Introduction to Human Sciences (HS8.102)

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Knowledge and Understanding

The world is made up of facts, and we can make claims (which may or may not fit in with the facts). We know that empirical facts and claims are one kind ("the Earth is the third planet from the Sun", or "my friend is 6 feet tall" for example).
Nondescriptive facts or claims may constitute another category, like statements about morality. Such claims form a subset of *a priori* statements – those which are not obtained from the senses.

Arguments

Any claim should be backed up by reasons to believe it, which constitute an argument.
An argument is made up of premises and a conclusion. Arguments are of two types – deductive and non-deductive.

Deductive Arguments

A *valid* deductive argument is one whose premises guarantee its conclusion. A deductive argument can be proved invalid by presenting a counterexample.
A *sound* deductive argument is one which is valid and which has true premises.

Plato presented a question about the relation between God and morality. His deductive argument can be laid out in the following way:

P1. If what is moral is so because God commands it, then morality is arbitrary.
P2. If what is moral is so for other reasons, then God is superfluous w.r.t morality.
P3. What is moral is so either because God commands it or for other reasons.
$\implies$ C. Either morality is arbitrary or God is superfluous w.r.t morality.

This argument has the form

P1. $A \implies B$
P2. $C \implies D$
P3. $A \otimes C$
$\implies$ C. $B \otimes D$,
which is logically undeniable.

A possible rebuttal to the soundness (not the validity) of this argument is that the third premise may be false – there may be more options than the two presented.

The Principle of Charity

When one is reconstructing an argument, one should attempt to give the speaker the best argument that can be reasonably attributed to them.

Necessary and Sufficient Conditions

These relations between conditions can be described in terms of logical relations. The following three statements are equivalent:

- $A \implies B$
- A is sufficient for B.
- B is necessary for A.

Conceptual Analysis

Defining concepts is an essential step in clearly understanding any hypothesis. For example, we need to know what a "good life" is in order to answer the question "How does one have a good life?"

However, it can be extremely difficult to define simple, day-to-day objects, like doors, mugs or tables.

This also invites the questino of what a definition is. Generally, by a definition, we refer to a set of conditions which are *individually necessary* and *jointly sufficient*. In other words, if X is defined by the conditions $A_1, \ldots, A_n$, then

$$X \iff \left(\bigwedge_{i=1}^{n} A_i \right).$$

Knowledge and Understanding (again)

Knowledge

Philosophy sometimes involves *non-conceptual analysis*, like giving explanations. Explanations are answers to *why* some phenomenon occurs.

This is in opposition to justification, which is simply providing reasons (evidence) for believing that some phenomenon occurs.

For example, the claim that galaxies are receding from us at high velocities has the justification of the red-shifted light being emitted from these galaxies, but an explanation involving the Big Bang or increasing entropy in the universe. There are different types of explanations – causal, teleological, formal, ethical or material.

The relation between any evidence for a theory and theory itself is that the evidence justifies the theory, while the theory explains the evidence.

Understanding

Understanding relies on explanations, not justifications – we say that we understand something if we understand the reasons that caused it, rather than that we are aware of evidence for it.

However, in asking "why" questions, we are faced with the problem of regress. We can keep asking for causes of causes *ad infinitum*, with no conclusion. It is irrational to try to follow a regress to its end, but it is not a trivial problem to decide where to stop.

Thought Experiments

Thought experiments are based on the same principle as scientific experiments, but are not (in some cases, cannot be) conducted in reality. The variables tested in thought experiments need not be isolated outside of thinking about them that way.

A Priori vs. *A Posteriori*

A priori facts, as we have seen, are those which do not require input from the senses. Their truth can be arrived upon without perceptive means. This is as opposed to *a posteriori* truths, which are empirical and require sensory justification.

However, their existence is a matter of debate. Some classify logical or mathematical truths as *a priori*, but this is not agreed on.