

**CHAPTER ONE:  
Integral Methodology for a New Man and a New Humanity**

*"There is no new humanity if there are not first of all new persons (new men) renewed by Baptism and by lives lived according to the Gospel."*

Pope Paul VI Evangelii Nuntiandi

SINCE CLASSICAL ANTIQUITY, savants, scholars and statesmen have approached **politics as a sub-branch of moral philosophy**, which is a practical, normative (value based), and prescriptive (ameliorative) discipline dealing with social issues in the contingent and ever-changing realm of world affairs. Its goal is to evaluate and improve social life by prescribing means to induce positive change. Conversely, politics in the modern world, since the 19th century, is almost exclusively approached as a **sub-branch of social science**, which is an empirical or **descriptive discipline** (describes what is without evaluating it as good or bad, right or wrong and without prescribing any type of change), **which aims at** providing objective quantifiable data that assists political leaders dealing with political matters such as policy questions and lawmaking.

The difference between politics as a philosophical study and politics as an empirical study has resulted in an artificial juxtaposition, which views them as competing rivalries. Moreover, moral theology is not even counted in the equation. This mistake has engendered an egregious internal division that has weakened the social sciences at a time when they are sorely needed to assist economic, political, and social reform in a world groping forward and searching for models to facilitate transition from socialism/communism and ailing liberal capitalism toward something that is more solidaristic and better enhances human dignity. This divisive error between empirical science and philosophy requires rectification in order to bring about a new synthesis equal to the immense challenges that confront humanity. Rather than being seen as mutually exclusive or adversarial, the two, if properly understood, can be seen as mutual and complimentary. Philosophical methods are normative and prescriptive; empirical methods are descriptive; the two must be brought together.

Normative methods deal with norms or values; they involve judgments about means and ends (good if they promote human progress and bad if they inhibit or vitiate it). Prescriptive methods presume an end that is philosophically demonstrated to be advantageous (normative) and then provide prudential means necessary to accomplish the desired end. **A prescriptive method being a calculated extrapolation** (positive if it actually helps accomplish goals, negative if it inhibits their realization or worse moves society in an unintended and opposite direction) **requires objective and accurate data** including objective description and measurement of social variables that effect implementation of means to reach desired ends. **A prescriptive philosophical policy that is good in theory can become bad in practice if it is wrongly applied**; accurate descriptive or empirical data is necessary to assure proper implementation. As a result, political planning that involves theory and practice can go wrong in several ways, the primary ones being:

**1. Improper Ends and Improper Means**

This error results from a failure to comprehend the issue because its theoretical

underpinning and key concepts are only partially understood. That is, paucity in philosophical knowledge pertaining to major concepts and ideas (on which the discipline is founded) results in the choice of improper ends and, as a consequence, improper means which, if implemented would cause distress.

## 2. Proper Ends and Improper Means

**The choice of proper ends but improper means**, that is, the chosen means are incapable of achieving the intended end, or worse, they actually have the opposite or unintended effect of aggravating an already difficult situation (such as communist planning for the "good of man").

The means are flawed either because of

- A. Adequate philosophical education about the essence of things **but weak empirical training** resulting in poor understanding of the environment in which the theoretical principles are applied; it has not been properly observed, described, measured and analyzed and is therefore misunderstood thereby resulting in the choice of improper means or improperly applying proper means.

or

- B. A proper end is articulated because it is an "easy" or "lucky" guess: who would argue, for example, against a desire for peace on earth; it is a so called, "no brainer." Unfortunately, the philosophical principles associated with the acquisition of peace (quiddity, synderesis, prudence etc.) and related concepts such as human development, justice, charity, and solidarity, that guide implementation, are not so easily mastered and integrated into a unified theory and then applied to practical reality. Thus, although a proper end is chosen, it is not understood well enough for successful implementation.

Because political leaders are often working from simplistic one-liners resulting in easy or lucky guesses (without the requisite theoretical/philosophical sophistication necessary to integrate and understand them) any attempts at implementation, including ones that "sound good", are prone to failure.

Although both theory and its application are important, when evaluating the two, it is clear that mastery of theory and the principles on which it rests take precedence. **If we go wrong on the level of theory, we are bound to go wrong on the level of practice.** Any architect knows that he/she has to get a concept correct in the mind before it can correctly expressed by the hands.

Nonetheless, **it is usually the second issue viz., proper ends** (health care, economic justice, education, full employment, liberty, human development etc.) **and a paucity of understanding** exacerbated by **improper means that causes the problem**. Political leaders articulate a proper goal but do not adequately understand the principle(s) from which the goal is derived and on which the science is based nor have they understood and integrated the ancillary anthropological foundation, (a correct definition of man) from which the discipline proceeds. If they have an anthropology, it is often flawed and therefore, although a proper goal (in this case, a lucky guess or a no-brainer) might be

articulated, improper measures are implemented to accomplish desired ends. Because ideas and concepts such as man, work, property, justice, rights, freedom, progress etc. are articulated for rhetorical/political purposes without being properly mastered, they can never be achieved.

Proper knowledge of a thing's end is first in the order of importance but last in the order of acquisition. First, it is necessary to know where you are headed (end) before you determine how to get there (means). **The end thus regulates the means that are implemented to achieve it and is the yardstick against which they are measured.** However, if the end is misinterpreted or poorly understood the means cannot be commensurate to its achievement and failure can be expected. Thus, a significant amount of time must be invested knowing about ends, but **ends can only be deduced if we know about essences or what things are.** It is impossible to construct anything (in this case a viable social system) if we do not first know what it and all of its necessary ancillary and component parts are. They must not only be named; they must also be properly and demonstrably understood.

Politics is infected with this strange malady: in every other professional discipline, (physics, medicine, architecture, and engineering), mastery of a tremendous body of knowledge and proof of mastery are required. Politics, the architectonic science, that is, the science which is the arch over them all, requires knowledge in all areas of human endeavor because it will make laws covering them all. It must know the essence of everything under the sun especially that of man, yet it is the one science where you don't have to know anything. Thus, politicians are often very busy doing things about which they know very little. This often happens because many politicians have a sense for what is good or at least for what sounds good, but they do not really understand what they think they know and consequent do not really comprehend the problem and therefore suggest improper methods that "used to work" but no longer will (such as efforts to fix a capitalist economy by the old worn out idea of lowering interest rates). Actually, they usually excel at implementation. The problem is that implementation often proceeds from defective understanding of the basic facts of life, that is, the nature or essence of things, such as man and society, the church and the state, nature and habit, prudence and wisdom or ends and means to name a few.

In short, achievement of proper ends requires more than bewildering "political talk" or easy fixes that used to work under different historical circumstances; it also requires mastery (especially mastery of self) and synthesis of associated theoretical principles and ancillary concepts on which politics is built as well as empirical knowledge (not lucky guesses) about the environment in which the principles are to be applied. To summarize, implementation often fails because although proper ends are often articulated, either

1. Some or all of the essential theoretical parts or ancillary concepts are not mastered
2. The environment in which desired ends are to be achieved is misunderstood or because of
3. Some combination of the two

### **The Weakness of Prescriptive Methods without Auxiliary Descriptive Ones**

The answer is not more philosophy, if by that we mean a discipline in ignorance of and

disdain for empirical science; we have had enough of this. Prescriptive philosophical methods provide goals, objectives, and procedures that are prudential judgments best calculated to assist in the application of theory to achieve theoretical ends that are seen as good and desirable. Of course, prescriptive methods presuppose proper analysis and understanding of the essential nature or essence of things, such as the natures and essential functions and purposes of man and society. This type of knowledge is necessary before goals, objectives and procedures can be articulated. If a doctor is going to prescribe medicine, she has to understand the body and the effects the medicine will have on it. Knowing what a human being or a society is enables politicians to better know what they are capable of achieving (what a human being or society can become), what their strengths and weaknesses are, how they interact, how they function in theory, and how they will most likely function in practice given proper consideration of contingent circumstances and the impact prescribed methods will have on them.

Theoretical understanding and wisdom is derived from knowledge of universal principles that is based on apprehending the ontological essence of things (not merely that a thing is, but what a thing really is, its essential nature, powers, structure and functions that determine what it is capable of doing and becoming). This type of ontological understanding necessarily precedes prescriptive judgments and the setting of goals and objectives. However, **for all intents and purposes, philosophical knowledge remains practically useless without detailed and descriptive knowledge of particular circumstances in which goals and objectives will be attained.** I want to stress the point before it is lost; viz., descriptive and practical knowledge of particular and contingent circumstances, the environment, is absolutely essentially for the attainment of properly formulated ends and also for the drafting of appropriate prescriptive means (goals and objectives) for achieving these ends in a particular environment, where the rubber meets the road so to speak.

Normative and prescriptive philosophical methods are necessary, knowledge of essence is essential, but without empirical descriptive methods, the former are incomplete and prone to failure. **Knowing what should be** (proper theoretical ends) **without also knowing what is** (proper empirical data) **is a recipe for disaster.** Even though philosophical knowledge might appear to be sophisticated, knowledge of a things ontological nature (its essence) without acknowledgement of the importance of modern empirical and descriptive methods that aid in the amendment and implementation of philosophical ideas, remains pedantic; such knowledge by itself is sure recipe for failure.

**Empirical knowledge is a necessary and corollary part of normative prescriptive knowledge.** That is, knowing how to get something done requires not only knowledge of what is to be done but also, equally important, knowledge of the environment in which it is to be done. Without demographic knowledge of a particular society, without knowledge of its economic, political and social system, of its history, culture, current laws, values and beliefs, it is unlikely that any ends and goals for their achievement will ever be reached or successfully implemented no matter how well they are philosophically articulated or understood.

Most philosophers go wrong because they lack empirical descriptive means, and most scientists go wrong because they lack knowledge of origins, ontological essence, ends, and related normative and prescriptive insight. Thus, empirical social science, in spite of its complex statistical and quantitative tools, is unable to prescribe ameliorative social

change for the good of humanity. This is a trenchant deficiency due to the fact that politics is all about providing social environments in which human life can flourish. Unfortunately, for all the stress on empirical descriptive methods necessary to improve outcomes, modern social science and political action without ancillary normative and prescriptive wisdom is unlikely to improve life for anyone, and this is its main purpose!

Philosophy should be able to assist empirical science with a deeper understanding of human nature and with the normative moral value of ends and means, while science should help assure the proper prescription/implementation of means and thereby facilitate successful achievement of desired philosophical/theoretical goals or ends. **The last thing we need is a group of academicians**, void of practical knowledge and its scientific attainment, **running around in philosopher's garb trying to tell us what to do and how to do it**; they have enough difficulty trying to keep their own desks in order, and we have seen what crafty/practical men with technical competence guided by utilitarian moral values, but lacking philosophical wisdom, can do for (or more correctly to) society.

In short, successful development of society requires articulation of proper ends that are actually understood and that are actually good for humanity. Moreover, proper planning goals and objectives or means commensurate with achieving ends must be drafted and carefully articulated. Successful implementation requires a unified understanding of the essence and nature of things and of the complex social systems in which goals and objectives are to be implemented and realized. An economic or political plan tailored for the people of 20th century Russia will not necessarily work for the people of 19th century China or even for the people of 21st century Russia itself. Each require a related but divergent integrated plan that shares common guiding principles and proper universal ends to be achieved (peace, justice, intelligence, prosperity etc.) but different relative long and short range goals and objectives commensurate to each particular set of social circumstances.

A truncated and bifurcated social science will no longer do. **The times call for the creation of a new political methodology**, they require and **Integral Politics, which can be defined** as a **practical** science specializing in the study of human social interaction and the promotion of integral human development or maximization of human potential necessary to live a good life. Because it serves human development, Integral Politics also requires, and therefore includes, **speculative wisdom** and understanding of itself and of its ancillary disciplines (anthropology and ethics) necessary for developing demonstrable theories, making normative judgments, and prescribing positive change for the good of man and society. Integral Politics requires, and therefore includes, as a secondary but intrinsic function, empirical knowledge necessary to prescribe practical plans, goals, and objectives calculated to best achieve desired ends while taking into account all of the contingent and relative circumstances including demographic, historical, economic, political, and socio-cultural factors which effect the implementation of means in an endeavor **to achieve a just community that promotes integral human development, serves the common good, and the pursuit of happiness for everyone.**

Integral politics requires the use of all three methods, viz., normative, prescriptive and descriptive. A social science that excludes any one or more of these three is necessarily truncated and incomplete as well as insufficient to the task of improving life for man in

the modern world.

A merely descriptive social science, as it is currently taught (but hardly ever practiced), is value free; that is, it purports to refrain from making normative judgments or providing prescriptive direction. It restricts itself to the task of describing what is and then, working within these parameters; in so doing, it indiscriminately serves the beck and call of every ideological position that courts public favor. Because it does not make judgments about good and bad or right and wrong (nor does it train its students to make such judgments) and because it neglects essential metaphysical data, it cannot provide, nor, under the circumstances, should it be expected to provide, a sufficient understanding of human nature or of the social problems encountered in society to successfully craft a definitive direction or plan of action for the future.

Even though political leaders do, in fact, draft such plans all the time, they are not educated/trained to do so, except, perhaps, for consideration of social utility, political expediency or best chance of success scenarios for a policy/procedure, which is often flawed or ideologically motivated and therefore more likely to exacerbate than to ameliorate human relationships. For example, the relational consequences of distributing condoms (to limit STDs) unintentionally inhibits self-control (which is a major cause of the problem in the first place), a constituent part of integral human development related to social justice, which helps make life in society possible in the first place. Such a policy implicitly promotes behavior that is positively correlated with the disease in the first place. The problem (self-control) is never actually addressed, (thus the likelihood of its increasing). The policy therefore (although it sounds good) unintentionally subverts the very first principle of politics, viz., justice, which is intimately related to ancillary self-control (temperance) necessary for human development, service to others, sublimation and actualization. Of course, if the policy is implemented as part of a short-term plan to achieve a long term goal such as justice and ancillary temperance, it might be legitimate. Unfortunately, it has not yet been articulated this way, except perhaps by Pope Benedict XVI whose approach involves short term acquiescence in pursuit of a longer term solution.

Empirical social scientists are taught again and again not to make value judgments and not to prescribe change. For them, there are no right and wrong or good and bad answers only utilitarian political calculation, objective and value neutral facts, and empirical description of what is. **In the name of "value neutral" social science, we have become "value illiterate"**. In spite of this fact, just about everyone on all sides of the **political spectrum** (conservative, liberal, ultra-conservative, ultra liberal, and everywhere in between) **knows that almost everyone** is motivated by a value laden ideology associated with a program for change. Crazy thing, **everyone is trained to be value neutral and, in practice, no one is**. So if, in spite of the rhetoric, the electorate and their chosen political leaders are inevitably going to make value laden decisions, we should educate them to make sound ones, not ideological or politically shallow ones having unintended or unforeseen consequences.

### **Opinion versus Knowledge**

Since antiquity, human beings have asked difficult questions about the meaning and purpose of life. Among the many approaches to knowledge and understanding of questions and ideas such as God, man, society, politics, nature and the cosmos, three

have withstood the test of time and are recognized as valid by most people: philosophy, science, and theology.

When it comes to such weighty topics as God, man and society, few people are persuaded by mere opinion, which is frowned upon as mere guess work, usually without much effort involved. **An opinion is a non-demonstrated or poorly demonstrated advocacy of a particular idea or point of view; it is a belief without sufficient reason to warrant acceptance and therefore tends to issue from the will rather than from the intellect, at least partially.** The ancient Greeks referred to such un-demonstrated knowledge as *doxa*. *Doxa* is a deficient cognitive state opposed to intellectual virtues such as

**Sapientia (Sophia) / Wisdom**, (demonstrated knowledge about the highest things).

**Episteme / Science** (the habit of induction or deduction necessary to induce verifiable principles or to demonstrate verifiable conclusions).

**Phronesis / Prudence**, (practical wisdom dealing with correct thinking about ends and means to their achievement in the contingent affairs of life).

Since antiquity, *doxa* or opinion has been frowned upon as the mark of an underdeveloped and ignorant person. Although, easily excused, specious dabbling and ignorance is not acceptable or so easily overlooked when it is applied to ultimate or penultimate questions such as the existence of God or the nature of the human soul, which effect plans for socio-political and economic change. It is excusable when young men and women, presumably, but not necessarily, students are searching for answers, similar to Glaucon in Plato's Republic.

Because he was young and his mind unformed, Glaucon had many opinions and little reluctance fumbling about ideas and concepts, which caused more confusion and doubt than clarity and certainty. Fortunately, because of his youthful exuberance and the basic moral habits he had inherited from his families natural albeit pagan virtue, he continued to entertain basic moral concepts and to nurture a germ of hope about the goodness of man that helps to explain why he had not yet turned into a skeptic. He had not yet experienced the pangs of reality, temptations to materialism, nor acquired the skill of hiding truth from himself by integrating incompatible and/or misunderstood principles (such as worker's rights and the elimination of private property as antecedents to justice). On the surface, such ideas seem feasible, but they lack synergy; when combined, they result in unintended consequences that are often difficult to detect in the thinking leading up to them. This faulty integration is one of many classic psychological maneuvers, which help to take away confusion, reduce dissonance, and turn one onto an ideologue with pseudo-sophisticated ideas that justify over-zealous action. Because it takes away dissonance and brings a type of internal Pyrrhic peace, it is usually tenaciously guarded.

Glaucon had not gone that far; his seed of doubt and rebellion was planted in a garden still germinated by hope and trust. Thus, he persisted in sincerely asking many questions. He retained enough good feeling, confidence, and habit to turn to respected teachers, such as Socrates, for guidance and assistance in examining difficult questions and properly forming them in his own mind under the instruction of a great teacher. This

type of opinion and unanswered question, the type undergraduates articulate, is understandable, necessary, and proper. It is not proper for highly educated professors engaged in advanced religious, scientific and philosophical research/teaching to hold to an undemonstrated or speciously supported idea and insist that his/her students do the same.

It is hoped, especially by youth, that adults have at least a modicum of learning and have acquired some wisdom. No one is happy paying an adult college professor for indoctrination or vacuous opinion, unless they suffer a similar malady with the professor. Students pay for and expect demonstrable answers that bring light and often closure to their many questions. Demonstrable, well thought out and integrated answers help to bring closure and foster mental peace; they take away or significantly reduce doubt because they have the import of **logical demonstration** or **empirical verification**. Thus, St. Thomas chose as one of his maxims to teachers, "Don't ever dig a hole in front of your students that you do not intend to fill." And I would add, fill well. This does not mean it has to be filled today or tomorrow; sometimes a crafty professor might dig a hole he intends to fill later in the semester. He knows and empathizes with his students thirst for knowledge that refreshes the searching mind and, accordingly, fills at an appropriate time.

Students like Glaucon, and human beings in general, have a natural tendency for truth. They want corporations and government to be transparent because they do not want to be lied to. **No normal person wants to be lied to.** They want the truth from their employer, they want the truth from their parents, they want the truth from their spouse, from their friends and neighbors, they want the truth about political affairs, from their pastors and priests, and from avatars and spirit helpers. In short, most human beings prefer truth to a lie. St Augustine recognized this human desire for truth: **"I have met many people that want to deceive, but none that want to be deceived"** (Confessions, 2002 Book X, para. 23).

**In this book, I will have to provide demonstrations; I will not be able to make a valid point unless I am able to do so.** Like most people, you probably want knowledge, not opinion. I am not writing to give my opinion; that would be a waste of my time (I already know what I think) and a waste of yours. I am writing to share knowledge. The difference between the two, opinion and knowledge, is that a person with knowledge purports to have some truth or truths that he/she is able to demonstrate. People with mere opinion or only partial knowledge are unable to demonstrate what they believe because they have either failed to order and to integrate their knowledge, do not understand it, or do not possess compelling reasons to demonstrate why they or anyone else should believe it. This does not mean that they do not possess any reason at all to believe what they happen to believe; most people have many developing or developed reasons and valid experiences or emotional responses that are understandably used to justify their beliefs. **Personal experiences should be, and I would add, must be, respected, but they do not carry the weight necessary for intellectual assent.** Emotional pleas or shallow demonstrations and the like require empathy, compassion, and patience, but, they do not require intellectual assent. For that, more than empathy is required.

In short, a person with an opinion holds some idea which he/she is not able to adequately demonstrate. What they profess might actually be true, but if they are unable

to demonstrate clear reasons why they believe it, they are said to possess information in a state of opinion.

Conversely, if someone provides a convincing presentation using logical demonstration or empirical verification or preferably a combination of the two, they do not have opinion but knowledge, the type of knowledge we are looking for to answer questions about man and society. For these purposes we need, and rightfully require, demonstration that provides a degree of certainty or high probability.

The mind naturally desires certainty or high probability and **it does not normally give ascent** (except for reasons of love and emotional attachment, as Pascal has said, "The heart has its reasons that the mind knows nothing of") **unless moved by one or the other** (empirical verification or logical demonstration). If a person has doubt, it is because he/she lacks a credible degree of certainty. **A degree of certainty takes away or reduces doubt.** If a mind has more doubt than it does certainty, it does not have knowledge but opinion in need of knowledge. Unfortunately, we are often lazy and become comfortable with our opinions to such a degree that we accept them as true to avoid the discomfort caused by doubt and thus become subject to demagoguery and manipulation to the extent that we are capable of believing almost anything if it is packaged correctly or makes us feel good.

Human beings have a natural tendency to reason about things, which, if trained and developed, helps them avoid demagoguery and assure them of their freedom. This is why we call intellectual training "liberal art". The liberal arts are mental skills of thinking that help liberate people and set them free to pursue happiness. The liberal arts are intended to instill intellectual virtues needed to acquire truth that sets a man free and helps keep him free. These are the type of intellectual skills Glaucon needed, the type being nurtured by his teacher Socrates. Human beings, like Glaucon, desire demonstrated knowledge that convinces. I have no doubt that  $3 + 3 = 6$  or that God exists (I might not understand the revealed mystery of the Trinity, but simple reason tells me God or a creator exists—almost everyone, believes some kind of god exists). I have no doubt of these things because they can be demonstrated so cogently and clearly that, if I am honest and objective, I must ascent.

The universal search for and appreciation of knowledge is so great that human beings have consistently constructed schools to impart learning and knowledge to each generation. In the west, colleges and institutions of higher learning imparting the liberal arts were found in ancient Greece 2,400 years ago. Socrates offered such study gratis, Plato his student, established the Academy and Aristotle the Lyceum at Athens. The medieval universities founded almost a thousand years ago are still functioning. In fact, throughout the civilized world special places called universities and colleges are established to impart an every widening array of scientific knowledge as well as cultural and philosophical knowledge to more and more students each year.

Such places are called universities because they maintain a certain commitment to universal knowledge, the endeavor to research and, if possible, to understand all things. In these places, students can study just about anything from chemistry to astronomy, psychology to sociology, economics to law and medicine or even tae kwon do. In short, universities impart a vast array of universal knowledge that is compelling and demonstrable. Men and women expect to learn and they are willing to pay for it. They

don't pay good money to be fed garbage or to be indoctrinated. If a professor wants to act like a dictator and impart lessons like an SS officer or on the authority of a coveted ideological position uncomfortable with questions from sincere students, he/she is not imparting education and learning but engaging in mere **indoctrination**, which **is little more than glorified opinion**.

Few students really tolerate this type of abuse. Instead, seasoned ideologues and unsalted students usually enter into a more congenial and time worn implicit agreement through which the teacher pretends to teach and promises a good grade if the student pretends to learn and keeps his questions and opinions to himself. In this situation, students will either leave (and many of them do, over 51% in the first two years in American universities) or, more likely, "kiss butt" and pay for the course because they, "need it." Worse, if they hear the "stuff" long enough, they might actually believe it and expect everyone else to accept these confusing opinions, which through ceaseless repetition have become their own; after all, they paid for them.

If students are not asking questions and being encouraged to do so, I sincerely doubt that real teaching and learning is taking place. **To be valid, teaching and learning require shared inquiry, demonstration, and intellectual assent.** Assent requires open dialogue and the confidence to ask questions and offer alternative perspectives in an air of acceptance and collegiality. Teachers using this approach most likely have self-confidence and are masters of the subject matter. They can authentically teach because they have authentically mastered the subject, ordered it, and integrated it. They are therefore able to impart understanding through cogent demonstrations, properly ordered questions and interactive-didactic instruction that is meaningful because it is intended to clarify; it is unified, ordered, and structured.

Universities are, or should be, committed to academic freedom in teaching and research that is necessary to discover the truth about God and man, about society and culture, the cosmos and the biosphere, about animal life and plant life, minerals and microscopic organisms and anything else under the sun. Teaching and valid inquiry are handled in various disciplines usually arranged into three broad domains including: math and science, humanities and fine arts, and the social and behavioral sciences. These broad disciplines attest to mankind's enduring attempt to acquire demonstrated knowledge that removes doubt because it satisfies the mind with empirical verification or logical demonstration.

Of all the various ways human beings have endeavored to acquire knowledge, the greatest and most enduring are science, philosophy, and theology. Science and philosophy are as old as the liberal arts and theology, as a rational discipline, has been around just as long. In fact, all the diverse disciplines mentioned above could be grouped in some general way under these three. All the social and behavioral sciences along with the hard sciences use some variation of the scientific method and traditionally use the philosophical as well. Mathematics uses inductive or deductive logic employed by philosophers, theologians and empirical scientists, and the humanities, esp. literature are expressions of philosophical and theological ideas. Fine art qua fine art (from the French *fin* or end) has no immediate scientific or philosophical purpose; it is associated with the theological idea of rest or Sabbath that is enjoyed as an end in itself.

## Science, Philosophy, and Theology

### Science

Modern science is empirical knowledge of concrete facts. Empirical knowledge is reliable because it is based on observation (hopefully objective) and therefore verifiable. Empirical science is usually utilitarian in that the primary purpose of objective observation is increased awareness and understanding necessary to improve the material quality of human life.\*

The scientific method is based on hypothesis, experiment to test the hypothesis, observation for evidence of change related to the hypothesis, control of its causes or correlated phenomena, reporting, and replication or necessary repetition of experiments using the same reported methods to acquire the same results. The more times an experiment is replicated and verified the more probable or certain are its conclusions until the point that scientific laws or principles (on which theories are constructed) are derived to facilitate further research and thinking.

Most of us are very familiar with this method. From combustion to automobiles, digital code to satellite communications, and telescopes to nanotechnology, the success and utility of empirical science has been so extensive as to deserve our admiration, thanks, and sincere applause. Scientific knowledge and its fruit, which we all enjoy, results from the strenuous labors of men and women intent on understanding the physical and material properties of the known universe and the painstaking application of these discoveries by engineers who have designed or invented new technologies that have enhanced and continue to enhance human life.

Empirical science, like all science, requires principles or general laws to facilitate further development. **The principles of empirical science are derived from continual and prolonged observation**, experiment, and careful recording of results until general laws are induced by which theories are developed. Because empirical induction is based upon specific observations necessary to arrive at general principles, it requires self-control, disciplined and trained concentration, and prolonged diligence. **A scientific principle is not established on the basis of a single observation, it requires numerous observations necessary to derive a sense of high probability.** For example, if a sample is taken of a population of 100,000 people in Ireland and the entire sampled population has red hair, it might be concluded that all Irishmen have red hair. This might or might not be true. The more observations that are made with the same result, the more certain the conclusion is likely to be. Thus, **the larger the sample rate the greater the probability.** The only way to be absolutely certain of any phenomenal thing is to keenly observe and study the ENTIRE POPULATION, but such an effort would require tremendous expenditure of time and effort bordering on the impossible. So, empirical science is comfortable with laws based on high probability derived from partial sample populations that, if acquired properly, enable scientists to make extrapolations from the sample to the general population.

Because the principles of empirical science are observable, they are believable; however, there are phenomena that are not observable. Some of our greatest questions deal with unobservable phenomena or abstract concepts and ideas such as liberty and

justice, God, virtue and the human soul, which, because they are unseen, cannot be studied by empirical methods; yet, universal human consent attests to their existence. Courses dealing with these ideas are taught and studied at practically every university in the world. If **virtue, justice and liberty et al do exist, they must be somehow knowable**. Empirical science is unable to answer questions about these concepts because **these concepts transcend the material box in which empirical scientists operate** with their *self-imposed methods*, which are limited to the physical world. It is not that empirical scientists do not want to see beyond this finite box or that they do not believe in or have ideas about God, justice and virtue etc., they realize and understand that they are unable to see or observe such concepts with their physical instruments and inductive methods and have therefore correctly concluded that, exist or not, these ideas are not the proper subject matter of their disciplines.\*

Consequently, there is need for other men and women who have interest in these metaphysical phenomena and who have developed methods for their study proper to their disciplines. They realize that there are significant metaphysical questions that human beings must wrestle with because they too are important to human life. In fact, they seem to be more important; not only do they provide direction for the proper use of scientific knowledge; they also provide direction for individual and social development. To study and analyze these other metaphysical things, human beings have recourse to philosophy and theology.

## Philosophy

Philosophy is different from theology (it does not require faith), and it is also different from science in that **it does not necessarily assume that everything has a natural cause** and is therefore limited to empirical observation. When empirical observation fails to support a hypothesis and conflicts with logic (for example over the question of spontaneous generation explored in chapter three) we have recourse to **philosophy**, which **is a framework of logical thinking based on observable scientific principles and self-evident truths that can be used to analyze scientific data**. The two should work in tandem. Historically, they did. Science and philosophy were not only historically related disciplines, they were historically integrated disciplines. Science as a predominantly empirical undertaking did not occur until the 18th century. Prior to this time educated people, especially in the social sciences, studied both philosophy and science, albeit, with a heavier emphasis on philosophy. For example, Aristotle is known as a “Father of Western Philosophy”, and also as the “Father of Biology.” From Aristotle forward, scientists had knowledge of philosophy and philosophers had knowledge of science. This ideal has roots in antiquity and reached its zenith in the Renaissance. The split between philosophy and science is a result of the modern insistence on observation and empirical verification as the only valid forms of knowledge.

This modern proclivity for practical reason coupled with a desire for experience reached its apex during the Age of Reason and has crested ever since. Since any extreme, which moves a system out of balance sets in motion an opposite and equal reaction, metaphysical and spiritual phenomena were bound to reappear.

\* There is such a thing as pure research (but it will not be funded too long if there are no practical results) and there is also natural philosophy which is the empirical study of nature but with a philosophical purpose; it is not empirical science for practical purposes.

Since the end of last century, there is a discernable movement back in the other direction as it is increasingly realized that empirical methodologies, especially in the human sciences, are unable to answer man's most profound and fundamental questions.

There is a clear and discernable academic movement away from positivism (empirical science), which crested in the fifties, in search of deeper meaning, while increasingly open to metaphysical and spiritual phenomena, especially in the human sciences. This shift toward spiritual/metaphysical phenomena was buttressed by the sixties movement as a reaction against empiricism, positivism, and materialism in search of greater meaning. The over emphasis on empirical methods during the last century, for whatever reason, created a moral and spiritual vacuum ultimately resulting in an increased awareness of the need for philosophy, theology and integrated social science.

Philosophy is concerned with a different set of questions than empirical science. It is not as concerned with the appearance of the material world as it is with **the reality behind the appearance** and with discerning the **ultimate purpose and cause of things**. Philosophers attempt to arrive at knowledge of **the inner nature of things, what they call the essence or quiddity**. They study external phenomena, functions, and operations to arrive at knowledge of internal processes, which give evidence about what a thing is and shed light on understanding its purpose and ultimate cause. **Philosophers desire to know the essence and origin of things, their purpose, and moral value. They want to know a thing well enough to promote its proper** development with an emphasis on moral development complimented by proper material development.

Although they are extremely concerned with inductive observation of physical phenomena, they are not primarily concerned with observation for utilitarian purposes but for purposes of understanding their origin, their end, their essence, and for purpose of making a moral judgment of their use or misuse. To accomplish these goals, philosophers use analytical thought guided by strict rules of logic to examine questions concerning human life such as, what is man, is there a God, what is the good life, what is the nature of justice etc.

Philosophers depend solely on reason. Like scientists, they necessarily use principles from observation (**a posteriori**, that is, formed after or **post** observation) from which they derive general laws used in subsequent thinking; they also use principles derived from common sense or from self-evidence (**a priori** or **prior** to observation). Self-evident principles are principles that do not require demonstration or proof because their veracity is immediately evident to anyone who understands the terms of the principle and because their opposite is absurd.

For example, the American Framers pronounced in the Declaration of Independence that, "We hold these truths to be self-evident." They were so certain of these founding principles that they required no further proof beyond their statement for their justification. Great thinkers for two thousand years have recognized that certain principles are self-evident because they are grounded in common sense and immediately apprehended once the meaning of their terms is understood. These *a priori* self-evident principles when conjoined with *a posteriori* inductive principles and guided by rules of logic lead to inevitable conclusions to which the mind must ascent to avoid contradiction.

According to Alexander Hamilton

"In disquisitions of every kind there are certain primary truths, or first principles upon which all subsequent reasoning must depend. These contain an internal evidence which, antecedent to all reflection or combination, commands the assent of the mind. Where it produces not this effect, it must proceed either from such disorder in the organs of perception, or from the influence of some strong interest, or passion, or prejudice. Of this nature are the maxims in geometry that things equal to the same are equal to one another; that two straight lines cannot enclose a space; and that all right angles are equal to each other. Of the same nature are these other maxims in ethics and politics, that there cannot be an effect without a cause; that the means ought to be proportioned to the end; that every power ought to be commensurate with its object" (The Federalist Papers Number 31).

For example, the a priori self-evident *Principle of Existential Causality* states that every Contingent Being is caused by a Necessary Being, that is, you cannot derive something from nothing. Once the mind apprehends the meaning of *something* and *nothing*, it is self-evident that the statement, something cannot be derived from nothing is true; it requires no more evidence.

Another example, which happens to be the first principle of ethics, is to seek good and to promote the good of others, which is just another way of stating the golden maxim: "Do unto others as you would have them do to you" or do good to yourself and others. When the terms *human* and *good* are apprehended, the statement is self-evident. **By good, philosophers mean anything that helps a being achieve its purpose or fulfill its potential.** To give a plant sunshine and fertilizer in the right amounts is good because it helps the plant to achieve its natural purpose/potential through activation of its functional organic parts necessary to grow to maturity. To pour gas on a plant is bad because it vitiates and runs contrary to the plant fulfilling its potential to grow and flower. **Good is a moral term in the sense that all living things have potential to mature and therefore proper and improper uses, which either enhance or inhibit this innate potential.** Good is, in a sense, relative to species because each have different purposes, functions and potentials. "Good" depends on the nature and purpose of a thing. Once the term good is understood and the term human (which is the purpose of this book to understand) is also understood, the statement becomes self-evident. It is certainly logical for a person to achieve what is good for him. The opposite, all human beings should destroy themselves, is an absurdity which makes the statement self-evident.

This is what the American Founders intended when they said **all men have an inalienable right to pursue happiness.** Since happiness results from fulfilling all one's potential and attaining all that is really good for a person, it is just another way of stating the first self-evident principle of ethics that all men should seek that which is good for them. **All the other precepts of the natural law are derived from this one** because all human beings require certain necessary things to achieve the end of happiness to which they all aspire. Good is in accordance with human nature and includes first of all a right to self-preservation and everything else that every person has a need of to achieve his/her end, which also requires that they fulfill their responsibilities to others whom, like

themselves, have a human end.

In addition to these *a priori* self-evident principles, philosophers, like empirical scientists, also use *a posteriori* principles derived from observation. A posteriori principles are derived from inductive observation of empirically verifiable facts to arrive at general conclusions used for further reasoning. For example, the observation that water freezes at 32 degrees Fahrenheit, when measured over and over again yields a general rule, which we can use for further reasoning without the need of subsequent proof. The development of a principle depends upon consistent observation of specific or particular facts; this is known as induction. However, once a general rule is accepted, it may be used in a process of deduction by which reason proceeds from the induced general rule to a specific application of the rule.

Logic is either deductive or inductive. When inductive, it is based on repeated observations that yield consistent results which can then be used in a process of reasoning that begins with a specific statement (the truth derived from the observation) and ends with a general conclusion. Thus, a general law is said to be induced. However, once induced it can be used in a process of deduction in a form of reasoning called the syllogism, which proceeds downward from (1) the new general rule (called a major premise, either induced or self-evident) through (2) an observed phenomena (called the minor premise) to a (3) particular application of the rule called the conclusion. Most philosophical logic is deductive, that is, it proceeds from a general rule to a specific application. Deduction is a process of moving from general to specific regardless of how the rule was derived (*a posteriori* induction or *a priori* self evidence).

A typical deductive syllogism proceeds from a general statement to a more specific one to reach a logical conclusion. If the **principles are true** and the **logic is correct**, the **conclusion is** said to be **sound**. A sound conclusion must be accepted or a logical contradiction results.

For example:

**Major Premise:** All men should seek that which is good (**major term**) for them.  
(A priori/self-evident premise)

**Minor Premise:** Thomas is a man (**middle term**) (a posteriori/observed premise)

**Conclusion:** Therefore, Thomas (**minor term**) should seek that which is good (**major term**) for him.

The first statement is a general a priori self-evident truth about ALL men, the second is a specific or particular a posteriori fact drawn from inductive observation. Since the logic is valid, the conclusion is sound and must be accepted. The conclusion is an explicit application of the general law about all men applied to a particular case, Thomas. The argument, because it moves from general to specific, is therefore said to be deductive.

This deductible reasoning process is known as a syllogism; philosophy depends heavy on its use for more complex demonstrations. The syllogism consists of three statements. The first is designated as the major premise, the second the minor premise and the third

is the derived conclusion.

The major term (**good**) is in the major premise (that is why it is the major term) and also in the predicate of the conclusion.

The minor term (**Thomas**) is in the minor premise (that is why it is the minor term) and is also the subject of the conclusion.

The middle term (**man**) is used for comparison between the minor and major terms. It is only in the middle or minor premise and therefore serves to join or compare the other two.

The statement that Thomas should seek that which is good for him is a normative statement or judgment about it being good for Thomas to pursue the development of his human potential, but it is not a prescriptive statement. **It becomes a prescriptive statement when Thomas is told what he should do to pursue happiness**, which is good for him. Normative statements are judgments about good and bad, they are about what should be done. Prescriptive statements are guidelines for action; they are statements about how to get something done, about what means are to be implemented to achieve desired ends.

It is as necessary for political philosophers, as it is for medical doctors, to prescribe a plan for healing, growth, and development. It is even more necessary for philosophers because, according to Aristotle, many men are informed about the body but few know much about the soul. "Clearly the student of politics must know somehow the facts about soul, as the man who is to heal the eyes or the body must know about the eyes or the body; and all the more since politics is more prized and better than medicine" (Ethics, 2002, Book I;13).

Philosophical conclusions depend upon sound philosophical proofs, which demand ascent because they proceed from true or correct principles and valid logic. **The issue, as in the natural sciences, is in the veracity of the principles and validity of the logic.** If they are correct and the logic is solid then ascent is mandatory. Moreover, philosophers, because of their different orientation, might ask questions that empirical scientists looking at the same data might not ask or conversely, scientists looking at the same data might ask questions philosophers might not ask. Together, the two methods provide important and essential data necessary for successful practical action; both are necessary and complimentary. Yet the point remains: philosophers ask different questions and use different methods than scientists.

As previously stated, philosophers are concerned with quiddity or knowledge of a things inner essence, with its cause, and with moral implications regarding action, which is good if conducted properly in accordance with a things nature. **Accuracy in making normative moral judgments requires thorough knowledge of what a thing is.** That is, moral judgments are difficult to make in the absence of quiddity or inner knowledge of a things essence. **Since science does not give this kind of insight, it cannot make normative or prescriptive statements.** It is possible to see into the essence of a purely physical thing, but when it comes to the human sciences and the possibility of the existence of an incomplete subsistent substance capable of separate existence, such as the human soul, such insight is not possible using purely empirical methods. Because of this necessary limitation, empirical scientists are unable to make normative judgments

about human actions. And, **since normative judgments cannot be made by empirical scientists, they certainly should not make prescriptive statements** (but somebody has to). They are correct in limiting themselves to description only.

As such, there is need of philosophy to answer such questions and to provide direction which empirical science is unable to give due to its own internal limitations. Although philosophy is needed to answer metaphysical questions (about unobserved essences) and to provide moral direction, it cannot answer the ultimate questions dealing with God's eternal law, grace, divine providence, worship or how to cooperate with God in building a just society. For these and related questions, theology is needed.

#### **Quick Note:**

Before proceeding to theology, it is important to point out that scientists, like philosophers, look into the nature of things. In fact, **scientists often see better into most things than philosophers do**. They have knowledge of the operations, structure, function, and design of most objects in the physical world, whereas the philosopher's knowledge about these objects is often deficient. Ironically, scientists often possess the potential to become better philosophers than the philosophers themselves, because (1) scientists are usually better observers of phenomena and, as such, know or potentially know the nature of more things than most philosophers or (2) because they often stand in a better position to extract knowledge of ultimate causes due to their being such keen observers of effects through which causes are known.

The need to know the inner nature of observable objects is a process common to both science and philosophy. In this, I propose science and philosophy are not very different. However, **when empirical methods are applied to the human sciences, a problem arises, which must be addressed**. An empirical analysis of a tree, of an organic organism or of an inorganic element yield knowledge and understanding of the properties and nature of these phenomena. In fact, it is such knowledge that enables scientists to systematize and classify things in the first place and which allows philosophers to know their quiddity or essence.

**How can anyone classify anything if they do not understand what it is?** Thus, not only philosophical but also scientific empirical observation can yield knowledge of the "forms" or of the "quiddity" or "essence" of material things, something which philosophers claim as "their baby". If truth be told, most scientists probably know more about the baby than most philosophers. **If philosophers object to this assertion, I wonder if they understand how knowledge of the quiddity of material or corporeal forms is derived or obtained to begin with**. This is not some mystical process that occurs by intuition or mediation (as maintained by New Age Theosophists who view intuition as an evolutionary cognitive processes emanating from a higher intelligence unfolding within human beings). Although mystical or infused knowledge is possible, it is not the normal mode of knowing by which the scientists and philosophers arrive at knowledge of quiddity. Human knowledge of quiddity has been and, I presume, always will be attained by rational thought and empirical observation; they are the *via royal* by which the human mind arrives at knowledge of a thing's essence, and this applies to knowledge of metaphysical things as well; they are known by observation of their effects.

Consequently, I do not expect that a philosopher (who also relies on observation) or an

esotericist (who relies on mystical intuition) can tell me more about the form of a mushroom, a dog, or cat than a biologist or zoologist can. In fact, I expect to hear more from the empirical scientist, who knows these objects so well that he/she can classify them according to their species specific characteristics. Nonetheless, I do not expect the scientist to tell me more about the final or first efficient cause, but, I do expect him/her to possess knowledge of intermediate efficient causes and material causes, which help both scientists and philosophers to ascertain much about the substance/essence of things. However, no matter how great the scientist's empirical observation, differentiation and classification capabilities might be, possible knowledge of metaphysical concepts, of essence or substance ceases for the empirical scientist when the subject is man or any separate substance or being whose essence transcends matter; he (the scientist) simply does not go there.

If man has a rational soul and a free will that are spiritual subsistent substances capable of separate existence, then empirical methods are of no avail; they are useless when it comes to knowledge of spiritual things or extrinsic formal causes. The scientist does not ask questions about things he/she cannot see; he has not developed knowledge of these concepts and their interrelationship, has not determined general laws applicable to thinking about them and has not asked questions about ends or origins and thus cannot make normative or prescriptive statements, nor even descriptive ones, about the. If a scientist decides to become a philosopher, he/she is off to a superb start. Aristotle and Aquinas are in agreement; **philosophy properly begins with knowledge of nature, of what can be observed, and most**, not all (ideology impinges observation), **scientists are experts at observing.**

The essence of the human person can only be known through philosophical methods (mystical methods have been excluded because of the paucity of such claims; they are not the normal route to metaphysical knowledge). Microscopes and radiography help us see into the human body and attain knowledge of every bodily part, which assist us in forming a partial concept or idea of man. However, they are incomplete ideas because they do not include the soul, its functions, powers, and purposes. Knowledge of this metaphysical subject requires other methods. Anytime a phenomenon transcends matter or is non-material, such as liberty, freedom, rational soul etc. empirical methods come up against an impenetrable wall and therefore must give way to disciplines and methods used in other fields like philosophy and theology. Philosophy provides rational knowledge of metaphysical things and provides moral direction for human action; it cannot however, as stated above, answer the ultimate questions dealing with God's eternal law, grace, divine providence, worship, or how to cooperate with God in building a just society. For these and related questions, theology is needed.

## Theology

Theology (as a rational not a mystical discipline) is one of the three ways human beings attempt to know with certainty or high probability. **Theology is also a science, but it is considered a "divine science" not an empirical science.** As a divine science, theology is different from empirical science because it is not concerned with describing finite things and discovering their physical properties and utilitarian purposes. Like the other sciences, theology has a defined subject area; it is divided into unified sub-disciplines each with their own methodologies, has specifically defined concepts;

adheres to rigorous laws of logic and most importantly, like science and philosophy, it has certain guiding principles from which it proceeds.

**These guiding principles, however, do not rest on empirical observation or self-evidence but, rather, on (1) an act of faith in their veracity**, which rests on the reputation and wisdom of their author and (2) an act of reason, because when understood, the principles adhere to reason and are reasonable. That is, although revealed principles such as the nature of the Holy Trinity are not derived from human reason, **once understood, they can be shown to be reasonable**, and, therefore, acceptable to the human mind. Theology, like empirical science and philosophy, utilizes principles from observation and a priori self-evidence as well, but its primary and defining principles are revealed.

Theology attempts to understand the highest mysteries of human life. Like philosophy, it reasons from principles to come to knowledge and understanding of metaphysical and moral questions. Like philosophy, it deals with questions of value and ultimate questions concerning man's existence and the nature of God. However, in exploring these questions, **it transcends philosophy, which is limited by the use of reason to finite principles and lesser details about these questions**. Theology, although it is limited by human reason, transcends philosophy because its principles are derived from revelation. They must be accepted on faith with the assistance of divine grace. **Because its principles are derived from revelation, theology is able to understand higher metaphysical questions**, although their complete comprehension ultimately transcends the mind's rational ability. **Like philosophy, it uses logical demonstration. However**, unlike philosophy, **it ultimately rests on divine initiative**, that is, on God coming to man. Theological knowledge of divine things is a result of divine initiative **by which God reaches downward to man in a process of full self-disclosure and possible interpersonal relationship**.

**Philosophy, on the other hand, consists of man reaching toward God**. That is, natural human knowledge of divine things (natural theology, which is a sub-branch of philosophy, not theology) is a result of human initiative, by which man reaches upward to God in a process of desire and intellection to attain knowledge and limited understanding of supernatural things. Philosophy consists of man reaching upward to know God; whereas theology consists of God reaching downward to reveal Himself to man and especially to those who seek to know Him. Thus, it is proper to say that philosophy tends toward theology and prepares the way for it.

Theology provides knowledge of divine things not possible to the senses or unaided human reason. Because it adheres to rigorous methods and logical discipline it is considered a science, but its principles are derived from faith. **Principles and concepts, such as the Virgin Birth, Divine Grace and the Incarnation, cannot be verified by the senses, but they are verified by miracles, good lives of the faithful, historical accounts, fulfillment of prophecies, heroic virtue, personal experience and by reason**, as demonstrated in the Summa Theologiae of Saint Thomas Aquinas, which is a logical treatise that endeavors not only to demonstrate truths about God, but to also demonstrate the reasonableness of belief in God and revealed principles.

For example, although no one is able to rationally discern the mystery of God's Personality, the essence of the Holy Trinity, it is reasonable to expect a revelation of this

essence. Such an expectation is reasonable, because the rational mind is capable of demonstrating the existence of God. It is also capable **through the same reason** to realize that it is deficient in knowledge of this mysterious Being (such as how to please Him through proper forms of worship) that it knows to exist by reason. It is thus reasonable to expect such a Being to provide a fuller revelation or self-disclosure. That is, the human mind naturally begs for a revelation due to the realization that its reason is incapable of grasping the nature, purpose, and divinity of a Being it knows to exist. It especially is desirous to know how to worship, petition, thank, and please such a Being; **such knowledge is necessary; it is also reasonably impossible.** Therefore, a revelation is reasonably expected.

Human beings must know how to petition this Being; they must know how to worship in a correct manner, one that brings blessing and not condemnation, so that the relationship can be strengthened. Since reason is unable to attain certain knowledge and at best limited probable knowledge of the Divine Mind, it is not possible to know how to worship him in a pleasing manner. However, it is natural to desire and realize the need for worship of the Creator, but, without revelation, our limited knowledge of the divine essence is bound to result in false worship. Because Moses believed in the existence of God but did not know how to properly worship, Yahweh disclosed liturgical rules and ceremonial precepts previously unknown by unaided reason.

The only way correct and essential liturgical knowledge is possible (all cultures and civilizations have been found to engage in religious practices) is either:

1. A highly improbable lucky guess (and heaven knows human beings have tried everything from fits of hysteria, drug induced trances, spiritual mediums, sex in the pagan temples to human sacrifice and bestiality in the midst of burning incense) or
2. A logically expected revelation including moral law and liturgy as given both to Moses and to the Apostles. It is reasonable that such a sacred revelation should be expected and then zealously guarded because of the importance of the human-divine relationship and the benefits it affords mankind.

Moreover, as a further example of faith being a mystery that transcends unaided reason, but, which at the same time is reasonable, consider the fact that no one could reason to the knowledge that human dignity finds its highest expression in the revelation that man is made in the image of God. It is, however, reasonable (to anyone who wants to seriously consider the unique and Godlike nature of our humanity) to believe such a thing after it is revealed. If we explore deeply into our bodies and minds, which bear the image and likeness of God, we can find within them the divine image as it has been revealed (I will explore the divine image in the human person in chapter seven). **This knowledge of the divine imprint in man would escape both discovery and comprehension if the human mind was (1) not enlightened by divine revelation that man is a being made in the image of God and if it was not further enlightened as to (2) what that image is because the Divine exemplar in revealing the mystery of the image also reveals Himself so that the image can be discerned**

Although philosophy uses reason to come to knowledge of the existence of God and of His attributes, it is strictly an intellectual exercise. Aristotle had knowledge of the existence of God, a God he could verify by his reason, which caused him, like Socrates

to question the veracity of the Greek pantheon. Nonetheless, he had a philosopher's knowledge; he did not have faith, because no such gift had yet been given in the ancient world, except by means of foreshadowing to the Hebrews. Aristotle was left with unaided natural reason. He had to proceed from observation using a posteriori and a priori principles to arrive at this knowledge. To his credit, he was able to discern much that is possible to natural reason.

Theological faith is superior to natural or philosophical knowledge of God (natural theology) because, like philosophy, it PROCEEDS FROM REASON to higher and more certain knowledge of divine things by MEANS OF REVEALED PRINCIPLES. Because it is reasonable, it confirms rather than contradicts that which unaided natural reason is able to apprehend about metaphysical realities. Consequently, because it is reasonable to expect revelation, **when reasonably expected revelation does arrive, the reasonably expectant mind is predisposed to accept it as a corollary to natural theology and as a more certain explanation of things the unaided intellect grasped only partially, as long as it does not contradict what reason already knows.**

Nonetheless, because theological principles are derived from faith some do not consider theology scientific knowledge but mere opinion which is not certain. There are at least two views on this matter. There are those who, like William James, claim faith is an act of the will because it rests on insufficient evidence and, like opinion, it is therefore uncertain knowledge. It is not the type of empirically verifiable knowledge you must believe in because it is certain.

On the other hand, thinkers like Aquinas argue that faith is neither opinion nor reason but partakes of both. Like opinion, it is an act of the will, but like knowledge, it is an act of the intellect attaining certainty.

In the Second Part of Second Part, Question 4 Article 1 of the Summa Theologiae Thomas states:

"Faith is that certainty of the mind about absent things which surpasses opinion but falls short of science."

In the Second Part of Second Part Question 1 Article 4, he states that:

"The intellect assents to something, not through being sufficiently moved to this assent by its proper object, but through an act of choice, whereby it turns voluntarily to one side rather than to the other: and if this be accompanied by doubt or fear of the opposite side, there will be opinion, while, if there be certainty and no fear of the other side, there will be faith."

**That is, no one necessarily believes anything. The mind is capable of choice.** Faith is a voluntary act. If a person believes out of fear and doubts the veracity of what he/she holds in the depth of the heart, he/she possesses mere opinion. If, on the other hand, faith is accepted in such a way that it enlightens the mind and dispels doubt and instead gives certainty, it is more like knowledge and should be accepted as such; it is divine knowledge that is reasonable.

**However, it might be difficult to discern the reasonableness of faith for one who**

**has not developed his/her power to reason.** If faith is confirmed by reason (not just any reason but correct reason [*rex ratio*] that proceeds from true principles using valid logic, reason that sees into the nature of things and is capable of moral judgments) it takes away doubt and is therefore contrary to opinion. The more faith is accepted blindly, the more it is similar to opinion or doxa; the more it is accepted because of a perceived unity between faith and reason, the more it is like science or episteme. Reasonable as faith might become, it always remains faith because divine things are beyond the ability of the finite human mind to grasp fully.

Because theology builds a scientific and therefore logically consistent system of demonstrable thought as rigorous as philosophy leading to conclusions that rest on valid principles, it is unlike myth which does not possess a logical structure at all. **Theology is not myth. Myth is not scientific; in fact, it is this lack of scientific logic that makes myth difficult and intriguing.**

## Myth

Although exceptional anthropological and religious work has been conducted in the study and appreciation of myth and its relationship to cultural evolution and psychic dynamism by thinkers such as Mircea Eliade and Joseph Campbell (who have emphasized and developed an appreciation of mythic time and its relationship to the sacred and profane, catharsis and renewal and to the release of spiritual energy), **no systematic body of knowledge or logical consistency has been established.** In fact, the realm of myth, like that of the unconscious, exists as a mysterious primordial sea of hidden danger, potential, and illusion. It is considered to be extremely potent, illogical and perilous by those who know it, so much so, that only prepared and especially initiated adepts, shaman or depth psychologists are supposed to approach. Those who treat it trivially and get in over their heads are often undone. According to Joseph Campbell (1973; 98)

“Among the most perilous voyages to the underworld are those of the shamans of the peoples of the farthest north (the Eskimo, Lapps, Siberians, and various American Indian tribes), when they go to seek out and recover the lost or abducted souls of the sick.”

This is one extreme. The other extreme manifests itself in sham or bogus magic conducted by charlatans looking to profit off of a passion for fascination and a willingness by many people to believe almost anything just as long as it is fabulous, provides pleasure or enough stimulation to arose them out of the meaninglessness and boredom that put them into a dream state in the first place.

The prophet Daniel, as an anti-example of the later, did not think much of the Babylonian creation myths or of their gods. Because he was sober, awake and able to see through the veil of chicanery (Daniel 14) he challenged the pagan priests to an interesting test which matched his faith in God and his power to reason against their power to conceal the truth behind myths about idols that talk and enjoy a good meal. The pagan priests had even fooled the great King Cyrus of Persia. Daniel, relying more on his wit than on their propaganda, challenged the 70 priests whom King Cyrus together with Daniel visited in the temple of Bel. The priests were indignant that their veracity should be

questioned by Daniel, but to save face before the king, they submitted to a test to determine if the god Bel actually consumed food prepared for him each day. They assured the king that they would leave the temple grounds that were situated inside the belly of the statue and, further, that he could lock them out. Prior to leaving, they invited the king to set forth food and wine on the main table. Their remonstrance was so strong that they agreed if, upon the king's return he did not find that Bel had consumed the food and wine, they would forfeit their lives. If, however, he found the food consumed, Daniel, whom they said was "telling lies", should die. Cyrus consented. Afterward they left and the king locked the door behind them while sealing it. Before leaving, Daniel ordered his servants to spread ashes on the floor. Then he departed with the king. During the night, the priests stealthily entered the temple with their wives and families through a concealed trap door and devoured the feast.

In the morning, the king asked Daniel if the seal was broken. Daniel replied, to the king's delight, "It is not". As soon as Cyrus gained entrance, he looked immediately at the empty table and seeing the food consumed, he credulously proclaimed, "You are great, O Bel; and with you there is no deceit, none at all." Then Daniel laughed, prudently restrained the king from proceeding any further, and said, "Look at the floor, and notice whose footsteps these are." The king said, "I see the footsteps of men and women and children." The enraged king summoned the priests, their wives and children, who in fear revealed the concealed door through which they entered the temple and customarily consumed what was on the table. The king put them to death and gave Bel to Daniel who destroyed the idol and with it, the entire temple.

The myth of Bel was not able to stand up to logical scrutiny. Similarly, philosophers such as Socrates, Plato, and Aristotle who favored reason and philosophy over myth and passion had trouble with authorities over religious matters involving Greek mythology. Socrates was put to death for his incredulity and Aristotle had to flee Athens so it would not, in his words, "sin twice against philosophy." The type of religion they were dealing with was based on myth not reason.

### **Relationship among Science, Philosophy, and Theology**

There could be a copasetic relationship among science, philosophy and religion if each remained in its proper domain and examined only those questions suitable to its methodology and defined subject matter. However, at certain times, each has acted as if it were regent and illegitimately encroached into the other domains. For example, in the Ancient World philosophy seems to have held sway whereas empirical science was in its infancy and sacred theology had not yet been developed. In the Medieval World, theology was the preferred approach, philosophy was secondary, and science was emerging and at times restrained because of mistaken conflict with theology. Whereas, in the Modern World empirical science is the preferred approach to the neglect of the other two.

The modern overemphasis on empirical science has resulted in an invasive encroachment into the human and social sciences (once considered the domain of philosophy) with mandates for use of empirical methods so successfully implemented in the natural and physical sciences. Although empirical methods are surely apropos and necessary, when they claim intellectual hegemony, the human sciences are reduced to analysis of observable phenomena to the neglect of unobservable but necessary

phenomena such as justice and the human soul which are at the heart of politics and psychology. Increasingly worn out by the limits of positivism, (caused by this encroachment) social scientists on the left are articulating the idea that human beings are likely animated by a spiritual soul while many on the right already hold to the idea.

Even if the human body is so animated, the idea can never be established by empirical methods alone. In short, empiricism crowds out every possibility of discovering such a thing, even if it were to exist; this is a gamble that goes against the odds (see Pascal's Wager, in his *Pensee*, Kolbe's Greatest Books). If we begin, as positivists do, with avoidance or ignorance of the complex unity of body and soul, we are forced, if logically consistent, to also leave justice, human rights, and liberty behind because empirical science disassociates itself from such normative terms that are connected with some constant and universal human reality by which human acts are judged as good or bad or right and wrong.

Although empirical social scientists often attempt to operationalize (make measurable) such abstract terms, it is difficult to understand how anything that cannot be known in its essence is capable of being properly defined and subsequently measured. That is, **how do scientists know what they are measuring if they cannot adequately define it in the first place, and how can they define it unless they somehow grasp its essence**, which, in the case of human beings, requires metaphysical knowledge not proper to empirical science. This becomes evident when we ask why seemingly good political actions go wrong.

Either

1. The proper ends were never sought
2. The means were insufficient to the ends
3. The environment was not adequately studied or
4. The issue was never really understood in the first place because the terms, concepts, and ideas were never thoroughly analyzed and comprehended as they should have been.

What is the sense of scientists acquiring and utilizing sophisticated quantitative methods if they fail to adequately understand what they are attempting to operationalize so that it can be adequately measured in the first place?

After all, not everyone knows what justice is and can identify and properly define its three constituent parts, its relationship to anthropology, its terminus in ethics, and explain why it is the first principle of politics. If they can't, they have no business trying to quantify and measure it and they certainly have no business prescribing programs of political change to attain it.

In the above section on science, I proposed that scientists often have better knowledge of a things quiddity or inner nature than philosophers do (esp. when it concerns natural finite phenomena). However, metaphysical knowledge about spiritual things requires philosophical methods necessary to discover their essence, which goes beyond a description of their parts to a determination of their ends. **Prescriptive statements and normative judgments about ends are really impossible without knowledge of a things essence, which requires description of the powers and operations through**

**which the essence is manifest.** This description proceeds from the physical nature of a thing and is thus the proper study of what Aristotle called Physics or empirical science. Physics or empirical description is not philosophy, but **PHILOSOPHY ABSOLUTELY DEPENDS ON AND MUST PROCEED FROM PHYSICS, WHICH IS THE REALM SINE QUA NON OF EMPIRICAL SCIENTISTS.**

**Physics rises to metaphysics not as a result of observation but (1) as a result of what questions are asked by the observer and (2) as a result of what in fact is being observed;** only subjects having metaphysical constituents (human beings) are capable of moving an observer to the level of metaphysical speculation about their essence. However, even objects without metaphysical constituents (plants, animals, minerals) are capable of moving an observer to the level of metaphysical speculation about their origin.

The scientist asks what is this thing good for or how can it be applied to better the human condition (utilitarian knowledge) or what are its constituent atomic and sub-atomic parts (analytical knowledge with a utilitarian purpose or from a pure desire to know) whereas the philosopher asks what are its powers, operations, purposes, origin and end. A biologist will tell us that the purpose of the parts of an animal is to assure adaptation and survival. This is proper description for an animal, but **when we look at a human being, we discover powers and operations that indicate an essence that although immanent, and thus wrapped up with adaptation and survival, is also capable of transcendence** which the human mind and human spirit seem capable of achieving.

In short, **the point being stressed is that if we fail to comprehend and adequately define the nature of a person or a thing, we cannot possibly know what is good or bad for it and, if we do not know what is good or bad for it, we cannot expect to prescribe effective cures or social programs.** The whole enterprise of politics and social reconstruction rests more on ancillary ontological knowledge of a things inner essence (which ultimately depends upon empirical description) than it does on external circumstances. Prescriptive judgments are impossible without proper understanding of what a thing is. Thus, empirical methods are necessary for knowing the essence of material things, but when question arise about the nature and purpose of unobservable phenomena, such as human thinking and free will, the playing ground shifts from physics to metaphysics and empirical methods must give way to philosophical ones because empirical ones are inadequate for examination of abstract immaterial subjects/concepts such as justice, polity, liberty, and soul.

Moreover, although empirical science is defined as a descriptive but non-normative non-prescriptive science and philosophy is commonly accepted as prescriptive and normative but not as a descriptive discipline, it is an egregious error to force politics into one camp or the other. As is clear, **philosophy is at its core a descriptive science** (it proceeds from an adequate definition of things and that begins with observation). As a consequence, politics as a branch of moral philosophy must necessarily be empirical and descriptive. **In fact, if it is not descriptive it cannot be normative or prescriptive.**

Thus, empirical science and philosophy are closely related partners; they derive their essential knowledge from the same data albeit for different purposes. The one, empirical science, has purposes that keep it descriptive and the other has purposes which cause it

to rise to the level of a normative and prescriptive science. But, **to repeat, philosophy can never be normative or prescriptive if it is not first of all empirical and descriptive** and in this domain, scientists are often the better and more astute observers. If they changed the nature and purpose of their questions, I do not doubt that with a little training empirical scientist would probably make the better philosophers. Nonetheless, modern science remains descriptive while **philosophy proceeds from description (or should) to knowledge of quiddity and thus by the purposes of its query, it necessarily evolves into a moral science**, not because philosophers are any smarter but because their interests are different. **Once knowledge of quiddity is established, moral judgments become possible. Short of this morality is impossible.**

In conclusion, on the way up the intellectual ladder to moral knowledge, the philosopher must take the empirical road, and, equally important, on the way back down from the level of theory to practical application, the philosopher must again take the empirical road to the contingent world of material reality where all political action necessarily takes place. **Unfortunately, there are often descriptive deficiencies on the way up to the clouds and there are certainly descriptive deficiencies on the way back down from the clouds, (if the philosopher ever comes back down), to the essential realm of praxis** where theoretical concepts and practical reality meet.

**In short, moral philosophy/politics as a practical science necessarily begins with description and it reaches its end in action also through description.** With such a crying need for description, **it is a wonder why so few philosophers are trained or educated in descriptive methods**, which are almost exclusively the domain of empirical science. **Philosophers need these methods and almost all lack them.** These days, **anyone can major in philosophy with hardly any scientific background** in either the social sciences or the hard sciences. **The road up to metaphysics requires education in the physical sciences, the road back down to practical implementation requires training in the social sciences;** yet many philosophers lack, not only one, but, both types of education and training. It is a wonder they call themselves philosophers at all.

### **Integral Political Science**

For thousands of years science, philosophy, and theology have been the three ways human beings have arrived at demonstrated knowledge. Even though some believe we are evolving to higher cognitive or advanced psychic states of consciousness, intuition, and meta-awareness, for the moment, these are the only three acceptable means for arriving at demonstrated knowledge. Consequently, political science must utilize one or more of these approaches if it wishes to advance beyond the realm of opinion to verifiable and demonstrable knowledge.

Because political science involves both moral judgments and descriptive analysis necessary for practical planning and goal implementation, it necessarily must partake both of philosophy and empirical science.

The integration of political science and philosophy should not be a great or insurmountable matter; they were integrated from antiquity. **In the excitement over scientific methods we have ended up making the same mistake as the ancients**

**although, in the opposite direction.** They erred by neglecting the empirical and for that, a corrective swing in the other direction was necessary; however, as in most corrective changes, the desired mean was exceeded and, instead, the opposite excess resulted. **Since we have seen the error on both sides of the mean, I am hopeful, that as we begin to swing back and reunite the two, we will find the proper balance and in that balance, perhaps even greater things will be realized.**

An understanding of the ordering of knowledge is essential to attain the methodological mean. To facilitate conceptualization, a simple diagram containing three columns into which the various branches of knowledge are organized is provided below.

### **THE THREE COLUMNS OF KNOWLEDGE**

<b>HUMANITIES</b>	<b>MATH/SCIENCE</b>	<b>SOCIAL SCIENCE</b>
Literatures <b>Philosophy</b> Fine Art Languages	Natural Science (biology, zoology etc.) Physical Science (physics, chemistry etc.) Mathematics (Calculus, Trigonometry etc.)	<b>Political Science</b> Economics History Psychology Sociology Anthropology

Close observation of the word **politics** or **political science** in the above diagram reveals the interesting fact we have been discussing. Philosophy is listed as a subset of the humanities. Drilling further down into this subset reveals the three branches of Philosophy and their constituent parts. These three branches are:

<b>I Metaphysics</b>	<b>II Logic</b>	<b>III Moral Philosophy</b>
Ontology Psychology Natural Theology Cosmology	Minor (rules to guide thinking) Major (epistemology study of thinking)	Ethics <b>Politics</b>

Drilling further down into the third column of moral philosophy, we find **politics**. Thus, politics is the second subset of the third branch of moral philosophy. It has been located there ever since its inception 2, 500 years ago and is still found there today. Interestingly, in the third column, "Social Science", the word political as in **political science** appears for a second time. This has been the case for about 150 years and it gives rise to a significant question: is politics a philosophical or an empirical study. If it is both, why is it bifurcated?

Traditionally philosophical knowledge about politics included empirical methods, albeit in a rudimentary form. For example, Aristotle's treatise on politics rested on historical analysis, empirical observation, and classification of all known political systems and constitutions, which he studied prior to refining his political concepts and his theory about the state and the best regime. He did not face the challenge of classifying politics into two domains because philosophical knowledge included empirical knowledge. However, the way it is set up today, philosophical knowledge excludes empirical and empirical excludes philosophical or, if there is ever a combination (such as so called scientific socialism), it is usually the result of an ideological perspective in the guise of philosophy or, equally invalid, many philosophers proceed as if they were somehow aloof and elite, and in no need empirical methods, which they bad mouth and shun

when, in fact, **without the empirical methods of the social scientists, rather than being aloof and elite, philosophers tend to be profoundly useless.**

How did it get like this? The term science, in its modern usage excluding philosophy, did not come into vogue until the 19th century. It was not until 1867 that the Oxford English Dictionary first used the word, "science" in its modern sense to connote exclusive empirical knowledge in disregard of philosophy or philosophical demonstration. A decade prior to this, the first chair of political "science" was established at Columbia University in 1857. By 1880, the same university established political (empirical) science as a separate discipline. **Political science, in its modern usage**, because it is demonstrated knowledge, is not doxa (opinion). However, it is also **not** sapientia (wisdom) or even phronesis (prudence). It **is**, rather, **a limited and deficient subset, of integrated knowledge related to practical political exercise, which is itself a further subset of phronesis.** Sapientia has to do with knowledge/understanding of the highest concepts that the human mind is capable of knowing, phronesis has to do with their proper application. However, **abstract concepts can never be applied properly** (except by a lucky guess) **without empirical knowledge which is a necessary part** (but not the whole) **of practical wisdom.**

Since prudence (phronesis) is about means to ends, empirical science partakes of prudence but it is not the same thing as prudence, **it only gives partial knowledge about means** (that is analysis of environments necessary for prudent practical decisions) **but, knows nothing about ends because it knows nothing of essences, which are also necessary to establish appropriate means.** Therefore wisdom and empirical knowledge (philosophy and science) meet each other in the realm of prudence or application. **THEY ARE BOTH NECESSARY FOR MAKING VALID PRACTICAL DECISIONS ABOUT MEANS COMMENSURATE TO ENDS OR FOR ARTICULATING GOALS AND OBJECTIVES NECESSARY TO ACCOMPLISH MISSION STATEMENTS.**

**Therefore, like it or not, without empirical knowledge there cannot be prudence** (no matter how wise a philosopher might pretend to be). However, empirical knowledge is not prudence. Empirical knowledge is an appendage of phronesis/prudence, which has to do with means or application of practical things in service of desired ends. **Although a necessary part of practical wisdom, empirical science can never by itself provide enough data necessary for phronesis** (it also needs knowledge of quiddity) nor can it ever rise to the highest wisdom. For this, politics or political philosophy is needed. Politics/political philosophy as a normative and prescriptive philosophical discipline meets Politics/political science as an inductive and descriptive empirical discipline in the act of prudence, but **no philosopher can claim to be prudent or practically wise if he/she neglects or is deficient in empirical knowledge and methods and no empirical scientist can claim to be prudent if he/she is deficient in philosophical wisdom.**

**Not only is prudence the juncture where wisdom and empirical science meet, it is also, as Aristotle insisted, the most difficult part of moral virtue and the most necessary for success in politics.** Political philosophy without practical wisdom, which necessarily includes empirical science, is imprudent. On the other hand, empirical science has knowledge of the environment necessary for prudential judgments about means but lacks knowledge of ends because it lacks knowledge of essences. **In plain English, without philosophical wisdom and understanding of key concepts,**

**empirical political scientists don't know what they are talking about, and without empirical methods, political philosophers don't know what they are doing.**

Effective political action requires both descriptive knowledge of the environment and also knowledge of ends which rests on knowledge of quiddity. Neither "political science" nor "political philosophy" has both, but both are needed for correct political planning and action to have a chance.

A scientist, philosopher or statesman, cannot rightly be considered wise if he/she possess only half of the requisites for wisdom. Philosophers lacking empirical knowledge have only half of what it takes to be wise (the greater half, but still only half). A man half wise is not wise at all. Both halves are necessary to form a complete whole. Wisdom has a speculative dimension (sapientia) dealing with universal principles and concepts and it also has a practical dimension (phronesis) involving empirical description and application. One without the other is incomplete.

I do not think that any so called "wise man or woman" relishes being accused of imprudence or lack of practical wisdom, of being, in short an "intellectually competent ignoramus"; if so, their supposed wisdom comes to naught. And, I do not think any social scientist relishes being accused of being, a "technically competent ignoramus", that is, a trained person competent in technical matters but ignorant of higher purposes or critical understanding about social value and human nature. Imprudence and ignorance both make knowledge ridiculous and that is just about the state that social science find itself as we begin the 21st century; nor do philosophers have anything to brag about if they lack descriptive empirical methods necessary to help them identify quiddity and to apply universal principles to particular contingent circumstances.

**For my part, I have no interest in being a foolish wise man (quasi-philosopher) or a practically wise fool (quasi-political scientist) reduced to either empty speculation or the mere descriptive work of a school boy. Social analysis and reconstruction require wisdom, prudence and science (not to mention the highest requisite, viz., purity of heart), which only come with integral human development and integrated philosophical (cognitive and appetitive) and empirical methods. In short, the disciplines need each other and, equally important, they require mature practitioners who are committed to integral human development first of themselves and then in service of others.**

That said, politics, even an integrated politics, as we are discussing, always remains a practical science. As a practical science, it concerns practical things that take place in the finite realm of contingent change and uncertainty. **That is political science, even with an integrated empirical-philosophical dimension is adopted, is only a probable science. It remains a probable science because there is never anything certain in the realm of contingent change that we call politics.** This is a profound realization. **In the practical realm, there are absolutely no right and wrong answers, only probable ones!** There is no absolute certainty about any political course of action, never any certainty about a political outcome. **A person looking for absolute solutions to practical problems will have difficulty being a political scientist or a politician; he/she should not study politics but confine himself/herself to metaphysics and theology,** which (being beyond the realm of contingency) are the only realms of thought where certainty can be attained.

I am sorry if this is shocking, but **practically speaking** there is no such thing as absolute

truth or certainty. There are right and wrong actions, (judged by how well they achieve an intended end) but these involve relative and probable judgments depending on the unique circumstances and particular facts associated with each unique case--no two cases are exactly the same. Perhaps there are truths in the theoretical realm, universal principles that guide action, but **when the move is made from the abstract level of pure universal principle to the concrete level of particular application, things significantly change.** The finite world of change and contingency strips us of certainty, and **thus it can be said that wise men and women agree on principle but they can certainly, validly, understandably, and predictably differ on application.** If they are really wise, they realize the inevitability of this eventuality and keep such secondary disagreement from breaking the bond of unity among them.

The application of universal principles involves educated extrapolation in which doubt is reduced and certainty increased when the person(s) doing the thinking:

1. Have mastery, (a) of themselves, and (b) of the integrated concepts and ideas that are part and parcel of their science.
2. Work with and identify means appropriate to identified ends because they have knowledge of quiddity
3. Are buttressed by possession of methods for application that are empirically verifiable.

Now here we have the point of essential distinction between the true statesman... and the false one. The true statesman knows his people: this is what Shaftesbury was praised for: 'his strength lay in his knowledge of 'England.' He knows not merely human nature (universal principle), but that species of it which is his material in particular (contingency): and cuts his coat accordingly (Bane p. 430).

To really understand human nature and probable action well, abstract universal knowledge must be buttressed by concrete contingent knowledge of human experience, society, and culture. Because the theoretical and the practical are quite different realms of being, they require different methods and different tests of certitude. The clarity associated with speculative thought or metaphysics dissolves the closer the theorist moves toward concrete practical particulars where the world of permanent and stable ideas touches the world of impermanence and constant change where nothing is certain and everything probable.

### **Tests of Probability**

In this uncertain practical field of politics and jurisprudence, statesmen, judges, and magistrates endeavor to develop and implement sound programs, policies, and legal procedures which are calculated to be just and fair. However, try as they may, no one has ever been able to get around the very real limit of uncertainty associated with practical contingency. **In an ever changing world where nothing is permanent, every practical act and therefore every political judgment carries a necessary risk because of uncertainty.** This is, perhaps, best illustrated by calling to mind the fact that even in courts of law, where life and death issues are often at stake, the supreme tests developed by the most able legal minds inevitably rely on various tests of probability.

For example, in criminal cases involving the death penalty the test of probability, "**Beyond a Reasonable Doubt**", is utilized because it is an extremely difficult test to pass. The probability is set very high because someone's life is at stake and because the court can never be certain, even in the case of self-confession, of the verdict. If a person's life is in jeopardy, justice requires us to be as certain as humanly possible. Certain as a judge or jury might be, there always remains a chance, slight as it might be, that they might be wrong. Beyond a reasonable doubt puts the burden on the prosecution to prove beyond any reasonable doubt that a defendant did in fact commit the crime he/she is charged with. That is, if a juror, based on the evidence, has reason to doubt the defendant's guilt, he/she should not find the defendant guilty.

Since the death penalty, in the United States, requires a unanimous decision, the slightest reasonable doubt (that is doubt based upon reasonable evidence, not whim or something unrelated or illogical) results in acquittal. The prosecution must remove doubt, the defense wishes to instill it. This seems to be a bad way to do business. But, if it is thought about, it will be readily seen that there are few other ways under the sun that are just, fair and impartial. It rests on the fact that certainty is not possible in practical affairs and because even though a highly probable case of guilt might be made, the realization that it could be erroneous forces us to acknowledge the possibility of innocence. In America, we prefer to err on the side of life, at least in criminal cases involving the death penalty. That is, we prefer to set a guilty man free rather than send an innocent man to death.

In civil cases, on the either hand, where the verdict is not one of guilt or innocence resulting in death or punishment but, rather in commutative justice involving monetary remuneration or compensation, a different test of probability, viz., "**By a Preponderance of the Evidence**" is applied. Because the stakes in a civil case, money not life, are not as high, a lower test of probability is permitted and applied. The preponderance of evidence test requires the defendant to merely have more evidence in his/her favor than arrayed against him/her. That is, the judge can have a lot of doubt and still find a person guilty of an actionable wrong if there is just a little more evidence working against her rather than in her favor.

Thus, when the probability test is low (By a Preponderance of the Evidence) a defendant might have plenty of evidence in his/her favor and still be found guilty, while in a criminal case, where the probability test is high (Beyond a Reasonable Doubt) a defendant might have only one piece of evidence in his/her favor and be found innocent, if this piece of evidence creates reasonable doubt.

Similarly, in social science, probability tests involving complex probability statistics are used all the time to gauge the likelihood of any number of subjects, such as projecting the winner of a presidential election or predicting the outcome of a particular policy or political course of action. **PROBABILITY DOES NOT MEAN THAT TRUTHS DO NOT EXIST.** Rather, it **means absolute certainty about the outcome of a given course of action (which is what politics deals with, means to ends) is never guaranteed and, therefore, only probable. Political science gets its certainty from the principles** (the truth is in the principles such as justice, liberty, and peace which are things most humans would agree are desirable ends). The **uncertainty resides in either a failure to master them** (being a poor philosopher) **and/or in their faulty application** (being a poor empirical scientist). Thus, it is clear that anything that increases the likelihood of

success at the stage of application, like empirical methods, not only makes sense but is valuable and, in fact, necessary if we are really sincere in our professed desire to be wise and to serve the community.

In conclusion, political science is (this is a descriptive statement) or should be (this is a normative statement) an integral composite of empirical and philosophical methods. Philosophical methods are necessary to attain knowledge of the most essential ideas and concepts associated with politics such as: man, liberty, justice, government, and peace. Empirical science provides necessary knowledge of environments in which the complex ideas/principles/theories are applied.

Since human nature is often unpredictable, we need to understand why. We need to learn more about human nature, physical, moral, intellectual and spiritual, which facilitates extrapolation and assists in the development of more humanistic social systems that truly serve authentic human development.

Empirical science is unable to give us knowledge of man's soul, but it can provide knowledge of social environments and of human physiological, emotional, and certain cognitive processes. Any complete anthropology will necessarily have to take all these into account with additional knowledge of human rational thought, the capacity to make moral judgments and volition or free will, which seem to be phenomena associated with the human spirit or soul. These will have to be studied along with a further analysis of how body and soul work together as an integral whole. In fact, this is what is meant by politics and integral humanism; it is a study of the entire person in each of his/her parts in order to grasp the synergy or integral whole and apply this knowledge to practical political decision making buttressed by sociological knowledge of demography, culture and social institutions as well as historical trends, cultural motifs, legal impediments and practical possibilities for socio-economic and political reformation that better serves the human person and the common good.

Integrated social science necessarily adopts normative and prescriptive methods. However, when strictly empirical exercises (intelligent tests on rats for example) are conducted, the modern advocacy for value neutral objectivity should be maintained. That is, there is certainly a necessary place for value neutral objectivity as long as this value neutrality does not claim some type of right to imperial rule or hegemony resulting in the negation of normative and prescriptive methods when and where they are applicable. For example, it is clear that certain actions are held to be right or wrong. To say that Nazi war criminals should be tried or that Communism was bad are certainly value judgments as are demands for human rights and pleas against racism, environmental genocide, war and hunger. Since politicians make value judgments all the time, it is necessary for politics to have a moral component.

It is necessary to insist upon more than a descriptive analysis and to aim at one that is ameliorative because it endeavors to make things better. If political science can do nothing more than describe and make strong predications about minor things, it is a science fit for automatons or of educated technicians ignorant of the most important questions of life. Worst, it leaves society without the possibility of wisdom and prudence where it needs it most of all. **If politics aims at ameliorating social problems, it cannot avoid value laden questions about the good life.** If a social scientist believes and can demonstrate why something is bad and should be corrected, in the name of

his/her sanity and human dignity, he/she should be able to do something to correct it or, at least, be able to prescribe change through council of those empowered to do something about it. **In reality, practical political questions demand prudent political judgments, which are almost always normative.**

Of course, value neutrality needs to be maintained when descriptive research requires it, such as participant observation, ethnography or controlled experiments. However, after the necessary data is gathered and over time developed into universal principles and integrated into political theory, descriptive analysis should give way to prescriptive planning and evaluation. Integrated social science is interested in accurately observing and describing what is, but it cannot stop there. **Observation and description about what is, serve evaluation and planning about what ought to be.**

In short, empirical science gives human beings power over nature, it puts incredible technological, biological, and even nuclear power in the hands of politicians, but it cannot guide them in the proper use or control of this power. Empirical science promotes medicine and healing, but in the hands of those with underdeveloped moral consciences, it can result in death and destruction. Empirical science and technology without normative and prescriptive guidance offered by philosophy are analogous to Pandora's Box; they provide power, tremendous power, which if placed in the wrong hands unleashes destruction. In short, science provides humanity with means to ends (technology, weapons, knowledge of genetics, institutions and animal behavior etc.), but it does not tell us what the ends ought to be and gives only partial knowledge, albeit necessary, as to how to properly use the means to attain the ends.

Empirical science cannot give us direction on how to live a good life or how to build a just society. It cannot tell us what happiness is or how to judge between right and wrong. By itself, it cannot solve a single moral problem, but integrated, it can help to solve many. Philosophy purports to offer help where empirical science fails. Philosophy, like theology, provides direction to ends we ought to achieve and provides standards to ensure that means are just and proportional to ends. Philosophy seeks to provide wisdom that helps make the use of power beneficent rather than maleficent.

If we fail to integrate empirical science and philosophy, we will continue with a truncated and disconnected discipline with its two vital constituent parts locked in a ludicrous intellectual battle. It is time to recognize our faults, acknowledge our limitations, and develop an integrated social science built upon an integral humanism respectful of both empirical descriptive methods and philosophical normative and prescriptive methods.

**Our task in this book is to develop an integral humanism or definition of the human person based upon integrated knowledge uniting the fields of empirical science, philosophy, and theology.** Thus, in chapter two I will begin the process by examining the biological and chemical processes that underlie the human body and lead to an examination of empirical and philosophical psychology of the human soul in chapters five and six buttressed by a theological perspective in chapter seven that **together will ultimately yield a definition of the human person, the integral humanism that is necessary for the work of social reconstruction in the modern world .**