CHAPTER ONE:
In Search of an Integral Methodology for a New Man and a New Humanity

SINCE CLASSICAL ANTIQUITY, savants, scholars, and statesmen have approached politics as a sub-branch of moral philosophy whose goal as a normative (rational statements about good and bad) and prescriptive science (rational statements about how to achieve the good) 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 approached as a sub-branch of social science, which is an empirical or descriptive discipline that 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 rivals. 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 complementary. Philosophical methods are normative and prescriptive; empirical methods are descriptive; the two should be integral.

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 a normative end that is demonstrated to be advantageous and then provide prudential means necessary to accomplish the

desired end. A prescriptive method, being a calculated extrapolation, is 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 (Lack of philosophical understanding)

This error results from a failure to comprehend the issue because its theoretical underpinning and corollary key concepts are only partially understood. That is, paucity or inadequacy 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 (and thus their end) **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) **Articulation of a proper end 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, e.g. quiddity knowing what a thing is), synderesis (first principles of moral action), prudence, 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 to devise proper means 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) most 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 underlying principles 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 be correctly expressed by the hands.

Political leaders usually have the theoretical end correctly identified; so the issue we are most often dealing with **is understanding the end well enough to prescribe proper means proper ends**. The challenge usually lies in political leader's paucity of philosophical understanding. This leads to choices of improper means, which cause the problems. To summarize, political leaders articulate a proper goal but do not adequately understand the principle(s) from which the goal is derived and the science on which it is based nor have they understood and integrated the necessary and ancillary anthropological/ethical foundations of the science, (a correct definition of man and hence of human ends) from which the discipline proceeds. If they have an anthropology, it is often flawed. For example, if ideas and concepts such as human good, work, property, justice, rights, freedom, progress etc. are used for rhetorical/political purposes without being properly mastered, proper ends cannot be articulated (except by a lucky guess or because some ends are no brainers) and therefore proper means

cannot be formulated even in the case of as "lucky guess".

Thus, a significant amount of time must be invested knowing about ends, but **ends can only be deduced if we know what a thing is (its essence) and thus what it is capable of achieving.** 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. Chief among these is the *nature and essence of man* who is the *reason* for the *very existence of society in the first place*.

Politics is infected with a 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 politicians/legislators make laws covering them all. Politics 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 proper foundational knowledge of 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 know and consequently do not really comprehend the problem. As a result, they suggest or support improper methods that "used to work" but no longer will (such as efforts to fix a capitalist economy by old worn out ideas such as lowering interest rates and increasing government spending). Interestingly, political scientists and politicians 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, and intellectual and moral virtue to name a few.

Achievement of proper ends requires more than bewildering "political talk" or easy fixes that used to work under different historical circumstances; it also requires 1) mastery of foundational concepts and principles, 2) intellectual and moral virtue, 3) mastery

and synthesis of ancillary concepts on which politics is built, as well as 4) empirical knowledge (something philosophers usually lack) 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 and cannot therefore be properly applied

2. The environment in which desired ends are to be achieved is misunderstood or

3. Some combination of the two

The Weakness of Prescriptive Methods without Auxiliary Descriptive Methods

The answer to this challenge is **not** more philosophy, if by more philosophy, we mean a discipline ignorant of and harboring disdain for empirical science; there has been too much of this, and it is unproductive. Normative and 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 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 effecting man and society can be articulated. If a doctor is going to prescribe medicine, she has to understand the body and the effects the prescribed 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 obtained from sound reasoning combined with knowledge of universal principles derived from apprehending the ontological essence of things (not merely that a thing is, but what a thing is, it's essential nature, powers, limitations, operations, structure and functions that determine what it is capable of doing and of becoming). This type of ontological understanding necessarily precedes prescriptive judgments and the setting of goals and objectives. However**, for practical 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: Descriptive and practical *knowledge* of particular and contingent circumstances, e.g., the environment, are absolutely essential 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.

Even though philosophical/ontological knowledge of essence/quiddity might appear to be sophisticated, without acknowledgement of the importance of modern empirical and descriptive methods that aid in the amendment and implementation of philosophical ideas, it is in the last analysis incomplete pedantry.

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 equally important, it requires knowledge of the environment in which it is to be done. One must have demographic knowledge of a particular society; knowledge of its economic, political and social system, and of its history, culture, current laws, values and beliefs, for any *ends and goals* to be reached or successfully implemented no matter how well they are philosophically articulated or understood.

Many philosophers unwittingly err because they lack empirical descriptive means, and many social scientists err 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. And science (esp. social 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 specifically, do to, society.

Successful development of society requires articulation of proper ends that are actually understood (not lucky guesses or mere rhetoric) 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 21st century Russia will not necessarily work for the people of 19th century China or even for the people of 20th century Russia itself. Each requires a related but divergent integrated plan that shares common guiding principles and proper universal ends to be achieved (peace, justice, liberty, prosperity etc.), but each should have different relative long and short range goals and objectives commensurate to

their 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 an 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 in society. 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. This is 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: normative, prescriptive, and descriptive. A social science that excludes any one or more of these three incomplete and insufficient for the task of improving life for man in the modern world.

A merely descriptive social science, as it is currently taught (but rarely adhered to), 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 or trained to do so except, perhaps, for consideration of social utility, political expediency or best chance of success scenarios for a policy/procedure. Thus, the plan 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 most likely a major cause of the problem in the first place). Self-control, is a constituent part of integral human development related to social justice that helps make life in society possible in the first place. Such a policy implicitly promotes behavior (intemperance) that is positively correlated with the disease (as one goes up, so does the other). The problem (self-control) is never actually addressed, thus the likelihood of the problem increasing grows in spite of all efforts to the contrary. The policy may sound good, but 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.

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 most people are motivated by a value laden ideology associated with a program for change. Crazy thing, everyone is trained to be value neutral but, 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 approaches 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 originate 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 determine verifiable principles or to demonstrate verifiable conclusions).
- **Phronesis / Prudence**, (*practical wisdom* dealing with correct thinking about *ends and means t*o their achievement in the contingent affairs of life).

Since antiquity, doxa or opinion has been frowned upon as the mark of an underdeveloped and usually of an 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 or of society, 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 Glaucon was young and his mind unformed, he 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, succumbed to the temptations of glamour and 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 or disguise confusion, reduce *dissonance* (discomfort caused by holding conflicting ideas or desires), and tend to turn one onto an ideologue with pseudo-sophisticated ideas that seemingly justify over-zealous action. Because it diminishes 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 continued to *sincerely* ask 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 master. His type of opinion and confused questions, the type undergraduates often 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 from the same ideological

malady as 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 to never "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. She knows and empathizes with her students thirst for knowledge that refreshes the searching mind and, accordingly, "fills" it at an appropriate time.

Students like Glaucon, and human beings in general, have a natural tendency to seek 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; they want it 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 she is not able to adequately demonstrate. What she professes might actually be true, but if she is unable to demonstrate clear reasons why she believes it, she is 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, he does 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). **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 helps 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 observation and reason tell me God or a creator exists. Almost everyone believes some kind of god exists). I have little or 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 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 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 little 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 their 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 free 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 harmonious.

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 idea.

CHAPTER TWO

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 knowledge as well as understanding necessary to improve the material quality of human life.

Moreover, the scientific method is based on hypothesis, experiment to test the hypothesis, and observation for evidence that confirms or disqualifies the hypothesis. A convention is employed to standardize each method, e.g., control of its causes and intervening variables, reporting, and replication 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 theory is established or scientific laws or principles (on which theories are constructed) are derived to facilitate further research and thinking. A scientific law or principle, e.g., law of entropy always applies under the same conditions, and implies a casual relationship among its elements. Scientific *theory* differs from laws in that a scientific *law* does not posit a mechanism or explanation of phenomena but is rather a universal acceptance that repeated observations will produce the same result. New hypotheses and subsequent theories can be developed from recognizing laws and considering novel observations or what-if concepts, such as nanotechnology which emerged out of investigating unknown phenomena of what happens when the volume of bulk material is scaled closer to the size of molecules: a high surface energy was discovered, which produced a new field of science and engineering.

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. Empirical induction from observation to laws and theories requires self-control, discipline, trained concentration, and prolonged diligence; **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 about any empirical phenomenon is to keenly observe its *entire* population; however, 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. Because they are unseen, they cannot be studied by empirical methods; yet, universal human assent attests to their existence. Courses dealing with these ideas are taught and studied at practically every university in the world. If virtue, justice, liberty, and related concepts do exist, they somehow must be 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, other men and women who have interest in these metaphysical phenomena have developed methods for their study proper to these 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 phenomena, 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 presume that everything has a natural cause and is beyond empirical observation alone. When empirical observation fails to support a hypothesis and conflicts with logic (for example, the question of abiogenesis 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 physical data to obtain knowledge of immaterial things. Science and philosophy should work in tandem. Historically, they did; they 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 demonstration and knowledge.

This modern proclivity for practical reason coupled with a desire for experience reached its apex during the Age of Reason and has recently crested. 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. 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, and an increasing openness 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 (what it is beyond appearances)**. They study external phenomena, functions, and operations to arrive at knowledge of internal powers and 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 complemented by proper material development.

Although they are concerned with inductive observation of physical phenomena, they are not 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 assent 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 Causality* states roughly that 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 onto 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 natural as well as a moral term in the sense that living things have natural potential to mature. They therefore have proper and improper uses, which either enhance or inhibit this innate potential**. Natural good is relative to species because they 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 (the purpose of this book) is also understood, the statement that all human beings should seek that which is good for them becomes self-evident. It is certainly logical for a person to pursue what is good for him. The opposite, all human beings should destroy themselves, is an absurdity which helps 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 of 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, under the same conditions, over and over again yields a general rule, which we can use for further reasoning without the need of subsequent proof.

Logic is either deductive or inductive. When inductive, it is based on repeated observations that yield consistent results; it 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, the general rule can be used in a process of deduction through 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 general 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 (**minor term**) 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.

Philosophy depends heavily on the use of such syllogisms for more complex demonstrations. The syllogism consists of three statements. To summarize, 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 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 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 statement that Thomas should seek that which is good for him is a *normative* statement or judgment that it is 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**. Normative statements are judgments about good and bad, they are

about why something 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. Together, the two methods provide important and essential data necessary for successful practical action; both are necessary and complementary. Yet the point remains: philosophers ask different questions and at times use different methods than scientists use.

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 into such matters, it cannot make normative or prescriptive statements.** For example, empirical scientists are unable to make normative judgments about human actions. Therefore, **normative**

judgments should not be made by empirical scientists, and certainly not prescriptive statements (but somebody has to make them). 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 intrinsic limitations. Although philosophy is needed to know the first principles of being, to derive knowledge of the essence of unseen things, 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 based upon knowledge of Divine Law and the unity and multiplication of the Divine Essence. 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/essence of more things than most philosophers or (2) because they often stand in a better position to extract knowledge of efficient and final causes due to their being such keen observers of effects through which efficient and final causes are known.

The need to know the inner nature of observable objects is a process common to both science and philosophy. In this, 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 were 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, spiritual, 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 definitions and knowledge of quiddity. Human knowledge of quiddity has been and, I presume, always will be attained by rational thought aided by 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 and analysis of their effects.

Consequently, I do not expect philosophers (who necessarily rely on observation) or esotericists (who rely on mystical intuition) to contribute more about the form or essence of mushrooms, dogs, or cats than biologists or zoologists can. In fact, a greater contribution is expected from the latter, who know their objects so well that they can classify them according to their species' specific characteristics. Nonetheless, I do *not* expect an empirical 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. No matter how superb a scientist's empirical observation, differentiation, and classification capabilities might be, possible knowledge of substances, of concepts, of essence or quiddity ceases when the subject is man or any spiritual substance; a scientist simply does not

deal with such subjects.

If man is endowed with a rational soul and a free will that constitute a spiritually subsistent substance capable of existence apart from matter, empirical methods are of no avail in knowing them; they are useless when it comes to knowledge of spiritual things or extrinsic formal causes. Because scientists do not ask questions about things they cannot see; they have not developed knowledge of these substances/concepts and their interrelationships, have not determined general laws applicable to thinking about them and have not asked questions about ends or origins and thus cannot make normative or prescriptive statements. 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 observation or empirical knowledge of nature**, **and most scientists are experts at observing nature**.

If a human being has a spiritual soul, it cannot be known by empirical methods alone, but it can be known by philosophical methods aided by empirical ones (mystical methods have been excluded because of the paucity of such claims; they are not the normal route to such 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 nor its powers and operations, which help account for the life of the body and related activities that are not explainable by mere recourse to matter. Anytime a phenomenon transcends matter or is non-material, such as liberty, justice, 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 immaterial things such as the essence of a soul and is thus able to provide 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, 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 Trinitarian nature of God 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. Like philosophy, it reasons from principles to come to knowledge and understanding of spiritual 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 spiritual questions**, although their complete comprehension ultimately transcends the minds limited rational ability. **Like philosophy, theology 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.**

Natural theology as a sub-branch of philosophy, on the other hand, consists of man reaching toward God. That is, natural human knowledge of divine things (natural theology, not revealed 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 such works as the Summa Theologiae of Saint Thomas Aquinas, which is a logical treatise that endeavors not only to demonstrate truths about God, but also to demonstrate the reasonableness of belief in God and in revealed principles.

For example, although no one is able to rationally discern the mystery of God's Personhood, i.e., the multiplication of the Divine Essence known as 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 by which it knows God to exist** to realize that its finite knowledge and its finite mode of knowledge (the material world) are deficient and therefore insufficient to grasp the nature and purposes of a perfect and infinite Being and the manner in which He should be worshipped and honored to attain His blessing and avoid malediction. 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 Persons, it is not possible to know how to worship them 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 Divinity is bound to result in false worship. Because Moses believed in the existence of God but did not know how to properly worship the God he believed in, 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/liturgical ceremonies) 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 worse) 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 believe such a thing ***after*** it has been revealed (to anyone who wants to seriously consider the unique and Godlike nature of our human essence). 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 and likeness as has been revealed (We shall explore the divine image and likeness within man and woman in chapters eight and nine). **This knowledge of the divine imprint in man would escape both discovery and comprehension if the human mind were (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 reflects. Therefore, the Divine Exemplar (model to be emulated) in revealing the mystery of His image in man also reveals the mystery of Himself so that the image can be discerned in man.**

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 limited knowledge; he did not have faith-because no such gift had yet been bestowed to the Ancients, 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 but to a 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**. **It is grasped as a more certain explanation of things the**

unaided intellect only grasped partially, *as long as it does not contradict what reason already knows.* If, in fact, it knows anything at all; certainly the Canaanites who sacrificed their children because they "thought" this mode of worship was pleasing to God, had their theology wrong.

Aquinas argued that faith is neither exclusively opinion nor reason but partakes of both. Like opinion, faith 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 a certain thing. 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 without a corresponding effort to

develop the powers of reason, 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 (latent powers of the unconscious mind) 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 often times of illusion. It is considered by those who study it to be extremely potent, illogical and perilous, 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 arouse 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, 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 (Daniel 14, Douay Rheims American Edition)). The pagan priests had even fooled the great King Cyrus of Persia. Daniel, relying on his intellect and wit to counter 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. To avoid the appearance of chicanery, they assured the king, that they would leave the temple precincts situated inside the belly of the statue, and further, he could lock them out. Prior to leaving, they invited the king to set forth food and wine on the main table. There 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 willingly forfeit their lives. If, however, he found the food consumed, Daniel, whom they accused of being a liar, should die. Cyrus consented. After, the priests vacated, the king locked the door behind them and subsequently sealed 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". A soon as Cyrus gained entrance, he immediately looked 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 and Aristotle who favored rationally deduced truth over myth, passion, and false gods 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 gain 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.

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 acts are judged as good or bad or right and wrong. In place of such an objective norm, some type of subjective norm, based on arbitrary will power rather than objective reason, must be devised. This has been the plight of the modern world whether in individualistic theology divorced from philosophy and speculative reason or in politics wedded to power and "practical reason" but divorced from "speculative reason" and moral virtue, which for the most part are ignored or unknown. This was the point of Pope Benedict's 2006 Regensburg Address, viz., what he refers to as the "dehellenization" of Western thought or a stripping away of its metaphysics:

> "The principle of *sola scriptura*, on the other hand, sought faith in its pure, primordial form, as originally found in the biblical Word. Metaphysics appeared as a premise derived from another source, from which faith had to be liberated in order to become once more fully itself. When Kant stated that he needed to set thinking aside in order to make room for faith, he carried this programme forward with a radicalism that the Reformers could never have foreseen. He thus anchored faith exclusively in **practical reason**, denying it access to reality as a whole."

Thus, the Medieval Reformers assisted the rise of 18th century Deism which finished what the Reformers had set out to do but in

such a way that what the Reformers unleashed would in time ultimately lead to their own undoing. In the hands of the Deists **not only was faith divorced from reason, faith itself became subject to reason** but not to the full spectrum of human reason known by Aquinas et al. Rather than reason in its totality, both speculative and practical**, a limited set of practical reason was pursued by which the faith of the Reformers itself is challenged and ultimately forced to flee from the public square** where Calvin and Luther had placed it. Thus, the theocracy of the Reformers and their heirs, the 17th century Pilgrims ultimately gets replaced in the 18th by privatization of Christianity and the secularization of rational thought and society by the desists *et al*.

In their dispute with Catholicism, the Reformers over emphasis on faith resulted in an over emphasis on reason during the Enlightenment and a consequent tumbling of faith down a long recess into the domain of morality, ethics, or practical philosophy divorced from its own speculative and mystical roots in the human intellect and in the Holy Trinity in whose image the intellect is fashioned. In fact, the practical philosophy of the deists, if it is really philosophy and not something else, is impossible without first rising toward the speculative by which journey the grasping of essences is accomplished before heading back downward into the practical. In other words, philosophy or politics cannot be practical unless it is first tends toward the speculative. In the hands of the 18th century Deists it became exclusively practical and then wedded anew to a neutered faith in the guise of morality, which is practical thinking about ethics and politics; however it is practical thinking without any *a priori* or *a posteriori* transcendence. Consequently, the religion of the future would be a worship of reason alone, not faith alone as the Reformers would have had it but reason alone with faith reduced to a reasonably justifiable moral code removed from the public square; faith yes, but it was no longer the faith of Peter and the Apostles which had a mystical and spiritual dimension wedded to practical and speculative reason but a faith that was purely reasonable, the type displayed by Jefferson in what has come down to us as the "Jeffersonian Bible" in which a Pelagian faith justified striping the incarnation, resurrection and, in general, all the mysteries from the pages of the New testament now measured by the rod of practical reason and proudly unable to scale the

metaphysical heights.

Thus, it has become increasingly difficult to ascertain the essence of abstract things or of immaterial substances. Faith itself was divorced from reason by the Reformers and then subject to a neutered reason by the Deists, a neutering from which it is only beginning to recover as we move toward the integration of philosophy, theology and empirical science. In the meantime, we are still suffering from the divorce of faith and reason set in motion by the Reformers and their illegitimate remarriage (faith and practical reason alone) proposed by the Deists. We suffer from a lack of understanding of the things most necessary for human improvement. Viz. knowledge of human essence and of the abstract essence of things especially those things most necessary to politics and social science: liberty, justice, and virtue; in out craze for the practical, we have forgotten the speculative and with it the essence of things necessary for normative and prescriptive judgments. Although empirical social scientists often attempt to operationalize (make measurable) such abstract terms as virtue, liberty, and justice, 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 social scientists know what they are measuring if they cannot adequately define it in the first place**, and **how can they define it unless they are able to somehow grasp its essence.** In the case of human beings, this identification requires metaphysical knowledge not proper to empirical science or practical reason. This becomes evident when we ask why seemingly good political actions go wrong. Either,

1. The proper ends were never sought because 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.

2. The means were insufficient to the ends or

3. The environment was not adequately studied

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, why it is the terminus of ethics and the first principle of politics or why it is tripartite in nature. If they can't do this, how can they quantify and measure it let alone prescribe programs of political change to attain it.

In the above section on science, I proposed that scientists often have or have the potential to have better knowledge of a thing's quiddity or inner nature than philosophers do (esp. when it concerns natural finite phenomena). However, metaphysical knowledge of a thing's essence goes beyond a mere description of its operations and of its parts to a determination of its ends. **Prescriptive statements, and normative judgments about ends, are really impossible without knowledge of a thing's 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 (the study of being, which includes the soul, spiritual substances and their ultimate cause, God) not as a result of observation only but **(1) as a result of what in fact is observed and (2) as a result of what questions are asked by the observer.** Only subjects having spiritual constituents (human beings) are capable of moving an observer to the level of metaphysical speculation about their immaterial *essence*. However, even objects without immaterial constituents (plants, animals, minerals) are capable of moving an observer to the level of metaphysical speculation about their *origin*.

A 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 a **philosopher, in addition to asking what are its constituent atomic and sub-atomic parts, asks what are its powers, operations, purposes, origin, and end**. Biologists 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, **if we fail to comprehend and adequately define the nature of a human person or of anything, 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 proper legislation**. Thus, the entire enterprise of politics, legislation, and programs for social change rest more on ancillary ontological knowledge of a things inner essence then it does on descriptive knowledge of 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; however, when questions arise about the nature and purpose of immaterial things, 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 concepts/subjects such as justice, polity, liberty, and rational soul, which is an immaterial substance from which thinking and free will originate**.**

Moreover, although empirical science is defined as a descriptive but non-normative and 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 that 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 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 capable of judging means and ends**. It does this not because philosophers are any smarter than empirical scientists 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 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 probability and 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 statistics and social sciences; yet many philosophers lack, not only one, but, both types of education and training.

Integral Political Science

For thousands of years empirical verification and logical demonstration have been utilized in the three domains of science, philosophy, and theology to arrive at demonstrated knowledge. Even though some believe we are evolving beyond rational analysis to a higher cognitive or advanced psychic state of consciousness, intuition, and meta-awareness, for now, empirical verification and logical demonstration utilized by all three disciplines are the only acceptable means for arriving at demonstrated knowledge. Unfortunately, the three are estranged and alienated

What the modern world is in need of is a valid and integral synthesis of these tripartite domains, which promises to yield abundant fruit for the attainment of a new man and a new humanity. Consequently, political science, if it is not to be passé and basically irrelevant, must undergo a synthesis of two or more of these approaches if it wishes to advance beyond the level mere description to the level of architectonic leadership in the realm of social reconstruction.

Because political science involves both moral judgments and descriptive analysis necessary for practical planning and goal implementation, it must necessarily 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,**

as we begin to swing back and reunite the two, it is anticipated that we will find the proper balance and in that balance, perhaps even greater things will be realized.

CHAPTER THREE

A Closer Look at the Topic

In order to obtain the hoped for methodological mean, an understanding of the ordering of knowledge is essential. 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

HUMANITIES	MATH/SCIENCE	SOCIAL SCIENCE
Literatures	Natural Science (biology, zoology etc.)	***Political Science***
Philosophy		Economics
Fine Art Languages	Physical Science (physics, chemistry etc.)	History
		Psychology
	Mathematics (Calculus, Trigonometry etc.)	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 three branches of Philosophy and their constituent parts. These three branches are:

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

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. And in the infrequent case where there is a combination (such as so called scientific socialism), it is usually the result of an ideological perspective in the guise of philosophy. Equally invalid, many inexperienced philosophers or those blinded by some type of spiritual hysteria proceed as if they were somehow aloof and elite, and in no need of empirical methods, which they are often heard to bad mouth and shun when, in fact, **without the empirical methods of the social scientists, rather than being aloof and elite, such philosophers tend to be profoundly useless**.

How did it get like this? The term science, in the modern sense, as a discipline exclusive of philosophy, did not come into vogue until the 19th century. In 1867, the Oxford English Dictionary first used the word, "science" to connote exclusive empirical knowledge in disregard of philosophy or philosophical demonstration. In 1857, a decade prior to this, Columbia University established the first chair of *Political "Science"*. By 1880, the same university established empirical political science as a separate discipline. Political science, in its modern usage, is certainly demonstrated knowledge, and 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**.

Empirical science *partakes* of prudence, but it is not the same thing as prudence, since prudence (*phronesis)* is about means to ends. Empirical science **only gives partial knowledge about means** (that is analysis of environments necessary for prudent practical decisions)**, but it 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 ***by itself*** does not qualify as prudence. It 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, philosophy is needed. Political philosophy as a normative and prescriptive philosophical discipline meets Political science as an inductive and descriptive empirical discipline in the act of prudence, but **no philosopher can rightly claim to be prudent or practically wise if he/she neglects or is deficient in empirical knowledge** and methods and **no empirical scientist can rightly 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 the most difficult part of moral virtue and the most necessary for success in politics. **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 to correctly devise means that are further enhanced or perfected by empirical knowledge of the environment in which they are applied. 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 part of what it takes to be wise (the greater part, but still only a part). A man part wise is not wise at all. Both parts 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 of derived means. One without the other (the speculative without the practical) is incomplete.

I do not think that any so called theoretically "wise man or woman" relishes being accused of imprudence or lack of practical wisdom, of being, "intellectually competent but useless"; if so, their supposed wisdom comes to naught. And, I do not think any social scientist relishes being accused of being "technically competent but useless", that is, a trained person competent in technical matters but ignorant of higher purposes or critical understanding about social value and human nature. Theoretical or practical ignorance both make knowledge fragmented or even ridiculous and that is just about the state that social science finds itself as we begin the 21st century.

For my part, I have no interest in being a practically foolish wise man (quasi-philosopher) **or a practically wise foolish man** (quasi-political scientist) reduced to either empty speculation or the mere descriptive work of a formal student. Social analysis and reconstruction require wisdom, prudence and science (not to mention the highest requisites, viz., virtue and a purity of heart that enhances sight), which only come with integral human

development and integrated philosophical 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 it, 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 if 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 inevitably no absolute 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 becoming 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 knowable 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 contingent 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 principal to the concrete level of particular application, things significantly change**. The finite and complex 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. Draw from knowledge of quiddity to work with and identify means appropriate to identified ends

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 that causes plenty of reasonable doubt 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 is ***reasonable*** or ***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 that 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**. Thus, **political science gets its certainty from the principles** (the truth is in the principles such as the necessity of 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.

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 probable predications about *minor* things, it is a science fit for trained 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. **If politics aims at ameliorating social problems, it cannot avoid value laden questions about the good life**. **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 tested and subsequently developed into universal principles that are integrated into political theory, descriptive analysis and theory naturally give way to prescriptive planning and evaluation. Observation and description about "what is", serve evaluation and planning about "what ought to be".

Moreover, descriptive empirical 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. Consequently, it cannot provide direction for living a good life or building a just society. By itself, it cannot solve a single moral problem. Fortunately, 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 shall continue with a truncated and disconnected discipline with its two vital constituent parts locked in a ludicrous intellectual battle. The modern world is in need of a new and peaceful synthesis including an integrated social science built upon an integral humanism, a synthesis of spiritual and physical composites arrived at by descriptive and normative methods, which make prescriptive political action possible.

The task in this book, therefore, is to explore human body and human soul to develop an integral humanism that yields a definition of the human person necessary for the further work of ethics and politics in the modern world. The exploration begins in chapter two with an empirical examination of the *biological and chemical* processes that underlie the human body and leads, in subsequent chapters, to a philosophical examination of *spiritual and immaterial processes* that underlie the human soul. These empirical and philosophical insights are synthesized with and buttressed by a sojourn into Trinitarian Theology undertaken in chapters eight and nine. Taken together, all three yield a profound and expanded definition of the human person a new insight into man as a being made in the image and likeness of God, which is the necessary psychological foundation for a new man and a new humanity in the Era of Peace.