Sources of Knowledge

Epistemic Awareness:

Epistemology is the branch of philosophy defined as "the study of human knowledge." Like epistemology TOK involves questioning our sources and the nature and accuracy of our knowledge in the hope that we will develop a more informed understanding of what we know and don't know. That is, enabling us to become more epistemically aware.

It is important because accurate knowledge of our two worlds - the real world and the inner world - correctly informs us of the conditions we must cope with. To know facts is to survive; not to know, or to assess one's environment wrongly, is to lose the fight for survival.

We face two serious epistemological problems.

- 1. How can we determine which facts are true? As human beings living in the 21st Century we are surrounded by a wealth of information but not all of it is trustworthy, so we must find a way to double check fact-claims. We must learn somehow to screen out the fictions but let in the facts. On what criteria can we decide what are facts and what are false claims?
- 2. How can we determine which facts are important? However, it is not enough to simply determine which facts are true, we must also consider which facts are useful. A correct catalogue of the size and shape of every blade of grass on my lawn may well be factually true but it will not be as useful as knowing that my lawn is on fire and about to engulf my house. Given the overwhelming number of facts available to us, what criteria can we use for deciding what is more important, what less?

Almost everything that we know originates from four basic sources:

- **Senses** (possibly the most important)
- Authority (knowledge from other sources, hopefully experts)
- Reason
- Intuition

The Senses

Information from the senses is called empirical knowledge and *empiricists* believe that the fundamental source of all knowledge is our senses. Our senses are exploratory organs; we use them all to become acquainted with the world we live in. We learn that candy is sweet, and so are sugar, jam, and maple syrup. Lemons are not, and onions are not. The sun is bright and blinding. Glowing coals in the fireplace are beautiful if you don't touch them. Sounds soothe, warn, or frighten us. Through millions of single sense-events we build a fabric of empirical information which helps us interpret, survive in, and control the world about us.

We have a number of different kinds of senses:

- The objective senses that tell us about the world: sight, sound, smell, touch and taste
- The visceral senses, in our mouths and gut that give us the sense of stomach ache
- The proprioceptive senses, in our muscles that tell us if our fist is clenched or not
- The balance senses, mostly in our ears that tell us if we are ... um ... balanced

However, our senses present us with a serious credibility problem. Before we start the TOK course most of us are *naïve realists* people who simply accept what their senses are telling them as the truth ... but is there any way we can actually be sure about this? Can we really trust what our senses seem to tell us?

Unfortunately the answer must be a reluctant no. Our senses do not give us a "true picture" of the real world; they give us useful picture – a picture that is designed to help us move around, survive in and take advantage of our world. To take a simple example: if you think about it we know that the chairs we sit on are not actually not solid: they are made of atoms which are actually more space than anything else. Yet our senses tell us that they *are* solid. Why? Because in terms of day to day survival there is no point

knowing about atoms: you need to know that a chair will hold you up if you sit on it and that a rock will hurt if it falls on you: a sensitive awareness of the arrangement of the sub-atomic particles of a boulder as it plummets towards you will not do your survival chances any good.

Authority:

Other people are continual sources of information. Such information, however, is always second-hand knowledge - or third-, fourth-, or nth-hand knowledge. It is all "hearsay." The farther it is removed from our own personal experience, the more caution we must exercise before accepting a fact-claim.

All of our historical knowledge is acquired in this way as is most of our knowledge of the sciences. We can't experience the past or personally repeat every experiment, so we must trust the specialists and accept, though not blindly, the discoveries they record for us. They key thing with knowledge from authority is that it can be double-checked and the work of scientists and historians is continually being 'double checked' as other workers in the same field (even sometimes us in our classrooms) repeat their experiments or investigations. A healthy cynicism of sources, the development of the skills required to check facts and an awareness of which sources are more or less reliable is a good way to ensure that the knowledge we receive from authority is as good as it can be.

Reason:

Reasoning might be defined as the process of using known facts to arrive at new facts. In this way Reason can help us arrive at new facts or new knowledge BUT only as long as the original facts we put into the process are correct and the process itself is reliable.

Imagine you are travelling in Japan and you know that the exchange rate is 200 yen to a dollar, you can easily work out that an 800 yen sushi meal will actually cost you \$4. This is new knowledge (you didn't know it before) but ... it only works if your original facts are right (i.e. you've got the correct exchange rate and are correct about the cost of the meal) and if the process is right (you can do multiplication / division properly)

Reasoning generally comes in two forms: *deduction* and *induction*. Deduction is the kind of reasoning usually used in Maths and is the more certain of the two as it involves 'drawing out' valid conclusions from previously known facts – e.g. All cats are animals, Jack is a cat, so Jack is an animal. Induction, on the other hand, is usually used in Science and is less certain as it involves jumping from some things you have observed to making universal statements about all things – e.g. I drop this pencil and it falls, so it is *likely* all dropped pencils (and indeed things) will fall. Notice that both forms are usually dependent on sensation to give us the initial facts or ideas in the first place.

The problem with reasoning is that deduction (the most certain form of reasoning) can never teach us anything new because all the information is there in the facts at the start, while induction (the thing that can give us what seems like new knowledge) can't ever give us anything certain, only things that are *likely* to be the case.

Intuition:

Although the word intuition has connotations of the mystical or unscientific, when carefully defined it can be considered a source of knowledge. Intuition refers to insights or bits of knowledge which suddenly 'pop' into consciousness as our deeper subconscious chugs away working on data that we have collected earlier. We have all probably had the experience where the answer to a question we were previously thinking about but have currently forgotten has suddenly popped into our minds for no reason. This is intuition and, as such, like reason, it too is dependent on our senses to provide the raw material on which the subconscious works.

Sometimes intuition seems to be a 'feeling'. We often say something like "I have the feeling he's not telling the truth," without being sure of why. The psychologist Jung suggested that actually this is actually a form of unconscious reasoning where your subconscious picks up on the tell-tale signs of lying (sweating, nervous movements, etc) that are too subtle for your conscious mind to notice and processes them resulting in the 'feeling' that this person is untrustworthy.

The problem with intuition however, is that most of our intuitions are wrong and they need careful double checking before they are trusted.

Other Sources:

- Faith often accompanied by supernatural revelation;
- Instinct;
- Racial Memory / the Collective Unconscious another idea of Jung's, that we have cultural
 memories that we can all inherit and share without actually experiencing the thing that caused the
 memory in the first place;
- Extrasensory Perception;
- Anamnesis ("recollection") or the remembrance of things from a past life;
- Spiritualism and the Occult, such as Ouija boards, tarot cards, etc.