ON EPISTEMOLOGY

An epistemology is a strategy for encountering an unknown (or partially unknown) world. In general, its goals are to

- Make a map or model or theory that represents that world
- Discover the hounds or limits of the world
- Enumerate the variety of phenomena (species) encountered together with their frequency of occurrence and relationships.

An epistemological strategy is a dialectical process. That is, it is a process that oscillates between two phases. The typical epistemological dialectic consists of 1) constructing a framework (model, theory, map) to contain all of the data (experience, phenomena, terrain) encountered. And 2) placing the data in the framework. Whenever there is no place for the data in the framework, return to phase 1 and reconstruct the framework. This process is like going forward by walking, moving the left foot then the right foot. Sometimes the frame foot is not moved forward, the data that does not fit is instead ignored or discarded. This limit further movement of the data foot. Sometimes a frame will handle only part of the data, while another frame will take care of other parts. Sometimes several frames are needed, some perhaps overlapping, but no one of which is capable of containing all of the data. There seems to be an epistemological imperative that requires reduction of all frames to a single frame.

It must not be assumed that the unknown world is immune from the acts of the explorer or from the consequences of being explored. In the case of the astronomical universe, we assume that our observations of it have no effect on its structure or behavior. However, there are other domains in which our observations and exploration alter their nature. Examples include the anthropological study of native tribes, and the micro quantum world. Hence it is wrong to think of an epistemology as purely a strategy of exploration. Encountering or engaging the unknown world may involve creation and alteration as well as exploration, invention as well as discovery, and teaching as well as learning. The explorer may alter the world he explores. His map may describe himself as well as the unknown world. The world of mathematics is an example of one in which the boundary between discovery and invention is uncertain. Thus, unknown worlds lie in a spectrum that extends from frozen in concrete to be encountered purely by exploration, to amorphous and pliable to be encountered purely through creativity.

It follows that a more general epistemological strategy must allow for both discovery and invention, for both exploration and creation, for both science and art. How then are the above three goals of an exploration epistemology to be generalized for an exploration-creation epistemology? What are the criteria for discrimination between frozen and pliable domains, between domains for discovery and domains for invention?

**Hand written notes:*

The Serenity prayer.

The story of the stranger who comes to town: What kind of people does one find around here? What kind where you come from? That the kind you will find here

SOME NOTES ON ONTOLOGY, REALITY, AND EXISTENCE

I. The First Canon of Ontology

In traditional Western thinking it is logical to associate nowhere with non-existence and to associate everywhere with existence. This seems so fundamental it needs no comment. But the famous British astrophysicist, Sir Arthur Stanley Eddington asserted that "Absolute uniformity is the ontological equivalent of non-existence." Which is to say that sameness, invariance and changeless are the proper logical associate of non-existence while difference, variation and change are the roots of existence. Nothingness is non-existent, not because it is nothing but because it is uniform and changeless. It is not difficult to adopt Eddington's view if we substitute perceptibility for existence. Any substance which possesses absolute uniformity, all of whose properties are invariant throughout space and time, would be undetectable by our senses and its existence would escape our notice. Something must be here but not there or now but not later in order to be perceived. We can agree that perceptibility requires there be change in space or time or both, but does it follow that if something is not perceivable in any way that it does not exist? We might go even further and agree that if something is not experienceable in any way then it does not exist. But is all experience reducible to perception? Are there no other modes of experience, other inputs to our minds than sensory inputs? Or does all experience rest ultimately on percepts alone? What about imagination? Before we can completely agree with Eddington, we must answer these questions.

If, as is customary, we assert that that which cannot be perceived or experienced is for all material purposes non- existent, then we may conclude that change must be a necessary condition for existence. We may thus formulate the First Canon of Ontology:

UNIFORMITY-UBIQUITY ↔NON-EXISTENCE
CHANGE↔ EXISTENCE

Immanuel Kant postulated two ontological domains into which the world could be divided: The phenomenal world was the perceptible or experienceable world, the noumenal world was the world that lay forever beyond perception or experience. According to the First Canon the noumenal world does not exist because it is imperceptible. Nonetheless, it is useful to postulate a domain beyond our usual powers of perception or experience ability, , a domain in which there is no change, no here or there, no now or then, where x, y, z, t frameworks are meaningless; A domain of everywhere and nowhere, of forever and never, a domain without variables or whose variables are hidden.

We may speculate on the nature of this non-existent world. Since it is uniform and without change, existence/non- existence is a dichotomy without meaning. The essential dichotomy seems to be that of everywhere/nowhere. But it is possible that this too is meaningless and everywhere = nowhere and forever = never. Or there may be some sort of binary switching between the two states of everywhere/nowhere which display themselves on the interface with our domain of existence as the laws of probability. It is

interesting that humans have spent great time and energy in attempts to explore the noumenal world. Theologians, philosophers, physicists, occultists all have their views of this non-existent domain.

Lest we succumb to a semantic trap, we must avoid generalizing the concept of existence beyond its attributes given in the First Canon. We may meaningfully discourse on ontological domains that do not exist so long as existence is associated with experience ability in accord with conventional modes of perception. That is to say, an ontological domain may exist in accord with the most general use of the term exist, but not in accord with the definition of existence requiring the presence of change.

ON PERCEPTABILITY, ACUITY, AND AWARENESS

It is important to recognize the relationships between change and perceptibility. Perception does not automatically occur when change occurs, perception may occur only when the change occurs at certain rates. There is the well documented experiment of frog boiling. If a frog is suddenly immersed in very hot water it will immediately jump out, but if the frog is immersed in tepid water which is slowly heated, it will remain in the water and even boil to death. Perception has to do with acuity or sensitivity to rate of change. Thus, the changing/unchanging dichotomy, but by our acuities to change rates. Rates of change are called 'second derivatives' by mathematicians and physicists. It is not surprising that the basic equations describing the world of classical physics are for the most part equations involving second derivatives. Our mathematical descriptions of the world reflect our perceptive filters.

II. The Second Canon of Ontology

Chang Tsu, the Chinese sage tells of his dream of being a butterfly. When he awakened, he puzzled over his confusion between his dream condition and his wakeful condition. "Am I a man dreaming I am a butterfly or am I a butterfly somehow dreaming I am a man?" If when we fell asleep and dreamed our dream would always begin where it left off when we awoke, just as our wakeful existence always begins where we left it when we went to sleep, then we certainly could not distinguish between our dream and wake states. The factor that makes the wake state more real than the dream state is continuity. We may thus hold that at root of what we call reality is continuity.