

Empathy and Animal Ethics

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In responding to the challenge that we cannot know that animals feel pain, Peter Singer says:

We can never directly experience the pain of another being, whether that being is human or not. When I see my daughter fall and scrape her knee, I know that she feels pain because of the way she behaves – she cries, she tells me her knee hurts, she rubs the sore spot, and so on. I know that I myself behave in a somewhat similar – if more inhibited – way when I feel pain, and so I accept that my daughter feels something like what I feel when I scrape my knee. The basis of my belief that animals can feel pain is similar.¹

Singer here suggests that the epistemological problem facing animal ethics is really the more general problem of other minds: the Cartesian problem of how to escape solipsism, how to cross the bridge from my own thoughts and feelings to the thoughts and feelings of any other being. The suggestion is that no one can seriously be in the thrall of this sceptical problem. The method for building the bridge to other minds is familiar to us all: we use it every day in our ascriptions of thoughts and feelings to people near and dear, and to those far away. And we use it every day in our ascriptions of thoughts and feelings to animals.

What is the method, exactly? Singer's suggestion can be interpreted in two different ways. One idea is this. When I am in pain, I display a certain sort of behaviour: I rub the sore spot; I complain; if it is bad enough, I cry. From this sample I develop a generalization: those who show this sort of behaviour are usually in pain. So, when my daughter cries and rubs her knee, I conclude that my daughter is probably in pain. On this interpretation, the bridge to other minds makes use of a general law stating that this sort of behaviour is normally correlated with pain. The inference works by bringing this instance under that general law. It delivers a conclusion whose form is propositional: it delivers the conclusion that my daughter is

in pain. The method does not essentially make use of the imagination. Indeed, although the passage from Singer suggests that my evidence for this general law comes from first personal experience, this need not be so. There is nothing in the method of inferring a general law from a sample, and making inferences about further cases on the basis of that generalization, which restricts it to first-personal evidence.

There may, though, be a second and different idea behind Singer's suggestion, which goes like this. How my daughter is behaving is roughly how I would behave if in pain. So what it is like for my daughter is roughly what it is like for me, when in pain. On this second interpretation, the bridge to other minds does not essentially make use of a general law about people. It does essentially make use of a projective act of imagination. It does essentially make use of the first personal experience of the one making the inference. And it delivers an extra conclusion that is not obviously propositional in form: it delivers not only the conclusion *that my daughter is in pain*, but also a conclusion about *what it is like* for my daughter.² We need handy labels for these two different possible methods of building a bridge to other minds; for now, let us dub them the *theoretical* and the *imaginative*, respectively.

It seems more likely that it is the second, imaginative, method that Singer primarily has in mind. The first-personal references do not seem merely accidental; the references to the behaviour and feelings of 'I myself' seem central to the kind of inference Singer envisages. And it seems important that the conclusion delivers something about *what it feels like* for my daughter – and, by extension, what it feels like for animals. Thus understood, the bridge to knowledge of other minds is that of empathy, of 'putting oneself in others' shoes'. To put oneself in the shoes of another is not to imagine that I am identical with the other: to take the above example, it is not for Singer to imagine that Singer is identical with Singer's daughter. That thought is incoherent. Rather, it is to imagine what it would be like for oneself to have the experiences of the other: to take the above example, it is for Singer to imagine what it would be like if he were to have the experiences his daughter has. There is nothing logically incoherent about the method of empathy.³

We have two interpretations of Singer's inference to animal pain, the theoretical and the imaginative, and we have said that the imaginative interpretation seems the better one. Now there are interesting parallels here with work in disciplines apparently remote from the concerns of *Practical Ethics*. The two interpretations of Singer's inference to animal pain match two distinct approaches within contemporary philosophy of mind: although these approaches are not simply concerned with pain ascriptions, but with mental state ascriptions more generally. According to the first, we go about the business of ascribing mental states to others

by making use of a 'folk theory' of the mind, whose general laws entitle us to infer certain mental states on the basis of observed behaviour, and to predict further behaviour on the basis of those inferred mental states. Proponents of this *theory theory* of mental state ascription say that we each ascribe mental states to others because we have each mastered a theory about the mental states of others: we have each mastered 'a set of causal laws which interrelate stimulus inputs, internal states, and behavioural outputs'.⁴ But theory theory has a competitor which says: we do not *theorize*, we *simulate*.⁵ According to proponents of *simulation theory*, I do not make use of a theory in ascribing mental states to another: instead, I imaginatively put myself into the shoes of the other, and infer that it is for her how it would be for me, if I were in her shoes. Or, putting the point in the jargon of cognitive science, I work out how things are for her by using my own cognitive mechanisms *off-line*.

Theory theory corresponds to the first interpretation we gave of the passage from Singer, which involves the theoretical method of inferring on the basis of a general law. Simulation theory corresponds to the second interpretation, which involves the imaginative method of projecting first personal experience, to achieve imaginative acquaintance with what it's like for the other. The following kind of example is sometimes used to illustrate the difference. Suppose you have a Lotus Esprit, and I am wondering how fast it can go. Suppose I cannot take it for a test drive. One way for me to find out, none the less, might be for me to have a good theory of the Lotus Esprit: detailed knowledge of the engine specifications, the aerodynamics, the weight and so on. My methodology would be that described by a theory theory of the Lotus Esprit. Another way for me to find out is to take my very own Lotus Esprit for a test drive, see how fast it goes and infer from that. My methodology would then be that described by the simulation alternative. These are two options when it comes to ascribing velocities to the cars of others: and the suggestion is that when it comes to ascribing mental properties to the minds of others, the situation is analogous. I cannot take your mind for a test drive. But I might find out what is happening with you by means of a theory of creatures like you; or I may find out what is happening with you by taking my own mind for a test drive, and inferring from that.

We said that simulation of the other involves special imaginative acquaintance with what it's like for the other, but the example suggests that this needs some qualification. The example suggests that the method of simulation is that of discovering properties of *x* – or explaining or predicting the behaviour of *x* – by considering properties of a known model of *x*. Put that way, the method seems objective, compatible with, perhaps part of, scientific method. Engineers commonly test how bridges or cars or aeroplanes will behave by testing out models. There is no

ineluctable reference here to a 'subjective view', no talk of discovering a further fact concerning *what it is like* to have those properties. Yet the method envisaged by simulation theorists is often contrasted with a scientific methodology. Simulation theory is said to draw on the heritage of *verstehen* philosophy, which makes a sharp contrast between our non-scientific understanding of human subjects and our scientific understanding of physical objects.

We suggest that two different streams in the simulation story need to be distinguished: one concerns knowledge via modelling; the other concerns knowledge of special what-it-is-like-for-the-subject facts. Part of what is interesting about *mental* simulation is these two streams typically come together. By simulating someone's mental state you might be able to learn that he or she is in a certain state; and by the very same act of simulation you might come to know what it is like to be in that state. It is possible that even here the two ideas might come apart: that mental simulation might enable us to tell what it is like for someone else without knowing what state they are in, or vice versa.⁶ But we trust that such possibilities are sufficiently *recherché* that we need not be concerned with them here. We shall take it that mental simulation – imaginatively projecting oneself into another's shoes – is claimed to give us both (a) knowledge, via modelling, *that* someone is in a certain state, and (b) knowledge of *what it is like* to be him or her, in that state.

Perhaps it is plausible to suppose that the attempt to identify imaginatively with others is an attempt to simulate others in the way that simulation theorists describe. We proceed on that assumption, and in what follows we shall use the notions of putting oneself in the shoes of another, imaginatively identifying with another, empathizing with another and simulating another, as roughly synonymous.⁷ Now Singer's use of this imaginative thought experiment is evidently in the context not just of epistemology – our knowledge of animal minds – but of practical ethics – our moral behaviour towards animals. So one might wonder whether simulation theory can be brought to shed light on ethics – and indeed on practical ethics of the kind that concerns Singer. Alvin Goldman is prominent among simulation theory's recent proponents, and he answers this question in the affirmative. He says that ethics has much to learn from cognitive science. He says that cognitive science can offer 'benefits to philosophy' in the domain of moral theory.⁸ He says that simulation theory offers a better understanding of what it is to put oneself in the shoes of others. He says that this understanding can supply just the epistemological and motivational resources which moral theory needs.⁹ If Goldman is right, then perhaps Singer's argument can be bolstered and given whatever sort of respectability cognitive science can add to ordinary philosophy.

Before assessing these ambitious advertisements from simulation theory – before considering whether ethics does have something to learn from simulation theory's account of empathy – we need to get clearer on the role that empathy is supposed to play in ethics in the first place.

Moral Theory

What role does putting oneself into others' shoes play when we pass from the theory of knowledge to moral theory? Suppose we confine our attention to the kind of utilitarian moral theory for which Singer has argued. Suppose, to simplify, we confine our attention to moral theory which enjoins us to act so as to maximize preference satisfaction. Then we might expect the thought experiment to have three fairly uncontroversial functions.

First, the thought experiment might have a role to play in *discovering the preferences of others*. You cannot calculate which action best satisfies preferences unless you know what others' preferences are, and know how strongly they are held. Putting yourself in their shoes enables you to know what they want, and how badly they want it. This is simply the epistemological role again, brought into a moral context. Importantly, here we might get a basis for interpersonal utility comparisons; in imagining what things are like for you we might get some grip on the question of whether they are better or worse than they are for us, in our very different circumstances. Singer thinks that it has such a role: 'By imagining ourselves in the position of others, and taking on their tastes and preferences, we can often arrive at a reasonably confident verdict about which action will satisfy most preferences'.¹⁰

Second, the thought experiment might have a role to play in *discovering who has preferences*; and for a utilitarian, this will determine the domain of moral salience. This role is closely linked to the first, but it is in a way more fundamental. The thought experiment of putting oneself in the shoes of others might be used to find out not simply how to compare preferences, but whether there are any preferences there to compare. It can be used to answer not only the question 'How do I compare the interests of the morally relevant parties?' but also the more basic question: 'Which parties are the morally relevant ones?' Again, Singer endorses such a role:

There is a genuine difficulty in understanding how chopping down a tree can matter *to the tree* if the tree can feel nothing. The same is true of quarrying a mountain. Certainly, imagining myself in the position of the tree or mountain will not help me to see why their destruction is wrong; for

such imagining yields a perfect blank. . . . there is a sense in which the limits of sentience are not really limits at all, for applying the test of imagining ourselves in the position of those affected by our action shows that in the case of nonsentient things there is nothing at all to be taken into account.¹¹

Here the thought experiment of putting oneself in the shoes of others is described as a test, the application of which shows that the tree and the mountain are outside the domain of moral salience: there is nothing to be taken into account.

Third, the thought experiment might have a role to play in *motivating* people to act in accordance with utilitarian moral theory. At least as a matter of empirical psychology, knowing how it feels to be in the shoes of others can bring you to want what they want. Singer does not explicitly mention this role; but as we shall see, he appears to embrace an argument that has the consequence that he should accept it. And this argument turns it into more than a simple empirical claim about human psychology.

These three roles concern the use of the thought experiment in an *application* of utilitarian moral theory: on the assumption that we ought to maximize preference satisfaction, imaginatively putting oneself in the shoes of others might enable us to know which parties we should be looking at, to know what their preferences are and to care enough to do something about it. It is unlikely that anyone will think that it has a monopoly on any of the roles. There are surely other ways of finding out who has preferences and what they are (we might ask them, for instance, or see what they do, or perhaps examine their brains); and not everyone will need imaginative identification to persuade them to the path of virtue. But a fourth and more ambitious role might be hoped for, one in which its function is not merely ancillary but essential. Imaginative identification might have a crucial role to play in *justifying* utilitarianism in the first place, via a philosophical argument linking universalizability to preference utilitarianism. Hare famously attempts to make such a link, arranging a marriage between Kantian moral theory and its traditional foe. According to Hare, it is of the very nature of some moral concepts, most centrally 'ought', that they are both prescriptive and universalizable. Universalizability requires that we put ourselves in the place of others; this in turn requires that we give weight to the preferences of others in just the way that utilitarianism says.

The details of how this argument is supposed to work are controversial. But a reasonable gloss is this:

- 1 To say that something ought to be done in particular circumstances is to prescribe it in all like circumstances.

- 2 To prescribe something in circumstances in which I actually find myself is to desire to do it; to prescribe it in circumstances in which I don't find myself is to desire that if I were in those circumstances I would do it.
- 3 If I were fully rational, then whenever I believed that someone in certain circumstances desired to do a certain thing, I would desire that if I were to find myself in those circumstances, I would do it.

Therefore:

- C If I were fully rational, what I would say ought to be done is that which best satisfies my desires across circumstances in which I do find myself and do not find myself; which is what best satisfies what I believe are the desires of those actually in those circumstances (including myself); which is what utilitarianism prescribes.¹²

All three premises of this argument are controversial. We shall not be concerned with (1) and (2), which together give expression to Hare's non-cognitivism and to his view of the universalizable nature of 'ought'. Rather, we shall concentrate on (3), since it is here that the role of imaginative identification comes in. (3) requires that we will form an actual desire about a possible state of affairs; adapting Hare's terminology, let us call this an actual-for-possible desire. Here is Hare's own formulation of the principle: 'I cannot know the extent and quality of others' sufferings and, in general, motivations and preferences without having equal motivations with regard to what should happen to me, were I in their places, with their motivations and preferences.'¹³ Following Alan Gibbard, we can call this the *Principle of Conditional Reflection*.¹⁴ What is its status? It could be thought of as simply a generalization about human psychology. But that is not the status that Hare gives it. He argues that the principle is conceptual:

If we try to represent to ourselves what it is like to have a certain desire, we have not succeeded unless there is something in our *present* experience to correspond to what we are trying to represent; and this has to be a desire too. We can utter the words 'I shall be desiring not to be whipped'; but we shall not really be *thinking what it would be like* unless there is a desire of equal intensity in our present experience, namely the desire not to be being whipped if we are in that situation.¹⁵

Hare here suggests that putting oneself in the place of another requires becoming imaginatively acquainted with what that place is like. He suggests that when one does so one comes to form the actual-for-possible

desires required by the Principle of Conditional Reflection (and, perhaps, that doing so provides the *only* reliable method for forming such desires – we return to this further point in a moment). This has been a persistent theme in Hare's writings. Here is how he put the point in *Freedom and Reason* in 1963:

He [i.e. *B*] must be prepared to give weight to *A*'s inclinations as if they were his own. This is what turns selfish prudential reasoning into moral reasoning. It is much easier, psychologically, for *B* to do this if he is actually placed in a situation like *A*'s *vis-à-vis* somebody else; but this is not necessary provided that he has sufficient imagination to envisage what it is like to be *A*.¹⁶

By 1981 in *Moral Thinking* the point is made even more explicitly. 'What exactly is it that we have to know?' Hare asks. He answers, 'What it is like to be those people in that situation' – the situation produced by one's own potential decision. He insists that a certain kind of theoretical knowledge is bound to be inadequate:

I have to know what it will be *like* for [the other person] . . . We shall have to keep carefully in mind the distinction between knowing that something is happening to someone, and knowing *what it is like for him*. It is the latter kind of knowledge which, I am proposing, we should treat as relevant, and as required for the full information which rationality in making moral judgements demands.¹⁷

So the rationality alluded to in the Principle of Conditional Reflection is that which comes from full imaginative identification. The principle should thus be spelt out like this:

- 3* If I were fully to identify imaginatively with someone, then whenever I believed that he or she desired to do a certain thing in certain circumstances, I would desire that if I were to find myself in those circumstances, I would do it.

Now Hare does not seem to think that imaginative identification is just one method among many for forming the actual-for-possible desires required by the principle. He seems to think that it is the only reliable method for forming such desires, and hence for bringing moral arguments to a successful conclusion. 'In most normal cases a certain power of imagination and a readiness to use it is a . . . necessary ingredient in moral arguments'.¹⁸ And again: 'The difficulty of fully representing to ourselves absent states of experience (our own or other people's) is one of the main obstacles to good moral thinking.'¹⁹

We can now see Hare's position on the function that imaginative identification has in the third role that we identified above: that of motivating us to embrace the desires of others. Hare denies that, as a matter of empirical psychology, it is sufficient on its own.²⁰ Moreover, he thinks that there is no rational requirement on the amoralist to be moved. But once we engage in the practice of moral argument, he thinks that the argument he gives will rationally compel us to be motivated to maximize the satisfaction of the preferences of others – it will rationally compel us to be utilitarians.

Why, in a chapter on Peter Singer, have we focused so much on Hare? The answer is that Singer seems to endorse Hare's position. He does not spend a great deal of time discussing the foundations of morality; his focus is, famously, on its practical applications. But in his contribution to *Hare and Critics*, Singer defends Hare's moral theory. As he summarizes his own position, 'I have been arguing that . . . universalizability does require that we put ourselves in the place of others and that this must then involve giving weight to their ideals in proportion to the strength with which they hold them.'²¹ Likewise, in *The Expanding Circle* Singer argues that Hare's approach, or something like it, provides the only way of resolving ethical disputes.²² And the quotation with which we began is surely directed towards just this kind of reasoning. When I put myself in the shoes of my daughter I learn not only the desires of my daughter and their strength; I learn also to give weight to those desires. When I put myself in the shoes of an animal, I learn not only the desires of the animal, and their strength; I learn also to give weight to those desires. These passages are enough to show that Singer is, at the very least, *tempted* to go in this direction. In what follows we suggest he would be wise to resist the temptation.

We shall not try to assess the validity of Hare's argument; many others have laboured on that task.²³ Let us concede its validity, for present purposes. Our interest is rather in the capacities we have to put ourselves in the shoes of others, and of the significance of this for Hare and for Singer. First, some brief remarks on terminology. We take the notion of putting oneself in others' shoes not to be a success notion; on this usage, I may put myself in your shoes, without successfully putting myself in your shoes – without getting it right. I may simulate you without accurately simulating you. On our usage, the idea of success is not built in to the idea of putting oneself in the shoes of others. So keeping this in mind, we are concerned with two questions.

(a) Can we in practice successfully put ourselves in the shoes of others?

This is a question about whether we reliably get it right when we try to put ourselves into the shoes of others. It is an important question. For if our

simulation fails, it will not fulfil the first role identified above: it will not help us find out what the preferences of others are, nor will it enable us to compare them. And if our simulation fails, it will not fulfil the second role: it will not help us find out who has preferences, and hence who is within the domain of moral salience. And if our simulation fails, it will not fulfil the third role either: while it may well motivate us to act, it will not motivate us to achieve the utilitarian outcome. So its use in the first three roles – its use, that is, in *applying* utilitarianism – will depend on returning an affirmative answer to this first question.

What, though, of the fourth role: does the use of imaginative identification in *justifying* utilitarianism require that we in practice be successful? Recall that the Principle of Conditional Reflection is of subjunctive conditional form. It says that we would form the relevant actual-for-possible desires *if* we were successfully to identify imaginatively with others. If, as a matter of fact, we are bad at doing so, this would not refute the principle, nor the argument for utilitarianism that Hare bases upon it. It would make us bad utilitarian agents; but it would not show utilitarianism to be false. It is enough for Hare's argument that the conditional is true; he does not require the truth of the antecedent as well.

A problem would be raised, however, if it were outright *impossible* to get into the shoes of others – and this brings us to our second question:

(b) Can we in principle successfully put ourselves in the shoes of others?

If the answer here is 'no' then the Principle of Conditional Reflection will go wrong, and Hare's argument for utilitarianism will break down. For the Principle is of subjunctive conditional form; and if the answer to our question is 'no', the Principle will have an impossible antecedent. Quite how we should treat subjunctive conditionals with impossible antecedents is a matter of some debate.²⁴ One approach is to think of them as false. If we take this route, then Hare's argument will be unsound. The rival approach is to think of subjunctive conditionals with impossible antecedents as vacuously true. On this approach the principle will, of course, be true, but so will every other counterfactual with the same antecedent, including 'If I were to imaginatively identify with others I would *not* form the relevant actual-for-possible desires.' Moreover, while on this view Hare's argument may be sound, its conclusion, which is a subjunctive conditional with the same impossible antecedent, will itself be trivial. Either way then, the argument for utilitarianism will be in trouble.

We turn now to consider simulation theory, to consider whether it sheds light on these questions about our actual and possible capacities for empathy. Depending on the different roles required of it by moral

theory, empathy needs to be in fact a reliable source of knowledge, or in principle a reliable source of knowledge. Goldman's recent work on simulation provides us with a useful focus, since he discusses what is required for empathy to be a reliable source of knowledge, and he offers some optimistic conclusions for moral theory.

Simulation

Prior to the question of whether we gain knowledge of other minds, through empathy, is the question of whether we gain *beliefs* about other minds, through empathy. If we empathize by *simulating*, then this is a question about whether we gain beliefs about other minds through simulation, and this is Goldman's starting point. He says that the thought experiment of placing oneself in the shoes of others is central to our practice of making mental state attributions to others. He offers this not – yet – as a philosophical truth of epistemology, but as an empirical hypothesis in cognitive science. I have a set of mental mechanisms that take some mental states as inputs and generate others as outputs: that take beliefs and desires as inputs, and generate decisions about action as outputs, for example. And I can, so to speak, 'unhook' these mechanisms, and use them 'off-line', so that instead of generating outputs for me they generate imagined outputs for someone else. For example, instead of generating my decisions, given my beliefs and desires as inputs, the mental mechanism generates the decision of someone else, given his beliefs and desires as inputs – or rather, it generates what I *believe* to be his likely decision, given what I *believe* to be his beliefs and desires. This 'off-line' use of mental mechanisms in the attribution of mental states to others is thought to be just one function of simulation among many. There is, in addition, the practice of first personal hypothetical deliberation, where I imaginatively place myself in the shoes, not of another person, but of myself in different circumstances, and I generate my own imagined decisions from imagined beliefs and desires. And there is, in addition, our practice of entertaining fictional stories, where I imaginatively place myself in the shoes of a merely fictional person.

Goldman discusses empirical evidence for the conclusion that we attribute mental states to others via a method of simulation rather than theory. In a 1982 experiment by Kahneman and Tversky, subjects were told the following story.

Mr Crane and Mr Tees were scheduled to leave the airport on different flights, at the same time. They travelled from town in the same limousine, were caught in a traffic jam, and arrived at the airport 30 minutes after the

scheduled departure time of their flights. Mr Crane is told that his flight left on time. Mr Tees is told that his was delayed and just left five minutes ago.

The subjects were asked: which of the two is more upset? Nearly all replied: Mr Tees. Why? The theory theory of mental state attribution should say that they inferred their conclusion from lawlike generalizations linking desires, different kinds of desire-frustration and different degrees of upsetness. But, says Goldman, it seems unlikely that the subjects were acquainted with any such lawlike generalizations. What seems more plausible is that their conclusions were reached by the method of imaginative projection: each subject put herself into the shoes of each character, and wondered how she would feel in those shoes.²⁵

So far this is a matter of psychology. It is a hypothesis about how we do in fact go about our business of grasping – and then comparing – the mental states of others. So it is a hypothesis about how we do in fact go about the business of making the judgements required by moral theory, such as interpersonal utility judgements: ‘In making hedonic comparisons between two people other than yourself, you would simulate each of them in turn and compare the resulting hedonic states.’²⁶ Goldman says that this is progress: simulation theory provides a ‘helpful’ account of our practice of making these judgements.

However, the important question, both for epistemology and for ethics, is not whether we do go about our business this way, but whether we are *justified* in going about our business this way. Here we move from psychology to epistemology. Do our simulation-based judgements about other minds count as *knowledge* of those minds? As we have seen, the different roles assigned by moral theory to the thought experiment of putting oneself in the shoes of others all require it to be a source of knowledge. Goldman answers this question in the affirmative. Simulation may provide a reliable means of knowledge, provided – and here comes the crunch – that I am *similar* to the person I am simulating. ‘Interpersonal simulation can only succeed if there are certain psychological homologies or similarities between simulators and simulatees.’²⁷ Neologisms aside, this is a basic, obvious and important point; and it is not news. A test drive of my Lotus will tell me something about yours only if yours is similar to mine. A test drive of Mr Tees’s unhappy situation will tell me something about Mr Tees only if Mr Tees is roughly similar to me. Whatever else simulation theory may have to offer, to the extent that it is a normative and not a merely descriptive account of our mental state attributions – to the extent that it is an account of knowledge, and not just of belief formation – it is no answer to the problem of other minds. It assumes not only that other minds exist, but also that they are basically similar to my own.

An affirmative answer to the question of whether empathy yields knowledge of other minds depends, then, on a general similarity assumption. We can use simulation to gain reliable knowledge of other minds only when we are already similar to those other minds. What is the status of this similarity assumption?

Perhaps the general similarity assumption may be an *a posteriori* premise that is empirically verified. A first possibility here is that I imaginatively put myself into the shoes of another and infer, by this simulation, that lo and behold he is roughly similar to me. But that would hardly do! A simulation-based justification of simulation's background similarity assumption would be entirely circular. A second possibility for empirical support might be predictive success: if simulation-based predictions about the behaviour of others are successful, then that success provides evidence for the background assumption of similarity. A third possibility might be a more theoretical kind of *a posteriori* verification. Goldman cites a discussion by Roy Sorenson of the similarity requirement.

Stepping into the other guy's shoes works best when you resemble the other guy psychologically. After all, the procedure is to use yourself as a model: in goes hypothetical beliefs and desires, out comes hypothetical actions and revised beliefs and desires. If you are structurally analogous to the empathee, then accurate inputs generate accurate outputs – just as with any other simulation. The greater the degree of isomorphism, the more dependable and precise the results.²⁸

Sorenson argues that the similarity required for empathy to work will be selected for by evolution, and that evolution therefore delivers a certain kind of empirical support for an assumption of similarity. These are some candidate defences of an *a posteriori* similarity assumption – and we shall not pause to assess them here.

A different possibility is that the assumption has an *a priori* status. According to John Harsanyi, empathy-based interpersonal utility comparisons rest on a similarity postulate that is ultimately non-empirical: once allowances have been made for empirically notable differences in situation, education, tastes and the like, it is reasonable for me to assume that your mental states are similar to those I would have in your shoes.²⁹ The similarity assumption has, on this suggestion, the kind of status that postulates of simplicity and parsimony have as constraints on scientific theory choice. Again, we shall not pause to assess this – or other candidate possibilities – here. Let us instead return to our two questions, and consider the bearing of the above discussion upon them.

We asked whether putting ourselves in the shoes of others can in practice be a source of knowledge of others; and we asked whether putting

ourselves in the shoes of others can in principle be a source of knowledge of others. The answer to both questions seems to be yes – *provided that* I am similar enough to the other into whose shoes I try to put myself. The method of empathy cannot stand on its own: it needs to be backed by an assumption of similarity that cannot, without circularity, be supported by the method of empathy itself. It can, perhaps, have the *a priori* status that Harsanyi assigns it, as a methodological norm of simplicity: ‘in the absence of evidence to the contrary, assume that others are similar to yourself’. Thus stated, the principle supports a default assumption of similarity, while at the same time assigning a crucial role to empirical evidence in disconfirming the default assumption. It is not obvious whether, thus understood, the similarity assumption is good methodology or sheer arrogance. However, we need not make a judgement about this, since our concern lies with domains where the similarity assumption clearly fails – and hence where the method of empathy must break down.

Back to Moral Theory

If imaginative identification is to play the role it is supposed to play, then we must be similar enough to those to whom we should show moral consideration. But are we similar enough?

This is a difficult question even when restricted to the domain of our fellow human beings. Our fellows are, to be sure, physiologically similar to us. But that might not be enough. We can have little conception of what it is like to be mentally ill in certain ways. Singer himself suggests that there will be some people for whom we cannot in practice achieve successful imaginative identification – ‘we cannot enter into the subjective states of psychopathic people, nor they into ours’.³⁰ We think that considerations like these place very real limitations on the usefulness of imaginative identification in applying utilitarianism across a human population. Indeed, the situation is more serious than this. Singer says that when we imagine ourselves into the position of psychopathic people, our imagining yields a perfect blank. He also says, as we have seen, that when we imagine ourselves into the position of a tree or a mountain, our imagining likewise yields a perfect blank. Yet this latter result is exactly what is supposed to tell us that in the case of a tree ‘there is nothing at all to be taken into account’ morally – and that destruction therefore cannot matter to the tree. This latter result is supposed to show us that the tree is outside the domain of moral salience.³¹ Should the former result likewise tell us that in the case of the psychopathic person ‘there is nothing at all to be taken into account’ morally – that destruction therefore cannot matter

to the psychopathic person? That the psychopath, like the tree, is outside the domain of moral salience? That would be an abhorrent outcome. We can leave the point as a hypothetical one: if there are human beings for whom the attempt at imaginative identification 'yields a perfect blank', then such human beings seem – by the test of imaginative identification – to be outside the domain of moral salience. Yet they ought not to be. This should make us have second thoughts about the role of the test in moral argument.

It might be thought, however, that in these cases we *could* achieve a successful identification, but that it would require a lot more effort than we are prepared to put in – that when Singer says we *cannot* imagine the subjective states of psychopaths, what he really means is that we *can*, but with great difficulty. This seems to be Hare's view:

The difficulty of fully representing to ourselves absent states of experience (our own or other people's) is one of the main obstacles to good moral thinking – that is obvious . . . The remedy, for humans, lies in sharpening our sensitivity, and above all in cultivating considerate habits of thought for use at the intuitive level.³²

The difficult cases might pose a problem for the potential of human beings to be good utilitarian agents towards other human beings; but it is not obvious that they pose a problem for Hare's attempt to provide a justification for utilitarianism as such. As we have seen, that argument requires only the *possibility* of successful imaginative identification.

However, that very possibility becomes doubtful when we turn to non-human animals. As Sorenson reminds us, 'stepping into the other guy's shoes works best when you resemble the other guy psychologically'. What happens when we step into the shoes of the other guy, and the other guy is neither guy nor girl, man nor woman? The very metaphor betrays a bias towards the shod. If the method of simulation barely gets us beyond the average guy, there seems little hope of its getting us as far as we need to get with the non-human animals. Indeed, if one were to take seriously Sorenson's evolutionary account of empathy, then the tendency of natural selection to push species into specialized niches should make us especially sceptical that there will be the necessary inter-species similarity.

Hare is remarkably sanguine. He thinks that we can think our way into the position of bears:

Those who indulged in bear-baiting did not reason: 'If we were bears we should suffer horribly if treated thus; therefore we cannot say that it is all right to treat bears thus' . . . The bear-baiter does not really imagine what it is like to be a bear. If he did, he would think and act differently. Another way of putting this is to say that these people are not paying attention to the

relevant similarities between themselves and their victims . . . the bear-baiter is not thinking of the bear as his brother – or even cousin.³³

More remarkably, he thinks that he can think his way into the position of a trout:

In our village there is also a trout farm. The fish start their lives in moderately commodious ponds and have what I guess is a pleasant life for fish, with plenty to eat. In due course they are lifted out in buckets and put immediately into tanks in the farm buildings. Purchasers select their fish, which is then killed by being banged smartly on the head and handed to the customer. I am fairly certain that, if given the choice, I would prefer the life, all told, of such a fish to that of almost any fish in the wild, and to non-existence.³⁴

More remarkably still, he seems to think that he can think himself into the position of inanimate objects:

It is sometimes said that stoves, mountains, and trees are outside the scope of morality (we cannot have duties to them) because we cannot put ourselves in their positions. I think that this is badly expressed. We can put ourselves in their positions, but, since when we do this we have no sentience and therefore no concerns, it simply does not matter to us what happens if we turn into such things.³⁵

We shall leave aside this last idea (what could it be to think oneself into the position of a stove?) and confine ourselves to the non-human animals. Hare's confidence that we can, in general, think our way into their positions is surely misplaced. Thomas Nagel has celebrated the difference between ourselves and bats. We have, he says, no idea what it would be like to perceive the world by bat sonar:

If I try to imagine this I am restricted to the resources of my own mind, and those resources are inadequate to the task. I cannot perform it either by imagining additions to my present experience, or by imagining segments gradually subtracted from it, or by imagining some combination of additions, subtractions and modifications.³⁶

To take another example: platypuses can detect, with their bills, electrical discharges from the muscles of other creatures around them. We have no idea what it is like to see the world this way either – and no amount of sharpening our sensitivities could ever help us to find out.

Moreover, the discovery that we don't know what it's like to be a bat or a platypus doesn't come from trying to think ourselves into their positions and failing. It comes because we have independent biological evidence

that they are *not* like us in important respects. The method of imaginative identification has achieved nothing. To say this is not to be a sceptic about animal minds. The difficulty we are considering is not – contrary to Singer's suggestion in our opening quotation – simply the problem of other minds. We do not doubt that the bat, or the platypus, has a mind. But we do not know *what it is like* for them.

If a moral theory – whether that of Hare or Singer or the simulation theorists – demands that we place ourselves in the shoes of animals to discover what it is like for them, then that moral theory will be in trouble. For someone like Singer, who has devoted so much work to the inclusion of non-human animals in the moral domain, the problems are especially pressing. They emerge, we think, in both spheres: that of applying utilitarianism, and that of justifying it. Let us take them one at a time.

Problems of Application

We suggest that if you want to discover the preferences of a bat or a platypus, the last thing you should do is to try to imagine yourself into their place. Is it cruel to screech loudly at a bat? Is it cruel to pass a 12 volt shock through the water near a platypus? We don't know, and imagining ourselves in their place won't help. Imagination 'yields a perfect blank'. Doubtless there *are* methods of finding out: we could check their behaviour, measure their heart rates and endorphin and serotonin levels, test whether they continue to thrive under these circumstances. All such evidence would be relevant. But imaginative identification will get us nowhere. Even when we consider animals that are not so different from us in their perceptual systems, it is doubtful that the method will get us very far. An example from Singer will make the point. He remarks that keeping calves in narrow stalls is especially cruel, since it inhibits 'their innate desire to twist their heads around and groom themselves with their tongues'.³⁷ Human beings do not have an innate desire to twist our heads around and groom ourselves with our tongues. We won't discover that desire by imagining what it's like to be a calf. Nor will we discover, by imaginative identification, any other innate desires peculiar to non-human animals.

Second, it seems to us that imaginative identification is a bad method of discovering which animals have preferences, and hence of determining the domain of moral salience. Try it with a slug or a sea anemone. Try it with a locust that goes on eating while itself being eaten by a mantis. Here again, imagination 'yields a perfect blank'. The differences are too great for our imagination to get any useful purchase. Any serious effort to discover whether these animals have preferences will require, once again, the application of biology rather than of imaginative identification.

Third, it seems to us that reliance on imaginative identification as a source of motivation is extremely dangerous. Perhaps it works. But if it does, it will skew our concern to those for whom we find imaginative identification easy. It will invite precisely the kind of parochialism that an impartialist moral theory rejects. We are familiar with the problem that long-lashed large-eyed animals get a disproportionate share of our concern – that the killing of baby seals provokes more outrage than the killing of coypu. A motivation that is based on an ability to empathize is equally parochial.

Suppose, as Nagel says, that we cannot know what it is like to have the experiences of a bat. One might, in response, pursue the thought that this does not matter much: that the utilitarian who invokes imaginative identification need not be able to acquire what-it's-like knowledge of all of an animal's experiences. Perhaps the utilitarian may merely need to know what-it's-like facts about pain – Singer's original example – and know that what the bat experiences, when in pain, is something like what I experience when I am in pain, since pain experiences remain constant across diverse species. Perhaps I don't know what it's like to be a bat sonar-tracking a moth; but perhaps I do know what it's like to be a bat in pain.

One response to this suggestion is Nagel's. He says that even pain itself will have a different subjective feel for the bat: 'We believe that bats feel some version of pain, fear, hunger and lust, and that they have other, more familiar types of perception besides sonar. But we believe that these experiences also have in each case a specific subjective character, which it is also beyond our ability to conceive.'³⁸ This seems speculative. Pin pricks may feel alike to bats and human beings. The physiological evidence suggests that all vertebrates, at any rate, have similar neurological pain structures.³⁹ None the less, the resort to similarity of pain is beside the point, for two reasons. First, there is an *ad hominem* consideration. Hare and Singer are preference utilitarians. They are concerned with minimizing unsatisfied preferences, what Hare rather eccentrically terms 'suffering', and suffering, in this sense, is distinct from pain. As Hare writes: 'It is possible to have pain without suffering, and without having a motive for ending or avoiding the pain.'⁴⁰ That thought is familiar enough to the marathon runner, and, perhaps, to some women in labour. And it is familiar in a rather different guise in David Lewis's example of 'mad pain': we can – perhaps – have imaginative acquaintance with what it's like for a person in mad pain, but his or her pain is nevertheless not suffering in Hare's sense.⁴¹ Once we turn to suffering, Nagel's contention that it will have a 'specific subjective character' is plausible, since suffering cannot be abstracted from the creature's other experiences. So imaginative identification will not, it seems, be able to supply us with the requisite knowledge.

Second, even if it is true that pain feels much the same for all vertebrates, this fact is altogether too parochial to do the work required of it. There might, for all we know, be creatures elsewhere in the universe that have a state functionally similar to our pain: a state that they typically hate, and try to avoid, and that indicates damage to their bodies. Lewis provides us with a philosophical example in the idea of 'Martian pain'.⁴² This state might have a quite different physiology and give rise to a quite different experience. Such creatures may have pains as different from any of ours as a burn is different from a headache. We will not be able to imagine what their pain feels like. Yet to exclude them from our moral concern would be to commit precisely the kind of parochial mistake that Singer has campaigned so strenuously to avoid.

Problems of Justification

As we remarked earlier, Hare's argument justifying utilitarianism requires only the truth of a subjunctive conditional: If I were to identify imaginatively with other beings, I would form the relevant actual-for-possible desires. But the considerations we have raised call into doubt whether it is possible for us to identify imaginatively with such animals as bats and platypuses. Given how we are constructed, we cannot do it, no matter how hard we try. This means that the Principle of Reflection goes awry: it has an impossible antecedent.

To be fair to Hare, we need to attend to a character whom we have not so far considered: the Archangel. Aware of our limited abilities, Hare asks us to imagine 'a being with superhuman powers of thought, superhuman knowledge and no weaknesses'.⁴³ Perhaps the Principle of Reflection will not go awry if its antecedent can be fulfilled by the Archangel. Perhaps even if *we* cannot imagine what it is like to be a bat or a platypus, at least the archangel can.

Well, we doubt it. We doubt that any being could do what Hare requires of the Archangel. The point is made well by Zeno Vendler, in his response to Hare, 'Changing places?'.⁴⁴ Vendler asks whether or not the Archangel is embodied. Suppose, as an angelic being, he has no body. Then he cannot have, and cannot imagine having, a toothache or a tickle. Then he cannot know that I have a toothache or tickle: or rather he cannot know *what it is like* for me to have a toothache or a tickle. So the Archangel, thus described, cannot after all put himself in my shoes. Suppose, then, the Archangel is nicely embodied. If he has a body, he is an organism of a particular kind. But then he can have experiences – and can imagine having experiences – only of the kind had by organisms of that particular kind. It will not make any difference how 'perfect' we

allow the Archangel's body to be. As Vendler says, 'We are at a loss to imagine what it must be like to be a bat or a frog partly because our bodies are far more "perfect", i.e. developed and sensitive, than theirs.'⁴⁵

What is Hare's reply to Vendler? It is to cite poetry. Blake wrote, of God, that

He doth give His joy to all;
He becomes an infant small;
He becomes a man of woe;
He doth feel the sorrow too.⁴⁶

God can put himself into the shoes of each of his creatures. Hare's Archangel is Blake's God.

As philosophical tactics go, this one is dubious – unless we are to concede validity to the argument 'Blake wrote that possibly p, therefore possibly p'. We doubt there could be a being that could be acquainted with the experiences of all creatures in the necessary way. We could perhaps suppose there to be a Protean God who really did *become* an infant small, a man of woe – and every other creature besides; and could, as a result of this pan-Incarnation, imagine what it is like to be an infant small, a man of woe and every other creature besides. But if it is to underwrite the formation of the relevant actual-for-possible desires, such a being would need not only to *transform* itself into any creature, but also to *remember* what its experiences in its other incarnations are like, and then to *compare* such radically different experiences. We doubt that such a being is possible.

Conclusion

Many critics of utilitarianism have complained that it is too impartial, that it does not make room for the parochial concerns and biases we have and ought to have. Our complaint here has been just the opposite: the utilitarianism of Hare and Singer risks being not impartial enough. It is too parochial if it ties ethics to what we can in principle imagine. We do not deny that empathy can be useful for moral thinking, that it can *help* in the first three roles we identified. We do not deny that one of the most important failings in our dealings with animals is our habitual failure to empathize with them; or, more accurately, our habitual tendency to empathize selectively; our skewed empathy which is stony-eyed to the plight of orang-utans yet weeps for a dead budgie. But we object to the idea that moral thinking should confine itself to what empathy can – in practice, or in principle – provide. We object to the idea that empathy

provides the basis for ethics. If, as Singer believes, we owe moral concern to the sentient, then we cannot restrict that concern to those whose shoes we can, in imagination, borrow. Sentience transcends imaginability. And these objections are at the same time objections to an over-ambitious simulation theory, which claims that our knowledge of other minds proceeds chiefly or exclusively by the method of putting oneself in the shoes of others. Instead of finding that simulation theory can help an empathy-based ethics in the way that was advertised, we find that both are flawed in the same way: both place the same unwarranted limits on what we can know and what we can care about. The bounds of our moral concern transcend the bounds of empathy; the bounds of our knowledge of other minds likewise transcend the bounds of empathy.

We intend this chapter less as a criticism of Singer than as a challenge. We have said that Singer is at the very least *tempted* to give imaginative identification the roles we have described here. But he is eclectic in his philosophical methodologies. Alongside arguments that our knowledge of animal minds proceeds by imaginative identification lie empirical arguments drawing on facts about animal neurology. Alongside the endorsements of Hare lie counsels on the dangers of sentimentality and anthropomorphism. If Hare's methodology is implicitly anthropomorphic, we would expect Singer to distance himself from it, and we invite him to do so. We sense too that there has been a shift in his position. In the first edition of *Practical Ethics* Singer suggests that the domain of moral salience is the domain of beings into whose shoes we can manage to place ourselves. Plants don't count because there our imagination must draw a complete blank.⁴⁷ In the second edition he seems more cautious. The negative conclusion about the plants has gone. He now seems to contemplate extending the bounds of the moral beyond the bounds of sentience itself. We have said that the bounds of sentience transcend the bounds of imaginability – but to go beyond the bounds of sentience, as Singer seems now to contemplate, would be to go even further beyond the bounds of imaginability. So perhaps Singer has begun to do as we have counselled him to do here: namely, to refuse to base morality on facts about what we can imagine. If we are right about this apparent shift of direction, then we end our chapter not on a note of complaint, but on a note of applause.

Notes

Thanks are due to the audiences at Monash and ANU who heard this chapter; and especially to Martin Davies, Dale Jamieson, Peter Singer and Michael Smith.

- 1 Peter Singer, *Practical Ethics*, 2nd edn (Cambridge: Cambridge University Press, 1993), p. 69.
- 2 We leave open the question of the nature of *what it is like* knowledge – whether it is *sui generis*, whether it is a form of *knowledge how*, or whether it is ultimately reducible to *knowledge that*. All we need is the idea that there is a distinction between the knowledge that a creature is in pain, and the knowledge of what that pain is like. For a discussion of the issues and options see Frank Jackson, 'Epiphenomenal qualia', and David Lewis, 'What experience teaches', both reprinted in W. Lycan (ed.), *Mind and Cognition* (Oxford: Blackwell, 1990).
- 3 For a discussion of this merely apparent problem, see R. M. Hare, *Moral Thinking* (Oxford: Clarendon Press, 1981), pp. 119–21; Zeno Vendler's article 'Changing places?', in D. Seanor and N. Fotion (eds), *Hare and Critics* (Oxford: Clarendon Press, 1988); and Hare's reply to Vendler in that volume.
- 4 This is from Alvin Goldman's description of theory theory, 'Empathy, mind and morals', in M. Davies and T. Stone (eds), *Mental Simulation* (Oxford: Blackwell, 1995), p. 186; reprinted from *Proceedings and Addresses of the American Philosophical Association*, 66 (1992), pp. 17–41.
- 5 Or, more accurately, we do not *merely* theorize; as we discuss below, simulation involves the use of some theory, in particular a theory about relevant similarities between the thing that is doing the simulation and the thing that is simulated.
- 6 Suppose, for instance, that you can work yourself into such a state as to know what another's anger is really like; then it might be that the very simulation of that anger clouds your judgement as to which state you, and hence the other, are in.
- 7 We shall avoid detailed examination of the debates within philosophy and cognitive science about exactly how the activity of simulation is supposed to work; in particular about whether it really does involve the 'off-line' use of our normal mechanisms.
- 8 Goldman, 'Empathy, mind and morals', p. 185. See also Robert Gordon, 'Sympathy, simulation and the impartial spectator', *Ethics*, 105 (1995), pp. 727–42.
- 9 Goldman, 'Empathy, mind and morals', pp. 199–203; 'Simulation and interpersonal utility', *Ethics*, 105 (1995), pp. 709–26.
- 10 Peter Singer, *The Expanding Circle* (Oxford: Clarendon Press, 1981), p. 101.
- 11 *Ibid.*, pp. 123–4. A similar passage occurs on p. 92 of the first edition of *Practical Ethics*: 'Is there really any intrinsic value in the life of a weed? Suppose that we apply the test of imagining living the life of a weed I am about to pull out of my garden. I then have to imagine living a life with no conscious experiences at all. Such a life is a complete blank; I would not in the least regret the shortening of this subjectively barren form of existence. This test suggests, therefore, that the life of a being that has no conscious experiences is of no intrinsic value.'
- 12 For simplicity, we have formulated this characterization just in terms of the agent's preferences for what she might *do*; it should, more fully, make reference

to her preferences for the circumstances in which she might find herself, whether or not these result from her own doing. Our characterization is influenced by that given by Nagel in 'Foundations of impartiality', in *Hare and Critics*, p. 104. However, it is not identical to it. In particular, we have taken account of Hare's complaint, in his response to Nagel, that what is rationally desired in hypothetical cases 'does not depend *only* on what I want to happen to myself if I occupy the various positions, though it has to be consistent with this'; see *Hare and Critics*, pp. 249, 250. We have therefore formulated (3) as a conditional, rather than an identity statement.

- 13 *Moral Thinking*, p. 99.
- 14 Allan Gibbard, 'Hare's analysis of "ought" and its implications', in *Hare and Critics*.
- 15 Hare, 'Comments', in *Hare and Critics*, pp. 216–17.
- 16 Hare, *Freedom and Reason* (Oxford: Clarendon Press, 1963), p. 94.
- 17 *Moral Thinking*, pp. 91–2.
- 18 *Freedom and Reason*, p. 94. 'Most' since in some cases one is actually acquainted with the relevant experience, and hence has no need for imagination.
- 19 *Hare and Critics*, p. 217.
- 20 *Moral Thinking*, p. 99.
- 21 Peter Singer, 'Reasoning towards utilitarianism', in *Hare and Critics*, p. 152. The ellipses conceal an important qualification: it is only 'as long as we reject the idea that there can be objectively true moral ideals' that utilitarianism follows from universalizability. And the talk here is of ideals rather than desires, since Singer has been arguing that ideals should be thought of as desires.
- 22 *The Expanding Circle*, pp. 101ff.
- 23 See, for example, the contributions of Gibbard, Nagel and Brandt to *Hare and Critics*.
- 24 See David Lewis, *Counterfactuals* (Oxford: Basil Blackwell, 1973), pp. 24–6 for a discussion of the merits of the two approaches.
- 25 D. Kahneman and A. Tversky, 'The simulation heuristic', in P. Slovic, D. Kahneman and A. Tversky (eds), *Judgement under Uncertainty: Heuristics and Biases* (Cambridge: Cambridge University Press, 1988); discussed in Goldman, 'Empathy, mind and morals', p. 187.
- 26 Goldman, 'Simulation and interpersonal utility', p. 720.
- 27 *Ibid.*, p. 723.
- 28 Roy Sorenson, 'Self strengthening empathy: how evolution funnels us into a solution to the other minds problem', typescript, New York University, cited in Goldman, 'Simulation and interpersonal utility', p. 723. Since Sorenson's paper is not yet published, we do not address it here; but we are bewildered at the suggestion that it offers a solution to the other minds problem, and astonished at the suggestion that, when it comes to generation of human like-mindedness, evolution is supposed to be more relevant than culture.
- 29 John Harsanyi, 'Morality and the theory of rational behaviour', in A. Sen and B. Williams (eds), *Utilitarianism and Beyond* (Cambridge: Cambridge

University Press, 1982). This candidate possibility and most of the preceding ones are discussed by Goldman. He himself favours a comparison between the similarity assumption and our '*a priori*' knowledge of grammar, but his argument rests on mistakes about apriority.

- 30 *Practical Ethics*, 2nd edn, p. 329.
- 31 *The Expanding Circle*, p. 123.
- 32 *Hare and Critics*, p. 217.
- 33 *Freedom and Reason*, p. 224.
- 34 R. M. Hare, 'Why I am only a demi-vegetarian', in his *Essays on Bioethics* (Oxford: Clarendon Press, 1993), p. 228, and in this volume.
- 35 *Hare and Critics*, p. 283.
- 36 'What is it like to be a bat?', in *Mortal Questions* (Cambridge: Cambridge University Press, 1979), p. 169.
- 37 Peter Singer, *Animal Liberation* (New York: New York Review of Books, 1975), p. 124. See also the discussion there of the views of W. H. Thorpe, who argues compellingly that a humane treatment of domestic animals requires us to respect the innate behaviour patterns and needs that they have inherited from their wild ancestors; *ibid.*, pp. 134–5.
- 38 'What is it like to be a bat?', pp. 169–70.
- 39 For a review of the evidence, see David DeGrazia, *Taking Animals Seriously* (Cambridge: Cambridge University Press, 1996), pp. 105–15.
- 40 *Moral Thinking*, p. 93.
- 41 See David Lewis, 'Mad pain and Martian pain', in Ned Block (ed.), *Readings in the Philosophy of Psychology, volume 1* (Cambridge, MA: Harvard University Press, 1980), pp. 216–22; reprinted with a postscript in Lewis, *Philosophical Papers, volume 1* (Oxford: Oxford University Press, 1983), pp. 122–32.
- 42 Lewis, 'Mad pain and Martian pain'.
- 43 *Moral Thinking*, p. 44.
- 44 *Hare and Critics*, pp. 171–83.
- 45 Vendler, 'Changing places?', p. 173.
- 46 *Hare and Critics*, p. 220.
- 47 *Practical Ethics*, 1st edn, p. 92; see note 11 above.