In *Monty Python and the Holy Grail* (Terry Gilliam, Terry Jones, 1975), the Monty Python comedy about King Arthur and his intrepid knights, there is a scene early on in which a mob of villagers come up to Sir Bedevere (Terry Jones) in a state of high excitement. The villagers insist that they have found a witch and want to know if they may burn her. 'But how do you know she is a witch?' asks Sir Bedevere. It turns out that the villagers have rather limited grounds for their claim. The only justification they can come up with is that 'she looks like one', and even this evaporates when it turns out that they themselves have given her a false nose and dressed her as a witch. All is not lost, however. Sir Bedevere tells them that 'there are ways of telling whether she is a witch' and helps them to formulate an argument (of sorts) to back up their claim.

Amongst the many pleasures of this scene is the absurdity of the idea that a crazed witch-burning mob of villagers would stop in their tracks until they had satisfied themselves that what they were doing was reasonable. But this is what they do; and the activity they are engaging in here is critical thinking, the kind of activity in which one stands back from one's views and beliefs and seeks to evaluate them, to establish whether there are good arguments for them, or to determine whether those arguments that have been put forward for them are adequate. As I indicated in the Introduction, critical reflection is central to philosophy. In this book we have looked at a range of philosophical positions, a series of general accounts regarding what we can know, the nature of our selves, morality and our social and political existence. But philosophy is not just a series of general accounts of the world and ourselves, a set of doctrines to learn and repeat. These accounts emerge when we no longer simply accept our situation, when we stand back from our habitual ways of thinking and acting in order to critically examine and test the basic assumptions about the

world and ourselves that we normally take for granted. Philosophy is above all an exercise in thinking, the critical examination and weighing up of beliefs, claims and positions, including its own accounts of the world and ourselves. In this final chapter I want to focus on critical reflection itself, and to look at what in general is involved in critical thinking.

Reasoning and arguing

In its most general sense, thinking critically is a matter of determining whether beliefs, claims or positions are rationally justified, whether they are supported by arguments that conform to the principles of sound reasoning. The notion of reasoning being invoked here is reasoning in its most basic and minimal sense: reasoning as a matter of engaging in clear, connected thinking, of making appropriate connections between ideas. To be able to reason is to be able to see that if we accept certain ideas or claims, other ideas follow. It is to see that certain ideas provide a basis or ground for accepting other ideas. The importance of this ability is evident when we consider cases where the ability is missing or limited. For example, in *Beavis and Butthead Do America* (Mike Judge, 1997) the limited reasoning skills of the 12-year-old protagonists are made entirely evident in the film's opening scene. Here, Butthead wakes to see that the television set is missing. He notices that there is a broken window, footprints on the carpet, and men outside loading a television set onto a truck, but he finds it very difficult to connect all these together and come to the obvious conclusion: that his television set has just been stolen. Similarly, limited reasoning ability is suggested if we are unable to see that certain ideas are inconsistent, that if we hold certain ideas we cannot hold others without falling into contradiction. For example, in *Rain Man* (Barry Levinson, 1988) the mental competence of the autistic Raymond (Dustin Hoffman) is called into question by a psychiatrist because he affirms two conflicting claims: both that he wants to stay with his brother, and that he wants to go back with the doctor to the home for the mentally disabled.

To be able to reason in this minimal sense of being able to see that if we accept some ideas, others follow, means that we can use certain ideas or claims to support others. That is, we can provide arguments for those claims, in the philosophical sense of the term. This is not argument in the sense of a heated discussion or a quarrel. We may be trying to change the beliefs of others, but we are trying to convince them that a certain conclusion ought to be believed because there are good reasons for it. An argument, as philosophers understand

the term, is a chain of reasoning in which reasons are put forward to justify claims. So another way of characterizing reasoning is as the activity of developing good arguments, in which initial claims, or 'premises', provide good reasons for the conclusion we seek to establish. Being able to reason in this way also means that we are in a position to think critically about claims or positions that are put forward. Critical thinking asks whether there are good reasons for holding a belief or a position, as well as whether reasons that are put forward in support of them are adequate or relevant, whether there are other considerations that might call these beliefs or positions into question, and whether they are compatible or consistent with other positions held. Through such critical reflection we can not only evaluate the beliefs and arguments of others, but also assess our own views to see if they are worth holding.

In critical thinking, then, we are assessing arguments, various chains of reasoning that are put forward to support a conclusion, in accordance with standards of sound reasoning. These standards are themselves articulated in the area of philosophy known as logic, which seeks to provide an account of when, in general, ideas follow from other ideas, and thus when arguments work properly. This is not to say that when you are actually involved in arguing, you are explicitly referring to these standards or rules, having them in mind and then applying them to particular cases – any more than when you speak, you start with rules of grammar, and then apply them in order to construct sentences. Rather, logical principles, like grammatical rules, are usually followed implicitly and unreflectively in our language and thought. Logic seeks to make these rules explicit, in the same way that linguistics makes explicit the grammar of a language. Moreover, it is not to say that these rules can always be used to describe arguments as they unfold in practice. Although logical rules may be made explicit and set out, it is not always clear how they apply to actual arguments. Real arguments are not usually formulated with absolute clarity. However by setting out some of these ground rules, it is possible to say in general terms what kinds of arguments there are, and what counts as a good argument.

To begin with, there are clear cases where what is going on fails to amount to an argument at all. Arguments are more than mere assertions, and also more than straightforward disagreements. Assertions are bald claims, without any kind of justification or grounds, whereas an argument builds up a case for the claim being made. To return to the witch scene in *Monty Python and the Holy Grail*, the initial claim of the villagers, that they have found a witch, is little more than an assertion. As we saw earlier, what evidence they do put forward initially to

back up their claim quickly evaporates. Sir Bedevere helps them to construct an argument in support of their claim, which we will have a closer look at in a moment. Arguments should also be distinguished from mere disagreements, in which one party asserts an opinion, and the other either denies it or asserts an opposing opinion. This distinction comes out in the *Monty Python* television show's 'Argument Clinic Sketch' (episode 29). Michael Palin pays for a five-minute argument with John Cleese and finds that Cleese's response to everything he says is: 'no it isn't'. Eventually Palin quite rightly makes the point that Cleese is not arguing, because argument is more than simply 'the automatic gainsaying of anything the other person says'. An argument, Palin insists, is a 'connected series of propositions designed to establish a conclusion' (to which Cleese replies 'No it isn't!') (see Chapman *et al.* 1989, 86–9).

Now if arguments are indeed a connected series of propositions designed to establish a conclusion, there are some arguments where, given the supporting reasons or premises, the conclusion is guaranteed as a matter of logic. In these cases, if we accept the initial premises, the conclusion simply must follow. It can be relied upon as being absolutely certain. There is an example of this in the argument clinic sketch, where Palin is trying to argue that Cleese is not arguing with him. We can formulate the argument that Palin is running against Cleese in the following way: to simply deny whatever I say is not to argue with me; Cleese is simply denying whatever I say; therefore, Cleese is not having an argument with me. Here, once we accept the two premises, that Cleese is simply denying whatever I say, and that to deny whatever I say is not the same as having an argument with me, the conclusion follows inescapably that Cleese is not arguing with me. It is not just very likely or highly probable that this is the case, but necessarily so. If these premises are true, the conclusion simply must be true. To put this another way, given these premises, it cannot possibly be false. To accept the premises and deny the conclusion would be to fall into complete inconsistency.

Now this might seem to suggest that if we employ these sorts of arguments, where the conclusion follows with logical necessity from the premises, we will always reach absolutely reliable conclusions. However this is not quite true. To explore this further we can go back to Sir Bedevere's lesson on argument in the *Holy Grail*. After pointing out that there are ways of telling if someone is a witch, he asks the crowd: 'what do you do with witches?' Their reply: 'burn them!' What else, he asks, do you burn apart from witches? Along with cries of 'more witches', someone suggests: 'wood'. So why, asks Sir Bedevere, do witches burn? The crowd: 'because . . . they're made of

wood?' Sir Bedevere: 'good!' But despite Sir Bedevere's confidence, this is an absurd conclusion. Let us look more closely at what is going on here. What is the underlying argument in this case? Presumably the following: there is a claim that if something burns, then it is made out of wood; a further claim that witches burn; and the conclusion that witches, in order to burn, must be made out of wood. And this is one of those arguments in which the conclusion follows from the premises as a matter of logic. In that respect it is like Michael Palin's argument. In this case, once I accept the claim that if something burns, then it is made of wood, and the claim that witches burn, then I am committed to the conclusion that witches are made out of wood. In these circumstances, I cannot deny that witches are made of wood without falling into inconsistency.

So if the witch argument is one of these absolutely reliable kinds of arguments, why have we ended up with an unacceptable conclusion? What is the difference between this and Palin's argument? Well, it is true that in both cases the conclusion follows necessarily given the premises, but there is one key difference: in Palin's argument, the premises are true. It is true that an argument is more than just denying whatever Palin says, and it is true that Cleese is simply denying whatever Palin says. In the witch argument however, one of the premises is false. It might be true that witches burn, but it is not true that if something burns, it is made of wood. There are many things not made of wood that also burn. So this is where the witch argument goes wrong, why its conclusion is unacceptable. One of its premises is false. This means that we can only completely rely on such arguments to the extent that their premises are true. Good reasoning requires true premises. At the same time however, we can still say that to question the premises of the argument is not an objection to its logic, which has to do only with the form of the argument. As far as the form of the witch argument goes, how the premises relate to the conclusion, it is perfectly okay. Indeed, the witch argument and the Palin argument are identical in form, a form that can be expressed in the following schematic way:

$$\text{if p then q}$$
$$\text{p}$$
$$\text{therefore q}$$

Any argument that has this form is said to be logically valid, and what this means is precisely that if the premises of the argument are true, the conclusion

must be true. If an argument has a valid form and its premises also happen to be true, the argument is said to be sound. So whereas the witch argument is valid, Palin's argument is not only valid but sound.

The argument form we have just been looking at is known as *Modus Ponens* (Latin for 'affirmative mood'). There are a number of other logically valid forms of argument, arguments where the conclusion is guaranteed to be true if the premises are true, a few of which can be noted here. A second logically valid kind of argument, known as *Modus Tollens* ('denying mood'), has the following schematic structure:

$$\text{if p then q}$$
$$\text{not-q}$$
$$\text{therefore not-p}$$

In *Dr Strangelove* (Stanley Kubrick, 1964), group captain Lionel Mandrake (Peter Sellers) uses a *Modus Tollens* argument to try to convince General Jack D. Ripper (Sterling Hayden) that there is no Russian attack and the planes that have been sent in to bomb Russia can be recalled. If a Russian attack were in progress, Mandrake points out, we would not be hearing a civilian radio broadcast; but since the radio he is holding is indeed playing ordinary music, there cannot be any Russian attack in progress. (Unfortunately Ripper is unimpressed by Mandrake's impeccable logic, since he has become completely insane.) One further logically valid form of argument is the hypothetical syllogism, an argument that takes the following form:

$$\text{if p then q}$$
$$\text{if q then r}$$
$$\text{therefore, if p then r}$$

We can extract an argument along these lines from the *Holy Grail* witch scene. As the discussion continues, Bedevere gets the crowd to accept a number of premises: if something weighs the same as a duck, then it is made of wood; and if something is made of wood, then it is a witch. From this it follows that if the accused weighs the same as a duck, then she is a witch. As before, the content of Bedevere's argument is questionable, but this is not an objection to its form, which is perfectly valid. In the end, however, it remains the case that good reasoning requires both acceptable premises and valid logical form.

In general, arguments of this sort, in which the conclusion follows with absolute certainty given the premises, are known as deductive arguments. If the truth of the premises of a deductive argument can be established, that leaves no room for doubt about the argument's conclusion. The conclusion can be said to have been proved. However many of the arguments we employ in ordinary life are not of this sort. We are more likely to encounter another kind, in which the premises provide evidence for the conclusion, but do not guarantee it. This is the kind of reasoning often employed by movie detectives. *Sherlock Holmes in Washington* (Roy Neill, 1943) opens with the famous detective (played by Basil Rathbone) in good form. He expresses surprise that Watson (Nigel Bruce) has decided not to go to the cricket that afternoon, even though Watson has said nothing about his intentions. When Watson, amazed, asks how he knew this, Holmes replies

> Elementary, my dear Watson; invariably when you go to a cricket match you fill your flask with my best whisky. Just now I noted in passing that the flask was empty. A single whiff informed me that it had recently been filled. Obviously after filling it you had poured the contents back into the bottle. Therefore, you had changed your mind about the cricket match.

> (see Davies 1978, 73)

Here, Holmes is working on the basis of what he has observed of Watson's behaviour, and also of the behaviour of whisky and flasks. He has seen that Watson regularly fills his whisky flask before going to a cricket match. Had he simply seen that the flask was filled, he would have surmised that Watson intended to go to the cricket. But now he notes that the flask is empty, though it smells of whisky, which allows him to infer that it was filled and then the whisky returned to the bottle. And this allows him to further surmise that Watson, having filled the flask, was intending to go to the cricket, but having emptied it, has changed his mind.

Clearly there is a process of reasoning going on here, but despite Holmes referring to what he does as 'deduction' (the film itself announces him at the beginning as the 'supreme master of deductive reasoning') it is not that sort of reasoning. Unlike deductive reasoning, the conclusion here is not guaranteed given the premises. There is no necessary link between Watson filling his whisky flask, and his going to the cricket. We can perfectly well imagine that Watson might fill his whisky flask and not go to the cricket,

without falling into inconsistency. This is simply a regular sequence of events that Holmes has observed. On the basis of this experience, Holmes has made a generalization, that whenever Watson fills his whisky flask, he is going to go to the cricket. Given this, he is able to argue that if Watson now fills his whisky flask, this provides evidence that he will be going to the cricket. Similarly, there is no necessary relation between smelling whisky on the flask, and its having been filled earlier with whisky. Holmes has observed that whenever whisky flasks are emptied, the smell of whisky tends to linger for a little while. And he makes a generalization on this basis, that whenever he smells whisky on an empty whisky flask, that flask has not long since been emptied. So smelling the whisky on Watson's empty flask now provides evidence that he has recently emptied his flask. It is these two lines of reasoning, together, that lead Holmes to his conclusion that Watson was going to the cricket, but has changed his mind.

This kind of reasoning, in which we take a number of specific cases and generalize from them, is known as inductive reasoning. Our most basic expectations about the world arise from it. We reason in this way when we conclude that the sun will rise tomorrow, that bread will nourish us, that objects will fall when dropped, because they have done so in the past. But it is important to remember that this kind of reasoning is never foolproof. Various things can go wrong. The examples I am basing my generalization on may be in some way unrepresentative. For example, Watson may come to think that all detectives are musically-inclined eccentrics, but this might be because he has not had the opportunity to meet other detectives like *The Name of the Rose*'s William of Baskerville, or *Chinatown*'s J.J. Gittes. He has generalized about all detectives on the basis of an unrepresentative sample. A further problem, discussed by David Hume in Section 4 of his *Enquiry Concerning Human Understanding*, arises with this kind of reasoning when we consider whether the future will always be like the past. Inductive arguments tend to rely on what has happened in the past to predict what will happen in the future, and there is an underlying assumption here, that the future will, at least in all relevant aspects, always be like the past. But there is nothing to guarantee that this will be so. We cannot argue, for example, that because the future has always been like the past in the past, it will continue to be so. To think that, we would have to assume precisely what we are trying to establish, namely that the future will always be like the past. We can only be sure that the future has, so far, turned out to be like the past; we cannot be sure that it will continue to be so (see Hume 1975, 32–9).

Yet even if these inductive arguments are never foolproof, even if they do not establish their conclusions with absolute, deductive certainty, they nonetheless provide evidence for their conclusions. They make the conclusion more probable or likely. We can speak of degrees of likelihood that the conclusion is correct, given the evidence; and we can say that some inductive arguments are stronger than others. The basic rule here would be to generalize as little as possible. An inductive argument is stronger, the less one generalizes from experience. For example, having observed Watson's behaviour with the whisky flask, Holmes would have strong grounds for saying that whenever Watson fills his whisky flask he is heading out to the cricket, but less strong grounds for the more audacious generalization, that whenever anyone fills their whisky flask they are heading for the cricket. Equally, inductive arguments can be strengthened by increasing the number of cases from which we generalize. So to improve his argument, Holmes could look at the behaviour of a large number of people. If he studied the bulk of the population and found that whenever they filled their whisky flasks they headed out shortly after for the cricket, he would have a stronger basis for the generalization that whenever anyone fills their whisky flask, they are heading for the cricket. Still, it remains the case that no matter how strong the evidence, we can never have complete certainty in inductive reasoning. The Princess (Robin Wright) in Rob Reiner's *The Princess Bride* (1987) is sure that she and her dashing rescuer Westley (Cary Elwes), on the run from the unpleasant Prince, will never survive the dreaded Fire Swamp. But Westley's response shows the right degree of caution about inductive inferences, no matter how strongly based: 'Nonsense, you're only saying that because no one ever has.'

When arguments go wrong

It is possible, then, to discern two basic types of argument, deduction and induction. We have also seen some of the possible problems that can arise with inductive arguments. Let us now look at some of the other ways arguments can fall short of being good arguments; and in particular, at various fallacies that can afflict reasoning. A fallacy is an argument that appears to be reasonable and which thus tends to persuade us, even though it is in fact a bad argument. For example, an argument can appear to be deductively valid, to have the form of a valid argument, but in fact be deductively invalid. Where the problem is in the form of the argument, we speak of formal fallacies. Informal fallacies involve no violation of logical form, but suffer from some

other kind of problem. We will shortly look at three kinds of informal fallacies: to do with language and linguistic confusion, to do with using premises in your argument that are irrelevant to what is at issue, and to do with inadequacies in the evidence being put forward for the conclusion we are trying to establish. But first, let's look at some formal fallacies.

Formal fallacies

Amongst the fallacies resulting from the form of the argument, the formal fallacies, are the two known as 'affirming the consequent' and 'denying the antecedent'. In the fallacy of affirming the consequent, we present an argument which looks like the valid *Modus Ponens* form 'if p then q; p; therefore q'. However in affirming the consequent we put things backwards and argue:

> if p then q
> q
> therefore p

An example of this appears in *Rear Window* (Alfred Hitchcock, 1954). L.B. Jefferies (James Stewart) has been watching his neighbour, whom he suspects of murder, wrapping a butcher knife and a small saw in newspaper. He tells his girlfriend Lisa (Grace Kelly) about it, adding that there's 'something terribly wrong'. He fancies indeed that this proves his suspicions about his neighbour. However to think this way is to fall into the fallacy of affirming the consequent. It is to argue along the following lines: if his neighbour was a murderer, he would have a knife and saw; he has a knife and saw; therefore he is a murderer. But as Lisa points out, this establishes nothing. Many people have knives and saws around their houses, but it does not follow that they intend to commit murder. After all, knives and saws can be used for quite innocent purposes. Later on his sceptical detective friend Doyle (Wendell Corey) joins in, reminding him of the hundreds of knives Jefferies himself has owned in his lifetime, and telling him quite rightly that 'Your logic is backward' (see Sharff 1997, 129–30, 149).

In the fallacy of denying the antecedent, we have an argument that looks like the valid *Modus Tollens* form 'if p then q; not q; therefore not p', but instead we are arguing:

> if p then q
> not p
> therefore not q

The fallacy of denying the antecedent appears in *Interiors* (Woody Allen, 1978), when Pearl (Maureen Stapleton) says at one point: 'You'll live to be a hundred if you give up all the things that make you want to.' This is a nice, humorous line but at the risk of ruining it let us take it completely seriously and look at the reasoning behind such a statement. The reasoning here is presumably as follows: if you do enjoyable things like smoking, drinking and having sex, this will shorten your life span; therefore, if you give up these pleasures, you will live a long life (but also a thoroughly boring one). However this is fallacious reasoning. To give up these things only means that you will not die from them, but there are plenty of other causes of premature death, such as being hit by a bus. All that can validly be said here is that if doing enjoyable things like smoking, drinking and having sex shortens your life, then if you do happen to end up living a long life, we can be sure that you didn't do these enjoyable things.

Informal fallacies of language

Turning now to informal fallacies, which involve a problem other than violation of logical form, let us begin with informal fallacies of language. These can arise from unclarity in the way things are expressed or formulated. One kind of unclarity is vagueness. A vague term or claim is one whose meaning is not precisely determined. For example, we speak of people as being bald, but there are degrees of baldness, and it is not always clear at what point one can be said to be bald. Vagueness becomes a problem for argument when vague terms or expressions are used to try to persuade people, in place of argument. In *The Next Best Thing* (John Schlesinger, 2000), Madonna's boyfriend Ben (Benjamin Bratt) exploits vagueness to get a table in a restaurant by saying 'would it make a difference if I said that Harrison Ford was in our party?' Later, when the maître d' complains that a trick has been played on the restaurant, Ben can rightly point out that strictly speaking he never said that Harrison Ford *was* in their party. But although vagueness can mislead, it is not easy to remove it completely from language, as Dudley Moore discovers in *Bedazzled* (Stanley Donen, 1967). Here, chronically shy Stanley Moon (Moore), infatuated with a waitress (Eleanor Bron), sells his soul to the Devil (Peter Cook) in return for seven wishes. It seems that Stanley is now in a position to realize his desires; but each time he describes a situation he wants realized, the Devil exploits vagueness and other shortcomings in his description to frustrate him. Thus for example when Stanley specifies that he wants

himself and his waitress to be living in the country, each in love with the other, he finds that she is married to a saintly husband (played by the Devil) and that neither she nor Stanley can engage in adultery because they both admire her husband too much (see Wilmut 1980, 111–14).

Another form of unclarity is ambiguity, which refers to words (as well as phrases and sentences) that have more than one meaning. For example, 'bank' can mean a river bank or a financial institution. *Being There* (Hal Ashby, 1979) is based largely on ambiguity and the resultant misunderstanding. Here, the child-like gardener Chauncey (Peter Sellers), having lived all his life in his employer's house, finds himself on the street after his employer dies and the house is sold. After being hit by a limousine carrying Mrs Rand (Shirley Maclaine), he recuperates at the house of her powerful businessman husband (Melvyn Douglas); and here he rises to political influence because his naive pronouncements about life and gardening are ambiguous enough to be interpreted as examples of great profundity. Thus when he says 'my house was shut down', Mr Rand takes him to mean that his business house was closed down; when he says 'I'm a good gardener', Rand replies that that's what a businessman is, a good gardener; when he tells Mrs Rand that he 'likes to watch', meaning watch television, she takes this to mean that his sexual tastes run to voyeurism; and so on. When a word is used ambiguously in an argument, and the argument depends on that ambiguity, we have the informal fallacy of equivocation. In the trial over the teaching of evolution portrayed in Stanley Kramer's *Inherit the Wind* (1960), fundamentalist Matthew Brady responds to Henry Drummond's (Spencer Tracy's) cross-examination with equivocation. Drummond points out that according to physical laws, if the earth had stopped spinning as the Bible reports at one point, it would have had catastrophic consequences. Brady's response is that since these laws were made by God they can be changed, cancelled or used as God pleases. But this response relies on an ambiguity in the term 'laws'. Laws in the sense of physical laws are descriptions of natural regularities and are discovered, not made; Brady treats them as laws in the sense of enacted rules, which have to be made and which can be changed or altered by their makers. The same ambiguity is exploited in the fallacious argument sometimes used for God's existence, that natural laws must have a law-maker because they are laws and all laws must have a law-maker.

Along with the failure to recognize ambiguity, unclarity arises from the failure to observe the so-called use/mention distinction. Most of the time we simply use words, but sometimes we want to mention them, to talk about the words themselves. If we are not careful about distinguishing between use and

mention, misunderstandings can arise. In *Monty Python's Life of Brian* (Terry Jones, 1979), Brian (Graham Chapman), born in a manger just down the road from Jesus, becomes a reluctant messiah. The stoning scene early on in the film indicates the importance of observing the use/mention distinction. Official (John Cleese): 'You have been found guilty by the elders of the town of uttering the name of our lord and so as a blasphemer you are to be stoned to death.' Man: 'Look, I'd had a lovely supper and all I said to my wife was, "That piece of halibut was good enough for Jehovah".' Cleese: 'Blasphemy!' As neither Cleese nor the crowd make any distinction between merely mentioning as opposed to actually using the offending word, it is impossible even to discuss the issue. Eventually Cleese himself becomes the victim of this confusion. Cleese (to Man): 'I'm warning you, if you say "Jehovah" once more. . . .' Someone throws a stone at him. 'Right. Who threw that? . . . Stop it, will you. Now look, no one is to stone anyone until I blow this whistle. *Even* . . . and I want to make this absolutely clear . . . *even* if they do say "Jehovah".' At this point the crowd rain stones on him and crush him with a huge rock (see Chapman *et al.* 1979, 11–12).

Language can also be involved in fallacious thinking when things are labelled in such a way that the conclusions we want the audience to draw about them are suggested by the labels, rather than being supported by reasons. For example, to speak of an individual in non-personal or inhuman terms, as an 'it', or an 'animal', is already to load any debate concerning that individual in a certain way. Something of this goes on in the *Star Trek* 'Measure of a Man' episode where the issue is whether the android Data is property, able to be dismantled, studied and replicated, or a person, with the right to refuse such treatment. The very way the defendant is referred to becomes significant. The scientist who wants to dismantle Data repeatedly refers to the android as 'it', which loads things in favour of the android being considered property, a mere thing. For his part, Captain Picard (Patrick Stewart) who is defending Data continually uses 'he', pushing the idea that Data is a person. The ensuing discussion also points to another way in which labelling can be used to sway an audience. This is through the use of euphemistic labels to replace words that might come across as too harsh, painful or offensive, and thus to sanitize what we want to talk about and promote. Picard's arguments on Data's behalf include the claim that to talk as the scientist does of creating and using a whole generation of Datas, and of treating them as disposable property, is to employ a comfortable euphemism, 'property', to obscure what would really be going on, namely slavery.

Euphemism can thus play a pernicious role in shielding things from critical examination or evaluation. Government agencies and the military seem particularly adept at this sort of whitewashing, a fact highlighted in a number of films. In Francis Ford Coppola's hallucinatory Vietnam movie *Apocalypse Now* (1979), Martin Sheen is told that his mission is to go into the jungle, not to kill the mad Colonel Kurtz, but to 'terminate' him 'with extreme prejudice'. In *Dr Strangelove*, General Buck Turgidson (George C. Scott) turns military euphemism into an art form. Discussing the options for the United States now that the insane General Ripper has sent nuclear bombers into the Soviet Union, he urges President Muffley (Peter Sellers, again) to 'back them up with everything we've got' before the Soviets have a chance to retaliate. To support his claim, he argues:

> We have to choose between two admittedly regrettable but distinguishable post-war environments, one where you have a hundred and fifty million dead and one where you have twenty million killed . . . I'm not saying we wouldn't get our hair mussed. But I do say no more than ten to twenty million people killed, tops, depending on the breaks.

Here the military language is euphemistic in the extreme. There are 'post-war environments'; we may 'get our hair mussed'. As the President points out, what the general is actually talking about is mass murder, death on a colossal scale. Even 'war' here has become a sanitizing euphemism.

Informal fallacies of relevance

A number of informal fallacies, then, involve confusion in language. Another general kind of informal fallacy has to do with using premises in your argument that are irrelevant to what is at issue. One such fallacy of relevance is the *ad hominem* argument. Here, instead of trying to disprove the truth of what has been claimed, one attacks the person making the claim, or the group to which they belong. A number of such *ad hominem* arguments can be found in *Twelve Angry Men* (Sidney Lumet, 1957). In this Hollywood classic, Henry Fonda plays juror #8, the architect, the only person on a jury holding out for a not guilty verdict for a boy accused of killing his father, and who uses argument to gradually turn the case around for the defendant. As the discussion unfolds, various forms of fallacious reasoning are exposed in the

other jurors, including examples of the *ad hominem* fallacy. These come from juror #10 (Ed Begley), the bigoted juror. At one point #10 says:

> Now you're not going to tell us that we're supposed to believe
> that kid, knowing what he is. Listen, I've lived among 'em all my
> life. You can't believe a word they say. You know that. I mean,
> they're born liars.
>
> (Garrett *et al.* 1989, 180)

So his argument is that the testimony of the defendant, a slum kid from an unidentified minority, that he is innocent, should not be believed, because he is one of 'them'. Later, he adds: 'Look, you know how these people lie! It's born in them! . . . That's how they are! By nature! You know what I mean?' (312–15). But as the old man, juror #9 (Joseph Sweeney), rightly points out: 'I don't think the kind of boy he is has anything to do with it. The facts are supposed to determine the case' (281).

   Another fallacy of relevance is the appeal to authority. We often need to rely on experts, but it is possible to rely too heavily on authority and to fail to take other considerations into account, or to appeal to an expert who is not an expert in the relevant field or otherwise untrustworthy. To use improper appeals to authority to support our conclusion is to commit the fallacy of appeal to authority. For example, in *Inherit the Wind* the fundamentalist Matthew Brady underpins his opposition to evolution by appealing to the invincible authority of the Bible. His view is that everything in the Bible should be accepted exactly as it is given there. Here we have an instance of excessive reliance on authority, a reliance that excludes all other considerations. In *Twelve Angry Men*, a fertile source of informal fallacies of all kinds, juror #1 (Martin Balsam), the foreman, appeals to the testimony of the court psychiatrist to the effect that the defendant has 'strong homicidal tendencies', as evidence for the boy's guilt. In this case however the expert evidence is considered more critically. Juror #11 (George Voskovec), the immigrant, points out that other considerations need to be taken into account, in particular that psychiatric tests can only indicate a potentiality to kill, which proves nothing; many of us may be capable of murdering, but few of us go ahead and do it (see Garrett *et al.* 1989, 296–9).

   A further fallacy of relevance is the appeal to anger or pity. Here we attempt to persuade people not through reason but by arousing their anger in support of a position, or by making them feel sorrow, sympathy or anguish, where

such feelings are simply not relevant to the issue at stake. In *Twelve Angry Men*, when Henry Fonda begins to win people over to his side, juror #3 (Lee J. Cobb), the angry juror, tries to discredit him by accusing him of committing this kind of fallacy, of swaying the other jurors through an appeal to pity. Hence when juror #5 (Jack Klugman), the slum-dweller, changes his view from guilty to not guilty, #3's response is:

> Brother, you're really something! You come in here and vote guilty
> like everyone else, and then this golden-voiced preacher here starts
> to tear your heart out with stories about a poor little kid who just
> couldn't help becoming a murderer.
>
> (216)

Later, as others start to vote not guilty, juror #3 accuses them of giving into pity: 'This is getting to be a joke . . . I mean everybody's heart is starting to bleed for this punk little kid . . .' (258). Eventually, he accuses Fonda directly:

> You come in here with your heart bleeding all over the floor about
> slum kids and injustice, and all of a sudden you start getting
> through to some of these old ladies in here! Well you're not getting
> through to me! I've had enough!
>
> (272)

   Finally, the fallacy of irrelevant conclusion (also known as *non sequitur*) arises when an argument purporting to establish a certain conclusion in fact proves something different. The premises of the argument and the supposed conclusion are then essentially unrelated, and the whole argument becomes logically irrelevant. In *Star Trek: The Next Generation*'s trial of Data, Picard argues that the prosecution has not established its case for this very reason. The point at issue is whether Data is a person, which the prosecution seeks to show is not the case by arguing that the android is a machine, and was created by a human. Picard, for the defence, argues that these arguments do not do what they purport to do because they are entirely irrelevant to the question of Data's personhood. They may establish that Data is a machine, but then human beings are also machines of a certain type; and they may also establish that Data was created by a human being, but human children are also created by human beings, out of the building blocks of their parents' DNA. Whether Data is a person or not can only be established using quite different considerations,

by determining whether the android satisfies the conditions of personhood, which Picard then goes on to argue for.

Informal fallacies of evidence

The third general kind of informal fallacy to be considered here is the fallacy of evidence, which involves inadequacies in the evidence being put forward for the conclusion we are trying to establish. A common fallacy of evidence is simply jumping to conclusions, accepting a conclusion as settled before all the relevant evidence is in. There are a number of instances of this in *Twelve Angry Men*. When the jurors are first asked why they think the accused is guilty, juror #6 (Edward Binno), the working man, supports his view as follows:

> I was looking for a motive . . . that testimony from those people across the hall from the kid's apartment, that was very powerful. Didn't they say something about an argument between the father and the boy around 7 o'clock that night?

In response Fonda points out that this is an overhasty conclusion:

> I don't think that's a very strong motive. This boy has been hit so many times in his life that violence is practically a normal state of affairs for him. I can't see two slaps in the face provoking him into committing murder.
>
> (Garrett *et al*. 1989, 189–90)

Soon after, juror #4 (E.G. Marshall), the stockbroker, offers another overhasty argument for the boy's guilt: 'He was born in a slum. Slums are breeding grounds for criminals . . . Children from slum backgrounds are potential menaces to society.' Juror #5 rightly points to the reckless generalization this involves: 'I've lived in a slum all my life . . .' (192–3). In other words, he points out that living in a slum does not automatically turn you into a criminal, or even a potential criminal.

There are a number of other fallacies of evidence. Begging the question is the fallacy of assuming as a premise the very conclusion that the premise is supposed to prove. In effect, one is arguing in a circle, arguing that something is true because it is true. In *Twelve Angry Men*, juror #3, the angry man, comes up with the following argument: 'D'you feel like seeing a proven murderer

walking the streets?' (217). This is entirely circular because his argument for the boy's being a murderer is that to acquit him would be to set free a proven murderer. Another fallacy of evidence is the appeal to ignorance, the fallacy of supposing that if there is no evidence against a certain claim, then this is a reason for believing that the claim is true. In *Twelve Angry Men*, juror #2 (John Fiedler), the bank-teller, falls into this fallacy: 'I thought it was obvious [that the boy was guilty] from the word go. I mean nobody proved otherwise' (183). In other words, the failure to prove the boy not guilty is wrongly put forward here as evidence for the view that the boy is guilty. The fallacy of false dichotomy operates by presenting a range of alternatives on an issue that are merely assumed or are misleadingly represented as exhaustive. As a result, the number of possible alternative positions there might be on the issue is unjustifiably restricted. An example comes from *The Crucible* (Nicholas Hytner, 1996), an adaptation of Arthur Miller's play about the 1692 Salem witch trials. When John Proctor (Daniel Day-Lewis) tells the trial judge Danforth (Paul Scofield) that the girls making the accusations of witchcraft are frauds, and that he has proof, the judge's response is that 'a person is either with this court or against it. There be no road in between. Only good and evil' (Miller 1996, 67). The fallacy here is to hold that the only alternatives are to support the court's hunt for witches, or to stand opposed to it and thus show oneself to be in league with the witches, if not a witch oneself. There is a third option being excluded here, which Proctor is trying to present, namely that the witch hunt is itself misconceived and without foundation.

Another fallacy of evidence is that of false analogy. We often argue by analogy, to the effect that if two things are similar in some respects, they will be similar in other respects as well. This is a form of inductive inference, and so it is not a foolproof, deductively valid approach, but properly used it provides evidence for a claim. In *Twelve Angry Men*, Fonda uses an argument by analogy to question one of the most important pieces of evidence against the boy: that his alibi did not seem to hold up. Though he claimed to be at the movies at the time of the killing, he could not remember the name of the film or who starred in it when questioned by the police. Fonda asks juror #4, the stockbroker, whether he can remember the movie he has seen a few days before, or who was in it. The stockbroker has some difficulty doing so, and Fonda points out that if it's possible for this gentleman to have difficulties remembering details of films he has just seen, then it is also perfectly possible for this boy to have done so (Garrett *et al*. 1989, 295). The fallacy of false analogy would arise if there were significant differences between the two

cases. Fonda is careful to stress the similarities between the stockbroker and the boy, that both have difficulties remembering the same kind of event after a similar period of time. But if he had tried to argue, for example, that it is possible to be unable to remember vitally important details soon after an event because most people cannot remember trivial details many years later, the two cases are now too dissimilar for the analogy to reasonably hold, and he would have fallen into the fallacy of false analogy.

A final fallacy of evidence is the so-called *post hoc* fallacy (from the Latin 'post hoc, ergo propter hoc', i.e., 'after this, because of this'). This is the fallacy of presuming that something that precedes an event is the cause of that event, or that something which comes after an event is caused by that event. The two events may regularly occur one after the other, but this is not the same thing as one event causing the other. The most flagrant examples of such thinking occur when there is not even a regular correlation to speak of, where one event has simply occurred after the other, and we imagine that one has brought about the other. We may pray for the traffic lights to change, and they do change, but this does not mean that our prayers brought about the change. An example of such thinking appears in *Dr Strangelove*. General Ripper, having sent the bombers into Russia, explains his views on the evils of fluoridation to Captain Mandrake: 'Do you realize that fluoridation is the most monstrously conceived and dangerous communist plot we've ever had to face . . . Do you know when fluoridation first began? 1946. How does that coincide with your post-war commie conspiracy?' Here, Ripper commits the *post hoc* fallacy by arguing that because fluoridation was introduced after World War Two around the time of the emergence of the Soviet state as a world power, it must be part of a communist plot.

Closed thinking

In a number of ways, then, bad arguments can have the appearance of good ones, and can thereby have persuasive power. The use of these deceptive arguments can be unintentional, the result of lack of understanding or carelessness, or it can be part of a deliberate attempt to mislead or manipulate. Whatever the reason, fallacious reasoning can give unjustifiable positions the appearance of being justified, or persuade us of positions that are not in fact defensible. One of the important tasks of critical reflection is to evaluate the arguments being used to justify or promote various positions in order to determine whether dubious forms of reasoning are involved. We come now

to another general kind of problem that can arise in our thinking, which has to do with the grip that positions, once they have been acquired, can have on our arguments and reasoning.

It might seem that a view of the world that is confirmed by everything we encounter, and which can explain away any inconsistencies we come across, would be a desirable thing. This however is the error that conspiracy theorists typically fall into. For them, everything is part of the great conspiracy. If there is no evidence to support the conspiracy, or important evidence is lacking, it has obviously been removed to hide what is going on. If anyone criticizes the conspiracy theorist, they show themselves to be part of the conspiracy. Every objection can be dealt with. But this unshakeability is not so much a sign of the superiority of the conspiracy theorist's views, as of the difficulty of putting these views to any kind of test since there is no way in which they can possibly fail. The problem here is sometimes referred to as the fallacy of the irrefutable hypothesis, or the fallacy of invincible ignorance. It can involve a straight-forward refusal to consider evidence that is contrary to some cherished belief; or we might interpret whatever evidence, even the most hypothetical, that might be put forward to falsify a claim, in a way that twists it into evidence for the claim. Either way, we end up with a closed, dogmatic, irrefutable system of thinking in which everything that we encounter seems to confirm our beliefs, and nothing can be put forward to call them into question.

Such closed thinking is not confined to conspiracy theorists. It appears whenever a viewpoint or a belief system becomes all-consuming and unquestionable, as for example in religious fundamentalism and political fanaticism. Such thinking becomes an object of parody in *The Life of Brian*. On the religious side, Brian (Graham Chapman), forced to pose as a prophet to escape from pursuing Roman soldiers, finds himself being hailed by the crowd as the Messiah. There is nothing he can say or do to dissuade his new admirers. The more he protests, the more this is taken as proof of his divinity. When Brian tells the crowd to go away, this is taken as a blessing; they tell Brian he has given them a sign of his divinity because he has 'brought them to this place', even though they have simply followed him; finally, when he says, point blank, 'I am not the Messiah, will you please listen!', the response is: 'Only the true Messiah denies his divinity' (see Chapman *et al.* 1979, 41–3). Even outright denial is thus interpreted in a way consistent with the original belief. Political fanaticism also comes in for attention in the film, in the form of the Judean People's Front, an anti-Roman guerrilla organization. Convinced of the rightness of their cause, the Front is not interested in anything that

might bring their struggle into question. When their leader Reg (John Cleese) asks rhetorically 'what have the Romans ever done for us?', and his followers come up with a long list, he remains unmoved: 'Alright, but *apart* from better sanitation and medicine and irrigation and public health and roads and a freshwater system and baths and public order . . . what have the Romans done for us?' (20).

Cleese himself has stated that *The Life of Brian* 'is about closed systems of thought . . . systems by which whatever evidence is given to a person, he simply adapts it, fits it into his ideology' (Cleese quoted in Wilmut 1980, 250). And once established, such thinking is clearly hard to shake. If all opposing considerations and arguments are either ignored or interpreted so as to confirm or reinforce one's position, criticism becomes enormously difficult. In *The Name of the Rose*, once the Inquisitor has accused someone of devil-worship and heresy, no counter-argument is possible. It is impossible to dispute the claim and defend those accused without oneself being suspected of complicity in the crime. Thus, when William of Baskerville tries to defend those accused of the murders taking place in the monastery, Inquisitor Bernard Gui accuses him of heresy, of 'having sought to shield a heretic from just punishment by the Inquisition'. Similarly in *The Crucible,* once someone is accused of witchcraft, it is impossible to dispute this. If the accused protests their innocence, this is only to be expected, for a witch will of course deny the crime; and anyone who questions the veracity of those doing the accusing, or who speaks up for those accused, runs the risk of themselves being accused of witchcraft. Even the trial judge, when he questions the girls who have been accusing people of witchcraft to test their honesty, finds himself threatened with complicity by their leader Abigail Williams (Winona Ryder): 'do you think you are so mighty that the devil cannot turn your wits?' (Miller 1996, 74).

In the end, such closed thinking cannot tolerate any contrary evidence or argument, any consideration or viewpoint that differs from it. In *The Crucible,* as we saw earlier on, if one is not for the court one is against it, and hence likely to be in league with evil. No further alternatives are possible. But this intolerance of alternatives also comes at a cost. Such thinking is also closed to any new or different thinking, to any ideas that go beyond the limits of the existing system of beliefs. It is thus unable to develop or expand. This immobility is evident for example in *Inherit the Wind* during Henry Drummond's cross-examination of the fundamentalist Matthew Brady. Here, Brady makes heroic efforts to maintain the literal truth of biblical claims, however outlandish

they might seem. When questioned about unlikely events reported in the Bible such as a man being swallowed by a whale, or the sun standing still in the sky, Brady remains unfazed. 'The Bible satisfies me', he proclaims, to which Drummond replies sarcastically: 'It frightens me to think of the state of learning in the world if everyone had your driving curiosity.' Drummond's point is that thinking of the fundamentalist sort is closed to new ideas and new forms of understanding which do not fit into the preferred view of the world; and that as a result, this is a form of understanding that cannot develop or grow. It is condemned instead to stand still, to repeat itself, and the closed system of beliefs becomes a prison.

We might perhaps want to dismiss closed thinking as the province of conspiracy theorists, blind fanatics, dogmatic fundamentalists and the like. But as the twentieth-century thinker Karl Popper (1902–1994) has pointed out, such thinking can also afflict perspectives that claim to be scientific (see Popper 1972, 34–5). He cites amongst his examples certain psychoanalytic theories which can provide a story to account for any human behaviour, and which no conceivable human behaviour is thus able to contradict; and those Marxists who endlessly reformulate their theory to keep any threatened falsification by historical events at bay. In both cases, the theories have the unfalsifiable certainty of religious faith. Their ability to explain everything they encounter, Popper argues, is precisely what is wrong with these theories. It means that they can never really be put to the test. Popper also points to the psychological appeal of these unfalsifiable theories. Their ability to explain everything means that their holders know in advance that everything that happens to them will be understandable. This provides not only a sense of intellectual mastery but also, the emotional sense of secure orientation in the world (see Magee 1973, 45). Here perhaps is the great attraction of closed thinking in general. An unquestionable system of beliefs keeps all uncertainty and risk at bay. It allows us to enjoy complete security and certainty, and provides a firm standpoint from which to understand and to proceed in the world.

It might even be argued that we have a general tendency towards closed thinking, or at least a degree of resistance to critical questioning of our beliefs, because of our need for some standpoint from which to proceed. We need some framework of beliefs in order to make sense of the world and to function within it. Otherwise, we would be confronted with a meaningless, unintel-ligible confusion of experiences and events. Our belief structures provide a frame of reference in terms of which to interpret our experiences, to pick out

what is important to us and ignore what is not. But what this also means, as Joel Rudinow and Vincent Barry point out, is that '[t]he way we deal with incoming information is determined in large part by what we already believe' (Rudinow and Barry 1994, 12). As a result it is not easy to question these beliefs in the light of new experiences, since they provide the frame of reference in terms of which we evaluate these experiences. We are more likely to view the world, and ourselves, in a way that confirms our existing outlook. For the same reason, we are more likely to steer clear of or dismiss beliefs, values and attitudes that are widely contrary to the ones we hold, than to consider that our views might be limited or questionable. And the emotional benefits of this cannot be discounted. For all of us, having a framework in terms of which things make sense gives us emotional security. To have one's world-view called into question is often acutely painful, unsettling and threatening.

So, far from being confined to fanatics and fundamentalists, a tendency towards closed thinking, a resistance to anything that might unsettle and change our existing beliefs, is arguably a widespread tendency in our thinking. The stubborn jurors in *Twelve Angry Men* are, at least initially anyway, resistant to considerations that might challenge their positions, but they are not fanatics. Far from it. They are recognizably ordinary individuals. They each bring a certain perspective to the proceedings, a way of thinking about the world which colours how they view the accused and the evidence presented in the trial, and which their various arguments and justifications are designed to preserve. This is a very understandable way of proceeding. However, to point to a widespread tendency is not to say that it is impossible for us to critically scrutinize and question our beliefs, simply that it requires effort. And it remains important that we make this effort, to the extent that fixed perspectives and closed forms of thinking imprison our understanding and make us intolerant of alternative ways of thinking. Critical scrutiny which shows up the limits of an existing way of thinking, its inability to deal with certain facts or arguments, opens up the possibility of escaping from its confines, recognizing that there might be different ways of seeing things, and coming to think in new and different ways.

This critical scrutiny of closed forms of thought can even be applied to critical thinking itself, understood as a matter of weighing up our beliefs and positions to determine whether they are rationally justified. It is possible to become closed and dogmatic in the very demand for rational accountability, to insist that positions are only ever acceptable if they can be rationally

grounded or justified. Arguably there are always limits to what we can rationally justify and make over in our views and beliefs. While we may provide reasons or arguments for particular beliefs, any argument must itself proceed on the basis of premises that are not themselves argued for, and which cannot be justified within the argument without falling into circularity. And while these premises may themselves be argued for elsewhere, it does not seem possible for us to rationally justify every single aspect of our thinking. On what basis could we do so? That would seem to require that we be able to stand outside all our beliefs and principles; but if we were somehow able to do that, we would have no beliefs or principles in terms of which to proceed. In other words, we would no longer have a place to stand. What this suggests is that in our thinking there will always be certain background beliefs and principles that remain outside the scope of rational justification at any particular time, beliefs and principles that we have to rely on in order to reason and argue.

Nonetheless, philosophers have sometimes argued that reason itself can provide the first principles from which to proceed, the ultimate standpoint in terms of which to organize our thinking. We then have a position from which to critically evaluate all our beliefs and principles, to rationally ground and justify them, and to exclude those that cannot be rationally grounded. Such thinking is characteristic of 'rationalist' philosophies of various sorts. Thus a rationalist philosopher like Plato insists that reason alone provides a reliable basis for knowledge, and criticizes all beliefs about the world based on the senses; in a similar spirit, Kant argues that only reason can provide an adequate basis for morality, and excludes desire and emotion from the scene. But it is important to note that the rationality being invoked to provide this ultimate standpoint is rather more complex than the basic notion of reason as connected thinking in accordance with principles of sound reasoning. And since the reason being called for here amounts to an absolute principle that everything else has to conform to, and which is itself supposedly beyond question, the problem of closed, dogmatic thinking reappears, along with the need for the kind of critical scrutiny that challenges dogmatic thinking. As we have seen in earlier chapters, the rationalist emphasis on reason as the only legitimate basis for knowledge or morality has in fact been a recurring object of criticism in philosophical thinking, insofar as the dogmatic insistence on the primacy of reason ignores or devalues other factors, such as the role of the senses in relation to knowledge, and of feeling and emotion in connection with morality.

The importance of being critical

At the beginning of the chapter I suggested that critical reflection is at the very heart of philosophy. To do philosophy is above all to philosophize, to stand back from and think critically about things rather than simply accepting them. In the ensuing discussion, at least two roles have emerged for critical thinking. The first is to weigh up positions, beliefs and arguments, to ask whether there are good reasons for holding a belief or position, whether reasons that are put forward in support of them are adequate or relevant, and whether the arguments being presented conform to principles of sound reasoning. The second role is to question beliefs or positions that have become closed and dogmatic, to show up the limits of such thinking, its failure or inability to deal with certain facts, considerations or arguments, and to open the way to thinking differently. In the Introduction I suggested that philosophy, understood as critical thinking, is linked in an important way with our freedom, and it is how these forms of critical reflection contribute to our freedom that I want to focus on in this final section.

Critical reflection in the first sense, as a matter of rationally assessing beliefs and positions to determine whether there are good reasons or arguments for holding them, allows us not only to evaluate the beliefs and arguments of others, but also to think about what positions we ourselves should accept and make our own. And one of the reasons it is important to undertake this kind of critical activity is that it provides us with a way of defending ourselves against manipulation and control by others. That is, when we become self-critical in this way, we are no longer simply at the mercy of whatever others tell us to believe. We no longer take things at face value. We can critically weigh up the positions being presented to us, to see if there are in fact good reasons for believing them. We can also weigh up arguments that might be presented to us in support of these positions, in order to ensure that we are not being taken in by spurious argument. Whether through carelessness or as part of a deliberate attempt to manipulate, fallacious reasoning can make unjustifiable positions appear justified. Critical reflection allows us to see through this deceptive semblance of justifiability.

As we saw in Chapter 1, Plato's image of the cave, right at the beginning of philosophy, invites us to do precisely this, to critically reflect on what is presented to us, rather than simply accept the way things appear. For Plato, this is the beginning of the road out of imprisonment, imprisonment within the cave of received ideas. We also saw how Plato's story of escape from

imprisonment through critical reflection has implications for a number of areas of our existence. Critical reflection plays an important part in our growing up, insofar as we come to think about ideas, beliefs and attitudes that we have picked up along the way from parents, teachers and friends. When we are young we tend to absorb beliefs and attitudes unthinkingly, and to that extent we are little more than passive products of our environment. But it is also possible for us to think critically about them. We may end up accepting or rejecting them, but whatever position we end up with, it will be one that we have decided for ourselves, for our own reasons. Critical reflection thus contributes to the development of our intellectual independence. And given that we continue to be subject to various social and cultural influences, critical reflection continues to have a role to play. In the face of influences from advertising, the mass media, cultural pressures and political propaganda, along with the seductive messages coming from all manner of experts, gurus and demagogues, a capacity to be critical, to critically weigh up the claims and arguments we are presented with, remains vital if we are to maintain a degree of independence.

Here, critical reflection helps us escape from the imprisonment that comes from being under the sway of the ideas, attitudes and views of others. In so doing, it contributes to our freedom, not merely in the sense of independence from the sway of external forces, but in the more positive sense of being able to determine ourselves, to rationally decide things for ourselves. Isaiah Berlin has given an eloquent formulation of the ideal of freedom as self-determination:

> I wish my life and decisions to depend on myself, not on external forces of whatever kind. I wish to be the instrument of my own, not of other men's, acts of will. I wish to be a subject, not an object; to be moved by reasons, by conscious purposes, which are my own, not by causes which affect me, as it were, from outside. . . .
>
> (Berlin 1969, 131)

As we saw in Chapter 3, the eighteenth-century philosopher Kant is one of the great advocates of this 'positive' notion of freedom, freedom as rational self-determination. Perhaps we can never completely dictate the terms of our existence, a feat that would be like trying to pull ourselves up by our own bootstraps; but critical reflection on our beliefs and attitudes means that we

can go a long way towards taking an active part in determining who we are and what we stand for, as opposed to being the mere product of external forces.

The second role for critical reflection is to confront closed, dogmatic forms of thinking. If we can be imprisoned by uncritically accepting the views of others, we can also be imprisoned by our own views, to the extent that we interpret whatever we encounter in terms of them and refuse to consider any evidence that is inconsistent with them. Such thinking is to be found in various kinds of fanaticism and fundamentalism, but it is arguably also a more widespread tendency, given that we view the world in terms of some frame of reference which we rely on to make sense of things and to interpret new experiences. The cost of such closed thinking, however, is imprisonment within its confines. Unable to pass beyond it, we are doomed to repeat ourselves; and we are closed and intolerant towards alternatives, towards that which does not fit into our way of thinking. The role of critical thinking here is to point up the limits of closed thinking, and to encourage an open-mindedness towards that which is outside of or inconsistent with it. We will then be open to the possibility of thinking differently, of appreciating different ways of looking at the world. This kind of critical thinking is also linked to freedom, not now the freedom from the undue influence of others, the freedom of self-determination, but rather freedom from the undue influence of our own views, freedom from the grip of closed, dogmatic thinking, and the freedom to explore other, alternative forms of thinking.

As we have seen, this form of critical reflection can also be applied to critical thinking itself, to the extent that the demand for rational accountability itself becomes closed and dogmatic. I have argued that we cannot stand wholly apart from and rationally dictate the terms of our existence. There are always background beliefs and principles we have to rely on in order to reason and argue, and which thus remain outside the scope of rational justification. But if we invoke a more complex notion of reason capable of providing the ultimate principles for our thinking and action, we run the risk of succumbing to a dogmatic rationalism, of becoming intolerant of whatever does not conform to standards of rational accountability, and of becoming prisoners of a rationality that has become tyrannical. Indeed this is one of the potential dangers that Berlin sees in the positive notion of freedom, freedom as living in accordance with the dictates of our reason. The more we turn reason into the central principle of our being, the more we see it as entitled to devalue, discipline and repress the 'lower' aspects of ourselves, our desires and

emotions. This is the rationalist view of the self which, as we saw in the second chapter, is present in Kant and goes right back to Plato. But as we also saw, thinkers like Hume and Freud are on hand to criticize such dogmatic rationalism, to help free us from a rationality that has become tyrannical, and to open our eyes to the profound role that desire and emotion play in our individual existence.

The importance of criticizing dogmatic rationalism is also evident in relation to our social and political existence. In Chapter 5 we saw how modern thinking, from the Enlightenment onwards, sought to provide a rational critique of traditional beliefs and institutions, and to remake the individual and social world in rational terms. For the Enlightenment, reason, rather than faith or tradition, was to be the proper guide to human conduct. Once again, the notion of reason being invoked is more than just the minimal idea of connected thinking. Reason here is either identified with science and technology, or it is understood in Kantian terms, bound up with some notion of our 'real' or 'essential' nature. Recent critiques of Enlightenment visions of a rational society are not directed at rationality in the minimal sense. They are not calling into question logical principles, but the more complex Enlightenment notions of rationality. And here also, the concern is essentially to criticize a dogmatic conception of rationality, which only accepts that which conforms to its standards, and is intolerant of anything that falls outside them. Critical reflection once again seeks to challenge a way of thinking that is imprisoning, and intolerant of alternatives. For the Frankfurt School the target is the technological rationality for which efficiency is the only criterion for organizing social practices; for Foucault it is the vision of rational social organization that imposes notions of normal behaviour and simultaneously defines a vast range of behaviour as deviant or abnormal. In both cases the aim of the critique is to help free us from an imprisoning form of thinking and to open up a space for something else, either for principles of social organization other than those dictated by technical efficiency, or for forms of life that go beyond the possibilities dictated by a regime of normality.

Philosophical thinking, as critical reflection, can thus be seen as contributing in various ways to our freedom. This is the freedom that comes from not simply accepting our situation, from standing back from received views, assumptions and forms of thinking, and thinking things through for ourselves; and also the freedom that comes from refusing to turn any position we might hold into fixed, unquestionable dogma, closed to the possibility of other ways of thinking. In the end this liberating aspect of philosophy gives

us another way of thinking about what philosophy itself is, another way of answering the question posed in the Introduction: what is philosophy? Philosophy is the kind of thinking that helps set one's thinking free. This is why viewing philosophy as no more than doctrines to be learnt or repeated misses what is most important about it. It is to turn its own pronouncements into views to be taken for granted and assumed without question, to imprison the mind in a new set of dogmas. The best way of understanding what philosophy is, is by engaging critically with the views it presents, thinking things through for yourself, coming to your own views about the matters it deals with; and also, never imagining that you have found the final, definitive answer, but always remaining open to the possibility of thinking differently. To understand philosophy in this way is to experience the limitless freedom of thought.