

Skill and Scepticism

An Enquiry Concerning the Nature and Epistemic Value of Intuitive Judgement

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Abstract

This thesis concerns two main questions: What is intuition? And can it be a source of knowledge or justification? In addressing these questions, it advances several ongoing philosophical debates, and does so in two main ways: firstly, by formulating a general account of the nature of intuitive judgement that establishes common ground amongst the often disparate views of scholars working on intuition (or intuitions) in psychology, linguistics, philosophy and various other disciplines; and, secondly, by developing a new epistemological position that combines scepticism about the evidential value of intuition with a new account of philosophical skill.

The general account of the nature of intuitive judgement mainly consists in drawing a distinction between intuitive judgement and intuitive appearance which is analogous to a distinction that can be drawn between perceptual judgement and perceptual appearance. It is argued that a common type of paradox entails the distinction for the non-perceptual case; it is then demonstrated how various related notions, such as intuitive belief, intuitive thinking and intuition as a cognitive faculty, can be derived from the notion of intuitive judgement.

The epistemological account receives additional support from a new theory regarding the objects of intuition, according to which the analogy between intuition and perception holds specifically for what is sometimes called ‘aspect perception’: it is argued that some intuitive appearances are partially constituted by an appearance of meaning and that, consequently, the analysis of intuitive judgement must distinguish between two types of object, an intentional object (typically, a thought) and a causal one (typically, an expression of thought). It is further argued that the focus on evidential value that has been prevalent in the philosophical literature is too restrictive. By contrast with the prevalent view, it is demonstrated that intuition plays a significant role in human thinking, including in philosophical and scientific enquiry, independently of whether intuition is of great or only of minimal evidential value.

‘How in the world did you deduce that?’ I asked.

‘Deduce what?’ said he petulantly.

‘Why, that he was a retired sergeant of Marines.’

‘...So you actually were not able to see that that man was a sergeant of Marines?’

‘No indeed.’

‘It was easier to know it than to explain why I know it. If you were asked to prove that two and two made four, you might find some difficulty, and yet you are quite sure of the fact...’

— Arthur Conan Doyle, *A Study in Scarlet*

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Preface

Much of my thinking about the issues that are addressed here has been inspired by two books in particular, one fairly recent and the other out of print. The two books are Susan Stebbing's *Thinking to Some Purpose* and Daniel Kahneman's *Thinking, Fast and Slow*. Stebbing approaches her subject matter from a logical perspective, while Kahneman writes against the background of his work in cognitive psychology, but both books are philosophical at heart. Compared with these popular books, the present work is of course written for a much smaller audience. However, I have followed their example insofar as I have tried to also address intuitive judgement in various areas of life. By contrast, the recent philosophical debate about the nature and epistemic value of intuition has been, perhaps unsurprisingly, rather self-absorbed: it has mainly focused on intuitive judgement *in* philosophy. Of course, every philosopher should take a special interest in understanding intuitive judgement in philosophy, but developing a useful philosophical account of any sort of intuitive judgement requires a broader perspective than that.

I deem myself very fortunate to have received help and advice from so many people, and in so many different ways, over the past few years that even trying to spell out my debts of gratitude to them here would be a hopeless undertaking; I hope that they will know who they are and how grateful I am. But I would like to express my gratitude to a few people in particular. I want to thank Bill Child for having guided my philosophical development at Oxford, for many insights and suggestions, for his patience and encouragement, and for so much of his time. And I want to thank Tim Williamson for his detailed comments on my work and the conversations that we had over the past twelve months. Finally, I want to thank my family, and especially my wife, for their love and support; this work is dedicated to them.

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Introduction

There is much to be said about the importance of intuition in this present age, both in general and in many individual spheres of human society, including science, politics and the arts. However, I need not go into much detail here for present purposes (that is, the examination of the thesis). I shall perhaps leave a more comprehensive introduction to the topic for another occasion.

The six chapters of this thesis are written in such a way that they might in principle be read in any order. There are various explicit interconnections between the arguments of each chapter, as well as several broad, unifying lines of thought that run through the work from beginning to end: in particular, a strand tracing the tension between *skill* and *scepticism*. The chapters are ordered in a tripartite structure, with each of the following broad areas of concern being taken up by two chapters respectively (and in this order): metaphysics, epistemology and the philosophy of philosophy. The discussion of these topics mainly proceeds by way of dialogue with recent work in philosophy and psychology; in future work, I hope to carry out comparative studies of relevant work by Bergson, Descartes, Husserl, Kant, Plato and Spinoza in particular, as well as of relevant work in non-Western traditions of thought.

Chapter 1 presents a general account of the nature of intuitive judgement. This account mainly consists in drawing a distinction between intuitive judgement and intuitive appearance. In particular, it is argued that a common type of paradox entails the distinction, and it is demonstrated how various related notions, such as intuitive belief, intuitive thinking and intuition as a cognitive faculty, can be derived from the notion of intuitive judgement.

Chapter 2 presents a new theory regarding the objects of intuition, according to which the analogy between intuition and perception holds specifically for what is sometimes called ‘aspect perception’: it is argued that some intuitive appearances are partially constituted by an appearance of meaning and that, consequently, the analysis of intuitive judgement must distinguish between two types of

object, an intentional object (typically, a thought) and a causal one (typically, an expression of thought).

Chapter 3 begins the discussion of the epistemic value of intuitive judgement. The chapter ends with an argument based on the notions of complexity and indeterminacy of meaning (and hence, in turn, partly based on the argument from chapter 2) in favour of a moderate kind of scepticism about the evidential value of intuition according to which intuition has little or no evidential value with respect to that which is really interesting.

Chapter 4 continues the discussion from the previous chapter, but shifts the focus onto questions of intuitive skill and expertise. It presents the outlines of a detailed philosophical account of the nature of intuitive expertise. In particular, it is argued that a broader category of what might be called ‘intuitive skill’ is required for this purpose, which includes what I propose calling ‘sceptical skill’. Thus, it is demonstrated that, even if the extent to which intuitive expertise can be attained is limited in such a way that one will continue to have untruthful intuitive appearances—as is arguably the case in science and philosophy, for instance—then someone’s intuitive judgement may yet in principle be perfectly reliable thanks to their sceptical skill, in virtue of which they may detect certain non-truthful intuitive appearances so as to avoid forming incorrect intuitive judgements on their basis.

Chapter 5 discusses different views concerning the epistemology of the philosophical practice of evaluating theses by way of examples and counterexamples; in particular, the chapter examines a common view, which is also widely shared amongst experimental philosophers, and a prominent view that is opposed to this common view (and typically also to experimental philosophy) according to which intuitions do not play any epistemic role in the relevant practice. The discussion culminates in the proposal of an alternative view, which promises to explain the evidential status of intuitions with respect to the philosophical practice in question without psychologising the evidence.

Chapter 6 discusses difficulties concerning the philosophical practice of evaluating theses by way of examples and counterexamples that arise from the fact that the appearance of a case as being classifiable as either an example or counterexample may be an illusion of determinate meaning

(because the meaning of the expression of the case may be indeterminate). Avner Baz has argued that these difficulties require a revolution in philosophical methodology. Citing authors from various apparently opposing schools within the analytic tradition—in particular, J. L. Austin, Bernard Williams and Timothy Williamson—I demonstrate that what is actually needed is simply more careful attention to detail (which, of course, is easier said than done; but the point is nevertheless true).

1 What is intuition?

Introduction

Many different things have gone by the name of ‘intuition’ or ‘intuitions’. Furthermore, a comparison of modern dictionary entries on contemporary usage indicates that the noun ‘intuition’ is currently without any one universally agreed meaning.

To begin with, let us look at the historical alternatives listed by the *Oxford English Dictionary*:¹

†1. The action of looking upon or into; contemplation; inspection; a sight or view. (= Latin *intuitus*.) *Obs.* 1497–1664

†2. The action of mentally looking at; contemplation, consideration; perception, recognition; mental view. *Obs.* 1628–1755

†3. The action of mentally looking to or regarding as a motive of action; ulterior view; regard, respect, reference. *with intuition to (of)*, with reference to; *in intuition to*, in respect to, in view of, in consideration of. *Obs.* 1626–1718

4. *Scholastic Philos.* The spiritual perception or immediate knowledge, ascribed to angelic and spiritual beings, with whom vision and knowledge are identical. 1652–1836

5.

a. *Mod. Philos.* The immediate apprehension of an object by the mind without the intervention of any reasoning process; a particular act of such apprehension. 1600–1860

b. Immediate apprehension by the intellect alone; a particular act of such apprehension. 1660–1877

c. Immediate apprehension by sense; a particular act of such apprehension. Esp. in reference to Kant, who held that the only intuition (*anschauung*, *intuitus*) possible to man was that under the forms of sensibility, space, and time. 1796–1864

6. In a more general sense: Direct or immediate insight; an instance of this. 1780–1879

Collins English Dictionary lists the following contemporary alternatives:²

1. knowledge or belief obtained neither by reason nor by perception

2. instinctive knowledge or belief

3. a hunch or unjustified belief

4. philosophy

immediate knowledge of a proposition or object such as Kant’s account of our knowledge of sensible objects

5. the supposed faculty or process by which we obtain any of these

¹ See ‘intuition, *n.*’, in *OED Online* (accessed 16 April 2018).

² See ‘intuition’, in *Collins English Dictionary* (accessed 16 April 2018).

Merriam-Webster has this:³

- 1 : quick and ready insight
- 2 a : immediate apprehension or cognition
- b : knowledge or conviction gained by intuition
- c : the power or faculty of attaining to direct knowledge or cognition without evident rational thought and inference

The notion of intuition that I am concerned with here—the answer that I shall give to the question ‘What is intuition?’—does not directly correspond to any one of these modern alternatives, nor to any subset of them. But the general account of the nature of intuitive judgement which I develop can be used to account for every one of these alternatives, each of which are indeed sometimes intended when people nowadays speak of intuition or intuitions. Furthermore, the general account yields a notion of intuition that is compatible with at least the most central and widespread uses of relevant terms in both academic and popular treatments of the topic.

Much philosophical debate on the topic has focused on whether intuitions are beliefs, judgements, dispositions to believe or judge, or, perhaps, a kind of experience. If nothing else, recent work in philosophy has shown the enormous extent of disagreement concerning even the most basic characterisations of what intuition is or is supposed to be. In the philosophical and psychological literature on the topic, one is faced with a myriad of sometimes implicit and sometimes explicit views of the nature of intuition, ranging from those who believe that it is of great epistemic importance to those who deny its very existence. This current lack of a theoretical basis constitutes an important motivation for developing the general account presented in this chapter, which will hopefully help to establish common ground on which to discuss some of the finer details of what is variously described as ‘intuition’, ‘intuitions’ or ‘intuitive’.

Most attempts to characterise the nature of intuition have focused on either the subject (which is said to have an intuition), the object (which the subject is said to have an intuition of) or the putative relation between the two. For example, some authors have attempted to characterise intuition in terms

³ See ‘intuition’, in *Merriam-Webster* (accessed 16 April 2018).

of what it is like to have an intuition from the subject's point of view;⁴ others have attempted to do so by specifying the type of object that it takes (one notorious candidate being 'the a priori');⁵ and still others have attempted to characterise intuition in terms of what causes the relevant relation between subject and object to occur.⁶ The present chapter focuses on the subject and the relation between subject and object, because for the purposes of the general account that it develops it is better to leave the question of what in principle may or may not be the object of intuition undecided (the question will instead be addressed separately in chapter 2).

The argument of the present chapter is organised into four main sections. The first two sections introduce the outlines of a general account of the nature of intuitive judgement. Sections 3 and 4 then each present a reply to a common objection, thus completing the exposition of the general account.

1. Intuitive judgement and intuitive appearance

Intuition is sometimes described as 'seeing with the mind's eye' or as 'intellectual perception'. More casually, people also say things like 'this looks true to me' or 'that sounds right'. Philosophers have always been interested in the analogy between intuition and perception. Plato, Augustine, Descartes, Husserl and Gödel all deployed the analogy; and both philosophers and psychologists with an interest in the nature of intuition continue to make frequent use of it.⁷ So there exist many different accounts of the analogy. Naturally, not all of them are compatible with each other. However, nearly all of them share features that are at least similar to what I take to be the two core elements of the analogy between intuition and perception.

First, there are at least some cases of both intuition and perception such that something appears to a subject a certain way. For example, S may have a visual appearance as of, say, the cat on the

⁴ See, for example, Audi 2015, Bengson 2015 and Chudnoff 2013, each of whom presents an analysis of intuition as experience; and, further, Earlenbaugh and Molyneux 2009 and Sosa 2007a, each of whom present an analysis of intuition as dispositions.

⁵ See, for example, Bealer 1996, BonJour 1998, Chudnoff 2013 and Gödel 1964.

⁶ See, for example, Ludwig 2007 and Sosa 2014.

⁷ See, for example, Bealer 1998, Bengson 2015, Boghossian 2014, BonJour 1998, Chudnoff 2013, Conee 1998, Kahnemann 2003, Maddy 1980, Nagel 2007, Plantinga 1993 and Sosa 2014.

table; analogously, S may have an intuitive appearance that, say, either it is raining or it is not raining.⁸

Second, in both these kinds of cases (intuition and perception alike), a subject in principle may or may not judge in accordance with how things appear to them. For if something appears to one a certain way, one may nevertheless have good reasons against judging that it is, in fact, so (in particular, one might have reason to believe that the content of the judgement is in fact false or that one's appearance is unreliable).

Thus, we can distinguish between intuitive judgement and intuitive appearance in broadly the same kind of way in which perceptual judgement is commonly distinguished from perceptual appearance. The distinction between perceptual appearance and perceptual judgement is easily illustrated by any old case in which something (sensorily) appears to one a certain way but one knows that it is not in fact the way it appears. For instance, in a curved mirror my nose may look bigger than the rest of my face, but I know that it is not in fact bigger.

Linguists and psychologists standardly, and quite naturally, classify certain instances of perceptual judgement or appearances as intuitive. Following this practice, it can be shown that the distinction between perceptual appearance and perceptual judgement entails the same distinction for intuition. For example, imagine that a psychologist asks some people in an experiment whether the grey lines in the diagram below are parallel to each other:

⁸ The correct quantification of this statement—that is, whether all or only some cases of intuition (or perception) are as described—depends on what precisely is meant by an ‘appearance’ (more on this question in section 2 below).

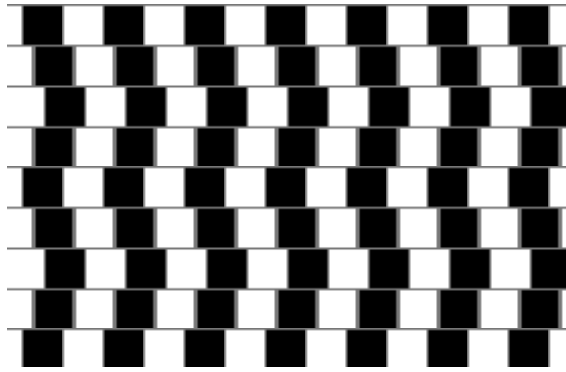


Figure 1 (Source: Wikipedia)⁹

Suppose that S_1 quickly answers the psychologist's question in the negative, and that in turn the psychologist, after having asked S_1 some follow-up questions to make sure that S_1 based their judgement on nothing but how the lines looked to them, notes down in her records that S_1 made an incorrect intuitive judgement in response to the question. It would be natural to describe S_1 in this way, and we may further suppose that the psychologist's description of S_1 is correct. (Hence, S_1 has based their intuitive judgement on the visual appearance that they had as of the lines not being parallel to each other; in other words, S_1 's intuitive judgement and appearance in this case are at least partially constituted by a perceptual judgement and appearance respectively.¹⁰) Next, suppose that a different subject, S_2 , answers differently—in particular, not in the negative—even though, like S_1 , they have a visual appearance as of the lines not being parallel to each other. Suppose that S_2 suspects that something is not right in this situation (perhaps S_2 is already familiar with a similar diagram or expects the psychologist to present them with a trick question); and suppose that S_2 actually compares each line with the next from one end to the other and that, upon finding that each single line looks to be parallel to the next one, they finally give the answer that the lines are in fact parallel to each other. Thus, S_2 does not base their judgement on how the diagram intuitively looked to them; to this extent S_2 's judgement is not an intuitive one. Given the recalcitrant nature of the illusion that this particular diagram tends to produce, however, we may assume that S_2 continued to have the intuitive appearance as of the lines not being parallel. Hence, S_2 has the intuitive (visual) appearance as of the

⁹ This is called the café wall illusion (Gregory and Heard 1979) or kindergarten illusion (Pierce 1898). See also the picture by Akiyoshi Kitaoka in chapter 4, section 4.

¹⁰ Sections 2 and 3 contain further discussion of the question of what constitutes intuitive appearance.

lines not being parallel to each other, but they do not judge in accordance with their appearance, because they know (having carefully checked the lines) that this appearance is untruthful.

Unlike their colleagues in linguistics and psychology departments, philosophers frequently work under the assumption that cross-classification between, on the one hand, intuitive judgement or appearance and, on the other, perceptual judgement or appearance is incorrect or somehow undesirable.¹¹ Indeed, a number of philosophers have explicitly argued against such cross-classification.¹² Some parts of the following discussion will therefore proceed as if cross-classification were not possible, but all relevant points are easily generalised. Given these philosophers' qualms, it is noteworthy that the distinction between intuitive appearance and intuitive judgement can also be made independently of that between perceptual appearance and perceptual judgement. The case which is standardly used to demonstrate this distinction between intuitive judgements and intuitive appearances that are of an intellectual sort rather than a sensory one is that of the naïve comprehension principle for sets:¹³

For every predicate, there is a set which consists of all and only those objects that satisfy that predicate.

This tends to appear true to most people when they first encounter it, but it is generally agreed nowadays that it is not, due to Russell's paradox.¹⁴ Yet many who thus believe that the principle is false have said that it still intuitively appears true to them. Hence, it intuitively appears to them that the principle is true, but they do not judge accordingly.

¹¹ The use of this terminology in philosophy is a fairly recent development. Compare, for example, Davidson 1882.

¹² See, for example, Bealer 1998, Ludwig 2007 and Bengson 2015.

¹³ I do not require strict opposition between the intellectual and sensory cases. Hence, my saying that the one case is an intellectual one rather than a sensory one is not intended to imply that it is strictly non-sensory (as if it did not involve the senses at all); equally, my saying that a given case is a sensory rather than an intellectual one is not intended to imply that it is strictly non-intellectual (as if it did not involve the intellect at all).

¹⁴ Russell's paradox is designed to establish a counterexample to Naïve Comprehension. Russell argued that for the predicate 'is a set which contains all and only those sets that do not contain themselves' there is in fact no set which consists of all and only those objects that satisfy the predicate, because there cannot be such a set due to the following contradiction: such a set would have to either contain itself or not contain itself; but if it contained itself, then it would not consist of *only* those objects that satisfy the predicate; and if it did not contain itself, then it would not consist of *all* those objects that satisfy the predicate.

Indeed, it frequently happens that something intuitively (intellectually rather than sensorily) appears to us a certain way and yet we do not judge accordingly, because we know better or think we know better. Politics, advertising and many other kinds of public, as well as private, discourse offer many examples of this. However, there are very few cases (if any) about which it is generally agreed that they instantiate this phenomenon. But the standard example can in fact be generalised.¹⁵ Like Russell's paradox, many well-known paradoxes—such as Meno's paradox, Galileo's paradox, the paradox of analysis, liar paradoxes and sorites paradoxes—are typically presented as a set of premises and a conclusion such that at least one premise appears intuitively true while the rest of the argument either follows or intuitively appears to follow.¹⁶ In the case of Russell's paradox, the naïve comprehension principle constitutes such a premise. Another example of such a premise is: 'Where there is no heap of sand, adding one grain of sand will not make it a heap either'. To many people this will intuitively appear true; and yet, if conjoined with additional premises and via apparently correct reasoning, it may be used to support the paradoxical conclusion that there can be no such thing as a heap of sand.¹⁷ To put it in general terms: some paradoxes are typically presented as an argument such that the argument may intuitively appear sound, in virtue of at least one premise's intuitively appearing true, and yet one does not judge accordingly because one has reason to believe that the argument cannot be sound. Thus, this common type of paradox entails the distinction between intuitive judgement and intuitive appearance independently of that between perceptual judgement and perceptual appearance.

This common type of paradox lets us identify something like a prototype of intuitive appearance that is of an intellectual rather than a sensory sort.¹⁸ Subjective appearances that resemble this prototype in relevant ways might perhaps also be called 'intellectual appearances' for short. To be clear, it is not intended that this type of paradox give us either a necessary or sufficient condition for what are or are not intellectual appearances. Rather, it gives us a defining characteristic of a prototype

¹⁵ As far as I am aware, this has not been previously noted.

¹⁶ I briefly discuss Galileo's paradox in chapter 4.

¹⁷ The expression 'sorites paradox' is derived from ancient Greek: '*soros*' means heap.

¹⁸ Cp. prototype theory in cognitive linguistics and cognitive psychology; see especially Rosch 1973, Rosch and Mervis 1975, Lakoff 1987 and, for an overview, Lewandowska-Tomaszczyk 2010.

of intellectual appearance, similar to the way in which butterflies in the stomach are a defining characteristic of a prototype of romantic love. Not all intellectual appearance need involve this type of paradox or any paradox at all for that matter, just like not all romantic love need involve butterflies in the stomach. It is an important feature of intuition that we are often correct to judge in accordance with how things intuitively appear to us to be. Still, we may begin to understand what intuition is via this common type of paradox, just like we may begin to understand what romantic love is via butterflies in the stomach.¹⁹

A basic definition of terms can now be formulated as follows. By saying ‘intuition’ or ‘intuitions’ we shall be speaking of either some intuitive judgement or some intuitive appearance. An intuitive appearance is a subjective appearance as of something’s being so (hence, S has an appearance as of something’s being a certain way). An intuitive judgement is the corresponding judgement that is in accordance with a given intuitive appearance (S judges that it is so). The disjunctive form of the definition corresponds to standard usage of the English words ‘intuition’ and ‘intuitions’, which are sometimes used to indicate judgement (‘My intuition is that so and so’) and sometimes to indicate less than that (‘I have an intuition..., but...’).

I shall additionally make use of all of the following types of expressions to describe various instances of intuitive appearance: ‘x intuitively appears (or seems) to be so (or true) to S’, ‘it intuitively appears (or seems) to S as if x is so’, ‘it intuitively appears (or seems) (true) to S that...’, ‘S has an intuitive appearance (or seeming, or impression) as of x’s being so (or true) (or as if x is so (or true))’ and ‘S has an intuitive appearance (or seeming, or impression) that...’.²⁰ Various types of object-expressions may be substituted for ‘x’: in particular, both that-clauses (such as ‘that grass is green’) and nouns or noun-phrases (such as ‘Bob’, ‘the cat’ and ‘this thought’).²¹

¹⁹ The prototype-based account is strong enough, as long as it is not very carelessly employed, to prevent the kind of overgeneration of the category of intuition that is discussed in Williamson 2004 and 2016.

²⁰ Other expressions can, in principle, also be used. For example, some scholars prefer to speak in terms of presentation. See, for instance, Bengson 2015, Boghossian 2014 and Chudnoff 2013.

²¹ This shows that my general account of the nature of intuitive judgment can also account for objectual intuition, that is, a type of intuition that is analogous to, say, seeing (or seeming to see) the cat. For example, Gödel has famously defended an account of knowledge of the objects of set theory along the lines of objectual

2. Phenomenology and further distinctions

Two phenomenological characterisations of intuitive appearance are central to the present account. These characterisations also reveal another side of the analogy between intuition and perception.

First, like perceptual appearance, intuitive appearance is typically conscious.²² When we describe a subject as having a perceptual appearance—say, as of a cat on the table—then we will typically be implying that there is a period of time during which the subject is aware that things are so appearing to them (such that, for instance, the subject will not be surprised to be told that they may have had this perceptual appearance).²³ Analogously, when we describe a subject as having an intuitive appearance—say, as of its being the case that grass is green—then we will typically be implying that there is a period of time during which the subject is aware that things are so appearing to them (such that, for instance, the subject will not be surprised to be told that they may have had this intuitive appearance).²⁴

Second, and again like perceptual appearance, intuitive appearance is typically spontaneous, that is, both kinds of appearances typically come and go of their own accord, while we can only try to be more receptive or less receptive. Consider perception first. Looking in the right direction may or may not let a subject have the visual appearance as of the cat on the table, regardless of whether it is in fact there or not; and trying to be more receptive, by looking closer for example, may still not let them have the visual appearance as of the cat on the table (for example, they might consistently mistake the cat for a bunch of wool, or the cat might be hiding behind the fruit bowl). On the other hand, when looking in the direction of the cat on the table—when it is in plain sight—one typically cannot help but have the visual appearance as of the cat on the table. Now consider the analogous case of intuition. Reflecting on whether it is true that grass is green may or may not let a subject have

intuition; see, for example, Gödel 1964; see also Chudnoff 2013 (chapter 7) and Husserl 1913 (on Husserl's influence on Gödel's account of mathematical intuition, see Føllesdal 1995).

²² See also Audi 2015, Bealer 1998, Bengson 2014 and 2015, Sosa 2007a and Williamson 2004 (116–25).

²³ See also my discussion of Grice 1961, in chapter 5.

²⁴ Psychologists often describe intuitive reasoning as unconscious (see Evans 2007); this is consistent with my characterisation of intuitive appearance as typically conscious. Indeed, it is part of the phenomenal character of conscious intuitive appearance that it is the result of unconscious processing, which contributes to the spontaneity of intuitive appearance (which is discussed in the next paragraph in the main text).

the intuitive appearance that it is true, regardless of whether it is in fact true or not; and trying to be more receptive, reflecting more or harder, may still not let them have the intuitive appearance that it is true. On the other hand, there are many things of which on a given occasion one typically cannot help but have a corresponding intuitive appearance.²⁵

We have already noted that intuitive appearance is different from perceptual appearance, although intuitive appearance is sometimes at least partially constituted by perceptual appearance.²⁶ It should furthermore be noted that intuitive appearance is different from other subjective appearances such as memorial appearances and from common sense and, further, disjoint from beliefs as well as from guesses, assumptions and hypotheses. Like in the case of perceptual appearance, some memorial appearances may be classified as intuitive appearances, that is, intuitive appearance is sometimes at least partially constituted by memorial appearance; however, not all intuitive appearance is constituted by memorial appearance, and it is at least an open question whether all memorial appearances can be classified as intuitive appearance.²⁷ The exact relation between intuition and common sense is an interesting question, but for present purposes it should be obvious enough that intuitive appearance is different from common sense on any reasonable notion of common sense, as it is generally possible that a given intuitive appearance stands in contradiction to whatever counts

²⁵ Both in philosophy and psychology, the key distinctive feature of intuition is often taken to be that it is ‘un-reflective’; see, for example, Nagel 2012 and Mercier and Sperber 2009. However, it is important to distinguish intuitive judgement from intuitive appearance in this respect. Intuitive judgement is correctly described as being unreflective insofar as it is made in accordance with, and in direct consequence of, one’s intuitive appearance; but intuitive appearance is not necessarily unreflective. The spontaneity of intuitive appearance is different from lack of reflection, as well as ‘speed of judgement’ (Cappelen 2012, 114–5), although lack of reflection or speed of judgement can be useful indications of the characteristic spontaneity of intuitive appearance: it is possible for an intuitive appearance to occur only after one has spent time focusing one’s attention or even after extensive reflection and yet, when it occurs (if it occurs) for it to do so spontaneously. Cp. also Goldman and Pust (1998, 179), who wrongly suggest that intuitions are ‘spontaneous mental judgments’, and McMahan 1999, who defines intuition as spontaneous judgement; cp. further McMahan’s revised version of his 1999 paper (McMahan 2013) in which he, rather more accurately, omits the word ‘spontaneous’ from his definition of intuitive judgement. See also Bengson (2015, 720–2), who describes the spontaneity of intuitive appearance in terms of its being both ‘baseless’ and ‘fundamentally non-voluntary’; see further, for example, Neta 2012, 329. Similarly, Kahneman writes: ‘A core property of many intuitive thoughts is that under appropriate circumstances, they come to mind spontaneously and effortlessly, like percepts’ (2003, 699). I discuss the question of spontaneity and reflection further in section 3 below.

²⁶ On the distinction between intuitive appearance and perceptual appearance, see also Bealer (1998, 208) and Chudnoff (2013, ch. 2).

²⁷ See also Bealer 1998, 210–11.

as common sense.²⁸ Belief is disjoint from intuitive appearance in the same way in which judgement is disjoint from intuitive appearance, because it may intuitively appear to me that something is so without me needing to believe accordingly.²⁹ Finally, guesses, assumptions or hypotheses are typically made freely in a way in which one is not free to make intuitive appearances; in fact, it is unclear what ‘making’ an intuitive appearance would mean.³⁰

Of course, not everything that we ordinarily call ‘intuition’ or ‘intuitions’ is an intuitive judgement or intuitive appearance in the senses of these latter two terms that I have outlined in this chapter thus far. For example, sometimes when we speak of intuitions what we mean are beliefs (a subject may be said to have an intuition in this sense, even if they are not currently having a corresponding intuitive appearance; we sometimes say that someone else shares one of our intuitions without implying that they are currently having a corresponding intuitive appearance); and sometimes what we mean are thoughts (that is, the content of a given intuitive judgement). Furthermore, sometimes when we speak of intuition (in the singular) what we mean is a cognitive faculty. Some people have found talk of intuition as a cognitive faculty problematic. However, if what we mean by this is merely the capacity for having intuitive appearances, on a par with the capacity for having perceptual and other subjective appearances, then this kind of talk will be no more problematic than the notion of intuitive appearances itself.³¹ The general account of intuitive judgement that I have outlined in this chapter allows us to conceive of these ways of using the words ‘intuition’ or ‘intuitions’ as being largely derivative of the central notion of intuitive appearance in broadly the same kind of way in which the notion of intuitive judgement has been said to be derivative of it.³² Similarly, the adjective ‘intuitive’ can be used to yield meaningful composite terms such as ‘intuitive thinking’, ‘intuitive

²⁸ Cp., for example, Parsons (1995, 56 and 59) and Ross (1930, 41), each of whom presents an analysis of intuitions in terms of common sense or, as Ross puts it, ‘convictions of thoughtful and well-educated people’.

²⁹ See also, for example, Bealer (1998, 208), Conee (1998, 848) and Sosa (1998, 259). It should be noted, however, that this is not to say that intuitive appearance might not be correctly analysed as inclination to believe (inclination to believe does not entail belief) nor, indeed, that there might not be a special form of belief that is accurately described as ‘intuitive’; see discussion in this section below; see also Nimtz 2010.

³⁰ See also, for example, Bealer (1998, 210–11) and Bengson (2015, 710–14); cp. Gopnik and Schwitzgebel (1998, 78–9), who propose analysing intuitions as hypotheses.

³¹ See also Audi 2015, 63.

³² Thus, the general account that I have outlined can also accommodate the widespread conception of intuitions as beliefs; see, for example, Ludwig 2007 and Sinnott-Armstrong, Young and Cushman 2010.

action’, ‘intuitive beliefs’ and ‘intuitive thoughts’ on the basis of corresponding instances of intuitive appearance, which may be present, past, conscious, unconscious or merely possible.

3. Two replies to the mystery objection

Many people find intuition mysterious. Some of them associate it with traditions and practices with a dubious reputation such as mediumship or fortune-telling. Given the rich history of the term and seeing many of the popular books on the topic, such an attitude is understandable; and it should not be surprising either that some scholars have also raised serious doubts about the existence of intuition. In philosophy, the term ‘intuition’ has played various important roles—not least in the debate over rationalism and empiricism—and yet philosophers are in as much disagreement over the question of what intuition might be as ever. For example, Paul Boghossian writes: “‘Intuition’ seems like a name for the mystery we are addressing, rather than a solution to it’ (2000, 231).³³ The first two sections of this chapter have been intended in part to provide an answer to the mystery objection. Before saying in a bit more detail what I take this answer to be, I want to discuss an alternative answer that has recently been offered in the literature.

Elijah Chudnoff has recently defended an experiential analysis of intuitive appearance. According to the experiential analysis, intuitive appearance is a kind of experience analogous to the way perceptual appearance is often said to be a kind of experience.³⁴ Following Chudnoff’s version of the experiential analysis, intuitive appearance is not an irreducible kind of experience; rather, it is itself constituted by other, often more familiar, kinds of experience (two examples Chudnoff frequently gives are conscious thinking and imagining). Thus, according to Chudnoff, intuitive appearance is no more mysterious than the kinds of familiar experiences that he thinks it is constituted by.

³³ See also, for example, Bengson (2015, 708), BonJour (1998, 107), Casullo (2003, 163–69), Devitt (2014, 192–3), Hintikka (1999, 130–3) and Kitcher (2000, 74–5).

³⁴ For similar accounts, see Audi 2015, Bengson 2015 and BonJour 1998. For work in psychology that emphasises experiential aspects of intuitive reasoning, see for instance Epstein and Pacini 1999, Evans and Over 1996 and Reber 1993.

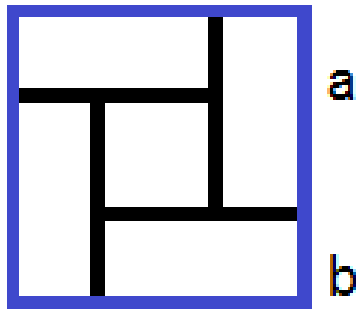
Chudnoff's argument, as I understand it, goes as follows.³⁵

Consider:

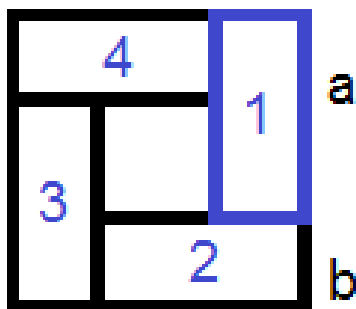
$$A: (a + b)^2 \geq 4ab \text{ and } ((a + b)^2 = 4ab \text{ just when } a = b)$$

This will not immediately appear true to everyone, but the following series of reflections may yet induce an intuition. The second conjunct $((a + b)^2 = 4ab \text{ just when } a = b)$ presents a special case of the first $((a + b)^2 \geq 4ab)$; the special case allegedly occurs 'just when $a = b$ '. Starting with the special case, we may now imagine the following diagrams corresponding to various parts of A.

$$(a + b)^2 \dots$$

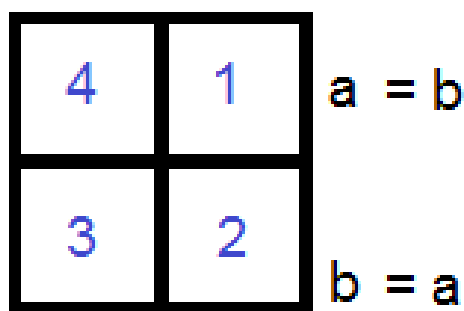


$$\dots = 4ab$$



³⁵ The mathematical example is Chudnoff's (see 2013, 52–7); I have merely added a couple of parentheses for clarity. The diagrams are mine.

... just when $a = b$



Going through these diagrams may have made it appear true to us that $(a + b)^2 = 4ab$ just when $a = b$ (that is, the second conjunct of A). Moving on to the general case (that is, the first conjunct of A), where it is possible that $a \neq b$, we can go back to the second diagram. It may then also appear true to us that $(a + b)^2 \geq 4ab$.

I agree, then, with Chudnoff that we may thus come to have an intuition that A, even though at first this did not appear true to us.³⁶ However, Chudnoff goes on to argue that the relevant intuitive appearance is entirely constituted by the reflections that are associated with it—such as the visualisation of diagrams—which he conceives as familiar kinds of experiences. I disagree with this latter claim.³⁷

Chudnoff's argument continues as follows. The exact sequence of reflections culminating in an intuitive appearance can vary. For example, while one person may need no more than a brief look at the second diagram above, for another person much more reflection may be required, and yet another person might not proceed in the mode of visualisation at all but via some other kind of reflection.

³⁶ It is widely held that intuitions are non-inferential in a similar manner to that in which perceptual appearances are non-inferential (I take the relevant way in which intuitive appearance is non-inferential to be entailed by its spontaneity as explained in section 2 above). Perhaps it will be objected that the mathematical case does not satisfy the condition of non-inferentiality. Indeed, it is possible that someone might use the diagrams to establish premises and infer from these premises that A, and for this not to constitute an intuition of A. However, reflection on the diagrams might also make A appear true to someone without its appearing true to them being the result of any of the inferences that they consider; and this appearance may still be an intuitive one. For a similar example, see BonJour (1998, 105). For a similar discussion, see Nagel (2012, 499–500). See also my discussion of naïve realism in chapter 2, section 2.

³⁷ Part of Chudnoff's claim is the assumption that the reflections associated with an intuitive appearance will always include experiences of some sort. This by itself is a contentious claim, but I shall not discuss it any further.

Chudnoff argues that variations like this confirm his theory about the constitution of intuitive appearance: he argues that the theory can be used to explain why the resulting intuitive appearances are, as he writes, ‘phenomenally different’, and that the theory thus ‘accounts for our phenomenological observations’ (2013, 56–7).

However, I find what Chudnoff calls ‘our phenomenological observations’ to be inaccurate. Chudnoff believes that the various ways in which an intuitive appearance can be reached in the mathematical case above constitute *different* intuitive appearances; I believe that the various ways in which an intuitive appearance can be reached in this case are simply various ways in which the *same* intuitive appearance can be reached (namely the intuitive appearance that A). Chudnoff offers no argumentative support for what he takes to be ‘our’ observations. The following two considerations speak against his view and in favour of mine.

First, the same set of reflections may result in an intuitive appearance for one person but not for another; as mentioned already, one person may need no more than a brief look at the second diagram above in order for it to intuitively appear to them that A, but for another person more reflection may be required. This possibility poses a problem for Chudnoff’s view: even if Chudnoff were right that intuitive appearance, which he conceives as experience, is constituted by other kinds of experience, such as reflections, associated with it, the possibility that the same set of reflections (or experiences) could result in an intuitive appearance for one person but not for another would still show that, all else being equal, the reflections (or experiences) cannot be *all* that constitutes the intuitive appearance.³⁸

Second, it is also questionable whether it should be a *necessary* condition for intuitive appearance to occur that some reflection or experience co-occur and constitute it; because some intuitive appearances occur immediately, that is, without any co-occurrent reflections or experiences that

³⁸ Of course, Chudnoff might still uphold the merely existential claim that some other kinds of experience will always be sufficient. I do not see how this hollow version of the claim might be supported by argument; but as long as the claim remains unsupported, it does not help to answer the mystery objection.

constitute the appearance.³⁹ For instance, when being asked whether killing a person is wrong, it might immediately appear to one that yes, it is.⁴⁰

Thus, Chudnoff's account fails to provide a satisfying answer to the mystery objection: not all intuitive appearance is co-occurrent with some reflection or experience that constitutes it. Furthermore, even if Chudnoff were right that all intuitive appearance is so constituted, then—because the same set of reflections or experiences may result in an intuitive appearance for one person but not another—there would have to be yet another thing that constitutes intuitive appearance. About this thing, however, Chudnoff's account says nothing. In other words, Chudnoff's account is either incomplete or it leaves intuitive appearance little less mysterious than he found it to be at the outset.

But why should we find intuitive appearance mysterious in the first place? After all, there are many examples of what are commonly called 'intuitions' to which the distinction between intuitive appearance and intuitive judgement can be applied.⁴¹ On the face of it, intuitive appearance has a minimal, perhaps even elusive phenomenal character: often, there is very little that the subject of an intuitive appearance can report other than that it appears to them that something is so;⁴² and it seems characteristic of intuitive appearance that its occurrence can be immediate. Other kinds of subjective appearances can have minimal phenomenal character in this sense too: for example, memorial appearances (try asking yourself the question 'What year were you born?') or imaginative associations ('Winston ...', 'hammer and ...', 'bread and ...'). Similarly, sometimes a word or expression can be, as it were, on the tip of someone's tongue; when it eventually comes to them, it often comes, as it were, out of the blue.

³⁹ It is not a coincidence that all three dictionary entries, as quoted in the introduction above, mention immediacy.

⁴⁰ Chudnoff fails to address this issue. He only argues that what he calls 'unreflective intuitions' can be constituted by 'merely entertaining or holding in mind' (73) the object of one's intuition. However, he offers no reason why we should not think that such 'merely entertaining or holding in mind' of the object of one's intuition is either itself a kind of reflection or not an experience at all; yet, if 'merely entertaining or holding in mind' the object of one's intuition is either itself a kind of reflection or not an experience at all, then it will do nothing to show that there are no immediate intuitions.

⁴¹ See Parfit (2011, 544–5) for a similar line of defence.

⁴² See, for example, Plantinga 1993, 105.

Perhaps we are still relatively ignorant of the nature of intuitive appearance, but it is not therefore mysterious; it is in principle no more mysterious what intuitive appearance is than it is mysterious what, say, memorial appearance, imaginative association or tip-of-the-tongue appearances are. The reductive type of explanation by which Chudnoff has attempted to vindicate the phenomenology of intuitive appearance is quite unnecessary; it is not a problem if the phenomenal character of intuitive appearance is indeed as minimal as, on the face of it, it seems to be.⁴³

4. Reply to the introspective objection

Some scholars have expressed doubt about the notion of intuitive appearance, because they have been unable to detect anything like it in their own case. Timothy Williamson's voicing of this objection from introspection has been particularly influential.⁴⁴ In a much-cited passage, he takes his cue from David Lewis's and Peter van Inwagen's minimalist answers to the question of the nature of intuitions (Lewis: 'Our "intuitions" are simply opinions', 1983, x; van Inwagen: 'Our "intuitions" are simply our beliefs—or perhaps, in some cases, the tendencies that make certain beliefs attractive to us, that "move" us in the direction of accepting certain propositions without taking us all the way to acceptance', 1997, 309):

Although mathematical intuition can have a rich phenomenology, even a quasi-perceptual one, for instance in geometry, ... I am aware of no intellectual seeming beyond my conscious inclination to believe Naïve Comprehension, which I resist because I know better. I can feel such an inclination even if it is quite stably overridden.... Of course, dwelling introspectively for long on *any* belief or inclination to believe has its characteristic phenomenology, but that is the phenomenology of the dwelling, not of what is dwelt upon. These paradigms provide no evidence of intellectual seemings, if the phrase is supposed to mean anything more than intuitions in Lewis's or van Inwagen's sense. (Williamson 2007, 217)

The naïve comprehension principle has served as a paradigmatic example for those who argue that 'intellectual seeming (or appearance)' does indeed mean something more.⁴⁵ Williamson argues that one's intellectual appearance in connection even with paradigms such as this does not involve the

⁴³ Of course, any respectable psychological account of intuitive appearance will include more than descriptions of its phenomenal character.

⁴⁴ See also, for example, Cappelen 2012, 117 and 2014a, 595; Deutsch 2015a, 28; and Plantinga 1993, 105.

⁴⁵ Williamson also uses the term 'intellectual appearance' in the passage from which the quotation is taken, and uses it in roughly the same meaning as 'intellectual seeming'.

rich phenomenal character that perceptual appearance typically does; and so, although he admits that intuition can also involve quasi-perceptual elements, Williamson concludes that the analogy with perception is unsuccessful because intellectual appearances typically lack a rich phenomenal character.

Proponents of the experiential analysis of intuition have naturally been reluctant to accept this conclusion. For instance, Chudnoff—following his theory of the essential constitutedness of intuitive appearance—has suggested that people like Williamson are ‘wildly mistaken’ about the nature of intuitive appearance and so are not looking for the right kind of thing when trying to introspect intuitive appearance.⁴⁶ However, I think Williamson is at most mildly mistaken here.

We have already noted the characteristic immediacy of at least some intuitive appearances and that this poses a general difficulty for accounts of the nature of intuition that emphasise an analogy with perception. Williamson’s argument seeks to exploit precisely this issue, but close reading shows that his position is nevertheless compatible with the general account of intuitive judgement that I have outlined in this chapter.

As is evident from the quotation above, Williamson speaks freely of intellectual seemings (or appearances). In the same passage, he also writes: ‘In the moment of its intellectually appearing that something is so, often nothing much else intellectually appears’ (217). This is clearly in agreement with what I have said about the phenomenal immediacy of some intuitive, including intellectual, appearances and other subjective appearances; yet Williamson goes on to conclude that even supposed paradigms of intellectual appearance ‘provide no evidence’ of the existence of ‘anything more’ than belief (or opinion) or inclination to belief. It is not clear what Williamson means by ‘more’, but it is interesting to note that he consistently specifies his inclination to believe that Naïve Comprehension is true to be ‘conscious’: in particular, he reports having a ‘conscious inclination to believe’ Naïve Comprehension that he resists due to possessing better knowledge, and he makes it clear that he ‘can feel such an inclination even if it is quite stably overridden’.⁴⁷ However, this report

⁴⁶ See Chudnoff 2013, 53.

⁴⁷ See also Williamson 2004.

is enough to commit himself implicitly to a dispositional analysis of intellectual appearance: because what Williamson reports having is, in other words, precisely an encounter with the type of paradox that entails the central distinction between intuitive judgement and intuitive appearance.

My reply to the introspective objection can be summed up accordingly: anyone who understands what paradoxes are understands what an intuitive appearance is.

Conclusion

Giving a sufficiently detailed answer to the question ‘What is intuition?’ is a difficult task by almost any standard. Here I have pursued the fairly moderate aim of presenting a general account that might provide some much-needed common ground for future scholarly work on intuition (or intuitions). It might be felt that at the end of this chapter I now owe an answer to the question of whether what I have been calling ‘intuitive appearance’ is a kind of experience or a kind of disposition to believe or judge. However, given the controversial nature of this issue, answering it requires much detailed argumentation, including appropriate definitions of both the nature of experience and the nature of either dispositions to believe or dispositions to judge; this would have required significantly more space than the limits of this chapter permit. But, more importantly, the aim of this chapter has been the different one of providing a general account that might serve as common ground for subsequent discourse: insofar as the general account of the nature of intuitive judgement that I have presented—including the distinction between intuitive judgement and intuitive appearance, the latter’s phenomenology and the possible generation of related notions of intuition and intuitive acts and things—raises, and does not preclude, the question of whether intuitive appearance is a kind of experience or a kind of disposition to believe or judge, my aim will have been achieved.⁴⁸

⁴⁸ Although chapter 2 does not focus on this particular question either, it may be read as providing at least a partial answer to the extent that it agrees with Wittgenstein that phenomena such as what he called ‘aspect perception’ may not neatly fall into either of these categories.

2 The intentionality of intuition

Put something down.

Put something down some day.

Put something down some day in.

Put something down some day in my.

In my hand.

In my hand right.

In my hand writing.

Put something down some day in my hand writing.

— Gertrude Stein, ‘Sacred Emily’

Introduction

Tongues may slip, grammar may be poor and clarity may be lacking, but we usually manage to make sense of it all—both as speakers and as listeners. That said, we are still easily misled by all kinds of appearances; and yet we have the tendency to form intuitive judgements even when dealing with complex or unfamiliar issues. In this chapter, I examine what types of things appear intuitively true to us. A standard view amongst scholars working on intuition is that what appears true to the subject of an intuition is a thought (or proposition). In one sense, this view is correct: if the bearers of truth are thoughts, then whatever intuitively appears true will, if it is in fact true, be a thought. However, expressions of the standard view are usually left largely unexplained and, so, there remain important questions.

My discussion focuses on examples like the following:

Lying is wrong.

Cats can’t cook.

An apple is an apple.

Three are more than two.

Killing five is worse than killing one.

Either it is raining or it is not raining.

Many people have argued that, phenomenologically speaking, intuition is much like perception; in particular, that from a subjective point of view the intuition that lying is wrong, say, resembles, in significant phenomenological respects, perceptions such as smelling that the food is burning or seeing that the cat is on the table. It is perhaps revealing that, when a person has the intuition that, say, lying is wrong, then they may also say that it sounds (looks, feels) true to them that lying is wrong or, perhaps even stronger, that they see that lying is wrong. The exact nature of the analogy between intuition and perception is a controversial issue with potentially wide-ranging theoretical implications.

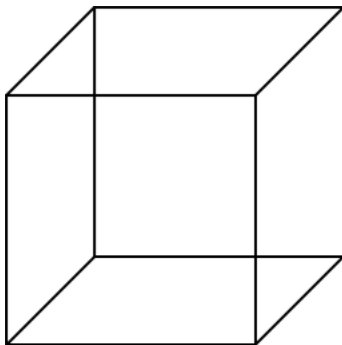
I begin with the observation that some intuitions are analogous to what Wittgenstein called ‘aspect perception’; the bulk of the chapter spells out this analogy from both a phenomenological and a metaphysical perspective. In order that the analogy with aspect perception may help us better understand what intuition is, the phenomenon of aspect perception must be explained in some detail. Thus, after giving a preliminary formulation of the analogy in Section 1, I introduce the problem of noticing an aspect in Section 2. I solve this problem in Section 3, after having explained the prerequisite distinction between intentional and non-intentional object-expressions. In Section 4, I employ the same distinction to show that the analysis of intuition must distinguish between two ways of describing a subject’s intuition and between two kinds of things that are thus typically described as the object of an intuition, namely, thoughts and expressions of thought. In Section 5, I demonstrate that there are many interesting intuitions that are like aspect perception. I conclude the chapter by outlining some of the more wide-ranging implications of the account for the epistemology of intuitions, for philosophy and for thinking in general.

1. Intuition and aspect perception



Van Gogh's *Starry Night* (1889) is not a particularly abstract painting. It is not difficult to see what it depicts, and its perspective is quite realistic. We see a landscape at night, featuring a bright and prominent sky, a range of mountains in the distance and a small village in the valley with a

church. However, Van Gogh employs a delicate structure of short brushstrokes and colour variation to achieve a special effect in the appearance of the sky. This technique leaves no contours; shape and colour become indistinct; and, so, the concentric shades of yellow and white can be seen as either light or matter. In other words, the painting is ambiguous with respect to the size and brightness of the shining objects in the sky: in one moment it may look to the viewer as if the stars were dazzlingly bright and in another it may look to them as if the stars were strangely close.



The same type of effect can be achieved by a simple drawing. The Necker cube can be seen as a cube in two different ways. We can see it either as a cube from above, with the bottom-left large square as the front; or as a cube from below, with the top-right large square as the front.⁴⁹

These pictures have what are known as different 'aspects'. Most people will find it relatively easy to switch between the two aspects of the Necker cube, but not all switching between seeing one aspect and seeing another is as easy as that; perhaps switching between the different aspects in the Van Gogh painting is more difficult. For a particularly difficult example, compare Nobuyuki

⁴⁹ The Necker cube is named after the Swiss crystallographer Louis Albert Necker (1786–1861).

Kayahara's *Silhouette Illusion* (2003) below, which is a dynamic picture that can be seen either as moving clockwise or as moving anti-clockwise.⁵⁰



Noticing an aspect, that is, seeing an aspect for what it is for the first time, is generally more difficult than switching between seeing one aspect and seeing another, because a subject will know what to switch to only if they have already noticed the relevant aspect.

Aspect perception is not limited to aspect seeing. We can hear aspects in much the same way as we can see them: for instance, polyphonic music, which involves various simultaneous lines of melody, lets the subject hear different harmonic aspects. It is also possible to smell or taste aspects.

Not all perceiving-as is the perception of an aspect. For example, some cases of recognition—say, recognising someone at a party to be an old friend—might be classified as perceiving-as but not the perception of an aspect. Furthermore, a paranoid person may perceive their surroundings in various ways as threatening, but this does not mean that the surroundings have a threatening aspect; similarly, not all things as which a patient may see a Rorschach figure count as aspects of the figure. Aspects—like meanings and unlike, say, hallucinations—are normally shareable: if someone claims to perceive an aspect of something but their attempts to share it with others consistently fail, and everyone else is unable to perceive the alleged aspect, then calling whatever the person claims to perceive ‘an aspect’ will no longer be correct.

Now consider the following statement. A kangaroo cannot jump higher than the moon. I assume that this statement will appear intuitively true to many people. But imagine that someone disagreed: ‘Of course a kangaroo *can* jump higher than the moon—the moon cannot jump at all!’ This kind of witty remark, perhaps a joke, exploits our natural tendency to take what is being said to be true; it

⁵⁰ An animated version of the picture can be found on Kayahara's website at http://www.procreo.jp/labo/silhouette_gif.html.

reveals an alternative possible meaning which it is natural to miss, or perhaps reasonable to ignore: the kangaroo statement can be understood either as meaning that a kangaroo cannot jump higher than the moon *is* or as meaning that a kangaroo cannot jump higher than the moon *can*. These kinds of different possible meanings might also be called ‘meaning aspects’.

The analogy between intuition and aspect perception holds primarily with the continuous perceiving of an aspect; in particular, with a subject’s continuous perceiving of an aspect whilst being unaware of the aspectual nature of what is perceived (hence, before the subject notices an aspect). The noticing of an aspect, on the other hand, takes the subject from the dimension of appearance to that of representation. Upon noticing a visual aspect, for instance, both the subject’s visual impression and corresponding seeming change: the cube drawing will no longer simply appear to be the drawing of a cube. Analogously, upon noticing a meaning aspect, both the subject’s meaning impression and corresponding seeming change: the kangaroo statement will no longer simply appear true.

A preliminary formulation of the analogy can now be given as follows: in some instances of continuous seeing (or hearing, etc.) of an aspect, one is having an impression of a visual (or audible, etc.) aspect whilst being unaware of the aspectual nature of one’s impression; analogously, in some instances of intuition, one is having an impression of a meaning aspect whilst being unaware of the aspectual nature of one’s impression.⁵¹

2. What do we see when we see aspects?

Explaining aspect perception is not an easy task. For present purposes, focusing on aspect seeing will be sufficient and make the task slightly more manageable, although much of what I say will be applicable to aspect perception more generally.

⁵¹ If perceptual seemings can constitute intuitive seemings, then an intuitive seeming might also be based on a subject’s continuous perceiving of an aspect whilst being unaware of the aspectual nature of their perceptual impression. Some philosophers believe that perceptual seemings cannot constitute intuitive seemings. In any case, my main interest in this chapter will concern meaning aspects.

Wittgenstein aptly captures the peculiarity of the experience of noticing an aspect when he writes: ‘I *see* that it has not changed; and yet I see it differently’ ([1953/2009b], §113). It might seem promising to try to explain the apparent change of what is seen when we seem to shift from seeing one aspect to seeing another as a change of one’s interpretation of one’s visual impression (rather than a change of one’s visual impression). Following a natural line of thought, which has played a significant role in the empiricist tradition of Hume, Russell, Ayer, Quine and others, we may hold the following view (which might be called ‘the colour-display view’): strictly speaking, what is seen by the human eye are nothing but combinations of colours in two dimensions; these two-dimensional colour-combinations constitute a subject’s visual impressions; the subject’s judgements concerning external causes of their visual impressions are merely inferential. For example, according to this view I do not, strictly speaking, see the cat on the table; rather, what I *see* is nothing but a combination of colours in two dimensions and I *infer* on the basis of this visual impression, and my knowing from experience that this kind of visual impression is to be so interpreted, that the cat is on the table.⁵²

Indeed, it seems natural to think that seeing, say, the Necker cube as one cube rather than another is not really a matter of seeing anything different but merely of interpreting what is seen differently; similarly, it might be argued, we often have some interpretation of a poem upon reading or hearing it for the first time but go on to modify our initial interpretation upon further consideration, while the poem of course remains the same.

However, it is not obvious that all noticing of, or switching between, visual aspects involves interpretation of one’s visual impression (quite regardless of whether the latter is conceived as a mere display of colours or otherwise). Consider the drawing below, C. Allan Gilbert’s *All Is Vanity* (1892).

⁵² See, for example, Price 1932; and Ayer 1973, chapters 4 and 5.



We may see a woman sitting in front of a candle-lit dressing table with a large round mirror, or we may see a human skull. The two aspects are not very difficult to notice. However, it is relatively difficult to isolate them from each other; each aspect, as it were, actively attracts the gaze. If we distance ourselves from the picture or blink our eyes, then the skull-aspect becomes more apparent than that of the woman; from close range, the woman-aspect tends to dominate over that of the skull. Being told, or reminding oneself, that the hanging tablecloth in the woman-aspect forms part of the spine in the skull-aspect (or *vice versa*) might also help one to notice, or switch to, the other aspect. There is thus a clear sense in which we can be said to engage in an interpretation of what is seen whilst viewing this drawing and noticing, or switching between, the two aspects of it; and perhaps this talk of interpretation could be construed as denoting interpretation of our visual impression in the sense required for the colour-display view to be correct.

However, the colour-display view seems untruthful to the phenomenal character of seeing aspects (that is: what it is like, subjectively, to see aspects). For instance: subjectively speaking, it takes very little interpretive work (if any) to notice the two aspects of Gilbert's drawing; rather, we *cannot help* noticing the two aspects. The colour-display view seems equally untruthful to the phenomenal character of vision in general. Subjectively speaking, we see *things*—cats, mats, tables, rainbows, pictures, films, smiles, and so on—and we do so effortlessly and nearly constantly (in a sense, relentlessly); by contrast, it evidently requires great effort on the part of the subject to see an exclusively two-dimensional combination of colours. Similarly: subjectively speaking, what happens when we notice an aspect is that we see some other *thing* (a cube, a skull, a woman); it is in virtue of the fact that we see some other thing when noticing an aspect, in a way that is not mediated by an act of interpretation, that the experience of noticing an aspect comprises its typical element of surprise.

Thus, whatever it is that the colour-display view gets right about vision, it is not the phenomenology of vision and not the phenomenology of seeing aspects. However, it is the phenomenology of seeing aspects that needs explaining.⁵³ Given the foregoing argument, it seems more promising to base an explanation of seeing aspects on the phenomenological observation that, when we notice an aspect, we really do see something that is different from what we saw before.

The colour-display view could be modified so as to respect this observation: when looking at an electronic display (for example, when viewing photos or watching a film), we see the things that are displayed rather than the electrons that do the displaying, or their immediate physical effects (pixels); analogously, when we have a visual impression, we see the things that are displayed—sometimes called ‘organisations’—rather than the colour-elements that do the displaying.⁵⁴

Alternatively, we might reject the colour-display view and hold, instead, the following view (usually called ‘naïve realism’): what is seen by human beings are, at least under normal circumstances, worldly things and goings on; consequently, the subject’s visual impressions are, at least under normal circumstances, transparent in a manner such that the subject’s visual judgements will be not inferential but direct. For example, according to this view, if I see the cat on the table, then I have the visual impression as of the cat on the table; and, on this basis alone (at least under normal circumstances), I may judge that the cat is on the table.

However, regardless of whether we adopt the modified colour-display view or naïve realism, the trouble with saying that we really see something different when we notice an aspect is that it appears to imply that we do not really see anything that remains the same. This is problematic because it is part of the experience of noticing an aspect that there is something that seems to remain the same, and that we seem to *see* something that remains the same, namely, the thing that we are seeing aspects of. The difficulty generalises to any explanation of noticing an aspect: the phenomenology of noticing an aspect seems to be such that the subject sees two different things at the same time, even though it

⁵³ Cp. McDowell 1994.

⁵⁴ The two variants of the colour-display view resemble the philosophical foundations of two competing schools of twentieth-century psychology: structural psychology, which was developed by Wilhelm Wundt and others, and gestalt psychology, whose main proponents were Max Wertheimer and Wolfgang Köhler.

is not (or should not be) possible for a single subject to see them both at the same time; more specifically, the phenomenology of noticing an aspect appears to be such that the subject sees both a previously unnoticed aspect and that of which the aspect is an aspect, but this appears to entail a contradiction, namely, that the subject sees that something has changed and, at the same time, sees that the same thing has not changed. Thus, the question of what we see when we see aspects persists.⁵⁵

3. Seeing aspects and seeing what they are aspects of

Oedipus was looking to find who had killed his father. As the ancient tragedy relates, Oedipus' father had in fact been killed by Oedipus himself. However, it does not follow from this that Oedipus was looking to find himself, at least not without qualification; because, at the time of his search, Oedipus did not know who had killed his father. It is arguably true that Oedipus was looking to find himself, but this description is misleading. For Oedipus' actions would appear in many ways quite unreasonable if the description that he was looking to find himself were a description under which he knowingly acted. Perhaps the best way of putting the point is this: Oedipus' intention is accurately described, from a psychological point of view, as concerning 'who had killed his father' but not as concerning 'himself'. Thus, we might distinguish an *intentional* object from a *non-intentional* one.

Here 'object' signifies a linguistic category. It is in this sense of 'object' that verbs take objects; for instance, 'love', 'throw' and 'read' typically take objects. To avoid confusion, I shall henceforth use the term 'object-expression', rather than 'object', to refer to this category. Of course, the correct

⁵⁵ At the start of this section, I quoted Wittgenstein's apt description of the phenomenal character of an experience of noticing an aspect ('I see that it has not changed; and yet I see it differently'). Or, to be more precise, I quoted the standard English translation of Wittgenstein's text. The original German reads as follows: 'Ich sehe, daß es sich nicht geändert hat; und sehe es doch anders' ([1953/2009b], §113). The final clause contains an ellipsis that is grammatically ambiguous: the clause can therefore be read as either 'und sehe es doch *in anderer Weise*', which corresponds to the standard translation, or 'und sehe es doch *als sei es anders*'. Thus, an alternative translation would be '...and yet I see something different (there)' or, perhaps, '...and yet I see it changed'. While this alternative translation brings out the apparently paradoxical character of noticing an aspect more clearly, the standard translation contains a hint towards what I take to be Wittgenstein's solution (more on which in footnote 59 below).

classification of something as an intentional (or non-intentional) object-expression is not merely a linguistic question but mainly a question of psychology and the philosophy of mind.⁵⁶

The notion of an intentional object-expression can be extended to subjective states other than intention. For example, suppose that I desire an apple; suppose further that I would in principle take any apple but decline the offer of any fruit other than an apple. In such a case, my desire will be accurately described, from a psychological point of view, as one for ‘an apple’ but not as one for, say, ‘a Golden Delicious’ or ‘fruit’; and evidence for what it is that I desire will largely consist in my relevant actions (for example, my declining the offer of an orange or my saying ‘I would like an apple’).

Consider a few more examples. Each of the following verb-object combinations may or may not be employing an intentional object-expression relative to the description of someone’s subjective state: ‘like the neighbour’s cat’, ‘fear that one will be late’, ‘envy a winged horse’. If a person likes the neighbour’s cat but she has always believed that it is a big rat (perhaps it is a hairless cat breed), then ‘she likes the neighbour’s cat’ will not be a description of her liking that employs an intentional object-expression; if she is running late but she would prefer being late by less than five minutes over both being early and being on time, then ‘she fears she will be late’ will not be a description of her fear that employs an intentional object-expression; and, if she envies Pegasus rather than any old winged horse, then ‘she envies a winged horse’ will not be a description of her envy that employs an intentional object-expression.

Now consider the following verb-object combinations: ‘hear voices’, ‘hear a ringing sound’, ‘smell gas’, ‘feel insects crawling on one’s skin’, ‘taste iron’, ‘see stars’, ‘see an after-image’. Each of these phrases might be used to describe a case of hallucination by adding nothing but a subject-expression to form a sentence in the indicative mood and present tense (for instance, ‘she hears a ringing sound’, ‘I am smelling gas’). It is sometimes argued, including by many philosophers defending something like naïve realism, that these uses of perceptual verbs deviate from the norm

⁵⁶ Perhaps this is what Anscombe meant by calling intentionality a ‘grammatical feature’. Cp. Anscombe 1965.

and, so, should be classified as either ironic speech or semantic error. Such conclusions are usually supported by a kind of view according to which perceptual verbs are success verbs or factive operators. Success verbs are verbs that entail the success of the denoted action or event: for example, ‘find’ is a success verb, but ‘search’ is not. Factive operators entail the truth of the thought on which they logically operate: for example, ‘know that...’ is a factive operator, but ‘believe that...’ is not. (Henceforth, I focus exclusively on the verb ‘to see’; but analogous arguments are available for other perceptual verbs.)⁵⁷

Consider an example. If someone says that they saw a pink elephant, then we may try to clarify what this means by asking whether they *really* saw a pink elephant. However, we may instead ask whether there *really* was an elephant there or whether it *really* was pink. Suppose that there was not really an elephant there: now the subject may acknowledge this fact and yet, as the conversation goes on, continue to refer to the event as their *seeing* a pink elephant. In such a case, we may or may not be so pedantic as to insist that, in order to be precise, they should be saying not ‘see’ but ‘seem to see’ (or something similar); nevertheless, the subject would be speaking perfectly ordinary English—and, hence, they would be speaking correctly—if they continued to say simply ‘see’.⁵⁸

Consider another example. If you stare into a light source and directly afterwards you look at a white surface, then you will experience an after-image. Suppose that a group of people try this out: they ask each other what they see, and they say things like ‘I see a green speck’, ‘I do not see a green speck’ or ‘I see a speck of the same size as that clock’ in reference to their after-images (or lack thereof). Perhaps someone will object that what those who say that they see a green speck really see

⁵⁷ See, for example, Ryle 1949, Strawson 1974, Travis 2004 (85) and 2015 and Williamson 1995 and 2000; cp. also McGinn 2015 and Siegel 2010. J.L. Austin is sometimes cited in support of this kind of view, but the following passage suggests that this may not be an entirely correct representation of Austin’s views: ‘There is no one kind of thing that we “perceive” but many different kinds...: pens are in many ways though not in all ways unlike rainbows, which are in many ways though not in all ways unlike after-images, which in turn are in many ways but not in all ways unlike pictures on the cinema-screen—and so on, without assignable limit’ ([1962], 4; see also page 27 on ‘seeing after-images’).

⁵⁸ Notable evidence for this fact about the English language can be found in many standard works of psychology and psychiatry which define kinds of hallucination along the lines of ‘seeing (hearing, smelling, feeling, tasting) of something that is not there’. See, for example, Levine and Oron 2014; and also: <https://en.wikipedia.org/wiki/Hallucination#Classification> and <http://www.nhs.uk/conditions/phantosmia/Pages/Introduction.aspx>.

are disturbances of the visual system; or that none of them really sees anything like a green speck, because there is not really a green speck there. Yet such statements would be perfectly ordinary English and, we may suppose, true.

In general, we can distinguish two ways of using the verb ‘to see’: when you experience an after-image, you *see* an after-image according to one way of using the verb ‘to see’ but you do *not see* an after-image according to the other way of using it. The first way of using the verb takes an *intentional object-expression*; the second way of using it takes a *causal object-expression*. A causal object-expression, if correctly employed, refers to the external causes of the subject’s visual impression; an intentional object-expression, on the other hand, may be accurately employed without making such reference.

Statements using the verb ‘to see’ usually employ an object-expression that is both intentional and causal. Thus, uses of the verb that take an object-expression such that what the subject is said to be seeing is not really there are not the most common type of use of the verb, but these uses should not therefore be classified as ironic or erroneous. In particular, acknowledging the two distinct ways of using the verb ‘to see’ does not entail that it is not a success verb, nor that it is not correctly analysed as a factive operator. For it might be argued that there are two types of success conditions, namely, one corresponding to each of the two ways of using the verb: for example, when I experience a green after-image, my sincerely stating ‘I see a green speck’ will accurately report an achievement of the use of the verb ‘to see’ that takes an intentional object-expression. Similarly, it might be argued that there are two types of facts, namely, one corresponding to each of the two ways of using the verb ‘to see’: for example, when I experience a green after-image, my sincerely stating ‘I see a green speck’ might be analysed as an operation on a true thought concerning my subjective state.

Finally, the distinction between the two ways of using the verb ‘to see’ allows us to explain some of the puzzling features of seeing aspects while avoiding the questionable normative claim made by some philosophers regarding the correct way of using the verb that I have criticised in this section. The key difficulty concerned the question of how to explain the experience of noticing an aspect:

given that the phenomenology of noticing an aspect appears to be such that the subject both sees a previously unnoticed aspect and sees that of which the aspect is an aspect, there appears to follow a contradiction, namely, that the subject sees that something has changed and, at the same time, sees that the same thing has not changed. We can now resolve this apparent contradiction by applying the distinction between the two ways of using the verb ‘to see’: when noticing an aspect, we *see* an aspect according to one way of using the verb ‘to see’ and we do *not see* an aspect according to the other way of using it; rather, on the second way of using the verb, we see that of which the aspect is an aspect.⁵⁹

4. Thought and expression of thought

When someone has an intuition that either it is raining or it is not raining, then what kind of thing do they have an intuition of? Here are three possible answers that are initially plausible: the declarative sentence ‘either it is raining or it is not raining’, the statement (or declaration, that is, the application of the sentence) that either it is raining or it is not raining, and the thought (or proposition) that either it is raining or it is not raining. Most experts agree that the best answer is the thought (or proposition) that either it is raining or it is not raining.⁶⁰ In the remainder of this chapter, I show that this is not the best answer and why, and I present the outlines of a better one.⁶¹

⁵⁹ Note that this solution entails no claim about the nature of aspects. This is also how I read Wittgenstein’s remark, with which he begins his famous chapter on aspect perception: ‘Two uses of the word “see”. ... What is important is the categorial difference between the two “objects” of sight’ ([1953/2009b], §111). The quotation marks in the final sentence, I take it, are scare quotes respecting the fact that, as I pointed out earlier, ‘intentional object’ and ‘non-intentional object’ may stand for kinds of linguistic objects (object-expressions), even if their correct classification is mainly a question of psychology and the philosophy of mind.

⁶⁰ For expressions of the standard view, see for instance Audi 2015, Bealer 1996, 1998, Bengson 2015, Boghossian forthcoming (esp. 145), Chudnoff 2013 (esp. chapters 1 and 2), Conee 1998, Deutsch 2015a (esp. chapter 1), Pust 2000, 2017, Sosa 1998, 2007a, 2014. All other authors concerned with intuitions, as far as I am aware, either take the standard view for granted or speak mainly of intuitive judgements without explicitly addressing the question of the objects of intuitions; see, for example, Cappelen 2012, Gutting 1998, Nagel 2012, Weinberg, Nichols and Stich 2001, Williamson 2004, 2007.

⁶¹ In what follows, I use the term ‘thought’ rather than ‘proposition’, mainly because the latter term, in the various uses that philosophers have made of it, is less ordinary. The nature of thoughts (and, for that matter, propositions) is a difficult and important question. However, I do not intend to use the term other than in its ordinary meaning: for example, thoughts can be good, bad, dangerous, encouraging, useful, creative, interesting, trivial, complex, simple, complicated, true, false, and so on; and we can grasp, convey, share, express, obscure, cherish, lose and recall thoughts as well as doing many other things with them. Of course, there are also important and difficult questions about each of these features of thoughts; but this does nothing

I have given a preliminary formulation of the analogy between intuition and aspect perception according to which, in some instances of intuition, one is having an impression of a meaning aspect whilst being unaware of the aspectual nature of one's impression; and we have seen how noticing an aspect takes the subject from the dimension of appearance to that of representation so that, consequently, the subject's impression changes: for example, the cube drawing, upon the subject's noticing an aspect, will no longer simply appear to be the drawing of a cube; analogously, the kangaroo statement, upon the subject's noticing an aspect, will no longer simply appear true. I have argued that from a theoretical point of view the experience of noticing a visual aspect shows that there are two kinds of object-expressions that the verb 'to see' can take, namely, intentional and non-intentional (causal) object-expressions: when noticing a visual aspect, we see an aspect according to one way of using the verb 'to see', whereas we see that of which the aspect is an aspect according to the other way of using it. An analogous distinction applies to the description of intuitions.

Upon my asking whether it is true that a kangaroo cannot jump higher than the moon, it may intuitively appear to someone to indeed be so. Suppose that, subsequently, the subject of the intuition is surprised to find out that the statement is ambiguous between the two meaning aspects as previously mentioned, but that a kangaroo cannot jump higher than the moon *is* continues to seem true to them. Now one might think that what has intuitively appeared true to the subject, both before and after noticing the ambiguity of the statement, is the *thought* that a kangaroo cannot jump higher than the moon *is*, and that it was never strictly speaking accurate, though it was perfectly natural, to say that what had intuitively appeared true to them before noticing the ambiguity was the (ambiguous) *statement*; however, neither of these points is correct.

Thoughts and statements are more intricately related than we often realise. For example, the best way to confirm whether a competent speaker has grasped a particular thought consists in their trying to convey the thought to an equally competent listener: if the speaker has in fact failed to grasp the thought, then they will fail to convey it. Sometimes we believe that we have grasped a particular

to show that we do not understand the relevant expressions in their natural employment in the language sufficiently well for present purposes.

thought, when we have in fact failed to grasp it; then our failure to convey the supposed thought shows as much. Similarly, as listeners, we sometimes believe that we have fully understood a given expression of thought, when in fact we have failed to grasp the relevant thought, have failed to grasp any thought sufficiently well or have failed to grasp any thought at all. Given that the subject had failed to fully understand the kangaroo statement before noticing that it is ambiguous and, hence, that initially they had an intuition upon being presented with the ambiguous statement only because the statement appeared to them to mean one and only one thing, it is accurate to say that what intuitively appeared true to the subject, at least initially, is the *statement*. Furthermore, the subject may even have failed to grasp any thought at all or any thought sufficiently well; so that, as a consequence, it would be inaccurate to say that what intuitively appeared true to them, either before or after noticing the ambiguity of the statement, is a *thought*.⁶²

Thus, as in the case of noticing a visual aspect, reflection on the experience of noticing a meaning aspect shows that there are two kinds of object-expressions by which we can describe relevant subjective states: intentional and non-intentional object-expressions. Corresponding to this distinction, there are two kinds of things that are typically described as the object of an intuition: when having an intuition, we have an intuition of a thought, or what appears to be one, according to one way of describing a subject's intuition; and we have an intuition of an expression of thought, according to the other way of describing a subject's intuition.⁶³

If our impressions concerning the meaning of statements and other expressions of thought were correct almost without exception, then this duality of descriptions would not be of much significance. However, our impressions of meaning are not correct almost without exception. On the contrary, it happens relatively frequently that we have a meaning impression of a given expression of thought

⁶² There are possible questions concerning the meaning of each element of the statement ('A kangaroo cannot jump higher than the moon'). For example, what if kangaroos evolved, perhaps with the help of technology, so as to be able to jump sufficiently high? Would prosthetic jumping still count as jumping? Exactly what measure does 'higher than the moon (is)' specify? If a subject is unable to give more or less definite answers to these kinds of questions on the basis of their supposed understanding of the statement, then they will not have grasped any thought sufficiently well for us to say that what intuitively appeared true to them was a particular thought.

⁶³ For simplicity, I am ignoring the possibility of expressionless thoughts.

and believe that we have grasped the relevant thought sufficiently well, when in fact we have failed to do so. In particular, there are many interesting intuitions that are such that a subject has the intuition only because the subject has an impression of one meaning aspect rather than another.⁶⁴

5. Indeterminacy and complexity

The kangaroo example employs an ambiguity that is easily missed; but it is also easily eliminated, and often it will be reasonable to ignore this kind of ambiguity. However, the meaning of my kangaroo statement is more deeply indeterminate than that. For example, someone may object that kangaroos could evolve to jump sufficiently high. It is not difficult to think of a situation in which it is very clear what any given statement means. However, there are many kinds of situations in which the meaning of a given statement is not clear; and some statements whose meaning is indeterminate will nevertheless appear to mean one thing rather than another (in other words, they will have meaning aspects).⁶⁵ My kangaroo statement is like this. To see this, it will be useful to consider the procedure that philosophers and psychologists use to test selected intuitions.

Philosophers and psychologists have an interest in knowing not only what intuitions people have but also why they have these intuitions. Consequently, they have an interest in studying the various things that can influence a subject's intuition; and, so, they often test intuitions while trying to isolate the subject from one or more of such suspected influences. Since philosophers, in particular, have an

⁶⁴ Ludwig 2007 and 2010 has argued that 'intuition' should be a success term. This could be turned into an objection against the present account that would parallel the objection against the above account of the two ways of using the verb 'see' by those who argue that 'see' is a success verb (which I discussed in section 4 above). My reply to such an objection would be similar to my reply above: like the notion of seeing, the notion of intuition is an intricate one, and distinctions may have to be drawn in order to make it more suitable for some theoretical discourse, but it is in principle good to use as it is.

⁶⁵ Standard examples of aspect perception tend to be cases of ambiguity, that is (as I have been using the term), cases of indeterminacy of meaning—or, more generally, indeterminacy of representation—where at least two possible meanings (or representations) tend to be salient. For example, the English word 'bank' is ambiguous, with the two salient possible meanings of a financial institution and a river bank; the Necker cube is another paradigmatic example of ambiguity. Presumably, the common reason for introducing aspect perception by using cases of ambiguity is that cases of ambiguity offer more intuitive examples of aspect perception than other kinds of cases. However, aspect perception does not require ambiguity. Instead, mere indeterminacy of meaning (or representation) is sufficient, that is (as I shall use the term), that a given expression—or whatever may be taken to mean or represent something—has different possible meanings (or representations), either in general or relative to a given occasion.

interest in what appears true objectively—as opposed to what merely appears true to some particular individual at some particular time—they have a special interest in testing a subject’s intuition in isolation from any influences that are not conducive to the objectivity of the subject’s intuition. Thus, philosophers’ presentations of statements (or cases) are often quite minimalistic.⁶⁶ However, such striving for objectivity has the side effect of making the meaning of the relevant statements less determinate.

For instance, the following statement may be used to test someone’s intuitions about logic:

Either it is raining or it is not raining.

This will appear true to many people but especially those familiar with classical logic. Having the subject read relevant passages of a textbook on classical logic before looking at this statement will increase the likelihood that it will intuitively appear true to them. Alternatively, showing the subject video clips of people in dense fog who are wondering whether it is raining or not will decrease the likelihood that the statement will intuitively appear true to them. A subject may understand the above statement in at least two different ways accordingly: namely, either as an instantiation of the principle of excluded middle (from classical logic) or as an empirical generalisation (with the supposed counterexample that the weather may be such that it is neither true that it is raining nor true that it is not raining). The present context does not decide between these two possible meanings. Hence, a subject to whom the statement intuitively appears true may be having an impression of a meaning aspect whilst being unaware of the aspectual nature of their impression. For if such a subject noticed the, or any, other meaning aspect of the statement, then their intuitive seeming would change (the statement would no longer simply appear true to them).

Consider a few more examples. I shall assume for each of the statements below that it will intuitively appear true to many people, at least after some reflection. To start with, here is a case by George Bealer:

⁶⁶ I discuss various instances of this practice in subsequent chapters.

When a house is undermined, it will fall.

Surely, someone might think if this intuitively seems true to them, if a house is undermined, then it will not simply hover in the air. Yet ‘plainly’, as Bealer puts it, ‘it is *possible* for a house undermined to remain in its original position’ (1998, 207). Bealer suggests that this is not a physical possibility but, merely, a metaphysical one. However, it is not very difficult to find a historical example of a house that was undermined (say, by a landslide) but did not fall (perhaps because of its strong foundation); nor, indeed, would it seem very difficult for an able architect to design a house that, when undermined, will remain in its original position. Of course, if one understands ‘undermined’ to entail that a house undermined will fall, then a house that is undermined necessarily will fall; but this is only one possible meaning of ‘undermined’ in the statement above.

A bachelor is an unmarried man.

Most dictionaries agree. Yet, of course, competent speakers would rightly hesitate to call just any unmarried man ‘a bachelor’. For example, it is questionable whether Catholic priests would be correctly classified as bachelors; or whether men who live in a long and healthy relationship without being married would be correctly so classified. If the above statement intuitively appears true to a subject, presumably what appears true is something like the thought that it is an *essential* condition for someone to be a bachelor (in the contemporary sense of the word) that they be an unmarried man. However, this is only one possible meaning of this statement.

Three are more than two.

This is one of Locke’s examples for what he calls ‘intuitive knowledge’; which, he argues, is acquired when the mind ‘perceives the truth as the eye doth light, only by being directed towards it’ (1689, bk 4, ch. II, sec. 1). This is precisely the simplistic sort of analogy between intuition and perception that I have argued against. Of course, ‘ $3 > 2$ ’ is a piece of elementary arithmetic and anyone who has been taught mathematics will normally recognise this immediately for what it is. However, while ‘three are more than two’ will thus naturally appear intuitively true to many people, it should also be noted that three need not be more than two: three pounds are less than two kilos.

Next, consider a slightly more sophisticated example from mathematics:⁶⁷

Two circles can have at most two common points.

Some people will be able to give a mathematical proof to support their intuition that this is true. However, others might wonder whether it is not also possible that two circles might have *all* of their points in common, so that two circles could have more than two common points. Geometry might then be used to show that in the latter type of case there would in fact be only one circle, not two. But suppose that we are comparing the relations between two circles as depicted in a series of diagrams and, further, that this series of diagrams is intended to show that the circles have a rigid motion: then one diagram in the series may show two congruent circles that happen to coincide but are not therefore identical.

Adding half of what is needed to make a whole will not make a whole.

It might be objected that, even though the statement appears intuitively true, it is shown to be false by the following theorem of calculus: $1/2 + 1/4 + 1/8 + \dots = 1$. However, it is an open question whether the meaning of the statement is such that it entails the claim that this theorem is false.

Lying is wrong.

Regarding the moral value of deceitful speech, there remain at least the following two kinds of ways in which this statement may be understood: namely, either as expressing the thought that lying is categorically wrong (such that even if someone were to lie with the sole intention of saving someone else's life, and without doing any harm other than perhaps the lying, then lying would still be wrong) or as expressing a thought that is more permissive of exceptions.

I suppose that it is relatively uncontroversial that competent speakers of natural languages have meaning impressions of the kind that I have discussed, but the indeterminacy of meaning that is involved in these examples may require some more explanation. Whence the indeterminacy of the

⁶⁷ This example is taken from Chudnoff 2013, 50; see also Boghossian forthcoming.

meaning of expressions that nevertheless appear to mean one thing rather than another? Will it not normally be clear enough what each of these kinds of statements mean? The question is what is normal. The same declarative sentences of English may be used to assert different things on different occasions. This creates a dilemma for the philosopher or psychologist who wishes to know other people's intuitions regarding a particular case. In order to control influences on the subject, the presentation of the case must be concise; but to control meaning, the presentation must be comprehensive (and hence relatively elaborate). The obvious solution is precision; but this is more easily said than done, especially when testing more than one subject's intuitions or when dealing with complex matters.⁶⁸

The meaning of each of the above statements is indeterminate not only due to the lack of specific context; their meaning is also indeterminate due to the fact that their occasion, that is, their context in the broadest sense of 'context' (which is not actually restricted to *text*), is one of philosophical discourse. Philosophy is a paradigm for the kind of occasion on which statements, and other expressions of thought, can have meaning aspects.⁶⁹ In general, philosophical discourse has a tendency towards indeterminate meaning. It is no coincidence that much of the best work in philosophy employs verbal definitions and similar methods to ensure some basic terminology whose meaning is maximally determinate: this procedure allows philosophers to produce theoretical accounts that are relatively clear despite the typical complexity of their subject matter.

The complexity that is typical of philosophy can be seen, for instance, from the exceptional level of generality at which philosophy tends to operate: if one continues to ask 'What is...?'-questions, or simply 'Why?', regardless of whether these questions spring from scientific theories or the most ordinary things, one will ultimately find oneself asking philosophical questions. The tendency towards indeterminate meaning is a consequence of this complexity, because our natural languages were not designed for the purpose of philosophical discourse.

⁶⁸ Some work in experimental philosophy has been criticised for failings of precisely this sort. See, for example, Sosa 2007c and 2015, 15.

⁶⁹ Another paradigm, although for slightly different reasons, is poetry.

The human mind has a natural tendency to use short cuts in reasoning and communication, including the tendencies to take what is being said to be true and to form intuitive judgements. Thus, as long as there is something like philosophical discourse amongst humans, there will be many interesting intuitions that are such that a subject has the intuition only because the subject has an impression of one meaning aspect rather than another.

Conclusion

Of course, not all intuitions are like aspect perception. Aspects, as I have used the term, are relevant alternatives rather than mere possibilities. A meaning aspect is one of at least two possible meanings of an expression of thought that are relevant on a given occasion of the use of the expression. Hence, not every meaningful use of an expression has meaning aspects: for example, if I ask the bartender in a café in London ‘Could I have a glass of tap water please?’, then under normal circumstances the meaning of my words will be perfectly clear and it will not be relevant that there is a possible world in which the meaning of my words is that it is windy outside. Nevertheless, it is of general importance that the analysis of any intuition distinguishes between intentional and non-intentional object-expressions for describing a subject’s intuition and between the two kinds of things that are thus typically described as the object of an intuition: thoughts, or what seem to be thoughts, and expressions of thought. We are often wrong about meaning—we have a meaning impression of a given expression of thought and believe that we have grasped the relevant thought sufficiently well, when in fact we have failed to do so—and, if we are thus wrong about the meaning of a given expression, a corresponding intuition will at best be like the continuous seeing of an aspect whilst being unaware of the aspectual nature of the intuition (such that, if we noticed an aspect, we would stop having the intuition). Furthermore, the likelihood that the meaning of a given expression is indeterminate rises in proportion to the degree of complexity of the matter at hand. Philosophy is a paradigm of this complexity and indeterminacy—and the ancient paradoxes epitomise the philosopher’s toil to separate the truth from that which merely appears to be true—but complexity and indeterminacy are structural features of all argumentative discourse regardless of whether it is in

art, science, politics or everyday life. Therefore, any serious thinker investigating a complex matter should be thorough enough to examine whether they fully understand the expression that they are inclined to use for a statement that appears intuitively true to them, for they might well find that more needs to be said, and thought, to grasp the thought that seemed true to them.

3 Intuitive knowledge and its limits

Whenever the topic of our thinking is at all complicated, which is usually the case, the business of thinking effectively is apt to be slow.

— L. Susan Stebbing, *Thinking to Some Purpose*

Introduction

We know many things intuitively. For example, we often know intuitively that someone is angry or sad simply from looking at them, without necessarily being able to say how we know it. In general, people report on a fairly regular basis that they knew something intuitively, and there is no reason to assume that they are not sometimes right about this. Similarly, many professionals have intuitive knowledge regarding many of the things that they deal with in their professional capacity on a regular basis. But what is intuitive knowledge, and what might be its limits? The present chapter looks at some fundamental issues in this connection (the next chapter, meanwhile, will look more closely at intuitive skill and expertise).

Before giving a brief summary of the sections of this chapter, I would like to begin with some brief remarks on terminology. Central notions in this chapter include justification, reasons for believing, evidence and reliability. I shall be using relevant terms according to the following broad stipulations (using ‘*iff*’ to replace ‘if and only if’). A subject’s belief is justified *iff* the subject has a reason for so believing; and the subject has a reason for so believing *iff* the belief is appropriately based on the total evidence available. Something is evidence *iff* it supports a given hypothesis to some degree. A belief is appropriately based on the total evidence available *iff* within the total evidence available, which may include both evidence for and against a given hypothesis, there is a significant balance of evidence in favour of the hypothesis.

Suppose, for example, that A believes that rice is grass; and, further, that the total evidence available is that B says that rice is grass and that this constitutes a significant balance of evidence in favour of the hypothesis that rice is grass. Now, if A's belief that rice is grass is based on the total evidence available, then—given the balance of evidence in favour of the hypothesis—A's belief that rice is grass will be appropriately so based, which is equivalent to its being the case both that A will have a reason for believing that rice is grass and that A's belief that rice is grass will be justified.

One notable dimension for the evaluation of evidence that I discuss is reliability: the evidential value of a given piece of evidence is largely proportionate to the reliability of an appropriately specified type of evidence. I shall take reliability to be the truth-conduciveness of a type of evidence or, more specifically, the degree to which some evidence of a given type is likely to support a given hypothesis, or type of hypothesis, in virtue only of being evidence of this type. For example, if B's testimony is reliable to some degree, then—all things being equal—B's saying that rice is grass is likely to support the hypothesis that rice is grass to the same degree, and its evidential value will be of a proportionate degree. If we also suppose that B is an expert on rice and grass, then a more appropriate specification of the type of evidence that B's saying that rice is grass constitutes will include this expertise of B's; consequently, B's saying that rice is grass will be likely to support the hypothesis that rice is grass to a greater degree, and its evidential value will accordingly be greater too.

I shall not discuss in detail the nature of evidence, the quantification of evidential value and the quantification of reliability. For present purposes, it will be sufficient to follow the common practices of classifying various kinds of things such as knives, film footage and memories as evidence, of comparing degrees to which different pieces of evidence, or types of evidence, support a given hypothesis in terms of their being relatively 'weak' or 'strong', and of comparing degrees of reliability in similar terms of relative strength.

The above stipulations leave undecided the questions of what determines the totality of evidence available—in particular, how this evidence is available and to whom—and what constitutes a

significant balance of evidence, as required for a belief to be appropriately based on the total evidence available. Leaving these questions initially undecided makes it possible to compare accounts that employ narrower conceptions of justification or evidence. In particular, it makes it possible to compare accounts that employ internalist conceptions (which emphasise the subject's relation to evidence) with those that employ externalist ones (which reject such emphasis or reject the significance of the subject's relation to evidence altogether). A common type of internalist conception about *justification* holds that the totality of evidence available is exclusively determined by what evidence the subject can access; similarly, a common type of internalist conception about *evidence*, which is closely related to phenomenalism, holds that the totality of evidence available is exclusively determined by the subject's past and present mental states. For example, suppose that B is a habitual liar, but A has no way of knowing this. On an internalist conception of justification or evidence, this modification will typically make little or no difference regarding the justification of A's belief, which is based on B's testimony: given that A has no way of knowing that B is a habitual liar, A's belief will be justified to the same degree as it would be if B were not a habitual liar. However, on an externalist conception of justification or evidence, this modification will typically make a significant difference: given that B is a habitual liar and regardless of whether A has a way of knowing this or not, A's belief will be justified to a lesser degree than it would be if B were not a habitual liar.

In section 1, I discuss the question of whether intuitive justification is foundational; I distinguish weak and strong foundationalism about intuitive justification, and argue against strong foundationalism. In section 2, I turn my attention to the experientialist version of weak foundationalism; I argue that it is underdeveloped. In section 3, I introduce the notion of reliability for the evaluation of the epistemic value of intuition; I briefly discuss an argument by Paul Boghossian, and present a criticism of this argument that appeals to the distinction between things that are easy to get right intuitively and things that are not so easy to get right intuitively. In section 4, I introduce and discuss the main alternative to experientialist accounts, namely understanding-based accounts; I focus on Sosa's work, and argue that his account of understanding in terms of a

competence ‘that reliably enough discerns the true from the false’ leaves important questions unanswered. In section 5, I discuss some such questions; I present a moderately sceptical argument about the evidential value of intuition according to which intuition has little or no evidential value with respect to that which is really interesting; the two key notions in this connection are complexity and indeterminacy of meaning.

1. Is intuitive justification foundational?

It is often said, and sometimes argued, that all judgement and all reasoning ultimately rely on intuitions.⁷⁰ Sometimes the thought is an innocent psychological one: namely, that any reasoning will entail some element for which the reasoning subject, without further reasoning, could offer no other justification than that it simply seems true to them.⁷¹ It is plausible that, if we ask enough questions, then any subject will eventually have to admit that something simply seemed true to them in this way. However, sometimes the thought is less innocent from a psychological perspective: for example, it is sometimes claimed that judgement that something is so implies that it *seems* to the subject to be so. This type of claim is aptly described as a form of ‘phenomenalism’.⁷² The truth of such claims is at least questionable. Subjectively speaking, not all judgement is based on some prior seeming; a lot of judgement is more direct than that. Furthermore, sometimes the thought amounts to one of two epistemological claims, which are often combined with phenomenalism. First, some philosophers have argued that intuitive justification is foundational in the sense that intuitions confer justification without requiring justification in turn.⁷³ Second, some philosophers have argued further that, in addition to being foundational in the sense just described, intuitive justification is also foundational in the sense that all justification is ultimately based on intuitive justification.⁷⁴ I shall call the first of

⁷⁰ For example, Robert Audi writes: ‘Much as we cannot navigate the physical world without sense experience, we cannot adequately pursue truth...without intuition’ (2015, 65).

⁷¹ See, for instance, Gutting 1998, 8: ‘[Intuitions] represent the inevitable starting point of any intellectual inquiry.’

⁷² See, for example, Huemer 2001, chapter 5, and 2006. Cp. Pryor 2000.

⁷³ See, for example, Bengson 2015.

⁷⁴ See, for example, BonJour 1998. For a combination of phenomenalism and strong intuitive foundationalism, see especially Huemer 2001.

these theses ‘weak foundationalism about intuitive justification’ (for short: ‘weak intuitive foundationalism’) and the second one ‘strong foundationalism about intuitive justification’ (for short: ‘strong intuitive foundationalism’).

Laurence Bonjour has presented the perhaps most comprehensive account in support of strong intuitive foundationalism.⁷⁵ Bonjour’s central argument in support of this claim employs a familiar regress argument for (general) foundationalism about the structure of justification (which I shall call ‘general foundationalism’).

The regress argument for general foundationalism goes as follows. In principle, the justification for any justified belief may be rationally queried without end: for if it is said that the justification for belief_A is B, then we may query the justification for belief_B, and so on. Now, if the nature of justification is such that this regress must come to an end and circularity is not an option, then there must be foundational justification. Of course, whether circularity is an option and whether the regress of justification must come to an end are serious questions, which require the proponent of foundationalism about the structure of justification to consider the alternatives of coherentism and infinitism; for the present discussion, it will be sufficient to note that foundationalism about the structure of justification is far from uncontroversial.⁷⁶

The next required step in Bonjour’s argument is to show that intuitive justification fits the bill of general foundationalism (which would yield the desired strong intuitive foundationalism). He attempts to do this mainly by eliminating other candidates. This elimination of other candidates follows a pattern of reductive argument. Bonjour argues that anything short of ‘immediate insight’, as he puts it, will have to rely on immediate insight for its own justification in turn; in particular, he argues that, if one tries to give more basic justification than that offered by an immediate insight, one will ultimately have to rely on some other immediate insight in order to stop the threatening regress of justification. Accordingly, Bonjour concludes: ‘There is no apparent alternative to the reliance on

⁷⁵ See especially Bonjour 1998, chapters 4 and 5. For a similar account, see Pust 2000.

⁷⁶ See also Bonjour 1978.

immediate, non-discursive insights of some sort' (1998, 133).⁷⁷ Since in Bonjour's terminology 'immediate insight' and 'intuition' are effectively synonymous, this conclusion amounts to the claim that intuitive justification is—indeed, must be—strongly foundational.⁷⁸

This kind of argument is especially appealing on an internalist conception of justification. Take for example a conception of justification according to which justification is necessarily accessible to the subject (that is, what is counted as the total evidence available is restricted to what is accessible to the subject); then a mental state such as what Bonjour calls 'immediate insight' will clearly be a promising candidate for the posited foundation of all justification. By contrast, the argument is less appealing on an externalist conception of justification. Take for example a conception of justification according to which justification derives from the reliability of the methods by which the belief in question is acquired (so that the total evidence available is not restricted to what is accessible to the subject); on this kind of conception, whatever accounts for the reliability of what is called 'immediate insight' will be a better candidate for the posited foundation of all justification than 'immediate insight' itself. For instance, one might hold that all justification is ultimately based on general facts such as that we are not being systematically deceived; or else that there exist shared practices that constitute normative standards of inference.⁷⁹

However, even if one accepts Bonjour's conception of justification (including general foundationalism), there remains a problem. For it remains questionable whether intuitive justification really fits that bill. Bonjour does not offer any concrete instances in support of the claim that all justification is ultimately based on intuitive justification. Consider some of the examples of intuitions which Bonjour discusses:

Nothing can be red all over and green all over at the same time (100)

⁷⁷ Joel Pust uses the same type of argument; see, for example, Pust 2000, 2001, 2004 (section 7) and 2017 (especially section 3). This type of argument is also similar to Michael Huemer's self-defeat argument for phenomenal conservatism; see, for example, Huemer 2001 (especially chapter 5) and 2007, and compare Bonjour 2004, section 3.

⁷⁸ Cp. Bonjour 1998, 102.

⁷⁹ See Boghossian 2001 and Bonjour 2001 for a related discussion; see also Goodman 1965 (66–7) and Harman 2001.

If A is taller than B and B is taller than C, then A is taller than C (103)

Two plus three equals five (104)

All cubes have twelve edges (105)

If one of these things intuitively appears true to someone, then we may ask them to justify their belief (or to justify their belief further); in particular, we may ask them to justify the belief that their intuition is correct. Indeed, the justification for any intuitive belief may be queried in this way; this is simply to apply the regress problem of justification to particular cases of intuitive justification. Therefore, it is perhaps not surprising that BonJour gives no instance of a regress-stopping intuition (or ‘immediate insight’): without further argument, there can be no such instance.

Alternatively, BonJour might perhaps argue that strong intuitive foundationalism does not require any instances of a particular intuitive justification; and that, rather, it will be sufficient if intuition constitutes the *source* of justification, that on which all justification is ultimately based, so that, even though the regress of justification may continue from one particular intuitive justification to another, the source of justification remains the same: namely, intuition.⁸⁰ However, it is difficult to see why this should be so. In fact, it is more plausible that any belief can in principle be justified discursively, through explanations. Against this, BonJour insists: ‘Any such reduction to discursive reasoning will inevitably be only partial, appealing ultimately to axioms and inferences for which such an account is not in turn available’ (1998, 104).⁸¹ Unsurprisingly, he does not specify any instances. Here, again, we must ask ourselves whether we ought to accept this claim. It is not difficult to imagine a relentless-explainer type of person, who never reverts to intuitive justification but always offers discursive justification instead.

⁸⁰ BonJour also sometimes speaks in this way; see, for example, BonJour 1998, 148.

⁸¹ See also, for example, BonJour 1998, 60–1, 63, 105–6, 131, 132, 134; and section 2.7.

2. Prima facie justification

Several philosophers have attempted to use the analogy between intuition and perception to show that intuitive justification is at least weakly foundational (hence, that intuitions confer justification without requiring justification in turn). Some of these philosophers have argued that the relevant analogy holds primarily with perceptual experience.⁸² For example, John Bengson has argued in a recent paper that a correct understanding of the phenomenological analogy between perceptual experience and intuition implies weak intuitive foundationalism.

Besides weak intuitive foundationalism, Bengson's account contains another claim about intuitive justification which has an auxiliary function in relation to weak intuitive foundationalism. This auxiliary claim concerns the question of how an intuition might confer justification in the first place and, hence, the questions of the nature of the justification that intuitions may or may not confer and what it might be for an intuition to require justification in turn.

Bengson begins by arguing that, like perceptual experience, intuitions are rationalising: 'They tend to make formation of corresponding beliefs seem rational or fitting from the first-person perspective...in the absence of putative reason to withhold assent' (2015, 723). This is correct. For example, if it intuitively seems to me that a kangaroo without a tail will topple over, then, in the absence of putative reason to withhold assent, this will tend to make it seem rational to me to form the corresponding belief that a kangaroo without a tail will topple over. As Bengson points out, this is analogous to a perceptual experience as of, say, the cat on the table, which, in the absence of putative reason to withhold assent, will also tend to make it seem rational to me to form the corresponding belief. From the phenomenological characterisation of intuitions as rationalising, Bengson then infers his auxiliary epistemological thesis, which can be formulated as follows: if one

⁸² See also Chudnoff (2013), whose account I discussed in chapter 1. Other philosophers have argued that the analogy between intuition and perception holds primarily with dispositions to believe or judge. See, for example, Sosa 2014. I discuss this kind of account in section 4 below.

lacks reason to question one's intuition, then one's intuition provides one with at least some *prima facie* justification for believing that things are the way they thus intuitively appear to be.⁸³

Next, Bengson continues his argument by noting that intuitive seemings occur spontaneously (as explained in chapter 1). He puts this point as follows: when S has an intuition that A, then A seems to S to be so, and there is no B, as distinct from A, such that S would have the impression that A seems to them to be so by B's seeming to them to be a certain way.⁸⁴ Thus, for instance, when S has an intuition that either it is raining or it is not raining, then it seems to S that either it is raining or it is not raining, but S does not have the impression that it seems to them that either it is raining or it is not raining by, say, its seeming to them that either it is raining or it is not raining is an instance of the law of excluded middle. One may even be aware of relevant features that are causally related to one's intuition, such as one's belief in the law of excluded middle; however, if one's seeming is of an intuitive nature, then it is not the mere result of a consciously mediated transition. As Bengson correctly points out, this is another phenomenological feature of intuition that is analogous to perceptual experience (for instance, when having a perceptual experience as of the cat on the table, it does not typically seem to one that it is made to so seem by some other seeming). From the conjunction of this second phenomenological characterisation of intuition and the auxiliary epistemological thesis, Bengson then infers that intuitions confer justification without requiring justification in turn.⁸⁵

Like many others, Bengson employs the notion of *prima facie justification*. But what exactly does Bengson mean by 'prima facie'? Unfortunately, he neither defines the notion of *prima facie* justification nor discusses it in much detail; the most that he writes to this effect is 'prima facie (i.e. defeasible) justification' (735). To see in more detail what Bengson means by 'prima facie justification', consider the following central passage of his paper:

In so far as intuitions present the world as being a certain way, from the perspective of an intuiter, matters are not neutral. In having the intuition that p, it is presented, non-voluntarily, to the subject as being the case that p; the world is presented p-ly, as it were. As in the case of

⁸³ See Bengson 2015, 741.

⁸⁴ See Bengson 2015, 749. Compare also the discussion of naïve realism in chapter 2.

⁸⁵ See Bengson 2015, 751–2.

perceptual experience, given that this is how things are from the subject's point of view, namely biased toward p in a way that appears, from the 'inside', to make p worthy of belief, it seems unreasonable to criticize such a subject as doing something epistemically improper in subsequently coming to believe that p, absent reason to so believe (e.g. absent special reason to doubt her intuition's reliability). Quite the opposite: it would seem that the subject has at least some reason to believe that p; it is *appropriate* for her to so believe. In the case of intuition as in the case of perceptual experience, given that it is presented as being the case that p, coming to believe that p is something such a subject is *prima facie* justified in doing. (739–40)

Careful reading of this passage shows that what Bengson calls 'prima facie justification' would be more accurately described as 'weak and subjective justification': the justification that Bengson describes is weak in the sense that it is easily defeated, and this weakness is partly due to the justification in question being essentially justification from the subject's perspective. Bengson repeatedly stresses that we are to consider 'how things are from the subject's point of view', 'from the "inside"' and 'from the perspective of an intuiter'. Indeed (as has been shown above), Bengson's claim that intuition provides *prima facie* justification follows more or less directly—mediated only by the auxiliary thesis—from his phenomenological characterisation of intuitions as rationalising, that is, as being such that 'they tend to make formation of corresponding beliefs seem rational or fitting from the first-person perspective...in the absence of putative reason to withhold assent' (723). Bengson's argument can be summarised as being that, assuming that the subject of an intuition lacks putative reason to withhold assent, the psychological fact that the intuition makes it seem rational to the subject to form a corresponding belief entails the epistemological fact that the intuition provides at least some *prima facie* justification for the corresponding belief.⁸⁶ However, the justification that, if Bengson is correct, intuition thus provides would be so subjective that it constitutes no justification at all for anyone but the subject, for the same justification might just as easily be provided by a dream.⁸⁷

Thus, Bengson's internalist version of weak intuitive foundationalism is very weak indeed (and so it lends no support to strong intuitive foundationalism either). Given the extent to which it is based on a correct phenomenological account of the analogy between perception and intuition, however, it

⁸⁶ Bengson explicitly says that the epistemological features of his account are supposed to follow directly from the phenomenological ones, but he does not discuss the relative importance of the latter; see Bengson 2015, 708–9.

⁸⁷ For a similar account, see Stratton-Lake 2016, 36–7.

may still be a useful starting point for a non-trivial account of the epistemology of intuition. But it leaves most, if not all, of the important questions concerning the epistemic value of intuition unanswered.

3. Evidence

If something seems intuitively to be a certain way, then is it likely to be as it intuitively seems to be? Any reasonable answer to this sort of question will require attention to both the objects and subjects of an intuition (or type of intuition), because the reliability of intuition varies depending on both these factors. Some people have better intuition than others, just like some people have better vision, hearing, etc. than others; and some things are more difficult to get right intuitively than others (in particular, having a truthful intuitive seeming about some things is more difficult than having a truthful intuitive seeming about others), just as perceiving some things is more difficult than perceiving others. Someone who is pessimistic about the reliability of intuition might now reason as follows: at least in the active pursuit of knowledge, we seek judgements that are not based solely on intuition and try to give reasons other than intuitive seemings whenever we can; in other words, we tend to treat intuitions as unreliable, which indicates that intuitions are in fact not very reliable.⁸⁸ However, there are similar arguments in favour of a more optimistic outlook. For example, Boghossian has argued that it is plausible that intuitions are ‘at least fairly reliable’, because it is plausible that it has been evolutionarily advantageous for us humans to be at least fairly reliable in the ways in which we arrive at judgements.⁸⁹ These arguments, pessimistic and optimistic alike, are very general. In fact, they are so unspecific that they could both be correct. To get a more detailed picture, we must consider some examples.

Here are some of the intuitions that Bengson mentions in his paper:

⁸⁸ Compare, for example, Cappelen 2012 and Deutsch 2015a.

⁸⁹ See Boghossian forthcoming, 149. Boghossian focuses on judgements in connection with ‘the capacity to think about what follows from what’, although his main interest in the paper is in intuition in general. In any case, the argument is easily generalised without losing much plausibility.

Three are more than two (707)

Zombies, non-conscious microphysical duplicates of conscious beings, are possible (712–3)

Everything is self-identical (715)

It is morally permissible for a bystander to pull a switch and thereby save five innocent lives by killing one innocent person (716)

It cannot be the case that both p and not p (718–9)

Either p is true or p is not true (725)

A person might survive body-swapping (725)

A house undermined will fall (733–4, note 32)

Bengson likens all of these examples of intuitions to the single type of visual experience in which it looks as if the cat is on the table. From a phenomenological point of view, Bengson's analogy may be correct, but it obscures some important epistemic differences. From an epistemological perspective, some of the above examples of intuitions are less akin to the type of visual experience in which it looks as if the cat is on the table than to the type of visual experience in which it looks as if the cat is on a far-away tree. Just as some things are more difficult to see than others, some things are more difficult to get right intuitively than others. Accordingly, the reliability of intuitions may vary significantly. For example, consider:

Christianity is a religion.

If A has two apples and two pears, then A has the same number of apples and pears.

If one of these things intuitively appears true to someone, then this will tend to be relatively strong evidence that it is true (both from the subject's point of view and from that of others). In general, if someone has an intuition that something is so, and this is something that it is easy to get right intuitively, then this intuition will tend to be relatively strong evidence that things are as they intuitively appear to be. By contrast, if someone has an intuition that something is so, and this is

something that it is not so easy to get right intuitively, then this intuition will tend to be not-so-strong evidence that things are as they intuitively appear to be.⁹⁰

Another important difference concerns the epistemic situations in which the respective mental states typically occur. Most of Bengson's examples of intuitions come from logic, mathematics or philosophy and, hence, typically occur in broadly scientific situations. Situations of a broadly scientific nature entail higher standards of evidence than most other situations, including those in which the type of visual experience in which it looks as if the cat is on the table typically occurs. Consequently, the reliability of intuitions tends to be more questionable, and hence the evidential value of intuitions lower, in broadly scientific situations than in most other situations.

It might be objected that philosophy, including the philosophy of logic and mathematics, is different. Some people believe that intuitions constitute the data against which theories are measured in philosophy and, hence, that philosophers treat at least some intuitions as providing moderately foundational evidence (which requires no evidence in turn).⁹¹ Many proponents of this view cite recent work in ethics and epistemology, especially from within the analytic tradition, as putative examples of a casuistic theorising practice in which theories are both built and tested on the basis of people's intuitions about real or hypothetical cases. They take these examples to show that intuitions provide, as Boghossian puts it, 'such strong [objective] justification that they are capable of *overturning* entrenched and highly justified theories' (forthcoming, 146, emphasis in the original).⁹² One of the most commonly told stories in this connection is that of the impact of Edmund Gettier's counterexamples to the theory that knowledge is justified true belief. Another popular example is Hilary Putnam's powerful case against semantic internalism.⁹³ However, these popular stories are actually myths that glorify the role of intuition. An accurate history of these events would account for the fact that an intuition alone does not overturn an entrenched theory: an intuition may play a

⁹⁰ Bealer appears to have a similar distinction in mind when he speaks of 'elementary deliverances'; see his discussion at 1998, 219–20. Compare also Sosa 2014.

⁹¹ See, for example, Bealer 1998, 204–7; Goldman and Pust 1998; Pust 2017, section 2.2.

⁹² Similarly, Goldman writes: 'The evidential weight accorded to intuition is often very high, in both philosophical practice and philosophical reflection. Many philosophical discoveries, or putative discoveries, are predicated on the occurrence of certain widespread intuitions.' (2007, 1)

⁹³ See, for example, Boghossian 2014.

crucial role in establishing a counterexample to a widely accepted theory, but it will do so only if, first, the intuition is widely shared and, second, scholarly discourse appears to confirm its correctness; ultimately, if further research demonstrates that the strength of the counterexample is such that the theory cannot be easily modified or recovered, then the theory will likely cease to be widely accepted.⁹⁴ Thus, it is partly in virtue of their intuitiveness that counterexamples like Gettier's and Putnam's have had such a big impact, but a considerable amount of scholarly work was necessary too; yet it is not difficult to see how these intuitive counterexamples may become the stuff of philosophical legend while the important work of many people, without which the counterexample might have had no impact at all, is largely neglected.⁹⁵

It is plausible that intuitions are a reliable source of evidence with regard to at least some questions, because this much can be inferred from the moderate success of human evolution. However, it is also true that depending on the total evidence available, intuitions tend to be treated as relatively weak evidence. Moreover, some of the things about which we have intuitions are more difficult to get right intuitively than others, and it is not plausible that humans should have evolved to get these things right intuitively (although it is not implausible that they might so evolve). The ancient paradoxes bear strong witness to this fact, as does a lot of psychological research; and if one has learned anything from Socrates, then one will have learned that the human mind is prone to get many things, and perhaps many important things, intuitively wrong. But what constitutes the difference between easy and not-so-easy intuitions? And how might one know, in a given situation, whether one is dealing with an easy or a not-so-easy intuition? Before pursuing this line of thought further, it will be useful to look at a prominent alternative account of the evidential value of intuitions.

4. Understanding

Some philosophers have argued that the analogy between intuition and perception holds primarily between intuitive seeming and perceptual seeming conceived as subjective dispositions. Ernest Sosa,

⁹⁴ For a detailed historical account of theoretical responses to Gettier, see Shope 1983.

⁹⁵ Chapters 5 and 6 contain more detailed discussion of these questions.

for instance, has presented an account along these lines.⁹⁶ Sosa, like some others, denies that there is such a thing as intuitive experience.⁹⁷ Hence, he believes that experientialist accounts of the epistemic value of intuition, like Bengson's, are incorrect. Rather, Sosa contends, the epistemic value of intuitions is best explained in terms of understanding.⁹⁸

Sosa argues that some intuitions are based on nothing but the subject's 'understanding or grasp' of the relevant thought and, further, that the fact that an intuition is so based affords it its evidential status.⁹⁹ Sosa's view is a natural one; and it is apparently simple, which lends it some plausibility. However, trying to spell out this view in detail reveals that its apparent simplicity is deceptive.

Consider an example:

Nothing can be red all over and green all over at the same time.

To many people this intuitively appears true, and many philosophers firmly believe that it is true. Let us suppose that it is. Is it plausible that this intuition is based solely on the subject's understanding of the relevant thought, as Sosa suggests? Boghossian has argued that this is not plausible. He writes:

Knowledge of the exclusion could not be built into one's grasp of the concept *red*, because one could have *red* without having *green*. Mutatis mutandis, it could not reside in one's grasp of the concept *green*.

Hence, at best it could reside only in the joint possession of *red* and *green*. But what could the joint possession of *red* and *green* be if not the simultaneous possession of each? (forthcoming, 144)

Boghossian intends this as a rhetorical question and concludes accordingly: 'It looks as though, in addition to grasping the ingredient concepts, some further act of insight is required'. However, it is not very difficult to see that there could be an alternative conception of understanding (or grasping) concepts, namely one according to which failure to grasp the truth of the exclusion entails failure to grasp the relevant thought and, hence, failure to grasp the relevant concepts. Moreover, it is not in fact necessary for an account like Sosa's to explain whatever relation holds between understanding

⁹⁶ See especially Sosa 2007a, 2007b and 2014.

⁹⁷ See, for example, Sosa 2014, 42 and 47.

⁹⁸ For overall accounts of intuition that combine an experientialist account of its nature with an understanding-based epistemology, see for instance Audi 2015 and Bealer 1998 and 2004; see also Chudnoff 2013, ch. 4. Another prominent understanding-based account is that presented in Ludwig 2007 and 2010.

⁹⁹ See Sosa 2014, 42.

thoughts and understanding concepts.¹⁰⁰ Still, Boghossian's argument shows that an account like Sosa's must give detailed explanation of the nature of the understanding that allegedly confers evidential value to an intuition.

It is possible that a rational subject who is a competent user of the language might contemplate the above example but fail to see its truth, at least initially, so that it would be natural to describe this subject as someone who understands the relevant thought but fails to have a corresponding intuition. Given that Sosa agrees that intuitions occur spontaneously (that is, that no intuition is the immediate effect of the subject's will), this possibility constitutes an apparent counterexample to Sosa's theory, because it suggests that understanding the relevant thought is not a sufficient basis for an intuition. Furthermore, it is possible that a rational subject who is a competent user of the language might have an intuition that is apparently based solely on their understanding of the relevant thought but for this thought to not actually be true; the persistent fascination of some ancient paradoxes stems from this possibility. This constitutes another apparent counterexample to Sosa's theory, because it suggests that the fact that an intuition is based solely on the subject's understanding of the relevant thought does not guarantee the correctness of the intuition.

In response to these cases, one may perhaps be tempted to stipulate that the subject who fails to see the truth that may be seen solely on the basis of understanding the relevant thought does not understand the relevant thought at all; and, similarly, that the subject whose incorrect intuition is apparently based solely on their understanding of the relevant thought either does not understand the relevant thought at all or else their intuition is based on something other than their understanding of the relevant thought. However, this would be needlessly dogmatic. A better response would be to admit the possibility of these types of cases but to point out that there may be different degrees of understanding a thought.

In a similar fashion and in line with these considerations, Sosa argues that what is required for an intuition that is based solely on the subject's understanding of the relevant thought to acquire

¹⁰⁰ For example, Sosa 2014 presents the account of the relation between intuition and understanding thoughts entirely without reference to conceptual understanding.

evidential value from its being so based is not just any understanding of the relevant thought but ‘adequate understanding’ of it.¹⁰¹ Sosa then explains adequate understanding in terms of a competence that discerns the true from the false. Thus, Sosa’s account of the probative value of intuitions can be summarised as follows: some intuitions are based solely on the adequate understanding of the relevant thought; and being so based confers evidential value to these intuitions, because such adequate understanding ‘is owed to a competence...that reliably enough discerns the true from the false’ (2014, 46).

But what is this competence? As we have already seen, it is not merely the competence of a competent user of the language, for a subject may not be reliable at all at discerning the true from the false solely on the basis of their linguistic competence; nor is it conceptual competence, insofar as conceptual competence directly corresponds to linguistic competence.

Considering the full range of possible intuitions from very easy ones to not at all easy ones shows that the competence that may be required in order to intuitively discern the true from the false more or less reliably will vary significantly depending on the topics in question. In particular, the competence may have to draw on considerable skill and knowledge. Thus, it is questionable whether Sosa’s type of analysis is best expressed in the way he does so, namely, in terms of understanding that, in turn, is analysed in terms of competence. The foregoing considerations demonstrate that this type of analysis may well require knowledge and skill that are more advanced than Sosa’s talk of competence suggests.

¹⁰¹ In the same passage, Sosa also finds it necessary to specify that what is required is ‘adequate understanding of the content in question’ (2014, 45); he thinks that one’s understanding of a thought will normally be no better than one’s understanding of its negation, so that on the basis of adequate understanding of the relevant thought alone the negation of the thought might seem true rather than the thought itself. I do not think that it is necessary to make this specification: the negation of a thought is simply a different thought, albeit a closely related one. Hence, Sosa may be right that one’s understanding of a thought will normally be no better than one’s understanding of its negation; but it is not the case that on the basis of adequate understanding of the relevant thought alone the negation of the thought might seem true rather than the thought itself, because the negation of the relevant thought is simply a different, albeit closely related, thought. Incidentally, Sosa’s claim that there is a difference between understanding a thought and understanding the content in question (or, as he also puts it, ‘the specific content of that very [thought]’, 49) is unclear to me, unless what he is referring to are simply different degrees of understanding the same thought.

5. Scepticism

Some of the things that we have intuitions about are difficult to get right intuitively. For example, that for every predicate there is a set that consists of all and only those objects that satisfy that predicate intuitively appears true to many people, but it is now generally agreed that this principle is false due to Russell's paradox of the set of all sets that do not contain themselves. Similarly, many chess players frequently have intuitions about what would be a good move to make that turn out to be false. The perhaps most general answer to the question of what constitutes the difference between easy and not-so-easy intuitions is complexity: the more complex the matter is that one has an intuition about, the more ways there are in which one might be wrong about it.¹⁰² A corresponding answer to the question of the reliability of intuition is this: the more complex the matter is, the more questionable the reliability of intuitions regarding this matter will tend to be. Now, supposing that all of the really interesting matters that we have intuitions about are rather complex, it follows that intuition tends to have relatively little evidential value regarding that which is really interesting.

I say 'tend to be', because the degree to which intuition regarding a given complex matter is reliable, and thus its evidential value, also depends on the subject, or type of subject, whose intuition it is and the occasion, or type of occasion, on which the intuition is had. For example, a chess master's intuitions regarding whether given chess moves are good ones will normally be more reliable than those of a beginner.

Consider an example:

If A or B, then it is not the case that both not-A and not-B.

From the point of view of modern logic, this can seem far from an exciting discovery. However, imagine a beginning student of logic, who has studied some propositional logic but has been left entirely ignorant of De Morgan's theorem (which says that conjunction and disjunction are interchangeable via negation). During the exam, the student is asked whether the indented statement

¹⁰² See also BonJour 1998, 141, and Huemer 2005, 105.

above is true; after a moment's reflection, the statement seems intuitively true to the student, but they nevertheless quickly construct a proof before writing down the answer. The student is right to do this. Considering the total evidence available to the student at the time of first having the intuition—including the fact that this is an exam situation, which means that the evidential value of intuitions tends to be lower than normal, as does the likelihood of a proof being available—the reliability of this type of intuition was questionable and the intuition thus weak evidence for the truth of the statement.

We regularly find ourselves in situations that are epistemically like that of the student—including in science, philosophy, business and politics—in which we encounter an unfamiliar issue, and have an intuition about it, but rightly decide against relying solely on our intuition.

Next, consider:

Lying is wrong.

Whether this statement is especially interesting will largely depend on what thought it should be taken to assert. For example, if the relevant thought is that the system of morality in which I have been brought up is such that under ordinary circumstances lying is wrong, then this will not be especially interesting. A much more interesting thought that the statement may be asserting, and which tends to appear intuitively true to many people, is that all lying is wrong regardless of who is lying to whom, what their reasons are and what the consequences may be. However, in the case of this thought intuition tends to be weak evidence: the lasting controversy in ethics after Kant about the truth of this kind of thought shows the matter to be too complex for intuition to be of much evidential value in this instance. (Of course: if the thought were actually true, and given that many people share the intuition that it is, then intuition would be reliable in this instance. However, based on the total evidence of our present collective ignorance, the reliability of intuition regarding this thought is questionable and its evidential value accordingly low.)

Finally, consider once more colour exclusion:

Nothing can be red all over and green all over at the same time.

Suppose that we do not take ourselves to know the alleged truth of colour exclusion already but, rather, are unfamiliar with this thesis. Suppose further that, upon being presented with the above statement, we initially fail to have an intuition. In the course of our reflections, we might think of apparent counterexamples such as that the same thing can be red all over when seen from one perspective and green all over when seen from another; that a closed container can be red all over on the outside and green all over on the inside; that a canvas can be covered in successive layers of oil paint such that it will be both red all over and green all over at the same time; or that something that is red all over and green all over at the same time may simply be brown all over. Suppose finally that, at some point following these reflections, the statement appears intuitively true to us. Perhaps we will nevertheless be reluctant to judge that the statement is true. We would be rightly hesitant. The apparent counterexamples that had previously occurred to us show that the matter at hand is a complicated one. Thus, based on the total evidence available to us in this case, the intuition is weak evidence in favour of the truth of the statement.

A possible consequence of complexity, which may further contribute to the difficulty of getting a complex matter right intuitively, is indeterminacy of meaning. The more complex a given matter is, the more difficult it will tend to be to think about the matter clearly and describe it precisely; consequently, the meaning of expressions that are used to describe the matter will tend to be less determinate. Therefore, if one's intuitions are to be reliable when it comes to complex matters, then not only will one normally need to have advanced knowledge of the matter in question (for instance, about colours), but one must also have considerable conceptual, indeed logical, skill.

A typical characteristic of great players of baseball, cricket, football and many other games is their exceptional anticipation skills. These players are capable of quickly processing information from their environment, especially regarding the movements of other players, so that their intuitive actions reliably anticipate what is going to happen. Similarly, the perfect stand-up comedian might not laugh once during another's show, because they anticipate every punchline. The perfect

philosopher will not be led into contradicting themselves by statements that intuitively appear true—not because they know everything or even much at all, but because they quickly recognise any indeterminacy of meaning for what it is.

The issue of indeterminacy is widely overlooked. It is especially striking that accounts like Sosa's, which stress the role of understanding, typically do not mention this issue but speak about understanding thoughts in an abstract way instead and quite independently of the question of what understanding a thought may involve. BonJour is another striking example of someone who fails to see how the dimension of representation might be relevant to the metaphysics and epistemology of intuition. In response to Gilbert Harman's presentation of apparent counterexamples to colour exclusion similar to the ones that I have discussed above, BonJour writes that, while he concedes the possibility of such cases, he finds it 'hard to see why Harman thinks they are relevant'.¹⁰³ BonJour continues:

Such examples do nothing, as far as I can see, to help us make sense of how the surface of an object could be both red and green, not from different perspectives or at different times or to different eyes or different observers, but without any qualifications of these sorts. And it is, of course, this case and not one of these other, more complicated ones that the original...claim asserts to be impossible. (BonJour 2001, 693)¹⁰⁴

BonJour is wrong to dismiss these kinds of examples as unhelpful. As we saw above—and the indented passage from BonJour inadvertently confirms this—the apparent counterexamples help with the understanding of the relevant thought, by eliminating alternative construals of its purported expression whose meaning is indeterminate. In general, the problem of indeterminacy shows that the metaphysics and epistemology of intuition must account for two kinds of objects, namely, thoughts and expressions of thought (as I have argued in chapter 2).¹⁰⁵

¹⁰³ See also Harman 2001, 660–1.

¹⁰⁴ In the same spirit, BonJour also writes: 'Once the existence of non-symbolic, intrinsically contentful thought elements is admitted, the role of any symbolic elements that are also involved becomes clearly secondary and derivative, albeit perhaps sometimes practically indispensable' (1998, 180).

¹⁰⁵ Ryberg 2013 is another example: 'Does there exist the same sort of causal link between prior experiences and a present intuition if we turn to the moral philosopher? It may be the case that prior involvement in consideration of cases that are supposed to be ethically evaluated may make it easier for the philosopher to fully understand a present case. And it may also be the case that the philosopher's intuition, as a result of prior experiences, is less vulnerable to extraneous influences. However, as initially underlined, this is not what we are considering here. Rather the question is whether the philosopher's intuition itself, when there are no

Conclusion

In section 1, I argued against strong foundationalism about intuitive justification; it is at the very least questionable whether all justification is ultimately based on intuitive justification. In section 2, I raised the objection to Bengtson's (2015) internalist version of weak foundationalism that it is, in fact, *too* weak either to lend support to strong foundationalism or even to amount to a non-trivial account of the epistemology of intuition. In section 3, I turned my attention towards an externalist conception of justification, bringing into focus the question of the reliability of intuition; I argued that Boghossian's argument from evolution in favour of the claim that it is plausible that intuitions are 'at least fairly reliable' still leaves untouched most of the important questions concerning the epistemic value of intuition, such as those of what constitutes the difference between easy and not-so-easy intuitions and how one might know, in a given situation, whether one is dealing with an easy or a not-so-easy intuition. In section 4, I discussed Sosa's understanding-based account of the evidential value of intuition; I found that Sosa's arriving—via his account of the adequate understanding that is purportedly required for an intuition based solely on the subject's understanding of the relevant thought to acquire evidential value from its being so based—at the notion of a *competence* 'that reliably enough discerns the true from the false' points in the right direction. In section 5, I presented an argument based on the notions of complexity and indeterminacy of meaning (and hence, in turn, partly based on the argument from chapter 2) in favour of a moderate kind of scepticism about the evidential value of intuition according to which intuition has little or no evidential value with respect to that which is really interesting. More detailed work on particular cases is required, both by philosophers and psychologists, in order to determine more exactly the limits of intuitive knowledge. The next chapter will continue the present enquiry (and will also be an implicit continuation of my critique of understanding-based accounts of the evidential value of intuition), with a focus on questions of intuitive skill and expertise; in particular, it will also continue my sceptical line of argument.

extraneous factors and the case is fully comprehended, is more reliable than the intuition of the layman.' (2013, 5).

4 Intuitive skill

Introduction

The reliability of intuitive judgement varies with regard to what a given intuition is about and whose intuition it is. Supposing that intuition has little or no evidential value with respect to that which is really interesting (following the moderate kind of scepticism that I have outlined in the previous chapter), an important question with respect to the likely limits of intuitive knowledge becomes that of the extent to which a subject may possess expertise in intuitive judgement with respect to a given matter of interest. There has been much recent work by both psychologists and philosophers on questions concerning intuitive expertise. However, little effort has been made towards a detailed philosophical account of the nature of intuitive expertise. This chapter presents the outlines of such an account. In particular, it is argued that a broader category of what might be called ‘intuitive skill’ is required for this purpose. The first main section introduces several relevant distinctions. The remaining four sections proceed to spell out the main elements of intuitive skill in more detail, with section 3 being an interlude that replies to a common objection along the way.

1. Elements of intuitive skill

Some people have impressive intuitive skill, that is to say, they make impressively skilful use of intuition. Many professionals reliably get things right intuitively that others spend a long time trying to figure out; some experts have even greater intuitive skill than other experts and consistently outperform everyone else.¹⁰⁶ One example of intuitive skill that is widely thought of as being particularly impressive is that of advanced chess players. Despite the sheer complexity of the game, advanced chess players often identify good or bad moves merely by taking a look at the board. The

¹⁰⁶ See, for example, Klein, Calderwood and Clinton-Cirocco 1986, a psychological study of the intuitive decision-making by fire-ground commanders; and Crandall and Getchell-Reiter 1993, a study of nurses in a neonatal intensive care unit who can detect infants developing life-threatening infections even before blood tests come back positive.

superior, intuitive skill of advanced players is also frequently put on display in simultaneous exhibitions, in which one player engages in several games at the same time and against different opponents. The intuitive skill of the best players is developed to such a degree that they can compete even against computers that calculate many times faster than the human brain is capable of.¹⁰⁷

Intuitive skill can be trained. The analogy between intuition and perception suggests that one can improve one's intuitive skill in the same way in which one can improve one's perceptual skills. For example, well-trained cooks will usually be better at discerning tastes than most other people, because instruction and practice have honed their gustatory skill; and well-trained musicians will usually be better at discerning musical sounds than most other people, in virtue of an improved auditory skill. Similarly, dedicated chess players improve their intuitive playing skill with nearly every game that they play; and many chess players train their intuitive playing skill by playing games under time controls that grant them less time per move than normal. A significant amount of psychological research indicates that any intuitive skill can be improved.¹⁰⁸ However, there is also a significant amount of psychological research that shows that many experts do not have great intuitive skill regarding their own subject matter, including questions where one would normally expect them to.¹⁰⁹

Acquiring the intuitive skill that is typical of an advanced chess player requires a lot of hard work. Chess is based on a relatively small set of rules which create a vast number of possible move combinations that even specially devised chess computers struggle to calculate within a reasonable amount of time. Science and philosophy, indeed even the smallest areas of specialisation within science and philosophy, are even more complex than the game of chess; moreover, science and philosophy tend to be much messier. Consequently, acquiring intuitive skill such that one may

¹⁰⁷ The ancient Chinese game of go is even more complex than chess and its requirement of intuitive skill more obvious, but chess is more widely known outside East Asia and thus constitutes the better example for my purposes.

¹⁰⁸ See especially the work following the naturalistic decision-making approach, after de Groot 1946 and Chase and Simon 1973; for instance, Crandall, Klein and Hoffman 2006, Klein, Calderwood and Clinton-Cirocco 1986, Klein 1998 and Schraagen, Chipman and Shalin 2000.

¹⁰⁹ See especially the work following the heuristics and biases approach, after Meehl 1954, Goldberg 1970 and Tversky and Kahneman 1971 and 1974; for instance, Frederick 2005.

reliably get things right intuitively with respect to interesting questions of science or philosophy will require at least as much hard work as acquiring the intuitive skill that is typical of an advanced chess player.¹¹⁰

Perhaps, when it comes to science and philosophy, things are so much more complicated that it is practically impossible to develop an intuitive skill that reliably gets things right. However, even if it were strictly impossible to develop one's intuitive skill so as to reliably get more things right intuitively regarding a given matter, one might nevertheless improve one's intuitive skill. For one might become more reliable at getting things right intuitively by getting fewer things wrong intuitively. In other words, someone's intuitive judgements may be reliable even if their intuitive appearances are not; that is to say, the reliability of my intuitive judgements is increased by removing some of those that are unreliable.¹¹¹

Like any method, intuition can in principle be adjusted either internally or externally: if it cannot be changed to produce correct outputs—that is, if internal adjustment fails—we may still be able to correct outputs by reinterpretation (like developing photographic film from negative to positive or sorting out blurred shots from a series of photographs). For example, if whatever the insurance salesman says intuitively seems true to me and I cannot stop having these intuitive seemings, then I might still be able to avoid making incorrect judgements on their basis by, say, adopting the principle of not judging to be true anything that the insurance salesman says which intuitively seems true to me. Similarly, if intuition tends to be relatively unreliable regarding philosophical matters, then making a conscious effort to avoid intuitive judgement regarding all matters philosophical will probably increase the reliability of one's intuitive judgement, by filtering out a particular type of judgement that is relatively unreliable, even whilst still engaging in philosophical thinking and judgement-making.¹¹² Of course, we would ideally want to be precise and filter out only the incorrect

¹¹⁰ I am using 'science' here and throughout analogously to the German word '*Wissenschaft*', to encompass systematic scholarly inquiry in general.

¹¹¹ This point is widely neglected in the philosophical literature. A rare exception is Machery 2011, section 3.4, which cautiously offers some experimental evidence.

¹¹² Arguably, one's effort at avoiding intuitive judgement regarding all matters philosophical could be successful only if one gave up on philosophical judgement, or perhaps any judgement, altogether. For someone might argue that all judgement logically entails some intuitive judgement. However, this issue can be avoided

intuitive judgements; but a more rigorous principle is often a good way to start the process of learning (as when a child begins by learning that lying is wrong).

Thus, we can distinguish the following elements of intuitive skill. First, there is what is often called ‘intuitive expertise’: an intuitive expert produces a positive, significantly above-average balance of truthful intuitive appearances over non-truthful ones. Second, there is what might be called a ‘sceptical skill’ regarding intuitions: a subject with such sceptical skill is able to detect non-truthful intuitive appearances so as to avoid forming incorrect intuitive judgements on their basis.¹¹³

Furthermore, the first of these two elements of intuitive skill, intuitive expertise, can be subdivided into positive and negative expertise: positive expertise concerns the capacity for truthful intuitive appearances, while negative expertise concerns immunity from non-truthful intuitive appearances. For example, an advanced chess player both sees good moves more frequently than someone of an average playing ability does (positive expertise) and sees, or seems to see, a good move where there is none less frequently than the average player does (negative expertise).

Here is another example. Consider the following question about baseball equipment:

A bat and a ball cost \$1.10 in total. The bat costs one dollar more than the ball. How much does the ball cost?

It is easy to get this right.¹¹⁴ However, many people get it wrong intuitively. Considering the present context, someone of a sufficiently sceptical constitution may have rightly distrusted an intuitive appearance that the ball costs ten cents, which is perhaps the most common intuitive reaction to this case. Such a person would have displayed sceptical skill regarding intuitions.¹¹⁵ Someone with

by restricting ‘intuitive judgement’ to judgement that is based on conscious intuitive appearance. Moreover, even if success was practically impossible, making the effort at avoiding intuitive judgement regarding all matters philosophical would not therefore be unreasonable, because a relatively good effort might still have the desired effect to a significant degree.

¹¹³ In psychology, the distinction between System 1 and System 2 is sometimes used to describe differences similar to those designated by my distinction between expertise and sceptical skill. See, for example, Kahneman and Klein 2009, 519.

¹¹⁴ The case is taken from Frederick 2005.

¹¹⁵ Compare also the case of S_2 who is sceptical of their intuition during a psychological experiment, which was discussed in chapter 1, section 1.

an even more sceptical attitude may not have experienced any intuitive seeming in the first place; they may have been only too aware that the case was never going to be as easy as it might have seemed. This could be an instance of negative intuitive expertise. Finally, it is also possible to get this case right intuitively: many accountants, cashiers and anyone else who deals with similar questions on a daily basis would probably be able to do so; that is, these people are likely to have relevant positive intuitive expertise.

2. Getting things right intuitively

Intuitive expertise primarily requires knowledge of the matter in question. The requisite knowledge may be of a predominantly practical nature, so that an expert need not be able to fully articulate how they know what they know. For instance, skilled footballers often anticipate, and thus know intuitively, what an opponent is going to do next, but they might be unable to fully articulate how they know it.¹¹⁶ A plausible psychological explanation of such abilities can be given in terms of pattern recognition.¹¹⁷ Similarly, advanced chess players reliably recognise many constellations of pieces on the chess board when they see them, which enables them to play intuitively (and hence faster than if they had to deliberate on each move). More widespread instances of intuitive expertise include knowing the emotional state of a friend in an instant, even though most others would be quite unable to detect it, and immediately recognising a piece of music from hearing just a tiny fragment of it; again, many people who display such intuitive knowledge may not be able to fully articulate how they know what they know.

In accordance with these differing degrees to which intuitive knowledge may be of a practical nature, the training required to attain positive intuitive expertise may consist of varying amounts of practice and theoretical study, depending on the field of interest as well as characteristics of the learner. For example, anticipatory skill in football may be improved to a significant degree through

¹¹⁶ See, for example, Savelsbergh, Williams, Kamp and Ward 2002; Mann, Williams, Ward and Janelle 2007. See also, on anticipatory skill in tennis, Shim, Carlton, Chow and Chae 2005.

¹¹⁷ See, for example, Farrow and Abernethy 2015. See also de Groot 1946.

free playing practice alone, but a chess player will typically have to study chess theory and simulate games in a controlled manner to reach even a moderate level of positive expertise within a reasonable time period. On the other hand, professional footballers who compete at the highest level of the game will also carry out theoretical studies and engage in controlled training with the aim of improving their anticipatory skill (for example, football coaching staff sometimes employ video analysis to teach players about tactics, passing strategies and individual tricks that opposing teams or players are likely to try to use against them).

Intuitive expertise in academic disciplines works in largely the same way as intuitive expertise in football or chess. For example, mathematicians will typically have reliable intuitions regarding a larger range of mathematical questions than non-mathematicians; like advanced chess players and professional footballers, mathematicians will typically have trained their intuitive skill through practice and theoretical study. For instance, consider the following mathematical question:

Which of the number series below has more members?

(a) 0, 1, 2, 3, 4, ...

(b) 0, 1, 4, 9, 16, ...

This question concerns basic arithmetic, yet many numerate people get the answer wrong both intuitively and on further reflection. In fact, even Galileo struggled with this question.¹¹⁸ Nowadays, trained mathematicians will typically get it right intuitively. There are various grounds on which (a) can seem to have more members than (b); and there are various grounds on which (b) can seem to have more members than (a).¹¹⁹ However, the correct answer is that neither series has more members than the other. Rather, they have equally many members. The mathematical proof of this lies in the fact that the members of the two series can be one-to-one correlated with each other, that is, the two

¹¹⁸ The problem has since become known as Galileo's paradox.

¹¹⁹ For example, (b) might seem to have more members than (a) to someone who does not understand either the notion of membership or the notion of a series: such a person may think that the numbers in between 1, 4, 9, 16, etc. also count as members of the series, so that (b) would be covering more ground per step than (a) does.

series can be extended indefinitely such that for each member of either series there is exactly one member of the other.

Similarly, physicists will typically have reliable intuitions regarding a larger range of questions about physical matters than non-physicists; chemists will typically have reliable intuitions regarding a larger range of questions about chemical matters than non-chemists; and so on. Through years of work and study, scholars acquire knowledge and improve their judgement, including their intuitive judgement, regarding the things that they study. By analogy, it is plausible that philosophers will typically have reliable intuitions regarding a larger range of questions about philosophical matters than non-philosophers. Perhaps philosophy is somehow special—indeed, many people, including many philosophers and scientists, believe that it is—but it would be surprising to find that philosophy should be so unlike any other scholarly field that years of work and study in this particular discipline did not also lead to the acquisition of at least some knowledge and improved judgement, including intuitive judgement, regarding its objects of study.

Nevertheless, some scholars are sceptical about whether philosophers have any special expertise regarding philosophical matters. In particular, there exist whole traditions within the discipline of philosophy that have been sceptical in this way. For example, ancient Greek and Roman sceptics argued that philosophy is the most uncompromising pursuit of truth and therefore does not lead to any definite answers but only ever to more questions. There have also been philosophers, throughout the ages and right up until the present day, who have argued that the distinctive feature of philosophy is that it is a purely therapeutic activity—for example, it has been argued that the sole concern of philosophy is the clearing away of confusion by reminding us of what we already know—and that philosophy is not the source of any distinctive knowledge about the world. Moreover, a growing number of philosophers believe that philosophers either cannot have or typically do not have *intuitive* subject-specific expertise (although they might have other types of subject-specific expertise), because these philosophers are sceptical regarding the reliability of intuition in philosophy. Rudimentary versions of all three of these views are reflected in the attitudes of many non-philosophers, including many scientists: especially from the outside, philosophy can easily appear to

be nothing but disagreement, which casts doubt over whether philosophers have any distinctive expertise at all regarding the things that they study.¹²⁰

However, even if it were the case that all that philosophers do consists in either disagreeing, asking questions or setting reminders, they could nevertheless acquire expertise, including intuitive expertise, and this expertise could also be distinctive to their discipline thus conceived: for instance, philosophers might typically have expertise, including intuitive expertise, regarding certain ways of disagreeing, asking questions or setting reminders. In fact, philosophy involves the study of such things as knowledge, logic and morality. Indeed, it would involve the study of these things even if all that philosophers do were to consist in disagreeing, asking questions or setting reminders about these things, for then *that* would simply be what constitutes philosophical study. Moreover, philosophers could still acquire expertise through the study, thus conceived, of such things as knowledge, logic and morality, because the more one knew about these things the better one might be at disagreeing, asking questions or setting reminders about them; and, so, it is also plausible that philosophers could in this way acquire intuitive expertise regarding the things that they study. Thus, for example, moral philosophers study morality—right and wrong actions, good and bad characters, rights, duties, virtues and so on—and, if they are good at what they are doing, they will thus typically acquire knowledge and improve their judgement, including their intuitive judgement, regarding the things that they study; and they would do so even if all that moral philosophers do were to consist in either disagreeing, asking questions or setting reminders about moral matters.

Consider the following story. Imagine that a tribe of people appoints one of their members as full-time arbitrator of disputes, and that this person, Arbi, is indeed capable at arbitrating disputes amongst the members of the tribe. Imagine further that Arbi takes the role seriously: she files records of all cases that are brought before her, and she spends most of her time working on being a good arbitrator. Finally, imagine that after some time, Arbi becomes widely respected amongst the other

¹²⁰ For recent examples of scepticism about intuitive expertise regarding philosophical matters, see especially Cummins 1998; Ryberg 2013, section 2; and Weinberg, Gonnerman, Buckner and Alexander 2010. For critical responses to this type of work, see for instance Rini 2014 and Williamson 2011; see also section 3 below and parts of my discussion of experimental philosophy in chapter 5.

tribe members for the good job she has been doing, and that one now frequently hears the other tribe members say to each other such things as ‘If you don’t know what is the right thing to do, then you must go and ask Arbi’ or ‘If anyone knows what is the right thing to do in this situation, then Arbi will know’. It is not difficult to see that Arbi may really have become the expert that the other tribe members take her to be. Furthermore, it is plausible to suppose that after some time in the job Arbi would have thought hard about a great number of cases, and that she would also be able to offer reasonable explanations for her decisions. Thus, by our own standards, Arbi may well qualify as a moral philosopher who has acquired knowledge and improved her judgement regarding the moral matters that she has studied—and she might have done so even if all of her studies have been conducted in the form of disagreeing (with herself), asking questions or setting reminders—and it is only plausible that such a person should also have reliable intuitions regarding a larger range of questions about moral matters than most other tribe members.

Philosophical matters are complicated. Therefore, although nearly every human being engages in some serious philosophical thinking at least sometimes, becoming any good at philosophy requires hard work. Consequently, one should not expect even all professional philosophers to have extensive philosophical expertise, especially since nowadays most professional philosophers have at most a fairly specialised expertise regarding philosophical matters, which pertains to a small and often esoteric area of philosophical interest. Given the theoretical rather than practical nature of philosophical thinking—in other words, the fact that it is a discipline of slow and rigorous rather than fast and free thinking—one should expect even fewer philosophers to have much *positive intuitive* expertise regarding philosophical matters. Similarly, almost anyone can play football or chess, but being any good at either of these activities requires at least a lot of practice, and becoming an expert requires more hard work still; nevertheless, there have been some excellent footballers and chess players with outstanding skill, including positive intuitive expertise. There have also been some excellent philosophers with outstanding skill; and so, by analogy, it is plausible that philosophers may at least in principle also develop positive intuitive expertise regarding some philosophical matters.

3. Calibration

Science and philosophy represent in many ways the highest dimension of the human quest for knowledge; and they would do so even if sceptics were right that philosophy has been consistently unsuccessful in its quest for knowledge. Science and philosophy are therefore of special interest to the question of the epistemic value of intuition, and it is an important question to what degree intuition may be reliable with respect to scientific or philosophical matters and how its reliability might be improved. An argument is sometimes made according to which there can be no intuitive expertise such that intuition would be a useful source of evidence in either science or philosophy. The most widely discussed version of this argument is that by Robert Cummins, which proceeds in terms of an analogy with the calibration of scientific instruments.¹²¹

The core of the argument is this: a useful source of evidence is one that is known to be sufficiently reliable for a given purpose; intuition can only be a useful source of evidence in science or philosophy if it is calibrated; but intuition can only be calibrated if its object can be accessed independently of intuition; however, if its object can be accessed independently, intuition is no longer needed; hence, intuition can only be calibrated when it is not useful; in other words, intuition cannot be a useful source of evidence in science or philosophy because either it is uncalibrated or its object has already been accessed independently.

Calibration is a method of testing the reliability of a given instrument. It essentially requires access to objects of the relevant type that is independent of the instrument, so that one may determine the accuracy of a given output. In this way, we will be able to detect (and, ideally, adjust for) possible data corruption that the instrument may be prone to introduce. Once the instrument has been calibrated, it is safe to use in similar conditions. Cummins offers the following illustration:

When Galileo pointed his newly devised telescope at the moon and saw mountains—earthlike blemishes on what should have been a perfect celestial object—it was legitimate for the opposition to inquire whether the apparent mountains were artifacts. The proper response was

¹²¹ See Cummins 1998. Cummins restricts the scope of his argument to philosophy, but it is easy to generalise the argument so that it pertains to any pursuit of knowledge, including scientific inquiry, that resembles the epistemic situation that Cummins describes. For a similar argument, see Ryberg 2013, section 3.

to point the telescope at something of known size, shape, distance, color, and so on to determine what distortions it introduced; to calibrate it, in short. (Cummins 1998, 116–17)

Contrary to what Cummins suggests, a case can be made that intuition regarding scientific or philosophical matters can be calibrated in broadly the same kind of way that a telescope can be. For example, intuition can be calibrated for fairness, which is also the example used by Cummins, in the same way in which a telescope can be calibrated for mountains. In either case, we take easy and familiar instances and access them independently of the method to be calibrated so as to confirm the correctness of the method's outputs. Thus, when calibrating a telescope for mountains, we may take familiar mountains and access these mountains independently (on foot or by helicopter, for example) to confirm the correctness of the telescopic data. Analogously, when calibrating intuition for fairness, we may take familiar cases and access these cases independently, through discourse and analysis, to confirm the correctness of the intuitive data.¹²² Once thus calibrated, we may proceed to apply the method to new (but similar) cases by allowing slight parameter changes as compared with the cases by which the method was calibrated (indeed, ideally the changes should be slighter than in Cummins's story in which Galileo proceeds from mountains on earth directly to what appear to be mountains on the moon). In this way the calibration process may be continued, in principle, indefinitely. Moreover, the same kind of process may in principle be employed to calibrate intuition for any other matter of scientific or philosophical interest that a subject might have intuitions about.

For instance, calibration of intuition for fairness may proceed along something like the following lines. Below are some variations of a case in which a baker is supposed to distribute a cake amongst five people in a room. Which of these distribution principles are fair and which are not?

¹²² It will perhaps be objected that, ultimately, the human mind cannot access anything independently of intuition. However, even if it were somehow true that the objects of intuition ultimately cannot be accessed independently of intuition (perhaps in one of the ways discussed in chapter 3), access that is sufficiently independent for present purposes may still be attained by restricting intuition to conscious intuitive appearance about the type of object for which intuition is being calibrated. In other words, even if intuition cannot be calibrated all at once, it would still be possible to calibrate intuition locally (for instance, for fairness): even if we could never access something independently of intuition because, ultimately, we would somehow have to rely on intuition, we might nevertheless be able to access the thing independently of a conscious intuitive appearance about this thing. The present argument is intended to demonstrate no more than the possibility of such *local* calibration of intuition, which would allow intuition to be a useful source of evidence in science or philosophy, analogous to the possibility of the calibration of a telescope for mountains (which is equally local).

- 1) The baker divides the cake into five pieces of equal size and gives one to each person.
- 2) The baker divides the cake into four pieces of equal size and gives one to each of four people.
- 3) The baker divides the cake into six pieces of equal size and gives one to each person.
- 4) The baker eats the cake.
- 5) The baker divides the cake into five pieces of varying sizes and gives one to each person.
- 6) The baker divides the cake into ten pieces of very-nearly and apparently equal sizes and gives two to each person such that everyone has approximately the same amount of cake.
- 7) The baker divides the cake into one big piece and four small ones and gives one to each person.

Suppose that A and B have differing intuitions about (3), (4) and (5).

Regarding (3), A argues that it is not fair, because either one person gets an extra piece, and so will get more cake than the others, or all of them get less cake than they were supposed to. Against this, B argues that it is fair, because everyone can have the same amount of cake, and what happens to the extra piece is another question. After some discussion, A and B agree that while (3), unlike (2), is not unfair, it approaches the ideal of a fair distribution principle to a lesser extent than (1) does; and they agree that B's intuition was more accurate than A's, because A's intuition was based on a needless presumption.

Regarding (4), B argues that it is fair, because all five would get an equal amount of cake, namely none at all. A points out, and subsequently B agrees, that (4) is not a distribution at all and, therefore, not a fair one; moreover, B wrongly presumed that the baker who is supposed to distribute the cake amongst the five is not one of them.

Regarding (5), A argues that it is not fair, because the pieces are not of equal size. B points out, and subsequently A agrees, that (5) is neither clearly fair nor clearly unfair, because (6) shows that dividing the cake into pieces of varying sizes may still be fair depending on the degree of variation;

the issue with (5) is that the degree of variation is left unspecified. After some discussion, A and B agree that B is right.

Next, A and B may proceed to consider variations of (1)–(7) in which someone is supposed to distribute, say, a sum of money instead of a cake; they may well find that they have different intuitions about the money-versions of (5) and (6) as compared with the original cake-versions, because distributing slightly unequal amounts of money tends to be less fair than distributing pieces of cake that are of slightly unequal sizes; and in this way the calibration process may be continued. As the process is continued, it will naturally become more and more involved; in particular, the resolution of disagreement is likely to become more difficult, consume more time and require more resources than just a short discussion between A and B. However, this gives no reason to believe that the calibration process cannot be continued significantly further; and after each successful step in the calibration process (and, perhaps, some necessary adjustments), we may proceed to apply the method to new (but similar) cases by allowing slight parameter changes as compared with the cases by which the method was calibrated.

Thus, Cummins's argument fails because it is not true that intuition can only be calibrated when it is no longer needed. On the contrary, intuition can be a useful source of evidence in science or philosophy, insofar as it can be calibrated so that it may be known to be sufficiently reliable for scientific or philosophical purposes.¹²³

Cummins falsely assumes that the only way to access the control samples when trying to calibrate intuition for scientific or philosophical matters would be through scientific or philosophical theory. This leads him to the conclusion that intuition cannot be a useful source of evidence in science or philosophy, on the grounds that one 'could have no possible use for intuition in a context in which the relevant theory was well enough settled to form the basis of a credible calibration test' (1998, 118). However, the step-wise calibration procedure that I have outlined is a credible one without so depending on scientific or philosophical theory for intuition-independent access to control samples;

¹²³ To what extent it is possible to meet this condition is a different question, which shall be the focus of the following sections.

rather, what is mainly required for the procedure in this respect are careful observation and reflection of and on particular cases.

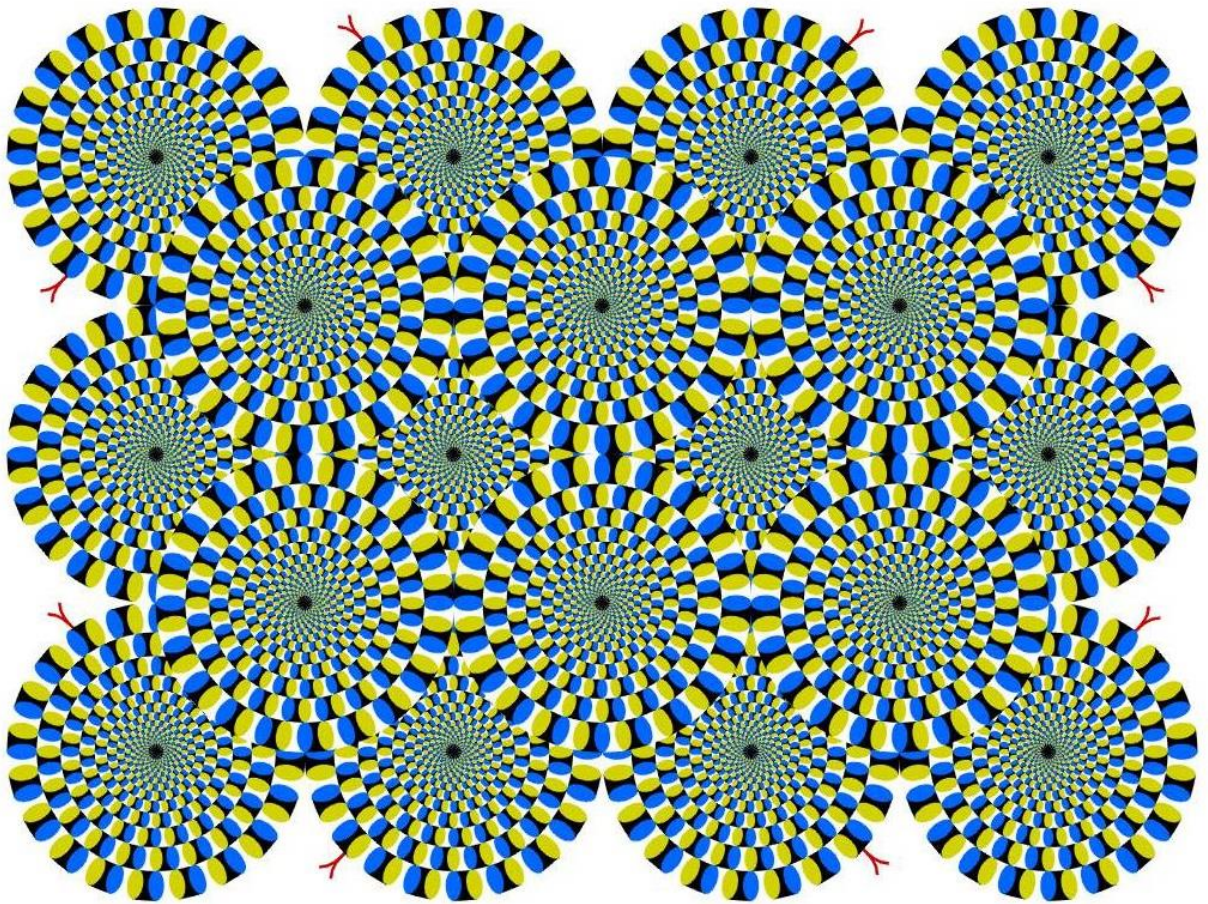
4. Not getting things wrong intuitively

We get things wrong intuitively a lot. Psychological research has shown that this failure is often caused by cognitive heuristics, that is, shortcuts that we tend to take in our cognitive processing. The intuition that the ball in the bat-and-ball case costs ten cents is a paradigmatic example of a shortcut gone wrong. We are somehow misled by the case into mistaking it for one that would be easier to get right but actually is not the case in front of us.¹²⁴ Such failure of cognitive heuristics is called ‘cognitive bias’. Many people will have heard of order effects or framing effects: the ways in which information is presented to a subject may easily and unduly bias the subject’s cognitive processing of the information. Journalists and politicians often trigger this type of cognitive bias when they present what someone has said in a different context in a way that tends to make it sound wrong or problematic. Indeed, psychologists standardly distinguish several dozens of types of cognitive bias. Other important sources of false intuitive judgement include wishful thinking, ideology and theoretical preconceptions. Thus, many sources of false intuitive judgement lie deeply buried in human nature, and they are often closely related to cognitive processes that enable us to function as rational agents. Consequently, reducing one’s susceptibility to false intuitions is not an easy thing to do, and cutting off the natural supply of untruthful intuitive appearances—if this were possible at all—would have a paralysing effect on our thinking.

Positive intuitive expertise regarding a given matter will normally entail a reduced susceptibility to untruthful intuitive appearances regarding that same matter. For example, the cashier who gets the bat-and-ball case right intuitively also displays the negative intuitive ability to, unlike most other people, not get this case wrong intuitively. On the other hand, there are strongly recalcitrant cases. For example, some optical illusions are such that, even though we know that things are not as they

¹²⁴ See Frederick 2005.

intuitively appear, the appearance remains what it is. The following picture by Akiyoshi Kitaoka is a static image, but avoiding the appearance of its somehow being in motion is very difficult.¹²⁵



Similarly, many well-known paradoxes, including Russell's paradox as well as liar and sorites paradoxes, are typically presented as an argument that may intuitively appear sound but that one does not judge to be so because one has reasons to believe that the argument cannot be sound due to its paradoxical conclusion.¹²⁶

Furthermore, the development of positive intuitive expertise also tends to bring with it new opportunities for getting things wrong, including getting things wrong intuitively. For instance, a dedicated chess player who continues to play against ever more and different opponents will thereby

¹²⁵ For both colour and greyscale versions of the image, see Kitaoka's website at <http://www.ritsumei.ac.jp/~akitaoka>.

¹²⁶ This has been demonstrated in chapter 1. The case of the two number series (Galileo's paradox) in section 2 above might also lend itself as an example of this structure; it might continue to intuitively seem that one of the series has more members than the other, even if one knows that this is not so.

not only continue to improve their playing skill but will also—partly in virtue of their improving skill—continue to encounter constellations that are new to them and that they may thus get wrong intuitively.

In fact, this is only a special instance of a more general problem that concerns new cases. The world keeps throwing new cases at us, of which we cannot know in advance just how new they might be. Thus, knowing how much a given case is like, or unlike, ones we have previously encountered can be difficult. Although it is possible, as outlined in the previous section, to calibrate intuition in a controlled procedure using small steps—with the consequence that positive intuitive expertise is possible—the calibration of intuition for any matter that is non-computable will never be known to be complete; in principle, there may always be new cases that we had not anticipated, regardless of whether these are (apparent) cases of cats, tables or fairness.

Perhaps the best human chess players may yet be surprised by an unconventional move, but digital chess computers with sufficient memory and computing power may not be thus surprised. However, real-life human affairs—politics, art, science, love, friendship, technology and so on—are immeasurably more complicated than the game of chess; they are both non-computable and largely unpredictable. Thus, any expert may get things wrong intuitively even regarding the things that they know more about than anyone else, whenever they are faced with new cases and regardless of how much training and practice they have had.

There is an analogous problem in the case of the calibration of a telescope. In Galileo's times, a telescope that has been calibrated for mountains, using earthly mountains as a control sample, may still be taken to be unreliable when it comes to what appear to be mountains on the moon. As in the case of the calibration of a telescope for mountains, even if intuition has been calibrated for some particular matter, its reliability regarding new cases, or what appear to be new cases, of the same matter may still be questioned.

It would have been both natural and reasonable at the time to question the reliability of Galileo's telescope when it showed what appeared to be mountains on the moon, but it is also understandable

that a scholar like Galileo may wish to leap from the control sample of mountains on the earth to what appear to be mountains on the moon. If we want to make progress, we sometimes need to be ambitious like that. And this is of course one important purpose of using intuition; it is supposed to allow us to make such leaps. In particular, intuition is supposed to be able to allow faster progress than smaller, more rigorous steps would often allow.

Similarly, it is often reasonable to question the reliability of one's intuition. In particular, scholars who, like Galileo, are actively working to make new discoveries should regularly question the reliability of their intuition. However, questioning the reliability of one's intuitions is significantly less natural, and more difficult, than questioning the reliability of, say, a telescope. The essential difficulty of questioning that which intuitively appears true to one, even after having resolved to do so with respect to a particular case or on a particular occasion, is perhaps relatively obvious; but it can hardly be overstated. The feeling of surprise at discovering perceptual illusions or the punchline of a good joke indicates this difficulty.¹²⁷ There is a similar experience, common in philosophy, where one tries to explain something to someone else, but gets nowhere, because this person has so many relevant questions that one did not anticipate.

When things appear to us to be so, not only do they not appear otherwise, but we will typically find it difficult to think of relevant alternative ways for things to be: the fact that something appears to us to be a certain way entails that alternative ways for the thing to be do not appear to us at the same time and, at this time, are likely to be relatively distant from our thinking. Knowing relevant alternative ways for things to be requires good previous knowledge of the matter at hand, and likely of many more things, as well as substantial experience as a thinker plus method and imagination.

In addition, the dimension of representation might make the task even more difficult, as it requires the skilful thinker to know relevant alternative modes of representation for expressions of thought (statements, pictures and so on)—which in turn requires mastery of the relevant means of

¹²⁷ For example, here is a recent joke by Ken Cheng: 'I'm not a fan of the new pound coin, but then again, I hate all change'. Frankie Boyle has recently authored the following one: 'Trump's nothing like Hitler. There's no way he could write a book'.

representation, in addition to the requirements already mentioned. The task of not understanding an expression in the way it naturally appears to us to represent is like the task of attempting to notice an aspect of a picture which, for all we know, might not have different aspects at all. The task of analysing the meaning of an expression is like the task of seeing the picture for the two-dimensional display of colours which, physically, it is and explaining what it represents and how it does so.

The problem holds for intuition regarding almost anything, but it is particularly acute in science and philosophy. Thus, the moderate scepticism that was formulated at the end of the previous chapter cannot be defeated by intuitive expertise. The more complex the matter that one has an intuition about, the more likely it is that one will come across new cases that one has not anticipated. However, it does not follow from this that intuition could not be a useful source of evidence. Rather, it means that—supposing, as before, that all of the really interesting matters that we have intuitions about are relatively complex—intuitions tend to be weak evidence regarding whatever is really interesting, even if they are the intuitions of an expert. For either their reliability is questionable or better evidence is available.

5. Sceptical skill

The right epistemic attitude to take towards intuitions, following the moderate scepticism that I have outlined in this and the previous chapter, is not one of full-blown scepticism but of conscientious moderation. For despite the limited extent to which intuition can be trained and adjusted to reach positive intuitive expertise, someone's intuitive judgement may yet in principle be perfectly reliable in virtue of external adjustment: specifically, one can develop what I propose to call 'sceptical skill' such that one reliably detects untruthful intuitive appearances in oneself so as to avoid making judgements on their basis.

For example, a good chess player will often know when their intuition is less reliable than normal, as when they are faced with an unfamiliar opening. Similarly, experienced chess players know that one tends to be more prone to making mistakes later in the game due to growing bodily exhaustion

or time pressure (if one is playing under time controls); another common source of error that advanced chess players have learned to avoid is overconfidence and loss of concentration that can beset a player who feels in control of the game. In these and similar situations good chess players will take an appropriately sceptical stance towards their intuitions; in other words, they will exercise their sceptical skill.¹²⁸

Many people already have sceptical skill regarding some matters. For example, nearly everyone knows that the claims of product advertisements are often misleading. Similarly, most people know that heightened emotional states are not good for decision-making. In situations like these, intuition is less reliable; and controlling oneself appropriately exhibits sceptical skill. Moreover, the ongoing evolution of post-truth politics, fake news and online fraud have made the development of such sceptical skill amongst the general population perhaps more pressing than ever, and more and more people are developing an appropriate attitude towards untrustworthy content, partly in virtue of a growing number of educational projects that aim to train people in this way.¹²⁹

Arguably the best way to acquire basic sceptical skill is to learn and practise philosophy. Socrates, in Plato's Socratic dialogues, is a great example of a philosopher who is trying to teach others this basic sceptical skill; in particular, he tries to teach his interlocutors to be critical against what only appears true in what other people, especially sophists, poets and politicians, say as well as against what only appears true in one's own thinking. And if there are people that have expertise in sceptical skill, it is philosophers.¹³⁰

There is widespread agreement that the study and practice of philosophy leads to the acquisition of skills in the construction and analysis of arguments, but not everyone agrees that these skills also

¹²⁸ Similarly, even if a professional footballer has great anticipation skill, they may not wish to rely on it against a player that they expect have greater skill than them on this front: so their approach would have to be less assured, more cautious, but would for that reason perhaps also be more successful; in particular, they might rely on analysis of what a given player tends to do and act on this knowledge rather than in the intuitive way that has been successful for them before against somewhat less skilled opponents.

¹²⁹ Harry Frankfurt's theory of bullshit remains essential reading in this connection. See Frankfurt 1986.

¹³⁰ Other salient examples of philosophers whose work is partly directed at teaching their audience sceptical skill are Nietzsche and Wittgenstein.

typically lead to an improved intuitive ability.¹³¹ Perhaps it will be objected to my account of intuitive skill—as the combination of intuitive ability and sceptical skill—that ‘intuitive skill’ is a misnomer, because sceptical skill is really the opposite of intuition or, more specifically, that sceptical skill does not enhance intuition but merely inhibit it (and so should not be conceived as part of intuitive skill). However, there are two good reasons to subsume sceptical skill under intuitive skill. First, sceptical skill mediates between intuitive appearance and intuitive judgement, and so is part of the process of making intuitive judgements. Second, sceptical skill regarding intuitions may itself be partly an intuitive ability. Indeed, this part of sceptical skill might also be called ‘meta-intuition’, for it is an intuitive ability regarding intuitions.¹³² Wittgenstein gives a vivid description of this type of intuitive ability:

People who have never carried out an investigation of a philosophical sort, like most mathematicians for instance, are not equipped with the right optical instruments for that sort of investigation or scrutiny. Almost, as someone who is not used to searching in the forest for berries will not find any because his eye has not been sharpened for such things & he does not know where you have to be particularly on the lookout for them. Similarly someone unpractised in philosophy passes by all the spots where difficulties lie hidden under the grass, while someone with practice pauses & senses that there is a difficulty here, even though he does not yet see it. – And no wonder, if one knows how long even the practised investigator, who realizes there is a difficulty, has to search in order to find it.

If something is well hidden it is hard to find. (Wittgenstein [2015–forthcoming], MS 118, 113r–114r, as translated in [1977/98], 33e–34e)¹³³

Sceptical skill is a subject’s ability to identify untruthful intuitive appearances in themselves. It is only at its best when it has been developed up to the degree of an intuitive ability, because then it will often make a big difference in terms of efficient thinking: in that case, it will be like stopping oneself from saying something just before one was about to say it because one notices that what one

¹³¹ See especially Weinberg, Gonnerman, Buckner and Alexander 2010, 334; and Williamson 2011. Williamson argues correctly, against the authors of the former work, that the argumentative skill of a good philosopher will typically lead to an improved intuitive ability, and that this is analogous to the skill and corresponding intuitive ability acquired by law students, who learn how to understand and analyse case descriptions. See also Williamson 2009, which is a response to Weinberg 2009, and Williamson 2007, 191.

¹³² In terms of dual-processing accounts in psychology, meta-intuition is a part of System 2’s surveillance of System 1 turned into a System 1 activity.

¹³³ Wittgenstein’s target here was Gödel—hence, presumably, the special mention of mathematicians. Wittgenstein was notoriously critical of Gödel’s work on incompleteness in formal systems, which he thought was sloppy from a philosophical point of view. The amount of questionable philosophy that has been produced off the back of Gödel’s mathematical results, and thus the fact that Gödel failed to forestall a number of serious misunderstandings that subsequent thinkers have taken away from his explanations of his results, perhaps confirms Wittgenstein’s contention that Gödel failed to see some of the philosophical difficulties involved. For a detailed commentary on Wittgenstein’s essential writings on this question, see Kienzler and Grève 2016.

was going to say is wrong or inappropriate; our noticing this before saying it, or even half-way through saying it, may save us a lot of trouble. Similarly, stopping one's thought in its tracks, because one senses that there is a difficulty, may save a thinker a considerable amount of trouble (and at least a certain amount of time). Perhaps the difficulty, once noticed, will be easy to see for what it is and thus be sorted out, but had the thinker not intuitively noticed the difficulty, then much problematic or inefficient thinking might have followed, even if the difficulty were ultimately noticed in some way or other.

Thus, given that ideally sceptical skill is developed to the degree of intuitive ability, sceptical skill should ideally be based on the same things that intuitive expertise is based on; thus, it primarily requires knowledge of the matter in question. Specifically, in addition to knowledge of the first-order matter in question (for instance, chess), sceptical skill—insofar as it should be developed to the degree of a (higher-level) intuitive ability (or 'meta-intuition')—mainly requires knowledge about intuition, including its psychology, metaphysics and epistemology. Furthermore, sceptical skill involves knowledge of oneself as a thinker, of one's cognitive strengths and weaknesses (especially susceptibility to various kinds of bias), and of relevant situational factors (that is, knowing what to expect given the situation that one finds oneself in).

Conclusion

Intuitive skill primarily consists of intuitive expertise and what I have called 'sceptical skill'. Furthermore, we can distinguish positive intuitive expertise from negative intuitive expertise: positive expertise concerns the capacity for truthful intuitive appearances and negative expertise immunity from non-truthful ones. Someone with sceptical skill may detect certain non-truthful intuitive appearances so as to avoid forming incorrect intuitive judgements on their basis. I have argued that both intuitive expertise and sceptical skill can be acquired through training, including in science and philosophy. Intuitive expertise is, then, like internal adjustment of an instrument, while sceptical skill is like external adjustment; that is, the former is an improvement of the inner workings of the method (that is, intuition) so that the balance of correct outputs over incorrect ones may be

increased, while the latter improves the method by filtering out incorrect outputs. Thus, even if the extent to which intuitive expertise can be attained is limited in such a way that one will continue to have untruthful intuitive appearances—as is arguably the case in science and philosophy, for instance—then someone’s intuitive judgement may yet in principle be perfectly reliable in virtue of their sceptical skill.

This account of intuitive skill, including sceptical skill, also shows that it would be better, contrary to a tendency in the philosophical literature on the topic, not to restrict the question of the epistemic value of intuition to the question of evidence. For even if intuitions regarding a certain matter tend to be only weak evidence (because they tend to be unreliable regarding this matter), reflection and analysis might be used to correct inaccuracies in a given intuitive appearance so that the overall epistemic process might still benefit from the intuitive appearance; untruthful intuitions may yet be pointing in roughly the right direction. Thus, part of the epistemic value of intuition lies in the analysis of particular intuitions, including untruthful ones, and perhaps especially those that are most persistent; in addition to the direct benefit that such analysis of intuitions may have, practising such analysis is likely to offer a thinker important insights into their own ways of thinking and of perceiving the world.

5 Logic and experiment

Introduction

Philosophers have often tried to emphasise the exceptional character of their discipline. One of the most prominent ways in which this has been attempted, starting perhaps with Plato's theory of forms, is through the employment of some distinction between the empirical world and the non-empirical (or rational or intellectual) world or, in epistemological terms, that which may be known through the senses and that which may be known without the senses (for instance, through reason or the intellect). The various ways in which philosophers have attempted to construe such distinctions have been much debated.¹³⁴ Some of these debates have recently been fuelled by an approach to philosophical questions that has come to be known as 'experimental philosophy'. In particular, some experimental philosophers have criticised what they perceive as the traditional, 'non-experimental' approach to philosophical questions. The challenge by experimental philosophers has received various critical responses (including the expertise defence by Timothy Williamson and others, which was briefly mentioned in the previous chapter).¹³⁵ In this chapter, I argue that the difference between so-called experimental methods and non-experimental methods in philosophy has been exaggerated; and that, as a consequence, the extent to which philosophers have always used experimental methods has been overlooked.

Section 1 introduces the reader to some salient examples of work by experimental philosophers. In section 2, I discuss different views concerning the epistemology of the philosophical practice of evaluating theses by way of examples and counterexamples. In particular, I discuss what I take to be the most common view, which is also widely shared amongst experimental philosophers, and a

¹³⁴ The epistemological distinction has traditionally been expressed in borrowed Latin terms as between that which may be known *a posteriori* (after the senses, so to speak) and that which may be known *a priori* (before, or prior to, the senses). For a useful overview, see Casullo and Thurow 2013.

¹³⁵ For criticism of certain reported results, interpretations of survey data and methodology, see for instance Ludwig 2010 and Sosa 2007c. For a brief overview of other critical responses to experimental philosophy, see Knobe and Nichols 2017.

prominent view that is opposed to this common view (and typically also to experimental philosophy) according to which intuitions do not play any epistemic role in the relevant practice; my discussion culminates in the proposal of an alternative view, which I call ‘the critical view’. Here are brief formulations of the relevant views:

The common view

The evaluation of philosophical claims often proceeds by way of cases that are intended to be examples (or counterexamples) and whose evidential strength is, or is supposed to be, a function of their intuitiveness (that is, the fact that a given case intuitively appears to be the intended example or non-example).

The negative view

Intuitiveness plays no evidential role in this practice.

The critical view

The practice proceeds by way of cases that are intended to be examples (or counterexamples) and that are designed to so appear intuitively, because intuitiveness constitutes significant, albeit weak, evidence in favour of the claim that the case is the example (or counterexample) that it is intended to be.

Section 3 compares the construction of a pair of similar cases in order to show how the critical view helps to explain what makes a good case from a philosophical point of view, and section 4 presents replies to objections to the critical view. Section 5, then, returns to the question of experimental philosophy. I argue that the critical view is at least implicitly adopted by significantly more philosophers than is often appreciated by participants in the debate and that the distinction between quantitative and qualitative methods of modern psychology shows that traditional, ‘non-experimental’ philosophers have already made significant use of the types of method that experimental philosophers promote, which shows that what remains of the experimental challenge is less radical than it has usually been made out to be and can, in fact, be easily met.

1. Philosophy and psychology

Psychology is a relatively young academic discipline. It only began its separation from philosophy in the second half of the nineteenth century and there are still fields of research that exhibit a close combination of the two, most obviously perhaps the field of philosophical psychology. The journal *Mind* used to bear the subtitle *A Quarterly Review of Psychology and Philosophy*, from its founding in 1876 until 1974. In his ‘Prefatory Words’ to the journal’s first issue, its inaugural editor-in-chief Croom Robertson wrote:

Psychology...has by no means won the rank of an assured science in the common esteem. Now, if there were a journal that set itself to record all advances in psychology, and gave encouragement to special researches by its readiness to publish them, the uncertainty hanging over the subject could hardly fail to be dispelled. Either psychology would in time pass with general consent into the company of the sciences, or the hollowness of its pretensions would be plainly revealed. Nothing less, in fact, is aimed at in the publication of *MIND* than to procure a decision of this question as to the scientific standing of psychology. (Robertson 1876, 3)¹³⁶

In recent years, some scholars have actively tried to bring methods from modern psychology to bear on philosophical questions. Moral psychology is a paradigm of fruitful cooperation between philosophy and psychology. Many philosophers working in ethics, not only those working on moral psychology, have an interest in the psychology of moral agents, because ethical theories can be fruitfully compared with respect to their psychological adequacy—for example, an ethical theory may be considered more or less practically useful depending on the extent to which it coheres with the ways in which humans tend to think and act in moral situations—and many philosophers working on moral psychology are actively engaged in the kind of psychological research typically conducted in psychology departments.¹³⁷

Another strand of psychological work that has been undertaken specifically with a view to answering philosophical questions was pioneered by Arne Naess in his *‘Truth’ as Conceived by Those Who Are Not Professional Philosophers* (1938). This book, Naess later wrote, ‘tried to show

¹³⁶ For more historical examples of the separation process between philosophy and psychology, see Appiah 2008.

¹³⁷ Of course, ethical theory need not aim for psychological adequacy. For instance, Kant’s work on the metaphysics of morals is arguably not interested in moral psychology. For an overview of recent work at the intersection of moral philosophy and moral psychology, see Alfano 2016.

the inadequacy of the intuitive methods employed by philosophers to determine how “true” and related terms are conceived, defined, and used by ordinary people’ (1953, Foreword). Naess had found himself dissatisfied with the apparent lack of scientific method in the work of philosophers on the nature of ordinary concepts of truth, knowledge, goodness and so on. The general contention of Naess’s approach is that, as he puts it, ‘empirical procedures should be applied to empirical questions’ (1953, Foreword); in particular, philosophers should use methods such as surveys, instead of relying on their own intuitions, whenever this is a feasible option.

The past twenty years have seen a flourishing of this approach as part of the research programme that has come to be known as experimental philosophy.¹³⁸ There now exists a considerable number of studies that purport to show the inadequacy of the intuitive methods that are supposedly employed by philosophers.¹³⁹ Like Naess’s pioneering work, these studies have mainly been intended to show either that philosophers should use methods such as surveys instead of relying on their own intuitions or, when surveys show that there is significant variation between different people’s intuitions regarding a particular type of case, that philosophers should altogether avoid relying on intuitions regarding these questions. The remainder of this section consists of various examples that give an indication of the scope and nature of this work by experimental philosophers.¹⁴⁰

Jonathan Weinberg, Shaun Nichols and Stephen Stich have presented a comparative study of intuitive responses by subjects from three different cultural groups regarding a famous type of case from epistemology.¹⁴¹ Participants in the study were asked to read through the following paragraph and to indicate their intuition by circling one of the two possible answers:

¹³⁸ Naess had already proposed the name ‘experimental philosophy’ for this kind of research back in the 1930s. I do not know what ultimately led to the adoption of this name for the present movement. See Naess 1938, 161.

¹³⁹ This recent flourishing of the approach is largely due to the work of Stephen Stich; see especially Stich 1988 and 1990.

¹⁴⁰ See also Knobe and Nichols 2017 for an overview.

¹⁴¹ See Weinberg, Nichols and Stich 2001. They also report variation between different socioeconomic groups.

Bob has a friend, Jill, who has driven a Buick for many years. Bob therefore thinks that Jill drives an American car. He is not aware, however, that her Buick has recently been stolen, and he is also not aware that Jill has replaced it with a Pontiac, which is a different kind of American car. Does Bob really know that Jill drives an American car, or does he only believe it?

REALLY KNOWS

ONLY BELIEVES

Weinberg, Nichols and Stich report that 74% of subjects from one cultural group answered that Bob ‘only believes’—hence that Bob does not really know that Jill drives an American car—while from the other two cultural groups only 44% and 39% of subjects gave this answer. This means that the majority of test subjects from two out of three cultural groups appear to disagree with Edmund Gettier, insofar as he based his famous argument against the theory that knowledge is justified true belief on an intuition that someone like Bob does not really have the knowledge in question. Gettier published his argument in a three-page paper in 1963. His argument soon became famous, because the vast majority of philosophers shared his intuition and, as a consequence, the theory of knowledge as justified true belief, which most philosophers had previously found quite acceptable, quickly fell into general and lasting disrepute. The study by Weinberg, Nichols and Stich suggests that the starting point of this revolution in analytic epistemology may have been a mistake, because the intuition that is almost uniformly shared amongst professional philosophers appears to be significantly less widely shared amongst other people. Several recent studies have shown that the results concerning Gettier cases reported by Weinberg, Nichols and Stich could not be replicated.¹⁴² However, their work remains of some interest, albeit not in the way originally intended by its authors, because its failure illustrates the difficulty of conducting thought experiments in a controlled manner (more on which in sections 3 and 5 below).¹⁴³

¹⁴² See Nagel, San Juan and Mar 2013 and Kim and Yuan 2015. See also Machery, Stich, Rose, Chatterjee, Karasawa, Struchiner, Sirker, Usui and Hashimoto 2015 for more psychological results indicating intercultural uniformity regarding Gettier cases.

¹⁴³ A similar situation exists regarding some psychological work on variation of philosophical intuitions between different gender groups. See, for example, Adleberg, Thompson and Nahmias 2015 and Seyedsayamdost 2015.

Apparently more robust results indicating significant cultural variation were obtained in a study by Edouard Machery, Ron Mallon, Shaun Nichols and Stephen Stich.¹⁴⁴ They used the following type of intuition probe in order to test an important case from Saul Kripke's work:

Suppose that John has learned in college that Gödel is the man who proved an important mathematical theorem, called the incompleteness of arithmetic. John is quite good at mathematics and he can give an accurate statement of the incompleteness theorem, which he attributes to Gödel as the discoverer. But this is the only thing that he has heard about Gödel. Now suppose that Gödel was not the author of this theorem. A man called 'Schmidt', whose body was found in Vienna under mysterious circumstances many years ago, actually did the work in question. His friend Gödel somehow got a hold of the manuscript and claimed credit for the work, which was thereafter attributed to Gödel. Thus, he has been known as the man who proved the incompleteness of arithmetic. Most people who have heard the name 'Gödel' are like John; the claim that Gödel discovered the incompleteness theorem is the only thing they have ever heard about Gödel. When John uses the name 'Gödel', is he talking about:

- (A) the person who really discovered the incompleteness of arithmetic? or
- (B) the person who got hold of the manuscript and claimed credit for the work?

According to Kripke's theory of rigid designation, the use of a proper name such as 'Gödel' will necessarily refer to nothing but the same object (in this case, Gödel), even if the speaker associates with the name only descriptions of the object that happen to be false.¹⁴⁵ This theory had a huge impact on the entire discipline of philosophy. The Gödel case was supposed to be an intuitive example in support of the theory (and an intuitive counterexample to the descriptivist theory of reference). However, Machery, Mallon, Nichols and Stich report significant variation between responses from two different cultural groups, East Asians and Westerners. Thus, their study suggests that for a significant number of people the Gödel case intuitively constitutes not an example in support of Kripke's theory but a counterexample to it.

In a study on the concept of intentional action, Joshua Knobe had subjects consider one of two variations of the following schema:¹⁴⁶

The vice-president of a company went to the chairman of the board and said, 'We are thinking of starting a new program. It will help us increase profits, but it will also [have a side effect].' The chairman of the board answered, 'I don't care at all about [the side effect]. I just want to make as much profit as I can. Let's start the new program.' They started the new program. Sure enough, [the side effect occurred].

¹⁴⁴ See Machery, Mallon, Nichols and Stich 2004.

¹⁴⁵ See Kripke 1980.

¹⁴⁶ See Knobe 2003.

For one case, Knobe substituted the side effect of *harming* the environment; for the other, he substituted the side effect of *helping* the environment. After presenting subjects with one of the two cases, he asked them to indicate their intuition concerning whether the chairman harmed (or helped) the environment intentionally or not. Knobe reports that 82% of subjects considering the ‘harming the environment’ case said that the action was intentional. By contrast, 77% of subjects considering the ‘helping the environment’ case said that the action was not intentional. Thus, according to this study people’s intuitions concerning whether a given action is intentional or not vary depending on the moral qualities of the action. This is in many ways an interesting result. One way in which it is interesting is that it is indeed counterintuitive that whether an action is intentional or not should depend on its moral qualities.

Stacey Swain, Joshua Alexander and Jonathan Weinberg investigated Keith Lehrer’s Truetemp case.¹⁴⁷ They had subjects consider the following intuition probe:

One day Charles was knocked out by a falling rock; as a result his brain was ‘rewired’ so that he is always right whenever he estimates the temperature where he is. Charles is unaware that his brain has been altered in this way. A few weeks later, this brain rewiring leads him to believe that it is 71 degrees in his room. Apart from his estimation, he has no other reasons to think that it is 71 degrees. In fact, it is 71 degrees.

Please indicate to what extent you agree or disagree with the following claim: ‘Charles knows that it is 71 degrees in his room.’

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Each subject was also presented with three other intuition probes including a clear case of knowledge and a clear case of non-knowledge. The authors of the study varied the order in which the cases were presented, so that different groups of subjects considered them in different orders. The authors report significant variation between responses depending on the order in which the cases were presented. In particular, they report that subjects who were first presented with a clear case of knowledge subsequently exhibited a tendency to not attribute knowledge in the Truetemp case, but subjects who were first presented with a clear case of non-knowledge exhibited the opposite tendency (that is, the tendency to attribute knowledge in the Truetemp case); hence, the study reports a significant instability in people’s intuitions regarding the Truetemp case. The Truetemp case forms an important

¹⁴⁷ See Swain, Alexander and Weinberg 2008. For Lehrer’s original Truetemp case, see section 3 below.

part of Lehrer's argument against externalist theories of knowledge, which emphasise the truth-conduciveness of processes of belief-acquisition. The results reported by Swain, Alexander and Weinberg pose a challenge for Lehrer's argument insofar as it depends on the Truetemp case being an intuitive counterexample.

In the wake of the steadily growing number of studies and the broadening scope of this work, as well as the fact that certain findings in this field have been taken to challenge some of the most influential arguments of twentieth-century philosophy, the view that philosophers should use methods of modern psychology instead of relying on their own intuitions has gained considerable support.

2. Anti-psychologisation

It is widely believed that intuitions are treated as evidence—indeed, as strong evidence—in philosophy. There are various possible reasons for which one might believe that intuitions are treated as evidence in philosophy. For example, rationalist foundationalism about intuitive justification implies that intuitions are treated as evidence in philosophy (as discussed in chapter 3). The most widely purported reason for believing that intuitions are treated as evidence in philosophy, however, is a view of the practice of philosophy according to which the evaluation of philosophical claims often proceeds by way of cases intended as examples or counterexamples whose evidential strength is, or is supposed to be, a function of their intuitiveness (that is, the fact that a given case intuitively appears to be the intended example or non-example).¹⁴⁸ As mentioned in the introduction, I refer to this as 'the common view'.

¹⁴⁸ The English word 'example' is sometimes used in a way that contrasts examples with counterexamples and sometimes in a way that contrasts examples with non-examples. The contrast between examples and counterexamples concerns the logical relation of a given case to a claim that is being evaluated, while the contrast between examples and non-examples either does not concern this relation or concerns only part of it; for instance, a counterexample to the claim that all Fs are Gs requires a case that is both an example of something that is F and a non-example of something that is G. Cases that are intended to be examples or counterexamples are typically constructed in such a way that some elements of the claim that is being evaluated, but not others, are stipulated to obtain—for instance, one may stipulate that something is F and on this basis try to construct a case for its being not-G—so that whether a given case intuitively appears to be the intended

For example, Brian Weatherson has offered the following account of counterexamples: ‘A counterexample to the theory that all Fs are Gs is a possible situation such that most people have an intuition that some particular thing in the story is an F but not a G’ (Weatherson 2003, 2); and Alvin Goldman has described the corresponding common view of philosophical practice thus:

One thing that distinguishes philosophical methodology from the methodology of the sciences is its extensive and avowed reliance on intuition. ... To decide what is knowledge, reference, identity, or causation..., philosophers routinely consider actual and hypothetical examples and ask whether these examples provide instances of the target.... People’s mental responses to these examples are often called ‘intuitions’, and these intuitions are treated as evidence for the correct answer. ... The evidential weight accorded to intuition is often very high, in both philosophical practice and philosophical reflection. Many philosophical discoveries, or putative discoveries, are predicated on the occurrence of certain widespread intuitions. (Goldman 2007, 1)¹⁴⁹

Gettier’s counterexamples to the theory that knowledge is justified true belief are typically cited as a paradigm of this practice. For example, George Bealer writes:

At one time many people accepted the doctrine that knowledge is justified true belief. But today we have good evidence to the contrary, namely, our intuitions that situations like those described in the Gettier literature are possible and that the relevant people in those situations would not know the things at issue. (Bealer 1996, 122)

Other well-known recent cases, some of which are also often cited by proponents of the common view, include Tyler Burge’s arthritis case, David Chalmers’s zombies, Foot’s trolley cases, Goldman’s barns, Frank Jackson’s Mary, Parfit’s fission cases, Putnam’s twin earth and Judith Jarvis Thomson’s violinist; some less recent cases are Lewis Carroll’s Achilles and the tortoise, Descartes’ evil demon, Einstein’s elevator, Frege’s Hesperus and Phosphorus, Hilbert’s hotel, Leibniz’s mill, Locke’s the prince and the cobbler, Newton’s bucket and Plato’s cave.

The majority of experimental philosophers who, like Arne Naess, have conducted psychological studies to show the alleged inadequacy of the intuitive methods that are supposedly so frequently employed in philosophy assume the common view. Many other philosophers agree that the practice that these studies are supposed to criticise is not a good practice. However, it remains an open

example for (or counterexample to) the claim that is being evaluated will mainly depend on whether the case intuitively appears to be the intended example (or non-example) of some particular element of the claim.

¹⁴⁹ Expressions of the same type of view can also be found in Baz 2017; Boghossian 2014, forthcoming; BonJour 1998; Bealer 1992, 1996, 1998, 2004; Dennett 2013; Goldman 1986, 2007, 2010; Gutting 1998; Jackson 2011; Kornblith 1998; Pust 2000; Sosa 1998, 2007a, 2014; and Weatherson 2003, 2014.

question exactly how intuitions are treated as evidence in philosophy and, in fact, whether they are so treated in philosophy at all (regardless, that is, of the normative question of what evidential role intuitions *should* play in philosophy). Timothy Williamson has argued that the common view concerning the practice of philosophy is incorrect, or at least very misleading, and that as a consequence the psychological research that is based on this view is misconceived. According to Williamson, the common view psychologises the actual practice and thus tends to represent the epistemological status of the practice in such a way that what counts as evidence in this practice is the fact that a given case intuitively appears to be the intended example or counterexample, rather than examples or counterexamples themselves (in other words, in such a way that the evidential strength of examples or counterexamples is, or is supposed to be, a function of *nothing but* their intuitiveness). As Williamson has argued in detail, psychologising one's evidence is an inadequate, albeit natural, reaction to criticism and risks scepticism.¹⁵⁰ I shall borrow Williamson's term and call the type of view that the common view arguably tends to promote 'psychologisation'.

Some critics of the common view, who share Williamson's anti-psychologisation, have further argued, to the contrary of psychologisation, that an epistemological account of the philosophical practice of examples and counterexamples need make no mention of intuitions at all, because intuitions do not play any epistemic role in this practice. This view is what I have called 'the negative view'.¹⁵¹

Max Deutsch has presented a detailed argument in support of this latter view. Deutsch examines two cases in detail: Kripke's Gödel case against the descriptivist theory of reference and Gettier's ten coins case. After quoting at length the passages in which the cases originally appeared in print, Deutsch points out that there is no obvious indication in either of the original passages that an

¹⁵⁰ See especially Williamson 2004 and 2007.

¹⁵¹ See, for example, Cappelen 2012 and 2014b and Deutsch 2009, 2010 and 2015a. My discussion focuses on Deutsch's work, because it depends on relatively few assumptions about the nature of intuition, evidence and philosophy. For instance, Cappelen's definition of intuition has been widely criticised as being too narrow; Deutsch, on the other hand, works with no particular definition but proceeds instead from examples of intuition that are commonly accepted. Cp. also Earlenbaugh and Molyneux 2009, whose account depends on a widely debated definition of intuitions as inclinations to believe.

intuition regarding the presented case is supposed to play an evidential role. It will be useful to quote the passage from Gettier here too (if only because I have not introduced the ten coins case previously):

Suppose that Smith and Jones have applied for a certain job. And suppose that Smith has strong evidence for the following conjunctive proposition:

(d) Jones is the man who will get the job, and Jones has ten coins in his pocket.

Smith's evidence for (d) might be that the president of the company assured him that Jones would in the end be selected, and that he, Smith, had counted the coins in Jones's pocket ten minutes ago. Proposition (d) entails:

(e) The man who will get the job has ten coins in his pocket.

Let us suppose that Smith sees the entailment from (d) to (e), and accepts (e) on the grounds of (d), for which he has strong evidence. In this case, Smith is clearly justified in believing that (e) is true.

But imagine, further, that unknown to Smith, he himself, not Jones, will get the job. And, also, unknown to Smith, he himself has ten coins in his pocket. Proposition (e) is then true, though proposition (d), from which Smith inferred (e), is false. In our example, then, all of the following are true: (i) (e) is true, (ii) Smith believes that (e) is true, and (iii) Smith is justified in believing that (e) is true. But it is equally clear that Smith does not *know* that (e) is true; for (e) is true in virtue of the number of coins in Smith's pocket, while Smith does not know how many coins are in Smith's pocket, and bases his belief in (e) on a count of the coins in Jones's pocket, whom he falsely believes to be the man who will get the job. (Gettier 1963, 122)

In arguing that intuitions are not treated as evidence in either Gettier's argument or Kripke's, Deutsch emphasises a distinction between logical and psychological qualities of cases that are intended as examples or counterexamples. Deutsch writes: 'The psychological question of whether the counterexamples are intuitive is independent of the logical question of whether the examples are *counterexamples*' (47). In other words, the logical question is whether a given case constitutes an example in support of (or a counterexample to) a given thesis, and the psychological question is whether it so appears intuitively.¹⁵² Deutsch argues that what is treated as evidence in the practice of evaluating claims by way of examples or counterexamples are not intuitions, but examples or counterexamples. He continues: 'It is only this logical question that is relevant to whether Gettier and Kripke succeed, with the Ten Coins and Gödel cases, in refuting the JTB theory of knowledge and the descriptivist theory of reference' (47).

Deutsch's distinction between the logical question and the psychological question is an important one. However, it is not only the logical question that is relevant to whether Gettier's and Kripke's

¹⁵² Deutsch asks 'whether the examples are *counterexamples*' and distinguishes between genuine and non-genuine examples and counterexamples. I shall more strictly distinguish between cases and examples (including counterexamples) and, hence, ask simply whether a given case is, or is not, an example (or counterexample).

arguments succeed. Both the logical question and the psychological question are relevant in this connection: while the logical question strictly concerns whether the arguments are *sound*, whether the arguments *succeed* (as Deutsch writes) further depends on whether their supposed soundness will be recognised as such and, thus, partially on whether the cases, which are intended to be examples (or counterexamples), appear to be examples (or counterexamples) intuitively.

Perhaps Deutsch's failure to account for the epistemological significance of the psychological question stems from the incompleteness of his historical approach. In defending his decision to focus on the original texts in which the relevant cases first appeared, Deutsch asks rhetorically: 'Could there be a better source for insight into how *Gettier* refuted the JTB theory of knowledge, or *Kripke* refuted the descriptivist theory of reference for proper names, than *Gettier's* and *Kripke's* own work on the subject?' (41). Deutsch is right that original sources are the best possible ones. However, the relevant chunk of the history of philosophy for the insight that Deutsch is seeking comprises not only *Gettier's* and *Kripke's* original texts but also the genesis of these texts and their subsequent reception.¹⁵³ How did the authors of the original texts come to believe that these particular cases were suitable for publication? And how did readers come to believe that the cases worked?

Part of the answer to these questions is that it was (partly) in virtue of the psychological fact that the cases *intuitively appear* to be counterexamples to the theories in question, for this psychological fact is evidence in favour of the claim that these cases are counterexamples to these theories. Deutsch disagrees: 'The right answer to the evidence-for-the-evidence question is not that intuitions...count as our evidence-for-the-evidence.... The answer is instead that *further arguments* play this role' (57). Deutsch is right that in order to establish examples that are central to their argument authors typically

¹⁵³ See Chalmers 2014 for similar criticism of Cappelen (2012), who also works with a nearly exclusive focus on original texts. Deutsch 2016 (section 6) presents a response to Chalmers, who focuses on the reception as recorded in the form of textbooks: Deutsch questions the correctness of textbooks that ascribe an evidential role to intuitions in philosophy. Regardless of whether Deutsch is right to do so, however, his response to this type of criticism is limited in scope to that of its primary target, that is, reception as recorded in textbooks, and thus does not address the more general point that I have made (and I do not see how his response could be suitably generalised to do so without appearing implausibly sceptical towards the reception of philosophical arguments in general).

present supporting arguments (see, for example, the last sentence of the Gettier quotation above).¹⁵⁴ Moreover, other philosophers who evaluate the work will typically proceed by way of even more arguments and layers of arguments both for and against the logical status of the cases as examples (or counterexamples).¹⁵⁵ However, this does not mean that the intuition that a case is an example (or counterexample) is not treated as evidence in favour of its being an example (or counterexample). There is a stage in the evaluation of a case such as Gettier's or Kripke's at which the best available evidence of its being an example (or counterexample) is that it intuitively so appears. Given that the reliability of intuitions in philosophy tends to be questionable (as argued in previous chapters), the evidence afforded may be weak, especially as compared with that which might be afforded by careful reflection and detailed and extensive argumentation. However, the potential efficacy of this evidence should not be underestimated, for at this initial stage in the evaluation of a case it might well be what gets the ball rolling; for, if the case did not intuitively appear to be the example (or non-example) that it is intended to be—or, worse, if it intuitively appeared to not be the example (or non-example) that it is intended to be (suppose, for instance, that the case was very badly presented)—then people might therefore be inclined not to bother any further with it (even if the case is, in fact, the intended example or non-example).¹⁵⁶

I have been discussing the common view of the practice of philosophy according to which the evaluation of philosophical claims often proceeds by way of cases intended as examples or counterexamples whose evidential strength is, or is supposed to be, a function of their intuitiveness (that is, the fact that a given case intuitively appears to be the intended example or non-example). Williamson, Deutsch and others have shown that the common view is problematic insofar as it

¹⁵⁴ Deutsch argues this point in detail for both Gettier's and Kripke's cases as well as several others; see 2015a, 79–89 and section 5.2. Cappelen demonstrates this point with respect to several other influential cases; see especially his 2012, chapter 8.

¹⁵⁵ Deutsch offers a useful discussion of some of the work in response to Gettier. See Deutsch 2015a, 89–95; see also Shope 1983.

¹⁵⁶ Goldman and Jackson have each made a similar point. Goldman writes: 'It wasn't the mere publication of Gettier's two examples, or what he said about them. It was the fact that almost everybody who read Gettier's examples shared the intuition that these were not instances of knowing. Had their intuitions been different, there would have been no discovery' (Goldman 2007, 2). Jackson writes: 'The impact...lay in the empirical, a posteriori fact that so many readers agreed with Gettier that the cases he presented were not cases of knowledge. The same goes for the cases made famous by Putnam (1975) and Kripke (1980)' (Jackson 2011, 476–7).

promotes psychologisation, that is, the type of view according to which the evidence in this practice is the fact that a given case intuitively appears to be the intended example or counterexample, rather than its actually being an example or counterexample. As they have pointed out, this type of view is a misrepresentation of the practice of philosophy in general and what is treated as evidence in philosophy in particular, including what is treated as evidence in the evaluation of claims by way of intended examples or counterexamples. However, the negative view—according to which intuition does not play any evidential role in philosophy—which has been defended by Deutsch and others, who emphasise instead the evidential role of argumentation, equally misrepresents the evidential role of intuition in the practice of philosophy. A suitably moderate alternative may now be expressed as follows: the evaluation of philosophical claims often proceeds by way of cases that are intended to be examples (or counterexamples) and that are designed to so appear intuitively—either directly or, indirectly, in light of the fact that the case intuitively appears to be an example or non-example of part of the thesis while the remaining parts are stipulated to obtain—because such intuitiveness constitutes significant, albeit weak, evidence in favour of the claim that the case is an example (or counterexample).¹⁵⁷ Since on this view the intuitiveness of a case constitutes only weak evidence—given that the reliability of intuitions in philosophy tends to be questionable and that stronger evidence would be afforded by careful reflection and detailed and extensive argumentation—I am calling this ‘the critical view’.

3. Constructing cases to be intuitive

The critical view, according to which philosophers construct their cases to intuitively appear to be the intended examples or counterexamples, helps to explain some of the significant choices that philosophers make, or should make, when constructing cases. For example, not only could Gettier have chosen to present different cases, he also could have presented the cases that he chose differently

¹⁵⁷ Deutsch (2016) revisits the issue, but he fails to appreciate that the author of a case may intend the case to have intuitive appeal for the reason that such intuitiveness constitutes significant, albeit weak, evidence in favour of the claim that the case is an example (or counterexample). See Deutsch 2016, section 5; also 2015a, 97–9.

in many respects. For instance, he could have chosen to present the ten coins case with more, or less, detail. A good presentation of a case typically strikes the right balance of detail. Lack of detail risks leaving too much work to the audience, who may be lazy or unsympathetic, while excessive detail acts like noise and hence makes it more difficult for the audience to grasp what is essential. A related question concerns the choice of specific detail: Gettier's choice of Smith, Jones, the assurance by the president of the company and the counting of ten coins in a pocket is arguably better than instead choosing two donkeys and two divine revelations.¹⁵⁸ Ordinary things and terms tend to make for better cases than ones that are out of the ordinary, because ordinary things and terms tend to increase the degree to which a case is likely to have intuitive appeal.

There are notable exceptions to this rule. For instance, BonJour chooses clairvoyance—the alleged psychic power of extra-sensory perception of things in a distant time or place—as the epistemic method in his well-known cases against externalist theories of knowledge.¹⁵⁹ Indeed, BonJour has a good reason for not choosing a more ordinary epistemic method: 'It will be useful to begin by considering...cases of a less familiar sort where it will be easier to stipulate in a way that will be effective on an intuitive level that only the externalist sort of justification is present' (1980, 59). Thus, by choosing an epistemic method as extraordinary as clairvoyance BonJour intends to isolate the phenomenon that is the target of his cases.

However, BonJour's particular choice of clairvoyance as a placeholder for a reliable method of belief acquisition is a questionable one. BonJour correctly notes: 'The actual existence of clairvoyance does not matter at all for present purposes, so long as it is conceded to represent a coherent possibility' (59). The problem is that the widely questioned existence and relatively poor epistemic standing of clairvoyance is noise that might have a biasing effect on the audience of the case, because it might leave a subject prejudiced against the possibility of acquiring knowledge

¹⁵⁸ Some have argued that some of the inferences that form part of Gettier's cases are not valid. See, for example, New 1965 and 1968. Given that these types of inferences are not necessary for the construction of a Gettier-type case, Gettier might have been better off avoiding these types of inferences. For an example of a good case that avoids such inferences, see Zagzebski 1994.

¹⁵⁹ See BonJour 1980.

through clairvoyance regardless of the stipulation that it be a reliable method.¹⁶⁰ Here is one of Bonjour's cases:¹⁶¹

Norman, under certain conditions that usually obtain, is a completely reliable clairvoyant with respect to certain kinds of subject matter. He possesses no evidence or reasons of any kind for or against the general possibility of such a cognitive power, or for or against the thesis that he possesses it. One day Norman comes to believe that the President is in New York City, though he has no evidence either for or against this belief. In fact the belief is true and results from his clairvoyant power, under circumstances in which it is completely reliable.

Does Norman know that the President is in New York City?

BonJour argues that, contrary to what externalism may have us expect, Norman does not know this. Moreover, Bonjour believes that it is intuitively apparent that Norman does not know this. Bonjour describes his argument as proceeding, as he puts it, 'on an intuitive level as far as possible': 'By considering a series of examples, I shall attempt to exhibit as clearly as possible the fundamental intuition about epistemic rationality that externalism seems to violate' (56). However, his cases are needlessly noisy. Moreover, there is clear potential of a biasing effect carried by his choice of clairvoyance as a placeholder for a reliable method of belief acquisition, which is only exacerbated by his choice of the President's being in New York City as the object of belief. In both these respects, David Armstrong's thermometer analogy and, based on this analogy, Lehrer's Truetemp case represent better choices. Lehrer's case goes as follows:¹⁶²

Suppose a person, whom we shall name Mr. Truetemp, undergoes brain surgery by an experimental surgeon who invents a small device which is both a very accurate thermometer and a computational device capable of generating thoughts. The device, call it a tempucomp, is implanted in Truetemp's head so that the very tip of the device, no larger than the head of pin, sits unnoticed on his scalp and acts as a sensor to transmit information about the temperature to the computational system in his brain. This device, in turn, sends a message to his brain causing him to think of the temperature recorded by the external sensor. Assume that the tempucomp is very reliable, and so his thoughts are correct temperature thoughts. All told, this is a reliable belief-forming process. Now imagine, finally, that he has no idea that the tempucomp has been inserted in his brain, is only slightly puzzled about why he thinks so obsessively about the temperature, but never checks a thermometer to determine whether these

¹⁶⁰ I shall ignore the additional problem of Bonjour's explicitly stating in the description of the case that the supposed clairvoyant has *no evidence* for the belief that is supposedly true and acquired through a completely reliable clairvoyant power; the problem with doing this is that an externalist conception of knowledge may well entail that the supposed clairvoyant does in fact have evidence for this belief and, so, stating that the clairvoyant has no evidence prejudices a relevant issue.

¹⁶¹ See Bonjour 1980, 62.

¹⁶² See Lehrer 1990, 163–4; see also Armstrong 1973.

thoughts about the temperature are correct. He accepts them unreflectively, another effect of the tempucomp. Thus, he thinks and accepts that the temperature is 104 degrees. It is.

Does Truetemp know that the temperature is 104 degrees?

Like BonJour, Lehrer argues that, contrary to what externalism may have us expect, the case is not an example of knowledge and that it is intuitively apparent that it is not. Both BonJour's and Lehrer's cases have proved to have intuitive appeal for many people. Perhaps BonJour's case has greater intuitive appeal than Lehrer's, thanks to its tendentious character. From an objective, philosophical point of view (as opposed to, say, a rhetorical one), however, Lehrer's case is better than BonJour's; in particular, Lehrer's choice of tempucomp and the temperature's being 104 degrees as compared with BonJour's choice of clairvoyance and the President's being in New York City. More specifically, Lehrer's choice of an imagined process of belief acquisition that is modelled on the basis of the thermometer, which is actually reliable, and that does exactly what it is supposed to do reliably—namely, measuring temperature—yields a more precise expression of what is essential in this type of case than does BonJour's choice of clairvoyance, whose existence is in fact widely doubted but which is here stipulated to be a reliable process of acquiring the type of belief that the President is (somewhere) in New York City. Thus, Lehrer has constructed the better case against externalism about knowledge insofar as his Truetemp avoids the potential for bias of BonJour's clairvoyance cases while yielding roughly the same degree of intuitiveness.

4. Objections and replies

Perhaps it will be objected that the critical view still contains some needless psychologisation: that what philosophers aim for when constructing cases is not intuitiveness (that is, the fact that a given case intuitively appears to be the intended example or non-example), but *precision*. It is true that good philosophers typically try to design their cases to be precise expressions so as to enhance the rigour of their argument. However, precision need not exclude intuitiveness. Rather, intuitiveness is a possible effect of precision. Indeed, it is plausible that philosophers aim for all three things when constructing cases—precision, rigour and intuitiveness—because aiming for precision and rigour

alone may fail to produce a case that is likely to be recognised as the example that it is intended to be, and aiming for nothing but intuitiveness would run a considerable risk of producing a false positive, that is, a case that intuitively appears to be an example (or counterexample) but actually is not.

Against this, in turn, it will perhaps be objected that the desired effect of giving precise expression to a case is not intuitiveness, but *clarity*. It is true that philosophers typically try to design their cases to be such that the relevant thought—A is an example of Y—will be easy to grasp. However, like precision and rigour, clarity need not exclude intuitiveness. On the contrary, clarity tends to be an enabling condition for the intuitiveness of an example. Of course, a case may be such that the relevant thought is clear, even if the case fails to be an example and fails to intuitively appear to be an example; for instance, ‘A dolphin is a fish’ is clear but false, and to many people a dolphin will not *seem* to be an example of a fish either. But if one produces a case that is both clear and an example, then will it not therefore also be intuitive? Some people may be inclined to answer this question in the negative. Consider a well-known argument by J. L. Austin regarding the notion of evidence:

The situation in which I would properly be said to have evidence for the statement that some animal is a pig is that, for example, in which the beast itself is not actually on view, but I can see plenty of pig-like marks on the ground outside its retreat. If I find a few buckets of pig-food, that’s a bit more evidence, and the noises and the smell may provide better evidence still. But if the animal then emerges and stands there plainly in view, there is no longer any question of collecting evidence; its coming into view doesn’t provide me with more *evidence* that it’s a pig, I can now just see that it is, the question is settled. (Austin [1962], 115)

Analogously, the objection could be that what philosophers aim for when constructing a case is not evidence that it is what it is intended to be (evidence that it is a pig), but the supposed fact itself (that it is a pig). Consequently—the objection may continue—the desired epistemic effect of giving precise expression to a case is not *having-evidence* (having evidence that it is a pig), but *knowing* (just seeing that it is a pig).

There are two possible responses to this objection.

First, there is the type of response that Paul Grice gives to a similar argument that he discusses in his paper on the causal theory of perception. In the relevant passage, Grice is concerned with the

family of psychological notions that are standardly expressed by such terms as ‘looks (to someone)’, ‘seems (to someone)’ and ‘appears (to someone)’. According to the argument that Grice is responding to, it is strictly incorrect to use these terms in describing a situation that is not susceptible to any doubt or denial, because the meaning of these terms carries the implication that there is some doubt or denial (the ‘D-or-D condition’, as Grice calls it). An example could be my saying, in all seriousness, ‘this seems to me to be a pig’ in the absence of any grounds for doubt or denial that a pig is plainly in view. The core of Grice’s response goes as follows:

If I were to say ‘it looks red to me’ in a situation in which the D-or-D condition is not fulfilled, what I say is (subject to certain qualifications) true...; while admitting that though true it might be very misleading and that its truth might be very boring and its misleadingness very important, one might still hold that its *suggestio falsi* is perfectly compatible with its literal truth. (Grice 1961, 125)

Now a response to Austin’s argument regarding the notion of evidence may be given along the same lines: if someone says ‘S has evidence that this animal is a pig’ in a situation in which there is no longer any question of collecting evidence, because S knows that it is a pig, then what is said will be true, albeit potentially misleading. There is something true in asking the question ‘What better evidence could there be than the thing itself?’, but there is also something ironic about it: if evidence is a matter of supporting a hypothesis to some degree, then verification is the limit, and whether the limit forms part of the area that it limits is a difficult question with no agreed answer.¹⁶³ Thus, even if I am asked for an example that is very easy to give (for instance, if I am asked for an example of a letter of the Latin alphabet) and I give a correct and straightforward answer (say, the letter ‘A’), then describing what I did in terms of the critical view—saying, that is, that I constructed a case that is intended to be an example and that is designed to so appear intuitively, because such intuitiveness

¹⁶³ Williamson has suggested that Austin might agree with such a response, given that the paragraph directly following the one from which I quoted above says: ‘Any kind of statement could state evidence for *any* other kind, if the circumstances were appropriate’ (Austin [1962], 116); cp. Williamson 2000, 207. A corresponding footnote, in which Austin briefly addresses a response similar to the one that I have been discussing, also indicates that Austin was not opposing all non-ordinary uses of the word ‘evidence’ but only ones whose non-ordinary character remains somehow unacknowledged: ‘I have, it will be said, the “evidence of my own eyes”. But the point of this trope is exactly that it does *not* illustrate the ordinary use of “evidence”—that I *don’t* have evidence in the ordinary sense’ (Austin [1962], 115–16, note 1).

constitutes evidence in favour of the claim that the case is an example—may well be misleading, but it may nonetheless be true.

Second, there is also a possible response that puts emphasis on the irony, rather than the truth, in asking the question ‘What better evidence than the thing itself?’. Even if one held that describing what I did, when I answered ‘A’, in terms of evidence is strictly incorrect, then one might still insist that someone who attempts to give an example typically aims for intuitiveness and also that philosophers aim for intuitiveness when constructing cases: one would merely have to interpret ‘intuitiveness’ slightly differently for the philosophical and non-philosophical types of cases. First, the epistemic effect that is desired by anyone who attempts to give an example is that their audience, to paraphrase Austin, just *see* that it is an example; but this seeing is nothing other than knowing intuitively; thus, one may insist that someone who attempts to give an example typically aims for intuitiveness, namely, in the sense that they aim for their audience to *know* intuitively that it is an example. Second, one may insist that when constructing cases philosophers aim for intuitive *evidence*, rather than intuitive *knowledge*, because they construct these cases in the course of evaluating philosophical claims, that is, in a type of situation in which one’s audience should not be expected to know intuitively that a given case is an example.

5. Varieties of dialectic

Bealer is widely cited as a proponent of the type of view that I have called ‘psychologisation’, that is, the type of view according to which the evidence in the evaluation of philosophical claims by way of cases that are intended as examples or counterexamples consists in the fact that cases intuitively appear to be the intended examples or counterexamples, rather than in their actually being examples or counterexamples.¹⁶⁴ Indeed, Bealer has sometimes expressed himself in a way that suggests this interpretation.¹⁶⁵ However, he is arguably actually defending something closer to the critical view

¹⁶⁴ See, for example, Cappelen 2012, Deutsch 2015a, Pust 2017, Weinberg and Alexander 2014 and Williamson 2007.

¹⁶⁵ See, for example, the passage quoted in section 2 above. In a later version of the same material, Bealer has changed the passage and thus avoids the problematic suggestion; see Bealer 1998, 204.

which I have proposed, that is, the view according to which the evaluation of philosophical claims often proceeds by way of cases that are intended to be examples (or counterexamples) and that are designed to so appear intuitively, because such intuitiveness constitutes significant, albeit weak, evidence in favour of the claim that the case is an example (or counterexample). Bealer writes: ‘Intuitions are used as evidence.’ On the same page, he reminds the reader of the ubiquity within philosophy of the argumentative practice of using examples and counterexamples, mentioning some well-known instances by Chisholm, Jackson, Putnam and others, and notes: ‘It is safe to say that these intuitions—and conclusions based on them—determine the structure of contemporary debates’ (1998, 205). Then he offers the following description of this kind of structure:

Philosophical investigation and argument approximate the following idealization: canvassing intuitions, subjecting those intuitions to dialectical critique, constructing theories that systematize the surviving intuitions, testing those theories against further intuitions, and so on until equilibrium is approached. (Bealer 1998, 205)

On a sufficiently broad understanding of ‘canvassing intuitions’ and ‘constructing theories’, this idealised description of philosophical practice is correct.¹⁶⁶ More importantly, the passage clearly states that philosophers should subject all intuitions that they work with to dialectical critique. Thus, Bealer’s position regarding the evidential value of intuitions in philosophy is that they provide weak evidence and that philosophers should treat them as such.¹⁶⁷

Close reading of the writings by other central figures in the debate shows that a significant number of them hold views that are very similar to the critical view. For example, Goldman appends a moderating qualification to a passage that has often been cited as an endorsement of psychologisation (and which I quoted in section 2 above). Immediately after writing that in philosophy ‘intuitions are treated as evidence’, he adds: ‘At a minimum, they are evidence for the examples’ being instances

¹⁶⁶ An understanding of ‘canvassing intuitions’ and ‘constructing theories’ that is broad enough for this idealisation to be a correct description of philosophical practice will arguably make it a correct description of scientific practice too. Accordingly, naturalists have presented very similar accounts of philosophical practice with intuitions. See, for example, Devitt 1994, 2012; Goldman 2010; and Kornblith 1998, 136–7. In direct response to Bealer, Michael Devitt writes: ‘The naturalist does not deny “armchair” intuitions a role in philosophy but denies that their role has to be seen as a priori: the intuitions reflect an empirically based expertise at identification’ (Devitt 1994, 564, note 27).

¹⁶⁷ In an earlier version of the same material, Bealer expresses himself more explicitly and writes consistently that intuitions are, and are used as, ‘prima facie evidence’ rather than simply ‘evidence’; see Bealer 1992.

or non-instances' (2007, 1); and he has elaborated on this qualification in subsequent work on the evidential value of intuitions in philosophy, including work on the 'second-order evidence needed to legitimize or secure intuitional methodology' (2010, 139).¹⁶⁸ Similarly, BonJour—whose clairvoyance cases were discussed in section 3 above—moderates his intuition-based approach as follows. Immediately after writing that 'by considering a series of examples, I shall attempt to exhibit as clearly as possible the fundamental intuition about epistemic rationality that externalism seems to violate', he qualifies: 'Although this intuition may not constitute a conclusive objection to the view, it is enough, I believe, to shift the burden of proof decisively to the externalist' (1980, 56).¹⁶⁹

It should not be surprising that philosophers believe that intuitions must be carefully examined whenever this is at all feasible. Examining what appears to be true and providing reasons for believing or disbelieving that it is true is a natural thing to do for any philosopher. Therefore, it should not be surprising either to find that philosophers have in fact been doing this already with respect to many of the intuitions that have recently been examined by experimental philosophers.

Experimental philosophers have argued that, as Naess had already put it back in the 1930s, empirical methods should be used to answer empirical questions. More specifically, experimental philosophers have argued that philosophers should use quantitative methods from psychology, especially surveys, to examine their own intuitions and those of others. Many, including many experimental philosophers, have thought the so-called experimental challenge to be a radical, or even revolutionary, one.¹⁷⁰ However, it is not. Many philosophers, both past and present, have followed a practice of carefully examining their own intuitions and those of others—including the type of intuitions about cases that experimental philosophers have focused on—and these philosophers have used both logic and experimental methods to do so.

¹⁶⁸ See also Devitt 1994, 2012; and Kornblith 1998.

¹⁶⁹ In his work that deals directly with the question of the epistemic value of intuition, BonJour also defends a moderate type of view in terms of 'prima facie justification' that is similar to the critical view (even though, like Bealer, he combines this view of the evidential strength of intuition with rationalist foundationalism). See especially BonJour 1998.

¹⁷⁰ See, for example, Knobe and Nichols 2008.

In examining their own intuitions, and those of others, philosophers have largely relied on logic and the imagination, comparing possible interpretations of the supposed truth and analysing corresponding structures of entailment. However, most philosophers have also been actively going around and talking (and otherwise communicating) with various people—just like Socrates used to do, but on a larger scale and often using more advanced technology such as the printing press, telecommunication and aeroplanes. In this way, they have discussed philosophical issues and tried out (experimented with) their own and others' intuitions and theories in mutual exchange with many different colleagues and students (both from within philosophy and without) and the wider public.

In particular, scholarly philosophical debate in the analytic tradition, which many experimental philosophers have specifically criticised, has often involved considerable efforts to examine relevant intuitions, including from a psychological perspective; and it is widely agreed amongst philosophers in this tradition that such psychological examination is important, partly because many philosophers have taken due notice of relevant results from cognitive psychology.¹⁷¹ For instance, a large number of philosophers have followed Bonjour's (1980) invitation to respond to what he has described as 'the fundamental intuition...that externalism seems to violate', and many philosophers are still discussing the nature and evidential value of this type of intuition. Another example is the debate surrounding Frank Jackson's (1982) Mary case and his connected knowledge argument against physicalism in the philosophy of mind.¹⁷² Since the publication of Jackson's paper, there has been a growing body of literature on the question of what kind of knowledge the intuition is about and what would follow if it were correct; and Daniel Dennett (1991) has argued on psychological grounds that

¹⁷¹ See, for example, Bealer's remarks on 'the quality of the background cognitive conditions (intelligence, attentiveness, constancy, memory, etc.) ... [and] the quality of the communication conditions (speaker and author sincerity, reliability of the medium of transmission, accuracy of interpretation, etc.)' (1998, 206).

¹⁷² Here is the relevant passage from Jackson: 'Mary is a brilliant scientist who is, for whatever reason, forced to investigate the world from a black and white room via a black and white television monitor. She specialises in the neurophysiology of vision and acquires, let us suppose, all the physical information there is to obtain about what goes on when we see ripe tomatoes, or the sky, and use terms like "red", "blue", and so on. She discovers, for example, just which wave-length combinations from the sky stimulate the retina, and exactly how this produces via the central nervous system the contraction of the vocal chords and expulsion of air from the lungs that results in the uttering of the sentence "The sky is blue". ... What will happen when Mary is released from her black and white room or is given a colour television monitor? Will she *learn* anything or not? It seems just obvious that she will learn something about the world and our visual experience of it.' (Jackson 1982, 130)

the knowledge intuition is illusory.¹⁷³ Similarly, Bernard Williams (1970) argued on psychological grounds that the widespread intuition that two persons may swap their bodies, which has played an important role in the metaphysics of personal identity at least since Locke, might be illusory;¹⁷⁴ and there are many more prominent examples of such work.¹⁷⁵

Psychologists distinguish between quantitative and qualitative research methods.¹⁷⁶ Qualitative methods in psychology are primarily aimed at the detailed analysis of individual cases rather than the quantifiability of results. When philosophers have examined the psychology of intuitions in philosophy, they have mostly employed qualitative methods, conducting long and in-depth conversations with a relatively small number of interlocutors. Moreover, philosophers have traditionally engaged in certain kinds of quantitative work too, insofar as an important part of the scholarly purpose that is supposed to motivate the publication of one's work, in philosophy as well as any other discipline, is to seek the views and reactions of as many other people as possible. After all, the aim of publication is, indeed, to address the public—and many philosophers use a variety of media and platforms for this purpose, including books, journals, classrooms, conferences and social media.¹⁷⁷ However, philosophers have not traditionally employed the quantitative methods of modern psychology to examine their intuitions or those of others, at least not in any systematic way, as experimental philosophers such as Naess have correctly noted.¹⁷⁸ This, then, is what is new in what experimental philosophers have brought to the discipline.

Part of the explanation of why philosophers have not traditionally employed the quantitative methods of modern psychology is, of course, that these methods have only recently become readily

¹⁷³ See Dennett 1991, 398–406.

¹⁷⁴ I discuss Williams's argument in chapter 6.

¹⁷⁵ Arguably, Wittgenstein and some of his followers have engaged primarily in this type of critical philosophy, which, again arguably, forms part of what is known as 'critical philosophy' in the Kantian tradition.

¹⁷⁶ See, for example, Smith 2015.

¹⁷⁷ Jackson has made a similar point. In chronological order, first, he writes: 'I am sometimes asked—in a tone that suggests that the question is a major objection—why, if conceptual analysis is concerned to elucidate what governs our classificatory practice, don't I advocate doing serious opinion polls on people's responses to various cases? My answer is that I do—when it is necessary. Everyone who presents the Gettier cases to a class of students is doing their own bit of fieldwork' (Jackson 1998, 36–7). Then, in a later work, he writes: 'I have always taken it as obvious that Gettier himself was carrying out a kind of survey, courtesy of the editor of *Analysis*' (Jackson 2011, 476).

¹⁷⁸ See also Ludwig 2017.

available. But why, it might be asked, have philosophers not made more serious efforts to develop quantitative methods to examine their intuitions and those of others that are more systematic, and more like those of modern psychology, than the ones they have actually used? Indeed, most studies in experimental philosophy employ survey methods that could have been employed hundreds of years ago. Presumably, the main reason why philosophers have not made any serious effort to develop such methods is that they did not consider them necessary but were satisfied with the quantification supplied by existing methods.

In fact, what is new about the methods that experimental philosophers have brought to the discipline is also what is most problematic about these methods. The failure to replicate the results of some prominent studies in experimental philosophy shows the problem. Constructing a case that is a precise and sufficiently clear expression of a given philosophical issue is a central task for any kind of thought experimentation. However, while more traditional methods of long and in-depth conversation give philosophers good control over whether people have understood the case and the question, the quantitative approach of experimental philosophers gives them limited control in this regard. One way in which experimental philosophers could try to increase their control would be to employ more of the qualitative methods of modern psychology.¹⁷⁹ If they start doing this, then the continuity of experimental philosophy and the rest of philosophy may become less obscured.

Conclusion

I have argued in favour of the view that the evaluation of philosophical claims often proceeds by way of cases that are intended to be examples (or counterexamples) and that are designed to so appear intuitively, because intuitiveness constitutes significant, albeit weak, evidence in favour of the claim that the case is the example (or counterexample) that it is intended to be. I have called this ‘the critical view’. I have also presented reasons for believing that this practice is in principle a good one, in particular that it does not amount to the view that I have called ‘psychologisation’ (that is, the type

¹⁷⁹ Cp. Andow 2016.

of view according to which the evidence in this practice is the fact that a given case intuitively appears to be the intended example or counterexample, rather than its actually being an example or counterexample). I have further argued that this view (and not only the practice) is at least implicitly adopted by significantly more philosophers than has generally been appreciated. On this basis, I have, lastly, argued against the challenge by some experimental philosophers—according to whom philosophers should use methods such as surveys and not rely on their own intuitions or those of their colleagues—that traditional, ‘non-experimental’ philosophers have already made significant use of the types of method that experimental philosophers promote; this, I have argued, can be shown by modern psychology’s distinction between quantitative and qualitative methods.

6 Legends of truth

Introduction

This chapter discusses certain difficulties concerning the philosophical employment of cases and judgements about cases. I discuss in detail the work of Avner Baz, who is an outspoken critic of the way in which the vast majority of philosophers, especially in the analytic tradition, have made use of cases in the evaluation of philosophical theses. Baz's work is of special interest partly for the apparent radicalness of his critique and partly for the tradition that he aims to represent. The two philosophers whom Baz cites most frequently in support of his own position are J. L. Austin and Wittgenstein. Like many other philosophers, Baz believes that there exist some unbridgeable differences between, on the one hand, the philosophies of the likes of Austin and Wittgenstein and, on the other, what Baz sometimes describes, perhaps not unfittingly, as 'the mainstream' in contemporary philosophy. I argue against this type of division, and suggest that the real division between philosophers when it comes to the practice of evaluating theses by way of cases is more accurately described in terms of the care and thoroughness that good philosophy requires.

1. A subversive critique

Avner Baz has argued that the practice of evaluating philosophical theses by way of hypothetical or actual cases that are intended to be examples, or counterexamples, has a fundamental problem which has gone widely unrecognised. The real problem with this practice, Baz argues, concerns not so much the appearance of truth as the logically prior appearance of a case as being classifiable as either an example or non-example; although these cases appear classifiable, they are not, because their expression does not have determinate meaning. In the face of this problem, Baz contends, philosophy requires a thoroughgoing revolution of its methodology.¹⁸⁰

¹⁸⁰ Baz has written two books on the issue (2012a and 2017), and several articles.

We can discern two claims that are central to Baz's critique. First, Baz argues that there exists a discontinuity between philosophy and other kinds of discourse that accounts for the relevant difference in meaning (and hence for the fundamental problem); according to Baz, expressions whose meaning is perfectly determinate in non-philosophical discourse may well have indeterminate meaning in philosophical discourse.¹⁸¹¹⁸² Second, Baz argues that the fundamental problem has gone so widely unnoticed because of an at least equally widespread conception of language that suggests that there is continuity, rather than discontinuity, between philosophy and other kinds of discourse such that the fundamental problem does not seem to arise.¹⁸³

In support of the alleged discontinuity between philosophy and other kinds of discourse, Baz contrasts philosophical occasions when the question arises of whether a subject in a Gettier case has the relevant knowledge with non-philosophical occasions on which an identically phrased question and case may be considered. He writes: 'My aim is to show that what the theorist's question comes to is, by design, fundamentally different from what everyday questions come to, or may come to' (2012b, 327).

Baz takes a well-known Gettier case from a study by Weinberg, Nichols and Stich (the same one that was already quoted in chapter 5):¹⁸⁴

Bob has a friend, Jill, who has driven a Buick for many years. Bob therefore thinks that Jill drives an American car. He is not aware, however, that her Buick has recently been stolen, and he is also not aware that Jill has replaced it with a Pontiac, which is a different kind of American car.

Weinberg, Nichols and Stich then ask the subjects of their study to answer the following question by circling one of two possible answers: 'Does Bob really know that Jill drives an American car, or does he only believe it?'

¹⁸¹ As in previous chapters, in saying that an expression has 'indeterminate meaning' I shall mean that the expression has more than one possible meaning, either in general or relative to a particular occasion of use.

¹⁸² Baz puts it thus: 'The theorist's question, as raised in the theorist's context, is indeterminate and has no determinate answer' (2012b, 330). See also Baz 2017, 6.

¹⁸³ Baz writes: 'The claim of continuity is underwritten by a conception of language...assume[d] without argument or evidence' (2017, 67).

¹⁸⁴ See Weinberg, Nichols and Stich 2001.

Baz thinks that this question, as posed by Weinberg, Nichols and Stich as well as many other philosophers about similar cases, is in a way uniquely philosophical. To show this, he tries to imagine a non-philosophical occasion for this question and case. One possible occasion that Baz considers goes like this:¹⁸⁵

Agent wonders whether Jill drives an American car. Bob tells her that he thinks that Jill drives an American car, because Jill has driven a Buick for many years. (Unlike the philosopher considering the Gettier case, Agent does not know that Jill's Buick has recently been stolen; that Jill has replaced it with a Pontiac, which is a different kind of American car; and that Bob is unaware of these recent events.)

Would it be natural for Agent to ask 'Does Bob really know that Jill drives an American car, or does he only believe it??' Perhaps not. But supposing that Agent asked a question using the same words as used in the philosopher's question about the Gettier case, would Agent and the philosopher be asking the same question? Baz argues that, in a sense, they would not, because Agent's question would primarily concern whether she can rely on Bob's testimony and, more specifically, whether Jill's having driven a Buick for many years would give Agent sufficient reason to believe that Jill (still) drives an American car.

Baz is right that Agent's question is different from the philosopher's question in this respect. Depending on her practical interests—which, presumably, the name 'Agent' is supposed to emphasise—Agent may have only a weak interest in knowing whether Jill drives an American car. Unlike the philosopher, Agent may ultimately not care whether Bob *really* knows or not, as long as she is satisfied that she can, or cannot, rely on Bob's testimony for the purpose of her enquiry. However, the contrast that Baz has thus correctly drawn fails to clearly pertain to the relevant issue, because the case that Agent considers is, as indicated in parentheses, different from the original Gettier case. Consequently, the difference between the two questions could also have resulted from the fact that the questions are being asked about different cases, whereas Baz wanted to show that

¹⁸⁵ I have slightly modified the wording of Baz's original case descriptions.

different questions may result from different occasions, while keeping the cases which the questions are being asked about constant.¹⁸⁶

Another of Baz's comparisons is better in this regard:

Judge knows all that the reader of the Gettier case knows. In addition, Judge learns that Bob told Agent that Jill drives an American car. Now Judge wonders whether Bob knew, then, that Jill drives an American car.

It would appear more or less natural for Judge—in any case, more natural than for Agent above—to ask 'Does Bob really know that Jill drives an American car, or does he only believe it?'. Supposing that Judge asked a question using the same words as used in the philosopher's question about the Gettier case, would Judge and the philosopher be asking the same question? As before, Baz argues that, in a sense, they would not. Supposing, plausibly, that Judge wants to assess Bob's conduct—assuming, that is, that Judge acts like a judge—Baz argues that Judge's question would primarily concern whether Bob's action was a lawful one.

Baz is right that Judge's question is different from the philosopher's question in this respect. Judge, in accordance with her official function, may ultimately not care whether Bob *really* knows or not, as long as she is satisfied that Bob's action—his telling Agent that Jill drives an American car—was a lawful one. Of course, Judge could still conceivably be asking the very same question as the philosopher. Consider the following modification of Baz's Judge:

Judge₂ has found that there is no more case-specific information regarding Bob's epistemic situation other than that stipulated by the Gettier case, plus the fact that Bob has told Agent that Jill drives an American car. Now Bob's defence lawyer presents an elaborate argument to

¹⁸⁶ Compare the following passage, in which Baz correctly describes the procedure that would be required: 'Take some version of the theorist's question—by which I mean, the form of words in which his question is couched—and ask how it might reasonably be understood if raised outside philosophy, in the course of everyday discourse, with respect to a case such as the one described by the philosopher. One thing that would then emerge is that, depending on the circumstances in which it arose, there are any number of different senses the similarly worded but non-merely-theoretical question could have..., depending on the context in which they were uttered or considered, even though the case under consideration remained the same' (2015b, 898; see also 2016b, 117-8).

the conclusion that Bob really knew, at the time of his telling Agent, that Jill drives an American car.

Here it would be perfectly natural for Judge₂ to ask ‘Does Bob really know that Jill drives an American car, or does he only believe it?’. Moreover, Judge₂ would appear to be asking the very same question as the philosopher intends to ask about the Gettier case (does Bob *really know* or not?). If Baz is right, however, then it would further follow that Judge₂’s question fails to have determinate meaning. But why should one believe this? Why should an expression (such as ‘whether Bob really knows’), whose meaning is perfectly determinate on some non-philosophical occasion, not have determinate meaning when it is used in philosophy (for instance, to ask a question about a Gettier case)?

According to Baz, the philosopher’s question lacks the situational parameters necessary to fix it with determinate meaning. For example, Judge’s situation provides clear guidance regarding how her question may be answered, including what sub-questions will need answering (for instance, when did Bob tell Agent that Jill drives an American car, or when was the last time that Bob saw Jill’s car prior to his telling Agent that Jill drives an American car?). By contrast, the occasion of the philosopher’s question—following common practice and, as Baz correctly notes, by design—provides little or no guidance regarding how the question may be answered; rather, on the assumption that the case is complete as presented, the expectation is that the question can be answered, correctly or incorrectly, in a straightforward fashion and more or less immediately. This expectation, Baz thinks, rests on a false conception of language that prevents philosophers from seeing that in such a situation their question has no determinate meaning and that anyone who is tempted to give a straightforward answer is merely under an illusion of determinate meaning.

2. Conservative responses

One conservative response to Baz’s challenge to current philosophical practice would be to argue that history has shown this practice to be largely successful. However, the subversive critic may reply

that the practice might have played a merely accidental role in whatever success there has been or might even have hindered the discipline from being more successful.¹⁸⁷ Resolving such a dispute regarding the history of philosophy would be a cumbersome task. A more direct line of response for someone who wishes to defend current philosophical practice is to argue that Baz is wrong about the continuity or discontinuity between philosophical and non-philosophical discourse and the indeterminacy of meaning that philosophical discourse allegedly involves.

Max Deutsch has presented a response to Baz along these lines. However, Deutsch's central argument, according to which same-worded question-sentences typically express the same questions regardless of their occasion, employs a criterion of sameness of meaning that is too crude to address Baz's concerns.¹⁸⁸ For example, it is not difficult to see the possible differences in meaning between typical uses of the following same-worded question-sentences with varying emphases:

- a) Does *Bob* know that Jill drives an American car?
- b) Does Bob *know* that Jill drives an American car?
- c) Does Bob know that *Jill* drives an American car?

We can assume that the thought whose truth is primarily in question is the same in all three cases. To this extent the question that is being asked will be the same across various possible contexts and situations: namely, whether Bob knows that Jill drives an American car. However, the different emphases correspond to different situations in which the words are likely to be uttered. This difference will typically entail a difference in the reasons for which the questions are asked, and to this extent the questions that are being asked will not be the same. Hence, in (a) the question is likely to be specifically whether *Bob*, as opposed to some other subject, knows that Jill drives an American car; in (b) whether Bob *knows*, as opposed to, say, only believes, that Jill drives an American car; and in (c) whether Bob knows that *Jill*, as opposed to someone else, drives an American car. To the

¹⁸⁷ For example, some people believe that much of the post-Gettier work in epistemology in the 1960s and 1970s hampered, rather than furthered, progress in epistemology.

¹⁸⁸ See Deutsch 2015b.

extent that we can thus distinguish the philosopher's question from same-worded non-philosophical questions, Baz's claim that there is discontinuity between philosophical and non-philosophical discourse is correct.¹⁸⁹

The most promising way for a conservative to proceed would be to focus on Baz's account of the indeterminacy of meaning that philosophical discourse allegedly involves. For example, some philosophers have argued that the difference between the philosopher's question and same-worded questions outside philosophy consists not in the kind of indeterminacy of meaning that Baz suggests, but in the high degree of complexity that is typical of philosophical questions.¹⁹⁰ Baz, a conservative might argue, mistakes the corresponding difficulty of knowing the correct answer to a philosophical question for the non-existence of such an answer. Baz disagrees: 'Not even Gettier cases are complex; they only appear complex when we attempt to apply "know that" or one of its cognates to them apart from any context of significant employment' (2012b, 325).¹⁹¹ Hence, Baz believes that the widespread conception of language that, according to the second of his two central claims, prevents philosophers from recognising the alleged indeterminacy of meaning in addition produces a false appearance of complexity.

The dialectic between the subversive and the conservative clearly takes on a fundamental character at this point. The important question now concerns the second of Baz's two central claims. Is there a widespread conception of language that prevents philosophers from recognising that their statements and questions have indeterminate meaning? The subversive will have a hard time convincing the opposition: arguably, Wittgenstein spent most of his life trying.

As I see it, the conception of language in question is indeed a natural one, and almost trivial. The conception is essentially the thought that words stand for things. Another way of putting it is this: words have meaning; the meaning of a word is what the word represents. The conception is as trivial as the following disquotational scheme by which it may be illustrated: 'cat' means cat, 'table' means

¹⁸⁹ Compare Socrates' explanation to Laches of what his question is.

¹⁹⁰ See, for example, Jackson 2011, 476; and Williamson 2004, 150. See also Deutsch 2015b, 887.

¹⁹¹ Many people agree with Baz that cases that are used in philosophy are not typically complicated. See, for example, Harman 2015.

table, ‘the cat is on the table’ means the cat is on the table, and so on. It does not follow from this conception that explaining the meanings of words was ever easy, either in general or regarding any particular occasion of their use; nor does it follow that there could be no non-literal meaning. From a logical perspective, the conception is very weak and entails very little.

Nevertheless, Baz believes that this conception of language causes serious trouble when it comes to the philosophical practice of evaluating claims by way of cases that are intended to be examples (or counterexamples). More specifically, he argues that this conception of language is likely to produce an expectation that, for any given case (real or hypothetical), the thing called ‘X’ is either present or not and that, therefore, a competent subject will in principle be in a position to judge correctly that X is, or is not, present; but, according to Baz, at least in philosophy this type of expectation is out of place. Contrary to what Baz suggests, however, the conception of language itself is innocent: whatever trouble it may be said to cause is really caused by stretching it (though it is, admittedly, easily stretched).¹⁹² In what follows, I shall therefore call it ‘the naïve conception’. Thus, to the extent that the naïve conception is both natural and innocent, Baz’s claim that it is widespread is plausible; however, Baz’s overall claim is more accurately expressed as the claim that it is not the naïve conception itself that prevents philosophers from recognising that their statements and questions have indeterminate meaning, but the stretching of this natural and innocent conception of language.

Baz argues at considerable length that passages such as the following two, taken from Frank Jackson and Timothy Williamson, express this kind of stretching of the naïve conception of language.¹⁹³

¹⁹² Compare Wittgenstein’s contrast in section 1 of *Philosophical Investigations* between, on the one hand, two natural descriptions of language use or acquisition (Augustine and the shopkeeper) and, on the other, ‘that philosophical notion of meaning’ (§2) which is illustrated by the two questions towards the end of section 1 and which, Wittgenstein suggests, ‘is at home in a primitive idea of the way language functions’ (§2). The word ‘primitive’ is not used in a pejorative sense here but means something like natural and naïve. The same primitive idea is expressed in the paragraph directly following the quotation from Augustine in section 1. The target of Wittgenstein’s critique is not the primitive idea but the philosophical notion which stretches it.

¹⁹³ See especially Baz 2016a, 121; and 2017, chapter 3.

The passage by Jackson reads as follows:

This requires a short discussion of the representational view of language. ... The sentence 'It is raining outside' represents how things are outside. Our knowledge that it does so, and how it represents things to be, is the explanation of how the sentence provides useful information, information that might, say, lead us to take an umbrella on leaving the house. Moreover, how it represents things to be is a function of the representational contents of its parts and how they are combined. Moreover, we have a grasp of the representational contents of these parts, and of the way various modes of combination into sentences generate representational structures whose contents are a function of the contents of their parts and the way the parts are put together. This is how we are able to generate a huge range of representational structures, given mastery of a relatively small number of representational atoms and modes of composition. (Jackson 2011, 472)

Williamson writes:

Frege already had the fundamental conception of compositional truth-conditional semantics, in which expressions refer to items in the mostly non-linguistic world, the reference of a complex expression is a function of the reference of its constituents, and the reference of a sentence determines its truth value. (Williamson 2007, 281)

It should not be difficult to see that these passages might be the expressions of someone who suffers from the kind of problem that Baz has diagnosed for the actual authors of these passages. Nor should it be difficult to see, however, that these passages *need not* be that. For one thing, the conceptions of language that are being presented in these passages are not being presented there as complete, that is, they may be supposed by their authors to pertain merely to some part or dimension of language. Indeed, there are passages by the same authors, and in the same sections from which the above passages are taken, that appear to speak against Baz's interpretation.

Jackson explicitly, albeit briefly, elaborates on two relevant points:

What matters is that we can combine atoms to make representational molecules, and that this is a fallible process. It is fallible in the same way that we can go wrong in working out what 'XXCCDIV' stands for (which is why many journals have dropped the Roman system for giving volume numbers). ... Think of the sentence 'There is someone who shaves all and only those who don't shave themselves'. It takes a little thought to work out that that combination of representational parts delivers an inconsistent representational whole. The other point that matters [is that] the content of the representational parts and the representational import of a given mode of composition are contingent and a posteriori. It is a matter of how we use the words and modes in question. There is nothing necessary or a priori about what 'flat' signifies, or about the effect of putting words together in some given manner. (Jackson 2011, 473)

Williamson writes more generally:

Philosophers who refuse to bother about semantics, on the grounds that they want to study the non-linguistic world, not our talk about that world, resemble scientists who refuse to bother

about the theory of their instruments, on the grounds that they want to study the world, not our observation of it. Such an attitude may be good enough for amateurs; applied to more advanced inquiries, it produces crude errors. Those metaphysicians who ignore language in order not to project it onto the world are the very ones most likely to fall into just that fallacy, because their carelessness of the structure of the language in which they reason makes them insensitive to subtle differences between valid and invalid reasoning. (Williamson 2007, 284–5)

Either of these passages could be variously interpreted, but they at least appear to show significant concern on the part of their authors for the potential of being misled by language, both in general and when doing philosophy, which is enough to pose a problem for Baz's interpretation. These interpretive issues are of philosophical interest in their own right. However, for present purposes they threaten to quickly take on dimensions too large to be resolved satisfactorily. For example, regarding the first of the two passages from Williamson Baz has also said: 'As Williamson makes clear, this account of language is supposed to apply *generally*' (2016a, 121). Yet the page reference that Baz gives in support of this claim does not lead to any obvious evidence for it.¹⁹⁴ On the contrary, the page that Baz refers to is directly preceded by a discussion of the relation between meaning and language-use, in which Williamson shows himself to be in broad agreement with the account of language and meaning in Wittgenstein's *Investigations*, which in turn is the basis on which Baz models his proposed alternative view of language; this, again, appears to speak against Baz's interpretation.¹⁹⁵

Ultimately, Baz's interpretation of Jackson's and Williamson's views of language, as well as his proposed alternative view, are irrelevant to the correctness or incorrectness of his critique of philosophical practice.¹⁹⁶ Presumably, no one would seriously defend a view of language on which the indeterminacy of meaning that allegedly affects this practice would be strictly impossible, and Baz's proposed alternative view does not entail any actual instances. It is not implausible that the naïve conception of language is both so widespread and so easily stretched that, as a result, it may prevent some people from recognising that one of their statements or questions has no determinate

¹⁹⁴ The page reference that Baz gives is 'Williamson 2007, 127'.

¹⁹⁵ See Williamson 2007, 123–6 and, for Baz's proposed alternative, especially Baz 2015a.

¹⁹⁶ Baz indirectly acknowledges this when he remarks that this part of his argument is really directed at any conception of language that suggests that there is continuity, rather than discontinuity, between philosophy and other kinds of discourse such that the fundamental problem does not seem to arise. See Baz 2015b, 897 and 2017, 68–9.

meaning, especially when engaging in philosophical thinking. However, convincing anyone that this actually sometimes happens and, even more so, that it has often happened to philosophers will usually require examples—and unfortunately, Baz offers hardly any.

3. Socratic logicians

Sometimes something seems true to us because, being unaware that the meaning of the relevant expression is somehow indeterminate, it seems to mean one thing rather than another. Comedians exploit this psychological fact to make people laugh. Many political and economic agents try to exploit it, too, often for less benevolent reasons. Of course, vagueness of expression and otherwise indeterminate meaning are not always deliberately produced. Indeed, when discussing complex matters, indeterminate meaning can be so difficult to avoid that one is often unable to detect it even in one's own thought or speech. Therefore, it should not be surprising that philosophers also sometimes suffer from illusions of determinate meaning.

Take, for example, the sentence that Jackson asks his readers to consider:

There is someone who shaves all and only those who do not shave themselves.

Jackson follows up his invitation with the somewhat muted punchline 'It takes a little thought to work out that that combination of representational parts delivers an inconsistent representational whole' (2011, 473). However, what actually takes a little thought to work out is not *that*, but *how* this sentence yields a contradiction, because it can also be employed in a way that entails no contradiction; in fact, this would be the most natural employment of the sentence, at least outside of logic or philosophy, and so reading the sentence in a way that entails no contradiction is in principle at least as natural as reading it in the way in which Jackson reads it, which does entail a contradiction. Accordingly, Bertrand Russell already thought that what is now commonly called 'the barber paradox' is not really a paradox at all: 'You can define the barber as "one who shaves all those, and those only, who do not shave themselves"'. The question is, does the barber shave himself? ... The contradiction is not very difficult to solve' (1919, 355). A natural way of solving the contradiction is

to distinguish the barber from his clients, that is, to exclude the barber himself from those whom he, in his professional capacity as barber, may or may not shave. Jackson's sentence does not stipulate the professional occupation of its subject; however, excluding the subject from those whom the subject may or may not shave would nevertheless be a natural way of solving the contradiction, because it would be natural to make this assumption under many circumstances in which the sentence might be employed; alternatively, a more specific type of reason for which it would be natural to exclude the subject is that the subject happens to be someone whose shaving-themselves is usually out of the question (for instance, a child).

Thus, substituting 'could be' for 'is' in Jackson's sentence gives a sentence that will intuitively seem true to many because it seems to mean one thing rather than another and, due to their lack of logical or philosophical training, they miss the reading that entails a contradiction; while to some logicians and philosophers it will intuitively seem false, because it seems to mean one thing to them rather than another and, due to their logical or philosophical training, they miss the reading that does not entail a contradiction.

Both kinds of intuition are accurately described as occurring on the basis of an illusion of determinate meaning; once the subject of such an intuition notices the alternative reading of the sentence, they will typically stop having the intuition. Again, it is not implausible that the naïve conception of language is both so widespread and so easily stretched that, as a result, it may prevent someone from recognising instances of indeterminate meaning. Moreover, someone who, like Baz, holds a view of language according to which indeterminate meaning should be expected is consequently more likely to recognise it when it occurs. Perhaps Jackson's mistake is caused by a general view of language that is a stretch of the naïve conception, as Baz suggests. However, Jackson may alternatively just have been a bit careless when he wrote 'that' rather than 'how'. More broadly speaking, there is no view of language such that holding it would guarantee either that one is not going to suffer from any illusions of determinate meaning or that one will always be aware of it when it happens.

Detailed assessment of how widespread this problem of indeterminate meaning is, in general as well as in any given area of discourse, will require discussion of a large number of examples. Here, I can only offer discussion of a few more examples from philosophy.¹⁹⁷ However, an indication of the relative frequency of the problem in philosophy may be given on the basis of a small number of examples together with the following inductive argument: philosophical matters tend to be more complex than many, if not most, other kinds of matters, partly due to the exceptional level of generality at which philosophy tends to operate; but the more complex a given matter is, the more difficult it will tend to be to think about the matter clearly and to describe the matter precisely; consequently, the meaning of expressions that are used to describe the matter will tend to be less determinate; hence, philosophical matters are such that the meaning of expressions that are used to describe a given matter will tend to be less determinate than is usually the case for many other kinds of matters.¹⁹⁸

This shows that there exists a serious problem for the practice of evaluating philosophical theses by way of cases, and that this problem is of just the sort that Baz has suggested: the appearance of a case as being classifiable as either an example or non-example, which is logically prior to the appearance of truth, may be an illusion of determinate meaning (because the meaning of the expression of the case may be indeterminate).

Baz contends that solving this problem of indeterminate meaning requires a revolution in philosophical methodology. However, the radicalness of Baz's critique appears to be mainly a symptom of his pessimism regarding current philosophical practice. For example, Baz writes: 'When we attempt to understand and answer the theorist's question...what guides us in giving our answers is at best an abstraction, and at worst a picture...that we have formed for ourselves and come to associate with that abstraction' (2017, 175). Unfortunately, he does not elaborate on what he conceives as the best possible scenario but only on what he conceives as the worst possible, as if the best possible scenario of what current philosophical practice might be was somehow too improbable

¹⁹⁷ Several other examples have been discussed in preceding chapters; see, for example, chapter 2, section 5.

¹⁹⁸ For more discussion of this argument, see chapter 2, section 5 and chapter 3, section 5.

even to be taken into serious consideration. On the same page, Baz insists that current philosophical practice should be distinguished from one that, as he puts it, ‘invites us to project ourselves imaginatively into situations of speech...in which we could, and normally would, be using our words’ (175). The goal of this alternative practice is, Baz writes, ‘to show that the philosopher responded to has failed to say anything clear with his words, or failed to say what he evidently wanted and needed to say given his theoretical commitments and ambition’ (175).¹⁹⁹ Such criticism is sometimes necessary, but there is no good reason to limit one’s philosophical activity to it. If, however, one need not limit oneself to such criticism, then can one not follow current philosophical practice whilst taking care, in the way that Baz suggests, not to be misled by language?

In support of the proposed alternative practice, Baz cites a famous passage by J. L. Austin describing how ‘we are to proceed from “ordinary language”, that is, by examining *what we should say when*, and so why and what we should mean by it’ (1957, 7). Unlike Baz’s alternative practice, however, Austin’s philosophical procedure was not typically limited to criticism, nor did Austin say that it was. On the contrary, still in the same passage Austin writes:

One thing needs specially emphasising to counter misunderstandings. When we examine what we should say when, what words we should use in what situations, we are looking again not merely at words (or ‘meanings’, whatever they may be) but also at the realities we use the words to talk about: we are using a sharpened awareness of words to sharpen our perception of, though not as the final arbiter of, the phenomena. (Austin 1957, 8)

Furthermore, Austin was acutely aware of the problem of indeterminate meaning in relation to the evaluation of theses by way of cases in philosophy; but, unlike Baz, Austin did not appear to think that the problem constitutes an insurmountable difficulty or that it requires retreat into the sort of approach that Baz recommends. On the contrary, Austin acknowledges the fact that one reason why philosophers evaluate theses by way of cases is actually to avoid the risk of indeterminate meaning, and he expresses confidence that this aim can be achieved satisfactorily:

When we come down to cases, it transpires in the very great majority that what we had thought was our wanting to say different things of and in *the same* situation was really not so—we had simply imagined the situation *slightly* differently: which is all too easy to do, because of course

¹⁹⁹ Presumably, Baz conceives of his own procedure when constructing and discussing his Agent and Judge cases along the lines of this alternative practice. See Baz 2012a and 2012b; see also my discussion in section 1 above.

no situation...is ever 'completely' described. The more we imagine the situation in detail, with a background of story—and it is worth employing the most idiosyncratic or, sometimes, boring means to stimulate and to discipline our wretched imaginations—the less we find we disagree about what we should say. (Austin 1957, 9–10)

Although Baz's pessimism is unjustified, his dissatisfaction with the philosophical practice of his time is perhaps understandable. Both Austin and Williamson express similar dissatisfaction. Unlike Baz, neither of them calls for a revolution in philosophical methodology. The most that their dissatisfaction with the philosophical practice of their time has compelled them to call for is reform; but what they mainly urge is, quite simply, more care. For example, Austin writes about the procedure of examining what we should say when:

Perhaps this method, at least as *one* philosophical method, scarcely requires justification at present—too evidently, there is gold in them thar hills: more opportune would be a warning about the care and thoroughness needed if it is not to fall into disrepute. (Austin 1957, 7)

Similarly, Williamson voices the following complaint in his afterword to *Philosophy of Philosophy*, which bears the title 'Must do better':

Details are not given the care they deserve: crucial claims are vaguely stated, significantly different formulations are treated as though they were equivalent, examples are under-described.... (Williamson 2007, 288)

Socrates already emphasised that a great deal of careful attention to language is necessary for philosophical discourse to be successful.²⁰⁰ Many, if not most, of the key figures in the long and varied tradition of Western philosophy after Socrates have also emphasised this point. This may perhaps not only show that no revolution in philosophical methodology is required but also explain why some radical change might nevertheless be deemed necessary, because for more than two thousand years the amount of sloppy philosophical work in which too little attention is paid to language has been growing more or less steadily. However, philosophy is not so different in this respect from, say, the shoe industry. Social, political and economic development in the West have led to large-scale low-quality production in the education sector as well as in the clothing sector, but they have also led to significant innovation and some high-quality output in both these sectors. It is

²⁰⁰ See especially Plato's *Laches*, in which Socrates explicitly instructs his two main interlocutors regarding, first, the purpose (or meaning) of his 'What is the F?' question—in the *Laches*, 'What is courage?'—and, second, the importance of understanding each other (and hence of attention to what the other's words might mean as well as to what might be the most precise expression of one's own thoughts). See also Grève 2015.

hard to deny that there has been some significant progress in Western philosophy since Socrates; in particular, Socrates would have loved to employ some of the logical methods that have been developed in the analytic tradition since Frege.

Thus, Baz is right that the practice of evaluating philosophical theses by way of cases has a fundamental problem, which is that the appearance of a case as being classifiable as either an example or non-example, which is logically prior to the appearance of truth, may be an illusion of determinate meaning (because the meaning of the expression of the case may be indeterminate). However, Baz is wrong to think that solving this problem requires anything more than methodological reform. In fact, all that is needed is sufficiently careful attention to language in order to avoid the traps that it sets us. However, this need for care and thoroughness must not be underestimated. Austin's warning and Williamson's complaint regarding a lack of care on the part of their colleagues are good reminders that the degree of precision that is required to ensure clear thinking and successful discourse in philosophy is high.

4. Cases and examples

What the task of evaluating philosophical theses by way of cases consists in, and why it is difficult, can now be summarised as follows. Philosophical theses tend to be about complex matters, partly due to the exceptionally high level of generality at which philosophy operates. Corresponding to the high degree of complexity of what philosophical theses tend to be about is the high degree of difficulty involved in understanding philosophical theses and, in particular, the relatively high probability that the meaning of a given philosophical thesis will be indeterminate (which is mainly a consequence of the typical complexity of philosophical matters). Cases are supposed to be instances or non-instances of the generalities asserted by philosophical theses. They serve, on the one hand, to confirm or falsify a given thesis and, on the other, to clarify its meaning. However, since cases are never completely described, the correct understanding of a case also depends on the thesis that it is being used to evaluate (the correct understanding of which in turn depends on the theoretical

framework in which it is advanced).²⁰¹ For example, the sentence that Jackson intends as an example of an inconsistent representation—‘There is someone who shaves all and only those who do not shave themselves’—may, as we saw, be understood in a way that entails no contradiction, but if we know what thesis the sentence is being used to evaluate, then we can use this information to complement our understanding of the sentence and focus on the relevant reading.

Thus, Baz is right that ‘what guides us in giving our answers [in response to cases] is at best an abstraction’ (or, perhaps more positively, it is *ideally* an abstraction). For the practice does indeed involve abstraction. In particular, the practice usually requires abstraction from the occasions on which relevant expressions are normally used. The description of any case, whether real or hypothetical, is necessarily incomplete in the way that Austin has pointed out, and so requires imagination to fill in some details; this, in turn, requires knowledge of what the relevant details are, and hence knowledge of the concepts involved and the theoretical framework under which one is, or is supposed to be, operating. Hence, Baz is also right to think that it is necessary when working with cases that we are able to ‘project ourselves imaginatively into situations of speech...in which we could, and normally would, be using our words’. However, the goal of doing this is not, contrary to Baz, ‘to show that the philosopher...has failed to say anything clear with his words, or failed to say what he evidently wanted and needed to say given his theoretical commitments and ambition’ (2017, 175). When evaluating theses by way of cases, philosophers are typically interested in something more specific than whatever is called ‘x’; they tend instead to be interested only in a certain subset of what is called ‘x’. For example, when epistemologists evaluate theses about knowledge by way of cases, they are typically concerned with not just any use of, say, the verb ‘to know’, but with a certain subset of how the verb ‘to know’ is used. Hence, they standardly distinguish, at least on the linguistic level, between ‘knowing that ...’ and ‘knowing how ...’. Moreover, there is widespread agreement amongst epistemologists that when the verb ‘to know’ takes a that-clause as its object, it is more or less standardly used in a factive way, that is, to entail the truth of the thought that is said to be known;

²⁰¹ This is the type of understanding process that has been of particular interest to certain philosophers in the hermeneutic tradition, such as Gadamer.

since epistemologists have a special interest in this factive use of the verb ‘to know’, they often abstract away from uses of the verb that are not factive. These kinds of abstractions will be legitimate if they are in turn underpinned by legitimate theoretical commitments.²⁰²

Baz’s pessimism regarding current philosophical practice apparently extends more broadly to theoretical commitments in philosophy; or, perhaps, his pessimism is itself underpinned by a commitment to some form of scepticism about philosophical theorising.²⁰³ In any case, there is no reason to be pessimistic about theoretical commitments in philosophy.²⁰⁴ Again, we just have to be careful enough to be aware of these commitments and to communicate them clearly; and, as Austin has pointed out, working with cases, if it is done in the right manner, will usually help us to achieve this goal. Hence, Baz is right to think that these kinds of abstractions can cause problems, and that failure to understand them will quickly lead to misunderstanding. My discussion of Jackson’s handling of his shaver case illustrates this difficulty, but it also illustrates how it may be positively resolved so that the philosophical evaluation of theses by way of cases may succeed (with the possible outcome that a given case could amount to an example that confirms the thesis in question).

The distinction between cases and examples is of special importance. Two questions tend to merit particular attention in this connection. First, there is the question of whether a given case is an example (or non-example), that is, whether it instantiates the target object or not (or not clearly). Second, assuming that the case is indeed an example (or non-example) of the target object, there is then the question of whether or not it amounts to an example in support of (or a counterexample to) the thesis that it is being used to evaluate.

None of these remarks about the amount of care necessary are likely to be very impressive to an audience. Perhaps this is a case where the proof will be in the pudding. Either way, looking at an

²⁰² As Austin writes: ‘It is necessary first to be careful with, but also to be brutal with, to torture, to fake and to override, ordinary language.... (In ordinary life we dismiss the puzzles that crop up about time, but we cannot do that indefinitely in physics.)’ (Austin 1957, 12). Compare also the quotation from Bernard Williams in footnote 207 below.

²⁰³ In this connection, Baz’s choice of ‘the theorist’s question’ as one of his key terms of criticism is perhaps revealing.

²⁰⁴ Arguably, there is not even reason for Wittgensteinians to be so pessimistic. See, for instance, Grève 2018 and Kuusela 2014 and forthcoming.

example in some detail will be useful (and it will at the same time reinforce my point against Baz that no revolution but only more care is needed to resolve his ‘fundamental’ problem).

That a person would survive having their brain transplanted into a new body appears intuitively true to many. This type of intuition has played a central role in the philosophy of personal identity, which has put much focus on the question of whether psychological or physical continuity respectively are necessary or sufficient for the persistence of a person. There is a large philosophical literature on the question of how to best account for the apparent truths about various cases, often involving brain-transplant surgery. Bernard Williams’s contribution to this debate, especially his article ‘The self and the future’ (1970), stands out from the rest, because he takes exceptional care to examine the psychology of this type of intuition. Williams begins his argument, indeed his paper, by presenting the basic setup of the cases that he goes on to consider:

Suppose that there were some process to which two persons, A and B, could be subjected as a result of which they might be said—question-beggingly—to have *exchanged bodies*. That is to say—less question-beggingly—there is a certain human body which is such that when previously we were confronted with it, we were confronted with person A, certain utterances coming from it were expressive of memories of the past experiences of A, certain movements of it partly constituted the actions of A and were taken as expressive of the character of A, and so forth; but now, after the process is completed, utterances coming from this body are expressive of what seem to be just those memories which previously we identified as memories of the past experiences of B, its movements partly constitute actions expressive of the character of B, and so forth; and conversely with the other body.

... Let us call the persons who emerge [after having had the process carried out on them] the *A-body-person* and the *B-body-person*: the *A-body-person* is that person (whoever it is) with whom I am confronted when, after the experiment, I am confronted with that body which previously was A’s body.... A non-question-begging description of the experiment will leave it open which (if either) of the persons A and B the *A-body-person* is; the description of the experiment as ‘persons changing bodies’ of course implies that the *A-body-person* is actually B. (Williams 1970, 161 and 163)

Williams also makes the following remark:

There are certain important philosophical limitations on how such imaginary cases are to be constructed, and how they are to be taken when constructed in various ways. I shall mention two principal limitations, not in order to pursue them further here, but precisely in order to get them out of the way. (161)

He is right to point out these limitations, but for present purposes we need not go into them, since thanks to the exceptional care with which Williams conducts his examination he at no point threatens to infringe them.²⁰⁵

Williams now goes on to describe three main types of cases. Here is one of the first type:

We take two persons A and B who are going to have the process carried out on them. ... We further announce that one of the two resultant persons, the A-body-person and the B-body-person, is going after the experiment to be given \$100,000, while the other is going to be tortured. We then ask each A and B to choose which treatment should be dealt out to which of the persons who will emerge from the experiment, the choice to be made (if it can be) on selfish grounds.

Suppose that A chooses that the B-body-person should get the pleasant treatment and the A-body-person the unpleasant treatment; and B chooses conversely.... Suppose the experimenter, having elicited A's and B's preferences, says nothing to A and B about what he will do; conducts the experiment; and then, for example, gives the unpleasant treatment to the B-body-person and the pleasant treatment to the A-body-person. Then the B-body-person will not only complain of the unpleasant treatment as such, but will complain (since he has A's memories) that that was not the outcome he chose, since he chose that the B-body-person should be well treated; and since A made his choice in selfish spirit, he may add that he precisely chose in that way because he did not want the unpleasant things to happen to *him*. The A-body-person meanwhile will express satisfaction both at the receipt of the \$100,000, and also at the fact that the experimenter has chosen to act in the way that he, B, so wisely chose. (163-4)

Assuming that this case will intuitively appear possible to his audience, Williams concludes (using, somewhat tendentiously, the word 'facts'): 'These facts make...a strong case for saying that the B-body-person really is A, and the A-body-person really is B; and therefore for saying that the process of the experiment really is that of changing bodies' (164). Williams considers several variations of this first type of case in which A and B make other choices. All versions of this first type of case, as Williams points out, likewise tend to appear intuitively possible and, hence, to be examples of changing bodies.

The second type of case that Williams examines concerns the question of A's and B's willingness to take part in such an experiment at all. Williams presents two cases, one in which A's and B's reasons for agreeing to the experiment concern potential advantages and disadvantages of a physical sort, and one in which they consider instead potential advantages and disadvantages of a

²⁰⁵ See Williams 1970, 161–3.

psychological sort. Both of these cases, like the previous ones, tend to appear intuitively possible and, hence, to be examples of changing bodies.²⁰⁶

The third type of case goes as follows:

Someone in whose power I am tells me that I am going to be tortured tomorrow. I am frightened, and look forward to tomorrow in great apprehension. He adds that when the time comes, I shall not remember being told that this was going to happen to me, since shortly before the torture something else will be done to me which will make me forget the announcement. This certainly will not cheer me up, since I know perfectly well that I can forget things, and that there is such a thing as indeed being tortured unexpectedly because I had forgotten or been made to forget a prediction of the torture: that will still be a torture which, so long as I do know about the prediction, I look forward to in fear. He then adds that my forgetting the announcement will be only part of a larger process: when the moment of torture comes, I shall not remember any of the things I am now in a position to remember. This does not cheer me up, either, since I can readily conceive of being involved in an accident, for instance, as a result of which I wake up in a completely amnesiac state and also in great pain; that could certainly happen to me, I should not like it to happen to me, nor to know that it was going to happen to me. He now further adds that at the moment of torture I shall not only not remember the things I am now in a position to remember, but will have a different set of impressions of my past, quite different from the memories I now have. I do not think that this would cheer me up, either. For I can at least conceive the possibility, if not the concrete reality, of going completely mad, and thinking perhaps that I am George IV or somebody; and being told that something like that was going to happen to me would have no tendency to reduce the terror of being told authoritatively that I was going to be tortured, but would merely compound the horror. Nor do I see why I should be put into any better frame of mind by the person in charge adding lastly that the impressions of my past with which I shall be equipped on the eve of torture will exactly fit the past of another person now living, and that indeed I shall acquire these impressions by (for instance) information now in his brain being copied into mine. Fear, surely, would still be the proper reaction: and not because one did not know what was going to happen, but because in one vital respect at least one did know what was going to happen—torture, which one can indeed expect to happen to oneself, and to be preceded by certain mental derangements as well. (167–8)

Assuming that this case too will intuitively appear possible to his audience, Williams states the resulting problem thus: ‘What we have just been through is of course merely one side, differently represented, of the transaction which we considered before; and it represents it as a perfectly hateful prospect, while the previous considerations represented it as something one should rationally, perhaps even cheerfully, choose out of the options there presented’ (168). If the two cases are indeed representations of the same thing, then the two intuitions that we tend to have about them cannot both be truthful; at least one of them will have to be untruthful.

²⁰⁶ See Williams 1970, 166–7.

Williams spends the remainder of his paper (equivalent to roughly half the paper's total length) discussing the question of whether the two cases really are representations of the same (relevant) thing, or are instead representations of different things.²⁰⁷ After briefly discussing two preliminary points, he gives a kind of genealogy of possible cases that could have been presented, and argues in favour of the claim that the two cases really are representations of the same thing (and, hence, that at least one of our intuitions is untruthful). Here is Williams's genealogical series of possible cases:

- (i) A is subjected to an operation which produces total amnesia;
- (ii) amnesia is produced in A, and other interference leads to certain changes in his character;
- (iii) changes in his character are produced, and at the same time certain illusory 'memory' beliefs are induced in him; these are of a quite fictitious kind and do not fit the life of any actual person;
- (iv) the same as (iii), except that both the character traits and the 'memory' impressions are designed to be appropriate to another actual person, B;
- (v) the same as (iv), except that the result is produced by putting the information into A from the brain of B, by a method which leaves B the same as he was before;
- (vi) the same happens to A as in (v), but B is not left the same, since a similar operation is conducted in the reverse direction. (172)

Following his discussion of this series of cases, Williams concludes: 'Thus, to sum up, it looks as though there are two presentations of the imagined experiment and the choice associated with it, each of which carries conviction, and which lead to contrary conclusions. ... Following from all that, I am not in the least clear which option it would be wise to take if one were presented with them before the experiment. I find that rather disturbing' (178–9).

Finally, Williams offers the following diagnosis:

The apparently decisive arguments of the first presentation, which suggested that A should identify himself with the B-body person, turned on the extreme neatness of the situation in satisfying, if any could, the description of 'changing bodies.' But this neatness is basically artificial; it is the product of the will of the experimenter to produce a situation which would naturally elicit, with minimum hesitation, that description. By the sorts of methods he employed, he could easily have left off earlier or gone on further. He could have stopped at situation (v), leaving B as he was; or he could have gone on and produced two persons each

²⁰⁷ See Williams 1970, 168–78. In particular, Williams makes a statement, which he proceeds to elaborate upon (175–8), that is similar to the one by Austin which I quoted in footnote 202 above: 'Here someone will say: you must not insist on drawing a line—borderline cases are borderline cases, and you must not push our concepts beyond their limits. But this well-known piece of advice, sensible as it is in many cases, seems in the present case to involve an extraordinary difficulty. It may intellectually comfort observers of A's situation; but what is A supposed to make of it? To be told that a future situation is a borderline one for its being myself that is hurt, that it is conceptually undecidable whether it will be me or not, is something which, it seems, I can do nothing with; because, in particular, it seems to have no comprehensible representation in my expectations and the emotions that go with them' (Williams 1970, 174–5).

with A-like character and memories, as well as one or two with B-like characteristics. If he had done either of those, we should have been in yet greater difficulty about what to say; he just chose to make it as easy as possible for us to find something to say. (179-80)²⁰⁸

Throughout his paper, Williams consistently speaks of ‘what we should say’ rather than ‘what seems true’. It is another indication of Williams’s awareness of the problem of indeterminate meaning in relation to the evaluation of theses by way of cases in philosophy. Like Austin and Williamson but unlike Baz, however, Williams does not appear to think that the problem constitutes an insurmountable difficulty or that it requires retreat into the sort of negative approach that Baz recommends. Indeed, his paper is an example of what can be achieved using this kind of procedure provided merely that one pays very careful attention to detail.

People sometimes speak of a ‘method of cases’. This makes it sound a rather neat and tidy affair, but it is not; moreover, this name captures neither the intended result nor the nature of the process. The construction of cases, as we have seen, is only the beginning. What is of at least equal importance in this procedure are questions and arguments about cases, that is, analysing, modifying and comparing them. The aim is, of course, examples and counterexamples to confirm or falsify particular theses. In general, the path from constructing a case to establishing an example or counterexample is long and complicated. Therefore, a better name for the philosophical procedure that employs cases to evaluate theses would perhaps be ‘thinking with cases’.

Conclusion

Whenever one engages in philosophical thinking, one will be at risk of suffering illusions of determinate meaning. In general, something may intuitively seem true to someone only because, being unaware that the meaning of the relevant expression is somehow indeterminate, it seems to mean one thing rather than another. I have argued that this problem is particularly acute in philosophy. Due to the relatively high degree of complexity of the things that philosophers are typically interested in, the meaning of expressions that are used to describe these things tends to be less determinate than

²⁰⁸ In this passage, by ‘the experimenter’ Williams means the philosopher who has constructed the case.

is usually the case for many other kinds of matters. The task of evaluating philosophical theses by way of cases is particularly problematic in this respect due to their relative incompleteness and the abstractions that their philosophical employment involves. This is a fundamental difficulty for any type of philosophical thinking with cases. Baz is right to point out this problem, but he is wrong to think that it calls for anything like a revolution in philosophical methodology.

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Square brackets around a publication year are used to indicate posthumous publication of an author's work without their direct authorisation.

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