

Knowledge, Belief and Reality

1. Are there different kinds of knowing?

When we consider “I know” statements it can be concluded that we can talk about **knowing that**, or knowing facts; **knowing places and people**; and **knowing how** to do something.

It is sometimes argued that knowing people and places simply involves knowing facts about them; for example, to know Li Jianhua means to know certain facts about him – his name, age, what he does for a living, etc.. As you get to know him better you get to know more facts about him, such as how he reacts to different situations. On the other hand, it is sometimes argued that to know someone involves more than knowing facts about a person. Someone can possess facts about a person, but still be unwilling to say they know them.

What about knowing how to do things? Someone might be able to describe all the necessary facts about how to swim, such as how to breathe and how move your arms and legs, but if she had never been into the water to try and swim, she’d probably be reluctant to say she “knows how” to swim.

In most subjects that you take at school concentration is given to knowing **“facts”**. We can talk about many different *types of facts* – logical facts (‘I know that if A is bigger than B, and B is bigger than C, then A is bigger than C’), a fact derived from simple observation (‘I know that there are twelve people in this room’), a scientific fact (‘I know that water boils at 100° C at sea level’), a historical fact (‘I know that the Communist Party came to power in China on October 1, 1949’), a moral fact (‘I know that it’s wrong to steal’), a religious fact (‘I know that God exists’), and an aesthetic fact (‘I know that Beethoven was a greater composer than John Lennon’). Can these different types of ‘facts’ and ‘knowledge’ properly be described as knowledge? What status do these different facts have in modern society?

The emphasis in TOK is on theoretical systems of knowledge. That is, it focuses on those systems that organise human experience using conceptual systems held to be universally valid. In other words, it focuses on the conceptual distinctions used for organising academic and scientific disciplines. We can accept this emphasis as being appropriate in view of the fact that IB emphasises this kind of knowledge and prepares students for further study in an academic environment. However, it is important to place this kind of knowledge in perspective within the wider context of human knowledge.

2. What is it to know something?

The most common definition of knowledge of facts, which goes back as far as Plato, is that knowledge is *justified true belief*. For a person to be able to claim correctly that he/she knows [that] P (P being a fact), the following three conditions must hold:

- a. **P must be true:** just as we say that centuries ago our ancestors did *not know* that the earth was flat, but simply *believed* it, so I have to admit that if I discover that something which I had wrongly believed to be true (such as a piece of news that I heard over the radio) was not in fact true, I never knew it, however convinced I was at the time that it was true.

Belief alone does not assure knowledge. Belief has to be true if we are really to have knowledge. Nietzsche says: “Convictions (strongly held beliefs) are more dangerous foes of truth than lies”. (Do you agree with Nietzsche?) We should always be ready to question our convictions in our search for knowledge. A reason for believing may fall short of the reasons needed for knowing. In short, there can be no knowledge without belief, but there can be belief without knowledge.

- b. **The person must believe P:** This is relatively easy. No one is going to claim that he/she knows something if he/she does not believe it.
- c. **The person must have good grounds for believing P:** It is not enough, if a person is to know something, that he/she must believe it, and that the belief must be true, one must also have good grounds, or reasons for that belief.

Consider this example; a teacher asks a student what 2^2 is and the student replies four. One might say that the student knows the answer. However, if in response to further questions the student says that 3^2 is five, that 4^2 is six and that 5^2 is seven, we might conclude that he/she is simply adding the exponent to the number he/she is being asked to square. Does the student, then, really know that 2^2 is four? According to this theory, he/she does not, because he/she does not have good grounds for his/her belief.

What are the sources of our knowledge?

How do we gain knowledge? In the 'western' tradition, it is held that we acquire knowledge primarily through the senses (empirically) or by reasoning (rationally). Let us look at these sources of knowledge, and also consider some alternatives.

1. Empiricism

"Empiricism" is derived from the Greek word "*empirikoi*", the name of an ancient school of physicians who claimed all their rules of practice were derived *from experience alone*. Thus, empiricism is the view that knowledge comes from experiences, that is, through the senses (sight, hearing, touch, taste and smell).

The strict empiricist argues that *all* our knowledge is obtained in this way. The best known statement of empiricism is that of John Locke (1643 – 1714) in his *An Essay Concerning Human Understanding* (1690). In this essay Locke holds that the mind begins as a *tabula rasa* (a blank page), and that all its content comes from sense-experience.

Let us, then, suppose the mind to be, as we say, white paper, void of all characters, without any ideas; how comes it to be furnished? Whence comes that vast store, which the busy and boundless fancy of man has painted on it with almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer, in one word, from **experience**; in that all our knowledge is founded, and from that it ultimately derives itself. Our observations, employed either about external sensible objects, or about the internal operations of our minds, perceived and reflected on by ourselves, is that which supplies our understanding with all the materials of thinking. These two are the fountains of knowledge, from whence all the ideas we have, or can naturally have, do spring.

Empirical knowledge, therefore, is knowledge gained from experience, through our senses. What disciplines (subject areas) do you think make most use of observations, investigations and experiment?

2. Rationalism

Rationalists believe that some knowledge, at least, is gained by reasoning, by thinking. One might argue, for instance, that "if A is bigger than B, and B is larger than C, then A is larger than C". That is, rationalists believe that human knowing and perception consists of reason, and, reason is far superior to the senses.

Rene Descartes (1596 – 1650) wrote in *Fifth Meditation – of God that He Exists* (1641):

When we discover them (certain geometrical truths), I do not so much appear to learn anything new, as to call to remembrance what I knew before, or the first time to remark what was before in my mind, but to which I had hitherto directed my attention.

Likewise, Leibniz (1646 – 1716) wrote in *New Essays – 1*:

In this sense it must be said that all arithmetic and all geometry are innate, and are in us virtually, so that we can find them there if we consider attentively and set in order what we already have in mind, without making use of any truths learned through experience or through tradition from others.

In which disciplines would a rationalist approach be most obvious?

Rationalism has generally had a strong base in continental Europe. Descartes and Leibniz were both great mathematicians; Descartes invented what is now called Cartesian (co-ordinate) geometry, and Leibniz, at about the same time a Newton was doing the same thing, invented what we now call calculus.

Comparing these two, rationalism and empiricism, and think about different approaches to gaining knowledge; the empiricist is always trying to seek out new facts, the rationalist is trying to reason it out.

3. Pragmatism

Pragmatism is essentially an American philosophical movement that has been influential in the last hundred years. It “is an attitude, a method, and a philosophy that uses the practical consequences of ideas and beliefs as a standard for determining their value and truth”. The emphasis is on method and attitude rather than systematic thought.

William James (1842 – 1910) defined pragmatism as “the attitude of looking away from first things, principles, ‘categories’, supposed necessities; and of looking towards last things, fruits, consequences, facts” (James, W. 1907. *Pragmatism*, New York: Longmans, p. 54-55). In other words, James broadened the base of empiricism from the laboratory to human experiences and events of daily life. For him an idea’s workability, or the difference an idea makes in life is the criteria used for assessing the truth of something.

The pragmatists emphasise empirical science and the changing world with its problems, and say we cannot go beyond that. For John Dewey (1859 – 1952) (who was a defender of freedom of choice for all persons in all areas of life), experience, which is the interaction of the organism with its environment, was central. An understanding of daily experience and the construction of a better society are the goals of Dewey’s thought.

4. Mystical Knowledge

The above two views have dominated western ideas about knowledge for two thousand years. But there are other possibilities. Mystics of both east and west have a long tradition of believing that knowledge about fundamental reality can be gained directly through “intuition”.

This kind of knowledge is impossible to describe to someone who has not personally experienced it. (The sceptic brought up on the idea that worthwhile knowledge must be public will object to this idea.) For many, direct knowledge of this type will only come through long periods of

meditation and quiet concentration. Fritjof Capra, an American physicist who, in *The Tao of Physics - an exploration of the parallels between Modern Physics and Eastern Mysticism* (1983, London: Flamingo), shows an interesting relationship between modern quantum physics and eastern thinking. In the following quote note the repeated insistence on the difference between this direct experience and either rational or empirical knowledge. Perhaps even superiority over them is implied.

What the Eastern mystics are concerned with is a direct experience of reality which transcends not only intellectual thinking [reasoning] but also sensory perception [empiricism]. In the words of the *Upanishads* [very ancient Hindu texts including some of the world's oldest writings],

*What is soundless, touchless, formless, imperishable,
Likewise tasteless, constant, odorless,
Without beginning, without end, higher than the great, stable –
By discerning That, one is liberated from the mouth of death.*
(Katha Upanishad, 3.15)

Knowledge which comes from such an experience is called 'absolute knowledge' by Buddhists because it does not rely on the discriminations, abstractions and classifications of the intellect which, as we have seen, are always relative and approximate. It is, so we are told by Buddhists, the direct experience of undifferentiated, undivided, indeterminate 'suchness'. Complete apprehension of this suchness is not only the core of Eastern mysticism, but also the central characteristic of all mystical experience.

The Eastern mystics repeatedly insist on the fact that the ultimate reality can never be an object of reasoning or of demonstrable knowledge. It can never be adequately described by words, because it lies beyond the realms of the senses and of the intellect from which our words and concepts are derived. The *Upanishads* say about it:

*There the eye goes not,
Speech goes not, not the mind.
We know not, we understand not
How one would teach it*
(Kena Upanishad, 3)

Lao Tzu [Laozi], who calls this reality the *Tao*, states the same fact in the opening line of the *Tao Te Ching*: 'The Tao that can be expressed is not the eternal Tao'. The fact – obvious from any reading of the newspapers – that humanity has not become much wiser over the past two thousand years, in spite of a prodigious increase in rational knowledge, is ample evidence of the impossibility of communicating absolute knowledge by words. As Chuang Tze [Zhuangzi] said: 'If it could be talked about, everybody would have told their brother'.

Absolute knowledge is thus an entirely non-intellectual experience of reality, an experience arising in a non-ordinary state of consciousness which may be called 'meditative' or mystical state. That such a state exists has not only been testified by numerous mystics in the East and West but is also indicated by psychological research. In the words of William James:

"Our normal waking consciousness, rational consciousness as we call it, is but one special types of consciousness, whilst all about it, parted from it by the filmiest of screens, there lie potential forms of consciousness entirely different." (*The Varieties of Religious Experience*, 1971, London: Fontana, p. 374)

Although physicists are mainly concerned with rational knowledge and mystics with intuitive knowledge, both types occur in both fields. ...

(Capra, 1983:36-37)

5. Revealed Knowledge

Although not everyone classifies revealed knowledge in a separate category, on the ground that the revelation must be either seen or heard, its nature is such that the distinction seems to be worth making. We approach new items of knowledge (revelatory knowledge can be said to be the disclosure of something new) with an existing framework of knowledge and interpretation. New experiences add to or modify previous experience and thus also modify our existing framework of knowledge and interpretation. An important question is, can we even speak of revelation if what people believe to be revealed turns out to be at variance with accepted facts? Common sense tells us that the answer to that question must be 'no'.

“Revelation” is a religious term that designates the disclosure of divine or sacred reality or purpose to men and women. Simply, when we talk about revelation we are talking about the way in which God makes himself known to human beings. Judaism, Christianity, and Islam are examples of ‘revealed religions’ because in each God has given information about himself either directly or through a voice from heaven (the baptism of Jesus Christ), through the prophets or sacred books (public revelation), or through appearances to individuals (Saul of Taurus on the road to Damascus).

More generally, perhaps it could be said that all experience is in principle capable of being revelatory. That is, events are capable of being understood on three levels of significance: at levels of nature or the physical world, the human world, and the world in relation to God. For the religions mentioned above, it is on this last level that revelation takes place. When we see the significance of an event as disclosing something about our relationship with God, and with each other in relation to God, revelation takes place.

6. Authority

When someone is asked how he/she acquired a certain bit of knowledge, he/she may often refer to a teacher or to a book as the source. Much of our knowledge is acquired through reports from other sources such as, textbooks, newspapers, radio, television documentaries which are all considered to be ‘authorities’ for knowledge. This is a legitimate way of acquiring knowledge.

However, although this may be the only practical way of obtaining knowledge, for example of distant places and times, or about scientific theories which require a great deal of time and expensive equipment to research, this ‘second-hand’ form of knowledge is less satisfactory than the knowledge we have discovered or reasoned out for ourselves. While accepting this when we have no alternative we need to be sure about the reliability of this knowledge, and determine that, in principle, if we had the time, the skills, and the access to the necessary resources, we could acquire such knowledge directly for ourselves.

A Summary of the Types and Sources of Knowledge

<i>Type of knowledge</i>	<i>Source of knowledge</i>	<i>Characteristics (subjects)</i>
Empirical	Sense data, observation, experiment	Physical and Social Sciences
Rational	Reasoning	Logic, mathematics
Pragmatism	Experience	Sciences, attitude, method
Mystical	Intuition	Religion, metaphysics
Revealed	Sacred Books, Prophets, Gurus	Certain religions
Authority	Someone else	Most subjects

How can we be sure of what we know?

This is an important question in TOK, and one which is encountered throughout the course. There are various levels at which this question can be addressed. At a fundamental level, there is the metaphysical question of whether we can know anything at all – can I be certain, for example, that I am not dreaming as I write or read this? Is it possible that all life is just a dream?

There are ways in which we can be mistaken in our observation of the physical world, and we need to reduce the chances of making such errors. Can we be certain of the correctness of ‘rational’ statements we make? If so, can we be sure that such statements are related to the ‘real world’? How can someone be sure that mystical experience is not psychological disturbance? Under what circumstances could we accept revelatory knowledge? How should we assess ‘authority’ as a source of knowledge?