the colleague's absence would have been exposed in a different way. If, for example, Sarah had interjected with the statement 'you were not at the last staff meeting and haven't read the minutes' she would have achieved the desired effect with a statement, rather than a question. By asking a question, Sarah uses information-seeking to achieve

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

this effect. Again, it is precisely the attempt to seek information from her colleague about what he thought of Julia's suggestion in last week's staff meeting that does the work of exposing the fact that he wasn't there and hasn't read the minutes.

Sarah uses a question to expose her colleague. The fact that she uses a question in this way does not change what it is to be a question. Again, to define a thing in terms of its function is not to determine every instance of its use. Rather, it is to identify the thing that makes it what it is, as opposed to something else. A question is defined by its information-seeking function, not by its role in exposing or embarrassing someone, or indeed, by anything else that we do with questions. This is the case, even when no overt or conscious information-seeking motive is present and some other motive is overtly in play, as illustrated by EXPOSE.

In fact, EXPOSE also illuminates a related issue mentioned earlier; that of rhetorical questions. Notice that the relatively small majority in EXPOSE (62%), is only slightly higher than the majorities seen in RAIN (58%) and DISINTERESTED (54%): the only two scenarios in the survey where the majority judged there to be no question. I think the relationship between these scenarios can be well accounted for by examining the place of rhetorical questions in relation to the Question Question. In turn, this will help to refine the contours of the information-seeking account, in light of the objection I have been addressing.

As noted, many of the survey participants interpreted RAIN and DISINTERESTED as containing rhetorical questions. For many (although not all), this had the effect of discounting the interrogative sentences in the scenarios as not 'real' or 'genuine' questions. Likewise, the interrogative sentence in EXPOSE can plausibly be interpreted as a rhetorical question. The survey participants' responses in the open comments section reflect this. One participant, for example, writes, 'the question seems like more of a rhetorical prop than a real inquiry for information.' Another comments, 'the question is mere rhetoric since Sarah knows that x has not read the minutes and did not attend the meeting.' A third participant makes an explicit connection between EXPOSE and RAIN: 'Like the rhetorical question about the rain, this question serves a purpose other than gaining an answer.'

As we saw with RAIN and DISINTERESTED, the survey participants are divided with respect to whether or not the interrogative sentence in EXPOSE is a rhetorical question. More tellingly, they are also divided on whether rhetorical questions should be counted as real questions. One participant, who responded 'yes', writes, 'I

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

think probably it's a question, because it's not exactly rhetorical.' Another, who responded 'no', comments, 'There wasn't a question, or if there was, it was rhetorical.' This two-layered lack of consensus among the participants, regarding the nature and status of rhetorical questions, explains the relatively small majorities found in response to all three scenarios. The unclear place of rhetorical questions in relation to the Question Question leads to divergent responses in the survey. How, then, should rhetorical questions be interpreted when it comes to answering the Question Question.

There is not space to develop a full-bodied account of rhetorical questions in this paper. However, a preliminary analysis can be offered, using the functional approach, which distinguishes rhetorical from non-rhetorical questions along functional lines. The information-seeking account of questions provides grounds for this. Thus, I define a question as an information-seeking act and propose that a rhetorical question can be defined negatively by the absence of an information-seeking function. Whatever else is required in order to develop a positive account of rhetorical questions, the absence of an information-seeking function can be viewed as a necessary condition. There is plenty more to be said about rhetorical questions, in their own right. However, this distinction helps to further refine the contours of the information-seeking account of questions. We can see this in operation in the survey.

In EXPOSE, Sarah is using the information-seeking function of questions to expose her disruptive colleague. Again, it is precisely the fact that she is seeking information from him that does the work of exposing him in this way. In DISINTERESTED, Sarah is not perceived to be seeking information from the disliked colleague. As many of the survey participants observed, she is adopting a convention of British politeness that is, to some extent, defined by a shared understanding that the utterance 'how are you' in this context, is not made in order to seek information. As one participant observed, 'The intention isn't to gain information or understanding.' Likewise, in RAIN, Sarah's utterance is not made in order to seek information about whether it will ever stop raining. It is, as many participants commented, more like an expression of disappointment or frustration. In both DISINTERESTED and RAIN, there is no information-seeking taking place. In EXPOSE, Sarah is seeking information in order to achieve the goal of exposing her colleague. As such, the latter scenario contains a question, while the former do not. This is predicted by the information-seeking account of questions and reflected in the survey results.

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

The distinction between rhetorical and non-rhetorical questions (or just questions) adds further clarity to the claim that a question is an information-seeking act. It allows for certain predictions about what will and will not be identified as a question, according to an everyday conception. It can also be used as a method for including or excluding things from the question collection. If something is an information-seeking act, then it gets a place in the collection. If it is rhetorical or conventional or something else, then it does not.[5] Clarifying the nature and status of rhetorical questions helps to identify a clear, analytical boundary around the information-seeking account of questions. Intuitions may diverge on what counts as an information-seeking act, but whether or not something is a question is determined by the result.

That being said, everyday life is never as clean or ordered as conceptual analysis would like it to be. As such, there are inevitably many things that it is difficult to classify, even with the information-seeking account of questions in place. I think of these as grey area cases. Grey area cases reflect the need for a pragmatic attitude in any attempt to answer the Question Question (and, indeed, in the analysis of everyday concepts more generally).

One such grey area case is represented in the last scenario of the survey. In this scenario, Sarah is leaving work for the day and night has already fallen. She pauses at one point and looks up to the clear, dark sky above. Marvelling at the scale and beauty of the scene she says silently inside her head 'how big is the universe'. She considers this for several minutes and then continues home. I call this scenario SKY. In response to this scenario, 53% of the survey participants judge there to be a question (2,592 participants), 35% judge there to be no question (1,698 participants), and 12% are unsure (560 participants). The scenario elicits only a very small majority who judge there to be a question and the largest percentage of 'unsure' responses.

This is a grey area case. However, I think the lack of consensus reflected in the survey results for SKY can be explained by the information-seeking account of questions. It seems likely that Sarah knows that there is no possibility of her actually finding out how big the universe is by saying silently inside her head 'how big is the universe'. However, it is unclear whether this fact alone should or does prevent her from seeking information in this way. As one survey participant, who responded 'unsure', puts it:

[5] Actually, that's not quite true, there is a special section in the collection dedicated to 'non-questions'.

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

> 'this could go either way. Obviously she won't ever be able to answer the question of how big the universe really is, but she still asked the question to herself which led her to ponder the vastness of it all, which could be considered a question.'

The case is unclear precisely because it is unclear whether Sarah is really engaged in an information-seeking act. Does wondering, pondering or awe, inspired by genuine curiosity, amount to information-seeking. Perhaps in some primitive sense, it does. On the other hand, perhaps this is a different kind of act entirely. SKY represents a grey area case when it comes to answering the Question Question, even with the information-seeking account in place. This raises a suite of fascinating questions of its own (many of which are considered by the survey participants). The existence of grey area cases, however, does not undermine the information-seeking account of questions but rather serves to illustrate the complexity of the task one undertakes when attempting to provide a satisfying answer to the Question Question.

5. An answer to the Question Question

A question is an information-seeking act. This is my answer to the Question Question. If this answer seems intuitive to you (perhaps even bordering on the obvious or mundane) then I have done what I set out to do. As I said at the outset, my goal is to present an answer to the Question Question that responds to and reflects an everyday conception of questions. This aim goes far beyond that of constructing accessible prose. As a philosopher, it is my privilege to spend time engaging in abstract conceptual analysis. But the object of analysis, in this case, is not itself an abstract entity, detached from the practical concerns of daily life. Quite the opposite, in fact, questions are an integral part of the way that we communicate with each other, coordinate our social and epistemic interactions, and learn about the world in which we live. They are part of the stock of the world and a ubiquitous feature of human life. A satisfying answer to the Question Question should reflect this.

I observed, at the outset, that relatively few answers to the Question Question have been offered throughout the history of philosophy. There is, as far as I am aware, only one other English language paper with the title 'What is a question?'[6] This paper was written

[6] Of course, this is actually a different title, as it includes a question-mark.

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

by the logician and legal philosopher, Felix S. Cohen, in 1929. Cohen (1929) opens his paper with the following sentence: ''What is a question?' is a question which seems to have been almost totally ignored by logicians' (p.350). I submit that it is a question that has been almost totally ignored by philosophy at large (and, in fact, logicians and linguists have done by far the most work in this field). Philosophy has plenty more to offer on this topic.

The answer that Cohen (1929) provides is, as one might expect, a version of the logician's answer I quoted at the start: 'A question, it is submitted, is simply a propositional function (or propositional form)' (p.353). As before, this answer reflects a formal approach to the analysis of questions and understanding it requires one to know, at least, how the terms proposition, form and function, are used by logicians. It is, again, far from intuitive. Any answer to the Question Question that seeks to move beyond this kind of formal analysis and, most importantly, capture the value and significance of questions in our lives must, I think, respond to and reflect an intuitive, everyday conception of questions.

That said, I am not attempting to undermine the logician's answer to the Question Question. Nor, for that matter, to undercut the definitions provided in dictionaries and reference sources (although perhaps these could be tweaked). Both of these sources contribute something valuable to the interpretation and analysis of questions. Nonetheless, as I see it, there is a wide open space between dictionary definitions and logical constructs, where the everyday conception of questions resides. This paper is an attempt to fill some of that space with philosophical reflection on the nature of questions. More importantly, it is an invitation for others to do the same. In one sense, questions are abstract but in another they are familiar and tangible. We all know what it is like to ask a question. My hope is that this paper provides a stimulus for further thought and discussion about this familiar act, and the practice of questioning in which it is embedded.[7]

University of Oxford
Lani.Watson@philosophy.ox.ac.uk

[7] I am grateful to Joshua Habgood-Coote and Jared Millson for a very helpful exchange during the writing of this paper. I am also grateful to all those who have taken the 'What is a Question' survey and contributed to the Question Collection on my website. Particular thanks to the audience of my talk as part of the *Royal Institute of Philosophy*, London Lecture Series 2020, and to the organisers for inviting me to give it.

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

References

Maria Aloni, 'A formal treatment of the pragmatics of questions and attitudes', *Linguistics and Philosophy* 28 (2005), 505–539.

Lennart Åqvist, *A New Approach to the Logical Theory of Interrogatives,* (Uppsala: University of Uppsala, 1965).

John, L. Austin, *How To Do Things With Words: The William James Lectures delivered at Harvard Univ. in 1955,* (Oxford: Oxford University Press, 1962).

Nuel Belnap, 'Questions, Answers and Presuppositions', *The Journal of Philosophy* 63 (1966), 609–611.

Nuel Belnap and Thomas Steel, *The Logic of Questions and Answers,* (Connecticut: Yale University Press, 1977).

Sylvain Bromberger, 'Why-Questions'. In: *Mind and Cosmos: Essays in Contemporary Science and Philosophy* edited by Robert Colodny. (Pittsburgh: University of Pittsburgh Press, 1966) 68–111.

Ivano Ciardelli, 'A First-Order Inquisitive Semantics', In: *Logic, Language, and Meaning: Selected Papers from the Seventeenth Amsterdam Colloquium* edited by Maria Aloni, Harald Bastiaanse, Tikitu de Jager, and Katrin Schulz, (Berlin: Springer, 2010).

Felix. S. Cohen, 'What is a Question?' *The Monist* 39 (1929), 350–64.

Jonathan Ginzburg, 'Interrogatives: Questions, Facts and Dialogue', In: *Handbook of Contemporary Semantic Theory* edited by Shalom Lappin, (Oxford: Blackwell, 1997) 385–422.

Jereon Groenendijk, 'The Logic of Interrogation', In: *Semantics and Linguistic Theory* edited by T. Matthews and D. Strolovitch, (Cornell: Cornell University Press, 1999) 109–126.

Jeroen Groenendijk and Martin Stokhof, *Studies on the Semantics of Questions and the Pragmatics of Answers*, Joint Ph.D. thesis, University of Amsterdam, Department of Philosophy (1984).

Charles Hamblin, 'Questions in Montague English', *Foundations of Language* 10 (1973), 41–53.

David Harrah, 'A Logic of Questions and Answers', *Philosophy of Science* 28 (1961) 40–46.

Jaakko Hintikka, 'The Interrogative Model of Inquiry as a General Theory of Argumentation', *Communication and Cognition* 25 (1985) 221–42.

Jaakko Hintikka, 'The Role of Logic in Argumentation', *The Monist* 72 (1989) 3–24.

William Jaworski, 'The Logic of How Questions', *Synthese* 166 (2009 133–55.

Lauri Karttunen, 'The Syntax and Semantics of Questions', *Linguistics and Philosophy* 1 (1977), 3–44.

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press

Ferenc Kiefer, 'On the Pragmatics of Answers', In: *Questions and Questioning* edited by Michel Meyer. (New York: De Gruyter 1988), 255–279.
Mary Prior and Arthur Prior, 'Erotetic Logic', *Philosophical Review*, 64 (1955) 43–59
Floris Roelofsen, 'Algebraic foundations for the semantic treatment of inquisitive content', *Synthese*, 190 (2013), 79–102.
Richard Whately, *Elements of Logic,* (London: J. Mawman, 1826).
Richard Whately, *Elements of Rhetoric,* (London: J. Mawman, 1828).
Andrzej Wisniewski, 'Erotetic Search Scenarios', *Synthese* 134 (2003), 389–427.

https://doi.org/10.1017/S1358246121000114 Published online by Cambridge University Press