

The cooperative principle and collaborative inquiry

Philip Cam

University of New South Wales

p.cam@unsw.edu.au

Abstract

The norms associated with HP Grice's cooperative principle focus on exchange of information and require considerable extension in order to capture the presiding features of discourse that attempts to inquire into a problem or an issue. These features are revealed by looking at the case of collaborative philosophical inquiry. Although it is a special case, the findings have widespread implications for education. When teachers venture beyond the kind of informative discourse that has traditionally monopolised verbal exchange in the classroom and engage in collaborative inquiry-based teaching, they need to attend to the norms that govern such discourse.

Key words

collaborative inquiry, cooperative principle, HP Grice, interrogative, speculative, semantic and logical norms

In his classic discussion of 'Logic and conversation', HP Grice set out what he took to be the general features of discourse or 'talk exchange'.¹ He told us that discourse is governed by the Cooperative Principle—the principle that, roughly speaking, we should make our contributions appropriate to the purpose or direction of a discourse at the stage at which that contribution occurs. In accord with this principle, our contributions should be (1) neither more nor less informative than is required, (2) truthful and in accord with the evidence, (3) relevant and (4) clear, succinct and orderly.

While the Cooperative Principle and its associated norms are general, Grice seems to suppose that the participants are engaged in discourse that revolves around an

¹ Chapter 2 of HP Grice (1991) *Studies in the way of words* (Harvard University Press, Cambridge, MA), pp. 22-40. I will use the word 'discourse' in the same way as Grice uses the word 'conversation' in his title, to include all kinds of what he also calls 'talk exchange'.

exchange of information. We are not to withhold relevant information or to add unnecessary detail, for instance, and not to deliberately misinform or make unwarranted claims. Now, informative discourse is not the only kind of talk exchange and many forms of discourse do not revolve around or fully respect Grice's rules. For example: light-hearted and diverting conversation seeks to entertain rather than to inform and may be relatively unconcerned with truth or orderliness; heated argument is often more concerned with expressing feelings than with exchanging information and it may play fast and loose with truth and evidence; humorous altercations are expressions of wit rather than informational exchanges and often make use of ambiguity and inconsequential remarks.

Grice is well aware of this. He acknowledges that participants in a talk exchange may violate, opt out of, or deliberately flout his rules, so that their behaviour is deviant in one way or another. Yet this is not the only way to regard the matter. Why not say that the norms he associates with the Cooperative Principle characterise only some forms of discourse? Grice is primarily interested in exploring what he calls 'conversational implicature',² which carries with it assumptions about the rationality of the discourse, having to do with truthfulness, evidential warrant, relevance, clarity and the like—the very features that are either cast aside or hardly to the point in the kinds of cases cited above. Gricean discourse is characteristically rational in ways that some other forms of discourse are not. We might say that his norms are those of *rational* exchange.

Even then, Grice's norms do not provide an adequate characterisation of significant forms of rational discourse. They omit so many essential features that they fail to provide a recognisable portrait of them. Collaborative inquiry is a case in point. It is rational in nature and cooperative by definition, but Grice's focus on information exchange leads him to formulate the Cooperative Principle in a way that misses crucial features of it. His interest is, of course, in general norms, rather than ones that apply only to particular kinds of discourse. As I hope to make clear, however, the norms of collaborative inquiry characterise so much of our discourse as to make the focus on information exchange a form of tunnel vision. These norms apply to talk exchange whenever we discuss things so as to think them through.

² 'Conversational implicature' is a term that refers to the unstated implications of what people say in carrying on a conversation, which Grice took to be intrinsically connected to the general features identified under the Cooperative Principle.

Although the issue is obviously a general one, I will be considering the case of discursive philosophical inquiry in a Community of Inquiry setting. I do so because the issue is of practical relevance to school education. While informative discourse is the mainstay of verbal exchange in the classroom, it is important to advance our understanding of the norms that apply to other forms of discourse that may be employed in teaching and learning.

An analysis of the general features of this discourse should be of interest to anyone involved in philosophy in schools and especially to those attracted to the Community of Inquiry model of pedagogy. Teachers who attempt to establish a Community of Inquiry in their classrooms by engaging students in discursive philosophical inquiry should know how that differs from informative discourse and how to make effective use of those differences.

This narrowness of focus should not be taken to limit our findings. As we proceed, it should be clear that nothing much turns on the details of my choice of setting in what it reveals about the norms of collaborative inquiry. Instead, my aim is to relate these general findings to the particular case. I wish to underscore the value of collaborative philosophical inquiry in providing the tools with which students can be taught to think more effectively about all manner of issues and problems, both in and out of school.

The basic features of philosophical inquiry

In order to think about how the norms of Grice's Cooperative Principle might be amended or enlarged to capture this form of talk exchange, it is best to begin by outlining the basic features of philosophical inquiry. I will ignore the collaborative setting for the moment, even though that is the context to which the norms are meant to apply. Once I have sketched the main features of philosophical inquiry I will add the collaborative context.

Problems and questions: It is common to see philosophy as inquiring into either problems or questions. The two things are connected. Such questions are probes into a problem domain. Let me illustrate with some examples of traditional philosophical problems and questions. A philosopher might attempt to deal with the mind-body problem by addressing the question whether mental states can be identified with states of the brain. Or again, he or she might try to answer the question of what it

means to say that someone 'could have done otherwise' in addressing the problem of free will and determinism. Sometimes a philosophical problem is captured by a single question, as in the traditional problem of evil, the resolution of which turns on the answer to the question whether the evil in this world is consistent with the existence of a wholly benevolent, omnipotent and omniscient God.

In light of this, we might say that a crucial step in dealing with a problem is to translate it into the questions that need to be answered if it is to be resolved. A philosophical inquiry, therefore, proceeds to answer such questions. The questions of philosophy are its mainstay in that the greatest part of inquiry lies there.

What makes questions *philosophical* is not something that admits of an entirely uncontroversial answer. Even so, there are a number of features that generally characterise them. (1) Philosophical questions tend to be *deep-seated*. Whether they concern what exists, what we can know, what we should value, or how we should live, these questions are deeply rooted in political, social and religious thought and practice and underlie all the sciences and humanities. (2) Philosophical questions are humanly or intellectually *substantial* ones. They are not inconsequential or trivial. (3) Philosophical questions almost invariably have *contentious answers*. This does not imply that one response is as good as another. Our responses can be life-enhancing, clear-headed and insightful, but they can also be stultifying, muddled and obtuse. (4) The lack of final answers means that the questions of philosophy tend to be *perennial*—they recur—and automatically accepting the views of previous generations can mean living with outmoded ideas. (5) Finally, while everyday experience and empirical knowledge may be relevant, philosophical questions cannot be answered simply by appeal to customary ways of looking at things or through the application of scientific method. Instead, they call for *insight* or what has traditionally been called *wisdom*. Rather than demanding a mystical power, such sagacity depends upon the development of ideas and understandings through careful reasoning and analysis, with philosophy having done much to develop the fields of logic and conceptual investigation, providing us with valuable general-purpose tools for reasoning and the exploration of ideas.

Hypotheses and theories: While the term 'theory' is sometimes used in philosophy to cover all manner of speculations, we need to distinguish between an initial idea or suggestion regarding the solution to a problem, or answer to a question, and a more comprehensive or systematic response that has been developed through reason and argument. I will use the term 'hypothesis' to refer to the former and 'theory' to

denote the latter. In this way, we would distinguish, for example, between the initial suggestion or hypothesis that mental states are brain states and the mind-brain identity theory as a systematically argued philosophical position.³ Similarly, the hypothesis that there can be freedom of the will in a deterministic universe is not the same thing as a well-developed theory that aims to demonstrate their compatibility. A large part of academic philosophical inquiry consists of arguing for or against competing hypotheses and developing promising hypotheses into more fully-fledged theories.

Concepts: Philosophers commonly engage in conceptual exploration. This involves both *analysis*—as in classification, making distinctions, and uncovering the criteria that lie behind the application of concepts—and *construction* or *invention*—as in devising new ways of classifying things, making fresh conceptual connections, and generating ideas. Employed together, analysis and construction combine the critical and the creative aspects of conceptual thought in ways that can be immensely productive. While such activities are not exclusive to philosophy, conceptual exploration forms part of its core business, rather than being ancillary, as in other disciplines. It is therefore something that should be acknowledged in any general characterisation of the norms governing philosophical inquiry.

Some see philosophy as aimed at establishing the truth about the matters into which it inquires, while others see it as concerned to provide meaning. These differences in aim obviously make a difference to the form of discourse that their proponents see as central to philosophy. This is not the place to explore the issue, but it is worth making the following point. Philosophical inquiries that are dominated by conceptual exploration embody the quest for meaning, whereas those that are dedicated to the pursuit of truth are more likely to emphasise justification and inference—the last item on our list of general features of philosophical inquiry.

Justification and inference: While justificatory reason-giving and inference are hardly unique to philosophy, it does specialise in these practices. The branch of philosophy known as logic is an investigation into the forms of justifiable inference, and philosophical work more generally is known for its meticulous attention to reason and argument. As a study in its own right, logic can be roughly divided into two parts. Informal logic is concerned with justifiable inference between statements in a natural language, while formal logic deals with logical relations between well-

³ This hypothesis was developed into a carefully argued theory by the Australian philosopher JJC Smart (see Smart 1959).

formed formulae in artificial languages or regimented versions of natural language. While most philosophers do not resort to the sophistications of advanced formal logic, they are inclined to insist upon the detailed logical justification of claims and are invariably concerned with justifiable inference, being careful to avoid forms of argument that they know to be invalid and to scrutinise inferences to ensure that they preserve truth.

Adding the collaborative dimension

Let us now see what these basic features of philosophical inquiry look like when inquiry takes a collaborative form—that is, when we collaborate in philosophical problem formation and questioning, hypothesising and theorising, conceptual analysis and construction, and justification and inference-making. Common conceptions notwithstanding, this is the normal form in which academic philosophy occurs. It is a collaborative enterprise inasmuch as philosophers read and respond to each other's work, correspond with one another, engage in seminars and conferences, and so on. The philosopher as a thinker working in isolation—as in Ludwig Wittgenstein working alone in a secluded cabin in Norway—is the exception rather than the rule. Even then, he was reacting against earlier work.

For the sake of discussion, I will take a group of people engaged in face-to-face discussion as my paradigm. To bring it even closer to the classroom Community of Inquiry, I will assume that the inquiry is initiated by the group being presented with material that stimulates its members to raise questions for discussion. Obviously, classroom inquiry cannot be equated with professional exchange. Yet there are commonalities underlying the differences and it should become clear as we proceed that nothing much turns on the choice of setting. As I said earlier, these conditions are not meant to limit our findings, but to bring out the general features of collaborative inquiry in connection with an educationally relevant case.

To raise philosophical questions is to unearth deep-rooted perplexities and to begin to grapple with the limits of our knowledge and understanding. When we do so collaboratively, others may raise questions that have not occurred to us, or formulate them differently, stimulating our own thinking on the matter. By bringing these differences of awareness and insight into critical and creative engagement, we are better able to make progress. As John Dewey (1938, p. 108) reminds us, 'a problem well put is half-solved' and the same could be said of asking the right question.

Indeed, as I have already suggested, to put a problem well is effectively to analyse it out and ask the right questions. The kind of critical and creative interplay through which we vary and refine our questions by constructively engaging with one another in collaborative inquiry gives us the best chance of ensuring that a problem is well put and the right questions asked.

While the beginning of inquiry involves scouting out the territory, getting a sense of direction and starting to feel our way forward, the main thing that a group needs to strive for at this stage is the construction of appropriate thought-provoking questions. This calls for an *interrogative* mode of thought and interaction, as opposed to the *assertoric* mode which is characteristic of an exchange of information. We are not merely questioning one another, but collectively probing the subject matter. More exactly, in attempting to respond to things that are problematic or puzzling by raising philosophical questions about them, we are trying to give interrogative form to our lack of knowledge or understanding—to raise queries that expose the roots of our ignorance. We are, moreover, making productive use of that ignorance by recasting it in a form that will allow us to use our collective intelligence to address it. In lacking positive knowledge of the matters with which we are concerned, we are not, in that sense, exchanging information with one another, but rather elucidating our ignorance. At this stage of our exchange, our contributions might be said to convey information, but only insofar as they reveal our ignorance—so that, as a group, we come, like Socrates, to know that we don't know.

Inquiry questions are open in the sense that there are no settled answers accepted by the group. Even if some of its members are initially more or less settled on the matter, to engage in inquiry is for them to adopt a critical attitude toward their own opinions and to be prepared to change their minds on the basis of reason and evidence. It may be in the nature of the question to admit of more than one satisfactory answer, there being different solutions to the underlying problem or ways of resolving the issue, or there might be a unique right answer, albeit one that is not to hand. In any case, while inquiry proceeds, there will always be more than one possibility to be investigated. If there is only one live possibility, then that is the answer and the inquiry is at an end.

Many things may need to be done in starting to address a philosophical question. We may need to confirm that we are asking the right question or to see whether there are subsidiary questions that should be addressed. We need to ensure that the question itself is well-formed and adequately understood by the group. Clarification

may be required, connections made to other concerns or things known about, assumptions and implications noted, and so on. Even so, all such things merely prepare the ground for our attempt to formulate possible answers to our questions through the formation of hypotheses. As I have been using the term, hypotheses are thoughts or ideas that have developed into suggestions, propositions, tentative explanations, and the like. Sometimes they arise as expressions of belief or opinion held by their proposer, but they become hypotheses by being treated as submissions to be considered by the group.

The search for hypotheses in collaborative inquiry is the pursuit of the possible. It is dedicated to raising alternative possibilities and canvassing different points of view. It promotes difference and divergence of thought rather than the linear pattern of thinking associated with such things as repeating information that has been taught and working out the right answer to a 'problem' through the mechanical application of an algorithm. Fanning out to search for possibilities and welcoming different opinions is an indispensable element of collaborative inquiry and should be recognised in any set of standards applied to it. At this stage of the proceedings, therefore, our contributions should call attention to the various possibilities and points of view that can help us formulate hypotheses.

We have now moved from operating in an interrogative mode to one that is *speculative*. To speculate is not to inform or to say what you know to be true. It is to suggest something that will be informative if it turns out to be true. There is a difference here between idle speculation and the speculations of inquiry. In idle speculation we are not really interested in finding out whether our conjectures are true, whereas the opposite is true in inquiry. A hypothesis can also be said to be idle in inquiry, if no evidence or reason could tell either for or against it. It is idle because it would remain uninformative no matter what our inquiry turned up. So, the injunction to hypothesise in inquiry comes with a warning against this kind of idle speculation.

The move from hypotheses to theories, as I earlier defined them, involves a good deal of reasoning and analysis and is therefore more appropriately treated by turning to the latter. Let us begin with conceptual exploration. Conceptual analysis is certainly concerned to make things clear and orderly, but its guiding ideal is meaning rather than truth. The same even more obviously applies to conceptual construction, which may be highly imaginative and inventive. In their search for meaning, participants in collaborative philosophical inquiry try to make sense of one

another's ideas by translating them into their own words, as well as by suggesting analogies, making distinctions, asking for illustrative examples, and trying to discern the criteria that govern the application of key concepts. All such efforts belong to what we may call the *semantic* mode of thought and speech. The elaboration and construction of meaning is such a core activity that any adequate account of the norms governing philosophical inquiry must reflect it. In this respect, we should strive to make our contributions analytically rigorous and constructively useful. Analytical rigour includes such things as requesting clarification when a contribution appears to be vague or ambiguous, critical listening, attention to detail in making and assessing offerings, and thoroughness of investigation in collectively exploring a line of thought. Constructive utility includes helping one another to see fresh possibilities, resolving misunderstanding, providing the group with a more productive way of looking at something and making fruitful connections between our ideas.

Reasoning—or more exactly, logical justification and inference—brings us to thought and communication in its *logical* mode. It is the mode to which we turn in order to test our hypotheses. On the affirmative side, we are in search of such things as evidential support, logical consistency and coherence, and conformity to established principles. On the negative side, we are on the lookout for such things as inconsistency with the evidence, unwarranted assumptions, logical incoherence and contradiction, and possible counterexamples. There are clear benefits in carrying out this work collaboratively. For example, it makes our hypotheses more open to the evidence, both positive and negative. Someone may provide evidence that was not available to others, or whose relevance had not occurred to them. They may look at the evidence from a different point of view, or evaluate it differently, leading the group to re-examine the criteria by which it should be judged. Collaborative inquirers also benefit from their collective powers of inference. One person may spot questionable assumptions to which another was blind, or question the other's reasoning and bring them to re-examine it. Varying contributions also encourage those with a more logical cast of mind to make inferential connections between them, such as pointing out the differences in their implications or their inconsistency with one another. In a similar vein, the collaborative construction and examination of arguments also pools the group's logical expertise.

The logical mode of communication is clearly concerned with truth. Evidence helps us to establish the reliability of our hypotheses and our inferences are justifiable insofar as they are truth-preserving. In themselves, however, logical justification and

inference are binary operations that have either a formal or a probabilistic basis. Hypothesis *H* is justified by evidence *E* if and only if we can infer *H* from *E*, either because the inference is formally valid or because it is acceptable on the basis of probability. In order to function effectively, our contributions need to preserve these logical relations. To ascertain and preserve truth, we need to focus on evidentiary warrant and validity. In a word, we should strive to make our contributions logical.

The norms of collaborative inquiry

Let me sum up the discussion. We have seen that philosophical inquiry is characterised by the nature of its problems and questions as well as by the special attention it pays to conceptual exploration and reasoning in testing hypotheses and developing theories. It involves interrogative, speculative, semantic and logical modes of thought, which are nurtured and enriched by the communicative acts of those who collaboratively engage in it. This means that it appeals to norms under the Cooperative Principle in addition to those of being truthful, maintaining relevance, and striving to be clear and concise, which govern discourse that is essentially an exchange of information. Recalling that, under the Cooperative Principle, we should make our contributions appropriate to the purpose or direction of a discourse at the stage at which that contribution occurs, the following norms suggest themselves:

- *The interrogative norm:* Philosophical inquiry deals with matters about which we are ignorant, our knowledge is questionable, or our understanding is deficient. We need to recast that lack of knowledge or understanding in a way that will allow us to address it. This means probing it with questions and forming them into an agenda for inquiry. At the outset, therefore, *our contributions should express our ignorance in interrogative form.*
- *The speculative norms:* In attempting to answer our questions, we should not follow just one line of thought or look at things from one perspective. *Our speculations should take account of all relevant possibilities and points of view.* Since we are hypothesising in an attempt to rectify our ignorance, *we should avoid all idle speculation.*
- *The semantic norm:* In the pursuit of meaning, we are likely to be called upon to clarify suggestions, to make distinctions, develop connections, and to scrutinise the criteria that we employ to make judgements. In order to do this effectively,

we need to think both critically and creatively. Hence, *we need to be analytically rigorous and conceptually adventurous in making our contributions.*

- *The logical norms:* We need to subject our hypotheses to critical comparison and individual scrutiny in order to test their worth and should not reject any hypothesis without good reason. Therefore, *we should ensure that our contributions look to the evidence and we should not make assertions without warrant.* From a logical point of view, we also need to be mindful of our assumptions and ready to examine the implications of our suggestions. Consequently, *our contributions should be inferentially appropriate and should always adhere to the principles of valid or reliable reasoning.*

To a first approximation, these look to be the basic norms to be followed by those engaged in collaborative philosophical inquiry, in addition to the ones identified by Grice. It takes but a glance at these conditions, however, to realise that they pertain to any serious attempt to discuss a problem or an issue, not just a philosophical one. No such discussion is in good order unless it addresses the appropriate questions, considers relevant possibilities and viewpoints in fashioning responses, avoids such things as vagueness and ambiguity, comes up with useful ideas or insights, adheres to the evidence, and employs reliable reasoning.

That we need to abide by such constraints in order to think our way through all manner of things has implications for education. Their breadth of application reveals the importance of students learning to think and communicate in such a manner and of teachers venturing beyond the kind of informative discourse that has tended to monopolise verbal exchange in the classroom. It is also clear that philosophical inquiry provides teachers with the means of learning to think in these ways. While none of them are exclusively its preserve, philosophy pays close attention all these things and has made a specialty of conceptual exploration and reasoning, which support the semantic and logical norms identified above. When it comes to this pervasive form of what Grice calls 'talk exchange', philosophical inquiry is the best-placed discipline that we could hope to reconstruct for educational purposes. This provides a strong argument for doing just that.

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