

Religion, Philosophy, and Science

- I. **RELIGION:** literally, to “bind back” (to the sacred, to what is most basic, most important, to the source of meaning)
- A. The Sacred: Felt sense of awe, profound respect for power of nature and being of the world, an experience of the sublime
- B. The elements or dimensions of religion that grow out of this sense of the sacred:
 **Experiential*- deeply felt sense that things matter and that this has a source that can be connected with
 **Ritual*- Re-enactments of the most sacred or holy original or central events
 **Mythical*-the narrative recounting of what is fundamentally important, story of how everything began and/or the source, how and why things are the way they are, what the final destination is, what our place is in this story is, what we should do about it, what it all means.
 **Social*-how religious beliefs provide a meaningful system of relations between people. (Myth is not to be confused with history, which is a different way of interpreting and expressing time and events). Mythical narratives are closer to literature in attempting to reveal profound psychological truths about ourselves and the world, rather than a literal account of it)
 **Ethical*-what is permitted or forbidden in order to stay connected to the sacred. The concern for others and for the collective is basic to humans and is always contained in religious traditions but does not reduce to this.
 **Doctrinal*-the systematic rational justification and/or explanation of all the other elements.
- C. 1. Naturalistic Religions such as the Buddhism of Siddhartha Gautama which focuses on immediate phenomena or philosophical Taoism (Lao Tzu, Chuang Tzu) which tends to focus on immediate phenomena with a philosophical non anthropomorphic underpinning. (anthropomorphic: man-like god or gods)
 2. Super naturalistic religions, such as Judaism, Christianity, Islam, Hinduism: heavily based on anthropomorphic metaphysical beliefs about non observable realities/entities with varying degrees of literalness. (metaphysical: not directly or indirectly observable)
- D. **Theology:** Literally, discourse and rational analysis about God or the gods, or more generally about religion or spirituality. This discourse is variously used to understand, defend, facilitate, propagate or compare one or more religious traditions. Our discussion in this class of traditional arguments for the existence of God is a part of theology as well as philosophy of religion. Insofar as the discourse is guided by the attempt to understand and make sense of religious concepts and phenomena, it is philosophical. Insofar as it is an attempt to support a religious tradition it is not.
- E. *Philology & Religious Hermeneutics*: scholarly literary interpretations of ancient religious texts that have exposed their origins and likely historical, cultural, psychological, literary significance.
- F. Two kinds of religion: "*religare*" spiritual religion (deeply felt response to human finitude and vulnerability and attempt to live the deep psychology of the mythology) vs. *theoretical, metaphysical, doctrinal* religion that provides a system of explanations and rationalizations based on taking the mythology as a foundational logical, historical truth. This type of religion tends toward ideology (a normative agenda put forward by controlling a society's core ideas).
- One of the most important distinctions between religion and science is that modern science is the mathematization of what we experience to provide explanations of experience. There is nothing in religion that can be measured like this, no application of infinitesimal calculus or any other such measurement to what we call distinctively religious experience and belief. But there are many other distinguishing features as we shall see.
- II. **SCIENCE**- literally, systematic knowledge, from Latin: *scire: to know*.
- A. **Greek Science:** Was primarily theoretical and intellectual in its method, for example, atomism was invented by Leucippus and Democritus to give a theoretical way to understand the problem of how things can have an identity and yet undergo change. (Science & philosophy were not distinct until Parmenides and Plato raised purely logical, metaphysical and epistemological questions about the nature of being, knowledge, and truth.)
- B. **Modern Science:** Systematic methods for testing empirical generalizations (claims based on sense experience) by generating and testing hypotheses (explanatory proposals) about cause and effect among

observed. **An example** is, the empirical generalization stated in a hypotheses such as: "cigarette smoking causes lung cancer." A tentative causal generalization like this arises due to observed correlations of the suspected casual factor, smoking, with the observed phenomena being explained, cancer, in this case observing the repeated occurrence of certain symptoms such as coughing, blood, etc, in people who smoke for many years. This requires an *operational definition* of what cancer is and what smoking is (smoking what materials containing what chemicals, how much, over what period of time, etc). An *experimental design* is a specific use of the scientific method for testing this particular claim in which we try to isolate both variables, the independent variable (smoking) and the dependent variable (cancer) and rule out all other possible causal variables (intervening variables) so we can be more certain that we are not measuring some other undetected causal factor instead of the one we want to test. Furthermore, the correlation may not be uniform. Some people smoke who do not get lung cancer. Some people get lung cancer who do not smoke. Why? So the relationship between smoking and cancer is not a simple cause and effect, but there is a correlation (meaning the two occur together in our experience) that leads us to suspect a casual relationship, nonetheless. In a complex case like this, there turns out to be many contributing casual factors (such as diet, genetics, stress, etc) and only with sustained study do they all begin to become recognized. Any experimental testing of suspected causally related features of our experience requires an already developed theoretical interpretive frame in which we can recognize the phenomena and begin to test the causal connection. In this case, modern biology provides that theoretical frame. An experimental design must be set up in such a way that no other possible causal factors can cause the phenomenon we are testing or we find out that the causal factors are multiple (for example, it may turn out that very few people with little stress, good diet, and certain genetic dispositions get lung cancer even if they smoke, but smoking is found to be part of a cluster of causes. All this is given statistical value so the exact relationship between these variables and how the incidence of cancer increases with more causal factors present becomes clearer.)

The primary model for the methods of the experimental sciences is mathematization of space and time, that is spatio-temporal phenomena. This is done by means of

measurement of sense experience under some guiding well-tested interpretive theoretical framework that allows for the development and testing of explanatory hypotheses and the production of data. The first really systematic modern sciences were Copernican astronomy and Newtonian physics (Galileo did not yet have a systematic framework of interpretation but greatly hastened the intellectual conditions that eventually led to the development of Newtonian science).

There is no unified method or body of knowledge called "science" but rather various sciences that share a family resemblance in the use of various similar but distinct methods of testing explanatory hypotheses. Each science is specific and tailored to the domain of inquiry and type of object it investigates. Thus, physics (which studies the basic physical nature of phenomena) and biology (which studies the basic nature of living things) are quite distinct. This is evident from the very vocabulary used in each of these sciences. The larger broad division of sciences is between the so-called *natural sciences* which include both physics and biology as well as astronomy, chemistry, geology, etc., and the *social or human sciences* such as psychology, anthropology, sociology, political science, etc., that study the nature of human beings (human behavior, emotion, cognition, etc.), and human social and political organization. The natural and social sciences as a group are typically distinguished from the *HUMANITIES* which include the many different arts and philosophy. History is usually considered one of the humanities, but is also often labeled as one of the social sciences.

C. Theories, Hypotheses, Laws, and Models:

An accepted *theory* in the sciences is a well tested interpretive framework that explains a range of phenomena and is necessary for the ordinary testing procedures of science to operate. Theories are the result of a highly successful attempt to simplify and unify a range of phenomena. A theory, once developed through a great deal of collective effort and shown to be mathematically sound, is very stable and does not change quickly or easily. A *hypothesis*, in contrast, is a tentative testable explanation (within a theoretical frame) developed for explaining some particular phenomenon or range of phenomena already recognizable as relevant under the general interpretive frame of the theory. A genuine hypothesis must be falsifiable. It cannot count as true without testing and we must know what would count in

its favor and against it. Successful testing produces confirmation and with enough confirmation the hypothesis becomes part of a larger theoretical framework which must also be falsifiable to be genuine scientific theories. Scientists do not set out to “prove” hypotheses, but to test and confirm them. Proof is a strictly deductive mathematical term. Science is based instead on inductive logic in which we reach conclusions about unobserved things on the basis of what has been observed. For example, our best theory of cosmology, based on massive amount of observation, inductively supports the prediction that the sun will burn out in about 4 billion years, though we have never witnessed this. The findings from inductive reasoning are always a matter of high probability, not certainty. However, there is no reason to reject a very well-confirmed theory until we have data that disconfirms it.

Often multiple hypotheses are posed to explain phenomena and the goal of research is to eliminate the ones that are not well-confirmed. Many hypotheses are generated in the sciences, but most do not survive the rigorous testing procedures often called the “scientific method” even though it should be plural: the methods of the sciences. In contrast, theories usually remain for decades or centuries even as they are modified and refined. In science, theories are never hunches or guesses but massively well-confirmed frameworks for interpreting and explaining phenomena. A theory or hypothesis that cannot be disconfirmed (cannot be falsified) is not a genuine scientific theory or hypothesis. However, it is also considered sufficient for theory to be testable in principle at some undetermined point in the future. The term theory in science is now sometimes stretched to refer to speculation that is currently unverifiable, such as string theory.

D. Testing Hypotheses: Experimental Design:

In the sciences phenomena that are correlated or appear together in experience that are suspected to be causally related can be tested by means of experimental design. The design begins with a phenomena or type of phenomena to be explained by means of a working hypothesis. Experiments are designed to test the hypothesis. Depending on the science and what is being tested, the suspected causal factor, (called the *experimental, independent or manipulated variable*), must be precisely defined. It must be given an *operational definition*, otherwise it will be uncertain what was tested, how to interpret the results and it will not be possible

to replicate the test to confirm or disconfirm its findings. The test should measure (typically give a numerical value to) the effect or outcome (the *dependent variable*) as a result of the presence of the suspected causal factor/independent variable. All other factors (intervening variables) that could possibly cause some change in the outcome must be screened out otherwise we would not know what caused the result. A degree of confirmation is achieved when there is a statistically significant outcome that is not explained by factors other than the tested variable. A hypothesis can also be tested by inferring what must be true if the hypothesis is true and then seeing if what was predicted by the hypothesis is in fact the case. That adds confirmation to the hypothesis. *Controlled experiments* involve manipulation of the thing to be explained to investigate causal outcomes. *Natural experiments* are those in which the thing to be explained and its effects/causes are found already in nature instead of manipulated.

Laws simply refer to regularities in phenomena that do not vary, such as the law of gravity, Newton's laws of motion, the laws of thermodynamics, Boyle's law of gases, the law of conservation of mass and energy, and Hook's law of elasticity. Laws are simply an invariable range of phenomena, such as how things fall to earth under certain conditions (gravity) though this can be explained differently by different theories. For example, Newton's Theory based on a static conception of space and uniform absolute time explains the law of gravity differently than later theories in physics. Because Einstein's theories explained and predicted a wider range of phenomena better than Newton's, Einstein's were adopted because they had more explanatory and predictive power and range and were better confirmed under a wider range of conditions.

One scientist *cannot* create a theory; she can only create a *hypothesis*. In general, both a scientific theory and a scientific law are accepted to be true by the scientific community as a whole. Both are used to make predictions of events. Both are used to advance technology that in turn allows for further development of science.

Models in Science (Stanford Encyclopedia of Philosophy) Models are of central importance in many scientific contexts. The centrality of models such as the billiard ball model of a gas, the Bohr model of the atom, the MIT bag model of the nucleon, the Gaussian-chain model of a polymer, the Lorenz model of the atmosphere, the Lotka-Volterra model of

predator-prey interaction, the double helix model of DNA, agent-based and evolutionary models in the social sciences, or general equilibrium models of markets in their respective domains are cases in point. Scientists spend a great deal of time building, testing, comparing and revising models, and much journal space is dedicated to introducing, applying and interpreting these valuable tools. In short, models are one of the principal instruments of modern science.

Models can perform two fundamentally different representational functions. On the one hand, a model can be a representation of a selected part of the world (the 'target system'). Depending on the nature of the target, such models are either models of phenomena or models of data. On the other hand, a model can represent a theory in the sense that it interprets the laws and axioms of that theory. These two notions are not mutually exclusive as scientific models can be representations in both senses at the same time.

Models and Theory: The separation between models and theory is a very hazy one and in the jargon of many scientists it is often difficult, if not impossible, to draw a line. So the question is: is there a distinction between models and theories and if so how do they relate to one another? There are two major views on this among philosophers: The syntactic and the semantic view of theories. The *syntactic view* of theories, construes a theory as a set of sentences in an axiomatized system of first order logic...Proponents of the syntactic view believe models to be irrelevant to science. Models, they hold, are superfluous additions that are at best of pedagogical, aesthetical or psychological value.

The *semantic view* of theories reverses this standpoint and declares that we should dispense with a formal calculus altogether and view a theory as a family of models. Although different versions of the semantic view assume a different notion of model, they all agree that models are the central unit of scientific theorizing.

However, against the semantic view, it has been argued that models are relatively independent from theory, rather than being constitutive of them...A look at how models are constructed in actual science shows that they are neither derived entirely from data nor from theory. Theories do not provide us with algorithms for the construction a model. Model building is an art and not a mechanical procedure. The second aspect of the independence of models is that they perform functions which they could not perform if they

were a part of, or strongly dependent on, theories. A theory may be incompletely specified in the sense that it imposes certain general constraints but remains silent about the details of concrete situations, which are provided by a model.

In contrast, others have argued that fundamental theories such as classical mechanics and quantum mechanics do not represent anything at all as they do not describe any real world situation. Laws in such theories are schemata that need to be concretized and filled with the details of a specific situation, which is a task that is accomplished by a model.

A further argument has been made that when theories are too complicated to handle, a simplified model may be employed that allows for a solution.

E. Interpretation: Finally, with regard to all discourse, including that of science and religion, it is hermeneutical, that is, a linguistic process of interpretation based on past interpretation. (This will be discussed further. See the sections on hermeneutics in *The Eros of Wisdom* and *Theory and Linguisticity*)

III. Philosophy versus Science

Philosophy involves rigorous and sustained thought about very basic issues such as reality, knowledge and truth, self, society, justice, ethics, and much more. Like the sciences philosophy involves testing our ideas. But unlike modern natural science, philosophy is not limited to narrow empirical methods. Much of philosophy has been theoretical in attempting to provide explanations of the world and our ideas, but philosophy does not/cannot assimilate the unknown to the known as science does. Philosophy does not produce knowledge, but rather, when successful, leads to better understanding, insight, wisdom, which the sciences, by the nature of their limits that make them such powerful explanatory methods, cannot. Science can only operate by gradually assimilating the unknown to the known via its narrow limits of empirical investigation and testing. Its power is in its narrowness. To dilute science into an attempt to understand how things hang together in the largest or deepest sense, pursue non empirical ideas such as justice, rights, meaning, etc., would be to destroy the effectiveness of science. Philosophy, beyond its previous attempts to provide such overarching large theoretical views, is consistently a kind of undoing or undermining of beliefs/truth, an emptying out that allows a new beginning, rebirth, begins in wonder and

generates wonder on the way to new understanding of ourselves and the world that is not finally restricted to any method. Philosophy in its narrowest sense is great skill in critical thinking, particularly conceptual analysis that aims at conceptual clarity. But philosophy is not merely about clarifying conceptual boundaries, as for example, in clarifying such central concepts as justice, time, causality, self, etc... In its broadest sense, philosophy is the hermeneutical or interpretive attempt to understand understanding itself. It is an attempt not to understand this or that, but to understand the conditions of the possibility of understanding, that is, what it is to understand at all. This is not at all a psychological explanation of what happens when we understand something. Rather, such psychological explanation is itself an example of understanding. What we understand and how we do it are not the same thing as understanding itself or its conditions of possibility. To understand understanding hermeneutically is to step outside theory altogether. It is an awareness of the conditions of our finitude and the conditions of meaningfulness and interpretation that dictate or make possible any understanding we have of anything. In this sense philosophy truly is the pursuit or love of wisdom as its name indicates. It is not knowledge, but a seeing into the very interpretive conditions of knowledge or meaningfulness generally that allows us to grasp anything at all. That was Plato's goal: to grasp the conditions of the possibility of intelligibility or meaningfulness of the world at all. But he tended often to use metaphysical and epistemological theories to pursue this as did most of philosophy after him until as recently as the late 19th and early 20th centuries when this "business as usual" in philosophy was severely challenged and largely abandoned, at least in the presumptions of what a philosophical theory might be able to do, and most strongly in; moving beyond methods and theories to a phenomenological and hermeneutical approach to understanding.

A. Some uses, descriptions and/or meanings of Philosophy:

1. Literally, love or pursuit of wisdom by intellectual and moral self-discipline. That is, rationalistic, and normative non mythopoeic, non supernatural investigations of the nature of things that may overlap with but are not restricted to objects of scientific investigation.
2. Inquiry into the nature of things based on logical reasoning not restricted to empirical methods.

3. The analysis and critique of fundamental beliefs.
4. The attempt to synthesize consistently all learning and understanding.
5. One's basic viewpoint.
6. The system of values by which one lives.
7. The *practice* rather than merely the intellectual recognition of wisdom. A way of life.
8. The normative investigation into the value and meaning of claims of truth, reality, justice, methodology, and value judgments themselves.
9. An unusually persistent attempt to think critically and clearly about fundamental issues
10. "...the disease for which it was supposed to be the cure" (Wittgenstein) (i.e., is supposed to clear things up for us but often does the reverse)

B. Traditional Areas of Philosophy

Metaphysics: Theories of reality

Epistemology: Theories of knowledge and truth

Axiology: Theories of Value (including ethics and aesthetics)

Ethics: inquiry into the nature of moral judgments, their meaning, and validity, and into the nature of an ethical or virtuous life),

Aesthetics: inquiry into the nature of the experience and judgment of beauty and/or artistic merit, the meaning and validity of such judgments.

Logic: Study of the Rules of consistent thought

Special Topics: e.g., philosophy of art, sport, science, law, etc..

C. Two kinds of philosophy in Socratic Lineage

1. Theoretical (some limited similarity to the sciences in generating and testing theories, but not by appeal to hypothetical-mathematically derived data).
2. Spiritual practice (some limited similarity to religion in pursuing a way of living a human life)

D. Characteristics

1. Logos - Logic, A or not A, true/false, pursuit of definitions, categories, limits, foundations, absolutes
2. Analysis (breaking down elements in order to understand) and Synthesis (putting all understanding and learning together in a consistent whole).

E. Types of Philosophy

1. *Argumentative* (logic of propositions, premise/conclusion construction and analysis of concepts to reduce or eliminate rhetorical, psychological, emotional elements and isolate truth value of particular propositions) versus *Narrative philosophy* (examination of rich

rhetorical, experiential, psychological elements together with logical/conceptual elements of language in our narratives to achieve profound insight and understanding)

2. *Language Analysis* (often inadequately identified as “Anglo-American” philosophy) Breaks into roughly two camps: Ordinary language analysis and formal language analysis in which the usual content of language is reduced or eliminated in the pursuit of logical/empirical truth. Both approaches attempt to maximize clarity in our statements and their conceptual components.
3. *Phenomenology* is a highly rigorous method where the usual abstract conceptual and theoretical elements that dominate our language and understanding are bracketed so we can deal with what actually appears in our experience of phenomena.
4. *Philosophical Hermeneutics* The attempt to understand understanding and the basic condition of finitude and linguisticity from which understanding arises. (See section in *The Eros of Wisdom*)

Oxford Dictionary Definition of Philosophy

(Greek, love of knowledge or wisdom) The study of the most general and abstract features of the world and categories with which we think: mind, matter, reason, proof, truth, etc. In philosophy, the concepts with which we approach the world themselves become the topic of inquiry. A philosophy of a discipline such as history, physics, or law seeks not so much to solve historical, physical, or legal questions, as to study the concepts that structure such thinking, and to lay bare their foundations and presuppositions. In this sense philosophy is what happens *when a practice becomes self-conscious*. The borderline between such 'second order' reflection, and ways of practicing the first order discipline itself, is not always clear: philosophical problems may be tamed by the advance of a discipline, and the conduct of a discipline may be swayed by philosophical reflection (see also owl of Minerva). At different times there has been more or less optimism about the possibility of a pure or 'first' philosophy, taking an *apriori* standpoint from which other intellectual practices can be impartially assessed and subjected to logical evaluation and correction (see methodology). The late 20th-century spirit of the subject is hostile to any such possibility, and prefers to see philosophical reflection as continuous with the best practice of any field of intellectual inquiry.

IV. Literal versus Symbolic Discourse:
Literal Discourse: Science and Philosophy: Emphasis on Conceptual clarity, clarity and subtlety of distinctions in *thought* expressed in language

Symbolic/mythopoeia: Religion/Philosophy - Emphasis on richness and subtlety of what is *felt and understood* expressed in language

V. Scientism and Religious Dogmatism

It is crucial to not confuse science with scientism (positivism) and religion with dogmatic religion. Science is an extraordinarily valuable, highly skeptical rigorous set of methodologies for testing our claims about the world, particularly empirical claims. *Scientism*, on the other hand, is a kind of poorly thought out *philosophy* or set of insufficiently examined assumptions ABOUT the sciences by people who may or may not be scientists and who may or may not have knowledge of how science works. It is not necessary to be scientific to be scientific. *Scientism* is the assumption and belief that science is the only or best way to approach understanding or provides the best model for this. This is clearly an unwarranted view. The most basic assumptions of science are not themselves scientifically verifiable, such as, the assumption that by mathematizing space and time you can produce something called knowledge. This is a valuable and an enabling assumption, but it cannot be tested within science. It is one of several basic logical “surds” or starting point that allow science to even function at all, as does the commitment to the *value* of objectivity, which is another basic and unexamined assumption. This assumes that only in treating something as an object and then distancing oneself in abstraction from it, can it be known and understood. There is no question that there is value in this standpoint for us. It is an enabling value that holds that *intersubjective testing is a better ground for our belief than individual subjective experience*. One’s personal desires and beliefs are bracketed out of the scientific method. Without this, science would not be possible and all its immense value to us would be lost. Philosophy too, appeals to an intersubjective/objective basis for its claims tested by the rules of logic that are not merely subjective.

So, scientistic thinking is not scientific thinking. Scientistic thinking is akin to *dogmatism in religion*. Much of religious dogmatism (unquestioned or insufficiently questioned belief) is based on a widespread confusion about the role of sacred texts and about the sacred itself. A text can be deeply

revered as sacred without dogmatically asserting its status as foundational unquestioned truth. The confusion of the terms "sacred" and "true" creates a great deal of unnecessary conflict and suffering. To take a sacred text as foundational and literally true is disastrous in two ways: 1) It actually undermines its sacredness, since it opens the text to literal, logical examination where its mythopoeic power to reveal something basic about our deep felt sense of being here is undermined by showing the logical inconsistency of such texts with themselves, and 2) if taken literally, one is then forced to deny any other sacred text as truly sacred, since only your sacred text is taken to be true.

The first problem, however, is that the word true is ambiguous. Literal truth is not the only kind of truth. A sacred text can reveal many deep insights or truths about the human condition, just as a great novel can. All sacred texts are written in **mythopoeic**, symbolic discourse which aims at a deeply felt sense of reverence and answers a need to be connected to the world in a deeply significant way. These texts often mix literal and symbolic discourse. If we force sacred texts to live up to strict standards of self-consistency and literal truth that we never require of other deeply poetical expressions of feeling in poetry and lyrics, for example, then its sacredness become confused with literal truth and is undermined. This forces the unnecessary choice of either accepting it on blind fanatical faith or rejecting it as nonsense. In either case, the power of its sacredness and its revealing insights on the human condition are lost, in the first case, to ideological rationalization and blind fanaticism, and in the second case, to confused and thoughtless skepticism.

The second problem is that those who claim a religious text as not only sacred, but foundational, must show why that particular text ought to be considered so rather than some other sacred text, (i.e., the Bible as opposed to the Koran, the Vedas, Tao Te Ching, Tripitaka, etc.). In addition, they must show that **their** interpretation of their own sacred text is correct and that conflicting interpretations by others who also take the same text as sacred and foundational are wrong. Further, if the attempt is made to justify belief in a particular sacred text on the grounds that it is the revealed word of God, then the text itself is no longer foundational, but rather its source becomes foundational, that is, God. But since other sacred texts make similar claims about God, the problem of choosing between them is simply moved to

another level, the question then becomes, which text **is** the revealed word of God? (Buddhism, Taoism and other naturalistic religions escape this problem, but not necessarily the problem of dogmatism which is a human problem, not a religious problem). The claim is often made that no justification is needed because the truth of a particular sacred text is "based on faith." The question here is what motivates this phrase "based on faith." If it is used to simply close rational debate, then it has little to do with the sacred and with faith, but is an instance of *fanatical closure*, a sign of fear of reasonable inquiry. Such a move is dangerous since if it is accepted as a legitimate move in public debate, then the possibility of democracy, which cannot exist without public use of rational debate, is undermined.

It would be instructive here to remember what one of the greatest Christians, Augustine, said about interpretation: To paraphrase the last chapter of his book **My Confessions**: since a sacred text is a text aimed at spiritual transformation in the lived experience of the reader, no interpretation can claim to be true exclusive of any other. Rather, if the interpretation brings the reader to live in the presence of the sacred, then the interpretation was "true" or successful. As long as one approaches the sacred with the attitude of deep humility and does not have the arrogance to claim to know the truth, then one has the most appropriate attitude with which to approach the sacred. This is entirely unsatisfactory from an historical, scientific, or logical/textual approach. But Augustine warns that logical and historical thinking should guide us when looking at the world, but not when we approach the sacred/God. To approach the sacred/God, one must drop all pretense to knowledge, leave all one's "truths" behind. Likewise, to historicize or logicize a sacred text is to undermine its purpose and power. The sacred, which for Augustine is not something that can be addressed with historical or logical thinking, can only be approached with the deepest of humility, with the attitude that one knows nothing with regard to the deepest mysteries. This is a matter of deep humility, not claims to truth or knowledge. It is arrogance to think otherwise. On the other hand, self-correcting well-reasonedness is our best and most responsible approach to what IS open to our understanding about the world that we can know something about. God is not a possible object of knowledge, is a matter of faith, not belief, since belief is susceptible to falsification, whereas, faith is not. We might

say that faith is completely inward and matters of belief and knowledge are matters of evidence.

Problems in the social sciences: The modern social sciences, psychology, sociology, anthropology, etc. began to emerge in the late 1800's. The mathematical exactitude of the older natural sciences of physics and astronomy and the new sciences of modern biology and chemistry were models of successful sciences. For more than a century now, the researchers in the social sciences have attempted in one manner or other to achieve such success through exactitude. Others in these fields have moved away from this model. One thing is clear: no social science has yet become a unified science. There are psychologies, anthropologies, sociologies, etc.. That is because they have no unifying methodology like the natural sciences. The social sciences are beginning to take the advice of 18th and 19th century thinkers who originally saw that the object of such sciences are interpretive beings, namely human beings, and they cannot be objectified, measured, and studied in the way physical elements, chemical compounds, and cells are. Dilthy had seen that an interpretive methodology was appropriate, namely hermeneutics. It will be a very slow process of overcoming this initial inappropriate direction that the social sciences took in the 1800's, but it has begun and should come to some powerful fruition in perhaps decades, perhaps a century. This is not to say that the data produced by the social sciences has not often been very insightful and useful. But it has not produced an understanding that goes to the heart of what it is to be interpretive beings who live in our meanings. There can be no overall unifying and simplifying theoretical view such as in the natural sciences. Once hermeneutics and the fundamental issue of interpretation is taken as the unavoidable starting and ending point of any understanding of human beings, as opposed to explanations of limited objectified measurable features of humans, the social sciences may blossom to their much fuller potential. All understanding is hermeneutical.