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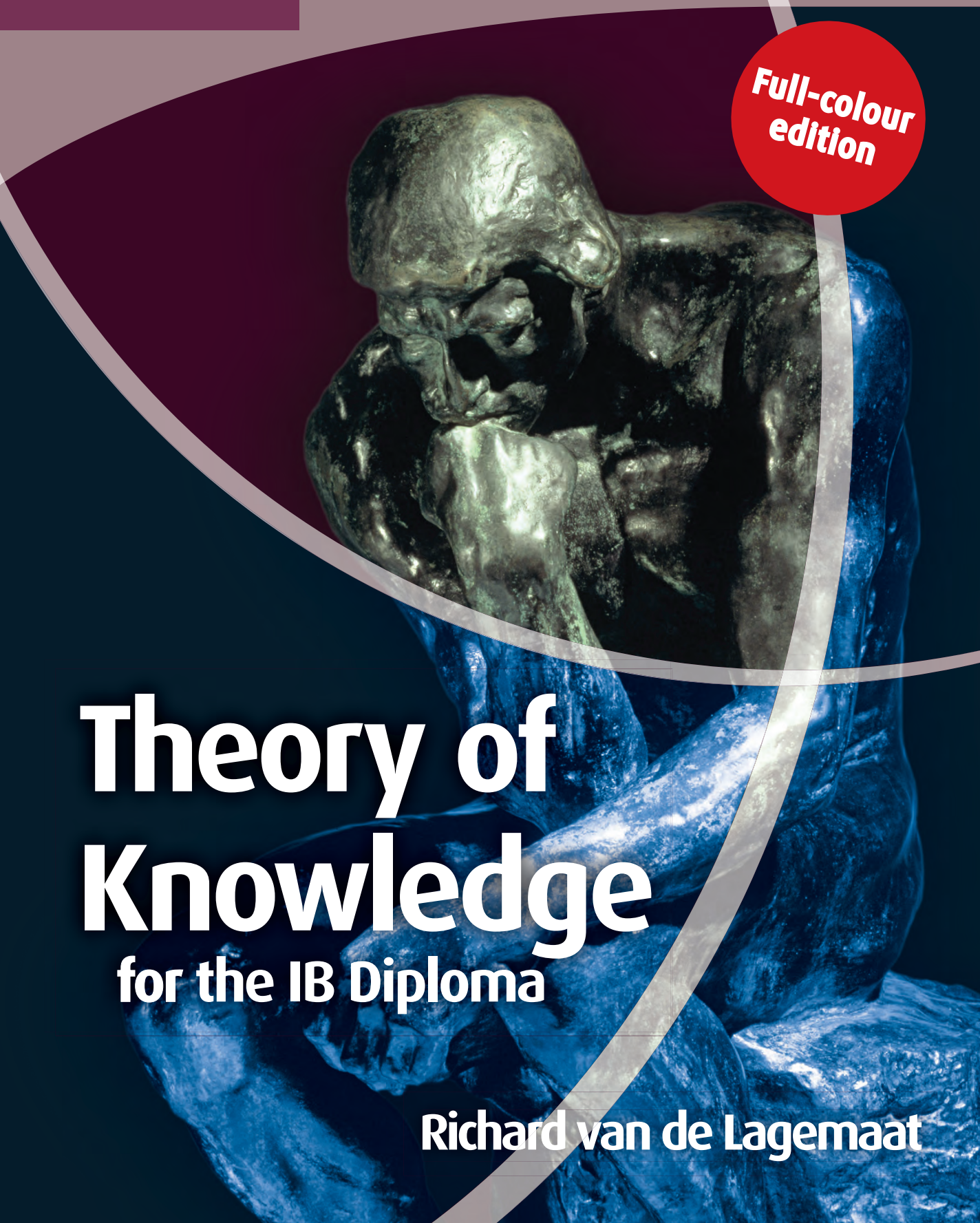

# Theory of Knowledge

## for the IB Diploma

Richard van de Lagemaat

# 1 The problem of knowledge

*'The greatest obstacle to progress is not the absence of knowledge but the illusion of knowledge.'*
Daniel Boorstin, 1914–2004

*'The familiar is not understood simply because it is familiar.'*
Georg Wilhelm Friedrich Hegel, 1770–1831

*'By doubting we are led to enquire, and by enquiry we perceive the truth.'*
Peter Abélard, 1079–1142

*'All men have opinions, but few think.'*
George Berkeley, 1685–1753

*'What men really want is not knowledge but certainty.'*
Bertrand Russell, 1872–1970

*'A very popular error – having the courage of one's convictions; rather it is a matter of having the courage for an attack upon one's convictions.'*
Friedrich Nietzsche, 1844–1900

*'Common sense consists of those layers of prejudice laid down before the age of 18.'*
Albert Einstein, 1879–1955

*'It is the customary fate of new truths to begin as heresies and to end as superstitions.'*
T. H. Huxley, 1825–95

*'There are two ways to slide easily through life: to believe everything, or to doubt everything; both ways save us from thinking.'*
Alfred Korzybski, 1879–1950

*'We know too much to be sceptics and too little to be dogmatists.'*
Blaise Pascal, 1623–62

*'Man is made by his belief. As he believes, so he is.'*
Bhagavad Gita, 500 BCE

*'To know one's ignorance is the best part of knowledge.'*
Lao Tzu, *c.* 600 BCE

*'To teach how to live without certainty, and yet without being paralysed by hesitation is perhaps the chief thing that philosophy in our age can still do for those who study it.'*
Bertrand Russell, 1872–1970

# Introduction

We live in a strange and perplexing world. Despite the explosive growth of knowledge in recent decades, we are confronted by a bewildering array of contradictory beliefs. We are told that astronomers have made great progress in understanding the universe in which we live, yet many people still believe in astrology. Scientists claim that the dinosaurs died out 65 million years ago, yet some insist that dinosaurs and human beings lived simultaneously. Apollo 11 landed on the moon in 1969, but it is rumoured in some quarters that the landings were faked by NASA. A work of art is hailed as a masterpiece by some critics and dismissed as junk by others. Some people support capital punishment, while others dismiss it as a vestige of barbarism. Millions of people believe in God, yet atheists insist that 'God is dead'. Faced with such a confusion of different opinions, how are we to make sense of things and develop a coherent picture of reality?

Given your school education, you might think of knowledge as a relatively unproblematic commodity consisting of various facts found in textbooks that have been proved to be true. But things are not as simple as that. After all, if you had attended school one hundred or five hundred years ago, you would have learned a different set of 'truths'. This suggests that knowledge is not static, but has a history and changes over time. Yesterday's revolution in thought becomes today's common sense, and today's common sense may go on to become tomorrow's superstition. So what guarantee is there that our current understanding of things is correct? Despite the intellectual progress of the last five hundred years, future generations may look back on our much-vaunted achievements and dismiss our science as crude, our arts as naive, and our ethics as barbaric.

When we consider ourselves from the perspective of the vast reaches of time and space, further doubts arise. According to cosmologists, the universe has been in existence for about 15 billion (15,000,000,000) years. If we imagine that huge amount of time compressed into one year running from January to December, then the earliest human beings do not appear on the scene until around 10.30 p.m. on 31 December, fire was only domesticated at 11.46 p.m., and the whole recorded history occupies only the last ten seconds of the cosmic year. Since we have been trying to make sense of the world in a systematic way for only a minute fraction of time, there is no guarantee that we have got it right. Furthermore, it turns out that in cosmic terms we are also pretty small. According to astronomers, there are ten times more stars in the night sky than grains of sand in *all* the world's deserts and beaches. Yet we flatter ourselves that we have discovered the laws that apply to *all* times and *all* places. Since we are familiar with only a minute fraction of the universe, this seems like a huge leap of faith. Perhaps it will turn out that some of the deeper truths about life, the universe and everything are simply beyond human comprehension.

# Common sense

Most people do not think that there is a problem of knowledge and they see knowledge as nothing more than organised common sense. While there may be something to be said for this view, the trouble is that much of what passes for common sense consists of little more

than vague and untested beliefs that are based on such things as prejudice, hearsay and blind appeals to authority. Moreover, many things that at first seem obvious to common sense become less and less obvious the closer you look at them.

Yet we need some kind of picture of what the world is like if we are to cope with it effectively, and common sense at least provides us with a starting point. We all have what might be called a **mental map** of reality which includes our ideas of what is true and what is false, what is reasonable and what is unreasonable, what is right and what is wrong, etc. Although only a fool would tell you to rip up your mental map and abandon your everyday understanding of things, you should – at least occasionally – be willing to subject it to critical scrutiny.

To illustrate the limitations of our common-sense understanding of things, let us make an analogy between our mental maps and real geographical maps. Consider the map of the world shown below, which is based on what is known as the Mercator Projection. If you were familiar with this map as you grew up, you may unthinkingly accept it as true and be unaware of its limitations.

**Figure 1.1** The Mercator Projection

**Activity 1.1**

1 Think of as many different ways as you can in which the world map shown in Figure 1.1 is:
   a inaccurate
   b based on arbitrary **conventions**
   c culturally biased.
2 Do you think it would be possible to make a perfect map of a city? What would such a map have to look like? How useful would it be?

Among the weaknesses of the above map are the following:

1. It distorts the relative size of the land masses, so that areas further from the equator seem larger than they are in reality. The distortion is most apparent when we compare Greenland to Africa. According to the map they are about the same size, but in reality Africa is fourteen times bigger than Greenland.
2. It is based on the convention that the northern hemisphere is at the top of the map and the southern hemisphere at the bottom. Although we are used to this way of representing things, the reality is, of course, that the world does not come with a label saying 'This way up'!
3. The map is eurocentric in that it not only exaggerates the relative size of Europe, but also puts it in the middle of the map.

Now compare the Mercator Projection with another map of the world, known as the Hobo-Dyer Equal Area Projection.

**Figure 1.2** Hobo-Dyer Projection

This projection accurately reflects the relative sizes of the land masses (although it distorts their shape); it has the southern hemisphere at the top and the northern hemisphere at the bottom; and it is centred on the Pacific rather than Europe. The fact that most people find this map disorienting illustrates the grip that habitual ways of thinking have on our minds and how difficult it is to break out of them.

The point of this excursion into maps is to suggest that, like the Mercator Projection, our common-sense mental maps may give us a distorted picture of reality. Our ideas and beliefs come from a variety of sources, such as our own experience, parents, friends, teachers, books and the media, and since we don't have time to check up on everything to make sure that it is true, there are likely to be all kinds of inaccuracies, half-truths and falsehoods woven into our mental maps. Furthermore, it can be difficult for us to think outside the customs and conventions with which we are familiar and see that there may be other ways of looking at things. Finally, there may be all kinds of cultural biases built into our picture of the world. If you ask an English person to name the greatest writer and greatest scientist of all time, they will probably say Shakespeare and Newton. If you ask the same question to an Italian, they are more likely to say Dante and Galileo.

One final point to draw out of this discussion is that, while different maps may be more or less useful for different purposes, there is no such thing as a perfect map. A *perfect* map of a city which included every detail down to the last brick and blade of grass would have to be drawn on a scale of 1:1. Such a map would, of course, be useless as a map, and would in any case quickly become out of date. We might call this the **paradox of cartography**: *if a map is to be useful, then it must of necessity be imperfect*. There will, then, always be a difference between a map and the underlying territory it describes. To sum up in a well-known slogan that is worth keeping in mind throughout this book: ***'the map is not the territory'***.

**Activity 1.2**

1 What relevance do you think the slogan 'the map is not the territory' has to our search for knowledge?
2 Look at the painting below by the Belgian surrealist René Magritte (1898–1967) called *The Treason of Images* (1928–29). What do you think of the title of the painting? What has this got to do with our discussion?


**Figure 1.3** Magritte: *The Treason of Images*

## Certainty

If there are problems with our common-sense picture of the world, perhaps we should abandon our everyday understanding of things and limit ourselves to what is certain. For it has often been thought that certainty is what distinguishes knowledge from mere belief. The idea here is that when you know something you are certain it is true and have no doubts about it; but when you merely believe it, you may *think* it is true, but you are not certain. At first sight, this seems reasonable enough; but when you start to look critically at the things we normally claim to know, you may begin to wonder if any of them are completely certain!

**Activity 1.3**

List in order the five things in life that you are most certain of. Compare your list with someone else's. Can you come to any agreement?

Consider, for example, the following four statements:

1. I know that Neil Armstrong landed on the moon in 1969.
2. I know that strawberries are red.
3. I know that if *a* is bigger than *b* and *b* is bigger than *c*, then *a* is bigger than *c*.
4. I know that murder is wrong.

I imagine you would say that all of the above statements are true. But how do you know? You might say that you know that Neil Armstrong landed on the moon in 1969 because you read about it in an encyclopaedia; you know that strawberries are red because you can see that they are red; you know that if *a* is bigger than *b* and *b* is bigger than *c*, then *a* is bigger than *c* because you can reason it out; and you know that murder is wrong because it is intuitively obvious. However, if you ask yourself whether you are 100 per cent certain that these statements are true, doubts may begin to creep in. A quick look at each of the four **ways of knowing** – language, perception, reason and emotion – suggests that they cannot simply be taken at face value.

### 1 Language

Language enables us to acquire knowledge from other people, and we claim to know a great many things because we have been told them or we have read them somewhere. However, the authority of other people is not always a reliable source of knowledge, and even the so-called experts sometimes 'get it wrong'. If you are into conspiracy theories, you might ask how we can be sure that the alleged American moon landings were not an elaborate CIA-inspired hoax.

### 2 Perception

Much of our knowledge is based on personal experience, but our senses sometimes deceive us. For example, if you are colour blind, you might not see strawberries as red. We shall have more to say about this in Chapter 4. For the time being, you might like to consider Figure 1.4.

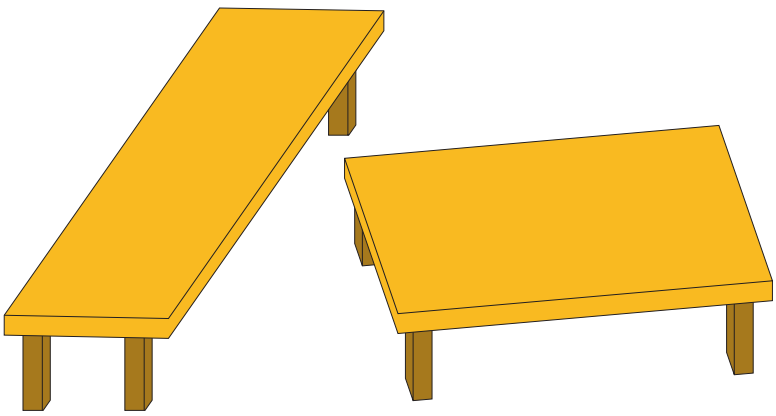

Figure 1.4

Believe it or not, the two table tops above are exactly the same shape and size. This suggests that we should not blindly trust our perception and assume that it gives us certainty.

### 3 Reason

Statement 3 above might seem less open to doubt than the others, and some philosophers have claimed that reason gives us greater certainty than perception. In practice, however, people do not seem to be very good at abstract reasoning and they are liable to make all kinds of errors. To illustrate, assuming that some dentists are drunkards and no cyclists are drunkards, does it follow that some cyclists are dentists? The answer is that it does not – but we may well struggle to see that this is true.

### 4 Emotion

Some of the things that we claim to know strike us as intuitively obvious or are based on our gut feelings. The trouble is that what is intuitively obvious to me may not be intuitively obvious to you, and gut feelings are far from being a sure guide to the truth. You only have to consider debates about such things as abortion or capital punishment to see the extent to which people may have conflicting intuitions on important issues. And it would surely be arrogant simply to assume that my intuitions are right and yours are wrong. Emotions may provide us with the energy to pursue knowledge, but it is far from clear that they are infallible guides to the truth.

## Radical doubt

So far, we have raised some preliminary doubts about knowledge that is derived from language, perception, reason and emotion. But, following the French philosopher René Descartes (1596–1650), there is perhaps one statement that you think is *absolutely* certain – namely that 'I exist'. Surely that is something that cannot sensibly be doubted?

Well, if pushed, I might say that I am not even sure about that! In the movie *The Truman Show* a character called Truman Burbank lives on an island called Seahaven and leads an apparently ordinary life. As the movie progresses, we learn that Truman's entire life is being filmed 24 hours a day and broadcast live on TV, and that his wife, family, friends and acquaintances are all paid actors. Truman himself is unaware of this and he mistakes his illusory world for reality. So how can you be certain that you are not living a Truman-Show-type life and that the people around you are not simply actors? Some philosophers have even speculated that the whole of life might be a dream. Perhaps you will awake in a few minutes and realise that you have been having the strangest dream in which you were a creature called a human being, living on a planet called Earth. Although such a radical supposition does not prove that you do not exist, it *does* suggest that your life might be completely different from what you thought.

**Activity 1.4**

1 Do you think it is seriously possible that you could be dreaming right now?
2 Do you think that some areas of knowledge are more certain than others?

## Relativism

Sometimes people react to this lack of certainty by swinging to the opposite extreme and embracing a position known as **relativism**. According to relativism, there is no such thing as absolute truth that exists in an objective way independent of what anyone happens to *believe* is true. Instead, truth is relative and may be different for different individuals or for different cultures. So rather than say that something is true or false in an unqualified way, the most we can do is say that it is 'true for me' or 'false for you'. Since there are no grounds for saying that one opinion is better than another, we must therefore conclude that all points of view are of equal value.

Since there are disputed questions in all areas of knowledge, relativism might at first seem an attractive position. Rather than insist that I am right and you are wrong, it is surely more attractive to say that one and the same knowledge claim can be true for me and false for you?

Despite its attractions, relativism leads to as many difficulties as equating knowledge with certainty. Consider the question of whether or not the earth is round. According to a relativist we would have to say it is true for me and false for a member of the flat-earth society. But surely there is an objective fact of the matter independent of what I or anyone else may happen to think? After all, the earth cannot be both round *and* flat. In view of this, I think that what people really mean when they say that something is 'true for them' is that they *believe* it is true. You are, of course, entitled to believe what you like, but the mere fact that you believe that something is true doesn't mean that it actually *is* true. A young child might believe that Santa Claus exists, but it only confuses the issue to say that it is 'true for the child'. For, no matter what the child believes, Santa Claus does not in fact exist.

The fact that we take seriously the idea that someone might be wrong in their beliefs suggests that relativism is false. Indeed, it could be argued that the statement 'All truth is relative' is self-contradictory. For if we ask ourselves about the status of the statement itself, we seem to run into difficulties – as can be seen from the dialogue in Figure 1.5. On the one hand, if it is absolutely true that all truth is relative, then there is at least one absolute truth – namely the truth that all truth is relative. On the other hand, if it is only relatively true that all truth is relative, then if a consistent relativist meets someone who says 'It is *not* true for me that all truth is relative', they are hardly in a position to argue with them.

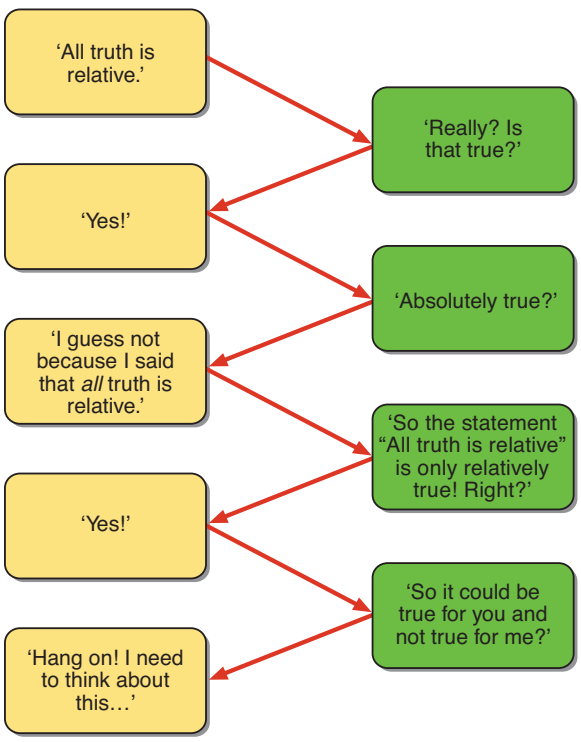


**Figure 1.5**
The dialogue of relativism

**Activity 1.5**

Read the dialogue taken from a novel *White Noise* by Don DeLillo (see Reading resources, page 19). What doubts does Heinrich cast on his father's claim that it is raining? Which, if any, of these doubts do you think are reasonable?

## What should we believe?

We have seen that neither common sense, nor certainty, nor relativism can give us a quick solution to the problem of knowledge. So what should we believe? There is no simple answer to this question, and TOK is, in any case, more concerned with *how* you believe something than with *what* you believe. Whatever you believe, you should, for example, try to support your beliefs with evidence and be able to consider and respond to criticisms of your views.

## The role of judgement

Since we live in a world in which there are few black and white certainties, you will probably have to rely more on **judgement** than proof in deciding what to believe. One important aspect of good judgement is the ability to balance scepticism with open-mindedness. Take the claim that aliens have visited the earth at some time in the past – something which opinion polls suggest is believed by around one-third of Americans. We should be sceptical enough to question some of the flimsy evidence that has been put forward to support this claim, but open-minded enough to allow that it is possible that a technologically advanced civilisation may have evolved and sent envoys to our planet. We must then engage in the difficult task of assessing the balance of evidence and coming to a provisional conclusion.

The great marketplace of beliefs in the so-called information age is, of course, the Internet. Surfing around, you can quickly find websites devoted not only to a whole range of academic subjects, but also to a dizzying array of paranormal phenomena, conspiracy theories and urban legends. Since we live in a credulous age, we should cultivate a healthy scepticism as an antidote to intellectual – and financial – gullibility. (If you are too gullible, you will find plenty of charlatans and hucksters out there who will be only too willing to relieve you of your money.)

## The danger of gullibility

Now, you may personally believe in some or other paranormal phenomenon or conspiracy theory, and at some point it may even be shown to be true. However, no one is willing to believe *everything* they read on the Internet, and we all have limits beyond which we conclude that a belief is absurd. I very much doubt that you would take seriously any of the following headlines from the *Weekly World News*, which styles itself as 'America's wildest and zaniest supermarket tabloid':

'Amazing New Proof of Life After Death' (11 January 1999)
'Faith Healer Cures Sick Pets with the Power of Prayer' (13 August 1999)
'US Scientists Bring Mummy Back to Life' (27 August 1999)
'Washington Think Tanks are Riddled with Space Aliens' (1 October 1999)
'First Marriage Between Human and Space Alien Still Going Strong' (8 October 1999)
'Dog Reincarnation: Five Ways to Tell if Your Dog was a Human in a Past Life' (12 November 1999)
'Top Psychic Warns: Hitler is Coming Back' (21 January 2000)
'Top Scientist says Sicko Space Aliens are Stealing Our Women and Turning them into Prostitutes' (6 April 2000)
'Your Dead Pet's Ghost May be Peeing on Your Carpet' (16 May 2000)

## The danger of scepticism

Despite the above comments, there is also a danger in being *too* sceptical; for you may then close your mind to new ideas that challenge the conventional wisdom. There are many examples of ideas that were ridiculed when they first appeared but were later shown to be true. For example, until the early nineteenth century, scientists dismissed the idea