## The Ways of Knowing Concise Definitions

Adapted in part from *Theory of Knowledge*, IBO, 2015.

Language consists of a system of signs (including letters, symbols, sounds, gestures, images and even objects) with agreed or conventional meanings combined according to a set of rules for the purposes of communication, formulation of ideas, storage of knowledge or as a medium of thought. Language is filled with potential problems: ambiguity, sarcasm, irony and translation issues.

**Sense perception** is the process by which we can gain knowledge about the outside world through sight, touch, smell, taste and hearing. It is an active process of interpreting the world according to prior expectations, conceptual frameworks and theories.

**Emotion**s are the product of hardwired responses in the brain to natural processes, with physiological causes and effects.

**Reason** is closely linked to logic—the deducing of valid conclusions from given starting points called premises. Inductive reasoning is the process of using a specific statement to make generalizations. Deductive reasoning is the process of using general statements to make specific.

**Imagination** is the capacity to form a mental representation of something without the stimulus of sense experience. Imagination has been associated with imagery and making a mental image of something – 'imagining that'.

**Intuition** is immediate cognition or knowledge that is immediately evident without prior inference, evidence, justification or rational processes. To know intuitively is to know through introspection or immediate awareness.

**Memory** refers to knowledge gained in the past, to things that are not currently happening, but which we believe actually happened. It has a strong link to procedural knowledge and remembering how to perform actions. Memory can also be a mechanism that allows us to process new and unique situations. Memory retrieval is unreliable, but it seems reliable.

**In relation to** (relative to) is an Indigenous way of knowing the land, the self, the ancestors, and all that is both animate and inanimate. The Indigenous worldview believes that everything is interconnected and through relationships and interconnectivity, one comes to know.

## **Expanded Definitions**

Language consists of a system of signs with agreed or conventional meanings combined according to a set of rules for the purposes of communication, formulation of ideas, storage of knowledge or as a medium of thought. The term "signs" can be interpreted very broadly to include letters, symbols, sounds, gestures, images and even objects. Language is a crucial part of our daily lives, but is also filled with potential problem areas, for example, ambiguity, sarcasm, irony and translation issues. Language plays an important role in communicating knowledge. However, some see language as having an even more central role, arguing that language doesn't just describe our experiences of the world but in fact actually structures those experiences.

**Sense perception** is the process by which we can gain knowledge about the outside world. Traditionally, there were believed to be five senses: sight, touch, smell, taste and hearing. However, many now argue that there are others such as a sense of heat, sense of pain, sense of movement, sense of balance and the senses of hunger and thirst, or a sense of where our body parts are. It is common now to view sense perception as an active process of interpreting the world according to prior expectations, conceptual frameworks and theories. There is some disagreement as to whether we directly perceive the world as it is, or whether perception is an active process where we supply much of the content of our experiences ourselves.

Emotion: The naturalistic view of emotions is that they are the products of natural processes, with physiological causes and effects. One supporter of this view was Darwin, who believed that emotions are purely physiological and therefore universal and experienced across all cultures. However, there seem to be many examples of culturally bound emotions, for example, the Chinese notion of "sad love". The opposite view is therefore that of the social constructionists, who argue that emotions depend on a social consciousness, and have no natural basis at all. For example, emotions such as shame seem to presuppose a notion of right and wrong. Emotions have been criticized as being irrational obstacles to knowledge that distort our picture of reality. However, others believe that not only do emotions help make sense of social and cultural experiences and behaviors, but they are also the source of social, ethical and political knowledge by helping us form an understanding of the world around us.

**Reason** is closely linked to logic—the deducing of valid conclusions from given starting points or premises. Human reasoning can also be inferential in nature, allowing conclusions to be drawn that cannot be strictly deduced from their premises. Inductive reasoning is the process of supporting general statements by a series of particular ones—the reverse of deductive reasoning which tends to proceed from the general to the particular. Inductive reasoning is by its nature inferential.

Statements involving the word "all" are often not strictly provable given the difficulties in making observations of an infinite set of particulars.

Imagination is often identified in a narrow sense as the capacity to form a mental representation of something without the stimulus of sense experience. Traditionally imagination has been associated with imagery and making a mental image of something. However, more recently interest in the imagination has also focused on exploring propositional imagining, or "imagining that". Imagination is sometimes viewed in a broader way as being associated with creativity, problem-solving and originality. Here it might be the making of connections between otherwise disparate ideas in order to solve problems. Imagination is also sometimes associated with possibility, in that it can be argued that only things which are possible can be imagined. In this way, the imagination is seen by some to provide evidence of what is and is not possible. It can be argued that imagination also plays a deep role in moral education, developing empathy, or providing opportunity for self-expression and an increased understanding of the self.

Intuition is sometimes described as immediate cognition, or knowledge which is immediately evident without prior inference, evidence or justification. Intuition is often regarded as knowing without the use of rational processes. Jung (Psychologische Typen 1921) famously referred to intuition as perception via the unconscious, highlighting the idea that intuition is often seen as beliefs which are known without understanding how they are known. Intuition has been much discussed in the field of ethics in terms of whether we have moral intuition, or a kind of innate sense of right and wrong. It is also seen by some to play an important role in scientific advances. To know something by intuition is to know something through introspection or an immediate awareness. In this way, some argue that it is impossible to justify, or that as it is immediately evident it requires no further justification.

Memory: Most of the knowledge that individuals have is in the form of memory and therefore how we retain information and how past events and experiences are reconstructed is an important aspect of how personal knowledge is formed. Memory, and particularly habit, has a strong link to procedural knowledge and remembering how to perform actions. In contrast to perception, memory refers to things which are not currently happening. And in contrast to imagination, memory refers to things which we believe really happened. Although memory refers to knowledge gained in the past, it can be argued that even new knowledge is dependent on and influenced by memory. For example, how we interpret new situations can be heavily influenced by experience and previous events. In this way, apart from being a "storage unit" for existing knowledge, memory can also be a mechanism that allows us to process new and unique situations. The importance of memory can be highlighted by imagining the challenges that would be presented by losing our memory. Because so much of our personal knowledge is in the form of memory, issues surrounding the reliability of memory are also crucial. Memory retrieval is often regarded as unreliable, for

example, because it is seen to be subjective or heavily influenced by emotion. However, we rely on our memory every day and because many of our memories seem to be reliable, this gives us confidence that our other memories are reliable.

In relation to (relative to) is an Indigenous way of knowing. Through relationships, people come to know the land, the self, the ancestors, and all that is both inanimate and animate. Common to many Indigenous peoples worldview is the concept of interconnectedness. Everything animate and inanimate is interconnected. Through relationships, reciprocity, and interconnectivity, one comes to know. To further understand this way of knowing from a Cree perspective, from the doctrine of Wahkotownin which is Cree for protocols for relationships, see minute 1 - 6 of the video *Sacred Relationship* https://www.youtube.com/watch?v=5NxBzyZ-8a4