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Preface

For the past 50 years I have been fascinated by the psychology of natural and revealed knowledge. This fascination began when I was a pupil in 6th Grade and was shown to be unconsciously an Apollinarian heretic for thinking that in Jesus the divine nature and person substituted for the human soul. At Fenwick High School in Oak Park, IL, my Dominican teachers introduced me to the philosophy of St. Thomas Aquinas via an English paraphrase of Thomas’ Summa theologicae, in which the question structure of St. Thomas’ work was replaced by the doctrinaire structure of the commentators. The philosophical concepts used to elucidate the teachings of revelation fascinated me: how they came to be, however, remained a mystery that even my teachers could not explain, instead they taught us to take them on faith, suggesting that they derived from divinely inspired intuitions given to St. Thomas. From this fideist conceptualism, my teachers at the Aquinas Institute, School of Philosophy, in River Forest, IL would later deliver me. From Professors Benedict Ashley, Humbert Kane, Ralph Powell and above all J. Athanasius Weisheipl, I learned that metaphysics is grounded in empirical natural science and that theology is grounded in biblical narrative and biblical theology. Thus it was, that in 1967, within a matter of weeks, I wrote my dissertation for the Dominican lectorate degree, treating the topic “Experiential, conceptual and intuitive moments in the knowledge of faith” Starting with the problematic addressed in the Modernist controversy, I undertook first to elaborate a psychology of normal cognition as a basis of a study of the conceptual and non-conceptual elements in the knowledge of faith and the nature of dogma. Relying heavily on secondary literature, in particular Louis-Marie Regis and Victor White, Karl Rahner and Eduard Schillebeeckx, I attempted to elaborate a comprehensive thomistic psychology of natural and supernatural knowledge.

When I had finished the dissertation, I knew that I would someday have to redo it, working this time not from secondary literature but rather from the texts of St. Thomas himself. Since then I have been gathering materials for such a revision. Methodologically I have learned to read Aquinas first historically in the context of his medieval world view. But to really understand him, it is then necessary to translate his thinking into our own contemporary scientific world view, hence the need for an ongoing dialog with contemporary science. As a librarian in the Tübingen University Library for the past 25 years, I have been strategically well placed to keep abreast of recent developments not only in thomistic studies but also and above all in contemporary empirical cognition theory. In particular I have been following developments in neurobiological and evolutionary cognition theory, in the psychology of language and in the social psychology of cognition. Over the years I have also closely followed contemporary developments in modern philosophical and theological epistemology. The ongoing infallibility debate in Catholic theology has led me to elaborate a theory of error to complement prevailing theories of truth. To work through this mass of gathered materials will take several years; thus I have decided to publish now the original dissertation unchanged. However, over the decades I have come to see many things more clearly. These new insights have found expression in two recent papers, which, because they lack documentation, have not yet been published. These papers are included here to bring the dissertation
up to date. The first paper “The phenomenology of cognition according to Thomas Aquinas” attempts to synthesize for the first time all of the diverse themes discussed by Aquinas in the course of his manifold discussions of natural cognition. The second paper “Philosophia und sacra doctrina: Neue Erkenntnisse zur Bestimmung der Verhältnisse zwischen Wissenschaft und Philosophie, Bibel und Theologie” examines the relationship between natural and revealed knowledge, showing how the latter, for Thomas Aquinas, is firmly rooted in Holy Scripture. Thus taken together, these two papers provide a framework reflecting the current state of my thinking on the matters covered in the dissertation.

In conclusion, I wish to dedicate this work to my teachers in River Forest, Ill., Dubuque, Iowa, and Tübingen, Germany. Without their help and encouragement, I would never have come so far in my understanding of the mind of Thomas Aquinas. In particular I wish to name the following professors in alphabetical order: Benedict Ashley, Humbert Kane, Hans Küng, Ralph Powell, William A. Wallace, Georg Wieland, and J. Athanasius Weisheipl.

P.S. The text of the 1967 dissertation was scanned and then converted to WORD by an OCR program. In this way, numerous minute typographical and format errors were introduced into the text, which I have subsequently done my best to correct. For those errors which I failed to notice and correct, I beg the reader’s understanding and indulgence.
THE PHENOMENOLOGY OF COGNITION ACCORDING TO THOMAS AQUINAS
Thomas Riplinger

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THE PHENOMENOLOGY OF COGNITION ACCORDING TO THOMAS AQUINAS

1. My approach to Aquinas’ theory of cognition

For some 50 years now, I have been studying the texts of St. Thomas on cognition. Over the years periods of intensive study of the texts have alternated with periods of reflection without reference to concrete texts and long periods in which the topic lay fallow, because I was occupied with other concerns. These long periods of gestation gave me a distance to the texts, thus enabling me to grasp the big picture more clearly than I did when working strictly with the texts themselves. Thus each time I return to the texts, I am surprised to find that I understand them better than the last time I looked at them. In what follows, I proposed to synthesize my current understanding of St. Thomas’ thinking on cognition without reference to specific texts, hoping that when I retire in four years I will have the strength and ability to rewrite my Dubuque masters thesis on Thomas’ theory of knowledge to provide the textual basis for what I describe here.

2. Heuristic principles

From Ashley and Weisheipl I learned to read the texts of St. Thomas in the historical context of Aquinas’ natural science. At the same time I learned, however, that to understand Aristotle's and Thomas' natural science, one must attempt to transpose it into the natural science of our own day. Thus, when Thomas speaks of “lumen”, it is not enough to simply translate it as “light”; we must then also call up our own knowledge of visible light as a specific portion of the spectrum of electromagnetic radiation emitted by or absorbed by molecules constituting the emitter or receiver of this “light”. Similarly, when Thomas talks about sound, we must think of compression waves in a medium. Again what is audible sound is only a small segment of the spectrum of such waves. The same holds true for the other proper sensibles and for the sense organs that perceive them. In each case, we must translate Aquinas' remarks into our own science, because this is what he would do if he were talking to us today. In the text that follows, I will not attempt to analyse texts or to reconstruct Thomas's own natural science background. This work I did some 30 years ago when I wrote and partially reworked my lectorate thesis on Experiential conceptual and intuitive moments in the knowledge of faith. This was a close textual study of Aquinas’ theory of natural human cognition and its application to theological cognition. This is the text I hope to rework in the years to come. Instead I shall present here only my own interpretation of Thomas' positions as transposed into the natural and social science of our own day.

I have deliberately entitled this text a “phenomenology” of knowledge according to St. Thomas. To understand what he says on cognition, it is not enough to read the corresponding “rational” explanations he gives of cognitive phenomena, since the “rational” explanations he gives can blind us to the phenomena he is attempting to explain. Abstract concepts like "species
impressa”, “intellectus agens” cannot be understood properly unless they are consciously related to the concrete phenomena they are introduced to explain. Thus it is necessary to reconstruct the phenomenology of cognition that underlies Aquinas’ rational analysis. Failing to do this has led baroque and modern commentators on Thomas’ texts to misunderstand his analysis and thus to construct a platonist-augustinian, “metaphysical” epistemology, because they failed to attend to the perceptual basis for Thomas’ conceptual development.

It is my conviction that, because Thomas was forced to confront the platonic-augustinian epistemology he found in the sacra doctrina (= sacra scriptura) and thus in the church fathers, he was thus able to see more clearly than Aristotle what natural human knowledge is about and how natural and social science and metaphysics differ essentially from a theology contained in and based on revelation. As St. Thomas saw it, the angelic mode of knowing corresponded by and large to the Platonic-patristic account of cognition. By thus contrasting the angelic and the human modes of thinking, Aquinas was able to see more clearly than Aristotle what was proper to the human mode of knowing and what was not proper to it.

3. The distinction between phenomenon and concept

Before attempting to reconstruct a modern phenomenology of cognition corresponding to the phenomenology of cognition Thomas himself had in mind as he posed his analytical questions and constructed his reasoned answers, it is necessary to attend to an important distinction. In knowledge we have to do with four distinct but interrelated realities: the knowing person, the powers or faculties by which the person knows, the acts of knowing proceeding from these powers and the objects known in these acts. The relationship between the knowing person and the known object is superficially clear. In the act of knowing, the known is presented to the knower and the knower realizes the known in a new mode of being, the cognitive mode. The act of knowledge, however, does not proceed immediately from the knower as such; it is a composite act involving distinct organs of the knowing human person, to which distinct powers of knowing belong. The act of knowing is the act of the person as far as its origin and term are concerned, it is, however, at the same time under a different aspect, the act of the knowing potency and of its proper organ(s). Because the outward organs of sense cognition are easily distinguishable from one another and from the other organs of the body, we are capable of analysing their construction and function to get a quite detailed picture of how they work. Of the so-called internal senses, we have very little perceptual knowledge to go on. We cannot establish their exact location or their specific organs in the nervous system nor can we analyse in detail their functions and interworkings. We conclude to their existence by identifying diverse, more or less clearly distinguished functional complexes, which, upon observation, indicate to us the existence and something of the character of a corresponding organ and faculty. But -- and this is most important -- we cannot “see” the individual organ; indeed, we cannot even be certain that it is a single organ. By the same token, we cannot “see” their functioning when in act. What we “see” is only the result of their working. Thus we know the internal cognitive organs and faculties not directly but indirectly, not in themselves but only in their function, not as things but only as
principles. Time and again, neoscholastic epistemology falls into the trap of thinking it is dealing with things rather than functions. It is not the eye that sees (except analogically), it is I that sees through the eye, it is not the intellect that thinks, but I who thinks through the intellect.

In knowing, the knower becomes the known in a special, “intentional” way. “Intentional” existence is generally thought to be a psychological concept for Thomist. To my great surprise, some two decades ago I discovered that it was for Thomas a physico-chemical concept which is analogically used in his psychology. Thomas introduces the notion to explain the role of the medium in indirect sensation. In vision, for instance, the image of the visible object is transmitted to the eye of the beholder by the medium of light. Light is so constituted that it is able to receive an impression of the object emitting or reflecting it and to carry this impression more or less unchanged to the eye it affects. It is this actualisation of the medium by taking on a physio-chemical impression of an object without losing its own identity that Aquinas call “intentional”. The same holds true for air as the medium of hearing and smelling; in both cases, the object impresses an image of itself physio-chemically upon the medium, and this medium transmits that image to the corresponding sense. Thus, in the medium, be it light or air, an image of the colored or sounding or smelling object has “intentional” existence.

Returning to the phenomenon of knowing, Thomas defines knowing as the presence of the known to the knower by being formed by the knower. This cognitive unity between the knower and the known is best seen in conscious knowing, when we reflect upon the fact that we know. Granted, there are many acts of unconscious knowing going on all the time, whether waking or sleeping. For instance, at the present moment as I write these lines, without my attending to them, the tactile sense organs of my inner arms are constantly monitoring, i.e. “knowing”, the temperature and texture of the tabletop upon which they rest and automatically they are stimulating the sweat glands in the associated area of my skin to exude moisture to avoid overheating. Normally, I do not attend to this process; it goes on unconsciously, only when a change takes place, e.g. when I move my arm to a neighboring place on the tabletop which is cooler or warmer, only then do I become aware of such unconscious knowing. Even in conscious knowing, however, we are not normally aware of which powers are acting at any one moment; we become aware of them in actu signato (i.e. as such, inasmuch as they are what they are) only reflexively; in the original act of knowing they were quasi-conscious in actu exercito (i.e. as the functional principles of the knowing act). We are most aware of our external sense powers and their organs. We have eyes that see, ears that hear, a nose that smells, a tongue that tastes, an epidermis that feels. We understand the function of these organs and powers spontaneously and easily, because we can observe their functioning.

4. Functional concepts and definitions

When it comes to the internal senses and the powers of intellection and volition, we have no clearly identifiable organ whose functioning we can observe. We can only observe the products of these inner organs and powers, e.g. the fact that the sensations received from different
organs are somehow compounded, that they are retained and combined over time, that they are manipulated. On the basis of such products, we conclude to the existence of a faculty or power; on the basis of the faculty, we conclude to the existence of an organ. Though we cannot observe either the acts or the powers or the organs, we can name them and define them in terms of their final causality. Here it is important to note that we “know” nothing more about them than that they must exist and that they must be so constituted as to be able to function to give rise to the product we observe. Science and philosophy are full of such “functional concepts”, which contain nothing more than a very remote genus minimally understood and a specific difference expressed only by a final cause. Neoscholasticism made the mistake of thinking that such definitions were metaphysical and thus somehow more expressive of an essence than any descriptive or otherwise causal definition. This is not so! The definition of man as a “rational animal” says no more than that something in the remote genus “animal”, not otherwise defined -- is able to produce “reasons” -- also not otherwise defined. Of course, the more one studies human beings, the more one can elaborate on this definition, thus filling in what kind of an animal man is and what kind of reasons man produces and how he produces them. But this knowledge is read into not read out of the original functional definition “animal rationale”.

5. Consciousness

The central problem of any philosophy of mind is the phenomenon of consciousness. It is easier to say what consciousness is not, than to say what it is. It is definitely not a ghost in a machine or a homunculus sitting in front of a set of computer monitors. Perhaps the best positive definition is Karl Rahner’s: consciousness is the presence of the knower to himself, i.e. Bei-sich-sein. Consciousness is like an infinite set of Chinese boxes. Each time we open a box, we find another box. Each time we reflect on a cognitive act, we reflect on an act of reflecting and so further. The problem with defining what consciousness is, is that we have no points of reference except for consciousness itself. We have good reason for attributing consciousness in one form or other to higher animals, but we really do not know what their experience of consciousness is like. We can speculate, as Thomas felt compelled to do, about the consciousness of angels and disembodied spirits, but again we can only fall back on our own experience as a point of reference. What is clear is that in consciousness we use images and words as symbols for the things present to us in cognition. From this point of view, the metaphor of consciousness as a computer expert watching various processes running simultaneously on a set of monitors in front of him, does have something to be said for it, as long as one remembers that it is only a metaphor. The point is, that the “I” of consciousness is not identical with any single faculty, neither sense nor intellect; it is a complex phenomenon in which sense and intellect are both involved simultaneously, without our being able to put them apart.

6. Knowing with the external senses

All human knowledge, for Thomas begins in the external senses. We have no innate concepts; even the first and most general concept of common being is derived from the senses.
Thus our phenomenology of cognition must begin with the external senses. The human organism is endowed with a variety of special organs capable of being impressed with forms derived from outside agents acting on them physio-chemically in such a way that, retaining their natural form and character, they take on an impression from the outside agent; this impression is a semblance of the affecting agent under the aspect with which it interacts with the sense organ. Thus a red apple absorbs most of the visible electro-magnetic spectrum, reflecting only light of the so-called red frequency. This “red” light reflected from the apple is focused by the lens of the eye to cast a red image on the retina of the eye. This red image affects the receptor cells of the eye which are sensitive to light of this frequency, evoking in them a chemical change in a pattern corresponding proportionately to the size and shape of the image cast onto the retina. This chemical change in the receptor cells is what Thomas means when he speaks of the “species impressa”, i.e. the impressed species. This “species” is not in itself cognitive, but as effecting the faculty/organ, which is passive to it, it reduces the faculty/organ to act making it “knowing”. Thus, although not in itself cognitive, the impressed species is an instrumental cause of cognition, since it makes the outside object present to the organism under the particular aspect communicated, in this case color. Thanks to this impressed image, the external sense becomes “knowing”, which at this stage of “pure”external sensation, means simply that the thus actualised potency causes spontaneous reactions in other organs of the body. All we know about “knowing” at this initial stage is that the sensing organ is able to trigger reactions from other organs. External sensation as such is pre-conscious, it becomes conscious only in reflection.

Whereas Aristotle and Thomas were able to locate in a gross way the organs of sight, hearing, smelling, tasting and feeling, we are able to construct a much more detailed picture of the structure of these organs. Thus we can identify the lens of the eye, which is responsible for focussing and projecting an image of the seen object on the retina. We know that the rods and cones of the retina are the specific organs responding to light and reacting to color. Much more clearly than Aristotle and Thomas, we see that the sense of touch is not one single power but a whole complex of powers, each with its own proper organ. Thus there are receptors in the epidermis for light, heat, texture, etc. There are organs sensitive to equilibrium, electrical charge, magnetic orientation. It is possible that there are other tactile organs, which have not yet been discovered. Thus by identifying the specific organs and the specific functions of these organs, the original functional concept or definition becomes differentiated and articulated. The original gross definition in terms of a grossly identified function as the final cause, is transformed into a real definition by identifying the material and formal causes.

7. **Knowing with the internal senses: the concomiting and the imaging senses**

Responding to this chemical change, which is the impressed species, the organ of sight sends a “message” via the optic nerve to the central nervous system, in particular to the brain, where again electro-chemical changes take place, corresponding again to the impressed species of the apple affecting the eye. In the course of the passage of the impressed species through this
neural network, the red object, which we know to be an apple but which at this level is simply something red, comes to be perceived in a perceptual complex, in which it is related not only to other objects in our momentary field of vision, but also with perceptions of itself and other objects coming from other external senses, i.e. from the auditory, olfactory, gustatory and tactile senses. To this function of combining percepts from the different external senses to form a complex percept incorporating all the impressions of an external object received in a particular moment, Thomas, following Aristotle, gave the name “sensus communis”, usually but misleadingly translated as “common sense”. I prefer to call it the “concomiting sense”, since its function is to unify all the impressions coming from different senses at any one moment. Because we cannot identify the proper organ of this sense, we have to do here with a functional concept in the sense explained above. All we know about this sense is that it functions to produce a unification of discrete percepts into a complex percept combining, at any one moment, all the impressions of an object (together with its perceptual environment) as these impressions are received by the different external senses. Thus we cannot “see” the specific organ or organs corresponding to the concomiting function or its faculty; we must reason to their existence without seeing them. We can, very well, using modern brain scanning techniques, identify areas of the brain which are active in such complex perceptions, but this knowledge is not sufficient to enable us to identify the proper organ of the concomiting sense from the organs of the other external and internal senses. Again we have to do with a functional concept or definition with minimal elaboration.

Our inability to identify the specific organs of the functions we attribute to the internal senses, means that we have only generic knowledge of their functions and thus only generic knowledge of the corresponding faculties and organs. For the external senses, we can identify the specific functions and the corresponding specific organs. Thus we can divide a generic notion like that of the sense of touch into a whole set of specific powers and organs. For the external senses we can identify the material cause (the respective organ), the formal cause (the physio-chemical structure in its active and inactive states), and the proximate final cause, what happens exactly when it is activated. With the internal senses, things are different. Being unable to identify the specific organs, we are unable to identify the specific formal causes and the specific final causes. Identifying only a generic final cause, we are unable to decide whether the particular sense is one or many. Thus, when we speak of a “concomiting sense” we are speaking loosely and improperly. We have yet to discover what specific senses and organs are contained virtually in this generic concept. Here again, it is essential to recall that we have no intuition of essences. The only way we can proceed from a generic to a specific concept is to discover empirically what species are contained within a genus. Only when we have identified all the species belonging to the genus do we have actual comprehensive knowledge of the genus. Prior to that moment, what is our specific knowledge is contained in our concept only virtually and is thus speaking pure and simply, is unknown to us. Virtual knowledge can be actualised only on the basis of empirical evidence.

Following Aquinas' account of cognition, we next note that the mind has the ability to
store and recall such complex percepts of the moment and thus to relate them to each other temporally. This ability to retain previous perceptions is, for Aristotle and Thomas, the proper function of the “phantasia”, usually translated as “imagination”. To avoid misunderstanding, I prefer, however to speak of the “imaging sense” or to use the German term “Vorstellungskraft”, i.e. an internal sense that presents things to us independently of their here and now acting on one or the other of our sense organs and powers. As space is the innate structure of the concomiting sense, time is the innate structure of the imaging sense. Though it does not as such know time, it relates percepts temporally by retaining them sequentially. Thus, thanks to the imaging sense, we are able to recall sensations we had a moment, a day, a year, a decade, a lifetime before. The imaging power re-presents them, thus connecting us to previous states of the object known, insofar as these were manifested to us in previous sensation. Thus it is possible to speak of a (“re-)presenting sense”, which is what the German term means. Because the imaging sense is able to know objects not immediately acting upon the organism, indeed to know them in their previous states, i.e. as they previously affected the knower, or in their presumed future states, i.e. as they will presumably affect the organism at a future time and date, the imaging sense needs something in which to see, hear, smell, taste or feel the object thus known. Thus, unlike the external senses and the concomiting sense, the imaging sense produces an image of the object as the term of its act. Thomas calls this image the “expressed species”. When we speak of seeing something “in the mind’s eye” it is this expressed species that we are talking about.

Though functionally distinct, the concomiting and the imaging senses normally work together. In our consciousness, we are constantly alternating between them, at one moment attending more to the outside world impinging on our external senses and thus to its expression in the concomiting sense, in the next moment, we attend more to the expressions of our inner world called up by the imaging sense. Because the concomiting and the imaging senses work together so closely, we are unable, despite the most refined brain-scanning techniques, to distinguish their proper organs, what is clear, however, is that they are especially related to the cerebral cortex, where it is possible to identify sensory regions corresponding to the different organs and areas of the body. As with the concomiting sense, there is good reason to believe that the imaging sense is only generically one, and that it is specifically divided among quite a number of related faculties each with its proper organ and function. Once again we have to do here with a functional concept identified by a generic final cause and thus needing further definition and elaboration by identifying the proper material and formal causes.

The ability to store and recall past sensory images is only one of the functions which Thomas, following Aristotle, attributes to the imaging sense. The other major function is to associate and to manipulate previously received impressions of the outside and the inside worlds. Thanks to the imaging sense we are able to conjure up images of objects not only never personally perceived, like dinosaurs, but also of objects which never existed at all except in imagination, e.g. unicorns. In conscious thinking, the imaging sense is constantly calling up images to accompany verbal thought. This is useful but dangerous when we are dealing with highly abstract notions or with functional concepts, since it is easy to confuse the concept with its
associated image and thus to attribute to the concept, properties belonging to the image. This is exactly what occurs when we “reify” mental concepts by mistaking a sensual metaphor for the sensory basis of the concept. Neoscholasticism, like modern philosophy generally, made the mistake of attributing to the concept functions actually proper to the complex percept presented by the concomiting and imaging senses.

When Thomas talks about the relationship between sense and intellect, he speaks about “phantasmata” The name is related to “phantasia”, his name for the imaging sense, but it means in fact much more than simply the image called up by the imaging sense at any particular moment. In fact, the “phantasm” is the whole sensory complex associated with a particular object of knowledge. Its counterpart, as Thomas explains in the *Commentary on the metaphysics* is the “experimentum”, i.e. everything known sensorally about the object of knowledge to date. In this sense, Thomas can speak of phantasms even when the object is immediately present to the external senses, since such immediate presence calls up automatically a whole panoply of past experiences of the object, including even the words we used in thinking and talking about it in the past and the images of it which we project into the future. Thus, in the rest of this paper, the words “phantasm” and “phantasms” are always to be understood in this complex sense-

8. Animal intelligence, the estimative sense and the value memory

Following Aristotle, Thomas discusses two further generic internal senses, the estimative sense and the memory. His texts on these two senses are short and, at first sight at least, not very expressive. Thus they are passed over quickly in most neoscholastic accounts of cognition. This is a catastrophe, for they are the primary and absolutely essential key to grasping Aquinas’ understanding of cognition.

In the *Commentary on the metaphysics*, Thomas explains how not only man but also higher animals develop experience by recognizing relationships between the objects sensed and their own proper needs. Thomas speaks here of a “vis aestimativa”, i.e. an *estimative sense* which forms, on the basis of innate determinations, concrete value judgments about what sense objects are useful and what sense objects are harmful to its organism; these concrete value judgments are responsible for the behavior of the animal. The higher the animal is in the order of intelligence, the more differentiated and complex are its patterns of behavior. In higher animals, this power is able to recognize not only concrete relationships to its own immediate needs, but also relationships between different objects in relation to its needs. Thus a dog is able to follow the scent of meat to the place where food in the form of meat will be found. With Aristotle, Thomas recognized that, whereas such value judgments were innate in lower animals, the higher the animal is in the hierarchy of intelligence, the more it has to learn to recognize such relationships. Thus higher animals, like ourselves, learn by experience. Such learned relationships are stored in what Thomas calls “memoria”, of which “memory” is a literal but misleading translation. Most of what we understand by memory is in fact the function of the imaging power in Aquinas’s sense. Thus in this paper I shall use “value memory” or “relational memory” to designate this faculty. Regarding the estimative sense, Thomas notes that in man it is freed from the direct ordering to
specific organic needs and thus he gives it a special name, “vis cogitativa”, i.e. the “thinking sense”. The fact is, that much if not most of what we attribute to intelligence is in fact the functioning of the “thinking sense” rather than of intelligence in the strict sense of the spiritual knowledge of universals. To designate the whole complex of estimative or thinking sense and experiential memory, I shall use the term “animal intelligence”.

Aristotle and Thomas had little knowledge of what higher animals are able to show in the way of intelligent behavior. Ethological studies on our higher primate cousins, the gorillas, chimpanzees and bonobos, reveal how complex animal experience can be. Higher Primates have mental maps of their environment, not only spatially but also temporally. Thus they are able to seek out deliberately sources of food that are in season. Thus they know from experience that the round red objects (e.g. apples) which are so fresh and sweet to the taste are found only under a certain type of tree and only in a certain season of the year. They are also able to grasp concrete relationships between goals and means deliberately seeking out appropriate objects and forming them into suitable tools to achieve distant goals. They know their place in complex social relationships and are capable of communicating with each other in various ways to cultivate these relationships and to coordinate social cooperation. They are even able to prevaricate, deliberately misleading other members of the troop to prevent them from taking a piece of food, for instance, that the lying animal wants to keep for himself. The most important and spectacular discovery about animal intelligence in higher primates is their ability to learn and to use symbolic languages taught them by researchers. This ability long remained unrecognised, because their voice apparatus is ill suited to producing human sounds. More recent researchers have had remarkable success in teaching them visual language, either the standard American gesture vocabulary for the deaf and or a variety of artificial machine or token languages. Here they manifest the ability to recognize their own identity and proper name, to identify symbols with not only with individual concrete objects but also with classes of objects showing not only visibly similarities but also functional similarities in the absence of visible similarity. They are also capable of forming such symbols into sentences, in particular into imperative sentences like “Give Washoe drink!” “Tickle Sara” etc. In isolated instances, adult animals have been observed passing on linguistic skills to their children, using them for more efficient communication. All of these observations should be a warning to us not to underestimate the power of animal intelligence, or to attribute to the spiritual intellect, functions which really belong to the repertoire of animal intelligence.

9. Analysing an act of cognition

Before going on to discuss the higher, “spiritual” powers of intellection and volition, it is well to go back and to analyse phenomenologically a particular act of cognition. As my illustration, I take a stone I brought back with me from my last visit to America. The stone I have in mind is a piece of Galena ore, this is the crystalline form of native lead found in the general area of Dubuque, where I passed so many years of my life. What happens when I “know” this stone?
First of all I should note, that I do not have the stone before me as I now begin to reflect on my acts of knowing it. It is physically on the shelf in our living room book case. But it is present to me here and now in my office at the University through my imaging power. In my mind I can see it, feel it, taste and smell it, even hear it. I can do this because I have done precisely those things in the past. Indeed even before I got this particular piece of Galena ore, I had handled similar pieces in mineralogy stores and exhibits, and even before that I had seen pictures of and read descriptions of Galena ore. All of these past experiences merge with my present imaging of the particular Galena stone I brought back from America. Remarkably, I do not even need to close my eyes to the world around me, in order to recall these earlier experiences of Galena ore generally and of my own stone in particular. On the contrary, at the very moment I type these words into my computer, looking now at the keyboard now at the monitor, I am seeing myself sensing and handling and reflecting about my piece of lead and the pieces of lead or that I have handled physically or imaginatively in the past. At the same time, I recall my emotional interaction (value judgments in the estimative sense) with my piece of lead ore, I recall my desire to acquire such a piece as I went to visit the mine in Schullsburg, I remember my joy at finding such an excellent piece on sale. I remember my feelings as I showed it to my family and my friends and all the emotionally colored associations that were evoked every time I thought of it or took it up to admire it in the past. All this takes place on the sensual level when I contemplate taking up and handling my piece of lead ore here and now at the computer where I am recording my reflections on this act of cognition.

Were I a chimpanzee or a bonobo, I would be able to name my piece of lead ore with the corresponding sign for “lead” and to form a concrete perceptual concept (experimentum) of lead identified by a congeries of particular classes of perception, e.g. the brown-grey color, the dull shimmer, the weight in the hand, the cubic shape, the soft texture, the soft, dull sound when struck. Armed with such a concrete perceptual concept consisting of a congeries of attributes, a chimpanzee would be able to apply its symbol of lead to other stones showing similar properties. What the chimpanzee could not know, is that one can melt down this stone to produce objects formed of the molten metal, that plates of metallic lead can be used to construct electrical storage batteries or to insulate sources of atomic radiation. The chimpanzee is capable of recognizing more or less immediate concrete relationships. Thus he might use my stone to crack a nut or perhaps even to hammer it into shape to use it as a tool, but the intricate relations between solid and molten lead, between lead and electricity or radiation are well beyond his ken. What distinguishes my reactions to my piece of lead ore from those of a chimpanzee or bonobo, is that I can recognize not only concrete relatedness but also the relation as such which is the “ratio” i.e. the reason for the existence of the relationship. Such “reasoning” is the clue to human understanding and what distinguishes human from animal intelligence. As human beings, we have an “intellect” enabling us to grasp relations as universals. This is where language came in. Higher primates can use language, but they cannot invent it, though they can indeed invent compound words to express concepts for which they have no single symbols.
10. The first act of the mind, simple intellection

To return to my example of contemplating my lead stone while reflecting on my contemplation of it, ... The whole time, while doing this, I am not only imagining my stone and my handling of it, >I am talking to myself about my reflection. This conversation with myself as a substitute for my intended reader is what finds expression on these pages as I write them. The moment I think of or image an object, I spontaneously and immediately become conscious of the name I habitually give it -- except of course when I happen to forget the name, which with increasing age happens all the more frequently. Generally we have no recollection of how in the first place we learned the words we use; they are simply there when we need them. I do however remember how my 16 month old son Emanuel learned the German word “Stern” to designate a star. It was night on our terrace as I stood there holding him and looking up to the sky. Suddenly he became restless and began pointing to the sky saying “Unh, unh, unh” ever more intensely. Having no idea what he was trying to express, I tried putting him down, or asking him if he wanted to go to the toilet, but when he kept insisting, I began looking in the direction he was pointing in and to name things that he might have been looking at, the sky as a whole, the roof of the house, the light etc. With each unsatisfactory word he became more and more restless until I pronounced the word “Stern”. Suddenly he relaxed, “Aaaah” he said, ceasing to point to the sky and embracing me all the more intensely. “Stern” was clearly the name he had been looking for to name the bright point of light he had perceived on the blue-black sky. Whether this was an act of animal or human intelligence, I cannot say, though given Emanuel's age at the time, I am inclined to attribute it to animal intelligence.

For this act of naming things, the scholastics coined the term “simple apprehension”. It is a misleading term, because it appears to say that we somehow apprehend essences in a simple act of intellection. This is not the case! Aquinas's term “intelligentia incomposita”, is a bit better, but also not entirely satisfactory. The problem arises, because my act of naming something can be primitive or elaborate, depending upon how much I know about the meaning of the word I use to name the object I am contemplating. For my son Emanuel, “Stern” meant nothing more than a brilliant point of white light against a dark background overhead; for me, “Stern” means a very large heavenly body burning nuclear fuel, shining as it did many years ago, because it is light years distant. Depending upon how elaborate my concept is, my “simple intelligence” of the object signified by the word I use to symbolize it can vary from a minimal sensuous concept, such as a small child or a chimpanzee might have, through to the elaborate phenomenal description and causal definition of an astrophysicist.

But even the astrophysicist cannot comprehend in a single moment everything he knows about stars. To do so, he must give a long lecture or better write a book. Even the expert has no “simple apprehension” of the whole essence in elaborated form! He must articulate his understanding step by step, using words to designate individual aspects, components and functions and calling up the appropriate phantasms. Thus human knowing is always discursive, moving from one aspect or component to the next. When I contemplate my piece of lead ore, I turn my attention now to the color, then to the shape, then to the weight etc. Only the most
primitive concepts like “being”, “no-thing” “oneness”, “composition”, “separation”, “thing”, etc can be comprehended in a truly simple act; all other things “simply apprehended” are virtually quite complex; they are “simply apprehended” only in the sense that, in the act of simple contemplation, prior to judgmental predication of an object, a single name stands for the complex being and for the complex essence of the thing at hand. That essence, however, initially at least, is not known in itself as essence, but it is known only as “something unique”, i.e. something having an essence, though it is not yet known what this essence is. As we have seen above, even in a simple definition like “man is a rational animal”, there is a wealth of meaning latent in the composition of the words “rational” and “animal”. But this wealth of meaning is for the most part only virtually present, it is by no means actual in any single act of knowing. If I want to elaborate what is contained under these words, I must compose long strings of other words to express what the original word means. Thus, when I contemplate my stone, for each aspect appropriate words come to expression. But I apprehend and comprehend them only sequentially, not simply. In this sense, there is no such thing as “simple apprehension” and it would be better to return to Aquinas's usage and talk about “simple intellection.”

11. Abstraction

Failing to attend to what Thomas says about the discursive character of mind, the neothomists were mislead by the term simple apprehension into thinking that we enjoy some sort of intuitive grasp of essence. That is Platonism, not Aristotle and not Aquinas! We do not “apprehend” essences, we construct them on the basis of our complex phantasms! Simple apprehension is often confused with “abstraction”. At other places, Thomas explains that we abstract essences from the phantasms. Thomas explains that our ability to grasp the universal in things transcends the order of physical things and must therefore be the act of a spiritual, not an organic power. This power he calls intellect. The problem, for Thomas, as for Aristotle, is how does the essence of the thing perceived get into the intellect. That the thing known somehow comes to be in the intellect is beyond question, for that is precisely the definition of knowing. Somehow the intellect must become the thing known, but how? In the order of sensation, we say how one organ affects the next physio-chemically or electros-chemically. But matter cannot impress itself physically on immaterial being. How then does the material thing known come to be in the intellect? Aquinas' answer to this question is the doctrine of abstraction. There are, he argues following Aristotle, in reality two intellectual powers, the passive or possible intellect in which the form of the external object is reproduced as an impressed species and an active or agent intellect, which uses the phantasm (i.e. the whole sensual complex percept) as an instrument to educe a likeness of the object from the potency of the possible intellect.

This theory has been the object of reams of speculation by Thomists over the centuries. Most of this speculation has been misled and false, because it supposes that there is some sort of intuitive grasp of being and essence at the start of intellectual cognition. This speculation has gone awry, because it fails to attend to Aquinas phenomenology of cognition and reifies his functional concepts. Above all it, confuses the via inventionis, the way of discovery" with the via
discendi, i.e. the way of dogmatic instruction. What neoscholastics take to be intuition of the essence in the intellectual concept is in fact intellectual insight into the empirically elaborated phantasm, the perceptual concept or experimentum.

How did I get my concept of Galena lead? Once upon a time, my Father opened his fishing kit and pulled out a sinker and put it into my hand. “This”, he said “is a piece of lead. Look how heavy it is for its size. Because it is so heavy, it is used as a sinker to make sure that the baited hook does not swim too close to the surface when fishing.” Sensorially, I noted the appearance of this strange object, noting that though formed in different sizes and shapes, it had the same dull grey metallic color, the same softness to the touch, the same heaviness. This congeries of sensual attributes became my descriptive definition of the substance designated “lead” in English “plombe” in French, “Blei” in German. Later in science classes I would learn that lead has a low melting point, that it is an electrical conductor and an insulator against atomic radiation, that it has a specific atomic weight and structure. Later still, paging through books on mineralogy and visiting mineral fairs, I learned that “Galena” was a particular lead ore characterized by a brownish grey color, a dull metallic shine, a cubic crystalline form. In this way, over the years, I have been building up a concept of lead, articulating for myself what was virtually contained in the concept behind the word, that I first learned, when my Father showed me the sinker. Nowhere in all these acts did I ever intuit an essence of lead. On the contrary, I built up over the years an increasingly complex descriptive definition of lead in terms of the sensible properties of lead and its ores, and I am on the way to developing a causal definition in terms of the material cause (molecules composed of atoms composed of electrons, protons, and neutrons, themselves composed of quarks), the formal cause (the molecular structure, the electron levels, the structure of the atomic core), the final cause (the set of physical, chemical and energetic properties explained by the molecular and atomic structure) and the efficient cause, atomic decomposition of heavier elements under earthly conditions or atomic fusion in certain types of decaying stars).

Let us go back, however, to my first encounter with the word and the object “lead”. In my first apprehension of the lead sinker, I had little more than a higher monkey’s concept of lead. I associated the word with a collection of sensual properties and a certain utility as an instrument for fishing. In this sense I knew it as a class name for substances of similar color, texture, weight, etc. Sooner or later, however, I realized that, underlying this common name for a class of perceptual objects was something “universal”, being applicable not only to the class of objects manifesting this set of properties, but also to the class of all products made of this materia, like white or red lead paint, despite the fact that these products showed none of the properties belonging to the sensuous or animal concept “lead”. In this sense, a universal concept “lead” has been “abstracted” from all the actually or potentially sensible material occurrences of the substance lead. Thus the “idea” of lead is separable from all its material occurrences; it is immaterial. Being immaterial, it cannot be lodged in any material organ of knowing like the external and internal senses. A special immaterial potency is required. This potency Thomas calls the “intellectus possibilis” because it contains potentially in some way, at least, everything that
can be known. But then the question arises, how is the object known brought to existence, i.e. made known, in the possible intellect. To explain this, transfer over the material-immaterial barrier, Thomas, following Aristotle, postulates the existence of an **agent intellect**.

Note that "possible intellect" and "agent intellect" are functional concepts of the type described above. Indeed, unlike the internal senses, they are separated from matter and physical reality completely; thus they have no organ that we can claim as a remote genus; when we call them a "power" or "faculty" we are simply saying that they are not always in act and that their acts therefore do not exhaust their potency. All we know about them is that they are something immaterial capable of performing the functions we attribute to them. **Abstraction** is also a functional concept. It names, but does not describe a process we cannot observe. It says nothing about whether this process takes place in an instant or in time. It says nothing about how it takes place. It is in fact a metaphorical term. We tend to visualize the agent intellect as a kind of robot with a claw arm to fasten onto a potential universal concept in the possible intellect and thus draw it out for viewing like one pulls out a photo from a pack of photos. Of course it is nothing like this. Indeed, the very idea of "abstraction" is itself so abstract that it can be applied to the long discursive process of defining and dividing concepts which constitutes the via inventionis.

Unfortunately, Thomas himself is partially responsible for the false impression that definitions and divisions are abstracted or intuited by insight into concepts. Although he warns in *In Eth Nic*, lect. 7 that learning first philosophy without sufficient experience is learning mere empty words, in fact, especially in his Summen he generally makes no special effort to help the reader elaborate the necessary phantasms or to detail the complex dialectical/discursive process by which a concept is constructed. Instead he appears to postulate definitions as though they be immediately intelligible, whereas in fact they are intelligible only when reflected back on adequate phantasms / experimentum. This fact was lost on the neothomists, who turned to the Summen as the expression not only of Thomas’ theology, but also of his philosophy. Ignoring the dialectical quaestio-structure of the Summen, they read the corpus of the articles as though they were euclidian/cartesian deductions from intuitively grasped intellectual principles, thus turning Aquinas’ empirical/dialectical method of discovery into a rationalistic/conceptualistic method of postulation, leaving the reader in the dark about the phantasms needed to ground all scientific principles. What they took to be insight into concepts is in fact insight into phantasms and metaphors based on phantasms. Without these, however, what most neothomists learned were in fact empty words that they then artistically juggled around to deduce ever more complex theses without empirical grounding.

Abstraction, therefore, is anything but an immediate intuition of essences; it is a long drawn out process in which empirically perceived attributes are recognized as universal properties and recorded as such by the immaterial intellect. In my example of how I constructed my concept of lead, as described above, I have attempted to reconstruct the phenomenology of the abstracting process. In this process, consciousness plays a part as the agent appearing to perform the various tasks. I believe that it was this experience of the role of conscious as
directing cognition that gave Aristotle and following him Thomas, the idea of an agent intellect. But, note carefully” there is here only an analogy. The agent intellect is not consciousness itself. Consciousness is a complex act involving agent and possible intellect and the internal and external senses.

12. Judgment

Simple intellection is the necessary prelude to judgment, the second act of the mind in Aquinas’ aristotelian scheme. To form a judgment about whether a particular set of words is an accurate definition of a particular reality, requires that we first know the meaning of all the terms in the proposition. That was the function of simple intellection, to insure that we know the meaning of the terms involved in a proposition. Thus when I read or hear a proposition preferred by someone other than myself, I respond by looking up, so to speak, the meaning of the words in the statement, thus evoking a phantasm corresponding to their meaning; then I compare their significance in context as expressed in the phantasm I have called up with phantasms corresponding to my own present and previous experience and propositional knowledge. If on the other hand, I am forming the proposition myself for the first time, then I have sought out appropriate words corresponding to the diverse aspect of my phantasm and have linked them together in such a way as to state that the object in question is as I have described it. In this way, in the via inventionis, we build up definitions and divisions through judgments. We do not intuit them. Only in a secondary sense, namely when we use already acquired definitions to form new propositional judgments is it possible to speak in a metaphorical sense of our intuiting the meaning of the terms we use.

It is through judgment, that truth enters the picture. When I simply think “lead” without making any judgment about its properties or definition, I do not yet have knowledge in the strict sense. The object is present to my mind, but I do not know it to be such. Knowing begins when I judge that this particular stone in my hand is a piece of lead ore, or when I judge that lead has a dull grey metallic color. This is where truth and falsehood come in. These judgments are either true or false; they can be verified or falsified empirically by attending to experience. When I have made a successful effort to do so, I know them reflectively as being true or false; and when I again reflect on the reliability of the tests I have undertaken, I proceed to a further level of reflexive judgment which tells me that they are certainly or only probably or perhaps only possibly true or false.

Careful observation of animal behavior shows that animals too make judgments. For the most part these are simple judgments about the utility or inutility of an object for the organism. This “animal judgment” is the function of the estimative sense. In the higher primates we find much more subtle forms of judgment, relating things not only to the knower but also to themselves, as when a chimpanzee seeks out a suitable reed to fashion it into a tool for extracting ants from their nest. Studies of linguistic behavior among higher primates shows them forming propositions about things and about their relationships to things as well as, rudimentarily at least,
about relationships between the things in themselves. Thus they form sentences like “cup / red”, “ice-cream / sweet”. These judgments, as far as we can see, are always particular judgments, referring either to individual objects and processes or to classes thereof. They are never universal in the sense that the proposition “lead is a dull grey metal” is universal, inasmuch as we also know the exceptions to the rule, namely that in various compounds it can appear in white or red colors and without metallic shimmer. Thus, what distinguishes human from animal thinking is not the ability to name and to judge particulars, but rather the ability to know truth, i.e. to know that something really is the way we know it to be. Such true knowledge is articulated about things, about definitions and divisions, about attributes and relationships.

13. Definition and division

In formal logic, definition and division is associated with simple apprehension. There is a sense in which this is correct. To formulate a judgment, we must know the meaning of the terms used, and this, in respect to a particular judgment, is the function of the simple intellection presupposed by the judgment. But this special sense of the term is misleading. We do not intuit definitions in the via inventionis, we construct them, and we use empirically based judgments to do so. Basically, there are three types of definitions: nominal, descriptive and causal. Nominal definitions consist of little more than pointing at the phenomenon named, without communicating any more information about the entity or phenomenon thus named. A special type of nominal definition is the substitution of a synonym for the term; this is what dictionary definitions usually do, sometimes adding references to related terms or to antonyms, or otherwise indicating how and in what contexts the term is used. Definitions in bi- or multi-lingual dictionaries likewise belong to the class of nominal definitions, giving the equivalent words or expressions in other languages. Descriptive definitions are put together on the basis of observations, identifying attributes and functions of the thing defined as being regular and typical for it. In the ideal case, such attributes and functions are proper to the thing defined, but often we have to do only with a more or less typical congeries of accidents sufficient to distinguish the thing from similar things. Such is the case when we attempt to define/describe a particular species of dogs. “Dog” is an English word used conventionally to name domesticated canines of various races; an exact delimitation with respect to various kinds of wild canines is difficult to draw, thus the class of canines designated by the English word for dog might be different from the class of canines designated by the Swahili word for dog. While we generally are able to give adequate descriptive criteria to identify generic natural kinds, we often have difficulty identifying species and putting together appropriate descriptive definitions to distinguish them from other species of their generic kind. Causal definitions go a step further, since they tell us specific information about the “essence” of the entity in question. There are four kinds of causes. The material cause is roughly speaking the stuff out of which something is made or constituted. Material causes can be identified as either proximate or remote. The remote material cause of a dog is body or flesh; the
proximate material cause is the organized body with its specific organs typical of the canine class. The **formal cause** is the internal principle of organisation and function. The formal cause of a dog is a soul (anima) suited to giving proper structure to the organs of the body typical of the species and to give distinctive direction to the functions of that body. Each attribute and each function has its proper formal cause in the order of accidents; but the whole organism has a substantial formal cause which is responsible for all the natural accidental forms. Whereas we can see and isolate organs, we cannot see or isolate formal causes. Rather we postulate them on the basis of what we see different parts of a living body to be doing. Formal causes are thus closely related to behavioral descriptive definitions. When we recognize that a particular attribute or function is native to the organism, we recognize that this attribute or function must have an internal principle. This principle we call its “form”. The basis for this usage is the exterior, visible “form” of bodies and their organs, such “visible” forms serve as the prime analogate for the abstract concept of “form” that we build up by identifying all sorts of “invisible” forms. Just as we have no immediate intuition of essences, so also do we have no immediate access to substantial or proper accidental **forms**: we know them only inasmuch as we postulate them to explain the attributes and behavior that we are able to perceive as regular, unique and typical. This means that formal and final causality are closely related. In describing the “functional concept”, I pointed out that **functional definitions** belong to the order of **final causes**. What we observe an entity to be doing regularly and typically is what we call its final cause. In the functional definition, we combine a remote material cause with a proximate, though partial final cause to name and thus to characterize a corresponding formal cause which we cannot directly observe. The fourth kind of case is the **efficient cause**. In the case of living things, the immediate efficient cause of the living thing is its parent(s). Non-living things are generated by atomic or chemical agents, often such agents are instrumental, deriving their power to produce substantial changes from a remote generator. Thus lightening is produced by an imbalance of electrical energy between clouds or between clouds and the earth.

The purpose of science is to discover such natural causes. To do so, it is imperative to observe the being under investigation. This means that science seeks first to develop adequate descriptive definitions, then to identify the causes responsible for the phenomena observed, thus gradually building up a causal definition. Besides the causal definition, there is another type of definition which is misleadingly called “metaphysical”. The **metaphysical definition** attempts to identify the proximate genus and the specific difference of a particular entity and thus of the corresponding concept. Such definitions are obtained by a process of **division**. We are familiar with the taxonomic divisions in biology. The problem with such divisions is that, whereas it is relatively easy to identify characteristic factors setting off the divisions of the highest genera, the closer one gets to actual things, the more difficult it becomes to identify either the proximate genus or the specific difference. Increasingly, rough descriptive definitions have to be used and for the very last divisions, we must fall back on functional definitions like “rational animal”, which is a concept of biology, not of metaphysics.
14. Reasoning

Animals, as we have seen, can know concrete relatedness; human beings, by contrast, can know and identify the relations underlying concrete relatedness. Truth is one such relation, namely the relation of adequacy between the knower and the known. Animals can know truly, but they cannot know truth as such, since they cannot know relations as such. Reasoning is an everyday phenomenon closely related to grasping truth formally in judgment. Reasoning, roughly speaking, is the ability to say “why” something is the way we think it to be. We answer the question “why” by mustering “reasons why”. My piece of Galena ore is a brownish grey, because its molecular structure absorbs all other frequencies of visible radiation. It is heavy because it has a densely packed molecular structure and a large number of heavy atomic particles in its atomic core. Besides such examples of reasons for being, we can also identify and formulate reasons for knowing. My piece of Galena is metallic brownish grey in color because this is the way it appears when I examine it under normal daylight; it is heavy because this is the way I felt it to be when I hold it in my hand or the way I measure it to be when I put it on a scale. Reasoning is a linkage made between two judgments on the basis of a shared middle term. The fullest expression of reasoning is the syllogism. To test the logical consequence of any reason giving, we can put it into syllogistic form. Thus the above reasons can be expressed syllogistically:

Objects with a molecular structure that absorbs visible light in all the frequencies except those of brown and grey appear under normal light to be brownish grey.
But: Galena lead has a molecular structure of this type.
Therefore, Galena lead appears brownish grey under normal light.

Though we can and do reason about reasoning or about the other acts of the mind, in most cases we use reasoning to make connections between percepts and their interpretation. Thus in the above examples, reasons are given for the way we perceive Galena lead to have its specific color, weight, etc. Thus we use reasoning to confirm and explain percepts. In doing so, we “prove” the thing at hand to be the way we perceive it to be. Such “proof” gives us certitude, certitude that our perceptual judgment is true. Note that such “certitude based on proof” is no substitute for empirical observation. The “proof” is only as strong as the percepts on which it is based. Again, we have no intuition of essences, we know elements of the essence only through the analysis and composition/division of perceptual knowledge in judgments. When we “reason” to “prove” something already known empirically, we only confirm what we already know perceptually; the difference being that in the reasoned knowledge we gain the certitude that what we observed empirically was not simply a fortuitous aggregate of special cases. When I know that Galena lead is brownish red or heavy because it has a corresponding molecular and atomic structure, I know in advance, so to speak that this will hold true for all the pieces of Galena lead that I will ever hold in my hand in the future, unless of course other chance factors prevent this natural attribute from coming to the fore. Reasoning therefore confirms the universality of our
observations; it is, however, never a substitute for observation.

15 Inductive and deductive reasoning

Roughly speaking, Thomas, following Aristotle, distinguishes two kinds of reasoning. Induction is a process of reasoning from sense observations. When a given attribute or activity of an entity is discovered by observation to occur regularly, typically and uniquely, this set of observations can be used as a middle term to ground (“prove”) that the corresponding attribute or activity is a property of the entity in question. The ideal induction is the so called complete induction, because it involves observing all occurrences of the corresponding phenomenon. In the real world, such complete observation is impossible; even if we were able to examine all possible cases here on earth in the course of the whole history of the earth to date, we could still not rule out the possibility that in a later period or elsewhere in the cosmos exceptions might be found. Thus, in practice, we have to do with partial, but sufficient inductions only. When I have examined a large number of pieces of lead ore of the Galena type, I conclude by induction that the brownish-grey color and the cubic form are natural properties because they occur regularly, uniquely and typically. The fact that there may be exceptions is then irrelevant.

The other type of reasoning is deduction. The commonest form of deduction is the application of universals to particulars. Knowing that Socrates is a human being, I can conclude that he has a sense of humor even before I see him smile or laugh. We are constantly drawing conclusions of this type, hardly attending to the fact that this is a form of reasoning. Thus on the basis of observations we make of our partners in traffic, we make reasoned predictions of how they will probably react when they see us coming. Indeed social life is based largely on deductions we make from general observations to predict the reactions of our social partners.

In the sciences, however, deduction plays a special role. In the Platonic-Scotistic-Cartesian-Kantian tradition, deduction is a method for discovering new truths by intuiting the essence of an entity and concluding thereof to the existence of a hitherto unknown property of that essence. For Aquinas, however, there is no intuition of essences and therefore no deduction of unobserved properties, except in the hypothetical-deductive method which will be described below. Only angels can "see" the properties of a being by contemplating its essence. Human beings have no intuitive knowledge of the contents of their concepts or ideas; hence we must "construct" our concepts of an entity's essence by observing and making judgments about the properties, activities and causes of the entity in question. Thus I “construct” a concept of Galena ore by observing its properties and activities. In this way I build up a descriptive definition. By observing how Galena lead is formed and how it reacts physically and chemically to heat, solvents, etc. I learn to identify what it is composed of (material cause) and what structure it must have (formal cause) to manifest the properties and activities (final cause) which I observe. None of this is “given” in my first concept of “Galena ore” when someone shows me a piece of it and tells me that this kind of stone is called “Galena”. If however, the person introducing me to this stone goes on to tell me that Galena is a form of native lead ore, and if I know that metallic lead
generally has a dull grey metallic shimmer and is heavier than most other materials for its size, I can indeed "deduce" that it will probably have a greyish color and feel heavy even before I actually see its color or feel its weight. Such deductive discovery methods, however, are the exception rather than the rule. Normally we know the thing to be the way it is by observation, not by deduction. Instead we use deduction to confirm and explain what we know by observation. Thus, when I observe that Galena is heavy and when I discover, or am told, that it is a massive ore of native lead, then I know why it is heavy, because, namely, it has metallic lead as its principal component (material cause). Knowing why "proves" it to be the way it is. Thus my causal explanation of the being of a thing is also a causal explanation of my knowing that being, though not in such a way that I can dispense with observation. Deduction thus has two principal functions, the first (and foremost) is to explain, the second (and secondary) is to certify or prove. When I know why something is the way it is, I know it more certainly than when I only know it by observation to be that way.

In his theory of science, Thomas prefers to speak of demonstration rather than deduction. This usage does justice to the primary role of deduction as explanation rather than discovery or proof. The aim of demonstration is to explain the phenomenon in question by giving reasons why it is the way it is and not otherwise. In the demonstration a commonly shared descriptive or causal definition is used to link a subject to a predicate. Thus in the example cited above, heaviness is demonstrated to be a property of Galena ore because lead is heavy and because Galena is an ore composed principally of lead. This is a demonstration in the order of material causality. Many demonstrations are in the order of final causality. When I know that lead has a specific weight, I can predict that its atoms will take a particular path in the mass-spectrograph and that it will sink in liquid mercury.

As mentioned above, there is in modern science a method of deductive reasoning which can lead to discovering properties, activities and causes prior to observation. This is the so-called "hypothetico-deductive method" used so often in modern science. On the basis of analogical reasoning from other similar cases, a hypothesis about a certain natural phenomenon is formed and then tested experimentally to see if it can be verified. Thus I might argue that by reason of its molecular structure, Galena lead may have a slightly different melting point than pure metallic lead. To know whether or not this is true, I must test it empirically by experiment: I must melt a sufficient number of Galena crystals and measure their melting-point in order to show that this melting point is regular, unique and typical and thus "natural" to Galena lead. Such hypothetical deductions are not known to be true until they are verified (or falsified); thus they are no substitute for sense observation. They have the advantage, however, of directing sense observation by setting the parameters for controlled experiment. But until they are verified or falsified, they have only more or less probable truth value.

16. Verbal and non-verbal thinking

As we have seen above, the imaging power needs to produce an “expressed species” in
which it and the estimative/cogitative sense reflect all they know about the particular object known. This expressed species, as we have seen, is called the “phantasm”. Though the visible element tends to dominate the phantasm, effectively the phantasm combines the data from all the senses, including the common sensibles and the locative dimension recognized by the concomitant sense, the time dimension recognized by the imagination, and the whole panoply of concrete relationships recognized by animal intelligence. For the same reason that the imaging sense needs an expressed species to represent objects not or no longer present to the organism physically, so also, the intellect needs an expressed species in which to contemplate its objects. Insofar as it is simply a matter of the intellect's contemplating ideas in the concrete singular objects of sense knowledge, independent of physical presence or absence, the phantasm is able to play this role, because the intellect is capable of reflecting upon sense knowing and thus on the phantasm. This, indeed is what happens all the time when we think about singulars or concrete classes. What is specific to the intellect, however, is that it has the ability to recognize relations universal in character, among the things known as related in sensory knowledge. Though the phantasm here remains the necessary substrate of such knowledge, the phantasm is not capable of representing the universal as such. Thus the intellect needs its own expressed species; this entity Aquinas calls the “verbum mentale”, the mental word. Though Thomas infers the existence of a mental word to explain intellection, what stands behind this inference is the empirical fact that when we think, we think for the most part in words of our native or learned second language. Concentrating on the inference, rather than attending to empirical experience, Neothomists either ignored or even went so far as to deny a relationship between the inferentially derived notion of the verbum mentale and the empirically recognized phenomenon of verbal thinking known in day-to-day experience. As a result of this grave mistake, the neoscholastics mystified the verbum mentale as some sort of metaphysical entity beyond the realm of experience. Recovering the empirical roots of this idea is essential to understanding Thomas’ account of knowing.

Under “verbum mentale” we have not to understand some abstract metaphysical entity, uncomposed and abstracted from all experience. On the contrary, it is only a generic concept for the whole phenomenon of thinking with verbal and non-verbal symbols. Under mental words we understand not only the simple words we use as names of things, but also compounded words used to name things when we have no simple word at hand. With words we name not only objects and their attributes and behavior in the outer world, but also entities and their attributes and functions in our inner world. Thus words can stand not only for concrete things and their concrete relationships in the outer world -- this is the way higher primates operate with words -- but they also can stand for our mental acts and their activities and products. Thus our names stand primarily for the things themselves, secondarily for our phantasms of them and tertiarily for our concepts or ideas of them, phantasms and concepts being symbols for the things themselves. Whether our names for these three entities are simple or compound is a matter of linguistic convention and differs from one language to the other.

What is interesting in intellectual knowing is the role of words in relation to concepts,
"concept" here being used in the strict sense of an intellectually known, universal relation, based on sensually known, concrete relatedness -- I prefer to use the word "idea" to designate the complex of phantasm and concept taken together in their innate relationship to each other. As shown above, we have no intuition of essences, thus we have no direct intuitive knowledge of the content of our concepts. To recognize to what they pertain concretely, we must reflect them back on our phantasms; to recognize the relations they express, we must likewise reflect them back on the phantasm, whereby we can often use phantasms as analogies and metaphors to illustrate our more abstract concepts. We use words to name our concepts, but also to elucidate them, in as much as we use words to define and divide their meaning. Once having learned the definition or division by simple or reasoned judgment we do have something akin to concept intuition, not in the via inventionis, but in subsequent usage. Thus when I utter or think a name, this name stands not only for the concrete individuals I know to belong to its class, but also for my developed idea as an interactive combination of phantasm and concept. This idea in its virtual entirety is the basis of the simple intelligence presupposed to making simple or inferred judgments. But again, what I know in simple intelligence is not actual, but only virtual. That is to say, at the moment of my simple intellection I do not possess actually the content of my idea; to possess this content actually, I must go through a more or less complex series of judgments and inferences; indeed I might have to write a whole book to explain my idea. At the moment of using a word to form a judgment, my knowledge of the content of my idea remains virtual: though I could, if challenged, call up my knowledge of the idea's content, I do not do so actually at this moment. This virtual ability to recall learned definitions and divisions is what creates the impression that we have an intuitive knowledge of essences: we are able to think them without repeating the whole procedure of how we arrived at them in the first place. In this sense, the "essence" is indeed present to me virtually, but not actually when I form or read/hear a sentence using that word.

Thus understood, "mental word" refers not only to simple names but also to definitions, divisions, judgments and inferences, and, in fact, it would be more correct to speak of mental words, since isolated simple names are the exception rather than the rule. "Mental words are the words we use when we think. Thus they are language specific, though the underlying relation is universal in se, though not always identical in actual usage. How detailed our concepts are depends very much on the language we use. The Inuit have dozens of words for the various forms of snow, whereas English speakers generally distinguish only between powder and wet snow. Names can serve as tools for developing concepts. Though my English language distinction of only two forms of snow does not do justice to the Inuit set of concepts, by a process of translation and explanation, calling attention to different attributes of snow in the phantasm, I can learn/elaborate the Inuit's conceptual set, finding and forming names to identify all the species of snow belonging to it. One of the tools for doing this is the use of nominal definitions based on etymology. In concrete languages like German, by contrast to abstract languages like English, the phantasms associated with a concept show through such etymological
definitions, whereas in English they must be consciously called up.

The ability of words to stand not only for concepts but also for phantasms makes it possible to construct analogical and metaphorical concepts. When I say that the stars are like lanterns in the sky, I associate my phantasm of the starry sky with my idea (concept plus phantasm) of lantern. Though the mental words we use are normally words from the natural languages we have learned, we also have the ability to create artificial symbolic words, as in mathematics and mathematical logic. Each of us has had the experience, now and then, of thinking non-verbally, for instance when listening to music or contemplating a picture. Whether or not such “thinking” is in the intellectual order or in the order of animal intelligence, is difficult to say; I am inclined to think it to be the latter. A similar question arises regarding certain meditation states, in which the person deliberately voids the mind of phantasms and mental words. It is conceivable that in such states, the intelligence and the imagination are turned off and the cognitive is reduced to pure animal consciousness. A further question regards mystical states, in which the person transcends the order of ideas to “feel” a transcendent “presence” beyond the phantasm/concept form of thinking.

17. Everyday knowledge and science

Thomas was not concerned to give a general account of ordinary, day to day knowing; his aim was to explain scientific knowing. Nevertheless, to appreciate what he says about science, we need to keep in mind the picture he had of everyday knowing. We can do this by attending to the examples he uses in discussing knowledge in general and scientific knowing in particular; we can also find important hints when he talks about the interaction of knowing and willing and about the intellectual virtues and prudence. What is clear is that simple intelligence, judgment and reasoning are day-to-day phenomena. To direct our reactions to our environment we are continually making judgments about that environment on the basis of sense perceptions and reasoned inference. About the motives and attitudes of people we deal with we are constantly drawing inferences and verifying, correcting or falsifying them in the course of our dealings with them. The same holds true when we contemplate particular objects. The judgments we make in this way are mostly particular judgments about individuals or classes of individuals sharing some common trait. Often we make inferences from the general to the particular, thus giving reasons why we believe things to be as we perceive them. Our conversation is so full of such judgments and inferences, that we hardly attend to them. By contrast to the kind of judgments and inferences we daily use, the examples cited by Aristotle and Thomas for the most part seem trivial, that Socrates is risibile because he is rational is of no interest to anyone except the writers of logic books.

One of the areas where we use judgments and inference in the everyday sense is in history. Here we are constantly asking how things were in the past and why they happened in one way and not in another. We answer the question about how things were by mustering evidence and reconstructing what happened by inference from individual pieces of evidence We also try to
identify the reasons why things happened as they did. We ask about personal motives and mistaken judgments, about innate tendencies and fortuitous events. We draw conclusions on the basis of our historical knowledge to interpret the present and to predict the future. Most such judgments are probable rather than certain: Seldom do we find ironclad evidence, and even documentary proof is most often open to interpretation or even falsification. History is in our blood, even people who show no interest in political or cultural history are generally interested in their personal history and the history of their families and friends. Indeed most of our conversation consists of telling or listening to stories. There are even indications that higher animals know the past, not of course formally as such, but in actu exercito as the basis for their experience. The fact for instance that animals, specifically elephants and higher primates “mourn” their dead indicates that they can concretely distinguish between past and present. Here there is need for further investigation of what in human knowledge of the future may in fact be attributed to animal intelligence. The fact that history deals with particulars and that it is mostly only probable led Aristotle and Thomas following him, to deny that history is a science. This is really a moot question that depends on the way one defines science, which itself is an artefact, not a natural thing. There is no question that history is a scientific discipline in the modern sense. It is an ordered body of knowledge with established rules for gathering and interpreting evidence and for drawing conclusions on the basis of evidence. The aim of its arguments is not only to establish facts, but also to explain them causally or intellectually. The fact that for the most part it yields only probable knowledge does not make it less scientific; most of natural and social science likewise yields only probable knowledge.

Closely related to history is prognosis, or in its scientific form futurology. Prognosis is also an everyday form of knowing. We use it constantly in behavior, in that we attempt to assess beforehand what effects our actions will produce or how our partner in action will presumably react. Prognosis, being future to sense perception, is always inferential. On the basis of existing knowledge we “infer” what is going to happen. Prognosis normally has to do with the singular and the concrete. Even when we make use of scientific universals, it is the singular that we attempt to know. An interesting question is whether animals, more specifically, higher primates have an ability to know the future. Again there is evidence that they do; tool-making and social behavior require that the purpose for the action be known as the reason for performing the action one way or the other. Here again we recall what Thomas says about the role of experience in animal judgment. Thus, what distinguishes human from animal prognosis is not the fact of predicting the future, but rather the ability of man to identify the specific reasons for his inference, whereas in the animal inference is instinctive.

The model for science for the ancient Greeks was undoubtedly mathematics, in particular, Euclidian geometry. Here one finds exemplified the ideals of certainty, clear and distinct definitions and compelling reasoning, i.e. proofs of reason. In mathematics we do indeed intuit essences; they are clear to us as soon as we understand the terms or make the construction. Mathematical questions and their answers can be put into strict logical form, with one inference
derived syllogistically from another. Theoretically it is possible to follow each line of inference back to the very first axioms of the science. On the basis of this model, Platonists of all colors through the ages have rejected the idea of a science of nature, at best they grant the existence of a natural science using mathematical methods. Aristotle too recognized the existence of and the advantages of such mathematical natural science, but he went on to show that it is also possible to develop a descriptive science of nature based on natural principles of being and knowing. Such descriptive science, which uses reasoning to explain rather than to prove, is what scientists engage in when they attempt to interpret the results of their experiments and mathematical models. It is false to disparage such scientific work as mere popular science. Mathematical models are not ends in themselves, they aim at telling us about nature as it really is, to sharpen our observations and to interpret what we observe. As will be explained below, natural science in many cases attains only probability, but even when it attains certainty, this certitude is only relative, "ut in pluribus (=as a general rule) as Thomas would say, because natural causes can be impeded from producing their proper effects by other fortuitous causes.

For Thomas, following Aristotle, natural science points beyond itself at several points. In the order of physics, the existence of moved movers points to the need for an unmoved mover as the initial source of motion, even when, as Aristotle believed, the motion of the universe might be eternal. Phase changes and chemical changes also point to the need for a pure act to account for the fact that in changeable beings actuality is an act of potency and therefore impure, i.e. mixed with unactualized potency. The fact that the cosmos as we know it is filled with finality also points beyond the cosmos of changeable being to an order of immaterial being with natural ends. In psychology, the discussion of how we know truth points to immaterial truth as the ground of material truth and shows that the ability of the human mind to know truth indicates that we have within us immaterial faculties of knowing and willing which are signs that our own souls are immaterial. In ethics too, we learn that our appetite for happiness cannot be satisfied by any form of changeable, material being. We have an innate appetite for the universal and therefore immaterial truth and goodness.

All these leads tell us that there is a realm of being beyond the realm of changeable, material being, which is what we know perceptually. The realization that this is the case constitutes what Thomas calls the "negative judgment of separation" and is the midwife to the birth of a new science beyond the natural and social sciences, a science of being as common to material and immaterial forms of being. This is what Thomas calls "metaphysics". Metaphysics is not, for Thomas, a study of immaterial being as such: about of immaterial being we know too little and too indirectly to constitute a special science, since we know it only as the remote cause of physical being and of human knowing and volition. It is not the study of abstract being: abstracting "being" from the diverse manifestations of being ranging from purely mental to the most supreme real being yields only an empty concept of "is-ness", with which we can do nothing. Likewise it is not the study of pure being as distinguished not only from changeable, material being, but also from immaterial being composed of potency and act: pure being as such
we know only at the end of metaphysics when we reason to the existence of a supreme mover, supreme being, supreme end, etc. and recognize that, the existence of such pure being as the cause of participated being, intimates an analogical concept of being applicable to both participated and un-participated being. Metaphysics is likewise not the study of common being: though it is true that everything from God to mental and fictitious being is contained in the first and most primitive concept of being which we apprehend at the birth of intellectual activity, all of these diverse forms of being are contained only confusedly and virtually in this primitive concept and we have no way to reduce this confusion and virtuality to act except through the long process of sensuous and intellectual inquiry. Finally, metaphysics, for Aquinas at least, is not the study of a concept of being as such, which is the notion of metaphysics that, as Ludger Honnefelder has shown, has been the common opinion ever since Scotus and which has been the object of Kant's critique. On the contrary, for Thomas, the object of metaphysics is defined by the negative judgment of separation to be a dimension of being shared by material and material being, a dimension, if you will, which, thanks to the separation judgment, now lights up within changeable being as we perceive and experience it. The object of metaphysics is separated, not abstracted from perceived, changeable being. This separation makes clear that changeable being has a hitherto unnoticed dimension of being. Consequently, metaphysics, though it recognizes that its concepts transcend the perceptual world, is, like all other human science, dependant on phantasms for its contact with reality. Without a concrete phantasm to which it is related, a "metaphysical" concept is empty and unreal. The difference between metaphysics and the natural sciences is that, in metaphysics, one consciously attends to the way the concepts transcend empirical experience. This is what gives metaphysics its formal identity over against the natural sciences of changeable being.

It would go to far to elaborate at this point on the practical sciences which Thomas, following Aristotle, distinguishes over against natural science, mathematics and metaphysics. Among these ethics and logic are the principle forms of practical science. There are also practical sciences of technology and the arts. Social science, having as its object the relationships between human beings has both a practical and a speculative side and must be treated separately.

18. The Scientific questions and the subject/object of science

The clue to Aristotelian scientific methodology is the scheme of the four questions, which Aquinas uses to structure his Summa theologiae. The four questions are:

- **an sit?** -- Is there a subject worthy of scientific inquiry.
- **quid sit?** -- What is the nature of this subject
- **quale sit?** -- What are the attributes of this subject?
- **propter quid sit?** -- Why do these attributes inhere in this subject

The first question is answered empirically by calling attention to phenomena manifesting the subject of inquiry Arguments in the order of final causality can be used to confirm such observations. The second question is answered by constructing definitions and divisions.
Dialectically the inquiry begins usually by analysing the current and historical (etymological) use of the word to name the subject of inquiry and its empirically recognized manifestations; this inquiry leads to a nominal definition. The mustering of the phenomena associated empirically with the subject of inquiry serves to answer the third question primarily, but secondarily it answers the second question as well, by making possible the formulation of a descriptive definition. As explained above, such descriptive definitions start with the nearest possible genus and then select a regular, typical and unique congeries of attributes as an expression of the specific difference. Further inquiry about the various manifestations of the subject of inquiry makes it possible to identify causes. Again as explained above there are four genera of causes, material, formal, efficient and final. The ideal definition (overlooking the so-called “metaphysical” definition mentioned above) is a list of the four causes of a natural thing or an artefact. Such a causal definition is the ultimate answer to question two, but it also provides the basis for answering question four about the reason for the properties of the subject of inquiry. In effect, each property of a subject of inquiry has its specific causes in both the order of knowing and the order of being.

As explained above, most definitions in science are of the functional type. Functional definitions combine a remote genus with a particular attribute or function as the sign of an otherwise unknown formal cause: in this way they are primarily definitions in the order of final causality, but as pointing to an intrinsic formal cause, they are secondarily definitions in the order of formal causality. The definition of man as a rational animal is a classic example of such a functional definition. It is a property of functional definitions to grow in conceptual depth as we get to know better the subject defined. Both the remote genus and the specific function are known initially only rudimentarily. Our first notion of animal contains little more actual information than that it is something with moving parts outside of parts (thus distinguishing it from non-living things and from plants). The more one studies the object, the better one comes to know the genus. Thus after studying biology we are able to put together a working definition of “higher primate” which comes very close to describing our human body and its functioning. The same holds true for the function chosen as the specific difference. Initially “rational” means little more than the hint that we observe ourselves finding “reasons” for our thinking and acting. Only after long study of all the sciences do we get a clearer picture of everything summed up in the simple word “rational”.

The fact that such explicit knowledge is contained virtually in the original rudimentary concept has led Platonists to think that such implicit knowledge can be made explicit by a study of the concept alone, without respect to the phantasms with which it was and remains associated in the course of the via inventionis. This is what they mean when they talk of intuiting essences. For Thomas, such detailed knowledge is not implicit but only virtual in the original concept; there is no short-cut to explicating it by the long and complicated process of observation and inferential verification. The kind of concept analysis that I was exposed to in the course of my encounters with dogmatic Thomism yields only conceptual knowledge when no effort is made to
communicate the phantasms on which it was based. Neothomistic philosophy, unfortunately, is full of such conceptual knowledge passing for real knowledge. It is possible to juggle verbal c

ed formulae without having anything but the most rudimentary sense impressions of the phenomena, which these notions were introduced to explain. Neglecting the empirical, Neothomists took to calling such concepts “metaphysical”, thinking that they could be “abstracted” from sense phenomena, which were no longer needed once the concept had been formulated. Reasoning became for them a method of proving propositions and deriving new propositions, all without reference to the empirical data about the subject in question. All this was Scotism, Suarezianism and Kantianism but not Thomism.

The explanation of properties by discovering their causes is the goal of scientific demonstration. Demonstrations are of two kinds: quia and propter quid demonstrations. Quia demonstrations are used to prove simple facticity by calling attention to causes making subjects and their attributes known; most of the time, they are taken from remote, rather than proximate causes; often they proceed by induction. Propter quid demonstrations, by contrast require that we identify proper causes of being. The principal function of demonstration is to explain and thus, secondarily, to certify facts we already know. Demonstrations support, but do not substitute for empirical observation. One of the reasons for the ill-conceived 20th century debate about the role of theological reasoning in the context of the development of dogma, is the total misunderstanding of the Thomistic notion of demonstration. The notion that we discover new truths by reasoning is Scotus, not Aquinas, something even Marie-Dominique Chenu and Yves Congar failed to realize in their discussion of doctrinal development.

In the preceding paragraphs, I have used the word “subject of science” deliberately. The distinction between subject and object of science is important. The subject of a science is the entity which the science treats of; in short, it is the principal grammatical subject of the judgments made in that science. Thus logic is about mental beings, mathematics is about numbers and geometrical figures, general natural science is about changeable being in general, physics is about locally moving entities on earth, astrophysics about the heavenly bodies moving locally, chemistry is about substances changing as to their qualities, biology is about living beings identified by metabolism, growth and reproduction, and in the case of animals, sense and appetite directed bodily motion. These are the things these sciences talk about, the subjects of their judgmental predications. The predicates of such statements are the definitions, descriptions and explaining reasons which, in judgment, direct or inferred, are stated to belong to them. The object of a science, therefore, is the sum total of such statements about the subject. It lies in the nature of human thinking (we know only discursively, i.e. “componendo et dividendo”) that science grows as the number of propositional statements grows. Each new statement actualises a more or less minute aspect of the subject hitherto known only “virtually” as being contained in the subject. It is the predicates which actualise the subject and thus it is only in the set of all possible predicates that the subject becomes fully known actually. Of course it is impossible, not only for the individual scientist, but also for the whole scientific community through history to
identify and to affirm or deny (componendo et dividendo) all the possible predicates applicable to
a particular subject, even a generic one. Thus our human science remains necessarily partial and
always capable of further ramification, elaboration and, not infrequently, correction.

19. Truth and certitude

Truth is, for Aquinas following Aristotle, the conformity of knowledge in the mind with
reality: “adaequation intellectus et re”. In most cases, the “reality” in question is something
outside the knower, but because we have the power to reflect about ourselves and our acts and
potencies, the “thing” in question can be a mental reality as well. Truth is of its nature a reflective
form of cognition: it is more than knowing truly --animals are capable of that -- it is knowing
that we know truly. The bonobo has true knowledge of the “fishing pole” he makes to fish ants
out of an anthill. But he does not “know” that this knowledge is true; he does not even pose the
question. It is the specific human ability to reflect not only on things, but on our own acts of
knowing that gives us truth. As indicated above, truth is apprehended only in judgment.
Reasoned truth is apprehended in reasoning which tells us why a particular judgment/statement is
true. Certitude is a step beyond truth. There are degrees in the knowledge of truth. Judgments
about first principles like the famous axiom “being is not non-being” enjoy absolute and
immediate certitude, because by their very terms they cannot ever be otherwise. Judgments about
the natural attributes of material things, by contrast, enjoy only relative certitude. “Relative
certitude” is not a contradiction in terms. The relative certitude that we have in the natural
sciences means that things and their attributes and activities that we observe in nature to be
regular, unique and typical (the definition of “natural”) will always manifest these attributes and
activities, as long as other factors do not enter the picture to impede them. Thus they are valid for
the most part, but not always, because they can be impeded.

The next grade below natural certitude is probability. In contrast to Aristotle and Thomas
, we know today that the universe is much larger and much more complex than meets the eye:
thus it is difficult to make adequate inductions to establish the existence and properties of natural
objects in it. For the same reason, it is difficult to identify the proper causes of things and their
properties and functions. One way of posing and answering such questions is the hypothetical-
deductive argumentation used so often in modern science. Thus if I manage to “prove” my
deduction experimentally, I attain natural certitude, such as I would not have been able to attain
by mere superficial observation without controlled experiment. Most of the time in natural
science, however, it is difficult to make such sufficient inductions to say what is certainly regular,
unique and typical, since we cannot be sure we have taken all possible causes into account. Thus
most causal relationships that we posit as the explanation of observed natural phenomena are
known not as certain, but only as probable. Note, however, that the fact that we know them only
probably does not make them any less true; thus they have their place in natural and human
science alongside the relatively small number of “certainly” true judgments. The works of
Aristotle and Thomas on natural and human science are filled with such probable explanations and it is characteristic that neither author makes much of an effort to distinguish between certain and probable propositions and reasonings in his natural, social or theological science. What counts is their truth, not their certitude.

The concern with certitude is a heritage of Platonism, and was awakened in medieval scholasticism by Scotus and Ockham and their followers. It has been a major preoccupation of philosophy and theology ever since. The question of certitude came to the fore when the Franciscan school took to analysing the difference between God's absolute and his ordinary power. Absolute certitude meant that a proposition must be rooted in God's absolute power, since with his ordinary power, God could dispose things otherwise than they are known to be by observation in this world. To find out, how things are according to the absolute power of God, Scotus began looking at the concept itself. If it could be shown that a property belongs to the essence of the thing in such a way that no contradiction is possible, then it is certainly a property of the thing according to the absolute power of God. With this type of concept analysis Scotus introduced a way of thinking which was to flower first under Descartes then under Kant, who recognized that such deductions of absolutely certain truths could not be made about things outside the mind, but only of the structures of thinking as such. Thus Kant developed the transcendental deduction to establish with absolute certitude the structures of thought itself. From Kant, this method was taken over into Transcendental Thomism, with which the names of Marechal, Rahner and Lonergan are associated.

For Thomas, by contrast, pure, non-experimental deduction from the concept as such plays no role in his science or philosophy. Even metaphysics is for Thomas an empirical science, since it begins with the negative judgment of separation that occurs when we discover that there are forms of being existing which are not of a material, bodily nature. This occurs with the discovery of an unmoved mover in physics, an ungenerated generator in chemistry and the discovery of an immaterial dimension to the human person in biology/psychology. Thanks to this discovery of immaterial being alongside material being, it becomes possible to develop a science of being as such as manifested in concrete material beings. But for the properties and activities of being as such, we are just as dependant upon observation as we are in natural science. We have no more intuitive knowledge of refined metaphysical concepts than we do of natural science concepts.

20. The universal and the singular

One of the most misunderstood positions of Aquinas is his statement that the intellect does not know the singular directly but only by reflecting on the phantasm. The intellect, he says, is concerned with the universal, not the particular; of the singular there can be no scientific knowledge. To understand these statements, it is necessary to attend to their context. Thomas by no means intends to deny that we know singulars. The fact is that phenomenologically speaking, knowledge of singulars constitutes the overwhelming majority part of what we know. With our
senses alone, we know nothing but singulars; universals, we have seen, are not intuited but abstracted from sense knowledge of a class of singulars. The question for Thomas is not do we know singulars but how do we know them. His answer is, that we know them with the senses directly, with the intellect only indirectly. To locate direct knowledge of the singular in the senses is not to minimize our knowledge of them. As explained above; the organs and faculties are not the knower in the strict sense, I am the knower and the organs and faculties are only the instrumental cause of my knowing. Thus, with my senses, I really know singulars, and were I not to know them, I would know nothing with my intellect, because the intellect contains only ideas derived from sense knowledge.

In ST, I, q.84, a.7-8, St. Thomas says clearly and unequivocally that the only reason for human science is to know the concrete singular! The point of all physics and chemistry is to know this particular stone: “ut cognoscit hanc lapidem”. Distinguishing between the sensual and the intellectual faculties, Thomas says that the intellect knows the universal properly and directly, but also the singular mediate and indirectly, namely by reflecting back on the phantasms of singular objects from which the universal concept was derived by abstraction or on the phantasms of singular objects which are recognized to belong to the class objects corresponding to the universal. The fact is that it is impossible for human beings to think without phantasms. Ideas without the associated phantasms are empty and meaningless. The phantasm, as described above, is the composite of all our sensory perceptions and judgments about the concrete singular object or about the sensory class to which that object belongs. The phantasm is produced by the imaging sense on the basis of the judgments of animal intelligence otherwise known in man as the “vis cogitativa” or “ratio particularis”. As we have seen, this animal intelligence in higher primates is the ability to recognize concrete relationships, not only between external objects to my own organism, but also among the objects themselves of my sensory world, irrespective of their relationship to myself. Again it is important to note, that what is known in such animal judgments is not the relation as such, for this is a universal transcending the material order, but rather the concrete relatedness of the objects, i.e. the relationship between them. The function of the animal intelligence is to recognize such concrete relationships and to codify them in the imagination as experience. Experience is the basis of all intellection of universals and thus of all of our intellectual ideas or concepts.

Ethological studies demonstrate that at least the higher primates are able to recognize concrete classes and therein the individual objects belonging to the class. Using symbols provided by the researchers, they can even name such classes and recognize, when confronted with a new object that it belongs to this or that class and thus can be called by this or that name. What distinguishes the human concept from the animal concept is therefore not its character as a class, but rather its formality as a universally recognized relation. Unlike the chimpanzee, we are able to identify and to formulate linguistically what it is that constitutes the particular class; i.e. we can define the class concept, a chimpanzee cannot do this. Being able to define class concepts, we are able to divide them, thus distinguishing them from other related concepts, e.g.
from more generic and more specific concepts, and from similar and associated concepts. Knowing our concepts as relations with universal applicability, we are able to make judgments predicating them of singulars or classes of singulars and we can use them to give reasons for the correctness of other judgments, i.e. to give reasons why things are or are not what they appear to be. All this is proper to human knowledge as contrasted with animal knowledge, but it involves no disparagement of the basic truth that we know singulars and that we indeed know them intellectually.

21. A theory of error

Thomistic epistemology has traditionally been preoccupied with proving that human knowledge is true and reliable. Most of the time, Thomists have overshot their goal; so that it becomes difficult to see where error can come in. The world in which Aristotle and Thomas lived was an orderly world. They had no inkling that the heavens were not crystalline spheres transporting the heavenly bodies; they had no inkling that the four elements, earth, water, air, fire, are not the ultimate principles of chemical change. Lacking a telescope, they were unable to “see” the structure of the heavens; lacking a microscope, they were unable to "see" that sensible substances have molecular and atomic structures. On the basis of prima facie evidence, they took their natural science to be real and certain for the most part. Our situation today is entirely different. Our earth, the scene of the overwhelming number of our observations is but a small point in a series of local systems within the universe. Though much of what we observe on earth can be extrapolated to other heavenly bodies, the astronomical data is full of exotic phenomena that we cannot explain, at least not yet. The same holds true for the molecular, atomic and subatomic levels. The deeper we go, the more exotic become the phenomena we discover. This being the case, we have a very different attitude to scientific truth and certitude than Aristotle or St. Thomas had. Though there are still sceptics around, who need to be countered by proofs of the reliability of knowledge, the main thrust of an epistemology for our age must be the development of a theory of error and unreliability. Until we do this, we will get no hearing in the scientific community.

The elements of a theory of error are available. Experimental physiology can give us a pretty clear picture of how the external senses and the concomiting sense function and malfunction. In particular, they make clear how our senses often react to but a small sector of potentially perceptible spectra like electro-magnetic energy or physical compression waves. To the other sectors of such spectra, other animals and plants often prove sensible. With regard to the operation of the internal senses, a wealth of empirical data is being accumulated daily, but it has yet to be synthesized. Most urgent is the study of the error capabilities of the system designated generically as the imaging power. Animal intelligence has only recently become the subject of a special science, ethology; only on the basis of detailed studies of animal behavior will we be able to get a clear picture of what is constitutive for human knowing. No doubt many errors arise at this level. With respect to intelligence, traditional Thomist epistemology asserts
that only the most fundamental and rudimentary concepts can be known infallibly and that only the first principles are universally true and absolutely certain. Beyond the very first principles of every science, the so-called axioms, every scientific judgment is theoretically fallible. To “prove” that it is certainly true, we would have to trace it back to the first principles. This we can do in mathematics, but it is impossible to do so in the natural and social sciences, where the matter is simply too complex. This is why it is generally impossible to distinguish between certain and probable argumentation in the natural and social sciences, where we almost never have complete inductions capable of ruling out exceptions, and where our inferences are incapable of ruling out hitherto unobserved factors influencing the effects of the causes that we have identified.

22. In place of a summary

Consciously, this paper ends not with truth but with error. Because Neoscholasticism was afraid to confront error, it fell into grave error, completely distorting the Aristotelian-Thomistic theory of cognition. What it claims to say to modern scientists finds no hearing, because the neoscholastics were afraid of soiling their hands with empirical natural science. Neglecting the phantasms, they fled into a metaphysical world of pure concepts, where they felt more comfortable. Few scientists followed them, and those who did, usually did so for the wrong reasons. Before Thomistic cognition theory can again find a hearing, it must be completely rewritten on the basis of contemporary experimental science. In this paper, I have attempted to sketch the lines along which such a rewriting might be done, but the task is too big for any one person. Unlike the natural science of Thomas' day, no one person, not even a genius of the calliper of St. Thomas, is able to master the whole of it. Future Thomist cognition theory must be a collective effort, to which this paper, I hope, might serve as a stimulus.
APPENDIX

Recovering the empirical basis of Thomas Aquinas's cognition theory

The neoscholastic interpretation of Thomas Aquinas's cognition theory suffers from having lost its roots in empirical natural science. Thomas, like his mentor Aristotle, thought through his "philosophy" in an intensive dialog with the natural science of his day. It was this natural science that provided him with the necessary empirical basis (experimentum) for his theories. Without this basis however, the necessary conversio ad phantasmata, which Thomas insists is necessary for real scientific knowledge, cannot be carried out. Without this conversio, however, Thomas's definitions and demonstrations yield no real knowledge, they remain pure nominal. Since the beginnings of modern science in the 16th century, this old natural science has been banished from sight; modern readers are unable to understand it, because they see the world through the spectacles of modern science. Most neoscholastics had little appreciation of modern natural science or regarded it as a realm for itself, having little or no connection with what they regarded as natural philosophy or, in many cases, special metaphysics. Thus even those neoscholastics, who might have been competent to do so, made little or no effort to put what they regarded as Thomas's epistemology or rational psychology in relation to modern cognition theory. But also from the side of modern cognition theory, it is only the recent developments in neurobiological interpretation of cognitive processes that make such a rapprochement possible and fruitful. The following theses are an attempt to summarize the most important elements of such a correlation.

1. The **transmission of images through a medium** (diaphanon) assures the contact between a distant object and the corresponding senses of vision and hearing. In this transmission, wave patterns of light and sound serve as *species in medio*, by which the emitting or reflecting object directly affects the external sense, impressing upon it an image of itself according to the mode of the recipient sense, e.g. a visual or acoustic image. Already the *species in medio* has, according to Thomas esse intentionale, that is to say, it is a sign of the object from which it originates.

2. In the **external sense**, the object or the medium produces a physio-chemical change in the organ of the sense affected. The pattern of this reaction corresponds to the affecting aspect of the object and is thus its image, having likewise esse intentionale. This physio-chemical reaction pattern is the *species impressa*. The act of knowing in the external senses is nothing more than this physico-chemical activation of the potency of the sense organ and is not yet conscious, though it can produce immediate reactions of the nervous system.

3. **The internal senses** are located in the central nervous system, the common sense being located in the spinal nerve and/or in the lowest organs of the brain. The internal senses are actualized through neuro-chemical stimuli coming from the external senses. The patterns of these stimuli are the *species impressa* of the internal senses.
4. The species expressa of the imagination is the mental picture of the object which we can call up at will, even when we are actually apprehending the same or other objects with our external senses. This “image” corresponds presumably to the lowest level of our consciousness, since we are able to recognize the difference between internal and external images.

5. The so called animal intelligence (vis aestimativa / vis cogitativa) represents the highest form of animal consciousness. Its function is to recognize and judge relationships in sensual and imaginative apprehensions. Its expressed species consists of concrete judgments, which taken together constitute what Thomas designates by the term experimentum. Experimental studies on primates reveal that higher forms of animal intelligence are capable of cognitive achievements corresponding to those of two to three year old human children, including the use of simple forms of speech using various forms of sign language, since the primate organs of speech are insufficiently developed to allow acoustic articulation.

6. The experiential correlate of the agent intellect is our human consciousness. Our consciousness uses the species of experimentum as an instrument to activate the potency of the passive intellect, evoking in it intellectual “images” of objects known through the senses. This process is called “abstraction”. Abstraction, however, is not to be understood as some sort of intuitive apprehension of the essence of the object. What the intellect apprehends in an initial encounter with the object is nothing more than “quidity” in the sense of “ali-quid”, namely that the object is a distinct “something”, whose essence is not yet known actively but is only in potency in this initial species impressa. What it is, must be found out in a long process of empirically based judgments and reasonings. In other words, the concept is always a construction based on numerous acts of judgment based on phantasms or experimentum. The species expressa of intellectual knowledge are the mental words (verbum mentale, conceptus intellectus) we use in thinking about an object. Such words are combined into sentences expressing judgments. Real definitions take the form of judgments predicating the known aspects of the object to the object contained in potency in the subject of the sentence. Real divisions are likewise judgments taking sentential form. Reasoning is a process of linking known truths expressed in sentences to identify causal connection and thus to explain phenomena which we observe. Since we have no direct insight into the potential content of our contents, we do not gain definitions by intuition nor can we “deduce” new knowledge directly from the potential content of our concepts.
EXPERIENTIAL, CONCEPTUAL AND INTUITIVE MOMENTS IN
THE KNOWLEDGE OF FAITH

by

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CHAPTER I  
POSING THE PROBLEM

A. REVELATION AND FAITH

At the outer limits of his natural intellectual vision, beyond the horizon of being revealed through his senses, man detects the presence of a super-sensible Being who is at once the immanent cause and the transcendent goal of all the beings which man's vision reveals. Beyond this distant horizon, man cannot of himself pass; the mystery that he detects at the outer limits of his perception escapes cognitive grasp. Beyond the mere fact of God's existence and his efficient, exemplary and formal causality of all things, man can by his natural powers know only that this transcendent Being is richer than any earth-bound concepts can directly express.¹

However, the God who dwells in this transcendent world hidden from man's view, was not content to leave man with only this faint and distant perception of the divine mystery. Having created man for intimate communion with himself, "he manifested himself from the start to our first parents ... and from that time on he ceaselessly kept the human race in his care in order to give eternal life to those who perseveringly do good in search of salvation."² Not only did God actually direct the course of history to bring about this end, thus revealing himself in action, but also to certain privileged men in the course of this saving history he manifested himself more directly, telling them about himself and about his plan of salvation. In intelligible word and imaginative vision God revealed himself time and again to the patriarchs and prophets, and in this way he supplemented and interpreted his self-manifestation in the saving deeds he performed in history.

Finally, not content with even this mode of revelation, God became incarnate in Jesus Christ (Jn. 1: 14). In the man Jesus Christ, God, having clothed himself in human form, became visible to man: to see Jesus is to see the Father (Jn. 14: 9). In Christ, therefore, the revealing Word of God finds its most perfect embodiment. In him "the fullness of the Father dwells" (Colos. 1: 19); he is "the image of the invisible God" (Colos. 1: 15). He preaches and teaches "as one having authority" (Mk. 1: 22): "we speak of what we know and we testify to what we have seen" (Jn. 3: 11)« He knows the Father (Jn. 7: 29) and is in the Father (Jn. 17: 21); indeed, he and the Father are one (Jn. 10: 30).

In Jesus Christ, Incarnate Word, the Son of God is present in our midst and in human terms that we can understand and assimilate he speaks, preaches, teaches, testifies to what he has seen and heard in the bosom of the Father.³
Jesus Christ is the fullness of revelation in every respect. He is **God the revealer**. Together with the Father and the Spirit he is the cause and author of revelation as an activity proceeding from the Trinity. Incarnate as a man, he accomplishes this task in a human way by words and deeds. He is also **God revealed**. Begotten eternally within the Godhead as the expression of God's knowledge of himself, the Second Person of the Trinity took human flesh in order to express God's self-knowledge in a way which would be suitable to mankind. In his own person, therefore, Jesus is the truth which he testifies to and teaches. **Jesus Christ is the Way of revelation.** Through Jesus we go to the Father, he is the sole means of access to the Father, the way to life and truth (Jn. 14:5-6). Jesus is the **sign of revelation**, both the motive of credibility and the symbolic representation of what he announces. "By the sublimity of his doctrine, the brilliance of his holiness and the power of his works ... Christ shows that he is truly what he claims to be, God among men and that his witness is true." At the same time his human words and gestures, indeed his very presence, symbolize both the divine person and activity they incarnate and the transfigured humanity they bring about in those who believe. Finally, Christ is man's **perfect response to revelation**. In his life are embodied the vision, trust and love which God evokes in the man who accepts his revelation. He does the Father's will in all things and unites himself to the Father in prayerful adoration.

Having accomplished the work of revelation and salvation for which he came into the world, Jesus Christ returned to the Father. But before he passed out of this world he made sure that the good news he brought would be made accessible to all men of all nations and all future generations. Thus from the beginning of his public life he gathered around himself a band of disciples. These men, who had lived in intimacy with him and thus possessed a direct, living experience of his person, his Work and his teaching, he commissioned as apostles, enjoining them to bear witness to all that they had heard and seen (Acts 1:1, 8, 22; 4:20; 10:39-41; Lk. 1:2; Jn. 15:27; 19:35-57; 1Jn 1:1-5). They were to preach the Gospel throughout the entire world (Mk. 16:15), making disciples of all men and teaching them all that Christ had commanded them (Mt. 28:20). To these disciples and to the Church he founded on them, Christ sent his Spirit, the Spirit of Truth, who would dwell with them forever (Jn. 14:16-17). This Spirit would teach them all things and bring to mind everything Christ had told them (Jn. 14:26). This same Spirit, who animated the apostles' oral preaching and their governance of the Church, inspired some of the apostles and other apostolic men to commit the message of salvation to writing. This enduring written witness to the revelation made to mankind in Jesus Christ would serve as permanent foundation for Church life and preaching. At the same time, and under a similar inspiration, the apostles, in order to insure that the Gospel remain forever whole and alive within the Church, left bishops as their successors, entrusting to them their own teaching role. "And so," as Vatican II's Constitution on Revelation declares, "the apostolic preaching, which is expressed in a special way in the inspired books, was to be preserved by a continuous..."
succession of preachers until the end of time.”

This sacred tradition, therefore, and sacred Scripture of both the Old and New Testament, are like a mirror in which the pilgrim Church on earth looks at God, from whom she has received everything until she is brought finally to see Him as He is, face to face (cf. 1 Jn. 3: 2),

God's revelation of himself to mankind is not, however, a purely external and objective affair. Not all who hear the word of God believe and understand (Jn. 6: 64-65): "I bless thee, Father, Lord of heaven and earth, for having hidden these things from the wise men and the prudent, and revealing them to little ones" (Mt. 11: 25). To Peter's confession of faith, Jesus replied: "Blessed art thou, Simon Bar-Jona, for flesh and blood has not revealed this to thee, but my Father in heaven" (Mt. 16: 17). No one comes to Christ unless the Father draws him (Jn. 6: 44-45). "God, who commanded light to shine out of darkness, has shone in our hearts, to give enlightenment concerning the knowledge of the glory of God, shining on the face of Christ Jesus" (2 Cor. 4: 6).

This interior enlightenment makes possible the response of faith. Faith is "an obedience by which man entrusts his whole self freely to God, offering 'the full submission of intellect and will to God who reveals' and freely assenting to the truth revealed by Him." In the words of the First Vatican Council:

… the Catholic Church professes that this faith, which "is the beginning of human salvation" is a supernatural virtue by which we, with the aid and inspiration of the grace of God, believe that the things revealed by Him are true, not because the intrinsic truth of the revealed things has been perceived by the natural light of reason, but because of the authority of God himself, who reveals them, who can neither deceive nor be deceived.

This faith is a free gift from God, the result of God's action moving and enlightening the believer: "Although the assent of faith is by no means a blind movement of the intellect, nevertheless, no one can assent to the preaching of the Gospel ... without the illumination and inspiration of the Holy Spirit," As the Constitution on Revelation given by Vatican II declares:

If this faith is to be shown, the grace of God and the interior help of the Holy Spirit must precede and assist, moving the heart and turning It to God, opening the eyes of the mind and giving joy and ease to everyone in assenting to the truth and believing it.

Faith is an extremely rich reality Involving not only hearing and understanding the word of God but also living according to it (see Mt. 7: 24-27; Lk. 6: 43-49). "He who says that he knows him [Jesus], and does not keep his commandments, is a liar and the truth is not in him. But he who keeps his word, in him the love of God is truly perfected; and by this we know that we are In him" (1 Jn. 2: 4-5). What does not
come from faith is sin (Rom, 14: 23); "faith works through charity" (Gal. 5: 6). Paul invites the Corinthians to "put your own selves to test, whether you are In the faith; prove yourselves" (2 Cor. 13: 5). Nevertheless, It remains true that In the first place faith involves knowledge, for it is a response to a message. One must hear the good news in order to believe (Rom. 10: 14, 17). By faith we come to know what God has revealed through the prophets and in Christ.

What God has revealed, the object of both revelation and faith is not merely a collection of abstract truths, a metaphysical system or an ethical code. An attentive look at the biblical record of revelation shows that "what God reveals is himself as a living Person, as the Creator who governs the world, as the Holy One who calls men to a service of love, as the Master of history who guides times and events toward a goal that is salvation." All the truths revealed about God, about mankind, about Christ and the salvation he brings, about the new life that we live in Christ, are ordered to making known Him who Is Truth in Person.

Through divine revelation, God chose to show forth and communicate Himself and the eternal decisions of his will regarding the salvation of men. That Is to say, He chose "to share those divine treasures which totally transcend the understanding of the human mind." All the truths revealed about God, about mankind, about Christ and the salvation he brings, about the new life that we live in Christ, are ordered to making known Him who Is Truth in Person.

The full realization of this revelation of God, although already accomplished In principle In Christ, must wait for the last times. Only at that time will the revelation of Jesus Christ, our Lord and Savior, be fully manifest (see 1 Cor. 1: 7; 2 Thess. 1: 7-10); then will his glory be revealed (1 Pet. 4: 13) and with it the glory of those who are now saved in hope (Rom. 8: 18, 24). To describe this definitive revelation the Synoptics show Christ using the traditional images of blessedness: kingdom, promised land, paradise, nuptials, banquet, treasure, salvation, life, resurrection, glory, etc.

But, through these images, a new thinking begins to dawn: the beatitude of the kingdom will consist essentially in the vision and enjoyment of God. The vision of God, forbidden to men here below (Ex. 33: 20), privilege of the Son (Jn. 6: 46; 1: 18) and his Angels (Mt. 18: 10), will become the privilege of the elect. "Blessed are the pure of heart, for they shall see God" (Mt. 5: 8). Vision face to face, the final unveiling of the sacred countenance so ardently sought for in the Old Testament, will characterize eternal life.

"We see now," St. Paul wrote, "through a mirror, in an obscure manner, but then face to face. Now I know in part, but then I shall know-even as I am known" (1 Cor. 13: 12). Then our divine sonship will be fully realized and we shall, like Jesus Christ, see God "as he is" (1 Jn. 3: 2). In his final vision of heaven, the author of the Apocalypse relates that the servants of God "shall see his face ... Night shall be no more, and they shall have no need of light of lamp or light of sun, for the Lord God will shed light upon them; and they shall reign
forever and ever" (Apoc. 22: 4-5). Clarifying this teaching, the Church has declared that "the souls of all the saints ... see the divine essence by intuitive vision, and even face to face, with no mediating creature serving in the capacity of an object seen, but divine essence immediately revealing itself plainly, clearly, and openly to them." This Intuitive vision in which the saints "see clearly the one and triune God Himself, just as He Is" is not some kind of Platonic ideal vision. It comes rather as the mutual presence of two friends who meet each other, or like a father who stands before his son. The face-to-face meeting does away with all distance between them ... The vision of God will be mutual knowledge and recognition, freely consented to, between God and man, in the most complete reciprocity: "Then I shall know," says Saint Paul, "even as I am known" (1 Cor. 13: 12).

Until that last day "we walk by faith and not by sight" (2 Cor. 5: 7). We live now in an economy of word and hearing, testimony and believing. The sign of Christ's flesh, the signs of the community of believers and the sacraments, the signs of human words are our only way to God. Even the revelation made full for us in Christ remains an "in-direct, imperfect, partial and obscure knowledge." Nevertheless, this economy of sign and belief offers us "a foretaste of the future vision in which the truth is more fully known." Faith, as the author of Hebrews says (11: 1), "is the substance of things to be hoped for, the evidence of things that are not seen." The knowledge of faith has the very same material object as the beatific vision, namely, the divine essence: (1) as it subsists in three persons; (2) as subsisting in the Person of the Word it is hypostatically united to human nature, and (3) as it divinizes men, now by grace, later by glory. Also in its motive it tends to vision, for faith is a response to an invitation to friendship and communion with God. The same divine attraction which gives rise to the act of faith continues to draw man to persevere until the end when the vision faith promises will be realized.

Faith's orientation to vision has as its consequence the possibility of growth in the knowledge of faith. Faith is not simply a blind assent to truths of which there is no understanding. On the contrary, as the First Vatican Council declared: ...

This ever-deepening understanding is also the work of the Holy Spirit who "constantly brings faith to completion by his gifts."
have been handed down" takes place through the contemplation and study made by believers, who treasure these things in their hearts (Lk. 2: 19, 51), through the intimate understanding of spiritual things they experience, and through the preaching of those who have received through episcopal succession the sure gift of truth. 25

This is not to say that the growth of knowledge in faith is without limit. Even in its fullest possible realization, the knowledge man gains through hearing the word of God and believing never attains the immediacy and clarity of vision. The human mind, even when instructed in the word of God and interiorly illuminated by faith and the gifts is not capable of perceiving those mysteries in the way it does the truths which constitute its own proper object. For divine mysteries by their very nature exceed the created intellect so much that, even when handed down by revelation and accepted by faith, they remain covered by the veil of faith itself, and wrapped in a certain mist, as it were, as long as in this mortal life "we are absent from the Lord; for we walk by faith and not by sight" (2 Cor. 5: 6). 26

For this reason, the knowledge which faith gives always remains bound to the revealing word of God; of which "sacred tradition and sacred Scripture form one sacred deposit." 27 For the doctrine of faith has not been handed down to the human mind "as a philosophical invention to be perfected." Rather, "it has been entrusted as a divine deposit to the Spouse of Christ, to be faithfully guarded and infallibly interpreted." 28 The Church itself, even the Magisterium is not above the word of God, but serves it, teaching only what has been handed on, listening to it devoutly, guarding it scrupulously, and explaining it faithfully by divine commission and with the help of the Holy Spirit; it draws from this one deposit of faith everything which it presents for belief as divinely revealed. 29 The knowledge which God gives to those who believe in his life is "through a mirror in an obscure manner" (1 Cor. 13: 12). That mirror is the word of God deposited in sacred Scripture with tradition. Through this mirror "the pilgrim Church on earth looks at God from whom she has received everything, until she is brought to see Him as He is, face to face (cf. 1 Jn. 3: 2)." 30

B. THE PSYCHOLOGY OF FAITH-KNOWLEDGE

For the theologian who wonders how this mysteriously mirrored knowledge of word and faith inserts itself into the general psychological structure of human cognition, a host of questions arise. Only one of these problems is the direct object of my concern in this dissertation. The word of God, as the Second Vatican Council declares,
comes to us "expressed in human language, having been made like human discourse, just as of old the Word of the eternal Father, when he took to himself the weak flesh of humanity, became like other men." \(^{31}\) How does this word mirror the divine realities to us in such a way that, through continually hearing it and reflecting on it in faith, we are able to grow in our perception and understanding of the divine realities of which it speaks? How does it come about that this growth in perception and understanding does not leave the word of God behind as the mature scientist leaves behind the words of his early teachers?

In one form or other this question underlies most of the modern theological controversies about the nature of revelation, dogma, faith and theology. It was implicit in the nineteenth-century debates over fideism and rationalism; it came into the open in the modernist crisis; and it re-appeared frequently in the subsequent controversies over the nature of dogmatic development, the work of theological reasoning, and the value of dogmatic formulas. Most recently it finds expression in the debates over the relation between Scripture and tradition, exegesis and dogmatics, and above all in the manifold questions posed by demythologizing and the new hermeneutics. Many outstanding theologians have exercised themselves over this question in the last one hundred years, but as yet no adequate solution has been found.

These controversies and the attempts at solution they provoked have not been fruitless. Through them many aspects of the psychology of faith have come to light. Particularly significant in this regard has been the work on the development of dogma. Increasingly, theologians have come to recognize the need to distinguish between an implicit, global intuition of the object of faith and an explicit, conceptual articulation of the 'content of that global intuition.'

Already in 1908-1909, Ambroise Gardeil had observed that what characterizes the knowledge of revelation is "on the one hand, the richness of its content; on the other, the relatively undefined and confused state in which it normally comes to us." \(^{32}\) As a result we have in the knowledge of faith a 'global intuition' which is of its very nature ordered to further transcription, adaptation, explication and development.\(^ {33}\)

More explicitly, E. Hugueny, writing in 1912, felt it necessary in speaking of the development of our knowledge of supernatural truths to distinguish:

between one sort of knowledge and another: between, on the one hand, the intuition, the experimental and global perception of the concrete reality in all its efficacy, and, on the other, the discursive reflection, the speculative analysis, the rational dissection of various concepts with which we attempt to break
down, in ideas which are more explicit but better proportioned to our native understanding, the impression which the supernatural reality manifested by revelation and accepted by faith has produced in us.\(^{34}\)

According to Hugueny, the intuitive global perception of the reality is given to the believer through the illumination of faith; it is transmitted from the apostles to the Church, and from one generation to the other within the Church.\(^ {35}\)

It is "the essence of Christianity," the ineffable truth thrust into the world by the Gospel. It is to analyze this experience and to translate it into distinct and definite formulas that all the effort of the second form of religious knowledge is directed. The intellectual progress of Christianity is nothing more than a labor of slowly integrating into discursive thought what existed whole and entire in the intuitive thought of its founders.\(^{36}\)

In the succeeding decades, as the debate over Marin-Sola's theory of dogmatic development through theological reasoning took the center of the stage in discussion of dogmatic development, this notion of an initial, intuitive and experimental, global apprehension of the object of faith, the divine reality itself, seems to have disappeared from the scene. In 1948, Henri de Lubac revived it as an hypothesis\(^ {37}\) and a fierce debate followed.\(^ {38}\) De Lubac sharply criticized the notion that the original revelation consisted of a series of isolated propositions from which later dogmas derived by a process of strict conceptual analysis and logical deduction.\(^ {39}\) Suggesting that the whole of revelation and the whole of dogma is present to us in Jesus Christ and that "the initial adherence to Christ is a total, concrete and living perception" in whose "riches many dogmas at first remain hidden,"\(^ {40}\) de Lubac proposed that in Jesus Christ everything has been given and revealed to us all at once ... consequently all the explanations which are to come, whatever be their tenor and their mode, will be nothing more than the recoining in fractional currency of a treasure already possessed in its entirety; .... everything was really, actually contained in a higher state of knowledge, and not only in principles and premises.\(^ {41}\)

To de Lubac's suggestion, Charles Boyer gave a vigorous ripost,\(^ {42}\) Boyer could not see how the knowledge of revelation could be communicated in any form except concepts and judgments. There must, therefore, be a "logical" and not merely an empirical connection between the deposit and its development. This logical connection would be verified whenever one truth is contained implicitly in another in such a way that by some process of intelligence, whether reasoning, analysis, inference or induction, one can pass from the one to the other.\(^ {43}\) Boyer saw in de Lubac's proposal the kind of irrational, blind mystical experience the modernists had earlier proposed. In justice it must be admitted that de Lubac's theory was somewhat vague in its treatment of the psychology of this concrete, total perception in the knowledge of
faith. But there is no reason to believe that de Lubac denied the truly cognitive and intellectual character of this perception. What de Lubac attempted in his suggestion was to provide an alternative to a conception of the knowledge of faith as a simple sum of the direct conceptual content and conceptual implications of a series of propositions isolated from their context.

Another theologian who took issue with de Lubac's theory was F. Spedalieri. Spedalieri charged that de Lubac misunderstood the nature of propositional judgment and therefore made the mistake of thinking that the material object of faith could be the subjectum attributionis in itself, rather than the meaning predicated of this subject*. Spedalieri too saw de Lubac's notion as a return to the modernist idea of revelation as an immediate, irrational experience. J. C. M. van der Putte made a similar charge. According to van der Putte, such a global experience would do away with the mediate character of revelation, making the present-day believer's knowledge equivalent to the knowledge of the apostles. Moreover it would do away with the need for the Church's preaching. In both these attacks there is a profound misconception of de Lubac's intention. De Lubac was quite as certain as anyone else that the concrete experience of the divine reality in faith is mediated by the initial experience of the apostles, and the transmission of their conceptualized experience through Scripture with tradition.

Despite this opposition, however, more and more theologians are coming around to recognizing the necessity of acknowledging the existence of the kind of global experience de Lubac had suggested. Two forces have been instrumental in moving these theologians to such a position,. The first is the difficulty of explaining theological and dogmatic progress in the understanding of faith as a purely syllogistic process. Historically in most cases an intuition of the developed dogma or conception-seems to have preceded and guided the explicit syllogistic reasoning by which the conclusion was finally disengaged. But more importantly, the development of Thomistic psychology has in recent years accentuated the role which non-conceptual elements play in the normal processes of human cognition, e.g., the role of phantasms in learning, and role of an intuition of being in the act of judgment.

C. PROSPECTUS OF THE ARGUMENT

The aim of this thesis is to show how imaginative and intuitional elements combine with the properly conceptual element to constitute the complex act which is the knowledge of faith. In pursuit of this aim we propose to proceed in the following stages.
In the next chapter, as a preparation for the theory we propose to elaborate, we will take up in detail the modernist theories of the non-conceptual element in the knowledge of faith and the significance of the stand taken by the Church in the face of the modernist theories. The purpose of this investigation is to make clear the requirements our theory must fulfill in order to escape the modernist errors.

In chapter III, we will set out certain presuppositions to a theory of cognition, principles which will be used in the psychological theory to be outlined in chapter IV.

Chapter IV will comprise two sections. The first will outline the process of learning and knowing as it develops by personal experience and investigation. Here we shall take up the relation of phantasms and concepts and the non-conceptual intellectual grasp of being in the reflection of concepts upon the phantasms. We shall note the relation of linguistic and other forms of symbolic expression to the cognitive process. Since the knowledge of faith is concerned in large measure with immaterial realities, we will consider in some detail the relation of image, concept and intuition in such knowledge. Finally we will consider the contribution made to knowledge by affectivity, the so-called affective knowledge. In the second part of this chapter we will turn to the process of learning and knowing through communication of meaning from one person to another. There we will be concerned to see how, on the basis of the words and symbols used to communicate, the recipient either finds a point of reference in his direct perception or else synthesizes a quasi-perception in phantasms of the imagination. Only in the reflection of the conceptual content of the message upon this perception or quasi-perception is the meaning actually grasped. Then we will take up the relationship of attestation and belief to the meaning which the listener grasps in the phantasms and concepts the communication evokes.

Finally in the fifth chapter we will apply the data of the preceding analysis to the knowledge of faith. There we will note first of all the way faith's knowledge is tied to sense experience and phantasms. Then we will consider the role of the light of faith in assisting the believer to grasp the meaning of the Word of God. Then we will survey the relationships between realistic and symbolic images, images and concepts, presentations and affective attitudes, in order to appreciate the way in which the experiential, conceptual and intuitive elements actually combine to give rise to the global experience of faith. At last, by way of corrolaries, we will suggest certain implications for the proper understanding of the relationships between faith and theology and between Scripture and dogma.
CHAPTER II

MODERNISM; A FALSE APPROACH TO THE PROBLEM

As the reaction to de Lubac's suggestion indicated, any attempt to speak of the role of non-conceptual and experiential or intuitive elements in the knowledge of faith must clearly distinguish itself from the proposal of the modernists around the turn of the century. Consequently, it will be useful to take a closer look at the teaching of the modernists and at the reaction of the Church to that teaching.

A. THE BACKGROUND OF MODERNISM

At the turn of the twentieth century, Catholic theology had reached an impasse. The scholastic revival had begun about sixty years before in Italy and Germany. Its leaders were men of vision and talent; they felt that in scholastic philosophy, especially in Thomism, could be found a way out of the epistemological chaos of Cartesian rationalism, British empiricism, Kantian conceptualism and German idealism. By 1879, this revival had grown strong enough for Pope Leo XIII to impose authoritatively the scholastic teaching and method as the norm for all clerical and higher academic education within the Church.

Leo XIII's intervention was a mixed blessing for the nascent scholastic revival. In many ways it was premature. An authentic return to a way of thinking hidden in forgotten writings six centuries old could not be accomplished by legislative fiat; it demanded long, painstaking historical spade-work. But in 1879 this preliminary work had hardly begun. Lacking the guidance of competent historical investigations, the revivers of Thomism could only read the works of the thirteenth century masters in the light of their own, usually rationalistic philosophical background, or else take refuge in the more accessible late-scholastic commentaries of the seventeenth and eighteenth century manualists. Very often, therefore, the philosophy elaborated in the scholastic revival was closer to the essentialist dogmatism of Christian Wolff than to the true vision of Thomas.

Even if, however, the historical work had been done, the scholastic revival held within itself a far more serious weakness. To revive the mummified body of a six-century old way of thinking, to make Thomism a living organism again, an organism capable of growing, of assimilating new experiences and discoveries, and of eliminating dead
and useless members, required genuinely original thinkers; it demanded men who combined a thorough familiarity with the developments in art, science and philosophy with a sympathy to the possibility of genuine progress in human thought and life. In fact, however, many of the men who led the scholastic revival in the nineteenth century were men of talent but not men of genius; they were schoolmasters rather than original thinkers. Worse yet, many were closed minds who looked to Thomism for a prop to shore up a collapsing order, a weapon against the threat of modernization.

At the beginning of the twentieth century, the dialogue of the revived scholasticism with the modern world had begun in many places. Historical studies were advancing rapidly. Biblical studies, taking account of developments in non-Catholic exegesis, were going forward. Nevertheless - the general impression made by the "scholastic" theology left much to be desired.

Little account was taken by dogmatic theologians of the historical character of revelation or of its psycho-social foundations. Instead of seeing it as a manifestation of the divine Persons themselves through the medium of saving action, theologists discussed revelation as a purely didactic presentation of a series of more or less disconcerting abstract ideas about God and about the nature of man. Words and sentences extracted from their literary context with little or no regard for the mentality of the sacred author were cited as biblical "proof texts" for the most abstruse metaphysical and juridical theses of the theologians. Taking as their starting point the propositions of a developed dogmatics, theologians unconsciously read into the dynamic and personalistic vision of the biblical revelation the abstract, metaphysical explication of this vision by later theology and Church teaching.

A similar exaggerated intellectualism characterized the prevailing notion of faith. Viewing revelation as a kind of juridical pronouncement commanding assent to propositions; the prevailing theology reduced faith to but one of its elements, the element of assent to a body of truths exceeding the capacity of the human mind. That faith is also the principle of a personal relation with God, that it does not stop with the proposition but goes on to unite the believer with the divine Person whom the propositions reveal, was an aspect of faith that found little or no place in the theology of the day.

Attempting to avoid illuminism and irrationalism, theologians presented the assent of faith as though it were substantially a purely natural intellectual judgment based upon reasoning from the signs of revelation and the notes of the Church. The supernatural and voluntary character of this assent were minimized and no attention at all was given to the role of faith as the dynamic principle of a contemplative
knowledge of divine things. The real distinction on the level of habitual principles between infused faith, the science of theology and mystical wisdom became in-practice a real separation and compartmentalization of the acts of these virtues.\(^5\)

In such a view, theology itself became a purely natural argumentive process whereby the truths of faith were defended against the adversaries of the Church's teaching and abstract metaphysical conclusions drawn out of revealed propositions. Theology appeared thus as entirely extrinsic to the knowledge of faith; a theoretical science pursued for its own sake or a practical apologetics. That theology and theological reasoning belong to the inner dynamism of faith itself found little recognition in the prevailing attitude.\(^6\)

Positing an adequate distinction between the object of faith and the object of theology, and insisting on the role of the Church in defining the object of faith, theologians lost sight not only of the notion of theology as faith seeking understanding but also of its relation to the sources of faith. Thus theology dissolved into a series of completely separate disciplines: exegesis, historical theology, speculative theology, etc. The primacy of sacred Scripture in theology was completely obscured. Whereas the dogmatic propositions of the Church and the speculative theses of theology had originally come into being through the efforts of the Church and theologians to understand and interpret the biblical revelation, they now came to stand in their own right.

**B. THE MODERNIST THEORY**

Modernism represented the first radical reaction to this kind of theology. Going to the opposite extreme, Loisy and Tyrrell insisted that revelation was not a matter of intellectual communication at all, but was a pure experience of God. Rejecting what he called an anthropomorphic notion of revelation, i.e., the Bible's mythical representation of God revealing truths by speaking with man as one man might with another, Loisy taught that revelation can only have been the awareness man acquired of his relationship with God. What is Christian revelation in its principle and point of departure, if not the perception in the soul of Christ, of the relation which united Christ Himself to God and of the relationship which unites all men to their heavenly-Father … The development of revealed religion is brought about by the perception of new relations, or rather by a more precise and distinct determination of the essential relationship, which was seen in the beginning, man thus coming to a better and better knowledge of both the grandeur of God and the character of his own duty.\(^7\) What results from the action of God in revelation is an intuitive, experiential and heartfelt perception of the man-God relationship. The
propositions of revelation are simply an extrinsic, subsequent expression of this supernatural religious experience. For our purposes here, George Tyrrell's teaching as found in his Between Scylla and Charybdis offers the best guide to the modernists' teaching. According to Tyrrell, revelation "belongs rather to the category of Impressions than to that of expression." Revelation is "not statement but experience." It is an act of God who establishes the recipient in mystical contact with himself. This contact has no element of representation. Revelation is not the communication of truth; it is mystical experience.

As experience, however, revelation is incommunicable. In order therefore to preserve the memory of It and to communicate it to others insofar as possible, the recipient of the revelation gives its content a personal expression making uses of the resources of his cultural background. Tyrrell wrote:

that which is communicated is a certain experience of God's presence of providence or fatherhood, of Christ's saving and atoning power over the soul, of communion with the saints, of the forgiveness of sins, of the hope of immortality, which fills and inspires the spirit of the prophet, and spontaneously utters and expresses itself through the categories and images with which his mind happens to be instructed.

This transposition of the experience into imaginative and conceptual terms is not the revelation itself but a shadow, a very relative representation of that experience. Thus the apostles gave expression to the impression Christ made on them in imaginative terms like, "Messiah," "Logos," "Second Adam"; later the Church would elaborate the more conceptual form of "Word, consubstantial with the Father."

These expressions in image and concept are but the human reaction, born spontaneously or reflexively elaborated, "to God's touch, felt deep within the heart." They are produced by the recipient of the revelation much as a dream is triggered in a sleeping man by some external sense experience. Only the experience itself, therefore, is really sacred.

What is immediately approved, as it were experientially, is a way of living, feeling, and acting with reference to the other world. The explanatory and justificatory conceptions subsequently sought out by the mind as postulated by this "way of life" have no direct divine approval.

In this way a distinction must be made between revelation and theology, including within the latter the expressions of both Scripture and dogma. "To speak of the development of revelation as though it were a body of
statements or theological propositions” is to confuse two very distinct ways of knowing. According to Tyrrell, the theological and dogmatic expression of the experience is only a provisory formula elaborated by the individual or the community in response to the needs and spirit of the age. It does not define objective and intellectual data but points to and interprets the experience. Indirectly, however, these formulations take on a kind of sacred character for through them, under the impulse of the Spirit, the men of subsequent generations can share the prophet's ineffable experience of revelation and can express their share in that experience. The scriptural and dogmatic expressions thus render the experience of revelation accessible to everyone. For Tyrrell, the reception of revelation is precisely an act of inward recognition -- a response of spirit to spirit, and not only the mental apprehension and acceptance of statements and meanings . . . The teaching from outside must evoke a revelation in ourselves; the experience of the prophet must become experience for us. It is to this revelation evoked within us that we answer by the act of faith, recognizing it as God's word in us and to us . . . Revelation cannot come from outside; it can be occasioned, but it cannot be caused, by instruction.

Tyrrell presented his theory as a middle way between two extremes, scholastic formalism and radical liberalism. The former, he charged, over-emphasized the conceptual aspect of faith and conceived revelation as a closed theological system within which dogmas are logically deduced under the pressure of the necessities of each age. The latter rejects all conceptualization of faith and continuity of dogma. These two views were the "Scylla and Charybdis" between which Tyrrell sought a safe passage for the Church. According to Tyrrell, revelation as experience is the element of continuity in the knowledge of faith. The experience is unchanging, it is the same for all. In contrast, the conceptualization of this experience is radically changeable. This symbolic expression of the experience develops and is transformed from one era to the next. Tyrrell not only distinguished these two moments in the knowledge of faith; he placed a real separation between them. As a result, the only way he could reunite them was by asserting an extrinsic connection between them.

- C. THE ANTI-MODERNIST REACTION

1. Lamentabili

The first action of Rome was to place the more notable modernist writings on the Index. When this action failed to check the movement, the Holy Office issued the decree Lamentabili on July 3, 1907. In the face of the subjectivistic revelation proposed by the modernists,
Lamentabili reaffirmed the objective character of revelation. Revelation, according to the decree, is a teaching. This teaching was received from God; it is contained in sacred Scripture and tradition; and it is entrusted to the Church to be transmitted and safeguarded. Consequently the decree condemned the proposition that "revelation could have been nothing more than the consciousness acquired by man of his relation with God." Likewise rejected was a teaching which Loisy had derived from the above, namely, that "the dogmas which the Church professes as revealed are not truths fallen from heaven, but that they are an interpretation of religious facts which the human mind by laborious effort has prepared for itself." Since man never reaches total self-awareness of his experience of God, Loisy had concluded that revelation must be a continuing event. Consequently the Holy Office proscribed the proposition that "the revelation which constitutes the object of Catholic faith was not completed with the apostles."

The object of these condemnations must be studiously observed. The Church was not denying that revealed truth must be subjectively received and assimilated by the believer. In the first proposition quoted, there is no denial of the possibility of a subjective consciousness produced by revelation; what is condemned is the assertion that revelation consists exclusively in such a subjective consciousness. In the second proposition the offending phrase is the last part which asserts that dogmas arise through a purely human process of interpretation. In the third proposition what the Church insists on is that the revelation "which constitutes the object of Catholic faith" is not yet completed. But granting that the constitutive phase of revelation has come to an end, it remains possible to speak of an interpretive phase of revelation which continues through the divinely inspired efforts of the Church and her members to assimilate the content of the revelation so constituted. In effect, these condemnations simply state in a negative way what the Church had already affirmed at Vatican I, namely:

by enduring agreement the Catholic Church has held and holds that there is a twofold order of knowledge, distinct not only in principle but also in object: (1) in principle, indeed, because we know in one way by natural reason, in another by divine faith; (2) in object, because in addition to the things which natural reason can attain, mysteries hidden in God are proposed to us for belief which, had they not been divinely revealed, could not become known.

In light of this text we can see in what sense the Church understands revealed truth as "truths which have come down from heaven." The "mysteries hidden in God" are not attainable by any natural reasoning or conceptualizing process, hence they cannot be the object of a constant evolution of human consciousness. Rather they constitute a deposit completed at the time of the apostles and entrusted to the Church, not to be improved upon, but to be assimilated and penetrated. Since the apostolic age, the object of faith has been
present to us in its entirety. Its essential perfection as an object of belief has been realized. But as Vatican I had explicitly affirmed, this divine deposit is the starting point for a progressive process of subjective understanding. This process, however, adds nothing to the revelation as it was originally constituted. Revelation as constitutive is not the product of philosophical elaboration; neither is it subject to the indefinite progress of human reason.

In Lamentabili the Church affirmed her conviction that Christ did not simply "begin a religious movement adapted to, or to be adapted to different times and places," but rather, "taught a definite body of doctrine applicable to all times and to all men." Christian doctrine did not go through a successive evolution from Judaic to Pauline to Johannine to Hellenic and universal forms; rather, "the principle articles of the Apostle's Creed have the same meaning for the Christian of the earliest times as they have for the Christian of our times." Behind these condemnations stands the condemnation of Tyrrell's basic thesis that:

- the dogmas, the sacraments, the hierarchy, as far as it pertains both to the notion and to the reality, are nothing but interpretations and the evolution of the Christian intelligence, which have increased and perfected the little germ latent in the Gospel.

and that:

- it can be said without paradox that no chapter of Scripture, from the first of Genesis to the last of Apocalypse, contains doctrine entirely identical with that which the Church hands down on the same subject, and so no chapter of Scripture has the same sense for the critic as for the theologian.

Here again it is necessary to observe that the Church had no intention of denying the real progress which has occurred in the assimilation of revealed truths. There is real change in the manner in which the Church over the centuries has expressed these truths; nevertheless, it is always the same truth that is expressed and assimilated. The mode of expression and the degree of explication may vary from one generation or place to another, but the object of these various expressions and explications remains the same throughout.

2. Pascendi

More clearly than the decree Lamentabili, the encyclical Pascendi, September 8, 1907, set out the Church's objection to the modernist's teaching by exposing the roots of that teaching in a systematic fashion. The encyclical distinguishes two philosophical sources of modernism. The first is agnosticism. By restricting the object of human understanding to pure phenomena, things as they appear
to the senses, the modernists held that the mind "cannot raise itself to
God nor recognize his existence, even through the things that are
seen." Consequently God cannot be the object of either science or
history. Natural theology, therefore, together with the motives of
credibility and external revelation are all relics of an outmoded
intellectualism. 37

Balancing this principle is the principle of vital immanence.
Since religion cannot be explained by anything outside of man, It must,
according to the modernists, find some explanation within man himself.
As a form of life "it is to be found entirely within the life of man." 38
Like every vital operation, its "first actuation is to be sought in a
certain need or impulse ... in a kind of motion of the heart, which is
called a sense." This sense, which the modernists identify with faith,
lies within the realm of the subconscious, but it is awakened to con-
sciousness when the human mind in its scientific or historical reflec-
tion confronts the unknowable "whether this be outside man and beyond
the perceptible world of nature, or lies concealed within the
subconsciousness." 39 In the presence of the unknowable
the need of the divine in a soul prone to religion, ... with no
judgment of the mind anticipating, excites a certain peculiar
sense; this sense has the divine reality itself, not only as its
object, but also as its Intrinsic cause Implicated within itself,
and somehow unites man with God. 40

According to the modernist position, the encyclical goes on:
the unknowable, of which they speak, does not present itself to
faith as something simple or alone, but on the contrary
adhering closely to some phenomenon, which, although it
pertains to the fields of science and history, yet in some way
passes beyond them ... 41
This connection of the unknowable with phenomena enables faith to suf-
fuse the phenomena with its own vital awareness of the divine. In this
way the phenomena are both transfigured and disfigured, for faith at-
tributes to the phenomena what the phenomena of themselves are
incapable of containing. 42

The encyclical makes much over the fact that in this process the
modernists attribute no role to the intellect or to any properly cogni-
tive faculty. The sense of which they speak is not a cognitive but an
appetitive faculty. The action of the cognitive faculties is secondary
and posterior to this sense. The encyclical expresses their position as
follows:

in that sense, they say, ... since it is sense not knowledge, God
presents himself to man, but so confusedly and disorderly that
he is distinguished with difficulty, or not at all, by the subject believer. It is necessary, therefore, that this sense be illuminated by some light, so that God may completely stand out and be separated from it. Now this pertains to the intellect, whose function is to ponder and to institute analysis, by which man first brings to light the vital phenomena arising within him, and then makes them known in words.43

The mind works on the phenomena suffused with the religious sense much as a painter works over a picture, brightening up the faded outlines to bring out the image more clearly. This process proceeds in two stages:

first by a natural and spontaneous act it presents the matter in a simple and popular judgment; but then after reflection and deeper consideration, or as they say, by elaborating the thought, it speaks forth its thoughts in secondary judgments, derived to be sure from the simple first, but more precise and distinct. These secondary judgments, if they are fully sanctioned by the supreme magisterium of the Church will constitute dogma.44

From the fact that the original experience was in itself non-cognitive, it follows that the formulations which result through the reflection of the intellect are only symbolic and instrumental. They do not contain truth absolutely, but they serve as symbols for representing the practical truth of the religious sense and as instruments forevoking it.45 In order effectively to perform this function, the formulae must be enlivened with the religious sense; "they must be accepted by the heart and sanctioned by it." Otherwise they remain mere intellectual speculations empty of religious value.46

If, therefore, the formulas of faith do not contain truth absolutely, but only relative to the religious sense of the believer, they have no value whatsoever unless they correspond to the believer's mentality. When, through the vicissitudes of cultural evolution, that correspondence is broken, the formulae of past ages simply cease to have any value. They must be jetisoned, therefore, in favor of new formulae better able to evoke the experience of the heart.47

It should be clear from this brief survey that what the Church objected to in the modernist teaching was the assertion that the religious experience of which it spoke was without any cognitive value. God remains completely unknown for the modernists; the so-called truths of revelation, dogma, and theology become, as a result, mere projections into consciousness of a purely affective motion of the appetitive powers of man. This affective motion in itself is without an object; for it is not a response to someone or something which was
first known. Welling up dynamically from within the person, this emotion objectifies itself by representing an object in imaginative and intellectual terms.

If, therefore, it can be shown that the experience which is communicated to the believer when he hears the objective teaching of revelation with assent is a cognitive experience, and not merely an affective one, there is no reason to fear the charge of modernism. In relation to a cognitive experience, the conceptualization of revelation in biblical, dogmatic and theological formulae preserves its objective character. The formulae are not merely evocative symbols appealing to the emotions; they are, rather, the proper expression of the experiential moment of knowledge.

3. The Oath against Modernism

If Lamentabili and Pascendi set the negative boundaries for a theology of the relation between experience and conception in the knowledge of faith, the Oath against Modernism sets out the positive principles which must be observed by any theory about the matter. Issued in the motu proprio Sacrorum antistitum of September 1, 1910, the oath summarizes the positive belief of the Church in the matter.

The oath affirms that God is not hidden from man's cognitive powers: he "can be certainly known and thus can also be demonstrated by the natural light of reason 'by the things that are made' (Rom. 1:20), that is, by the visible works of creation, as the cause by the effects." Likewise, "through the divine facts of miracles and prophecy, as through very certain signs, man can know the divine origin of the Christian religion." Already in these two statements one can detect an implicit acknowledgment of one experiential element underlying the knowledge of faith. God is not seen directly, neither is his existence and nature known by deductive reasoning from a pure idea. Sense experience must present the visible works of creation and the divine facts of miracles and prophecy. God is known by reason through sense representations of his effects.

The oath goes on to state that faith is not a blind religious feeling but a "true assent of the intellect to the truth received extrinsically ex auditu, whereby we believe that what has been said, attested, and revealed by the personal God, our Creator and Lord, to be true on account of the authority of God the highest truth." The object of faith is "a divine deposit, given over to the spouse of Christ to be faithfully guarded by her." It is not "a philosophical invention" or "a creation of the human consciousness found gradually by the efforts of men and ... perfected by indefinite progress ..." This deposit is
"transmitted from the apostles through the orthodox fathers, always in the same sense and interpretation, even to us." Consequently dogmas do not evolve by "passing from one meaning to another different from that which the Church first had." 52

It is unfortunate that the Church did not elaborate more clearly her positive conception of the obvious growth in understanding and explication of the deposit of faith. Nevertheless, even in what is said here, it is possible to detect another implicit affirmation of some sort of global intellectual apprehension of the object of faith. By faith we give universal intellectual assent to every revealed truth which is found in the oral teaching that we hear. By the very fact that we make this global assent to the words in which it is expressed, the full object of the revelation becomes present to our cognitive powers and is known by the intellect to be true. At first there may be little real understanding of the formulae. The assent, however, extends to the full meaning the statements were meant to have and not merely to our own limited understanding of that meaning. Slowly the believer individually, and the Church generally, takes explicit possession of that fullness of meaning. What results in this process of explication is not an objective growth of meaning, but only an objective growth of expression. Through that objective growth of expression, however, there occurs a subjective growth of explicated meaning. To affirm that the knowledge of faith is transmitted in the Church "always in the same sense and interpretation" does not mean that its potential meaning is equally explicated at every point in the Church's history. Nevertheless, that potential meaning must somehow have been present in the Church's consciousness for the growth in explication to take place without any new revelation.
CHAPTER III

PRESUPPOSITIONS TO A THEORY

Before embarking on the analysis of the psychological structure of human cognitive processes, I would like to set out certain general observations which must be kept in mind throughout the analysis.

A. PRE-REFLECTIVE AND REFLECTIVE CONSCIOUSNESS

A little reflection upon the manner in which we know things reveals that prior to and at the root of our explicit, thematic awareness of many things, there exists an implicit, non-thematic consciousness of the reality subsequently brought into explicit awareness. Recognition of this phenomenon is nothing new. St. Augustine had long ago observed and noted it when he remarked that he knew what time was until somebody asked him to explain it.1 Recently, however, existential phenomenology has focused attention on this distinction and has attempted to give an account of the relation between these two forms of knowing.

William Luipen,2 following Jean Paul Sartre,3 suggests the following analysis. Suppose I count the cigarettes in a pack: "1, 2, 3, … 1 2. There are a dozen," I say to myself. If someone asks me what I am doing I reply, "I am counting my Cigarettes." In the first moment of counting, the explicit theme of my consciousness is the number of cigarettes; I am not explicitly conscious of my act of counting. Yet, somehow, my act of counting must also have been present in my consciousness, for in the next moment I could refer to it explicitly and make it the theme of another act.

A verbal trick makes it possible to represent these two modes of knowledge. We can use the form "consciousness-of-an-object" to designate the explicit, thematic consciousness. Thus in my act of counting there was an explicit, thematic "consciousness-of-twelve-cigarettes"; when I reflected upon what I had been doing, there was an explicit, thematic "consciousness-of-counting." On the other hand, in the act of counting there was an implicit, non-thematic "counting-consciousness," and in the act of reflecting there is an implicit, non-thematic "reflecting-consciousness."
In ordinary human activities we are not directly and explicitly conscious of our own acts or even of ourselves acting. I enjoy a meal; I like my friends; I know their faces; but in doing these things I am not directly conscious of my enjoyment, my affection or my knowledge. "Originally," therefore, "there is no consciousness of the self, but, with the consciousness of some thing, self-consciousness is fused together."4 This implicit "self-consciousness" lacks the explicitness indicated by the preposition "of." I become "conscious-of-myself" only by explicitly returning to my implicit "self-consciousness."

Through my consciousness I am originally present to myself, but through reflection I place myself in my presence, so that what I first omitted -- my love, my enjoyment, my knowledge -- becomes the theme of my consciousness.5

These two modes of consciousness are called in modern philosophical thought "pre-reflective consciousness" and "reflective-consciousness," "Consciousness is called reflective when I pass from being in the presence to placing myself in the presence.. This transition means the thematization of what was non-thematic, the explicitation of what was implicit."6

The distinction between pre-reflective and reflective consciousness, however, is not found only in the area of self-consciousness. Just as there can be an implicit, non-thematic self-consciousness in the act of knowing or loving something, there can also be an implicit, non-thematic consciousness of certain parts or specific aspects of an object accompanying an explicit thematic consciousness of the object according to a particular salient feature.

The distinction between these two forms of consciousness with respect to any object can be illustrated in the phenomenon of perception. Human perception is so constituted that it never places more than one facet of its object in explicit consciousness at a time.7 If I gaze out my window, I take in the whole landscape it opens out onto, but I focus my sight on only one of the objects contained in that landscape: at one moment I focus on the building off to the right; at another moment I focus on the lone poplar trees that stand in the middle ground. As my focus shifts from one part of the scene to another, the whole is in some way present in consciousness, but only one or another feature of that landscape is explicitly present to my consciousness. In one sense I know the whole, and in another sense I do not know it. At any one moment I perceive the whole implicitly, but I perceive only one feature explicitly.
B. PROFILE AND HORIZON IN KNOWLEDGE

The distinction between implicit and explicit knowledge, between non-reflective and reflective knowledge is closely connected with another distinction emphasized in modern phenomenology, namely, the distinction between profile and horizon. Referring again to the phenomenon of perception, we can see that the view we take of any object is always determined by the standpoint from which we view it. As I sit before my typewriter looking at it, my typewriter presents to me only its front profile. To the wall behind it, the typewriter presents a different profile; to the table under it, it presents still another profile. The fact is that "reality gives itself only by means of profiles (Abschattungen) which are correlated with a determined standpoint of the perceiving subject." 8

Any particular standpoint, however, refers intrinsically to other possible standpoints. If I were to get in back of my typewriter, I could see it as the wall "sees" it; if I were to get under it, I could see it as the typing table "sees" it. Of course, if I were to get in back of it or underneath it, I would no longer perceive my typewriter according to the front profile it now presents to me. The intrinsic connection between the possible viewpoints of an object is an indication of the intrinsic connection that also links the various profiles of the object. All the possible profiles remain profiles of the same typewriter. So close is the connection between the various profiles that

the anticipation, the pre-grasping of other possible profiles pertaining to the object of perception is an essential and constituent aspect of perception as perception occurs. Accordingly, perception is not perception if it does not contain these anticipations as possibilities. Likewise, and this amounts to the same, the object of perception simply is not a real object of perception if a determined profile does not refer to other possible profiles.9

It is not enough, however, to take account of the various profiles of a single object in perception: It is not merely the totality of the object of perception that has to be stressed, but also the unity of this totality within the entire field of perception. Every object appears as a definite figure against a background; it appears against a background of meanings.10

The typewriter which I perceive as a unified whole through an endless
series of profiles virtually contained in my present perception of it appears as a real typewriter only against the background of the table, the corner of the room, etc., wherein it is found. Apart from such a background it would not be real but only a figment of my imagination. Similarly, the scene outside my window reveals itself to me only within the background or horizon of my total gaze which includes the window frame and the surrounding wall outlining the scene. The horizon against which the object of explicit perception appears is constituted not only by the viewpoint of the perceiving subject but also by the location of the explicitly perceived object. The background or horizon is as much a part of perception as is the salient figure.

Corresponding to each of the various profiles of any object is a distinct background. And these distinct backgrounds are part of the totality of perception just as the distinct profiles of the salient figure are. It is possible also to focus on different salient figures each with their own profiles and horizons. In any one moment of perception only one profile of one salient figure can be the focus of attention, but all the other possible profiles and figures are present implicitly in that perception. The fact that they are present actually though not explicitly is what guarantees the identity of the object throughout a process of exploration. The horizon is the correlative of the impending power which my gaze retains over the objects which it has just surveyed, and which it already has over the fresh details which it is about to discover. It may be that these other background features and profiles may be explicitated only by memory, conjecture, or a new perception conjoined with the old by memory. But it is not merely memory and conjecture that unify the various perspectives and features of the totality. It is perception itself.

To look at an object is to inhabit it, and from this habitation to grasp all things in terms of the aspect which they present to it. But insofar as I see those things too, they remain abodes open to my gaze, and, being potentially lodged in them, I already perceive from various angles the central object of my present vision.

C. IMMANENCE AND TRANSCENDENCE IN KNOWLEDGE

If we turn now to a more psychological than phenomenological analysis of knowledge, another pair of characteristics comes to light.

The experience we have of perceiving any object reveals to us a multitude of interior activities adding to and perfecting our personal being. Thus when I regard this typewriter before me, I see it with my eyes, feel it with my hands, hear the sound of its action with my ears, I remember what it was like when it was new; I recognize It as a useful Instrument in my work. I understand its construction and its function.
Within the total perception I can reflectively distinguish the action of my vision, my hearing, my touch, my memory, my estimative faculties, my understanding. In itself each of these actions is distinct, not only from the other perceptive actions but also from my own substance. If I close my eyes I no longer see the typewriter, if I withdraw my hands I no longer feel it, etc., yet I remain and so do my other perceptive acts. The actions, therefore, are accidents of my substance.

As accidental entities, the actions of perception and of knowledge generally must be seen in relation to the substance in which they inhere. That substance is a living, personal being, and the activities which constitute knowing are vital activities. Thus knowing activities partake of the interiority, actuality and self-constructing character common to all vital activity. "Vital activity," as Louis Regis remarks, "is a gift that a living being gives itself from its own wealth. This wealth is the actuality of the soul itself, and of its powers." Of its very nature, vital activity involves a certain degree of transcendence over matter. Unlike physical action which arises by reason of the passive potentiality of material objects, vital activity arises from a dynamic capability of a living being able, unlike ordinary material beings to move itself into act. At the source, therefore, of every vital activity is a certain transcendence over matter which is the principle of exteriority, imperfection and transformation.

This transcendence of the limitations matter imposes has very important consequences for the understanding of the process of human knowing. Because of the way our understanding depends upon sensible models in conceiving non-sensible realities, we tend to conceive everything after the manner of the hard, extended corporeal objects our senses reveal to us. Thus we imagine the manifold of cognitive activities as a cast of separate entities, subsisting beside each other like the players in an encyclopedic drama, whose entrances and exits are carefully calculated, whose actions and speeches never coincide, and who must leave the stage as soon as they have spoken their lines. Nothing could be further from the truth. What is true of all proper accidents is true pre-eminently of the vital properties which are the powers and activities of a living being. They come into being not by any transformation of one thing into the other but by a kind of welling up from within. And they exist together not like billiard balls packed within a frame, each one completely outside the other, but within each other as the perfection of the perfected -- according to a hierarchy of receptivity and actuality. Thus the body is present to the soul, and the soul is present to each and every one of its powers. And the powers are present to each other, the higher directing and governing the lower, the lower preparing the activity of the higher.
This presence of vital activities one to another is not of itself cognitive, but the principle is true in the cognitive order as well as in the purely vital order. Thus:

...all the acts of the external senses are immanent to the activity of the sensus communis, or sensible awareness. The activity of the latter is immanent to that of the imagination, which is itself present to the activity of the memory. All these sensory riches are immanent to the sensus cogitativus, which enlists them in the service of the intellect and will. Finally this whole ensemble of sensible operations is immanent or present to the intellect acting upon the phantasm...

The same law of immanence extends through the activities of the intellect:

...analysis of the activities of our intellect, with its three categories of acts -- apprehension, judgment, and reasoning -- shows that apprehension is present to judgment, since it provides the matter for its act, and that judgment completes it by giving it truth. Judgment is both the principle and the end of reasoning, for it is in judgment that reasoning begins and towards judgment that it is directed and finds its term.

Supernatural activities are no exception to this law of immanence. Grace and the supernatural gifts do not replace but modify the human person, his powers, and his activities. The supernatural life is not some kind of second story built above the natural life but having no connection with it. The life of grace exists in and modifies the natural operations of man elevating them to new objects and strengthening their mode of operation. Thus sacred theology and Infused wisdom reflect back upon the revealed realities made present to the mind of the believer through the assent of faith. In doing so theological and mystical contemplation do not extend the knowledge of faith to new objects; instead they enable the believer to penetrate more deeply the same object presented globally in the initial assent of faith. Similarly, they reflect upon the natural experience and understanding of the world which the believer has acquired from his cultural tradition and his personal discoveries. As a result of this reflection, the mind penetrates more deeply into this presentation of the world without, however, replacing it or getting outside it.

The converse of the immanence of cognitive activity is its transcendence. The consciousness which our manifold knowing activities give us is not, despite their immanence, something closed in upon itself. In human knowledge the term of the act is always something posited outside the act itself. There is an irreducible otherness involved in all human cognition. In knowledge, something outside the knowing subject becomes present to that subject. The manifold of interior cognitive activities is evoked, directed and determined by a world of objects exterior to the consciousness. Human consciousness, as Husserl saw, is essentially "orientation-to,
"openness -for ."  "Perceiving consciousness is always a being-with-reality which is not consciousness itself, a being-open-for and directed-to-reality." 25 In fact, human consciousness, as we have already seen in speaking of reflective and non-reflective consciousness, discovers itself only in and by the presence of this stranger who has invaded it and taken possession of it. 26

The stranger who invades the person in the activity of knowing is called the "object."  In Thomistic usage, the term "object" always has a relational meaning. "The object is not a thing taken as an absolute, nor the soul taken as another absolute, but a habitudo between things and the soul and vice versa." 27 The object is the exterior thing known precisely as it comes to exist in the knowing subject.

We have already noted, however, that the integral act of knowing anything comprises a manifold of distinct activities proceeding from distinct powers. It is necessary, therefore, to distinguish between what is formal and what is material in the object. I see this typewriter with my eyes as an extended colored body. I hear it with my ears as operating noisily. Always it is the thing itself which becomes present as the term both of the integral and of the constituent activities. The thing itself is the material object. But the material object is attained by the distinct constituent acts under distinct formalities. These distinct formalities are the formal quo objects of the various powers from which the activities emmanate. The thing precisely under one or another of these formalities is the formal quod object of the related power.

Between the material and the formal objects there is no one-for-one correspondence. The formality of the object is determined by a proportion between the object and the action of the cognitive power with which it is known. Sometimes the operation of the soul divides things which are unified in reality. Thus in my cognitive activity the typewriter which I perceive is divided according to its color, the sound of its operation, the feel of its action, the nature of its construction, etc. Similarly, the action of the soul sometimes unifies many distinct things under a single proper formality. Thus In the perception of my typewriter standing on a typing table in the corner of my room, I unite the typewriter, the table and the room under the single formality of being. 28

Here too, it is necessary to caution against too material a notion of the presence of the object according to its various formalities. We spontaneously tend to imagine these distinct formalities after the fashion of the distinct colored particles which combine to form a pattern on the screen of a kaleidoscope, or like the
colored bits of tile and glass that make up a mosaic. But the truth is something else again. Except for the distinct formalities which are the objects of the external senses, and which are combined only in the sensus communis, the distinct formal quo objects exist one within the other just like the acts to which they are related. Just as the activity of the lower power is present to the activity of the higher power, so also the object of the lower power is present to the object of the higher power.

The higher power of itself regards a more universal formality of the object than the lower power; because the higher a power is, the greater the number of things to which it extends. Therefore, many things are combined in the one formality of the object considered by the higher power, though they differ in the formalities regarded by the lower powers of themselves. Thus it is that various objects belong to divers lower powers but are subjected to a single higher power.29

Thus, just as the manifold activities of consciousness combine into one integral act of knowing, so also do the various aspects under which these divers activities apprehend a material object coalesce in such a way that the material object itself is integrally presented to the subject. Although it is possible for the mind to reflect back upon and to analyze the components of an integral perception or judgment, what is given directly in perception and judgment is the presence of the whole thing as it is in itself and not simply the various atomized aspects. I can reflectively attend to the color, noise, shape, structure and function of my typewriter, and to the diverse activities by which I perceive it, but what I perceive and know directly and immediately is this tan, noisy, undersized, and badly constructed typewriter.

D. INTENTIONALITY AS THE MODE OF HUMAN COGNITION

The considerations which have preceded prepare the way for onelast prenote to the analysis of the knowledge of faith, the intentional character of human cognition., Intentionality is the peculiar form in which immanence and transcendence are united in the human mode of knowing.

The notion of intentionality as it has arisen in modern phenomenology runs directly contrary to the assumption of idealism and empiricism that consciousness is first constituted in itself and only secondarily opened to a reality alien to itself. On the contrary, phenomenology has shown that perceiving consciousness is always a being-together-with-reality; there is no bridge to be built between consciousness and reality because consciousness never exists wrapped up in itself. The
question of whether or not perceiving consciousness seizes reality cannot even be raised, for consciousness of its very nature is an intention toward reality.  

Scholastic philosophy, at least in its Thomist form, acknowledged this characteristic of knowledge in its famous dictum: sensus in actu est sensibile in actu; intellectus in actu est intelligibile in actu. In the act of knowing, the knower becomes the object known. The ideal of knowledge would be a perfect ontological identity of knower, knowing power, knowable likeness and object known. This ideal is realized only in God. There is no ontological distinction between God as knowing, the divine essence as known, the divine intellect, or the divine act of knowing. Even the Word in which God expresses his knowledge of himself is one in being with the divine substance, the divine intellection, the divine intellect and the divine essence.

In God this absolute identity is possible because there is no admixture of potentiality. God's being is not merely potentially intelligible, potentially understood and potentially understanding; it is always and perfectly actually intelligible, actually understood and actually understanding. In creatures, however, this fullness of actual being is not to be found, for there is always some admixture of potentiality. In knowledge, therefore, perfect identity is not possible, yet it remains a goal toward which cognition tends. Intentionality is the form which marks the human mode of transcending the limitations imposed by the act-potency relationship. By a process of progressive actuation, what is not immediately given in act is progressively brought to actuality.

Because cognition in man is a process, we can distinguish various phases ranging from pure potentiality, through remote and proximate stages of first act, to the full achievement of knowledge in second act. What distinguishes animals and men from all other corporeal beings is their capacity to be-with other things, to receive the actuality of other corporeal things without ceasing to be what they are in themselves. This potentiality itself represents a radical transcendence over material potentiality. Material beings are potentially all other things only in the sense that they can be changed into other things at the cost of losing what they were formerly; they are limited to their own form only. Cognitive beings, however, escape this limitation. They are able to become all other things without ceasing to be what they are.

The goal of knowledge is to achieve this being-with other things in second act, but to achieve that goal the knower must first become the object known. In first act. Before the knower can come to-be-with the object known cognitively it must come to-be-with it entitatively; it must entitatively be impressed with a likeness of the thing to be known. The potentiality of the knower is so constituted that the physical activity educes from it not merely a specific likeness like the heat induced in a lump of coal by a hot fire, but a distinct individual likeness. It is
able to receive not just another form, but the form of another thing. The actuality that the knower receives from the object is not assimilated as its own actuality, but remains distinct as the actuality of another even as it actualizes the cognitive potentiality of the knower. This distinct, individual likeness of the object is called the "impressed species." It informs the cognitive power both entitatively and cognitively. Entitatively it actuates the potency specifying its indeterminacy. Cognitively it makes the object itself present both in proximate first act and in second act. It gives the object a new mode of being, a psychic existence, in the knowing subject, and it makes the subject one with the object. This impressed species is not itself that which is known; it is a pure means or principle, of knowing. Its function is to specify the cognitive action of the knower.

Although it makes the thing known, the impressed species is not the thing itself but only a likeness of the thing known. It is an accurate likeness of the thing as far as it goes, but it may be more or less adequate insofar as it is more or less distinct. The species impressed on my visual powers as I look out at the distant hills is an accurate likeness of the hills, but the details of their configuration remain confused and indistinct. Here we must remember, however, what was said earlier in the section on profile and horizon in knowledge. What is known indistinctly is still in some sense known. Indistinct knowledge is neither purely potential nor completely actual; rather, it stands midway between potentiality and act. The effect of repeated experience of the object from different viewpoints is not to give a completely new impression, but to clarify the content of previous impressions retained by the knower. This intentional species is a true formal similitude by reason of its correspondence to the object in intentional or representative existence. It is, in fact, the "identical quiddity of the object in as much as everything that is found in the object in reality is communicated to the representative species."

The impressed species inaugurates the act of knowledge as a true formal principle, for it specifies the immanent action of the cognitive power, but it is not the term of the act. "It is that by which (quo) the object (quod) is known." That the action of cognition be completed, it must attain the object as a term. The external senses attain their object as a term in the immediate, physical contact they have with the object. But experience teaches that we can know things which are not immediately present by physical contact. By reason of the impressed species the object known comes to exist psychically in the knower, and the action of the knower is oriented to it. But the impressed species of a lower order cannot function as a medium in which the object is represented as the term of the acts of higher order knowledge. Consequently, the higher order cognitive powers form within themselves a representation of the object as known. The representation, called the "expressed species" is a "likeness of the thing known, which is produced in the process of knowing and in which the knower contemplates the object known." More particularly, as produced in the process of higher order sense knowledge, the expressed species is called the "phantasm." As produced in the process
of intellectual knowledge it is called the "concept" or "mental word," or "intentio in-tellecta."

The expressed species, like the impressed species, is a likeness of the object. But unlike the impressed species, the expressed species is the term, not the principle, of the cognitive act. Whereas the impressed species specifies and actuates the potentiality of the knower, putting it in proximate first act with respect to cognition; the expressed species, on the contrary, is produced by the actualized cognitive power as a representation of the term of the cognitive act. \(\ldots\) The impressed species makes the object present as knowable; in the expressed species it becomes present as actually known. \(\ldots\) The impressed species persists in all the higher cognitive powers, for it continues to inform the potency entitatively, preserving the potency in remote first act. \(\ldots\) The expressed species, however, comes into being as a virtual product in the act of cognition (second act) and exists only so long as actual cognition endures, for it represents the object as actually and determinately known. \(\ldots\)

As a product of the act of higher order knowing, the expressed species is distinct from the act of knowing. Consequently, a distinction can be made in the act between its virtual role of producing the expressed species and its formal role of knowing the object represented in the species expressed. \(\ldots\) In intellectual knowledge, the act is designated "intellection" or "understanding" insofar as formally it attains the object; it is designated "diction" or "conceptualization" insofar as virtually it produces the expressed species. \(\ldots\) There is no corresponding pair of terms to designate the two aspects of internal sense knowledge, though the verbal "imagining" is frequently used to refer to the production of a phantasm or image of the object.

Like the impressed species, the expressed species can be considered both entitatively and formally. Entitatively it is a quality modifying and determining the faculty in act. \(\ldots\) Formally, however, it is a representation, a likeness, a vital image in which the knower attains the object represented to it. Formally, therefore, the expressed species too is intentional. In it the object comes to have intentional and immaterial being. The expressed species is not a mere picture or replica of the object; it is not something which only secondarily bears a resemblance to something else. It is the very form of the object itself, existing now in a new mode of being. It functions as an interior medium in which the object is known, without itself being directly known. \(\ldots\) Not in its entitative being but only in its intentional reference is the expressed species the term of the action. As St. Thomas observed: something is known inasmuch as it is represented in the knower, not inasmuch as it exists in the knower. The likeness
existing in the cognitive faculty is not a means of knowing the object according to the existence it has in the cognitive faculty, but according to the reference that it has to the thing known. 58

This distinction between the entitative being of the expressed species and its intentional reference accounts for a certain ambiguity in scholastic expression. Sometimes the expressed species is spoken of as that "by which" or "in which" the object is known; at other times it is said to be "that which" is known. 59 Both of these usages can be found in the following passages:

what is understood per se is not the thing of which the intellect has knowledge, for sometimes the thing itself is understood only potentially and exists outside the knower. Such is the case when man knows material things like a stone or an animal etc. Understanding, however, demands that what is understood exist in the knower and that it be one with the knower. By the same token, what is understood per se cannot be the thing's likeness informing the intellect for the sake of understanding. … This likeness is related to understanding as a principle … not as a term of understanding.

Therefore, what is primarily and per se understood is that which the intellect conceives in itself of the thing understood, whether this be a definition or a statement. … What is thus conceived is called the "interior word." 60

The conception of the intellect is intermediate between the intellect and the thing understood, for through its mediation the intellect attains the thing. Therefore, the intellectual conception is both that which is understood and that by which the thing is understood. Thus what is understood can be said to be both the thing itself and the conception of the intellect; likewise, what is spoken can be said to be both the thing which is expressed by the word and the word itself. . . . 61

If these texts are taken literally to mean that the concept as such is what is first known, we are locked in conceptualism and it is impossible to sustain the thesis of an intuitive, non-conceptual moment in any kind of human knowledge. For the activity of the intellect would simply consist in reflection on and manipulation of concepts. However, there is another interpretation possible. It is not the concept as such that is known in the act of knowing, at least not primarily, but the thing itself as represented in the concept. It is in this latter sense that Cajetan and John of St. Thomas understood the matter. John of St. Thomas wrote:

when at times St» Thomas teaches that the word or concept is not only a medium of knowledge as a quo, but also is known as a quod, he speaks of what is represented in it, inasmuch as in the concept the knower has the object rendered intellective and de-materialized, i.e., stripped of material conditions. Thus
what is known is not the concept itself as a quod, inasmuch as it is a certain quality informing the intellect; rather the thing thought out and formed through the concept is known as a quod. Thus compared to the thing outside it can assume the character of idea.⁶²

To prove that this is the correct interpretation would take us too far afield. The proof can be found elsewhere.⁶³ To these two ways of speaking of concepts, the commentators introduced the terms "formal concept" and "objective concept."⁶⁴ Formally the concept is the subjective image which the intellect forms in its act of understanding, but because the nature of the concept is to represent something other than itself, that which it represents, precisely as represented can be called a concept by analogy of attribution.

Perhaps this long excursus seems a bit over-drawn, but the point has been to make clear the intentional character of the expressed species, whether phantasm, concept, or conceptual proposition and discourse. Every expressed species contains more than it formally expresses. The phantasm expresses the sensible object according to its surface qualities and external relationships, but the objective reference of the thing thus represented includes virtually the internal intelligible structure of the object. Similarly, the concept of man as a substance expresses the substantiality of man formally but includes an objective reference to the other essential attributes of man. This objective reference is implicit, not explicit.
CHAPTER IV
CONCEPTUAL AND NON-CONCEPTUAL ELEMENTS
IN ORDINARY HUMAN COGNITION

A. INTRODUCTION AND ORIENTATION

In the light of the preceding general observations, we are ready to begin the direct analysis of the role of conceptual and non-conceptual moments in human cognition. Building on the analysis to be conducted in this present chapter, we shall go on in the following chapter to see how this natural process of human cognition is modified and utilized when taken up into the knowledge of faith.

The goal of this present chapter will be to describe and explain the interaction of conceptual and non-conceptual elements in the form of knowledge which most closely corresponds to the supernatural knowledge of faith, namely, knowledge through communication. In fact, most of our knowledge derives not from direct experience and personal interpretation but from vicarious experience and learned interpretation. We depend on teachers to broaden our experience and to help us to clarify our interpretation. The influence of such vicarious experience and learned interpretation permeates the whole of human knowledge. Human knowledge is essentially a social phenomenon. Personal experience and interpretation take place only within a context of received experience and meaning. The child cannot come to consciousness or to any distinct understanding except in the world created for it by other human beings who give him language as a means of intellectual expression, who guide his experience of the world and introduce him to things he cannot directly experience, and who interpret to him the meaning of his experience.¹

Nevertheless, for the purpose of analysis it is easier to begin with the process of learning by personal experience and discovery, even though this involves abstracting this mode of learning from its living context. Such abstraction, however, has a real foundation; personal discovery and creative interpretation are realities. By means of them not only the individual but the society as a whole expands its cultural
horizon of explicated meaning. Provided, therefore, we do not lose sight of the context of this learning process we need not fear being led astray

**B. THE DIRECT PROCESS OF LEARNING**

1. **Concept and Image in Perception and Apprehension**

In the genetic process by which we come to know a corporeal thing directly, that body acts by physical causality upon the external senses. We have already noted that in this process, by reason of the peculiar character of the sense potencies, the effect of this action is not a mere specifically similar form transforming the sense organ, but, rather, a reproduction of the object's own individual sensible form precisely as it refers intentionally to the object itself. The physical causality of the body on the external sense triggers a psychic reaction of the sense so that specified by the impressed species received from the object, the knower comes to know the object itself in second act.

This act of knowledge-presence is not strictly speaking conscious in the external sense. It becomes conscious only in the operation of the sensus communis reflecting upon the operation of the external sense. This sensus communis or "sensible awareness" takes possession of the distinct impressions of the object which have been received by the various external senses; it compares and distinguishes them; and thus, it knows distinctly the object and the various sensations of it. Moreover, since sensible awareness is able to call upon the data of past perceptions stored in the imagination, it is able to grasp the object and its activity as extended in time and located in space. With the aid of imagination we are able to grasp the objects of the physical world in a temporal and spatial permanence independent now of continued actual physical presence.

It is very important to note that the imagination is not a capricious falsifier of perception. As the treasurer of past perceptions its primary function is to contribute to the synthesis of the integral perception, data regarding the spatio-temporal extension of the object. Since the perceptions which it retains are the very impressions received from the external senses and integrated by the sense awareness, the imagination of itself shares the same objectivity as these senses. Although this objectivity is most surely guaranteed when the object is directly present to the external senses and can thus serve as a control, this objectivity extends proportionately to imaginative
representations of the sensible object synthesized in the absence of direct sense perception. This ability of imagination to represent an object truly, even in the absence of direct physical contact, is the foundation for the objectivity of indirect knowledge.

Because the imagination knows objects or at least aspects of objects which are not here and now present to the external senses, it must represent these objects in an expressed species, the so-called phantasm. Into this phantasm are integrated the elements of immediate sense perception, so that the phantasm represents the object in all its sensible aspects.

Besides the concrete and quantified sensible qualities of the object, we perceive with our senses certain concrete relationships. The perception of these relationships is the work of the cogitative sense, which like the common sense has annexed to it a retentive faculty, the memory, from which it is able to recall relationships perceived in past experience. In animals the corresponding sense, the estimative sense, is limited to grasping objects only as related to a physical interaction situation; thus a sheep knows a lamb only as the lamb seeks from it milk or protection, etc. Man's cogitative sense, however, by reason of its continuity with his intellectual operations, is able to transcend the interaction situation and to know objects in their concrete being. Thus by his cogitative sense, man is able to know a man as this man, a piece of wood as this piece of wood, a sheep as this sheep. Similarly, under the direction of intellect, the cogitative sense has the ability to organize perceptual matter so as to represent more clearly or to symbolize objects of consideration and to focus attention upon what the image presents to intellectual consciousness. By grasping the data of imagination as related to the concrete object experienced, the cogitative sense is able to insure the conformity of the imaginative representation to the object as directly perceived.

The result of the activity of the internal senses is a representation of the object known in its concrete reality. In this representation we know the object as a distinct, concrete, existent substance endowed with all its accidents, proper and adventitious, and located spatio-temporally in the horizon of material being. The objectivity of this representation is guaranteed by the direct line of formal causality which the exterior object exercises on the sense faculties. Distortion, of course, is possible by reason of indisposition of the physical organs or the interference of the higher faculties, but
such distortion can be controlled by the cogitative sense. Because the data of perception are retained in the imagination and memory through the retention of their impressed species, it is possible to reproduce an accurate representation of the concrete existent object even in the absence of direct physical contact. This kind of reproduction occurs even in direct perception insofar as the object directly perceived is located in space and time. But it is of absolutely critical importance in knowledge of past events.

Besides his senses, man is endowed with an intellectual power. The human intellect has as its proper object the being and natures, substantial and accidental, of the material things presented in sense knowledge. Although in sense knowledge we grasp the material object concretely as existing apart from ourselves and as having a distinct nature and distinct modifications, we do not by sense know these aspects formally. To know them formally is the prerogative of Intellect which is able to abstract the essence from its concrete embodiment.

Of itself, the intellect is a tabula rasa; It has no a priori forms by which it can know the essences of things. The sensible content of the concrete perception, however, is not of itself actually intelligible, for a thing is actually intelligible only insofar as it exists without matter. For the same reason the forms of the concrete bodily object in its physical existence are in themselves not actually intelligible. Both in their physical existence and in their sensible psychic existence, the being and natures of corporeal objects are only potentially intelligible. Consequently, they cannot directly specify the action of the intellect. Moreover, as material they are incapable of acting upon the immaterial potentiality of the intellect to educe an impressed species. Thus the direct formal and efficient causality of the exterior object in specifying the activity of man's knowing powers by producing an impressed species comes to an end at this point. The concrete singular existent itself, as the term of intellectual cognition can penetrate no deeper into the knowing powers of man, for its forms can exist only in matter.

To bridge the gulf separating intellectual from sense cognition, man is endowed with an active intellective power, the agent intellect, which has as its function the rendering of material forms actually intelligible and, therefore, of impressing their intelligible species in the intellectual power properly so-called, the possible intellect. To designate this activity, St. Thomas uses the terms "abstraction" and "illumination." This activity should not be understood as
simply uncovering what is hidden in the phantasm, despite the use of the term abstraction. Rather, in accordance with the general Thomistic understanding of how a potency is actualized, it should be seen as the result of the agent intellect's communication to it of its own actuality. This actualization gives to the material form a new mode of being in the possible intellect where it comes to have entitative existence as an impressed species actually intelligible. Since matter, however, is the principle of Individuation, in being thus elevated to actual intelligibility, the form impressed is abstracted not only from its material mode of existence but also from its singular mode of existence.

By the impressed intelligible species, the possible intellect is specified to know not this or that man, this or that animal, this or that white object, but man as such, animal as such, whiteness as such, etc. The intellect, therefore, apprehends its object not only irrespective of its physical presence or absence, but also according to a different mode of being than it has in nature, for it understands the nature of the thing as separated from the material individualizing conditions without which it cannot exist in nature. There is, therefore, a double reason for the possible intellect to represent its object in an expressed species, the concept. The first reason, the indifference to physical presence or absence of the object, it shares with the internal senses. The second, is altogether proper to the intellect which apprehends the object according to a different mode of being and, therefore, a different mode of ontological truth than it has in itself. The object as known formally and directly in the concept is a form which exists in reality but not the form as it exists in reality, for in the concept it is immaterial and universal; In reality it is material and singular.

The fact that the object as represented in the concept is only specifically a likeness of the object (for the concept represents the object in one or another of its universal intelligible aspects), is the foundation of the necessity for the intellect's conversio ad phantasmata, a theme frequently stressed by St. Thomas. In intellectual cognition the phantasm functions not only in the actualization of the possible intellect, but also in the actual contemplation of the object by the intellect. The following text is very illuminative. ... the possible intellect, like every substance, operates in a manner consonant with its nature. Now it is by its nature the form of the body, hence it does indeed understand immaterial things, but it sees them in something material. An indication of this is
that in teaching universal notions particular examples are employed, so that the universals may be viewed in them. Hence, the possible intellect, before possessing the intelligible species, is related in one way to the phantasms which it needs, and in another way after receiving that species; before, it needs that phantasm in order to receive from it the intelligible species, and thus the phantasm stands in relation to the possible intellect as the object moving the latter; but after the species has been received into the possible Intellect, the latter needs the phantasm as the instrument or foundation of its species, so that the possible Intellect Is then related to the phantasm as efficient cause. For by the Intellect's command there is formed in the imagination a phantasm corresponding to such and such an intelligible species, the latter being mirrored in this phantasm as an exemplar in the thing exemplified or in the image.25

The universal concept as it exists in the mind is a being of reason, not a real being; it is able to make known real beings only when reflected back upon the phantasm. For the aim of all knowledge is to know the thing as it is in reality, not as it is in the mind. As St Thomas observes:

… the proper object of the human intellect, which is united to a body, is a quiddity or nature existing in corporeal matter; and through such natures of visible things, it rises to a certain knowledge of things invisible. Now it belongs to such a nature to exist in an individual, and this cannot be apart from corporeal matter. For instance, it belongs to the nature of a stone to be in an individual stone, and to the nature of a horse to be in an individual horse, and so forth. Consequently, the nature of a stone or any material thing cannot be known completely and truly, except insofar as it is known as existing in the individual. Now we apprehend the individual through the senses and the imagination. And therefore, for the intellect to understand its proper object actually, it must necessarily turn to the phantasms in order to perceive the universal nature existing in the individual.26

Indeed Aquinas goes so far as to say that the proper operation of human intelligence is "to understand intelligible aspects in the phantasms."27

This return to the phantasm constitutes a most important non-conceptual moment in human knowledge. The nature of human ideas are such that they can never of themselves perfectly represent the concrete, corporeal
existent in its individual mode of being. In this respect human ideas are altogether different from divine or angelic ideas. In order to know reality as it is, man requires both ideas and sense images, for by the former he possesses only the universal intelligible aspects and by the latter he possesses only the particular corporeal aspects. Sense knowledge is not simply an occasional epiphenomenon accompanying intellectual apprehension of reality, nor is it merely a praepadeutic to be left behind once the intellect has been impressed with the intelligible forms of corporeal things. Man does not know objective reality by his intellect alone but only in the conjunction of the operations of intellect and sense.

Not only is the intellect dependent upon the phantasm in the apprehension of the singular, concrete existent, it is also dependent upon the phantasm in its discursive clarification of the content of its conceptions. The human intellect does not apprehend the essence of material things by a simple intuition that immediately grasps the essence in all of its distinctiveness, rather, it must pass through a series of zones of progressive clarification by attending to the differentiating factors, the characteristic accidents, which are represented in well-organized phantasms. This discursive apprehension of the distinct essences of things results in clearer and more distinct concepts, but it does not proceed by any sort of direct intuition of the virtual content of the concept; only in reference to the distinguishing characteristics represented in the phantasms can the intellect clarify its conceptions.

We should note here, however, that in the act of reflecting its concepts back upon the phantasms present in sense knowledge, the intellect must possess a kind of indirect intuition of the virtual content of the concept. Were the intellect unable to grasp the fact that its conceptions are incomplete, though fundamentally accurate in their positive content, it would have no reason to seek further clarification. Implicit in the return to the phantasm must be an intuitive intellectual grasping of the concrete reality precisely as exceeding the expressed content of its conceptual representations. Now the object exceeds the expressed conception fundamentally in its very being, so that this implicit, intuitive, non-conceptual moment in intellectual knowledge is first and foremost a consciousness of being.

In itself this immediate grasp of the concrete reality of the object is indistinct and implicit for it takes place only in
and with the distinct and explicit grasp of an intelligible aspect of the object and is its inverse correlate. Nevertheless it plays a critical role in intellectual knowledge, for it is the thread which leads out from the abstract concept back to concrete reality, the center toward which all the abstract conceptual expressions of the reality converge, and the fundamental awareness in which we grasp the insufficiency of every conceptual expression and thus the possibilities of further explication. Above all, it is the foundation of the act of judgment by which the intellect formally takes possession of its knowledge of reality, knowing it not only truly but also as true.

2. Concept and Image in Judgment

By apprehension, the outward real comes to cognitive existence in us dispersed into a multitude of abstract concepts, each of which is a specific likeness of one or another aspect of the outward real. Thus reality comes to exist whole and entire within our intellects but not in the mode of existing it has in reality nor in its full degree of explication. We have seen how, in the return of the conceptual apprehension upon phantasms, there is given an implicit intuitive grasp of the concrete reality which the concepts correctly but imperfectly express. This implicit awareness links the diverse concepts together and relates them to the reality known, but only implicitly. For this reason, human intellection is not perfected in immediate apprehension but must be complemented by another act by which we explicitly "reconstruct the original unity of the thing by regrouping its different aspects according to its mode of existing outside the soul." This act is the act of judgment.

Judgment completes apprehension, it does not replace it. On the other hand, it does not consist in some sort of higher order apprehension which grasps an aspect of the thing that had escaped previous apprehension. Judgment does not make anything new known, but merely makes the content of previous apprehension to be known in a new way, namely, as explicitly unified and related to reality as it outwardly exists. By means of judgment, the implicit intuitive awareness of the concrete being of the object is brought to explicit consciousness, In the words of D. M. De Petter: human judgment, therefore, is the act by which the knowing subject formally becomes aware of the implicit intuitive being-content of its abstract conceptual content, and on this basis brings the abstract conceptual content back to its concrete and real existence in a positive manner.
The reason why the human intellect must resort to judgment in order to complete its apprehensions is that man's agent intellect is too weak to actualize at once an intelligible species perfectly explicating everything which belongs to the reality known. The intelligible species which result from our abstractive apprehension represent one thing in such a way as not to represent another. But the illuminating activity of the agent intellect does not stop with the production of the intelligible species; as we have seen, it continues to illuminate the phantasm as the possible intellect reflects its concepts back upon the phantasm representing the reality known. This illuminative activity is not only the source of the knowability of its object but also of the actual vigor of the intellect in its act of understanding. Its continued action, therefore, enables the possible intellect to perfect its knowledge of reality by combining its distinct apprehensions into a unified representation of the reality as it exists in nature.

From the point of view of the immanent product, and in the order of exercise, judgment gives rise to a unification of concepts in a statement or proposition. In the statement, concepts representative of the quiddity of things, i.e., concept nouns, are composed with concepts representative of particular accidents related to substance, i.e., concept predicates or verbs, in such a way as to express a single predicated meaning. It is impossible to think simultaneously two distinct intelligibilities. I can think of man and I can think of running as two absolutes, but I can think them simultaneously only by relating them to one another so that they merge into one intelligibility, one predicated meaning: e.g., "man is capable of running"; "this man is actually running"; etc. This is done by subordinating the meaning of one to the meaning of the other: the total intelligibility of the subject is subordinated to the explicit intelligibility of the predicate in such a way that the subject is understood in terms of the predicate. In the statements "man is capable of running," "this man is actually running," the focus of intellectual attention is not the intrinsic nature of man or the concrete existence of this man, but the meaning of "capable of running" or "actually running."

What is formal in knowledge, however, is not the immanent product and the order of exercise, but the objective term and the order of specification. In the act of intellectual cognition concepts are produced and combined in statements and discourses, but it is not the concepts, statements and discourses that are directly known. What is made known in the statement is the very being of the thing according to its proper mode of existence. St Thomas writes:
the operation of the intellect is twofold: one, called "apprehension of indivisibles," by which it knows the quiddity of something; the other, by which the intellect combines or separates, forming an affirmative or a negative statement. These two operations correspond to two real aspects of things. The first operation has to do with the nature of the thing known; according to this aspect the thing known, whether it be something complete and whole or something incomplete like a part or an accident, holds a certain place in the order of being. The second operation has to do with the very being of the thing (ipsum esse rei); this results from the combination of intrinsic principles in composite beings or coincides with the very nature of uncomposed beings.42

This ipsum esse rei which is the objective term of judgment is not to be understood as the formal act of esse as distinct from the essential aspects of the thing known. Rather, it refers to the object's mode of existence according to the meaning predicated. Thus, in the statements "the earth exists," or "a man named Socrates once existed," the judgment attains explicitly the substantial mode of existence of the subject. In statements like "the earth is a body," or "Socrates was a man," the intellect takes explicit possession of the essential identity of the subject with one of its intelligible aspects. It is also possible for the judgment to bear upon an accidental mode of existence, as in the statements "the earth is illumined by the sun" or "Socrates lived in Athens." 43

Judgment is not an apprehensive but a projective act.44 Its product, the statement, is measured by the reality revealed in the phantasm but it is not caused by it -- not even in the way that the apprehension of an intelligible species is caused by the phantasm.45 The statement's function is to give expression to the intuitive awareness of the predicate's mode of being, an awareness which was implicit in the apprehensive reflection of the abstract concept back upon the phantasm. Formally, therefore, judgment does not unite two concepts but rather unites explicitly the conceptual moment and the intuitive moments of intellectual cognition.46 Insofar as this end is adequately or inadequately achieved, the judgment is true or false. Thus it is only when expressed in a statement that knowledge comes to have the property of truth and falsity. Truth and falsity can be found in sense and apprehensive knowledge, but it is not known as such until it is affirmed or denied in a judgment.41
Just as the phantasm is the basis of conceptual insight, so also it is the basis of judgmental knowledge; thus judgment, like every human cognitive act, is one integral operation to which many powers contribute. Psychologically, judgment consists in the process whereby the intellect, working in virtue of the agent intellect back through its formal determination or intelligible species, reflects to the phantasm, the enduring foundation of the meaning actually understood, and through the phantasm and sense powers knows that what it understands is realized concretely in a singular material existent.

At this point we should take note of those immediate and universal judgments which are called "first principles," namely, the principles of non-contradiction, identity, causality and finality. St. Thomas describes the knowledge of these principles as naturally possessed and innate, and attributes the knowledge of them in a special way to the operation of the agent intellect. As immediate effects of the operation of the agent intellect, these first principles are the intellectual light which makes the world of sense experience intelligible to man. They are the "seeds of wisdom and science" implanted in man's mind by the special action of God who is Truth itself. Regis observes:

Natural judgments .... have all the stability of natural acts because they are doubly bound to the infallible activity of the Creator, by the Intermediation of the agent intellect, immanent participation in the divine light itself, and by the habit of understanding that is spontaneously generated from the meeting of primary notions and the illumination of the agent intellect.

D. M. De Petter in his essay on the origin of our knowledge of being, has shown that the being which we grasp in these first principles is not the potential and, therefore, unintelligible being which material things have in themselves apart from our knowledge, but rather the being of material things as actualized and "lighted up" by the operation of the agent intellect in the phantasm. For as we have seen, the agent intellect does not abstract the intelligible aspects of material beings by somehow uncovering an intelligibility already actual but hidden. Rather, it makes the forms of the sensible object intelligible, that is, it communicates its own being to them in such a way that they stand out from their own potential (and, therefore, actually unintelligible but potentially intelligible) mode of being.

In order to state the object of these first principles we
must distinguish between two different ways in which we know them. Initially we know them only as particularized and determined by some sensible content presented in perception, for the spontaneous form of our knowledge of being is not a knowledge of being as such but of this or that being. Determined in this way by the sensible content of our perceptions, the first principles are found actually but implicitly in all our perceptual judgments as well as our more abstract, metaphysical judgments in which they are universalized. In fact, as J. Isaac has shown, we know them formally and explicitly as universal only by way of an induction from many perceptual judgments.

However, in themselves, no matter how implicit our awareness of their universality, they are universal and permeate all our knowledge of reality as the firm foundation upon which our particular knowledge stands. It is in this sense that they are the seeds of science and wisdom, the light by which we know everything that falls within the horizon of our intelligence. All our detailed knowledge is simply a contraction and determination of them.

This does not mean, of course, that psychologically we know things specifically and particularly by somehow looking directly into these first principles. We have already seen that we have no direct knowledge of the virtual content of our concepts. The specification and particularization of conceptual-knowledge is completely dependent upon the presentation of sense experience in the phantasm. In like manner, the particularization of the first principles is due to the material objective causality of our phantasms. Nevertheless, it is because the particularization is resolvable to these principles precisely in their universality that we know the validity of all our particularized knowledge of concrete reality.

Keeping this distinction between the particular and the universal modes of the first principles, we can state their proper object in this way. Heidegger, uses the term "Being" (Sein) to designate "the lighting process by which beings [i.e., the concrete existents which we experience, together with their properties, accidents, and relationships] are illumined as beings." If we may be permitted to appropriate this term to designate the operation of the agent intellect in making the potential being of material forms to be actually intelligible and, therefore, actually to be, we may thus distinguish:

a) From the point of view of the universality of the first
principles -- the act of being known in them per se primo is the Being which lights up beings, i.e., the intelligible being which material things have in themselves only in potency but which they come to have actually through the illumination of the agent intellect which communicates its own actuality to them. Per se secundo, though nonetheless immediately, the proper object of the first principles is the imperfect and potential being which physical things have in themselves, precisely as this being is manifested through the lighting process of Being.

b) From the point of view of actual thematic consciousness in particular perceptual or scientific judgments, the per se object of the first principles is the being which the physical object or objects have in themselves, though this is manifested only in the lighting process of being. The explicit thematic consciousness of the lighting process itself comes only in phenomenological reflection and metaphysical explanation, and therefore, with respect to particular perceptual and scientific judgments involving the first principles is only a per accidens object.

This perforce brief account of a highly complex topic is required for any proper understanding of the process of human cognition. But in addition it is required here for an understanding of the illuminative operation of the virtue of faith. For St. Thomas compares the illumination of faith to the role of the first principles as they depend upon the agent intellect.

3• Language, Concepts and Images in Direct Knowledge

So far we have considered the process of cognition without any reference to the phenomenon of linguistic expression. There is a certain basis for this abstraction. Long before the human person learns to give verbal expression to his perceptions, the intellect has been at work in apprehension and judgment. Daily life is full of unverbalized "thinking-in-action." Nursing an invalid, driving a car, playing tennis, painting a picture, are not simply animal activities. They involve a wealth of intelligent perception, judgment and creativity; yet this is rarely or at best only imperfectly verbalized. Unverbalized understanding-in-action plays a very important role in daily life. It is what makes it possible for us spontaneously "to conduct ourselves as human beings, to behave properly when we dine with others, when we visit strangers. It enables us to cross a street or to work."
Nevertheless, the fact remains that thought and language are intimately related. Language both conceals and reveals beings. The ability to express his understanding linguistically enables man to explicate the content of his perceptual judgments and to elaborate philosophy and the sciences. But it can also conceal reality from man, as happens when inappropriate linguistic conceptualization leads men to deny-explicitly those natural and immediate judgments that are essential to every meaningful activity.

Language, like thought and knowledge generally, is primarily a social phenomenon; nevertheless, it also enters into the process of personal learning and thinking, and so we must consider it here. The functions of language are many and various; in general, however, three basic functions can be distinguished. They are: (1) "statement," (2) "expression," and (3) "address." As "statement" language states facts, describes things, situation and events, narrates sequences of events, defines Intelligible natures, gives reasons, explains relationships. As "expression" it reveals the personal attitudes of the speaker, his feelings, moral or esthetic judgments, ways of viewing and interpreting the objects of his experience. As "address" language evokes a response from the one to whom it is directed; it enlightens or confuses him, persuades or dissuades him, commands or forbids him. Of course, these functions never exist in an absolutely pure state; to some extent every statement exercises all three functions despite a tendency for one or another function to predominate. Likewise all three can be found not only in dialogue but also in monologue. I can objectify my knowledge in language to "inform" myself and to pass judgment on it. I can express my feelings and opinions to myself in order to reflect on them. Similarly, I can address myself in order to persuade myself to take a certain course of action or to make a certain judgment.

Spontaneously we tend to think of language principally in terms of its informative function, though statistically this function is probably the least important of the three. Linguistic usage abounds in things like questions, requests, exclamations, interjections, performative declarations (i.e., formulas like "I pronounce you man and wife"), oaths, promises, "small talk," etc., in which the informative function is minimal, whereas the expressive and appellative functions are paramount. In this thesis, however, it is principally the informative function that concerns us, since we are concerned with the psychology of cognition. Moreover, even the expressive and the appellative functions in order to accomplish their effect suppose that the listener understand the attitudes they express or the appeal which they make to him. They must, therefore, be perceived and interpreted, and in this way they have a peculiar
informative function of their own.

Linguistic expression is not identical with the inner word, whether that be the concept, the statement, or a mental discourse. Rather language belongs to the order of corporeal expression; it consists in the verbal signs we formulate in our imagination and speak or write physically. The words that we use in thinking are really symbolic phantasms (words in imagination) or symbolic physical realities (spoken or written words). In fact, the notion of language can be extended to include all forms of thoughtful expression, even though these be not verbal. Bodily gestures, looks, artifacts, etc., are all forms of language. Such forms of expression play a very important role in supplementing verbal expression, as is obvious in the case of demonstrative gestures like pointing out objects or directions. 68

When we say that linguistic expression is distinct from the inner word we must be careful of falling into the naive notion that meaning somehow preexists its expression and that linguistic expression, therefore, is a purely secondary phenomenon required to communicate the content of this pre-existent meaning but adding nothing to the meaning itself. It is true that the meaning that we express in words often, if not normally, exists in some other form of meaningful expression before it is given full linguistic expression. Nevertheless, until it finds linguistic expression, its explicit content is minimal and, for all practical purposes, pre-conscious. 69

By being spoken, meaning receives a new mode of being in us, and this new mode of being, though it is measured to some degree by the meaning which existed previously in some non-verbal form of expression, profoundly influences the direction of our further effort to appropriate and explicitate its content. Thus, for example, social conflicts and tensions existed in capitalistic society long before Karl Marx interpreted them in speech and writing. But the way in which he wrote about them sharpened and focused them and profoundly influenced all subsequent efforts to understand and to modify them. Nearly every meaning can exist at least in a primitive fashion within one or another non-verbal form of expression, i.e. as a "lived" meaning, but in some form or other every meaning knowable by man can be brought into the new mode of being which linguistic expression created. As R. Kwant notes:

By being embodied in speech and especially by being expressed in a scientific way, meaning is objectivized. This term indicates that a meaning which was originally only "lived," which surrounded us as a kind of climate or sphere in such a way that our existence fused with it, now becomes the object of our consideration. We continued to live in that meaning, but at the same time
we place ourselves at a distance from it. This objectivation is a powerful means to help us seize that meaning, to manipulate it. We have already noted how the inner word, be it a simple concept or a full statement or discourse, necessarily falls short of expressing directly the full content of the intellect's grasp of reality and consequently must be complemented by an intuitive grasp of the unexpressed. With even greater reason does this condition hold for linguistic expression. Not all forms of meaning are equally expressible in spoken language. Anyone who has ever attempted to describe a remarkable experience that he has had should be aware of the ineffability of meaning. In fact, the more experiential a meaning is, the more difficult it is to put it into words. Therefore, it is only in relation to the "lived" meaning that the spoken meaning has value. When we forget the ultimate ineffability of meaning and regard the spoken meaning as the absolute norm of all meaning, we distort our knowledge of reality -- often with disastrous consequences. For instance, the Marxist attempt to force all of reality into the categories of dialectical materialism led to the absurd theories of Lysenko in biology.

Language does not simply express conceptual meaning; it expresses the content of phantasms as well. Indeed, concerning any statement it could almost be said that the subject term stands principally for the content of the phantasm. In contrast the predicate term stands mainly for the content of the reflected concept, and the copula expresses the intuitive grasp of the being of the thing according to its proper mode of existence. Thus, both the conceptual and the intuitive moments of intellectual knowledge find a common reference to the phantasm. At times, in fact, the principle role of linguistic expression can be to express phantasms. Descriptive and poetic language is meant principally to express an experience, not some abstract intelligibility. This is evident from the way in which, when we read or hear a description or certain types of poetry, we call up visual, auditory and tactile images of the concrete reality described; the only intelligibility directly expressed in such verbal presentations is the immediate perceptual intelligibility of the concrete data in question.

Since linguistic signs are physical conventional signs, they exist in the imagination in the form of phantasms subject to controlled association. Thus, verbal phantasms can function in the cognitive process as shorthand symbols for
complex perceptual realistic phantasms. In the sentence "my trip through Kentucky was a wonderful experience," the words "my trip through Kentucky" serve as a vicar for the complex of remembered experiences that justify my evaluative judgment. Much as the abstract symbols of algebra and calculus enable the mind to perform highly complex calculations which would be impossible in terms of numerical counting operations, so also verbal phantasms enable the mind to deal with highly complex experiences and to bring to light further depths of meaning.

Because linguistic expression symbolizes imaginative as well as conceptual elements in knowledge, it possesses a peculiar flexibility. The beginning physics student who formulates the judgment that "energy can be understood as the ability to do work" on the basis of a few kinetic experiments, possesses a true understanding of this principle. But twenty years later, when he expresses it as a mature scientist who has seen the principle verified in innumerable experiments, he will possess a much richer understanding of the same linguistic statement. The predicated conceptual meaning has not changed in itself; both statements focus upon the same intelligible aspect of energy, its ability to do work. But the mature scientist has seen the phenomenon of energy in many different forms and under many different aspects. Over the years the phantasms built up to represent energy have become increasingly rich in actualized potential meaning, whereas the phantasms in the novice were much more restricted in the extent to which their potential meaning had been actualized. Thus, the phenomenon of profile and horizon noted earlier is found verified in the linguistic expression of predicated meaning. Although only one intelligible aspect is here and now known explicitly, the other aspects form a virtual background against which the salient intelligibility takes on new depth of meaning. So true is this that although a true judgment always remains true, sensory and physiological conditions being equal, a person who is continually broadening his experience in the realms of reality and knowledge and thus increasing the depth of potential meaning represented in phantasms never makes exactly the same judgment twice.  

Linguistic expression can both fall short of and go beyond the actual state of our knowledge, Because meaning can pre-exist linguistic expression at least in an implicit and rudimentary manner, we can become aware of the inadequacy of our expressions. Thus, the writer continually works over his manuscript until he is satisfied that he cannot make his point any more clearly. Frequently, however, we say more than we actually know explicitly. "The words we use, the
language we speak and the structures we utilize, contain latent forms of visions which do not entirely escape us but none the less are not wholly understood. Not infrequently later thinkers are able to know more about a particular philosopher than he knew about himself. Aquinas certainly understood the import of Aristotle's philosophy more deeply than did Aristotle himself.

It is essential to note that although verbal phantasms can stand in place of the complex realistic phantasms, they can never supplant the latter as the ultimate ground to which the conceptual moment of knowledge must be referred. The concrete reality with its proper mode or existence is directly represented only in a realistic phantasm based upon perception. The verbal phantasm is no more than a conventionally associated, symbolic vicar. Of itself it contains neither the intelligible aspects of the object nor its proper modes of being. Ultimately, therefore, all conceptual and judgmental knowledge intrinsically demands a return to some sort of realistic phantasm in which either the object itself or one of its effects is directly expressed.

4. Conceptual and Intuitive Moments in Discursive Knowledge

We have already noted that the perfection of human knowing is found in judgment, for in judgment the conceptual and the intuitive moments of knowledge are so united that the statement represents the intelligible aspects of an object in their proper mode of being in relation to that object. It is in judgment that the intellect formally possesses truth. We have seen that the reason for the act of judgment is that our intellectual light is too weak to know at once by a simple explicit intuition the substantial nature of the objects of its perception and to grasp all at once all that is attributable to things as they exist in reality. To remedy this deficiency, the human intellect is obliged to proceed discursively, using the truths already formally possessed to bring others to light.

Reasoning is of its nature an incomplete act designed to terminate in an explicit insight into an essence or a judgment of existence. With respect to the principles from which it proceeds, namely the first immediate judgments both universal and perceptual, reasoning is the complementary and perfective activity of judgment, for by means of reasoning the
indeterminate, vague and virtual truth of the first principles is gradually made determinate, distinct and actual in expressed insights and judgments.  

Although in the order of exercise judgment consists in the linking of statements in the form of a syllogistic or inductive argument, neither the argument as a whole nor the conclusion arrived at constitute the objective term of the discourse. Above all we must be wary of conceiving reasoning, especially deductive reasoning, as a way of circumventing immediate perception or as proceeding according to a purely intellectual inspection of the virtual content of abstract concepts. One must not identify the structure of logical relations in the syllogism with the psychological structure of the act of thinking discursively. As Edward Schillebeeckx aptly observes:

... psychologically discursive thought is nothing else than the totality of experimental knowledge itself, that is, experience constantly growing but dominated by the total object which from the beginning was implicitly also part of the consciousness. In the process of explicit proof, one sees the original data in the light of implications which have been discovered both by reflection and by experimental knowledge. These implications may appear as consequences, but they had been present, unnoticed, in the consciousness from the start Thus development is always a passage from implicit to explicit consciousness, but not the passage from a recognized principle to a fully new truth, deduced by a purely logical process and in no way present in the consciousness at the beginning.

Like judgment, reasoning does not give new knowledge but a new mode of knowledge. Its function is to make explicit the whole field of real relations that exist between real things, relations of cause and effect, of concomitance and succession, of law and fact, of harmony between parts of a whole, between means and end, finally of everything which, added to the absolute unity of the real, involves the thing in a plurality of relations or orders.

Just as judgment has its foundation in the implicit awareness of the real mode of being of the object represented in the phantasm upon which the intellect reflects its concepts, so also reasoning has its basis in the same implicit awareness. Out of this awareness of the distinction of the expressed and
the unexpressed emerges the question: why, how is it so or not so? The aim of the reasoning process is not to "discover" the conclusion, for the conclusion pre-exists in the properly formulated question. Rather, the aim of reasoning is to discover a causal connection between the subject and predicate of the conclusion, to discover the middle term. That is to say, the principal function of reasoning is explanation, not revelation or even certification, though these may be by-products. 84

At this point it is necessary to introduce the notion of certitude. All judgmental knowledge is either true or false, for truth and falsity are properties of the statement. In judgment, therefore, we come to know truth formally. Nevertheless, our knowledge of truth in direct judgments remains to be completed by a reflex act by which we come to know the truth value of our direct judgments. The name of this reflex act of judgment is "assent" or "dissent" and it has as its object term the truth of a previous direct judgment, Regis observes:

the role of the act of assent is therefore to register the intellect's approval of the truths presented to it, absolute or relative approval depending upon whether the truth in question is presented to it with guarantees of infallibility or with possibilities of bankruptcy. Also the function of dissent is to reveal the intellect's disapproval in face of error, absolute or relative disapproval depending upon whether the error is presented as identical with-the absurd or may possibly be changed into truth by means of modifications in the real that measures it. 85

Assent and dissent are two diametrically opposed judgments of the possible intellect. Since the intellect of itself is not determined to either the one or the other it must be determined by something outside itself. Now there are only two agents which can determine the intellect; these are its proper object and the will. The following conditions therefore can arise:

1. Sometimes the intellect tends neither to the one nor to the other, either because of a lack of evidence, e.g., in those problems for which we have no reasons, or because of an apparent equality of the reasons inclining to both sides. This is the state of one doubting, who flutters between two contradictory positions.
2. Sometimes the intellect inclines more to one than to the other position, but this inclination is not sufficient to determine it totally to one of the positions. Consequently it accepts the one position but continues to have doubts about its opposite. This is the state of one holding an opinion; he holds one of the contradictory positions but fears the other.

3. Sometimes the possible intellect is so determined that it adheres totally to one of the positions. Sometimes this is due to the intelligible object sometimes to the will.
   a) To the intelligible object it is sometimes due mediately at other times immediately.

   It is due immediately, when the truth of the intelligible propositions appears immediately from the intelligible objects themselves. This is the state of one understanding principles which are known as soon as their terms are known. 

   It is due mediately when, knowing the definitions of the terms, the intellect is determined to one of the positions by reason of first principles. This is the state of one knowing scientifically.

   b) Sometimes, however, the intellect cannot be determined to one or the other part either by the definitions of the terms, as in the case of principles, or by reason of first principles. Nevertheless it is determined by the will. The will chooses to assent to one position determinately and precisely because of something which is sufficient to move the will but not the intellect, namely, that it seems good or useful to assent to this position. And this is the state of one believing, as in the case of one who believes the words of another man because it seems proper or useful.

To this list must be added the special case of experiential assent given to direct perceptual judgments in the very act of perception.

Taken formally, certitude consists in the repose of the intellect in the possession of its good, the truth as necessarily and self-evidently true. In all of the above mentioned states except the first, the intellect can possess the truth, but only in the cases of understanding and scientific knowing and direct perception does the intellect possess the truth necessarily and self-evidently, so that its natural desire for perfection is completely satisfied. In belief, however, there is a participated form of certitude, namely conviction, which consists in the practical satisfaction that the commanded assent brings into action; it is a voluntary not an intellectual satisfaction.
The reason for introducing this excursus on certitude as a property of reflex judgment is to caution against an unconscious reduction of cognition to scientifically certain knowledge. Certitude belongs to the perfection of knowledge but not to its essence. The truth of opinion and faith is by no means compromised by the fact that it does not possess the perfection of certitude. Likewise, sensation and intellectual insight are real forms of knowledge, even though they do not possess the perfection of formal truth which judgment would give them. By the same token discursive knowledge is not limited to scientific reasoning. Our knowledge of reality is thoroughly permeated by discursive processes long before we engage in technical, scientific and controlled reasoning. Thus as Newman observed, there is a natural, spontaneous, non-technical, implicit reasoning which underlies, often unconsciously, the deliberate, technical, explicit reasoning which is used in conscious attempts to articulate one's position.

Technical, scientific reasoning is necessarily abstractive. It attains certitude only by ignoring the contingent and particular aspects of beings in order to concentrate on universal and necessary truths. There is no "science" of the particular and the contingent, only of the universal and necessary. Even the phantasms which scientific reasoning makes use of take on a certain schematic character. Also verbal phantasms play a very important role in scientific discourse, symbolizing, as we have already noted, the complex realistic phantasms which serve as the basis of the scientist's inductions and demonstrations. Another kind of symbolic phantasm which plays an important role in scientific thinking is the model phantasm. Aspects and elements which cannot be directly perceived are represented in some sensible model bearing an analogous character. Thus, the composition of the atom is visualized as a planetary system or a wave model; light is conceived according to a corpuscular or wave model. Technical literature abounds in such models and analogies, without which advancement to higher viewpoints would be virtually impossible. Nevertheless, useful as such symbolization is in scientific cognition, it cannot, as we have already noted, replace the realistic phantasms by which we make contact perceptually with the concrete corporeal realities which are the proper object of human cognition in this life. The goal of scientific knowledge is always knowledge of an intelligible aspect precisely as it exists extramentally in the concrete existent singular. In the words of St. Thomas cited earlier, "the nature of any material thing cannot be known completely and truly except insofar as it is known as existing in the individual."

5. Concept and Image in the Knowledge of Immaterial Beings

Discursive reasoning brings us to explicit awareness of a sphere of being which transcends the limitations of the material mode of existence, for it comes to realize that material forms of being do
not find sufficient explanation in the causality of other material beings. By a negative judgment of separation the mind recognizes that being is not restricted to the material mode which is the proper object of human cognition.  

It is impossible in this life to form a positive quidditative conception of an immaterial being, for the human mind naturally possesses no intelligible species except those derived from the material things represented in phantasms. And no matter how much one abstracts from materialized notes from material being, it is impossible to arrive at a conception of immaterial being. Aquinas' answer to Averroes' theory that the notion of immaterial being could be abstracted from material being was that: this opinion would be true, if, as the Platonists supposed, immaterial substances were the forms and species of these material things. But supposing on the contrary that immaterial substances differ altogether from the quiddity of material things, it follows that, however much our intellect abstract the quiddity of material things from matter, it could never arrive at anything akin to immaterial substance. Moreover, in this life even were such a quidditative species to be supernaturally impressed in the intellect, the recipient could (without rapture) make cognitive use of it only by reflecting it in some sensible phantasm. Consequently, according to its present state of existence, the human intellect can know the existence and nature of immaterial beings only as a function of their perceptible effects. Even its own immaterial being and operation is known by the intellect only as a function of an act by which it knows some material things in a phantasm.  

Because the understanding of a material being is a perceptible effect which is fully proportionate to the power of his soul, man can comprehend the immaterial nature and power of his own soul. The perceptible effect of other immaterial beings, however, is not adequately proportioned to their nature and power. Consequently, man cannot form an adequate positive conception of immaterial beings even by the discursive process through which he becomes aware of their existence. The fact is that we can know immaterial beings only by a simultaneous affirmation of their causal relationships to their sensible effects and a judgmental separation of their proper reality from the materialistic conceptions we form of them based upon their sensible effects. The reason for this separative judgment is that there is not a sufficient proportion between material and immaterial beings, and as Dionysius says (Cael. hier. ii) the likenesses drawn from material things for the sake of gathering some understanding of immaterial things are more unlike than
Although true of all cognition of immaterial beings, the soul and its powers and acts alone excepted, this condition applies pre-eminently to knowledge of divine things. Created immaterial beings do not share the same natural mode of being as material things, but they at least belong to the same logical category, the category of substance, and according to this common aspect something positive can be known about them through comparison to material things. God, however, does not even belong to the same logical category as material beings; he transcends all categorization. Consequently, nothing positive can be known about his nature through material likenesses.

In the Thomistic tradition after Scotus it has become common to speak of transcendental concepts as being derived from material things by abstraction but being predicable proportionately of both created and uncreated being. The abstraction by which they are obtained is not a perfect one such as would yield a univocal concept of immaterial being, but an imperfect one. The concept which results contains confusedly, imprecisely, and potentially the distinction between the two modes of being. It is, therefore, no longer formally a concept of a created being but only proportionately, just as it is proportionately a concept of uncreated being. In and by such transcendental concepts we know God directly though not perfectly.

In the post-modernist period, however, this thesis has come under heavy attack even from within the Thomistic school. Space does not permit me to enter into the details of this discussion. However, in my opinion, the best account of the way in which the concepts we derive from material things bear upon the divine is that given by Edward Schillebeeckx. According to Schillebeeckx's interpretation of St. Thomas, even the so-called transcendental concepts do not as such contain God even proportionately, though they objectively signify him in being predicated of him. In themselves they remain created concepts; that is, they represent a perfection as it is realized in its created mode. But because this perfection is a participation of the perfection found really and essentially in God, the creaturely content directly expressed implies the divine perfection; that is, it objectively points in the direction of the divine realization. In knowing God discursively as the cause of these perfections in creatures, we know the divine perfection positively as lying in the direction indicated by the creaturely concept predicated.

In other words, the res significata exceeds the ratio concepti. God's own being is not contained in our concepts even proportionately, but the content of our concepts is measured by the

like.
divine mode of being. This measure is not reciprocal: creatures are like God, but God is not like his creatures; the proportion between God and the creature is not measurable, for the difference between God and the creature is infinite. Consequently, our notions can properly signify God, but not definitively or circumspectively. “We do not possess any ratio corresponding to the divine perfection, any proper concept of God.” Thus, the act of signifying extends beyond the ratio nominis [the aspect of conceptual representation], but it passes beyond this ratio in the direction which the conceptual content indicates, in such a way that the reality is really seen, but is not conceptually grasped.

As Schillebeeckx explains, the creaturely content of the transcendental perfections, objectively and of itself, indicates only the direction in which God is to be seen. God is outside our categories, but he is not "super-transcendental."

It is a question here of a positive content of cognition which objectively orients us toward the properly divine mode. Our "concepts of God" actually delineate an intelligibility which nevertheless opens out onto the mystery. The noetic value characteristic of our knowledge of God consists therefore in a projective act in which we tend toward God, not comprehending him, but knowing that he is located in the direction in which we tend. That is to say, our knowledge of God is not a kind of blind shot into space. God really lies in the perspective of the intelligible content of the "transcendentals," which thus point us positively toward God, even though we cannot positively locate him with any more precision within this defined perspective.

If Schillebeeckx' theory be correct, it is clear that the knowledge of faith, since it is concerned principally with divine things will be thoroughly permeated by this unique non-conceptual character. However, in this thesis we are principally concerned with the relation of concepts to phantasms. The special point about the knowledge of spiritual reality is that it must ultimately be rooted not in the model phantasms used to symbolize the intelligible content, whether this be directly conceptual or not, but in the realistic phantasms which represent the sensible effects of spiritual reality. St. Thomas observes:

The phantasm is a principle of our knowledge, as that from which our intellectual operation takes its start, not as something passing away, but rather as something persisting as a kind of foundation of intellectual operation ... For phantasms are related to the intellect as the objects in which the intellect views everything it sees, either according to perfect representation or according to negation, ... Manifestly we cannot
know God to be the cause of corporeal things or to exceed all corporeal things or to be without corporeity unless we imagine bodies … 113

It is true that knowledge of immaterial things does not terminate in the senses or the imagination as the physical and mathematical sciences do. Phantasms are the source, not the term of knowledge of immaterial beings. The judgment is not formed according to the sensible representation, but passes beyond it by way of causality or separation.114

Thus, St Thomas explains Boethius' statement that we come to know the divine form by the removal of all phantasms in the following manner. Noting that we do have some sort of knowledge of the divine nature -- were this not true we could not know God's existence -- he insists that this is not even the sort of indistinct quidditative knowledge we have of material things through recognizing their genus and differentiating them from other objects by their congeries of accidents. Instead, in place of generic knowledge, we know immaterial substances through negative judgments, for instance when we see that these substances are immaterial, incorporeal, having no figure, etc. And the more negations we know concerning them, for by subsequent negations earlier negations are contracted and determined, much as a remote genus by differences … And in place of accidents, we have, in regard to immaterial substances, their relations to sensible substances, either according to a comparison of cause to effect or according to a comparison of excess.115

6. Affective Experience and the Learning Process

So far we have spoken only of the presence of the object in sense phantasms. However, there is another form of contact we have with reality, namely, affective contact. In itself, the affective order is distinct from the cognitive, but by reason of the reflective ability of sensible awareness, the cogitative sense, and the intellect, contact in affection can be virtually cognitive.116.

Affective contact begets an experience of a very special sort. In cognition the object is drawn into the knower and acquires a new mode of being in the knower. When the object of knowledge of itself exists in a lower mode of being than that of the knower, it comes to exist more perfectly in the knower than it did in itself. Thus, material things receive an immaterial mode of being in sensible and especially intellectual cognition. But when the object of itself exists in a higher mode of being than-the knower's, its cognitive presence through the new mode of being it acquires in the knower is an impoverished one. That is, as we have seen, it simply is not contained in the impressed
likeness or concept by which it is known. The opposite relationship marks the affective order. In appetitive activity the subject is drawn out toward the object. Thus, if the object is of a lower order than the subject, the subject's being is proportionately diminished. But if the object is more noble, the subject's being is expanded in being thrust out toward the object. This phenomenon is empirically manifest. Men who set high goals for themselves, provided they be realistic goals, live a fuller life than those who settle into a routine dominated by a gross pursuit of food, drink and sex.117

Since appetition too is a vital activity, it too partakes of the interiority, actuality and self-constructing character we already noticed with respect to cognition. It too is a perfection of the being of the subject; it proceeds contrary to the law of entropy in the direction of ever-increasing actuality; and it makes the subject come to be in the presence of the object. Since it is an inclination existing in the subject according to the subject's own mode of being, it is capable of functioning as a medium of knowledge. St. Thomas observes:

now the inclination of a thing resides in it according to its mode of existence. Hence a natural inclination resides in a thing naturally, and the inclination which is sensible appetite exists sensibly in the sensitive being. Similarly, the intelligible inclination, which is the act of the will is in the intelligent subject intelligibly …118

Now in appetitive activity, just as in interior cognitive activity, there is produced a term, a medium in quo for the thrust outward toward the object. This term is not, like the expressed species, a likeness of the object; rather it is a thrust outward of the subject, an impulsion, a movement, an aspiration.119 We find a sensible manifestation of this term in the kinematic sensations we experience when we are emotionally stimulated, e.g., the impulse to attack something that angers one, to throw oneself into the arms of someone we deeply love, etc. These physiological reactions are the language of appetite. Through them we communicate with reality and with other persons quite as much as we do through cognition. In the thrust outward toward the object, the object is presented though not represented, and contact is made or strengthened.120

Of itself, this process is dynamic not cognitive.121 But because of the presence of internal acts one to another, it passes into cognition. Because of the reflective ability of the internal sense and the intellect we become aware of our emotions. But these movements lead out toward the object, so that in becoming aware of the emotion we become aware of the object itself in a new and altogether unique way.122 We experience it concretely, singularly and uniquely as good or evil. The appetite moves out to
the object as good, and the cognitive powers experience in this movement the goodness of the thing as truth and thus know it intimately in its being.

The term of the affective knowledge begotten by this reflection is a value judgment. The affective movement and its intrinsic term do not themselves terminate the act of affective knowledge, rather they determine the judgment as a formal ratio, that is, in the manner of a middle term in demonstration. The internal term of affective knowledge is the evaluative judgment; the affection is its determining cause. The object is known "in the light of being loved."

The process of affective knowledge seems to be something of this sort. The intellect together with the sensitive powers abstractively grasps a potential suitability of the object to fulfill and perfect the knower's being. Drawn by this abstract likeness of the object as it is presented in speculative knowledge, the will elicits an act of love. Thus, the potential suitability of the object is actualized in the thrust of the person toward the object. As the appetite reaches out toward the object in its real existence, it establishes an active proportion between the person and the object of his love.

Carried along by the dynamism of the will the intellect attains a new appreciation of the goodness of the object. Instead of an abstract recognition, there is now an actual esteem for it, a savoring of the good in its concrete being. There is no new formality of the object revealed to the intellect, but the formality previously known is now perceived with a greater realism and a deeper intimacy.

The reason for this deepening of experience through affectivity lies in the fact that although the good of everything is constituted in its own being as caused by God, this goodness consists formally in a relation to appetite, so that an object is good formally and actually only insofar as it is the object of an actual appetitive inclination. Consequently, the goodness of an object is revealed to man in its perfection only insofar as the thing is the object of actual appetite. It can only be known fully and formally as good if it is loved and precisely as it is loved. Knowing is having the form of another as of the other, and the goodness of an object is possessed formally by the knower only in the union of love. Therefore only through love as a medium of knowledge can there be a real perception, a savoring of the goodness of the object.

Affective knowledge is both experiential and non-conceptual. It is very like the experiential knowledge of the external senses, which are in immediate physical contact with their object. The presence
effected in affectivity is not an immediate physical presence, for it is
mediated by the affective union of the lover and the beloved, but the
presence of the beloved in this affective union, as the act of love
reaches out toward the object of love in its real existence and seeks
immediate physical possession of the object, bears a strong likeness to
immediate sense experience. For the proper object of affection
knowledge is the thing loved precisely in its real existence and
concrete individuality. Affective knowledge, therefore, is even more
truly non-conceptual than speculative judgmental knowledge. Since the
goodness of the object is intelligibly present to the intellect in the
affective union of love, there is no need for a representative likeness.
And, in fact, no representative likeness or concept can adequately
express its content. This does not mean that concepts and phantasms
play no role in affective knowledge; without them there would be no
affection for the object, for love follows knowledge. But the new
intimacy grasped in affective knowledge is not itself expressed in the
concept, any more than the real mode of existence grasped in
speculative knowledge is directly expressed in the concepts used. It is
grasped in the concomitant and compenetrating affectivity which in the
act of judgment the intellect explicitly unites with the conceptual
moments of its knowledge.

Affective knowledge does not of itself yield any more than a
more intimate and penetrating realization of the goodness and reality
of the object known. However, by focusing the attention of the
cognitive powers upon the object, affective knowledge can incidentally
give rise to a deeper speculative penetration of the object according to
the usual mode of cognitive penetration. This can happen especially
with respect to the goodness of the object. Such penetration, however,
is no longer simply a matter of affective knowledge.

Of course, the intervention of affection into the cognitive order
can have other effects too. Since its effect is to intensify speculative
value judgments and to render them more realistic, the affective
reaction can reinforce and intensify false as well as true judgments: it
can make false judgments seem so real that we become blinded to
counter evidence. For this reason the sciences seek for objectivity
and emotional detachment. Objectivity, however, has its own
peculiar blindness. Emotional detachment can be purchased only at
the cost of replacing realistic by symbolic phantasms, for the sense
appetites react spontaneously to realistic phantasms. Thus,
detachment and abstraction go hand in hand. In seeking complete
objectivity one can lose not only the special sense of reality that the
affective reaction gives, but also, the absolutely basic cognitive
contact with the concrete reality as presented in realistic phantasms.
The true goal of knowledge is not pure detachment but the penetration
of true speculative judgment by affective evaluation.
7. **Provisional Summation and Orientation**

In the preceding sections we have attempted to inventory the various conceptual and experiential elements and moments which enter into the integral operation of human cognition. We have seen how even in apprehension the conceptual grasp of particular intelligible aspects of material things is complemented by an implicit, non-conceptual intuition of their concrete mode of being and of their unexplicated intelligible aspects, the basis for this intellectual intuition being the return of the intellect upon the phantasm in which the object is represented. Next we saw how in judgment the intelligence of man explicitly unites these two moments of apprehensive knowledge so that it explicitly knows the object in its proper mode of being. At that point we noted the role of language in thinking: how it expresses both conceptual and perceptual content, and how as a symbolic representation it must always be referred to perceptual experience of reality in realistic phantasms. Then after noticing the relation of conceptual and intuitive moments in discursive knowledge defined principally by its explanatory function, we considered the special relationships which exist between conceptual and non-conceptual moments in discursive knowledge of immaterial beings, especially God. Finally we noted how this structure can be permeated and intensified by the special effects which affectivity brings to cognition. Now it is time to relocate this structure within the context of socialized learning and to note how these elements and moments are modified when utilized by vicarious experience and taught interpretation.

**C. LEARNING THROUGH COMMUNICATION**

1. **Symbolic Communication of Meaning**

Most of our learning takes place through instruction rather than personal discovery. From infancy the child is forever surrounded by teachers who endeavor to form his behavior and influence his thought. Man is a communicative creature, he creates meaning and communicates it with his fellow men. Even animals have means of communication which they rely on extensively. Studies in animal psychology have shown the important role learning plays in the acquisition of the necessary behavioral patterns among the higher animals. Among men there are almost no innate behavioral patterns; everything must be acquired through social communication.

There are many devices for teaching. Physical skills are usually learned through being put through the motions. A mother teaches her infant to eat with a spoon by putting the spoon in the child's hand, grasping the child's hand in her own and then guiding the child's
hand as it goes through the motions of picking up the food and carrying it to the mouth. Similarly, the golfing instructor shows the novice how to hold the club by forming the learner's hands around the handle so that he "gets the feel of it." Showing is another important device. Before she puts the child through the motions with the spoon, the mother has probably demonstrated the motion by performing the action herself and letting the child "see how it is done." 

"Showing" is the primary means of teaching whenever it is a question of learning something other than a skill. Parents "show" their child how soft the rabbit is by putting the rabbit in their child's arms so the child can feel it. They point out the rainbow in the sky, etc.

Many things, however, cannot be learned by the simple processes of being put through the motions or being shown. Whenever the operation to be learned is internal rather than external, it is impossible to teach it by putting the learner through the motions directly. It is impossible to put someone through the motions of thinking unless it be a question of the external expressions of thinking, e.g., the procedures of counting. Similarly, one would not attempt to "show" a child how hot the stove is by burning his hand on it. To surmount this obstacle, we have recourse to symbolic forms of communication. It is through symbolic communication that most teaching is done. We describe and explain things and procedures in words, pantomimes and diagrams.

Symbolic devices for communication belong to that general class of objects we call signs. Signs are relational realities. They have as their function the manifestation of something other than their own ontological reality. Symbols are distinguished from signals within the general class of signs. Signals communicate only in the sense that they announce the existence of what they signify. Smoke announces fire; a shout indicates danger; dark clouds announce an impending storm. The proper response to signals is action not thought, whether imaginative or intellectual. We stop at a red light; we take cover when dark clouds swirl overhead; we look out for our safety when we hear a shout. Symbols, on the other hand, communicate meaning in a more proper sense; they stimulate thought not action. If someone were to yell "Fire!" at this moment I would run for my life. "Fire!" is a signal to act. But in other contexts that sound is a symbol. It evokes in my imagination a picture of the fires I have seen and calls to mind the understanding I have of the process of combustion.

Before going further, we should note the existence of two kinds of symbolic communication and consequently of symbolic phantasms: representational or "iconic" and non-representational. Diagrams, photographs, onomatopoetic words, etc., belong to the category of representational symbols. A diagram of itself is simply a series of marks on paper, but those marks have been systematically arranged to
correspond to a schematic realistic phantasm of the thing represented. So too, a photograph is of itself only a varicolored piece of paper; but through the mediation of optical and chemical agencies, it bears a likeness in figure, shading and color to the object it represents. A word like "buzz" is a schematic imitation of the sound it designates. On the other hand, the vast majority of symbols especially verbal symbols are non-representational. Most flags, for instance, are non-representational, their color-schemes and patterns being quite arbitrary. Even words like "bumblebee" which may have originally been onomatopoetic have for the most part lost their representational character, and the vast majority of spoken words seem never to have had any representational character. Needless to say, written words, at least in languages using the Roman and Greek alphabets, are in no way representational.

Representational symbols and their phantasms are in themselves actually meaningful to the extent that they actually represent the object signified. Non-representational symbols, on the contrary, are actually significant only on the basis of association with representational realistic phantasms. We learn the meaning of words by associating them with experiences of objects or with known symbols which have been associated with objective perceptions. Thus, the child learns the meaning of the spoken word "bread" by being taught to associate it with the reality he sees on the table and eats. Later he learns the meaning of the written word "bread" by associating its visual appearance with the spoken word.\textsuperscript{132}

Recalling what we said earlier about the role of symbolization in intellectual activity, it should be clear that once I have learned the meaning of non-representational symbols through association of phantasms, the symbol itself is potentially intelligible. When I see the flag of the United States, I need not picture America, or the Capitol or something of that sort; the flag itself is meaningful. When I hear the word "fire," I need not call up actually the complex of realistic phantasms associated with it. In the verbal phantasm itself, made actually intelligible by the illuminating action of the agent intellect, I can understand the process of violent oxidation accompanied by release of energy in the form of heat and light. The verbal phantasm here stands as a vicar for the complex of realistic phantasms which are the existential basis for my intellectual understanding.\textsuperscript{133} For the perfection of my understanding, however, it will be necessary at some point to return upon the associated realistic phantasms in order to take explicit cognizance of that existential basis.

2. \textbf{Verbal Symbols and their Interpretation}

Language is our principal means of communication, even
though gesture, facial expression, visual aids, etc. do much to supplement and clarify the meaning carried by our words. Of course words have many other functions besides symbolizing and communicating information. We ask questions, issue commands, give vent to feelings, take oaths, perform rituals, engage in empty talk, etc., and in all of these activities we use words, yet none of these communications are strictly speaking informative. Our concern at the moment, however, is with the informative function of words.

At the outset we should note that the basic unit of linguistic communication is not the isolated word or sentence but the total "verbal image" that is expressed in more or less complex sentences, sometimes reduced to a single word, but always corresponding to the total expression or meaning. This complex whole is uttered and perceived over a period of time, however. It is thus by nature discursive. In living dialogue it will be punctuated by questions and interjections, replies and repetitions. Despite this successive character of the elements of the verbal image, however, its meaning is known by a single integral act which is gradually perfected as the perception of the words and the assimilation of their meaning progresses.

The way verbal symbols are interpreted varies with the meaning they carry. In general, we can distinguish three kinds of verbal meaning: descriptive, explanatory, and aphoristic.

a. Description

When the meaning conveyed by the total verbal image is descriptive or narrative, we spontaneously tend to convert the verbalized meaning into a more or less vivid picture of what is related. This is the case whenever words merely symbolize concrete singulars. This conversion is the result of the spontaneous operation of both the intellect and the internal senses.

The only thing that passes into my mind as I read a description of the Great Fire of London in 1666 is the visual appearance of the words used. Nevertheless, associated habitually in my imagination with those words are certain patterns of realistic phantasms, phantasms representing objects I have either experienced directly or have learned about through the descriptions of others. At the same time the words themselves have an intelligible content for me. Under the direction of the intellect which is guided by the intelligible content of the verbal signs, the internal senses synthesize out of the associated realistic phantasms a more or less perfect representation of the events described.
This synthesis is not a random associative process. It is directed by the intellect which relies on the intelligible content of the verbal phantasms as a rule for directing the associative process. Thus, as the description continues, the phantasm is gradually perfected: mistaken constructions are corrected and new details are explicated. Of course, the resulting phantasm never perfectly reproduces the event exactly as it was perceived by the narrator. It is simply beyond the power of words to express everything that one actually knows.

The effect of description or narration is very much like the experience of direct perception. Of course, it never attains the full reality of a direct or a remembered direct perception. But in the phantasm evoked, the concrete datum is known in its existence in much the same way as the concrete object is known in a direct perceptual experience. Thus, the intellect can grasp particular intelligible aspects in this concrete representation and thematize them for itself. The phantasms evoked by such descriptions can, like the phantasms produced by direct perception, be used as a basis for the abstraction of new intelligible aspects. They can be integrated into perceptual experience to fill out the horizon of perception. However, the only intelligibility directly expressed is the immediate intelligibility of the concrete facts in question. Reflecting on the reality phantasms the intellect understands "it is true that" or "it is probable that" or "it is possible that" the event occurred in this way.

b. Explanation

When the meaning communicated is not concerned with concrete singulars but with abstract conceptual definitions and explanations, even if these should be concerned with particular things, the synthesis of realistic phantasms is not so spontaneous. Although in the direct process of knowing we discover such truths by seeing them revealed in highly complex realistic phantasms illuminated by the agent intellect, we have already seen how we tend to use symbolic phantasms, whether words or model phantasms, to think about them. Thus, the man who has learned the meaning of the definition "man is a rational animal" through the complex philosophical induction that manifests it, grasps its full intelligible content in the verbal phantasm itself.

We may ask, however, what kind of meaning such statements Iconvey to one who has never grasped the stated truth in the requisite realistic phantasms. Several levels of meaning are possible. The listener may grasp only the fact that the unknown meaning signified by the words is true. He may learn to parrot the statement but it has no more than nominal meaning for him. His knowledge is purely verbal. A somewhat higher form of verbal learning occurs when the symbolic
meaning of the words is vaguely grasped. Suppose someone ignorant of history were to hear the statement "Napoleon's downfall began when he invaded Russia." If this is all the person has ever heard of Napoleon, his history, or Russia, this statement will mean little more than: "Napoleon (an historical personage of some sort) invaded Russia (something apparently difficult to do), and this (for some reason or other) led to a downfall (of some sort or other)." Here too, there could be an intellectual assent to the statement, but little or no real meaning understood, for the listener has no reality phantasms to turn to. Such purely nominal learning is very common, especially when it is a question of learning abstract facts, explanations and definitions; The definition "man is a rational animal" is the result of a highly complex discursive philosophical investigation of the cause of characteristically human phenomena. Yet, it is known generally among philosophically unsophisticated people who probably understand by it little more than that man has a body with legs, arms and hair, and that in the most ordinary sort of way he can "think." This is a kind of pseudo-learning, for the listener thinks he understands the meaning of the statement whereas in fact he does not. Here too, there can be real assent given to the truth of the proposition with little or no assimilation of meaning, because of the lack of the requisite realistic phantasms.

Quite contrary to these forms of verbal learning is the learning that takes place when the listener either already possesses or is able to synthesize and organize the realistic phantasms required to understand the real meaning of the communication. Thus, the historian who over the years has read many accounts of Napoleon's career, who has walked over the battlefields, or seen them in pictures, who has come to understand the complex causes that led to the invasion and the subsequent downfall is able to grasp the real import of the statement that Napoleon's downfall began when he invaded Russia. Not only does he assent to the truth of the proposition but he understands the significance of the statement. But even a novice historian, who has not yet come to understand the causalities involved, but who has read enough to picture the terrible events of the invasion and the retreat, has an imperfect real understanding of the significance of the terms. Such is the case whenever it is a question of simple descriptive knowledge. In the realistic phantasms evoked by the words, the intellect apprehends concretely the intelligible natures and the being of the objects represented without proceeding to any generalization or explanation.

Between these various levels of assimilation of meaning there is a certain continuity. The unintelligible definition becomes nominally intelligible for me as I begin to find real referents for its terms. As I continue to reflect on it in the light of the context I gradually form a realistic image of the subject of discussion and begin to grasp the intrinsic intelligibility of this object; thus, the sentence begins to take on meaning for me. As I continue to reflect I penetrate ever more deeply into the meaning of the statement, uniting more and more
phenomena in the complex phantasm which serves as the instrument of my understanding. The interpretation of philosophical texts offers striking examples of this gradual penetration of the meaning of a statement. Martin Heidegger, for instance, tells how time and again he worked his way through Franz Brentano's dissertation *On the Manifold Sense of Being in Aristotle* which opens with a cryptic quotation from Aristotle: “τὸ ὄν λέγεται πολλαχῶς”, translated by Heidegger as "A being becomes manifest (sc. with regard to its Being) in many ways." In that cryptic phrase he was to find the determining direction of his thought. But this process of gradual assimilation of the meaning of a verbal communication is by no means confined to philosophy. It permeates all communication situations, for, as we have already noted, it is impossible to express directly and explicitly in a single sentence the full meaning one intends to communicate.

It is important to note two differences between the processes of learning through descriptive and through explanatory verbal presentations.

The first difference concerns the process of imaginative representation. In descriptive communication, the text itself, as we have seen, guides the synthesis of the appropriate realistic phantasms which represent the concrete object under discussion. In explanatory exposition, however, the text itself does not guide the synthesis of realistic phantasms. Rather, it supposes that the listener is already sufficiently familiar with the object under discussion, either through personal experience or through the assimilation of descriptions of the object. If the listener does not already possess this experiential knowledge, no amount of repetition or conceptual clarification of the purely abstract, explanatory message will avail to communicate the meaning. This is why it is essential for the teacher who would communicate a conceptual interpretation of some phenomenon or procedure to supplement his exposition by pointing out concrete examples in the experience of the listener and by describing objects with which the listener would not otherwise be familiar. By doing so the teacher guides his listener to synthesize or recall the appropriate realistic phantasms in which the student himself comes to see the intelligible meaning emerge. This is why visual aids are so important in any conceptual communication. Whenever it is a question of imparting a conceptual interpretation of some phenomenon, the aim of the teacher must always be to so organize the realistic phantasms of the student that under the illumination of the student's own agent intellect, the student himself sees the intelligible meaning of the phenomenon represented and gives his own conceptual expression to it.

That brings us to the second difference between the kinds of learning that take place through descriptive and expository verbal presentations.
When it is a question of learning through descriptive presentations, we express our understanding immediately in the realistic image into which we convert the verbal image. Although it is natural for us to communicate our knowledge of concrete, individual objects in words, we do not spontaneously think about them in words. Although the words we use may serve as highly symbolic vicars of complex representative phantasms rich in potential meaning, for example, the word "man" to a psychologist or anthropologist, when they are used in strict factual description, they point to the concrete object in question and not to the complete complex of phantasms which grounds the full intelligible meaning they are capable of representing. When the psychologist says that the man next-door is intelligent, he signifies directly the concrete man who lives next-door and not the full complex of phantasms representing the many men whose observed activities form the basis of his scientific inductions about the nature of man. The meaning grasped in this concrete image is analogous to that found in direct perception in which we know sensible objects immediately present to us, i.e., "we remain directly aware of the object, even though an idea of it is conceived in the composite sensory-intellectual act of perception (usually judgmental)."  

On the other hand, when it is a question of learning abstracted intelligible meanings by assimilating expository verbal presentations, we not only actually or virtually elaborate realistic phantasms in which the intelligible content is apprehended and judged, but we reexpress our intellectual understanding by stating it again in our own words and models. The process here is the same as the one which takes place when we give linguistic and symbolic expression to insights acquired by-personal discovery. This re-statement enables us to take reflective possession of the intelligible content of the message as we have understood it and, therefore, to check our understanding with the source. Thus, the student enters into dialogue with the teacher. This dialogue by which we check the accuracy of our understanding of the message is most clearly evidenced when it is a question of two living persons present to each other and conversing with one another, whether inside or outside the classroom. But it is found analogously even when it is a matter of reading a written communication from someone who is not present and available for questioning. 

Without this re-statement of one's understanding of an expository communication, learning remains implicit and imperfect. It is not enough simply to parrot back the words of the teacher, as an extreme dogmatism demands. On the contrary, the assimilation of intelligible content demands that the listener interpret the communication in terms of his own vocabulary and conceptual system. Only in this way can he take reflective possession of the message. Likewise, it is only in this way that the teacher can judge whether the student has actually grasped the meaning he intended to communicate.
c. Aphoristic or value statements

We have seen that verbal description corresponds roughly to perception in the direct process of learning and that verbal exposition corresponds to conceptual understanding in the direct process. The third type of statement we have to consider corresponds generally to the evaluations of affective knowledge. Consider, for instance, the statement "democracy is the government of free people." In the context of a textbook on political science, this statement might have mere expository value, serving as a definition of a certain form of political organization. In that case its understanding would suppose that the listener had sufficient experience of the various forms of political system denominated by the word "democracy" to see that the statement offers at least a reasonably accurate definition. As used, however, in a newspaper editorial or a political speech, it is loaded with affective connotations. In the vocabularies of both communist and capitalist systems of economic and social organization, the words "democracy" and "government of free people" are value terms expressive of an attitude of intense approval, but concrete referents and intelligible content of these terms in the two systems stand poles apart.

The meaning communicated through aphoristic statements is principally the attitude of the speaker. Thus, in aphoristic discourse the words used may be cut off completely from their conventional denotation. The word "science," for instance, generally denotes some kind of disciplined body of knowledge. By reason, however, of its use in the controversies between humanists and believers, it has come to symbolize for some humanists true knowledge as opposed to religious myth, whereas for some believers it means a false form of knowledge which challenges religious belief. Any area of communication which touches man's basic concerns, e. g., religion, politics, ethics, etc., is bound to be full of such aphoristic expression. The recent history of the Church's encounters with the modern world is full of such aphoristic usage, for example, the usage of terms like "modern," "science," "freedom," "aggiornamento,"

The interpretation of such aphoristic statements demands that the listener grasp not so much the meaning directly denoted by the words themselves, but rather the emotional attitude of the speaker and the realistic phantasms together with their intelligibility that the speaker himself has in mind. Just as in abstract exposition, the terms used offer no effective guide to the synthesis of appropriate realistic phantasms, so also in aphoristic discourse the words used offer little help in grasping the real object of the speaker's evaluation. This must be obtained from the context of the aphoristic statement, e. g., the occasion which provoked it, the habitual attitudes of the speaker.
3. Signification and Attestation in Verbal Communication

As we have seen, it is possible in assimilating the meaning of a verbal communication to penetrate to depths of meaning that the speaker himself either did not grasp or did not mean to communicate. Illustrations of this phenomenon are numerous. A patient tells the doctor her symptoms, the doctor realizes that she has cancer. A brilliant disciple understands the words of his teacher better than the teacher himself does. These are examples primarily of deeper intellectual insight. But it is possible for there to be a richer phantasm content too. A reporter gathering the testimony of many eyewitnesses forms a richer imaginative representation of the event than any of the individual witnesses possess, though their particular impressions will be more vivid. Hence, when he listens to the testimony of other witnesses, he truly sees more than they do. We may ask, therefore, what relation this deeper meaning has to the act of communication.

Edward Dhanis suggests that we must distinguish two aspects of communication: signification and attestation. So far, we have been concerned principally with signification. When they are externally expressed in speech or writing, words take on a kind of objective character. They become public property. They become detached to some degree at least from the situational and verbal contexts and the field of private meaning. They cease to be dominated by the speaker. As uttered by the speaker they gave expression to a meaning which was larger than what the words immediately denominate. That larger meaning may or may not be grasped by the listener. On the other hand, the same words as-understood by the listener may contain more meaning than the speaker himself grasped. The meaning that the words have for the speaker and the listener is their signification.

Signification may be either direct or indirect, expressed or implicit. If I should say "Bernard has written a fine poem today," I directly or expressly signify only that a certain person named Bernard has composed a literary piece of a certain type and quality. But to me, Bernard is not some indeterminate person; he is a friend. I have read his poem, I know its theme and the way it develops; I know the experience that inspired it, and I know the reaction it evoked from me. I know the talent and the work that went into its composition. All this is part of the indirect or implicit signification, part of its connotation. To another mutual friend, most of this implicit signification is immediately accessible, being supplied in the phantasms evoked by my words in context. Even a stranger, however, can understand more than the direct signification. He can surmise that Bernard is a man, that he is an acquaintance of mine, that he has a certain amount of intelligence and literary talent. From the point of view of the listener, therefore, we can distinguish two forms of indirect or implicit signification. One is immediate, known by an immediate perception.
in the phantasms called up by the statement. The other is mediate or virtual, it supposes the intervention of discursive reasoning based upon intelligible relationships, e.g., that "Bernard" is a masculine name, that the composition of poetry demands talent and intelligence, etc. Note that in the example given, the mutual friend knows the same things as the stranger; but the mode of knowing differs in the two cases. The implicit signification of the statement is known by the mutual friend in an immediate, experiential mode; it is known by the stranger in a mediate, discursive mode.

As used here, signification is defined by the meaning potentially understandable in the words taken in context, it refers to the meaning the recipient of the communication is able to perceive in the statement. Attestation, on the contrary, is defined by the speaker's intention to communicate. The phenomenon of attestation is most clearly evident in legal proceedings, where a witness is called to guarantee the truth of his declarations, but it is common in all human communication.

Attestation may be formal or virtual. One formally attests to what he intends to communicate, what he asks his hearers to understand and accept. In saying that "Bernard wrote a fine poem," I formally attest at least to what is directly denominated by my statement. But what of the connotations, the truths immediately or mediatelyst implied in my statement? Do I mean to communicate them, to attest to them? I may or I may not. If I intend to communicate the implicit as well as the explicit content of my statement, then this implicit content is part of my formal attestation.

To take another example -- suppose I say to an acquaintance that I think saturation bombing of cities is manifestly unjust and cannot be justified. Seeing the implications of my statement, he replies, "Do you mean to say that we should not have bombed the German cities in World War II?" "That's exactly what I mean," I reply. My reaffirmation of the content of my first statement adds nothing to it. In my first statement I had already formally intended to communicate the conclusion implicit in my statement.

Virtual attestation is strictly speaking not attestation at all, for it does not fall within the perimeter of meaning intended to be communicated. Nevertheless, insofar as it is truly and certainly implied in what is objectively said, it participates in the attestation of the original statement. Legal practice recognizes the reality of virtual attestation by excusing a defendant from answering questions which, by their implications, might tend to incriminate him. Virtual attestation need not be against the intention of the speaker as in the case of self-incrimination. It is sufficient that it fall outside the speaker's real intention, even though he may not be unwilling that the truth be known. The case can even occur in which the speaker is happy the truth is known, though he did not will that it should be revealed through his statement. Thus, someone bound to secrecy might quite innocently state...
some fact which in the light of other known facts reveals the identity of a criminal to the authorities. Insofar as his statement is responsible for the deduction of the identity of the criminal, the speaker has virtually-testified to it. But since it was not his intention to reveal the secret, even indirectly, his testimony is not formal.

Since formal attestation is determined by the speaker's intention to communicate, the manner in which the hearer grasps the meaning intended makes no difference. Thus, formal attestation can attach indifferently both to explicitly and to implicitly signified meanings and, among the latter, both to immediately and mediately implicit meanings. All that is required for the inclusion of implicitly signified meaning is some evident manifestation of the intention to attest to it. Usually such evidence is given by the context, gesture, tone of voice, etc. Thus, in the example cited, the fact that I placed great stress on the unjust character of saturation bombing of cities, indicating my attitude by my gestures, facial expression and tone of voice, would reasonably be construed as an indication that I formally intended my listeners to conclude that I thought we should not have bombed the German cities.

A little reflection will reveal how common formal attestation of implicitly, signified meaning really is in daily life. The husband who comes home from work and tells his wife that he has just had a terrible day at the office formally intends that she draw certain conclusions about how she should treat him that evening. The unfinished sentences that play so large a role in informal conversation -- sentences left unfinished because the listener has obviously gotten the point -- are a very common form of such attestation, likewise, the impatient "you know what I mean", with which we bring to an abrupt end those involved explanations that we cannot otherwise bring to a satisfactory conclusion.

4. **Belief, Understanding and Assent**

The reception of any verbal communication has two phases, a phase of interpretation and a phase of judgment. The interpretive phase has as its goal simply the grasping of the meaning of what was said. The interpretive phase itself is composed of apprehensive and judgmental moments. The listener forms phantasms and concepts to grasp the meaning of the terms; as the communication develops he checks these against the new data being presented. Thus, the complex of phantasms and concepts is gradually corrected and refined through judgments determining their conformity to the symbolic meaning expressed in the verbal phantasms and illuminated by the agent intellect. The aim of such judgments, however, is simply to determine whether or not the listener has grasped the intended meaning of the
communication. Hence, these judgments remain within the interpretive phase.

In the judgmental phase proper, what is in question is no longer the relation of the assimilated meaning to the intended meaning but of the intended and assimilated meaning to reality. Of course, these phases are not ordinarily temporally successive. Because of the need to make use of realistic phantasms in the interpretive phase, comparison of the assimilated meaning with the intelligible content of the phantasms comes spontaneously. In the course of assimilating any communication, we tend, therefore, to make spontaneous but provisional value judgments of the truth or error of the communicated meaning. These judgments are the same sort of reflex judgments that perfect the judgments we make in direct learning, namely, the reflex judgments of assent, opinion, belief, suspicion or doubt {in reality the withholding of judgment).

We have already noted how these reflex judgments enter into direct learning; now we must consider them as they are involved in communicated meaning. Sometimes when we have understood a verbal communication, its truth or falsity is so evident in the phantasms and conceptions that we have elaborated that we give immediate intellectual assent or dissent to it, just as we would to the same truth acquired by personal discovery. Such is the case when we listen to statements of primary universal principles like "the whole is greater than the part," etc., or follow with real understanding the course of a scientific argument, e.g., the proof of a mathematical theorem.

Most communicated meanings, however, are not so evident. Where the intrinsic evidence is not sufficient to manifest the truth of the statement, that is, when the realistic phantasms evoked are not clear enough to reflect the conceptual meaning of the verbal phantasms, or when the accuracy of the realistic phantasms cannot be guaranteed by direct perceptual experience, either present or recalled, it remains possible to assent to the truth contained in the statement on the basis of the authority and credibility of the speaker. Such is the case in belief. The object of belief is the intended meaning of the statement, not the meaning here and now apprehended.

It may happen that meaning actually apprehended may be no more than that the statement means something (whatever that something may be) and, that the statement as such is true because it is attested by the authority of the speaker. Thus, the beginning philosophy student who learns the distinction, "Conceptus formalis est productum mentale seu idea prout consideratur ut quaedam entitas quae in mente et a mente producitur, Conceptus autem objectivus est producti mentalis contentum seu significatum, i.e., idea prout consideratur ut repraesentatio vel imago alicuius rei," may have not the slightest
notion of even the nominal meaning of the statement. Nevertheless, to the extent that he has learned the formula, believing it to be true, he has implicitly appropriated its objective meaning.

Later, in the silence of his room he turns over the unfamiliar words in his mind. Painstakingly he traces their grammatical connections until he finally begins to realize at least the nominal value of the statement. Driven on by his conviction that the statement is meaningful and true, he uses this nominal meaning to discover, in the fund of his experience, the phenomenological foundations of the distinction. He is thus now on his way to real understanding. Organized and refined progressively by the intellect's understanding of the nominal meaning of the formula, the phantasms representing this experiential basis for the distinction gradually become luminous by the proportionate illumination of the agent intellect. Through them the student begins to see, i.e. understand, the distinction. At first his knowledge is vague and indistinct, and it may even be mingled with deceptive representations, as, for instance, when the student using physical models to express his dawning insight begins to imagine the formal and objective concept as two separate, quasi-physical entities. Provided, however, he does not settle upon such an imperfect understanding in a judgment -- a judgment which would be erroneous, and continues to be guided by his belief in the objective meaning of the statement and not simply his partial understanding, he remains in possession of truth, albeit an imperfect possession through belief.

Finally, if he continues the process of thinking long enough and is intelligent enough, the student finally acquires sufficiently refined phantasms to enable him to judge the truth of the statement upon intrinsic evidence. Thus, his belief finally gives way to full assent. The words of his teacher have finally become his own. If he should cite them in an article he writes or a talk he gives, his reference to his source will no longer be an appeal to extrinsic authority as it would have been earlier; instead, it would be a simple expression of indebtedness for an appropriate expression.

This analysis suggests that we should distinguish two very different forms of the appropriation of truth through belief. In one form -- we might call it "pure faith" -- there is no understanding, only belief. Hearing the statement, the listener believes it to be true, but knows only that it means something; what that something is he does not know. In the other form -- we might call it "faith-understanding" -- the listener believes the statement to be true and understands to some extent what it means, but his understanding is not clear enough to reveal its intrinsic truth. We shall now examine more closely how the believer appropriates the truth in these two different forms of belief.
a. **Pure faith**

In this case the believer does not know *what* the statement means, but he does know that, whatever it should mean, as a statement it is true. Consequently, he knows implicitly and intuitively: (1) that if this statement is true, nothing irreconcilably contradictory to it can be true and, (2) that in striving to penetrate the truth of the statement he will come to true knowledge of the reality under discussion. In this intuition there is real knowledge, but it is a practical knowledge referring to the mind's desire for true knowledge and the dynamism of the activity by which it pursues such knowledge.\(^{151}\) Such practical intuition, expressed in the dynamism of the pursuit of truth plays a very important role in knowledge through belief. It is the spur and the guide to the progressive assimilation of truth. Formally, however, this intuition does not refer to the truth of the meaning the believer seeks to grasp; rather, it refers to the truth of the activity by which the believer seeks to grasp it.\(^{152}\)

b. **Faith-understanding**

The basis of real understanding, we have already noted, lies in the ability to correlate the meaning verbally expressed with the phantasms which embody the reality about which the words speak. This correlation will often be a gradual process. In this process the practical intuitions regarding the dynamism of the believer's search for meaning continue to operate, but something more is added. As the believer begins to elaborate appropriate realistic phantasms and to see the conceptual meaning of the statement as emerging from these phantasms and reflected in them, the believer comes to an implicit intuition of the real meaning of the statement. This intuition is very similar to that found in the non-conceptual moment of knowledge of immaterial and divine realities through their imperfect material representations. The believer knows that the truth of the statement lies along the line of vision opened up by his imperfect imaginative and conceptual representations, though, in fact, he does not see exactly what that truth is or why it is true.

The difference between these two forms of appropriation can, therefore, be stated in this fashion. In *pure belief*, the appropriation of truth is really not cognitive in the strict sense; it consists formally in the dynamism of the process by which the believer seeks the truth. It is cognitive only in a secondary and practical sense, i. e., the believer knows that, by pursuing this activity, he is approaching the truth. On the contrary, in *faith-understanding*, the appropriation of truth is truly cognitive. It consists in a real implicit intuition of the objective meaning of the statement in and through phantasms and conceptions that only very imperfectly represent that meaning.
5. **The Scientific Elaboration of Understanding in Belief**

Human cognition is thoroughly permeated by belief. Belief is the foundation of the historical sciences. Much, of course, can be gleaned by discursive reasoning from archeological evidence, but documentary evidence remains the principal source for historical knowledge. Even in the empirical sciences, however, belief plays its part. Scientists do not personally verify every discovery or theory of their colleagues. Unless they have reason to call a point into question, they rely on the work done by other reputable scientists. So it is in all the professions: doctors rely on the work of biochemists and pharmacologists; engineers rely on the work of theoretical physicists; etc.

The dynamism which results from the man's innate appetite for true and evident understanding gives rise in the believer to a process of thinking within belief. The believer wants to see what he believes, to see why it is true and to see its implications; so he thinks about what he believes in an effort to approach these goals. St. Augustine actually defined believing as "thinking with assent." Approving this traditional definition, Aquinas explained that "thinking" (cogitare) properly refers to the kind of investigative consideration which the mind engages in before it has attained to the full perfection of understanding in the certitude of vision. What distinguishes belief from other forms of thinking is that the mind firmly adheres to the truth about which it thinks, even though it lacks the certitude that vision or demonstration would give it.

The thinking and reflection which belief stimulates is spontaneous and often quite non-reflexive. But it can also be undertaken in a methodical and reflexive way. In this way it is possible to develop a "science" of belief. One can make use of critical methods to evaluate the authority of the various witnesses, to investigate the influence of their personal convictions on their testimony, to interpret and to correlate their various testimonies into an integrated picture. One can also turn these critical methods on the object presented in their testimony. The historical sciences, for instance, study both the testimony of the various witnesses and the culture and history they present. On the basis of belief in the authenticity and authority of the various witnesses and their depositions, the historian traces the various influences at work in the culture, the effects of critical events on subsequent historical and cultural developments, etc.

The products of this thinking within belief, whether it be spontaneous or methodical, can be related to the basic state of belief in a variety of ways. Sometimes it is simply a matter of understanding the meaning expressly stated. Thus, the thinking that the beginning philosophy student engages in as he attempts to
penetrate the meaning of the statement of the relationship between formal and objective concepts was designed to enable him to appropriate the express meaning of the statement. Often, however, whether intentionally or not, this thinking in faith leads to an explication of what was only implied in one way or another in the original statement.

In the light of what we noted earlier about attestation, the express meaning of the statement clearly falls within the order of formal attestation and, therefore, the assent given to the explication of this meaning is the same as that given to the statement itself. A meaning implicit in the statement, however, may or may not be formally attested. If it is formally attested, it belongs formally to the belief that the listener gives to the speaker's statement. Thus, in the example used earlier of someone concluding from my assertion on the morality of saturation bombing that we should not have bombed Dresden and Hamburg, the man who drew this conclusion would (assuming he did not fully understand the truth of the principle) hold the conclusion on my authority and it would be part of his formal belief in my statement. On the other hand, if the conclusions the listener draws do not fall within the ambit of the formal attestation, they are known in virtue of the listener's belief in the statement, but are not formally part of his belief. Thus, were my auditor to conclude from my statement that the political and military leaders responsible for the bombing of Dresden and Hamburg should have been prosecuted as war criminals, he would know this conclusion only in virtue of his belief in my principle, but his conclusion does not formally belong to this belief, since it was not my intention to communicate it.

Note that we have spoken here in logical terms, but we must recall what was said earlier about the difference between a logical and a psychological approach to discursive reasoning. The analysis indicated above would apply quite as much to aspects of the reality which were not directly expressed in the words themselves but became evident in the phantasms synthesized in the imagination in the process of interpreting a description. When someone tells me that Chicago is buried in three and a half feet of snow, I don't have to go through a process of formal verbal reasoning to see how the snow is piled up in the backyard of my parent's home and how it covers the flowerbeds and the fence. Reflexively, I may later check my perception by resorting to formal reasoning or by checking my imagination with someone who has actually seen the snow in the backyard, but that belongs to another step in the process of knowledge. Again, we must remember that knowledge must not be reduced to infallibly certain truth.

As long as the truth communicated through the statement of the
speaker and accepted on the authority of the speaker, either formally or virtually, does not become so clear that it intrinsically compels assent properly so-called, it remains within the area of belief rather than vision. All "science" of past events not directly experienced by the historian is of this type; i.e. it possesses neither the certitude of immediate perception nor the certitude of absolutely or hypothetically necessary universal truths. Yet, it is possible for the historian to have real causal (and therefore "scientific") knowledge of historical events. On the hypothesis that the events really occurred as described by the witnesses and as grasped by the historian in his phantasms and conceptions, the historian can have true and "necessary" understanding of their causal relationships. In itself, his knowledge of the events and their connection is only more or less probable, his certitude about both the facts and their causal explanation comes from the belief that he gives to the witnesses.

My knowledge that Champoleon's deciphering of the Rosetta stone made possible the rapid flowering of the science of egyptology, is based on the accuracy and authenticity of the historical sources. Yet it is both true -- as far as I can tell -- and "necessary" in the sense that, supposing the rapid flowering of egyptology in the nineteenth century to have been caused at least in part by Champoleon's work, it is such "necessarily."

6. Summary

Our task of elaborating the natural analogue to the knowledge of faith is now complete. It remains for us to summarize and correlate the various elements we have uncovered. Rather than attempt any restatement of what has gone before, I propose to illustrate the theory outlined by applying it to a concrete example. The following passage from Plato's Apology will serve as the basis of the illustration.

The setting is Socrates' trial in spring or early summer of 399 B.C. At least five hundred jurors are present, as well as Socrates' accusers and friends. Socrates is speaking after he has been sentenced to death; he says:

…with those who voted for my acquittal I should like to converse about this which has happened, while the authorities are busy and before I go to the place where I must die. Wait with me so long, my friends; for nothing prevents our chatting with each other while there is time. I feel that you are my friends, and I wish to show you the meaning of this which has now happened to me. For, judges -- and in calling you judges I give you your right name -- a wonderful thing has happened to me. For hitherto the customary prophetic monitor always spoke to me very frequently and opposed me even in very small matters, if I was going to do anything I should not; but now, as you yourselves see, this thing which might be thought, and is
generally considered, the greatest of evils has come upon me; but the divine sign did not oppose me either when I left my home in the morning, or when I came here to the court, or at any point of my speech, when I was going to say anything; and yet on other occasions it stopped me at many points in the midst of a speech; but now, in this affair, it has not opposed me in anything I was doing or saying. What then do I suppose is the reason? I will tell you. This which has happened to me is doubtless a good thing, and those of us who think death is an evil must be mistaken. A convincing proof of this has been given me; for the accustomed sign would surely have opposed me if I had not been going to meet with something good.160

Reading this text, I accept it as a credible report of an eyewitnessi substantially at least reporting the actual words of Socrates. By that act of belief, I take in globally the whole meaning of the passage. To the reading I bring my memory of Greek history and culture, my understanding of human psychology, my system of values. As I read the account I imaginatively represent the event to myself, drawing upon pictures I have seen of Socrates, Plato, descriptions I have read of them,' etc. On this imaginative representation, I bring to bear my intellectual and conceptual understanding of human psychology so that I can understand what Socrates means when he speaks of the prophetic monitor whose apparent approval of his action is the basis of an argument for the basic goodness of what is about to happen to him.

In the event narrated there is potentially a great deal of intelligibility. In the quasi-perceptual, intellectual judgment of belief by which I affirm the reality of the event as represented in my imagination, there is an implicit, non-conceptual intuitive grasp of that fullness of meaning, a fullness which includes all the meaning that Plato intended to communicate in presenting the narrative, but more as well. In this implicit, non-conceptual moment of affirming the existence of the reality represented in the phantasm is to be found an initial global experience of the "event related. Simply as represented in the phantasms, the wealth of intelligible meaning remains implicit and potential. To actualize it, it is necessary that the phantasms be organized, clarified and illuminated by the agent intellect and the cogitative sense. Only then will these realistic phantasms be able to reflect the conceptual meaning that I derive from the verbal phantasms and to provide a basis for the discovery and conceptualization of new intelligible aspects. As I continue to reflect upon this passage, new aspects attract my attention, so that gradually in the course of my reflections I explicate the meaning given implicitly in my initial representation and assent. To give expression to my deepening insight, I might write a brief essay putting into words the aspects which strike me as most significant. As I write, I am conscious that the meaning I have grasped is greater than the meaning I have explicated in words, I expand and refine my essay seeking to give expression to a meaning
which always extends beyond the reach of my expression. It is the implicit and indirect, non-conceptual intuition of this fact that spurs me on to perfect my explication. Always, however, the point of reference is the text itself whose meaning is given to me in a global way despite the incompleteness of its conceptual and verbal explication.
CHAPTER V

CONCEPTUAL AND NON-CONCEPTUAL ELEMENTS IN
THE KNOWLEDGE OF FAITH

A. INTRODUCTION

As outlined in the first chapter, the intention of this thesis is to seek in the ordinary process of human cognition a natural analogue to the kind of implicit global experience which contemporary theologians of revelation and the development of dogma have found necessary to postulate in order to explain the known properties of the knowledge of faith. In the last chapter we sketched such an analogue.

If the preceding analyses of the process of cognition is substantially correct, the foundation of this natural analogue is to be found in the essential imperfection of man's conceptual knowledge. By reason of the abstractive character of all of human conceptions, our cognition is not purely intellectual; rather, it is an integral operation of sense and intellect. This operation is perfected in the act of judgment in which, reflecting its conceptual understanding upon a perceptual or imaginative experience, the intellect knows: (1) the concrete reality sensibly represented; (2) according to the real mode of being of; (3) the intelligible aspect conceptually represented. Thus, in the intellectual act of judgment, the conceptual moment is fused with the non-conceptual experiential moment; and the concrete reality is known.

Insofar as it develops out of the phantasms representative of the initial perception of the object, all subsequent conceptual penetration of the intelligible aspects of the object constitutes nothing more than a gradual making explicit of what was already grasped implicitly and non-thematically in the initial perception. This explication takes place not by a process of analyzing the concepts in which the initial perceptual judgment was expressed, but rather, in an analysis of the concrete reality presented in the phantasm.

The knowledge of faith, however, is not an immediate vision. It is true that we daily experience directly the sensible effects of God's saving action, for our existential experience of our own being and activity is an experience of a being which de facto either is divinized by grace or is marred by the loss thereof.
Likewise, the Church that we experience is of its very nature a supernatural community united to God in Christ by the power of the Holy Spirit, the Bible, the sacraments, and the preaching of the Church are, not merely natural realities but the instruments of salvation. Nevertheless, despite the de facto extension of our experience to supernatural realities, neither are our natural cognitive lights penetrating enough to discern the supernatural depths of these experiences, nor do we receive an immediate revelation from God indicating that depth of meaning. Consequently, we depend upon the historical word of God, communicated to us, principally at least, in the Bible, whose meaning is lived and preached in the Church. For this reason the proximate analogue to the knowledge of faith is not direct experience and personal interpretation but, rather, vicarious experience and interpretation communicated through words.

It was for this reason that we prolonged the investigation of the process of cognition to see how the assimilation of vicarious experience and interpretation takes place. Here we made two discoveries. First, we noted that the assimilation of a verbally expressed message is not a purely intellectual and conceptual process. A proper understanding of the conceptual content of the message demands that the listener either be in direct perceptual contact with the object under discussion, or else, be able to synthesize a quasi-perception of that object in phantasms of the internal senses. For this purpose verbal or model phantasms alone will not suffice. Useful as they are in more intricate operations of intelligence, words and models are potentially meaningful only to the extent that they actually stand in place of the complex realistic phantasms which alone directly represent the object to the knower. We saw that this condition obtains even when it is a case of an immaterial object of cognition, or in order to be knowable by an intelligence whose proper object is the quiddity of material beings, such objects must first be presented to the knower through their sensible effects.

For this reason there is no direct conceptual communication through words. Words convey new conceptions to the listener only by organizing the phantasms of the listener in such a way that, under the illumination of the listener's own intellectual light, the corresponding intelligible aspect comes to light in the mind of the listener. Perceptual or quasi-perceptual experience, therefore, plays proportionately the same role in learning through instruction as it does in learning through personal discovery. So true is this fact, that the listener gifted with a more penetrating intellectual light and the ability to reproduce a rich enough phantasm, may actually see deeper into the objective meaning of a statement than did the original speaker.

Secondly, we noted that when a listener gives the assent of belief to a statement, he makes his own the full objective meaning of the
statement even though here and now he has little or no actual understanding of what the statement means, knowing only that, whatever it does in fact mean, it is true. This projective appropriation of meaning in itself is not cognitive (except practically) but dynamic; that is to say, it consists not in any actual appropriation of the content of the statement, but only in the dynamism of the cognitive actions by which the listener seeks to penetrate the communique's significance. When linked, however, with even the most rudimentary grasp of real meaning through the development of realistic phantasms and the reflection upon these phantasms of some conceptually grasped intelligibility, this dynamism makes possible a truly cognitive anticipatory appropriation of the full meaning of the statement, insofar as the listener realizes that the reality lies in the direction of his rudimentary but real grasp of the statement's meaning. It is the dynamism of belief, coupled with the intuitive realization of the direction of research through the imperfect understanding actually achieved, that keeps the listener attentive to the pursuit of the true meaning and prevents him from deviating from his pursuit of true and perfect understanding or settling down with an imperfect grasp of the meaning.

On the basis of these discoveries, we are now ready to attempt an explanation of the experiential moments in the knowledge of faith and of its relation to the conceptual moment.

B. THE MEASURE OF REVEALED KNOWLEDGE OF DIVINE THINGS

Despite its deeper penetration, the knowledge we have through the light of faith remains bound by the rule of the senses: we know God in this life only through his sensible manifestations. Aquinas observes: . . . in our present life we can in no way know the quiddity of the immaterial substances -- neither by way of natural cognition nor even by way of revelation, for, as Dionysius says, the ray of divine revelation comes to us according to our own measure. Consequently, although we are lifted up by revelation to know something which otherwise would remain unknown to us, we are not so elevated as to know in any other way than through 'sensibles.'

Outside of the unique vision of Christ and the possible extraordinary raptures of Moses and Paul, even the direct recipients of divine revelation by way of intelligible species, had to reflect upon phantasms in order actually to know the object of the revelation. Likewise, someone who had been granted the extraordinary privilege of seeing God immediately and essentially in this life, would after the rapture have to make use of phantasms in order to recall the memory of what he had seen. If this be the case for the prophets and apostles who were the direct witnesses of revelation, then a fortiori it must hold for the knowledge we acquire by believing their testimony.
If the knowledge brought by revelation remains within the limitations imposed by the phantasm-concept relationship, what sort of improvement can it bring to our knowledge of divine things? Aquinas notes the possibility of a threefold progress.

Even though the human mind does not come to know the divine nature but remains limited to knowing the divine existence, it can progress in its knowledge of God in three ways: (1) by more perfectly knowing his causality in producing things; (2) by knowing him to be the cause of more noble effects, which, insofar as they bear some resemblance to him, indicate his greater pre-eminence; (3) by more and more knowing him to transcend everything that appears in his effects.

Thus, Scripture, together with the Church's preaching, repeatedly calls attention to the creative and providential role of God, to his special solicitude for mankind. It describes his role in saving history as it culminates in the coming of Christ and the foundation of the Church. In promise and symbol the Word of God describes for us the continuing historical causality of God, especially in the Church and in the believer. It even gives us a prophetic vision of the fullness that is to come at the end of time. In this way revelation gives us a much richer appreciation of the breadth and depth of the divine causality. In fact, as we noted in the first chapter, revelation formally consists in the presentation of the mystery of God's action to save and elevate mankind through history.

In the picture it gives us of Jesus Christ and of the community of salvation in him, the Word of God describes and interprets for us the most perfect of God's creatures. Thus, it makes us see the transcendent perfection of God to lie far beyond what we might otherwise be able to imagine and conceive from the ordinary effects of the divine causality. The whole course of salvation history culminating in the absolutely unforeseeable divinization of man in Christ and the ultimate triumph of God's power over sin and evil gives us to understand far more profoundly the depths of the wisdom, mercy, justice and power of God.

Finally, by its constant emphasis on the transcendence of God and the impossibility of our ever comprehending him, the Word of God indicates how much the reality of God is removed from anything that we could conceive about him. The revelation of mysteries like the Trinity, predestination, grace, salvation, the incarnation, etc., not only indicates aspects of God which absolutely defy our understanding, but also points out the inadequacy of the understanding we do have of God's being, unity, goodness, etc.

Thus, the knowledge which revelation brings remains within the basic framework established by the dependence of the human mind on phantasms and concepts, namely, the three ways of causality, emmi-
nence and separation. Nevertheless, it profoundly deepens the understanding which is opened to us through these three ways, for it extends our knowledge of the divine causality, reveals more noble effects of that causality, and deepens our appreciation of how much God is removed from our present way of understanding him.

Besides this extension of our knowledge, there is another way in which our knowledge of God through revelation surpasses the ordinary mode of our knowledge of divine things, namely, in its new perspective. In the ordinary way of human cognition, it is the effects of God that are the focal point of our attention. Of ourselves, we cannot see these effects from God's point of view, because we cannot directly see God. Consequently, no matter how much God may be the apparent subject of our discourse, he really enters our vision only obliquely as the explanation, from our point of view, of the effects that hold the center of our attention. In logical terms, God is not the subject but the middle term in the ordinary discursive way we know him. Properly speaking, we do not "prove" the existence of God in metaphysics; instead we "explain" the existence of changing, acting, contingent, participated and ordered beings by recognizing that they must derive from a being which is unchanging, perfectly actual, necessary, unparticipated, and intelligent. Only when we have already grasped the existence of this being whose causality ultimately explains all things, can we turn this explanation of created phenomena into an apologetic proof of the existence of God.

Of ourselves, we can never see the effects of God's activity from his own point of view, though we can and do form some conjectures based on an inverted projection of our own point of view. God, however, sees—the effects of his activity from his own point of view and sees himself immediately as he produces these effects. Moreover, he is able with complete freedom to speak to us of what he sees and thus to reveal to us his own point of view. This he does in revelation, so that the knowledge that we acquire through revelation is properly a knowledge which proceeds from the divine point of view. Its focal point is not the effects themselves, but God as he effects them. In logical terms, God is properly the syllogistic subject of revealed truth, his activity is the explanatory middle term, and the created effects are the predicate.

We might compare this difference between the revealed and the ordinary way of knowing God to the difference between purely archeological and properly historical knowledge. In 1868-71, European visitors first came upon the great ruins at Zimbabwe in East Africa. Having no documentary or traditional evidence to guide their interpretation of these ruins, early archeologists conjectured that they must have been built by a colony of oriental merchants. In the past two decades, however, researchers in the area have discovered among the indigenous Negro-population reliable historical traditions which have come down from the native African culture that erected these monuments in the sixteenth and seventeenth centuries. We know that their builders were
the Karahga people who under the Rozwi dynasty developed a large empire and a high iron-age culture which flourished in the area from about 1440 until about 1800 when they were overrun by invaders from Natal. Until the historical traditions were discovered, the center of attention was the monuments themselves. Their builders were known only in terms of the monuments, and conjectures about the builders and their culture were directed to explaining the monuments. Now in the light of the discovered historical traditions, it is possible to set the monuments into the context of the history and culture of the Karanga people and to begin to see the monuments as the Karanga people themselves saw them. The center of interest now is not the monuments but the Karanga people, and the monuments are significant only insofar as they shed light on this people.

C. THE LIGHT OF FAITH

In order that the recipient of his revelation truly receive the divine message, it was not sufficient for God simply to impress upon man's knowing powers the sensible or intelligible forms in which the divine message was embodied. The Pharaoh, who according to the story of Joseph (Gen. 41: 1-7), had the dreams of the fat and the lean cows, the fat and the lean ears, had not actually received the revelation of the coming prosperity followed by famine, neither did Caiphas in his inspired prediction of the salvation to be wrought by Jesus' death (John 11: 51). The formal constituent of divine revelation is the bestowal of a new intellectual light by which the recipient of the revelation is able to apprehend and to affirm in judgment the meaning of the communique. This light is necessary because of the inadequacy of the natural light of the agent intellect to illuminate sufficiently the potential intelligibility of the phantasm and thus enable the possible intellect to grasp in judgment the truth of the conceptual apprehension. Until this infused light of revelation gives rise to a judgment in the possible intellect of the recipient of the revelation there is no communication of intellectual meaning.

Corresponding to the light of revelation in the immediate recipient of revelation by the prophet or apostle, there is required a proportionate illumination of the minds of those to whom these men communicate the revealed message in speech and writing. This secondary illumination, called in the New Testament the "anointing of the Holy Spirit", is given by the infused light of faith. This light of faith differs from the light of revelation in that it is entirely dependent upon the apostolic teaching for the determination of its operation. This teaching comes to us through the Bible and the preaching of the Church; consequently, "the formal object of faith is the First Truth insofar as it is manifested in Sacred Scripture and in the teaching of the Church," and "Faith depends on hearing" (Rom. 10: 16), and not merely on illumination. The relation between the external proclamation of revelation and
the internal light of faith is analogous to that between sense
presentations and the light of the agent intellect in the discovery of first
principles. 17

The infused light of faith comes to us in the first place through
the supernatural virtue of faith, though faith's illumination is
supplemented, especially in the more advanced stages of supernatural
life, by the operation of the gifts of understanding, wisdom, and
knowledge, and, when it is a case of one endowed with a special mission
in the Church, by operation of official or extraordinary charisms.

The principle operation of the virtue of faith would seem to be
instinctive rather than formally illuminative. Faith operates through the
dynamism of the will, moving the intellect to assent to the truth
communicated in the Scriptures and the preaching of the Church. By
reason of this assent, however, faith is virtually illuminative, for the
assent is directed principally to those fundamental truths which
constitute the articles of faith. 19 These articles -- generally speaking, the
distinct truths enumerated in the Apostles' Creed 20 -- are to the
knowledge of faith what the first principles are to ordinary human
knowledge. 21 All the other truths which are known in faith or through
faith 22 depend upon these articles: on the one hand, they particularize
and explicate the meaning implicit in the articles; on the other, they
derive their certitude from their being reflected back to the articles
which they explicate. 23

It does not seem, however, that we can deny completely a
formally illuminative role to the virtue of faith. To do so would mean that
the believer either would have no real understanding of the content of
revelation apart from the operation of the gifts of understanding,
wisdom and science, or else, would have at least the beginnings of a real
understanding of the revealed meaning by the purely natural light of his
unaided agent intellect. The first of these alternatives is inconvenient
because it fails to explain how the sinner who lacks the gifts could have
any real knowledge of supernatural truth. The second alternative fails to
do justice to the supernatural character of the content of revelation,
reducing the supernaturality of faith simply to the mode of assent.

It seems reasonable to conclude, therefore, that the virtue of
faith itself has a properly illuminative role and that it actually modifies
the intellect itself and not simply the intellectual act of assent. His
modification would consist fundamentally in a real elevation of the
possible intellect making it capable of receiving and using ideas
referring to supernatural realities. Formally as illuminative, however,
the virtue of faith would strengthen and elevate the natural light of the
agent intellect, enabling it to communicate its supernaturalized actuality to the potentially meaningful phantasms in which (through the text of Scripture and the preaching of the Church together with the immediate perceptual experience of sensible supernatural realities) divine truth is presented to the mind of the believer.

Be this as it may, whether one attribute the intellective illumination in faith knowledge to the unaided natural light of the agent intellect or to a properly illuminative role of the virtue of faith itself or to a special illumination through the gifts of the Holy Spirit, it is necessary to have something more than the virtual illumination of the instinctus fidei assenting to the articles of faith if there is to be any real intellectual knowledge through faith. Even the perception of the mere possibility of the supernatural meaningfulness of the statements of Scripture and the teaching of the Church would involve an operation of the possible intellect dependant upon an illumination of the agent intellect. But the purpose of revelation was not simply to communicate an altogether unintelligible enigma, like a book in an unknown language, something to be venerated as valuable and meaningful but without the slightest knowledge of its content. Revelation is ordered to communicating meaning, and for there to be any actual communication of meaning there must be some intellective illumination of the phantasms in which the meaning is communicated.

Nevertheless, this participated light of faith is not so strong as to render the objects of faith presented in Scripture and the preaching of the Church evident to the judgment of the believer. The light of faith does not make the object visible in the obscure, but nonetheless intrinsically certain way that the prophetic light does. Whatever the degree of illumination given by the light of faith (it makes no difference whether we explain this illumination as the natural operation of the agent intellect, a supernatural operation of the agent intellect modified by faith, or a special illumination of the Holy Spirit through the gifts), the intellect, in virtue of it, is not so convinced by the intrinsic evidence that it can fully assent either to the meaning itself or even to the revealed character of the assertion. The assent which the intellect gives to the statement remains an assent of faith, a voluntary assent given by reason of the instinct of faith.

The light of faith, therefore, is a kind of half-light. It really illumines the content of the revealed message, but not so clearly that the truth becomes evident. Shining on the phantasms in which the divine truth is presented, it is like the twilight of a dawning day, growing progressively brighter as the believer advances "from faith to faith" (Rom. 1:17). But this light falls directly and principally upon the effects of the divine causality as represented according to their sensible aspects in the phantasm. Directly, therefore, it is only the
terminus of the divine activity that we see more clearly, but in doing so we see more clearly how much God exceeds our created representations of him. Consequently, the same light, which is like a dawning light with respect to the effects of God's activity, is like the fading light of evening in its revelation of God's own intimate being and the properly supernatural nature of his effects. As we progress "from faith to faith", we come to see ever more clearly how deeply, in the shadows cast by our created representations, these supernatural realities really lie. As our perception of God's existence and presence increases in a clearer vision of his effects, our implicit intuitive grasp of what he is becomes explicated more and more through an understanding of what he is not.29

D. THE EXPERIENTIAL REFERENCE OF THE WORD OF GOD

By faith we give global assent to the teaching contained in the Word of God as that Word comes to us in Scripture and the teaching of the Church.30 We perceive this Word in verbal phantasms. God speaks in the idiom of human language; the terms he uses are the familiar terms of our experience.31 We interpret God's Word, therefore, by finding its reference points in our experience.

The word of God has a twofold experiential reference.32 Scripture especially, but also the teaching of the Church, has its principal reference point in the historical experience of those to whom the revelation was originally communicated, that is, to the experience of the prophets, of Jesus, and of the apostolic witnesses. Nevertheless, insofar as it speaks of the Church and of man redeemed by grace, insofar as it instructs us in how revelation touches contemporary human life and how in faith we are to conduct ourselves in order to attain eternal life, the Word of God has a contemporary experiential reference as well.

Contemporary preaching and teaching of the Church addresses itself immediately to this contemporary experience, but the contemporary teaching of the Church is not an independent revelation: the Church can only apply and interpret the teaching communicated to her originally in the historical revelation and subsequently transmitted down through the centuries in the Bible and the living tradition.33 Consequently, the fundamental reference point for the interpretation of the Word of God is always the historical experience of revelation and of its particular traditional interpretations.34 It is this historical experience which provides the context for apprehending the immediate literal sense of the texts to be interpreted. Fuller senses and authentic spiritual senses exist only in the prolongation and explication of this immediate literal sense.

Nevertheless, even the immediate literal sense does not always
directly refer to its experiential referent. Very often, the descriptions presented in Scripture and repeated or elaborated in the preaching of the Church are not properly representational but symbolic. They contain imaginative models constructed to express intelligible aspects of something other than themselves. The parables of Jesus offer an obvious example. In the parable of the great banquet (Matt. 22: 2-10; Luke 14: 16-24), for instance, there is a self-contained narrative of an important man's reaction when the guests invited to his banquet refused the invitation. Out of the imaginative presentation of this event an intelligible meaning emerges. But the meaning this parable was meant to have as revelation can be seen only when one reflects its intrinsic meaning upon the context in which it was uttered, namely, the hostility of the scribes and Pharisees to Jesus and the receptivity of sinners and publicans. But, especially in the apostolic preaching, with the beginning of the mission to the Gentiles, it came to focus its meaning on another context, the relation of the Jews and the Gentiles to the invitation of the Gospel. Only when referred to one of these contexts does the parable communicate its real message. So it is with all such symbolic presentations. Thus, we can grasp the real meaning of the Apocalypse or of the book of Daniel only by locating these highly symbolic visions in the context of the struggles of the Christian and Jewish communities to maintain the faith during periods of persecution.

There is little problem with texts of an obviously symbolic character like the parables or the prophetic and apocalyptic visions. Biblical exegetes, however, have come to see that some degree of schematization and symbolization characterizes even the presumably historical materials of the Bible, e.g., the presentations of pre-history and patriarchal history, the descriptions of the exodus, desert wanderings, and invasion of the promised land, have been idealized in order to more clearly present their value to subsequent generations. So too, the formation of the Gospel traditions involved a selection and idealization of the history of Christ in order to more clearly, though symbolically, represent meanings valuable to the community. Form criticism is a methodical attempt to distinguish the stages in this development and to situate the successive redactions of the material in their proper context of non-symbolic reference. The demythologizing method and the new hermeneutic which developed out of the demythologizing theology of Rudolph Bultmann are attempts to find the ultimate referent of the Gospel narrative not in the historical experience of the original recipient of revelation but in an ever contemporary experience of the believer and the believing community as it listens to the divine Word, conceived as almost completely symbolic.

Our purpose, however, in introducing this matter of the symbolic character of certain narratives was not to undertake a study of form-critical theory or to pass judgment upon the suppositions and procedures of demythologizing and the new hermeneutic. We merely wish to indicate here the special difficulty that attends the attempt to identify the real referent for the interpretation of the Word of God. The picture of Christ painted by the Gospels is not a police-blotted
description. It has been schematized and idealized in order to symbolize the higher significance of Jesus for the apostolic community. Consequently, the picture of Christ that we conjure up for ourselves as we read the Gospel account of a miracle like the appearance of the risen Christ on the shore of the sea of Tiberias (John 21) in all probability should not be taken at its literal face value; instead it must be seen as a symbolic presentation of the abiding presence of Christ to his Church. Its' most probable reference is not an actual appearance of Christ but the realization of the apostolic community that Christ remained with them. The proper realistic phantasm to which it must be referred is the recollection of the life and activity of Christ after the ascension.

E. IMAGES AND CONCEPTS IN THE KNOWLEDGE OF FAITH

When the Word of God speaks to us directly of objects with which we are in direct perceptual contact and in words that clearly point to this perception of the object, the light of faith shines upon the phantasm of our direct perception and the intellect apprehends the conceptual meaning of the words in the perception thus illuminated. Thus, in the Mass, when the celebrant holding the sacred host turns to the congregation before communion and says, "Behold the Lamb of God; behold him who takes away the sins of the world," the faithful who witness this proclamation of the word of God see its meaning directly in the host they sensibly perceive. In this concretization of their belief in the mystery of the Eucharist, they know this host to be the Body of Christ by a perceptual judgment which is not evident in itself, but which is made in virtue of faith.

Most of our knowledge of faith, however, does not consist in such immediate perceptual judgments made in virtue of faith, for the immediate referent of the statement does not here and now fall within the actual horizon of direct perception. When alone in my room without any external sign of my affiliation to the Catholic Church I affirm the article of the Creed, "I believe in the Holy Catholic Church." I have no direct perceptual contact with the reality of the Church. Were it not for the previous experience I have had of the sensible appearances of the Church, the words "Holy Catholic Church" would have no real point of reference for me. The words have come to be significant for me only because I have had some realistic experience of the living reality of the Church.

Because the meaning, which the verbal phantasm "Holy Catholic Church" stands for, is one which I have learned by reflecting it in a reality I have actually perceived, I can think about the meaning of my
profession of faith without explicitly elaborating an imaginative reproduction of the Church in my internal senses. It suffices here and now that I be capable of making such a reproduction. Of course, as we have already noted regarding verbal thinking, my thinking will not be complete until I actually reflect the meaning I grasp in the word upon some perceptual or quasi-perceptual experience of the reality of the Church. Thus, in practice, I will probably imaginatively represent the Church to myself according to one or another of its more salient features.

It is, therefore, in an imaginative reproduction of the concrete referent of the object, that the knowledge of faith normally terminates. In some cases, this imaginative reproduction will consist simply in a recollection of a past perception of the object -- such is frequently the case when we think about the Church or the sacraments or various aspects of moral life. In most cases, however, the phantasm which we use to represent the intelligible meaning of the statement involves some degree of original synthesis by the imagination. This need for original synthesis is most clearly necessary when it is a question of reproducing the historical experience of the original recipient of revelation.

In chapter four of this paper, we showed how such a synthesis is effected. In the case of faith-knowledge, the text in which the Word of God is embodied provides the external norm; our previous experience, both direct and indirect, provides the material; and the light of faith provides inner guidance at least to the extent of impelling the mind not to rest content with inaccurate representations. Thus, as I read Mark's account of the passion and death of Christ, I form a sensible reproduction of it in a phantasm within my internal senses. This reproduction will be the more detailed and accurate as I have seen pictures of the locale, have studied Roman and Jewish customs, etc. The light of faith will forewarn me against putting too much stock in my representation of those details about which the various Gospel traditions are at variance, leaving open the possibility of schematization or symbolism.

Illuminating this imaginative presentation the light of faith renders the phantasm capable of reflecting at least imperfectly the intelligible aspects which my intellect actually grasps conceptually. This I see that the man I apprehend in this presentation is, in fact, the Son of God and that his death will be the cause of our salvation. We saw earlier that the conceptual apprehension of meaning supposes the determination of the possible intellect by an impressed species received from sense experience; and we noted that it is possible to derive such an impression from vicarious as well as direct experience. In the case of knowledge by faith, in most cases the raw materials for the composition of complex conceptions will already be available to the intellect through the ordinary process of intellectual insight outside the
context of revelation and faith. Indeed, it is the apprehension of such raw intelligible data in the individual words of the statement that guides the intellect in synthesizing the imaginative reproduction of the event. It might, however, be possible for the intellect to abstract individual notes from the synthesized phantasm. In any case, the actual combination of distinct intelligible notes into a complex conception will be based not only upon the verbal phantasms but also upon the representative phantasms gradually elaborated in the process of interpretation. Thus, my intellectual conception of Christ's humanity will be conditioned not simply by the sum of intelligible aspects directly expressed in the words of the passion narrative, but also by the way in which the combination of these verbally explicated notes are reflected in the phantasm I have synthesized.

We should recall here, of course, that where it is a question of the immaterial and supernatural aspects of the presentation, the conceptions that we form directly express only the intelligibility of the sensible effects of these realities; consequently, we actually know the supernatural reality only in the protective judgment in which simultaneously we affirm the causal dependence of the sensible effects on the non-sensible reality and deny the direct application of the conceptions derived from these sensible effects. Thus, I know the divinity of Jesus in his passion only by affirming that this man I see is in person the Son of God (embodying all the perfections I know to belong to God from seeing his creatures, the most perfect of which is this man), and simultaneously denying that his divine being is in any way measured by my conceptions of these perfections.

F. THE AFFECTIVE ELEMENT IN THE KNOWLEDGE OF FAITH

To treat of that properly affective, mystical knowledge, which is the result of the operation of the gifts of the Holy Spirit, is beyond the scope of this dissertation. Such knowledge in itself transcends the normal mode, of human cognition through concepts, phantasms and intuition, being based upon the connaturality of the graced believer with the revealed object. In the higher stages of the mystical life this connaturality resulting from the unitive tendency of love becomes so intense that it can be called "quasi-experimental." Such knowledge falls within the subject-matter of this thesis only to the extent that the believer who is privileged to enjoy it must, in order to recall and reflect upon it as well as in order to communicate something of his experience to others, translate it, as it were, into the ordinary phantasm-concept framework.

Nevertheless, though it lacks the full experiential character of mystical affective knowledge, the knowledge of faith is not without an affective
dimension. The realities with which faith deals are of ultimate and pressing concern to the believer. God reveals himself to man as a loving Father, who has sent his beloved first-born Son into the world to save his errant children from their sin and to restore them to friendship and community with himself; he also reveals, however, his unflinching opposition to sin and his just punishment of those who offend him. Accordingly, for the man who loves him, God is the greatest and most loveable good; for the man, however, who prefers sin, God is at best unappealing, or worse, threatening and therefore seen as evil.

Such affective reactions are bound to have effects in the knowledge of faith, reinforcing or diminishing the realism of the knowledge given through belief in the Word of God. Thus, as God is the more perfectly loved, the assent of faith will be all the more prompt; and the divine object represented in the phantasms and concepts stirred by hearing the Word of God will be all the more real. Consequently, insofar as God is not so loved, his goodness is not appreciated, and the content of the phantasms and concepts seems progressively less real.

G. EXPERIENTIAL, CONCEPTUAL AND INTUITIVE MOMENTS IN FAITH-KNOWLEDGE

We have at last arrived on the brink of achieving the goal we set for ourselves in this paper, the determination of the relationships between the experiential, conceptual and intuitive moments in the knowledge of faith. In terms of this determination, I trust, the psychological grounds for the implicit, global experience of knowledge in faith will become clear.

The knowledge of faith consists formally in a judgment, not simply in representations. It is, therefore, in judgment that we must correlate these moments. But as we noted in discussing the role of belief in the communication process, two judgments are possible within faith. The first implies no explicit grasp of the actual meaning of what is attested; it consists simply in the voluntary intellectual affirmation that whatever may be the objective meaning of the communique, that meaning is true. Rarely, if ever found in its pure state; this "pure faith" nevertheless underlies all knowledge in faith. The second judgment takes place in the presence of some explicit understanding of actual meaning but not enough to compel the assent of the intellect on intrinsic evidence. This judgment consists in a voluntary affirmation that the full objective meaning attested by the speaker is true and that this meaning really lies in the direction pointed out by the imperfect understanding possessed by the believer. This second type of judgment goes out to the full truth through its own correct but imperfect understanding.
1. The Judgment of Pure Assent

This judgment terminates explicitly only in the verbal phantasm produced in hearing or reading the Word of God. It is the sort of assent simple Christians sometimes give to the Bible or to a dogmatic statement. Its only conceptual content is the bare understanding that the text in question is potentially meaningful and that its meaning is true. Thus, in the assent of pure faith, the experiential and conceptual moments have minimal content, and in the judgment that unites them, the believer explicitly knows no more than the naked fact that the sensible signs represented in his sense presentation are potentially capable of revealing divine truth to him. Yet, implicit in this judgment there is, as we have seen, a kind of intuitive grasping of the meaning of the statement. It is a purely practical intuition: by it, the believer knows only that in seeking to understand the meaning of these unfamiliar signs he can attain to supernatural truth and that nothing can be true which is not in conformity with the meaning contained in these signs. In the dynamism of the cognitive acts by which the believer attempts to penetrate the meaning of the statement of faith, or by which he reinforces his belief through consideration of the motives of credibility, or again, by which he is led to withhold assent from incorrect interpretations of the message, there is a practical experiential grasp of the full truth of faith. This practical experiential intuition of the content of the Word of God is the foundation of all knowledge in faith.

One might give the assent of pure faith without any understanding to a particularly difficult text of Scripture, or to an individual dogma of the Church expressed in unfamiliar terms. But it is difficult to conceive of an absolutely pure assent of faith with respect to God's revelation as a whole. In fact, in order for there to be a true act of faith on the part of the believer and not a mere interpretative intention supplied by the faith of the Church, there would at least have to be a minimal explicit recognition that God exists as the source of man's good and that the text which is the proximate object of the assent is in fact God's Word, believable in virtue of God's own truthfulness and authority. Nevertheless, even if we grant that the pure assent of faith can be given to God's word without any real understanding, it remains true that such assent is possible in particular cases and that it underlies all assent with understanding. The practical intuition which is found in such pure assent provides a basis for the notion that the faith of the simple can be explicit in the faith of the learned. It is also what keeps the material heretic oriented to the true meaning of revelation despite his false explication, and what preserves faith in the believer assailed by a barrage of doubts. Above this, all practical intuition is a goad which drives the believer to try to push beyond less perfect to more perfect degrees of understanding. By it, the believer is not given any actual penetration of the meaning of the revealing Word's meaning, but he is given a real knowledge of where and how to look for understanding, and that practical knowledge is the foundation of all further development of actual understanding.
2. • Judgmental Assent in Partial Understanding

The normal situation of the judgment of faith, however, involves some degree at least of real understanding. The Word of God is accessible to men in human language, a language which can be understood even without any illumination of faith. The Bible is an open book that can be read by anyone who takes it up. The teaching and preaching of the Church is public; the Church's liturgy and dogma are available in vernacular as well as classical forms. Special instruction in the teaching of faith is given to those about to be baptized or who express even the slightest curiosity about the teaching of the Church and Scripture.

When it is a matter of a judgment of faith combined with real understanding of the object of faith, the experiential moment is constituted by the perceptual experience of contemporary supernatural realities like the Church and her sacraments, the Christian mode of life of believers, etc, together with the quasi-perceptual experience (in artificially synthesized phantasms) of the historical context and the proper referent of the statements to which belief is directed. This perceptual and quasi-perceptual experience may be more or less complete and detailed. In any case it will have the marks of profile and horizon which characterize all perception. Implicitly, therefore, it includes all the sensible aspects which belong to realities represented, although here and now only a few of these aspects have been explicated and are in focus. No detail which will later come into focus and explicit consciousness is really a stranger to this initial perception. Even future events are somehow present in this perception by their anticipation in cause and promise.

The conceptual moment in such a judgment is correspondingly rich. It includes directly- and explicitly all the intelligible aspects which the organized and illuminated phantasms are able to reflect, no matter how imperfectly. It includes the material and creaturely conceptions by which we know immaterial and divine things, albeit by a negative judgment of their applicability. Here too, the laws of profile and horizon apply. Not all the intelligible aspects of the realities perceived will actually and explicitly be grasped; many remain implicit as more particular determinations of generic conceptions or remain imperfectly focused as descriptive definitions. De facto, it is impossible to explicate fully and directly in conceptual terms either material or immaterial objects of knowledge. Material beings, e.g., the concrete sensible effects of the divine saving action in history, cannot be fully explicated because the concepts in which they are apprehended are abstractive and thus dematerialized. Immaterial beings, on the other hand, cannot be fully explicated because the concepts in which they are known only partially reflect their real actuality.
In the judgment of faith as in every judgment, the experiential and the intuitive moments are united through the mind's reflection of its conceptions upon the realistic phantasms; there is also an implicit intuitive realization of the extent to which both the phantasms and the concepts fail to do justice to the full reality of the object which is known in and through these phantasms and concepts. Unlike the intuitive moment which characterizes the judgment of pure assent, the intuitive moment which marks judgmental understanding is not a practical but a speculative intuition. In projecting the mind's vision along the lines opened up by the phantasms and concepts which are its counterpart, this intuition truly and positively attains the reality revealed. It remains, of course, implicit; any attempt to explicate it necessarily falls short of the mark. But it is real nevertheless. It is this intuition, given implicitly and obliquely in the phantasms and concepts of explicit understanding, that is the formal constituent of the global experience of revealed realities.

H. FAITH, THEOLOGY AND DOGMA: THE NON-REFLEXIVE AND REFLEXIVE STATES OF THE KNOWLEDGE OF FAITH

Apart from mystical development the knowledge of faith exists in the believer in two distinct states. The first state, which has no special name other than faith itself – one could call it simple faith, is constituted by the believer's spontaneous and non-reflexive understanding of and assent to the truth of the Word of God. It involves no effort on the part of the believer to re-express his understanding in his own terms; its only verbal expression is the original text to which the assent was given and by which the phantasms and conceptions were composed. This is the kind of understanding that children and theologically unsophisticated adults possess when they recall the answers of their catechism. It is the understanding that spontaneously comes to mind as one reads the Bible, hears a sermon or makes a moral judgment in conscience.

The other state is called theology. Theology is faith's knowledge methodically developed after the manner of a science. Theology differs from simple faith in that it is consciously reflective. It systematically makes use of critical methods: (1) to discern the quality of the text, to interpret its revelation and thus to discern its object more clearly; (2) to formulate definitions and classification of the realities spoken of; and above all (3) to explain, by demonstration of their causal connections, the meaning and implications of the statements of faith and the realities they speak of. Per se, theology does not have a different material object from pure faith; it has a different formal object only insofar as it attempts to clarify deliberately and discursively, by tracing relationships, the understanding and assent given in the spontaneous act of faith. It may happen that the tracing of such relationships leads to the explication of
certain intelligible aspects whose existence and nature are not formally attested by God. In such cases theology would pass beyond the limits of the material object of faith, but this is quite incidental. By no means is theology's proper object limited to the deduction of these so-called "pure" theological conclusions, i.e., truths known by deduction from revealed truths but in no other way contained even implicitly and obscurely in other truths of faith. 45

Theology makes a deliberate effort to re-express in its own terms the meaning which faith spontaneously grasps in the original form in which the Word of God comes to it. 46 The language used by theology for the purpose of this re-expression reflects the individual theologian's experience and philosophy. Thus, the theological expression of the early Church Fathers reflects a Platonic understanding of the world, the theology of medieval Franciscans reflects an Augustinian view, the theology of Aquinas an Aristotelian view, etc. We saw in the previous chapter that linguistic expression enables one to exercise a reflective judgment about the validity of his spontaneous judgments, to preserve insights for the future, and to penetrate into the more complex relationships which bind one object to another. But linguistic expression also tends to structure thought. It can blind the thinker to aspects of the reality which he has not managed adequately to express; it can also bring to explicit consciousness problems or insights which might otherwise have passed unnoticed.

Insofar as these reflexive expressions actually refer to and explicate the revealed truth whose understanding they attempt to express, the assent of faith virtually extends to them. 48 However, the suitability of secondary theological expressions for containing the truth assented to is not revealed to the individual theologian by any special illumination of his judgment. Neither does the supernatural light of faith directly determine the estimation of this suitability. The light of faith is not so clear that in every individual case it permits the believer to distinguish clearly the necessary truth of faith from the contingent, culturally determined elements of its expression. 49

The reflexive linguistic expression which theology attempts to give to the insights gathered by its investigation is subject to the special limitations which attend all secondary expression of knowledge. It is impossible for the theologian to give perfect expression to the full depths of meaning that he grasps in his direct contact with the Word of God. Every theological judgment, therefore, must include implicitly an intuition of how much the theological formulation leaves unsaid. This intuition invites and guides the theologian to perfect his expression and to clarify his insight.
Insofar as they are interpretive of the Word of God, the official dogmatic pronouncements of the Church's magisterium are in many ways akin to theological statements. In most cases, indeed, they are directly occasioned by theological controversies and bear the stamp of their origin. Dogmatic statements are the Church's attempt to express reflectively and methodically the truth she possesses in faith. Although they never canonize any particular school of philosophical or theological opinion, the dogmas defined by the Church tend to reflect the manner of thinking and speaking which marked the prevailing school or schools of orthodox thought at the time of formulation. Thus, the decisions of Ephesus I reflect the thinking of the Alexandrian school; whereas the decisions of Chalcedon lean more to the expressions of the Antiochean school, etc.

Dogmatic statements, however, are not mere contingent theological formulations like those elaborated by the individual believer. In making them the Church as a whole -- particularly, however, in her official teachers, the bishops and the popes -- is-guided by a special assistance of the Holy Spirit. Thus, in the ultimate analysis, its dogmatic formulations are infallible. Unlike the individual theologian's conceptions and expressions, the Church's official teaching can never fail to conform to and express revealed truth accurately in the core of their meaning.

Nevertheless, precisely because they are human formulations, the Church's dogmatic pronouncements share the character of all human noetic expression and representation. They never exhaustively express the fullness of truth latent in the Word of God deposited with the Church. Every dogmatic formulation leaves much unsaid. Consequently, the assent the believer gives to dogmatic formulas must always be accompanied by the usual implicit intuition of what remains unexpressed, and the proper interpretation of such formulas demands an exegesis not only of what was said positively and explicitly, but also a retrieval of what was left unsaid and implicit.

Moreover, the dogmatic formulations of the Church possess a historical character. They were formulated in response to specific controversies and needs of the Church in distinct historical epochs, and they bear the stamp of these epochs in the vocabulary and symbol systems which they make use of to re-state and interpret the Word of God to the contemporary mentality. The precise object of the Church's faith, therefore, is always clothed in contingent culturally conditioned representations which are subject to change in subsequent generations and cultures. In any dogmatic formulation, therefore, there is a subtle distinction to be made between the real heart of the dogmatic affirmation and the historically conditioned clothing of this core meaning. The distinction cannot usually be grasped explicitly by the generation responsible for the formulation. What reason, for instance, could have suggested to the men of a pre-Copernican world that the descent of Christ into hell and his ascension into heaven might not have followed the
spatial coordinates of the ancient cosmology. As Schillebeeckx observes:

It is only in the train of new human experiences, new positive data, that the question of the distinction between the "content" and the "clothing" of the faith poses itself expressly and that it becomes possible to investigate whether the "clothing" equally pertains to the dogmatic content or is simply a manner of representing these things. 54

Thus, a kind of "reinterpretation of Dogma" becomes possible. Holding fast to the core of meaning in her former declarations, the Church, over the course of centuries, comes to explicit awareness of the precise distinction between the core affirmation and its contingent clothing. Consequently, it becomes possible for her to replace the outmoded conceptual and imaginative representations by new representations more conformed to the contemporary state of knowledge. Sometimes it is a matter of changing the imagined frame of reference, as, for instance, the abandonment of the Ptolemaic system of cosmology; at other times, it is a matter of changing the conceptual system in the direction of greater precision, as, for instance, the substitution of a modified Logos-anthropos Christology at Chalcedon for the Cyrillic Logos-sarx Christology of Ephesus. 55

I. FAITH, THE BIBLE AND THE CHURCH

We saw earlier that the Church of today depends on the faith of the apostolic community for its contact with revelation. True, the Church does not derive all its certitude of revealed truth from Scripture, nor is she without real and sensible contact here and now with realities in which God is revealed. Nevertheless, because of the historical character of revelation, the original revelatory experience of God's people remains normative for all subsequent life in the Church. 57

Without going into the complex of theological problems involved in determining the precise relationship between Scripture, tradition and the magisterium, we can say this much at least, that the principal depository of the historic revelation is the Bible. Particular traditions may preserve details of that experience which are not immediately evident in the text of Scripture. Likewise, the living experience of faith in the Church may give rise to dogmatic insights like the dogmas of the Assumption and Immaculate Conception whose connection with Scripture is very tenuous. Nevertheless, at least in a vague and indistinct way the words of the Bible embrace the whole of creation and history. Moreover, the Bible is our closest possible link with the original experience of God's saving interventions in history. 58 Scripture gives us our only representational contact with Jesus Christ who is the fullness of revelation. It likewise gives us a divinely guaranteed witness to the constitution, life and faith or the apostolic community.
In contrast to the Bible, dogmatic and theological statements are less concerned with presenting descriptively the experience of revelation than they are with defining more or less abstract details involved in the explanation of revealed truth. We noted in the preceding chapter that the understanding of such abstract, expository statements demands that the listener or reader supply from his own resources a concrete, imaginative representation of the object under discussion. It is the Bible, insofar as it is the record of the experience and understanding of the original witnesses of the historical revelation, that supplies the believer with the guidance necessary to elaborate such concrete representations by means of realistic phantasms. Thus, Scripture is the focal point for all dogmatic and theological statements. The Christological dogmas, for instance, find their real point of reference in the descriptive representation which the Bible gives us of the concrete man Jesus who lived and taught, died and rose again, in first century Palestine.

It is difficult to discover straightforward textual proofs in Scripture for most of the doctrines of the Church. Scripture does not speak in the technical terms of modern theology and dogma. It is a rare biblical statement that can be abstracted from its context and made the major premise of some scientific theological deduction. The value of the Bible as the foundation of dogma and theology lies in another direction. Repeated reading of Scripture produces a total impression in the listener. This impression consists primarily not in the abstract concepts which the words evoke, but in the complex of realistic phantasms which they call up. Thus, Mark's Gospel never explicitly calls Jesus God, but he unmistakably gives the impression that Jesus was a man who acts as only God could act. It is by insight into such phantasms, not by a process of purely conceptual and verbal analysis, that theology and dogma principally advance. The intricate textual and logical demonstrations by which the Church and the theologian attempt to certify their insights do not represent the actual process of discovery. They pertain rather to the reflective justification of the insight. As we noted earlier, the psychological process of discursive thought is quite different from its logical explication.

The Bible, therefore, is the primary source of the experiential moment in the knowledge of faith. This is true even when it is a question of dogmas dealing with present-day perceptible supernatural realities like the Church, the sacraments, the life of grace, etc. For although we actually perceive these realities here and now according to their sensible appearances, we see their supernatural meaning only to the extent that we see the contemporary realities in relation to the original consciousness of the apostolic community. We understand the supernatural significance of the realities we directly experience as a prolongation and explication of the apostles' and prophets' original
understanding of them. Thus, we see the papal office as continuing Peter's role in the apostolic community; we see the Mass as the present-day form of the Lord's supper, and so forth.

In contrast, the dogmatic and theological formulations of belief refer primarily to the conceptual moment in the knowledge of faith. Like the conceptual moment itself, they are meaningful only in relation to the Bible. This is why the medieval scholastics identified the study of theology and dogma with the study of the sacred page. The present-day separation of exegesis and dogmatics is not a healthy situation, though it may endure for some years before the practical keys to its solution are discovered. Of course, insofar as these disciplines have distinct methods and objects, no simple amalgamation of them would be either desirable or possible. Nevertheless, in the knowledge of faith, possessed by the individual or by the Church as a whole, the content of the conclusions of these two disciplines must be integrated. Dogma ought to be seen as the conceptual explication of Scripture, subject like all such explication to the intrinsic limitations of conceptual understanding. The Bible, on the other hand, read in the living context of Christian ecclesial life, must be seen as the experiential foundation for both the intuitive and the conceptual moments of faith-knowledge.

J. SUMMARY AND CONCLUSION

The argument of this thesis is now complete. There remains only the task of summarizing its conclusions.

The principal conclusion, stated concisely, is that already with the first assent of faith, given even the most rudimentary grasp of the meaning of the Word of God, there is present an implicit, global experience of the reality revealed. This experience is not simply dynamic, but is truly cognitive. It consists in an implicit, projective intuition of the reality along the lines of meaning indicated by the realistic phantasms and intelligible conceptions united by the act of judgment. In virtue of, and in the light of this implicit, projective intuition, the believer strives to refine his phantasms and conceptions in order progressively to explicate the original global experience. From this point of view, all growth in the knowledge of faith, all subsequent theological and dogmatic elaboration, is nothing more than the gradual explication of what was already given implicitly in the initial experience.

A second conclusion which emerges from this investigation is an explanation of the primary conclusion in terms of the agencies operating to effect this partially explicated global experience of revelation. Since there is no question of a clear vision intrinsically evident, the realism of the experience is supplied by the assent which faith, operating through
the will impels the intellect to give. The specification of the experience depends entirely upon the hearing of the Word of God, though ordinary personal and vicarious experience and conceptual understanding provide the raw materials for the explication of the Word's meaning in phantasms and conceptions. The operation takes place in the internal senses and the possible intellect of the believer, with the agent intellect, most probably strengthened and elevated by the virtue of faith, providing the illumination.

A third conclusion explains the way in which the various forms in which the Word of God is embodied determine and specify the explication. As the depository of the testimony of the privileged witnesses to the original events of historical revelation, the Bible is the principal source for the experiential content of knowledge in faith; that is, it is the principal guide to the elaboration of the realistic phantasms from which all conceptual explanation must derive and upon which all conceptual explanation must be reflected. In contrast, dogmatic and theological statements, insofar as they define and explain abstract facts and connections, are the proximate source and norm of the conceptual content of faith’s knowledge.
The theme underlying this dissertation has been that every conceptual explanation must in order to be meaningful be set back into the context of living experience which it explicated. Alone in sense experience do we know concrete reality. If this principle is correct, then the highly abstract, conceptual theory which we have outlined in this thesis is intrinsically self-effacing. Like every conceptualization, it was conceived and elaborated in order to explicate the implicit content of an experience. In the end, therefore, it must be resolved back into the implicitness of the experience of faith-knowledge. In turn, the very consciousness of knowing by faith must resolve back into the primary experience faith gives us, the experience of the loving divine Father, who sent his Word into the world he had made in order to save it from the power of sin, by revealing himself to mankind, redeeming man by his death and resurrection, and forming the new People of God by the power of his Spirit. By faith, as St. John says (1 John 5: 20): "we know that the Son of God has come and has given us understanding, but the goal of faith is not to know this act of knowing; rather, it is "that we may know the true God and may be in his true Son, who is the true God and eternal life. "

FOOTNOTES


4 Ibid., 369.

5 See ibid., 368-69.


7 Ibid., c. 2, n. 8, p. 6.

8 Ibid., c. 2, n. 7, p. 6.

9 Ibid., c. 1, n. 5, p. 5.

10 *Vatican I Constitutio dogmatica de fide catholica*, c. 3 (Denz. 1789). All citations of Henricus Denzinger’s *Enchiridion symbolorum* are to the 23rd ed of J. B. Umberg (Freiburg im Br.: Herder, 1937); the translations are those of R. J. Deferrari, *The Sources of Catholic Dogma* (St. Louis: Herder, 1957) with minor corrections.
11 Vat. I, De fide, c. 3 (Denz. 1791).

12 Vat. II, De rev., c. 1, n. 5, p. 5.


14 Vat. II, De rev., c. 1, n. 6, p. 5.

15 Latourelle, op. cit., p. 428.

16 Benedict XII, Bull Benedictus Deus (Denz. 530).

17 Council of Florence, Decretum pro Graecis (Denz. 693).

18 Latourelle, op. cit., p. 429.

19 Ibid., p. 425.

20 "... est praelibatio futurae visionis, in qua veritas plenarie cognoscitur" [Thomas Aquinas, Super III Sent., d. 23, q. 2, a. 1 ad 4 (ed. M. F. Moos; Paris: Lethielleux, 1933)].

21 Latourelle, op. cit., p. 426.

22 See Ibid., pp 426-27.

23 Vat. I, De fide, c. 4 (Denz. 1796).

24 Vat. II, De rev., c. 1, n. 5, p. 5.

25 Ibid., c. 2., n. 8, p. 7.

26 Vat. I, De fide, c. 4 (Denz. 1796).

28 Vat. I, De fide, c. 4 (Denz. 1799).

29 Vat. II, De rev. c. 2, n. 10, p. 8

30 Ibid., c. 2, n. 7, p. 6.

31 Ibid., c. 3, n. 13, p. 10.

32 "Ce qui caractérise le donné révélé au sortir de l'inspiration prophétique, c'est, d'une part, la richesse de ce donné; d'autre part, l'état d'indétermination et de confusion relative dans lequel il nous est ordinairement livre" [Ambroise Gardeil, Le donné révélé et la théologie, 2nd ed. (Juvisy: Ed. du Cerf, 1932)], 164.

33 Ibid., 166-67.

34 ". . . entre connaissance et connaissance, entre l'intuition, la connaissance expérimentale, mais aussi, de la réalité concrète dans toute son efficacité, et la pensée discursive, l'analyse speculative, la dissection rationelle des divers concepts avec lesquels nous essayons de decomposer en idées bien explicites, mieux proportionées à notre connaissance naturelle, l'impression qu'a produite sur notre connaissance surnaturel manifeste par la révélation et accepté par la foi" [E. Hugueny, "La Tradition: Étude apologetique," RSPT 6 (1912). 719].

35 Ibid., 720.

36 "Elle est l'essence du Christianisme, l'ineffable vérité jetée dans le monde par l'Evangile; c'est à l'analyser et à la traduire en formules distinctes et définies, que va tout l'effort de la seconde forme de la connaissance religieuse. Le progrès intellectuel du Christianisme n'est qu'un travail de lente intégration dans la pensée discursive, de ce qui a existé tout entier dans la pensée intuitive de ses fondateurs" (ibid., 720).


38 For an account of this debate see Herbert Hammans, Die neueren katholischen Erklärung der Dogmenentwicklung (Essen: Ludgerus Verlag, 1965), 192-201.
De Lubac, _loc. cit.,_ 139-149, 154-55.

40
"L'adhésion primitive au Christ fut une 'perception toute concrete et toute vivante' et nombre de dogmes restaient d'abord «latents dans la richesse de cette perception premièee"' (De Lubac, _loc. cit.,_ p. 155, citing J. LebretonL’Encyclique et la théologie moderniste, p. 61).

41
"… in Jesus-Christ tout nous a été d'un coup, a la fois donné et révélé; et que, par conséquent, toutes les explications à venir, quelle que soit leur teneur et quel que soit leur mode, ne seront jamais que le monnayago en fractions plus distincts d'un trésor déjà possédé en entier; que tout était déjà contenu réelement, actuellement, dans un plus haut état de connaissance et non par seulement dans des 'principes ou des 'prémisses'' (ibid., 157-58).

42
Charles Boyer, "Sur un article de Rechérches de science religieuse,"
Greg., 29(1948), 152-54.

43
Ibid., 153. See Boyer's "Qu'est-ce que la théologie?" Greg., 21 (1940), 264-65; this passage was cited explicitly by De Lubac (loc. cit., p. 137) as an example of a conceptualist notion of dogma.

44
See De Lubac, _loc. cit.,_ p. 155.

45

46

47
Footnotes to Chapter II:

1
On the Wolffian influence in scholasticism see Santiago Ramírez, De hominis beatitudine, I (Salamanca: Biblioteca de Autores Christianos, 1942), 17-20.

2

3

4

5
See Reginald Garrigou-Lagrange, "La mystique et la doctrine de St. Thomas sur la foi," VS 2 (1920), 263-64.

6
Chenu, "Position. ...," loc. cit., 133.

7

8
See Latourelle, op. cit., 176.

9
George Tyrell, Through Scylla and Charybdis (London: Longmanns, Green, 1907), 280.

10
Ibid., 280.

11
Tyrell, op. cit., 285.


Ibid., 208-09

Ibid., 210

Ibid.

Ibid., 237, 303-05

Ibid., 305-06

Ibid., 116-18; Schillebeeckx, *loc. cit.*, 228.


Pius X, decree of the Holy Office Lamentabili, prop. 20 (Denz. 2020). This proposition was drawn from Loisy's *Au tour d'un petit livre*, p. 195. See Latourelle, *op. cit.*, 290, n. 52

Lamentabili, prop. 22 (Dene. 2022).

Lamentabili, prop. 21 (Denz. 2021).

See Latourelle, *op. cit.*, pp. 281-82.


Vatican I, *De fide*, c. 4 (Denz. 1795).
27 See Latourelle, *op. cit.*, pp. 281-82.


29 Vatican I, *De fide*, c. 4 (Denz. 1796).

30 Pius IX, Encyclical "Qui pluribus," Nov. 9, 1846 (Denz. 1636).


32 *Lamentabili*, prop. 59 (Denz. 2059).

33 *Lamentabili*, prop. 60 (Denz. 2060).

34 *Lamentabili*, prop. 62 (Denz. 2062).

35 *Lamentabili*, prop. 54 (Denz. 2054).

36 *Lamentabili*, prop. 61 (Denz. 2061).

37 Pius X, Encyclical "Pascendi," (Denz. 2072, see also Denz. 2073),

38 *Pascendi* (Denz. 2074).

39 *Pascendi* (Denz- 2074.

40 *Pascendi* (Denz., 2074).

41 *Pascendi* (Denz., 2076).

42 Ibid.
Footnotes to Chapter III:

1 Augustine wrote: "Quid autem familiaris et notius in loquendo commemoramus quam tempus ? intelligens utique, cum id loquimur, intelligimus etiam, cum alio loquente id audimus, quid est ergo tempus ? si nemo ex me quaerat, scio: si quaerenti explicare velim, nescio ..." Augustinus Aurelius, Confessiones xi, c. 14, lines 6-10, CSEL 33, 292.

2 William Luipen, Existential Phenomenology (Duquesne Studies, Philosophical Series, n. 12; Pittsburgh: Duquesne Univ. Press, 1965), 74-77.

4 Luipen, *op. cit.*, 75.


6 *Ibid.*'


8 Luipen, *op. cit.*, 97-98

9 *Ibid.*, 98


11 Merleau-Ponty, *op. cit.*, 68


14 Regis, *op. cit.*, 166.

15 See I, q. 18, aa. 1-2.

- 16 See Regis, *op. cit.*, 162-166.


18 This is the teaching of St. Thomas in I, q. 77, aa. 6-7. In the resp. ad 1 um of a. 7, he writes: "sicut potentia animae ab essentia fluit, non per transmutationem sed per
naturalem quandam resultationem, et est simul cum anima ita est etiam de una potentia respectu alterius.

19
Regis, op. cit., 176; see I, q. 77, a. 7.

20
Ibid., 173.

21
Ibid.

22
See Conley, op. cit., 62. Reginald Garrigou-Lagrange in Theological Virtues, vol. I., On Faith, trans. Thomas a Kempis Reilly (St. Louis: B. Herder, 1965), 113, explains how a superior habit intensifies and refines lower ones, as, for example, charity with respect to the acquired moral virtues. Thus, the virtue of faith penetrates the natural operations of the human mind to the extent that "ratio manuducta per fidem excrescit in hoc ut ipsa credibilia plenus comprehendit et tunc ipsa quoddamodo intelligit" [Thomas Aquinas, Scriptum super libros Sententiarum, I, prol., q. 1, a. 3, sol. 2 (ed. P. Mandonnet and M. F. Moos, 4 vols.; Paris: Lethielleux, 1929-1947). N. B. All references to Thomas' commentary on the Sentences are to this version unless otherwise noted.]

23

24
See Conley, op. cit., 101-03.

25
Luipen, op. cit., 93.

26
Regis, op. cit. 175; see Thomas Aquinas, Quaestiones disputate, De veritate, q.10, a. 8c (ed. R. Spiazi, 8th ed., 2 vols, Turin: Rome, Marietti. 1949). All citations of the Quaestiones disputate are to this edition.

27
Regis, op. cit., 177. In Q. D. De ver., q. 22, a. 10, Thomas says: "Dicitur autem aliquid esse objectum animae, secundum quod habet aliquem habitudinem ad animam ... Res autem ad animam inventur duplicem habitudinem habere: unam secundum quod ipsa res est in anima per modum animae, et non per modum sui; aliam secundum quod anima comparatur ad rem in suo esse existentem."

28
"Ratio autem obiecti sumitur secundum proportionem rei circa quam est operatio habitus vel potentiae, ad actum animae in qua sunt habitus vel potentiae.' Quia autem per operationem animae dividuntur
quandoque quae secundum rem coniuncta et summe unum sunt; ideo contingit quod ubi est res eadem, sunt diversae rationes objecti, sicut eadem res objectum est liberalitate ut est donabilitas, et iustitiae, ut habet rationem debiti. Et similiter ubi res est communis, est ratio objecti particularis et propria; sicut philosophia prima est specialis scientia, quamvis consideret ens secundum quod est omnibus commune, quia speciale rationem entis considerat secundum quod non dependet materia et motu" (Super III Sent, d. 27, q. 2, a. 4, sol. 2c).

29
"... potentia superior per se respicit universaliorum rationem objecti, quam potentia inferior: quia quanto potentia est superior, tanto ad plura se extendit. Et ideo multa conveniunt in una ratione objecti, quam per se respicit superior potentia, quae tamen differunt secundum rationes quas per se respiciunt inferiores potentiae. Et inde est quod diversa objecta pertinent ad diversas inferiores potentias, quae tamen un superiority potentiae subduntur" (I, q. 77, a. 3 ad 4).

30
Luipen, op. cit., 92-93.

31
See I, q. 14, a. 2c; q. 85, a. 2 ad 1; q. 87, a. 1 ad 3.

32

33
"... in Deo intellectus, et id quod intelligitur, et species intelligibilis, et ipsam intelligere sunt omnino unum et idem" I, q. 14 a. 4c.'

34
See I, q. 27, a. 2; q. 28, aa. 2-3.

35
See I, q. 14, a. 2 and 4.

36

37
"... cognoscentia a non cognoscentibus in hoc distinguuntur, quia non cognoscentia nihil habent nisi formam suam tantum: sed cognoscens natura est habere formam etiam rei alterius, nam species cognitae est in cognoscente. Unde manifestum est quod natura rei non cognoscentis est magis caerulea et limitata: natura autem rerum cognoscens habet maiorem amplitudinem et extensionem. Propter quod dicit Philosophus, III
38
In a way St. Thomas' expression "form of another" is unfortunate, for it suggests that we know only substantial and accidental forms and not the reality itself in its singularity. "Form" in this expression is not to be taken in the physical sense. Rather, it is the full actuality of the object. Thus, it is the object itself and not merely its participated forms which comes to have a new, immaterial mode of being in the knowing subject.

39
Aquinas wrote: "Species enim lapidis est in anima non autem secundum esse quod habet in lapide" (De ver., q. 21, a. 3c). This new mode of being St. Thomas describes as "esse intentionale et spirituale": "... sensus recipit formam sine materia, quia alterius modi esse habet forma in sensu et in re sensibili. Nam in re sensibili habet esse naturale, in sensu autem habet esse intentionale et spirituale" [In Aristotelis librum De anima commentarium, II, lect. 24 (ed, A. M. Pirotta, 3rd ed.; Turin: Marietti, 1948), n. 553. N. B. This edition is cited throughout. This intentional existence is supra-subjective, for it does not make the thing to be a subject sealed up in itself, rather, it makes the object to be in the knowing subject precisely as knowable. It is also active, for it makes the knower's action to tend out toward the object (see Peifer, *op. cit.*, 60-61). The change which makes possible this new mode of being Aquinas calls a "spiritual change" (I, q. 78, a. 3c).

40
Gredt, *op. cit.*, I, p. 364, n. 468; also p. 367, n. 471. 3; see also Peifer, *op. cit.*, 70.

41
See Peifer, *op. cit.*, 63-96, for an extended discussion of the specifying function of the impressed species.

42
"... qui scit aliquid indistincte, adhuc est in potentia ut sciat distinctionis principium; sicut qui scit genus est in potentia ut sciat differentiam. St sic patet quod cognitione indistincta media est inter potentiam et actum" (I, q. 85, a. 3).

43
This clarification is not achieved at the level of the external senses but only at the level of the internal senses and the intellect.

44
"... ad formalem similitudinem in sensu dicto sufficit formalis et vera convenientia in eo esse, in quo talis similitudo datur. Sed in esse intentionalis suo representative habet species impressa convenientiam cum obiecto, imo est ipsumet quidditatis obiecti, quatenus totum, quod in obiecto invenitur realiter, transfertur ad speciem representative; ergo habet formalem similitudinem" [John of St. Thomas, *Cursus philosophicus thomisticus, Naturalis philosophiae* P. IV, q.1, 6, a. 3 (ed. B. Reiser; Turin: Marietti, 1937) p. 184 a44-b7].
Not only do both the internal senses and the intellect attain the object irrespective of its physical presence or absence, but also they attain it in a more eminent mode of being than these objects have in their physical being. Thus, the imagination attains the object as represented; the estimative sense, as useful or harmful; memory, as recognized; intellect, as abstracted and universal. See Gredt, op. cit., I, p. 366, n. 469; Peifer, op. cit., 148.

"Specie expressa … est rei cognitae similitudo, quae cognoscendo producitur, et in qua cognoscens contemplatur obiectum cognitum" (Gredt, op. cit., I, 364, n. 468).

Unfortunately the word "phantasm" has a pejorative connotation in much of modern psychology. It usually denotes in that context an illusory or deceptive representation, a product of hallucinations or fantasy. "Image" would probably be the best English equivalent and we will frequently use it as such. However, since the word image will not always suffice to make clear that we are talking about the expressed species of the internal senses and not the mental word or some kind of external likeness, we will also make use of the term phantasm in this technical sense. The use of "phantasm" for the mental image in the senses is listed in Webster's Third New International Dictionary of the English Language Unabridged, ed. P. B. Grove and the Merriam Webster Editorial Staff (Springfield, Mass.: C. G. Merriam Co., 1961), v. c.

The classic text on the production and distinction of the expressed species is Thomas Aquinas' Summa contra gentiles, I, c. 53 (ed. Leonina manualis; Turin: Marietti, 1934): "... res exterior in-intellecta a nobis in intellectu nostro non existit secundum propriam naturam, sed opportet quod species eius sit in intellectu nostro, per quam fit intellectus in actu. Existens autem in actu per huiusmodi speciem sicut per propriam formam, intelligit rem ipsam. Non autem ita quod ipsum intelligere sit actio transiens in intellectum, sicut calefateio transit in calefactum, sed manet in intelligente: sed habet relationem ad rem quae intelligitur, ex eo quod species praedicta, quae est principium intellectualis operationis ut forma, est similitudo illius.

Ulterius autem considerandum est quod intellectus, per speciem
rei formatus, intelligendo format in seipso quandam intentionem rei intellectae, quae est ratio ipsius, quam significat definitio. Et hoc quidem necessarium est: eo quod intellectus intelligit indifferenter rem absentem et praesentem, in quo cum intellectu imaginatio convenit; sed intellectus hoc amplius habet, quod etiam intelligit rem ut separatam a conditionibus materialibus, sine quibus in rerum natura non existit; et hoc non potest esse nisi intellectus sibi intentionem praedictam forma ret.

Haec autem intentio intellecta, cum sit quasi terminus intelligibilis operationis, est aliud a specie intelligibili quae facit intellec-tum in actu, quam oportet considerari ut intelligibilis operationis prin-cipium: licet utrumque sit rei intellectae similitudo. Per hoc enim quod species intelligibilis est forma intellectus et intelligendi principium, est similitudo rei exterioris, sequitur quod intellectus intentionem format illi rei similem: quia quale est unumquodque, talia operatur. Et ex hoc quod intentio intellecta est similis alicui rei, sequitur quod intellectus, formando huiusmodi intentionem, rem illam intelligat

51 See John of St. Thomas, Cursus, Phil, nat., p. IV, q. 11, a.2; Reiser ed., p. 362a7~26.

52 "seejbid., q. 6, a. 3; Reiser ed., p. 191a47-b47.

53 Peifer, op. cit, 144-46.

54 John of St Thomas speaking of this process in intellectual knowledge explains the distinction thus: “… operatio intellectus et versatur circa verbum producendo illud seu formando et exprimendo, et hoc est dicere seu loqui verbum … et secundo versatur circa obiectum quod repraesentatur in verbo. Et hoc intellectus non versatur producendo, quia intellectus non immutat neque tangit rem cognitam in vi intellectionis: sed versatur apprehendo obiectum et trahendo ad se, seu faciendo illud unum sibi, ita ut intelligere sit esse ipsummet obiectum apprehensions. Et hoc est intelligere, scilicet ipsa sit operatio vitalis ut apprehendens: significat enim intelligere apprehendere obiectum" [Cursus theologicus, In lam, d. 32, a. 5 (Solesmes ed.; Paris: Desclee, 1931- ) IV, p. 79, n. 33].

55 See Peifer, op. cit, 156-160.

56 Ibid, 162-64.

57 See ibid., 165-179; for a consideration of the expressed species in the internal senses see ibid., 105-09.

58 "… hoc modo aliquid cognisciter secundum quod est in cognoscente repraesentatum, et non secundum quod est in cognoscente existens.
Similitudo enim in vi cognoscitiva existens non est principium cognitionis rei secundum esse quod habet in potentia cognoscitiva, sed secundum relationem quam habet ad rem cognitam" (Q. D. De ver., q.2, a. 5, ad 17.

St. Thomas speaks of the concept as that by which the intellect knows in Super I Sent., d. 27, q. 2, a. 1 ad 4; Q. D. De ver., q. 3, a. 2 q. 4 a. 2 ad 3, taking it as a likeness of the object. In other places he speaks of it as that in which the object is known, e.g., Super evangelium S. Joannis lectura, ed. R. Cai. 5th ed. (Turin: Marietta, 1952) c. 1 lect. 1. In other places still he speaks of it as that which is understood, e.g., Q. D. De pot., q. 9, a. 5; De ver., q 4, a 2 ad 3; I, q. 28, a. 4 ad 1. This meaning is also implied in Aquinas' frequent use of the phrase "intentio intellecta" For a discussion of this point see Peifer; op. cit., 183-212; also William W. Meiss"er "Some Aspects of the Verbum in the Texts of St. Thomas," Modern Schoolman, 36 (1958), 22-25.

"Id autem quod est per se intellectum non est res illa cuius notitia per intellectum habetur, cum illa quandoque sit intellecta in po-tentia tantu, et sit extra intelligentem sicut cum homo intelligit res ma-teriales, ut lapidem ve animal aut aliud huiusmodi: cum tamen oporteat quod intellectum sit in intelligente, et unum cum ipso. Neque etiam intellectum per se est similitudo rei intellectae, per quam informatur intellectus ad intelligendum: intellectus enim non potest intelligere nisi 'secundum quod fit in actu per hanc similitudinem, sicut nihil aliud potest operari secundum quod est in potentia, sed secundum quod fit actu per aliquam formam. Haec ergo similitudo se habet in intelligendo sicut intelligendi principium, ut calor est principium calefactionis, non sicut intelligendi terminus. Hoc ergo est primo et per se intellectum, quod intellectus in seipso concipit de re intellecta, sive illud sit definitio, sive enuntiatio, secundum quod ponuntur duae operationes intellectus, in III de Anima_0_ Hoc autem sic ab intellectu conceptum dicitur verbum interius" (Q. D. De pot., q. 9, a. 5c).

"conceptio intellectus est media inter intellectum et rem intellectam, quia ea mediante operatio intellectus pertingit ad rem. Et ideo conceptio intellectus non solum est id quod intellectum est, sed etiam id quo res intelligitur; ut sic id quod intelligitur, possunt dici et res ipsa et conceptio intellectus; et similiter id quod dicitur, potest dici et res quae dicitur per verbum et verbum ipsum . . " (Q. D. de Ver., q. 4, a. 2 ad 3). In I, q. 85, a. 2, however, he notes that "species intellectiva secundario est id quod intelligitur, sed id quod intelligitur primo, est res cuius species intelligibilis'est similitudo."

Si quando D. Thomas docet verbum seu conceptum non solum esse medium cognoscendo ut quo, sed etiam esse cognitum ut quo loquitur ratione sui repraesentati, quatenus in ipso conceptu habet objectum reddi intellectivum et immaterializatum seu denudatum condicionibus
materialibus, et sic non intelligitur ipse conceptus ut quod, inquantum est qualitas quaedam informans intellectum: sed res excogitata et formata per ilium conceptum cognoscitur ut quod, et sic comparatur ad rem extra, et induere potest rationem ideae" [John of St. Thomas, Cursusjheol., In Iam, q. 15, d. 21, a. 1 (Solesmes ed.) II, p. 537b, n. 11]

63

64

Footnotes to Chapter IV;

1
On the interpersonal character of all human knowledge see Remi Kwant, Encounter, trans. R C. Adolf, 2nd ed. (Duquesne Studies, Philos. series, n, 11; Pittsburgh: Duquesne Univ., 1965), 25-50,

2
Regis, op. cit., 267.

3
In II De anima, lect. 13, nn. 390-91; see Regis, op. cit., 268.

4
See Thomas Aquinas, In libro De memoria et reminiscencia, lect. 2, n. 319 (ed. R. M. Spiazzi, 3rd ed.; Turin: Marietti, 1949). After observing that magnitude, motion and time are known by sense, Thomas distinguishes between two ways in which something can be perceived by sense: "Uno quidem modo per ipsam immutationem sensus a sensibile, et sic cognoscuntur tam sensibilia propria quam etiam communia, a sensibus propriis et a sensum communem. Alio modo cognoscitur aliquid quadam secundario motu, qui relinquitur ex prima immutatione sensus a sensibile. Qui quidem motus remanet et quandoque post ab-sentiam sensibilium et pertinet ad phantasiam, ut habitum est in libro De anima. Phantasia autem secundum quod apparat per huius immutationem secundariam est passio sensus communis: sequitur enim totam immutationem sensus, quae incipit a sensibilius propriis et terminatur ad sensum communem. Unde manifestum est quod praedicta tria, scilicet magnitude, motus et tempus, secundum quod sunt in phantasmate comprehenduntur et cognoscuntur per sensum communem."

5
See Regis, op. cit., 271.
See Guzie, _op. cit._, 68. Note that strictly speaking the word phantasm refers to the sensible image precisely in relation to the operation of the intellect. However, it is also used in a broad sense to refer to the expressed image of the imagination both as constituted in itself and as modified by the activity of the cogitative sense,

7
See Regis, _op. cit._, 271-275.

8
Aquinas says: "Quod .. sensu propria non cognoscitur, si sit aliquid universale, apprehenditur intellectu … Si vero apprehenditur in singulares, utputa cum video coloratum, percipio hunc hominem vel hoc animal, huusmodi quidem apprehensio in homine fit per vim cogitativam, quae dicitur et ratio particularis, eo quod est collati-va intentionem individualium, sicut ratio universalis est collativa rationum universalium.

"Nihilominus tarn en ha ec vis est in parte sensitiva: quia vis sensitiva in sui supremo participant aliquid de vi intellectiva in homine, in quo sensus intellectui coniungitur. . . .

"Nam cogitativa apprehendit individuum ut existens sub natura communi: quod contingit ei, inquantum unitur intellectui in eodem subj-ecto; unde cognoscitur hunc hominem prout est hie homo, t hoc lignum prout est hoc lignum. Aestimativa autem non apprehenditur aliquid individuum, secundum quod est sub natura communi, sed solum secundum quod est minus aut principium alicuius actionis vel passionis; sicut ovis cogniscit agnus non inquantum est hie agnus sed inquantum est ab eo lactabilis; et hanc herbam inquantum est eius cibus. Unde alia individua ad quae se non extendit eius actio vel passio, nullo modo apprehendit sua aestimativa naturali, Naturalis enim aestimativa datur animalibus utper eam ordinentur in actiones proprias, vel passions prosequendus vel fugiendas." _In II De anima_, lect. 13, nn. 396-98).

9
Here is to be found the function of the cogitative sense in gathering the _experimentum_ from which the intellect is able to draw the universal intelligible [See Thomas Aquinas, _In XII libros -Metaphysicorum_, I, lect. 1, n. 15 (ed. M. R. Cathala and R M. Spiazzi; Turin: Marietti, 1950)]; also its function in preparing the phantasms for intellection (See _Contra gentiles_, II, c. 73).

10
See Guzie, _op. cit._, 700

11
See Regis, _op. cit._, 261-276.

12
See I, qq. 84-88.

13
See _In III De anima_, lect. 8; see also I, q. 76, a. 2 ad 4.

14
Aquinas writes: "... ex hoc est aliquid intelligibile actu, quod est immateriale ... sed quia Aristotiles non posuit formas rerum naturalium subsistere sine materia; formae autem in materia existentes non sunt intelligibiles actu: sequebatur quod naturae seu formae rerum sensibilium quas intelligimus, non essent intelligibiles actu" (I, q. 79, a. 3c). See also Regis, op. cit., 223 and D. M. De Petter, "De Oorsprong van de zijnskennis volgens Thomas van Aquino," in Begrip en werkelijkheid, ed. cit., 118-124. [This article first appeared in Tijdschrift voor Philosophie, 17(1955).]

See Regis, op. cit., 222-224.

See I, q. 54, a. 4; q. 79, a. 3.

"Phantasmata et illuminantur ab intellectu agente et iterum ab eis per virtutem intellectum agentis species intelligibiles abstrahuntur. Illuminantur quidem, quia sicut pars sensitiva ex conjunctione ad intellectivam efficitur virtuosior, ita phantasmata ex virtute intellectus agentis reduntur habilia ut ab eis intentiones intelligibiles abstrahuntur. Abstrahit autem intellectus agens species intelligibiles a phantasmatisbus, inquantum per virtutem intellectus agentis accipere possimus in nostra cognitione naturas specierum sine individualibus conditionibus secundum quorum similitudines intellectus possibilis informatur" (I, q. 85, a. 1 ad 4).

See De Petter, "Oorsprong..." 114-124. John of St. Thomas describes the causality of the phantasm as being neither efficient instrumental nor purely material, but rather "objective instrumental" and "objective material," and again, "matter after the manner of an object." See Cursus, Phil. nat., P. IV, q. 10, a. 2; Reiser ed., III, p. 304a 15-313b 26; also P. I., q. 26, a. 2; Reiser ed., II, 529a 12-b 22. See also Peifer, op. cit., 124-31 and Regis, op. cit., 235-36.

It is not the phantasm itself which is rendered actually intelligible, for this would require that the phantasm be dematerialized. Rather, it is in the intelligible species produced by the agent intellect together with the phantasm that the object is represented intelligibly in act. See John of St. Thomas, Cursus, Phil. nat., P. IV, q. 10, a. 2; Reiser ed., III, p. 308 b 17-309 b 34. In a less proper sense, however, the phantasm itself is rendered intelligible, namely, insofar as the intellect reflects its conception back upon the phantasm and views the intelligible aspects of the object precisely as they are embodied in the phantasm.
seipso quandam intentionem Rei intellectae, quae est ratio ipsius, quam significat definitio. Et hoc quidem necessarium est: eo quod intellectus intelligit indifferenter rem absentem et praesentem, in quo cum intellectu imaginatio convenit; sed intellectus hoc amplius habet, quod etiam intelligit rem ut separatam a conditionibus materxalibus, sine quibus in rerum natura non existit; et hoc non esse nisi intellects sibi intentionem praedictam formaret" (C, G. I, c. 53).

23 Speaking of the human intellect Aquinas says; "... proprium eius est cognoscere formam in materia quidem corporali individualiter existentem, non tamen prout est in tali materia. Cognoscere vero id quod est in materia individuali non prout est in tali materia est abstrahere formam a materia individuali, quam repraesentant phantasmata" (I, q. 85, a. lc).

24 See De Petter, "Oorsprong ...," 125.


26 "Intellectus autem humani, qui est coniunctus corpori, pro-prium obiectum est quidditas sive natura in materia corporali existens; et per huiusmodi naturas visibilium rerum etiam in invisibilium rerum aliqualem cognitionem ascendit. De ratione autem huius naturae est, quod in aliquo individuo existat, quod non est absque materia corporali: sicut de ratione naturae lapidis, est quod sit in hoc lapide, et de ratione naturae equi quod sit in hoc equo, et sic de aliis. Unde natura lapidis, vel cuiuscumque materialis rei, cognosco non potest complete et vere, nisi secundum quod cognoscitur ut in particulari existens. Particulare autem apprehendimus per sensum et imaginationem. Et ideo necesse est ad hoc quod intellectus intelligat suin obiectum proprium, quod convertat se ad phantasmata, ut speculetur naturam universalem in particulari existentem" (I, q. 84, a. 7c).

27 "... operatio proportionatur virtuti et essentiae, intellectus autem
hominis est in sensitive, sicut dicitur in secundo De anima. Et ideo propria operatio eius est intelligere intellegibilium in phantasmatibus, sicut intellectus substaritiae separatae operatio est intelligere res secundum se intellectas" (In lib De mem, et remin, lect. 2, n. 317).

28
See I, q. 57, a. 2c; also a. 1 ad 2.

29
See I, q. 58, a. 4c; also C. G. Ill, c. 108, n. 4; and Super II Sent., d. 3, q. 1, a. 6.

30
Super III Sent., d. 35, q. 2, a. 2, sol. 1; see also I, q. 79, a. 8. This is the reason why the human intellect is called "ratio" rather than "intellectus," for few natures are simple enough for the human intellect to grasp immediately in their distinctiveness; instead the intellect must proceed laboriously and discursively to its definitions and classifications.

31
To explain the details of this process would take us too far afield. Happily an excellent though brief account can be found in Regis, op. cit., 283-306.

32
The necessity and nature of this implicit and intuitive moment corresponding to the explicit conceptual moment in human intellectual knowledge has been well described by De Petter in "Implicate Intuitie," in Begrip en werkelijkheid, ed. cit., 25-43 (this article appeared originally in Tijdschrift voor Philosophie, I [1939]).

33
Ibid., 30

34
See ibid.- 32-33; also De Petter's "Zin en Grond van het oordeel," in Begrip en werkelijkheid, ed. cit., 74-93.'

35
Regis, op. cit., 312.

36
Ibid., 312-13.

37
"Het menselijke oordeel is derhalve de akt waardoor het kennend subject zich formeel bewust wordt van de in de abstract begripsinhoud geimpliceerde intuitive zijninhoud, en op grond hiervan de abstracte begripsinhoud naar het concrete en dus werkelijk bestaand op bevestigende wijze terugvoert" (De Petter, "Zin …," 91; see also "Implicate Intuitie,"
32.

38. See I, q. 14, a. 14c; q. 58, a, 4.

39. See Q. D. De ver., q. 9, a. lc.

40. Regis notes: "Within this intelligible whole constructed by the intellect, concept nouns are what substance is in the extramental thing; they are the stable, permanent element remaining identical despite the attribution of a multitude of predicates. This is why they are subjects, for what characterizes substance is precisely, as its name indicates, its support of accidents, its giving them existence. Concept verbs, on the contrary, have an entirely different role to play in the intellect's synthesis of the concepts of apprehension. Their function relative to the subject is informative, actualizing. They are its form, its acts just as accidents are the perfective form or substance; they express action, passion, existere, insofar as they inhere in the subject, insofar as the subject is their source and term. Since action, passion and existence are always acts whose perfective elements (concept verbs) are always predicates par excellence, and since no other concept can play the role of predicate par excellence unless the verb be present to help it perform this function, 'the verb always signifies what is predicated'" (pp. cit., 320

41. See ibid., 320-21; also Guzie, op. cit., 115-19; and Bernard Lonergan, "The Concept of Verbum in the Writings of St. Thomas Aquinas," Theological Studies, 8 (1947), 39.

42. "... duplex est operatio intellectus. Una, quae dicitur 'intelligentia indivisibilium', qua cognoscitur de uno quoque, quid est. Alia vero, qua componit et dividit, scilicet enuntiationem affirmativam vel negativam formando. Et hae quidem duae operationes duobus, quae sunt in rebus respondent. Prima quidem operatio respicit ipsam naturam rei, secundum quam res intellecta aliquem gradum in entibus obtinet, sive sit res completa ut totum aliquod, sive res incompleta, ut pars vel accidens, Secunda vero operatio respicit ipsum esse rei, quod quidem. resultat ex congregatione principiorum rei in compositis vel ipsam simplicem naturam rei concomitatur, ut in substantiis simplici-bus" [Thomas Aquinas, Expositio super librum Boethii De trinitate, ed. Bruno Decker, 2nd ed. (Studien u. Texte zur Geistesgeschichte des Mittelalters, 4; Leiden: Brill, 1959), q. 5, a. 3c. (All subsequent references to Aquinas' Super Boeth. De trin., are to this edition)]


44. De Petter, "Zin. ...," 90-91.
See Regis, *op. cit.*, 331-33.

See De Petter, *op. cit.*, 81-91.

"Veri enim ratio consistit in adaequatione rei et intellectus; idem autem non adaequatio sibi ipsi, sed aqualitas diversorum est; unde ibi primo invenitur ratio veritatis in intellectu ubi primo intellectus incipit aliquid proprium habere quod res extra animam non habet, sed aliquid ei correspondens, inter quae adaequatio attendi potest.

"Intelectus autem formans quidditates, non habet nisi similitudinem rei existentis extra animam, sicut et sensus in quantum accipit speciem rei sensibilis; sed quando incipit iudicare de/re apprehensa, tune ipsum judicium intellectus est quoddam proprium ei, quod non invenitur extra in re, dicitur iudicium verum esse" (Q. D. *De ver.*, q. 1, a. 3c; also I, q. 16, a. 2).

Guzie, *op. cit.*, 120; see Regis, *op. cit.*, 355.

For this classification of first principles see Regis, *op. cit.*, 379-403. Regis explains in some detail the foundations for each of these judgments and their various formulations, ontological, psychological and epistemological.

See especially Q. D. *De ver.*, q. 16, a. 1, q. 11, a. 1 ad 5; q. 10, a. 6c and ad 6. For the texts and a thorough discussion of their implications see De Petter, "Oorsprong. . . .," 101-05.

See Q. D. *De ver.* q. 10, a. 6c. For a discussion of this point again see De Petter, *loc. cit.*, 105-109.

Commenting on the text of Job 38:36 "Quis posuit in visceri-bus hominis sapientiam?", Aquinas observes: "Per viscera hominis intelliguntur intimae vires animae ipsius, scilicet intellectus et ratio, quibus Deus sapientiam indidit inquantum lumen rationis homini dedit: quaedam (enim) seminaria sapientiae et scientiae naturaliter indidit rationi ipsius in cognitione primorum principiorum" [*Expositio super Job*, c. 38, in *Opera omnia*, ed. Leonina, vol. 26, pt. 2 (Rome: Santa Sabina, 1965) lines 620-627. (In older editions this section stands at the head of lectio 3; the lectio division was omitted in the new Leonine edition)].

Regis, *op. cit.*, 376.
De Petter, "Oorsprong. ..." 94-135.

55
The analogy to physical light is perhaps the best that can be offered. The same physical light which illuminates the object communicates the form of the object to the visual sense. The form received is "abstracted" from its matter in the sense that it is received as an impressed species in the visual sense without its proper matter. These two effects -- illumination on the part of the object, abstraction on the part of the sensed form of the object -- are correlative consequences of one and the same illuminative-abstractive operation.

56
See De Petter, loc. cit., 113-129.

57
Ibid., 126.

58

59

60
See Q. D. _De ver_, q. 16, a. 2; see also q. 15, a. 1c.

61
William Richardson, _Heidegger; Through Phenomenology to Thought_ (Hague; Martin Nijhoff, 1963), 6.

62

63
Ibid., 172.

64
This classification is that of Karl Bühler's _Sprachtheorie: Die Darstellungsfunktion der Sprache_ (Jena, 1934) as developed in Luis Alonso Schokel, _The Inspired Word: Scripture in the Light of Language and Literature_, trans, Francis Martin (New York: Herder and Herder, 1965), 134-35.

65
Alonso Schok'el, op. cit., 143.

66
See David Crystal, _Linguistics, Language and Religion_ (Twentieth

67
See I, q. 34, a. 1.

68

69
Ibid., 32-33.

70
Ibid., 37.

71

72
See De Petter, "Zin. . . .," 87. Of course such an association of the subject of the sentence with the phantasm does not mean that the subject of the sentence is known only with sense knowledge. The subject is known in the phantasm by an act of perception, an act which is both sensitive and intellectual.

73

74
Ibid., 128; see 126-28.

75

76
See Guzie, *op. cit.*, 167-68.

77
See note 30 of this chapter.

78
I, q. 79, a. 8c; q. 60, a. 2; II-II, q. 180, a. 8c.

79
On the difference between direct judgmental cognition and the so-called "conceptual" or "absolute insight," see Guzie, *op. cit.*, 119-123.

80
See Regis, *op. cit.*, 431.
Such indeed is the impression given by many manuals of scholastic philosophy and theology. It permeates especially the works of Francisco Marin-Sola and P. Muniz. Thanks, however, to the careful scholarship of M. R Gagnabet in "La nature de la théologie speculative," RThom 44 (1938), 213-255, a truer notion of Aristotelian and Thomistic demonstration has come to light. The aim of demonstration is not to discover new facts but to explain known facts about a subject by tracing their causal relationships. See also Gagnabet's "Le Probleme actuel de la théologie et la science aristotelicienne d'apres un ouvrage recent," Divus Thomas Piac 20 (1943), 237-270; and "La théologie de S. Thomas science aristotelicienne de Dieu," Acta Pont. Acad. Romana S. Thomae Aquinatis, 11 (1946), 203-222.


Regis, op. cit., 432.

See Gagnabet, "Nature de Théol. ," 234-35; also M. Labourdette, "La théologie, intelligence de la foi," RThom 46 (1946), 380

Regis, op. cit., 408.

"...intellectus noster possibilis respectu partium contra -dictionis se habet diversimode.

1) Quandoque enim non inclinatur magis ad unum quam ad aliud, vel propter defectum moventium, sicut in illis problematibus de quibus rationes non habemus; vel propter apparentem aequalitatem eorum quae movent ad utramque partem. Et ista est dubitantis dispositio, qui fluctuat inter duas partes contradictionis.

2) Quandoque vero intellectus inclinatur magis ad unum quam ad alterum; sed tamen illud inclinans non sufficienter movet intellectum ad hoc quod determinet ipsum in unam partium totaliter; unde accipit quidem unam partem, tamen semper dubitat de opposita. Et haec est dispositio opinantis, qui accipit unam partem contradictionis cum formidine alterius.

3) Quandoque vero intellectus possibilis determinatur ad hoc quod
totaliter adhaeret uni parti; sed hoc est quandoque ab intelligibili, quandoque a voluntate.

a) Ab intelligibili quidem quandoque mediate, quandoque immediate. Immediate, quando ex ipsis intelligibilibus statim veritas propositionum intelligibilium infallibiliter apparat. Et haec est dispositio intelligentis principia, quae statim cognoscuntur notis terminis, ut Philosophus dicit. Et sic ex ipso quod quid est, intellectus immediate determinatur ad huiusmodi propositiones.

Mediate vero, quando cognitis definitionibus terminorum, intellectus determinatur ad alteram partem contradictions, virtute primorum principiorum. Et ista est dispositio scientia.

b) Quandoque vero intellectus non potest determinari ad alteram partem contradictionis neque statim per ipsas definitiones terminorum, sicut in principiiis, nec etiam virtute principiorum, sicut in conclusionibus demonstrativis est; determinatur autem per voluntatem, quae eligit assentire uni parti determinate et praecise propter aliquid, quod est sufficiens ad movendum voluntatem, non autem ad movendum intellectum, utpote quod videtur bonum vel conveniens huic parti assentire. Et ista est dispositio credentis, ut cum aliquis credit dictis alicuius hominis, quid videtur decens vel utile" (Q. D. De ver., q. 14, a. lc).

87
See Regis, op. cit., 422.
88
See ibid., 404-23.
89
The authoritative synthesis of Newman's teaching on this distinction between implicit and explicit reasoning can be found in Walgrave, op. cit., 96-103. An analogous notion, it would seem, can be found in Bernard Lonergan, Insight: A Study of Human Understanding (New York: Philosophical Library, 1957), 174.
90
91
See Guzie, op. cit., 100-01, 121-22; also 148-57.
92
See Lonergan, Insight, 8-9, 17-18.
93
See note 25 of this chapter. Elsewhere Aquinas observes:"... in scientia natural! terminari debet cognitio ad sensum, ut scilicet hoc modo iudicemus de rebus naturalibus, secundum quod sensus eam demonstrate ut pater in III Caeli et mundi; et qui sensum neglegit in naturalibus, incidit in

"Quod quidem efficaciter diceretur, si substantiae immateriales essent formae et species horum ma'terialium, ut Platonici posuerunt. Hoc autem non posito, sed supposito quod substantiae immateriales sunt omnino alterius a quidditatibus materialium rerum, quantum-cumque intellectus noster abstrahat quidditatem rei materialis a ma-teria, nunquam perveniet ad aliquid simile substantiae immateriali" (I, q. 88, a. 2c).

See Q. D., *De ver.*, q. 13, a. 3; II-II, q. 175, a. 4 ad 3. In this life the dependence of the intellect upon phantasms is so close that knowledge of even created immaterial beings, to say nothing of the uncreated being of God, is possible only in rapture -- the total separation of the intellect's operation from the operation of the senses; see Q. D. *De ver.*, q. 13, a. 3; II-II, q. 175, aa. 4-5; cf. Q. D. *De ver.*, q. 12, a. 7c on how the purely intellectual vision of immaterial beings (through infused intellectual species representing them per essentiam) would differ from a knowledge reflected in perception or in phantasms.

See I, q. 87, a. lc.

I, q. 88, a. 2 ad 3.

"… ex rebus materialibus ascendere possimus in aliqualem cognitionem immaterialium rerum, non tamen in perfectam: quia non est sufficiens comparatio rerum materxalmm ad immateriales, sed similitudines si quae a materialibus accipiuntur ad munaterialia intelligenda, sunt multum dissimiles, ut Dionysius dicit ([Cael. hier.]*)" (I, q. 88, a. 2 ad 1; see also ad 2).

"... substantiae immateriales creatae in genere quidem naturali non conveniunt cum substantiis materialibus, quia non est in eis eadem ratio potentiae et materiae: conveniunt tamen cum eis in genere logico, quia etiam substantiae immateriales sunt in praedicamento Substantiae, cum earum quidditas non sunt earum esse. Sed Deus non convenit cum rebus im matinguliberibus neque secundum genus naturale, neque secundum genus logicum: quia Deus nullo modo est in genere ut supra [ see I, q. 3, a. 5] dictum est. Unde per similitudines rerum materialium aliquid affirmative potest cognoscere de angelis secundum rationem communem licet non secundum rationem speciei; de Deo autem nullo modo" (I, q. 88, a. 2

See ibid., 58-63.

Penido writes: "Aucune recherche théologique ne peut aboutir -- échappant au m'etaphorisme comme à l'anthropomorphism - - s i l'on n'admet pas d'emblée, en notre esprit, un pouvoir d'abstraction qui nous permette de penser dans l'transcendant. L'idée transcendentale de bonté n'est plus formellement (mais seulement proportionellement) le concept de bonté créée, et c'est cette idée que nous proportionnons à Dieu. C'est dans et par cette idée universelle que nous connaissions la bonté subsistante" (ibid., 189).


See Thomas Aquinas, *Jn lib. B. Dionysii De divinis nominibus expositio*, ed. C Pera (Turin: Marietti, 1950), c. 13, lect. 3, n. 995: "manifestum est enim quod hoc nomen bonum, cum sit a nobis impositum, non signat nisi quod nos mente capimus; unde, cum Deus sit supra mentem nostram, superexcedit hoc nomen, Et quia theologi consideraverunt quod omne nomen a nobis impositum deficit a Deo, ideo ipsi, inter omnes modos quibus in Deum possimus ascendere per intellectum, praeordinaverunt eum qui est per negationes, per quas quodarn ordine in Deum ascendimus.,"

Aquinas writes: "licet aliquo modo concedatur quod creatu-ra sit similis Deo, nullo tamen modo concedendum est quod Deus sit similis creatureae, quia, ut dicit Dionysius, cap. 9 De Div. Norn., in his quae unius ordinis sunt, recipitur mutua similitudo, non autem in causa et causato: dicimus enim quod imago sit similis homini, et non e converse Et similiter dici potest aliquo modo quod creatura sit similis Deo, non tamen quod Deus sit similis creatureae" (I, q. 4, a. 3 ad 4).

See *In De div. nom.*, c. 9, lect. 3, n. 834; cf. *Super Boeth. De trin.*, q. 1, a. 2 ad 3.

See Q. D. *De pot.*, q. 7, a. 5 ad 9.

"Toutes nos representations de Dieu tirées du monde crée peuvent sans doute signifier Dieu 'sed non definitive vel circumscriptive': nous ne possedons aucune 'ratio' correspondant à la
perfection divine, aucun concept propre de Dieu (Schillebeeckx, loc. cit., 253).

110
"L'acte significant s'étend au-delà de la 'ratio nominis', mais il dépasse cette 'ratio' dans la direction qu'indique le contenu, de sorte que la chose est réellement visée, mais non compris conceptuellement" (Schillebeeckx, loc. cit., 254). Aquinas writes: "... quia omnis similitudo creaturæ ad Deum deficiens est et hoc ipsum quod Deum est omne id quod in creaturis invenitur excedit, quidquid in creaturis a nobis cognoscitur a Deo removetur, secundum quod in creaturis est; ut sic, post omne illud quod intellectus noster ex creaturis manuductus de Deo concipere potest, hoc ipsum quod Deus est remaneat occultum et ignotum. Non sol-urn enim Deus non est lapis aut sol, qualia sensu apprehenduntur, sed nee est talis vita aut essentia qualis ab intellectu nostro concipi potest et sic hoc ipsum quod Deus est, cum excedat omne illud quod a nobis apprehenditur, nobis remaneat igno-turn" (In De div. nom., proem, n. I).

111
"Il s'agit ici d'un contenu positif de conscience qui nous oriente objectivement vers le mode proprement divin. Nos 'concepts de Dieu' délimitent réellement une intelligibilité qui, pourtant, reste ouverte sur le mystère. La valeur noétique typique de notre connaissance de Dieu réside donc dans un acte projectif dans lequel nous tendons vers Dieu, sans pourtant le comprendre, mais en sachant qu'il se situe dans la direction ou nous tendons. Ce qui veut dire que notre connaissance de Dieu n'est pas une sorte de tir aveugle dans l'espace. Dieu se trouve réellement dans la perspective du contenu intelligible des 'transcendentalia', qui nous orientent donc positivement vers Dieu, bien que nous ne puissions positivement le situer avec plus de précision à l'intérieur de cette perspective déterminée (Schillebeeckx, loc. cit., 258).

112
On this point see J. Legrand, loc. cit.

113
"... phantasma est principium nostræ cognitionis, ut ex quo incipit intellectus operatio non sicut transiens, sed sicut permanens ut quoddam fundamentum intellectualis operationis; ... cum phantasmata comparentur ad intellectum ut obiecta, in quibus inspicit omne quod inspicit vel secundum perfectam repræsentationem vel per negationem. ... Patet enim quod non possimus intelligere Deum esse causam corporum siue supra omnia corpora sive absque corporeitate, nisi imaginemur corpore ..." (Super Boeth. De Trin., q. 6, a. 2, ad 5).

114
Super Boeth. De Trin., q. 6, a 2c. See also Super IV Sent., d. 49, q. 2, a. 7 ad 8, where Thomas explains how it is possible for us to think 'of God immediately even though we do not see him immediately, seeing instead only some created effect.
"… loco cognitionis generis habemus in istis substantiis cognitionem per negationes, ut cum scimus quod huiusmodi substantiae sunt immateriales, incorporeae, non habentes figuras et alia huiusmodi. Et quanto plures negationes de eis cognoscimus, tanto et minus confusa est earum cognitio in nobis, eo quod per negationes sequentes prior negatio contrahitur et determinatur, sicut genus remotum per differentias. … Loco autem accidentium habemus in substantiis praedictis habitudines earum ad substantias sensibiles vel secundum comparationem causae ad effectum vel secundum comparationem excessus" (Super Boeth. De Trin. , q. 6, a0 3c).

116

117
See I, q. 82, a. 3; also I-II, q. 66, a. 3, and II-II, q. 23, a. 6 ad 1.

118
"Inclinatio autem cuiuslibet rei est in ipsa re per modum ei-us. Unde inclinatio naturalis est naturaliter in re naturali et inclinatio quae est appetitus sensibilis, est sensibiliter in sentiente, et similiter inclinatio intelligibilis, quae est actus voluntatis, est intelligibiliter in intelligente . . . " (I, q. 87, a. 4c).

119
See I, q. 27, a 4c.

120
See I, q. 27, a 4c. Thomas notes that there is no distinct name for this intrinsic term (I, q. 28, a. 4; also q. 37, a. 1); instead the same name is used for the act and for its term. See I, q. 37, a. lc; for further explanation see Paul Philippe, Doctrina mystica S. Thomae (Rome: Pont Ath. "Angelicum, 1952), 174-76.

121
See I, q. 81, a. lc.

122
See Philippe, op. cit, 191-95.

123
Sharkey, op. cit, 104.

124
Ibid, 11-14.
Ibid., 22-23.


Ibid., 26-27; See Philippe, op. cit., 188-91.

See Conley, op. cit., 133.


This distinction between signal and symbol is taken from Susan Langer's Philosophy in a New Key, 2nd. ed. (Cambridge: Harvard Univ. Press, 1951), 53-78.

See Crystal, op. cit., 94.

This is not to say that linguistic communication is simply a matter of behavioristic association. Internal responses and contextual references are inseparable from meaningful communication. Nevertheless, in a general way it remains true that there is no learning of meaning through non-representational symbols without association. See ibid., 90-108, for a brief but clear treatment of the matter of semantics and theories of meaning.

Guzie, op. cit., 145.


Gusdorf, op. cit., 36.

I have generally followed Guzie, op. cit., 146-63 in the distinction and exposition of these processes of interpretation and learning.

Ibid., 146.

The basic unit of speech is not the isolated parts of speech, but the complex whole, comprised of more or less complex sentences, expressing as a whole a single intended meaning; see Gusdorf, op. cit., 36.
Martin Heidegger, preface to William Richardson's *Heidegger: Through Phenomenology to Thought*, ed. cit., p. x

See Guzie, *op. cit.*, 151-52

Ibid., 147

Ibid., 160

See Edward Dhanis, "Revelation explicite et implicite," *Greg. 34* (1953), 216-19. In the exposition which follows I have made certain modifications of Dhanis' terminology and explanations. Dhanis himself begins by distinguishing the objects of an affirmation into explicit and implicit objects. The *explicit object* is signified immediately and clearly. The *implicit object* is what is obscurely contained in the explicit object. If the implicit object is clearly contained in the statement taken as a whole, even though it is not stated in so many words and in detail, it is *immediately implicit* and immediately signified. On the other hand, if the implicit object is not clearly contained in the statement taken both in detail and as a whole, it is *mediately implicit*. Mediatly implicit objects are then further subdivided into those which are mediately signified and those which are immediately signified, according as they are or are not intended by the speaker to be part of the communication and to be attested by his authority. For Dhanis, therefore, at the last subdivision signification tends to merge with attestation. It seems better to reserve the term signification for the function attributed to "object" in Dhanis' classification.

On the importance of situational and verbal contexts and personal connotations in the determination of meaning, see Crystal, *op. cit.*, 95-101.

Strangely enough Dhanis regards the formal attestation of
mediately signified meaning as very rare in ordinary human communication (see op. cit. 219).

151
Joseph Marechal in his Le Point de depart du metaphysique, cahier V, 2nd ed. (Paris: Desclee de Brouwer, 1949), 372-438, has given a thorough analysis of this dynamism. Regretably Marechal makes this dynamism and its attendant practical intuition the exclusive basis and explanation of transcendental cognition (see 439-68, especially his deduction of the ontological affirmation, pp. 457-60; cf. Schillebeeckx, "L' Aspect non conceptuel …," 244-47, and De Petter, "Zin. …," 78-81.

152
See Schillebeeckx, ibid., 245-46.

153

154
Ibid., 70.

155
"... ipsum credere nihil aliud est, quam cum assensione cogitare. Non enim omnis qui cogitat, credit; cum ideo cogitent plerique ne credant: sed cogitat omnis qui credit, et credendo cogitat, et cogitando credit" [Aurelius Augustinus, De Praedestinatione sanctorum, c. ii, n. 5 (P. L. 44, 963)].

156
"... dicitur cogitare magis proprie consideratio intellectus quae est cum quadam inquisitione, antequam perveniatur ad perfectionem intellectus per certitudinem visionis" (II-II, q. 2, a. lc).

157
"Actuum enim ad intellectum pertinentium quidem habent firmam assensionem absque tali cogitatione, sicut aliquis considerat ea quae se it vel intelligit: talis enim consideratio iam est formata. Quidam vero actus intellectus habent quidem cogitationem informem absque firma assensione: sive in neutram partem declinent, sicut accidit dubitanti; sive in unam partem magis declinent. sed tenentur aliquo levi signo, sicut accidit suspicanti; sive uni parti adhaereat, tamen cum formidine alterius, quod accidit opinanti. Sed actus iste qui est credere habet firmam adhaesionem ad unam partem, in quo convenit cre~dens cum sciente et intelligente: et tamen eius cognitio non est perfecta per manifestam visionem, in quo convenit cum dubitante, suspicante, et opinante. Et sic proprium est credentis ut cum assensu cogitet . . ." (II-II, q. 2, a. lc).

158
See Dhanis, loc. cit., 211-12.

159
See Garragan, op. cit., 73-80, on the nature of historical certainty. See I-II, q. 14, a. 6 ad 3 on the necessity found in contingent particulars.


Footnotes to Chapter V:

1


2


3

"... de substantiis illis immaterialibus secundum statum viae nullo modo possumus scire quid est non solum per viam naturalis cognitionis, sed etiam nee per viam revelationis, quia divinae revelationis radius ad nos pervenit secundum modum nostrum ut Dionysius dicit. Unde quamvis per revelationem elevemur ad aliquid cognoscendum, quod alias esse nobis ignotum, non tamen ad hoc quod alio modo cognoscamus nisi per sensibilia" (Super Boeth. De Trin., q. 6, a. 3, par. 2).

4

II-II, q. 175, aa. 4-5; Q. D, De ver., q. 13, a. 3.

5

II-II, q. 174, a. 2 ad 4; see Q. D, De ver., q. 12, a. 12 ad 2.

6

Q. D, De ver., q. 13, a. 3; II-II, q. 175, a. 4 ad 3.

7

"Et sic tripliciter mens humana proficit in cognitione Dei, quamvis ad cognoscendum quid est non pertingat, sed an est solum. Primo, secundum quod perfectius cognoscitur ens efficacia in produ-cendo res. Secundo prout nobiliorum effectuum causa cognoscitur, qui cum eius similitudinem aliquam gerant, magis eminentiam eius commendant. Tertio in hoc quod magis ac magis cognoscitur elongatus ab omnibus his quae in effectibus apparent" (Super Boeth. De Trin., q. 1, a. 2c, par. 3).

8

See Basil Davidson, Africa: History of a Continent (New York:

9
See C. G., III, c. 154; also the texts of Aquinas' treatment of prophetic knowledge in II-II, q. 173, a. 2c. What is formal in prophetic knowledge is the divine light (II-II, q. 171, a. 3 ad 3).

10
See Q. D. De ver, q. 12, a. 7c.

11

12
Both in Q. D. De ver, Q. 12, a.7 and in II-II, q. 173, a. 2, St. Thomas stresses the inadequacy of a mere apprehension of species. There must be a judgment before the communication is consummated. See Paul Synave and Pierre Benoit, Prophec_y_andJinspiration, trans. A, R. Dulles and T. L. Sheridan (New York: Desclees Co., 1961), 64-65.

13
See the excellent study of this matter by J. De la Potterie, "L'Onction du Chrétien par la foi," Biblica, 40 (1959), 12-69. This work shows clearly the dependence of this inner light of faith on the Word of God in the apostolic teaching for its specification.

14
See C. G., III, c. 154, also Super Boeth. De Trin, qo 1, a.1,par. 30

15
"Fides principaliter est ex infusione ..., sed quantum ad determinationem suam est ex auditu," Super IV Sent., d. 4, q. 2, a. 2,sol. 3 ad 1. See also II-II, q. 6, a. 1c. For a thorough comparison of the light of faith with the light of prophecy, see Juan Alfaro, "Supernaturalitas fidei iuxta S. Thomam," Greg. 44 (1963), 533-41.

16
"Formale obiectum fidei est veritas prima secundum quod manifestatur in Scripturis sacris et in doctrina Ecclesiae" (II-II, q. 5, a. 3 ad 2).

17
"... fides ex duabus partibus est; a Deo scilicet ex parte interioris luminis, quod inducit ad assensum; et ex parte eorum quae exterius proponuntur, quae ex divina revelatione initium sumpserunt: et haec se habent ad cognitionem principiorum, quia utriusque fit aliquae cognitionis determination Unde sicut cognitio principiorum accipitur a sensu, et tamen lumen quo principia cognoscuntur est innatum ita fides est ex auditu et tamen habitus fidei est infusus" (Super Boeth. De Trin. q. 3, a. l and 4; see also Super I Sent, prol., q.
This is the conclusion of the very thorough studies of Benoît Duroux, "Illumination de la foi chez saint Thomas d'Aquin," Freiburger Zeitschrift, 3 (1956), 28-38; M. Seckler, Instinkt und Glaubenswille nach Thomas von Aquin (Mainz; Matthias Grünewald, 1962) [regrettably this work was unavailable to me, though its argumentation is summarized in Schillebeeckx, "L'aspect non conceptuelle … de foi," 315-321], and Alfaro, _loc. cit_, Schillebeeckx (_loc. cit_, 315-21), however, takes exception to an exclusive interpretation of the illumination of faith under the aspect of instinctus and assent.

R. M. Schultes, _Introducitio in historiam dogmatum_ (Paris: Lethiellieux, 1922), 74-85, has shown that for the thirteenth century-scholastics, especially Aquinas, the term "articulus fidei" has a very technical sense. It meant the primary truths necessary for salvation and distinguished one from another by the distinct difficulties they offer for belief. Other truths are revealed and believed insofar as they are related to these articles. In the fourteenth century, however, nominalist theologians began to use the term indiscriminately for all revealed truth. Denying all articulation within the deposit of revealed truth, the nominalist theologians denied the possibility of theological reasoning operating within the object of faith and revelation. Instead they made a complete separation of the objects of faith and theology: faith has as its object all the truths of revelation and has assent as its only act; theology, on the contrary, has as its object those new truths which can be deduced by pure reasoning from truths of revelation and has as its act deduction. It was this nominalist notion that was adopted by many of the classic commentators on St. Thomas and gave rise to the erroneous notion that for St. Thomas theology was a purely deductive science based upon revealed truths but ordered to an object completely extrinsic to faith. Schultes' conclusions have been confirmed by Albert Lang in "Die Gliederung und die Reichweite des Glaubens nach Thomas von Aquin und den Thomisten," _Div. Thom._ (Fribg.,) 20 (1942), 207-236; 335-46; 21 (1943), 79-99; and _Die theologische Prinzipienlehre der mittelalterlichen Scholastik_ (Freiburg im Br.: Herder, 1964).

See II-II, q. 1, a. 8.

The immediate effect of faith is a "simplex cognitio articulo-rum, quae sunt principia totius christianae sapientiae" (Super III Sent., d. 35, q. 2, a. 1, sol. 1 a d 1. See also _Super I Sent._, prol., q. 1, a. 3, q'la 3, sol, 2; Super III Sent., d. 24, a. 2, sol. 1 and 2.

On the distinction between knowing in faith and from faith, see _In Div. nom._, c. 1, lect., n. 11.
23
See II-II, q. 1, a. 6 and 8-9.

24
See M. Labourdette, "La théologie, intelligence de la foi," R Thom. 46 (1946), 12-16, for a treatment of the formally illuminative character of faith; also Schillebeeckx, "De la foi apostolique …," 69-76.

25

26
The precise reason why God spoke to man and became incarnate in Christ was to reveal to man his supernatural destiny and to teach him the means by which God would bring man to that destiny. See I, q. 1, a. 1; also Q. D. De Ver., q. 14, a. 2 and a. 3 ad 9.

27
Alfaro, loc. cit., 535-40; and Douroux, loc. cit., 32-38.

28
See esp. Douroux, loc. cit.

29

30
We might note that insofar as Christian art is an extension of the preaching of the Church, the Word' of God also comes to us in visual, iconic and non-iconic symbolic phantasms and in the non-verbal auditory phantasms of music. These forms in fact play a very important role in the knowledge of faith, but as they depend upon and supplement the verbal Word of God we shall not treat specially of them.

31
See Alonzo Scho'kel, op. cit., 38-45.

32

33

34
See Levie, op. cit., 298-99.

35
See Heinrich Kahlefeld, Parables and Instructions in the Gospels.
trans. A. Swidler (New York: Herder and Herder, 1966), 90-94, on the distinction between the contextual meaning of Jesus' words in his own preaching and in the evangelist's narration of them.


37 In treating of prophetic knowledge, Aquinas has treated at length of the interaction of phantasms and concepts in revealed knowledge; see esp. Q. D. De Ver., q. 12, aa. 7, 9, 12, and 13; II-II, q. 173, aa. 2, 3; q. 174, aa. 2, 3; q. 175, aa. 1 and 4. Regrettably, neither he nor his commentators seem to have made any effort to explain the knowledge of faith along similar lines.

38 It should be noted that there is a special problem of the certitude of such a reflection of an article of faith in perception (see II-II, q. 1, a 3 ad 4). Thomas would explain the judgment given in such a perception of faith as participating in the certitude of the applicable universal article of faith. Consequently, should this judgment de facto be false, because the bread was not validly consecrated or some such thing, this erroneous judgment i-pso facto would not be a judgment of faith but only a conjecture (see I, q. 14, a. 13c).


42 "... fides ... hominem divinae cognitioe coniungit per assensum" (Q. D. De ver., q. 14, a. 8 c; see also II-II, q. 1, a. 2c.

43 See II-II, q. 2, aa. 5-7.

44 Schillebeeckx, "Qu'est que la théologie," in Approches thgol. ed. cit., 88-89.
See R. Gagnabet, "Le nature de la théologie speculative," RThom 44 (1938), 1-39, 213-255, 645-674. In the wake of Gagnabet’s articles, and in response to the approximately contemporary publications of J.-Fr. Bonnefoy ["La théologie comme science et l’explication de la foi selon saint Thomas d'Aquin," £TL 14 (1937), 421-426, 600-631; 15 (1938), 491-516] and Louis Charlier, [Essai sur la problème théologique (Thuillies: Ramgall, 1938)], a vast literature grew up in the late thirties and extending even to the early fifties. The center of this controversy was the so-called "theological conclusion" and the notion that the object and activities of scientific theology are extrinsic to the knowledge of faith.

Some have persisted in holding an extrinsecist notion of theology as a deductive science. A particularly unfortunate example of this position mars the otherwise excellent work of F. Muniz ["De divers muneriibus S. Theologiae secundum doctrinam S. Thomae," Ang. 24(1947), 93-123]. Convinced that Aristotelian-Thomistic demonstration has as its object exclusively the discovery of new truths, rather than causal explanation, Muniz was forced to relegate all theological consideration of directly revealed truth to a non-scientific, "sapiential" function. Had he had a clearer understanding of the nature of demonstration, he would have seen that only discourse about the fundamental articles of faith belongs to this non-scientific "sapiential" function, and that the scientific function of theology is operative even within the deposit of revealed truths insofar as it explains secondary revealed truths by connecting them with the articles.

For a more balanced account of the various functions of theological discourse see Labourdette, "La théologie ...," 24-25, 34-35; Reginald Garrigou-Lagrange, La synthèse thomiste (Paris: Desclee de Br. 1946), 108-113 [The position taken here constitutes a notable advance over the earlier and more widely known views of the author]; Schillebeeckx, "Qu'est que la théol. ." 95-136; and Kevin Conley, op. cit., 66-103 [Conley's work is particularly good in its treatment of the primarily contemplative nature of theology, pp. 81-89].

Even when theological reasoning does lead to discovery of new aspects of revealed realities, the process by which the discovery is made is much closer to the inductive methods of the sciences than to a purely deductive process of the mathematical type. See Labourdette, loc. cit., 39.

M. D. Chenu, "Vocabulaire biblique et vocabulaire théologi-Parole de Dieu, ed. cit., I, 171-86.

See Yves Congar, La foi et la théologie (Le mystère chrétien; Tournai: Desclee, 1962), 197-201.

The formal quo object of theology is neither purely human nor purely divine, but is both divine and human (see Congar, op. cit., 129-30). The theologian does not assent to his theological explanation by faith [see .
Congar's review of the articles of J. F. Bonnefoy in *Bthom.* 5 (1937-39), 502-03; nevertheless he assents by faith to the revealed truth which his theological explanation contains and explains. This revealed truth is embodied for him in the representations of his imagination and conceptual understanding, though he recognizes intuitively that it is more extensive and more profound than his representations explicitly delineate. It is, therefore, in and through these theological representations that he gives his assent to the reality; apart from such representations he simply has no noetic contact with the revealed reality (see Schillebeeckx, "Le concept de vérité," 239-40).

49 See Schillebeeckx, "De la foi … ", 69-76; also «Le concept de vérité ", 237-242.


52 See Congar, *ibid. , 70-71.

53 Schillebeeckx, "Le concept …," 239-40.

54 "C'est seulement à la suite de nouvelles expériences humaines, de nouvelles données positives, que la question de la distinction entre le 'contenu' et le 'revêtement' de la foi s'est expressément posée et qu'il a été possible d'examiner si le 'revêtement' n'était qu'un simple manière de se représenter les choses ou appartenait également au contenu dogmatique" (ibid., 240).


57

See Vat II, *De rev.*, c. 1, nn. 9-10, and c. 6, n. 21.

58


59

See M. D. Chenu, "Vocabulaire ...,", 186.

60

See Johannes Beumer, "Das katholische Schriftprinzip in der theologischen Literatur de Scholastik bis zur Reformation," *Schol.* 16 (1939), 24-52.

61

A notable body of literature has grown up on this point. Some of the best contributions can be found in Herbert Vorgrimler's *Biblical versus Dogmatic Theology*, *cit.*
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PHILOSOPHIA AND SACRA DOCTRINA
New insights into Thomas Aquinas’ understanding of the relationship between science and philosophy, Sacred Scripture and theology

Introduction

At first sight it would appear unlikely that anything new can be said about this topical complex about which so much ink has been spilled. Yet I claim here to do just that. Historical research has overthrown mighty pillars of the classical neoscholastic approach to the topic. 1) We now see more clearly than before, that the expression „sacra doctrina“ in the decisive Quaestio prima of the Summa theologiae was for Thomas a technical term, whose meaning is not simply to be equated with scientific theology. 2) More and more attention is paid to Aquinas’ commentaries on the Bible and on Aristotle, which thus come to be seen as important sources for understanding his theology and philosophy. 3) The relationship between metaphysics and natural philosophy for Thomas is seen to differ from that propagated by classical neothomism. The Aristotle commentaries show that a) Aquinas so-called natural philosophy was not a speculative metaphysics, but rather an empirical natural science of physics, chemistry and biology; that b) his psychology, ethics and social teaching were likewise empirically based human sciences; and that c) his metaphysics is based neither on an intuition nor on an abstraction of being and is concerned in the first place not with immaterial being, but rather with a dimension of being revealed in the empirical-material environment of daily experience, a dimension opened up by the so-called negative judgment of separation, which recognizes that being as such is not exclusively material. These new insights, which I shall discuss further in the course of this essay, imperate, I am convinced, a new discussion of the relationships between the Bible, theology and philosophy as understood by St. Thomas Aquinas.

Two directions of human knowing

The prevailing understanding of the relationship between philosophy and theology for Aquinas was often presented in such a way as though it were a matter of two different levels of knowledge – German critics speak of „Stockwerk-Theologie“ i.e. two-story thinking: below lies the natural level of thinking, above the supernatural level. By contrast, my thesis is that we have to do here with two distinct but related directions of knowledge: one from below, i.e. from the natural world of human experience, the other from above, from the revealed point of view of God himself.

1. Science from below

For Thomas our knowledge is fundamentally rooted in sense perception. Through the external and internal senses, in particular through the imagination, the material world surrounding us, i.e. the external reality, is re-presented in the body/soul unity which constitutes the knowing human subject. These re-presentations Thomas, with Aristotle, calls „phantasmata“ or „experimentum“. By his natural powers, the human being knows only what is, in some way or other, contained in this re-presentation, either directly as a sensibly perceptible object, or indirectly as a causal relationship to another object which may not be directly perceptible. It is the task of understanding and reason to recognize such causal relationships. Concepts, for Aquinas, are
relational constructions, not immediately intuitive illuminations; they are not abstracted simply by leaving out particulars, but rather they are built up dialectically on the basis of discursive inquiry into the empirical data presented in phantasms. In the course of this by no means simple process of conception and explanation of the sensibly perceived world surrounding us, we discover at various points in cosmology and anthropology/psychology, that, beneath (or perhaps better within) the material reality which we perceive, there are immaterial realities which serve as the cause of empirically observable phenomena.

Up to this discovery, we move on the level of natural and human science. (Our habitual distinction between natural philosophy and natural science, between empirical human sciences and rational psychology, ethics and social theory, was completely foreign to Thomas, as it was for his mentor Aristotle.) However, with the discovery of immaterial being in the form of a remote immaterial mover and remote efficient cause of physical changes and an immaterial soul as the cause of properly human knowledge and volition, a new dimension of being makes its appearance as we recognize that being is not to be equated with materiality and that the potency/act structure is found in material and immaterial being as well as a composition of essence and existence. The recognition of this deeper dimension of being through this negative judgment of separation is what makes a metaphysics possible as a first science of composite being. For Thomas, in contrast to thinkers inspired by Augustine, in particular the Franciscan schools, whose influence reaches down through the „Schulmetaphysik“ of the 17th/18th Centuries down to many a neothomist of the 20th Century, metaphysics rests not on intuition or abstraction, but rather on this separation judgment.

This new „meta-physical“ science concerns itself with being as such, i.e. with being as the common dimension of composite beings (thus not including divine being), be they material or immaterial. However, such a metaphysics is likewise bound by the dependence of all human knowledge on the sensible phantasms, which are man’s point of contact with external reality. We continue to „see“ being as such only as it reveals itself in our phantasms of sensible being: without these, Thomas says in In Eth. Nic. VI, lect 7, our metaphysical concepts are mere empty words. Thus metaphysics likewise concerns itself primarily with perceptible reality, however, at a deeper level than that of the natural and human sciences. It is able to make statements about the immaterial causes of material being and its sensible phenomena and in dependence upon sensible reality to make deductive statements about the nature of such immaterial beings, which are known not by abstraction but rather by „remotion“, the removal of material conditions through analogous predication.

This is the background for properly grasping Thomas’ understanding of the relationship between revelation, faith and theology.

The way Thomas understood natural knowledge, both physical and metaphysical, can be illustrated by a metaphor. The scientist or philosopher can be compared to a geologist, who is situated in a deep valley surrounded by high mountains which mark the boundaries of his field of vision. On the basis of observations on the alluvial deposits and the geological strata, the geologist is able to make a variety of judgments about the mountain landscape beyond his field of vision, though this is known only as the cause of what he observes. Though imaginable, the landscape beyond the mountain rim is in fact only known by inference and as a function of what is directly observable. Based on his broad fund of experience, the geologist is thus able to imagine what the world beyond his perceptual horizon might be like. But he must continually
remind himself that his inferences and images are known only indirectly in models, not in the reality itself. So it is with our natural knowledge, be it physical or metaphysical. It is knowledge „from below“ which looks up to the boundaries of our experiential horizon and looks beyond this only in analogies structured by removal of material conditions.

2. Science from above

Returning to the geology metaphor, we recognize that, for the geologist in the parable, there is theoretically another mode of knowing open to him. If he could use an airplane or climb the highest peak, he could look down on his landscape from above. Then the relationship of the mountains and valleys, the watercourses and the plains would be immediately clear, without having to rely on inferences based on observations from the valley floor. Note, however, that this mode of knowing also has its limitations: it lacks the immediacy of field observation, the details revealed only to direct investigation. For Thomas, this perspective from above is what is characteristic of revelation and faith knowledge. This is what Thomas has in mind when he uses the technical term „sacra doctrina“ in the first question of the Summa theologiae.

According to Thomas, following Aristotle, there are four scientific questions to be asked in any discipline. The first question „An sit?“ asks if there is a subject open to scientific inquiry. In S.T., I, q.1, a.1 the question is posed, „is there a sacra doctrina as a distinct form of knowledge?“. Answering yes, because there is a corresponding subject for such inquiry, Thomas proceeds in the next articles to pose the question „Quid sit?“. He answers with a fourfold definition of that subject in terms of the four causes: material cause (of what is the subject composed?), formal cause (what are the generic and specific aspects setting it off from other subjects of knowledge?), efficient cause (under what causal agent and in what process has it come into being?), and final cause (to what does it tend, what does it produce?). Applied to the topic „sacra doctrina“, this analysis yields the following definition: sacra doctrina is a body of knowledge about God and creation (material cause) communicated by God through the sacra scriptura (efficient and formal cause) to endow believers with understanding of God and the world from the point of view of God Himself and the saints and angels in heaven enjoying the beatific vision (final cause). The next question is „Quomodo sit?“, what are the generic and specific properties of the subject? This question is complemented by the question „Propter quid sit?“: why does the subject have these properties?. Thus in the following articles Thomas asks if sacra doctrina is speculative or practical, argumentive, metaphorical, etc.

Note that Thomas speaks here of the „subject“ of the sacred teaching. Methodically, it is essential to note, for Thomas, the difference between the subject and the object of a scientific discipline. The object of a science is the body of truths contained therein: materially this is the sum of the real objects known in the propositions of the discipline, formally it is the aspects of these real objects which are brought to light in the propositions of the science. The subject of a scientific discipline is, by contrast, the topic about which the discipline makes its statements, i.e. it is the grammatical subject of the main propositions formulated by the discipline. Corresponding to the sentence subjects are the sentence predicates, which are identical with the formal object of the discipline. They bring to expression and therefore to conscious cognition the individual aspects of the (material) object (= subject) known. The reason for this relationship lies in the discursive character of human knowledge. Unlike the angels, we do not have immediate and comprehensive access to the ideas of things; we know not instantaneously but only successively, attending to one aspect after another and expressing in propositional form the particular aspect of the subject to
which we attend at the moment of making such a statement. In this sense, one can say that the
formal object of a discipline is the sum total of the propositions or statements made in the
discipline. What makes such statements scientific is that reasons are given, why the predicates
should belong to the subject, i.e. why the property expressed in the predicate truly belongs to the
subject.

The aim of science is thus to give reasoned knowledge, i.e. not only to establish what can be said
of a subject, but also and more importantly why it can be said of the subject. Questions of fact
must normally be answered empirically by appeal to „experimentum“ or to the testimony of
credible witnesses. The function of reasoning, by contrast, is to discover middle terms linking
subject and predicate. There are two types of such reasons. Quia-reasons are immediate causes of
knowing, but not necessarily causes of being. Thus one answers the question „An sit?“ by
pointing to phenomena manifesting the existence of a subject of predication. Thomas explains the
existence of sacra doctrina by calling attention to man’s need for more information about divine
things than philosophy and normal science can supply. Such reasons are either secondary causes
of being, e.g. remote ends, or simply causes of knowledge, e.g. empirical phenomena. Propter
quid-reasons, by contrast, are proper and immediate reasons for both being and knowing. Sacra
doctrina is speculative, because it deals with God and his creation and governance of the world; it
is argumentive because it is a science, it is metaphorical because it deals with objects beyond
human comprehension. Propter quid-reasons are identical with the four causes by which a subject
is defined. As the discussion of the 1st Question of the Summa theologiae shows, it is impossible
to understand what Thomas is trying to say, if one does not take into account this methodology

Thus for Thomas the sacra doctrina is a „participation in the knowledge of God and the blessed“.
In this way it is comparable to the view from above in the parable of the geologist. It is a teaching
about the way God sees himself and his creation, from the cause, so to speak, rather than from the
effects, which are the object of man’s natural mode of knowing. Thus it is matutinal knowledge
from cause to effect as distinguished from vespertinal knowledge from effect to cause. Nevertheless,
there is an important restriction, which Thomas notes. Normally God does not give
human beings directly this view from above as long as they are in this earthly life. Normally the
beatific vision is granted only in the next life and it is a mode of knowing which radically
transcends the normal human mode of knowing from cause to effect. Thus this view from above
is communicated directly only to a few privileged human beings in this life, the authors of the
books of the Bible and a few other mystics and prophets. Enlightened by revelation and inspired
by the Holy Spirit, the prophets and apostles put their divine experiences and insights into human
words for us. Thus Thomas uses the term „sacra scriptura“ in the 1st Question as equivalent to
sacra doctrina. „Sacra scriptura“, he goes on to explain, is the divine teaching in the form of
biblical text.

Our analogy of the geologist can illustrate this relationship of sacra doctrina and sacra scriptura.
Assuming that he cannot himself climb the highest peak or fly over in an airplane, our geologist is
forced to rely on descriptions brought back by others who do just this. These witnesses bring their
own individual experience, observation talents and literary gifts to the testimony they give. Each
has his own particular perspective based on personal gifts and interests and on the concrete
conditions prevailing at the time his observations were made. All this gives a personal, historical
coloring to the descriptions the observers formulate, when they sit down after the fact to describe
their experience. This personal and historical coloring must be taken into account by our
geologist as he reads their reports. All of the observers shared in principle the same view from

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above, but their reports differ greatly depending on the particular perspective of their observations and their ability to describe what they see in words (we leave out here, for the sake of the example, the ability of the observers to bring back photos to illustrate their observations). Thus the geologist must interpret the texts, taking account of what he knows about the idiosyncracies of the observers and the conditions under which they made their observations. This is precisely what the theologian must do when he attempts to understand the sacra doctrina contained in the sacra scriptura. First he must attempt to understand each text in its historical context, then he must compare the different observations to reconstruct the big picture. Since he is not ordinarily endowed with special mystical gifts, the theologian must do this methodically, relying on the help of others, historians and theologians, to try to understand the sacra doctrina as it is imparted in the Bible.

A biblical theology

For Thomas, the authors of the Bible, however, are themselves not mere seers and hearers of revelation; they are themselves theologians, who, each in his own time and place, presented the insights they received in a form suited to his own audience. Thus Moses formulated the revelation he received for a primitive people untrained in Aristotelian natural science, which explains his metaphorical way of speaking in describing creation. Paul, by contrast, is for Thomas the paragon of a theologian. In his writings he poses questions, explains concepts, develops metaphors and models, proves theses and answers objections. Thomas reads the pauline corpus as a systematically composed theological handbook. Thus, to explain the relationship of theological work to the sources of the sacra doctrina in the Bible, Thomas appeals to the model of a „scientia subalternata“, i.e. a science which borrows its principles from another science, in this case, from the science of God and the blessed. What he means by this expression is illustrated by the science of astronomy. An astronomer need not master the whole of theoretical mathematics to calculate the movements of the heavenly bodies; it suffices that a mathematician explain to him those few equations he needs to perform his calculations. Thus, for Thomas, astronomy is subalternated to the science of mathematics. So it is with theology. The sacra doctrina is a divine teaching, which enables us to participate in the divine view of reality from above. Schooled by this teaching, we can not only recognize realities completely hidden from our natural powers of knowing or at best can be made out as hidden causes of what we naturally know; in addition, we can view the objects of our natural knowledge in this divine light, seeing them from above, from God’s point of view.

What is the content of this divine teaching through the Holy Scripture. Because Thomas sees the biblical authors as inspired theologians, who view and explain things from God’s point of view, Thomas conceives the content of the Bible as being much broader than modern biblical scholars are inclined to do. The Bible is for him much more than the history of God’s interaction with mankind and his Chosen People. For Thomas, the Bible contains not only historical but also scientific and metaphysical truths. So, Thomas believes, God instructs us about his own trinitarian mode of being and circumincensive mode of living, about the events of creation and the nature of creatures, about human nature and about the ontology of grace, about the events in Paradise and the ontological effects of the original sin, about God’s historical intercourse with mankind and with his Chosen People, his Covenants and his Laws, about the natural foundations of ethical principles and social realities, about the Incarnation of Word of God, its ontological presuppositions and consequences for his life, death and resurrection, about the working of the
Holy Spirit in the community of the Church, the ontological working of the means of salvation and the perfection of all creation in the eschaton. Thus, for Thomas, this divine teaching includes not only truths which without revelation we could never know, but also many truths which in principle we could know in the natural way. Such truths too we see from God’s perspective from above, a perspective, however, which necessarily transcends our comprehension.

The work of the theologian

Where both cognitive directions meet in connection with a particular object, they remain, for Thomas, distinct cognitive perspectives, which are not entirely commensurate with each other. Again this persisting distinction between the two perspectives is illustrated by the geologist metaphor. Just as the geologist draws upon his own observations and explanations to interpret the observations of the witnesses to the view from above, so also the theologian uses his empirical, “from below” knowledge to interpret the texts of the sacred authors: in doing so, however, a certain incommensurability between the statements of the sacred authors and the interpretations of the theologian remains. Propositions of faith may be illuminated by propositions of natural knowing, but they are not thereby turned into propositions of reason; neither are propositions of reason replaced by statements of faith.

What then is the task of the theologian? First of all, as we have seen, in the reading of the Holy Scripture: this is the unique and unsurpassed original revelation, the original holy teaching. Reading the holy text, the theologian receives, like every other believing reader, the sacra doctrina as God’s revelation in words of human beings addressed to other human beings. The theologian receives the contents of the sacra scriptura globally as God’s holy teaching and thus as truth, even though he does not immediately understand every proposition of that teaching. This is the global assent of faith, supported by the undeceivable authority of God and transmitted through the Church. Having given this global assent, the theologian now attempts with the aid of his previous knowledge to penetrate and to understand the content of the sacred text. In doing so he is aided by the Tradition expressed in the explanations of the church fathers and doctors of the church and guided by the rules of speaking laid down by the magisterium.

The comparison of the individual holy testimonies with each other, their confrontation with statements of other teachers and with his own observations and insights awaken questions in the mind of the theologian. Other questions are put to him by his students and colleagues. Objections from opponents awaken further questions. Such questions constitute for Thomas, as for medieval scholasticism generally, the basis of systematic theology. Such systematic questioning corresponds in our geologist metaphor to the work of the geologist when he attempts to reconcile the statements of other researchers with his own observations and insights in order to generate a systematic overview of this field of research. In both cases, however, the divergent perspectives retain their identity even when they meet and cross over. It lies in the nature of things, that the questions which the theologian thus puts to the text go beyond what is directly intended by the biblical author, though the do not, of course, go beyond the intention of the divine author. No question, however abstruse or trivial, can be excluded apodictically, for many a question, however the honest theologian must confess that he can give no answer or at best a very conjectural one. Such conjectural answers are what Thomas calls „rationes convenientiae“; these are plausible, but by no means compelling arguments for answering questions, which cannot be clearly answered on the basis of explicit divine revelation or naturally acquired cognition.
Thus understood, theology is for Thomas not a rationalistic activity on the outward periphery of revelation, faith and the Bible, as the barock and neoscholastic „Konklusionstheologie“ would have one believe, but it is rather an activity, which is carried out within the sacred teaching itself: it is the attempt, with human means (experience and reason) to orient oneself within the sacred text, to understand its statements and their implications, to recognize connections between truths of faith among themselves and in connection with truths of reason, to enter into the images, explanations and arguments of the sacred author and to be instructed by them. Thus, the proper task of the theologian is not to deduce ever more abstruse conclusions from revealed premises, but rather to penetrate and interpret the central propositions of the divine teaching. Whether or not in the course of doing so, new, unintended conclusions are drawn, is a question to which Thomas paid little or no attention. In fact the whole preoccupation with degrees of certitude so typical of barock and neoscholastic theology (the so-called „notae theologicae“) is a topic quite foreign to Aquinas’ way of doing theology. Even the rough distinction between binding propositions of faith and discussible opinions is something he seldom engages in. For him, it is understanding, not certification which is in the foreground.

The return to Holy Scripture

Systematic theology is for Thomas not a goal in itself. Its results are not merely grounded in the biblical teaching, they are developed to serve the better understanding of the sacred teaching as this is unsurpassedly contained in the sacred text, to which the theologian must always return. Thus our familiar separation of biblical and systematic theology was quite foreign to Aquinas, since for him the sacred authors are not only the original recipients of revelation, but also the paragons of theology par excellence. Thus every theologian is obliged time and again to sit at the feet of these privileged theologians. Furthermore, for Aquinas the acquisition and elaboration of systematic theology is ordered to contemplation, by which is meant not the mystical vision but rather the scientific form of contemplation relating concepts to phantasms, i.e. a quiet, pleasureful reflection on the results of scientific theological investigation. Science, for Thomas is not primarily the hectic search for ever new discoveries, but rather the contemplative enjoyment of what has already come to be known -- what the ancient Greeks called „theoria“. Such contemplation is restful but not static. Like all human knowing it is discursive. Our intellectual vision can only focus on one aspect at a time, now on the whole picture, then on this or that detail. Only briefly does the mind repose in the contemplation of a particular view, then it must move on. Thus for scientific contemplation guidance is helpful, i.e. a text which successively brings to expression the diverse aspects and dimensions of the contemplated object. As a guide for theological contemplation, the texts of the Bible are unparalleled and unsurpassable, because they are the divinely inspired vehicles of the original revelation. Where can one better contemplate the truths of christology than in the narratives of the evangelists and the theological discourses of St. Paul and the other epistle-writers? Where can one better contemplate the mysteries of creation than in the Genesis narrative and in the Psalms and the prophets.

This return to Scripture is also illustrated by our geologist metaphor. Because our geologist himself has not flown over the landscape he studies or viewed it from the highest peak, he must rely on the written accounts of those observers who have done that. Even when he has integrated their descriptions and explanations into his own systematic overview, he does not simply put these works aside. Time and again he will return to them, because they are the irreplacable
perceptual and conceptual mirror for his own mental reconstruction of the landscape as seen from above. Enlightened by the fund of his knowledge about the terrain, when he returns to these reports, he is able to understand ever better what the observer saw and was trying to express in his text. Indeed, it is entirely possible that the geologist reader, aided by his prior knowledge, is able to see things in his mind’s eye clearer than the original observer. Be this as it may, he still remains dependant upon the original account of the observations, at the very least as the nexus for his contemplation of his acquired knowledge, but also in the hope of discovering this or that detail, which previously had escaped his observation. So also the practiced theologian, at the close of his systematic elaboration, must return time and again to the biblical text. In the reality described and explained there he is able to recognize depths of meaning, which may very well go beyond what the individual human author himself was able to see or intended to express, though not of course beyond what the divine author intended to communicate. Thus implicit in the realities, which are directly described and explained in the „sensus literalis“, there is a deeper level of meaning, the „sensus plenior“, which the theologian on the basis of his systematic work is able to uncover, when he rereads the biblical text. Thus for Thomas the principal and most exalted task of the scientific theologian is not the production of systematic handbooks and tracts, but rather the ongoing commentary on the books of Holy Scripture.

Scripture, systematic theology and philosophy in the context of Thomas’ literary production

As is well known, Thomas’ literary production is divided among three classic genre cultivated by the university theology of the late 13th Century.

1) The best known genre is that of his systematic-theological works. To this genre belong his *Commentary on the Sentences of Peter Lombard* -- a work of his youth as a bachelor in preparation for his promotion to a full professorship als magister -- but also his two Summas, the *Summa contra gentiles*, written for the instruction of theologians engaged in dialog with other religions, and the unfinished *Summa theologiae*, written for beginning students of theology, such as those he had to teach in the Dominican study houses in Italy after leaving Paris. To this category belong also his published *Quaestiones disputatae* and *Quastiones quodlibitales*, products of his professorial teaching as a Parisian magister. Likewise belonging to this category are a variety of smaller tracts answering questions put to him by other Dominicans or containing expertises commissioned by church authorities

2) The second major category of his works is that of his biblical commentaries, for the most part revised versions of his university lectures -- in his day the Parisian master had to lecture on the Bible, not on texts of systematic theology; that was left to the bachelors. His lectures on *Job, Psalms, Canticle of canticles, Isaia, Jeremia, Lammentations, Matthew, John* and *Paul* have come down to us. In addition he edited a collection of patristic notes to the gospels, published under the title *Catena aurea*

3) The third group consists of his published commentaries on the books of Aristotle, Proclus, Pseudo-Dionysius, Boethius and Gratian. These works are an embarassment for many a neothomist. What moved him to give so much attention to such recalcitrant, oft out-dated works. The reply, that these works enjoyed a special popularity and authority in the Parisian university scene, is correct but insufficient to explain the amount of energy Thomas put into the task of commenting on them. Likewise inadequate is the explanation that he wanted to give his students and colleagues needed assistance in combatting the philosophical rationalism, which had captured the university milieu as a result of the
influence of Averroes commentaries on Aristotle. No, the most important reason why Thomas devoted himself to this arduous task was his desire to teach his students to think philosophically as the necessary basis for their efforts to think theologically. He was convinced that one can properly understand the sacred teaching from above only when one has first mastered the natural scientific way of thinking from below.

Thomas saw the sacred teaching as being threatened not only by rationalistic Aristotelianism based on Averroes but also by fideistic Platonism based on Augustine. Whereas Averoism exaggerated the cleft between human science and theological faith, Augustinianism threatened to eliminate the persisting differences between the natural way of thinking from below and the supernatural way of thinking from above. That this was the real motive behind Aquinas’ meticulous commentaries on the books of Aristotle, is confirmed by his commentaries of the works of Proclus, Boethius, Gratian and Pseudo-Dionysius. In these works Thomas is preoccupied with questions of epistemology and methodology, the distinction between the human and the divine ways of knowing between the Aristotelian and the Platonist ways of thinking. To put it shortly, Thomas commented on Aristotle to teach his pupils the empirical-dialectical way of thinking proper to natural human knowing and to acquaint them with the most important results of the natural and human sciences, not only metaphysics, but also physics, astronomy, meteorology and earth sciences, chemistry, biology, psychology, ethics, social and political science. Thus it is no wonder that his colleagues from the Arts Faculty of the University of Paris paid more attention to his death than his colleagues from the Theological Faculty!

The fate of Thomas’ vision in subsequent generations

With this program Thomas in fact was unsuccessful. His immediate pupils were insignificant as philosophers and theologians. It was the platonizing Albertists and Franciscans who dominated the schools in the generations after Thomas. The Thomists adapted their way of thinking, allowing themselves to be lead by the questions and objections posed by scholars of the other schools. When one reads the Summen with eyes open, one quickly notes that the arguments used by Thomas to answer questions of theological interpretation are taken not so much from metaphysics as from the natural and human sciences. In the debates following Aquinas’ death, the discussion moves rather to the metaphysical level. Duns Scotus inaugurates modern metaphysics as a science of common being, which, unlike Aquinas, he sees as an abstraction from physical being, something which can be investigated by conceptual analysis independent of phantasms. Losing sight of the perceptual basis of metaphysics for Aquinas, later Thomists jumped aboard the Scotistic train.

Even among Thomists the commentaries on Aristotle fell into oblivion and with them Aquinas’ clear distinction between the two modes of knowing, the human mode from below and the divine mode from above. The meticulous empirical dialectical construction of concepts which Aquinas practiced in the Aristotle commentaries was neglected by his epigones and was soon forgotten. In their place were cited the concise formulations of definitions and divisions found in the theological Summas: these were presented apodictically as though originating from immediately evident conceptual abstraction or intuition. The dialectical question-method was replaced by the dogmatic thesis-method. Even among Thomists one finds philosophy and theology presented as deductive sciences. Indeed the
original meaning of demonstration was completely lost from view, demonstration being taken as proof instead of explanation. What was an explanation for Thomas becomes a rational proof for his epigones. Texts of the Bible and the church fathers, instead of being sources of questions are reduced to the function of supplying proof texts. Statements of the magisterium rather than scripture become the principle source of theological truth. Thus in the late scholastic controversies between Thomists, Scotists Albertists and Nominalists it is the question of certitude which moves to the fore. An attempt is made to specify exactly the degree of certitude attached to a particular thesis and its proofs via the so-called „notae theologicae“ and to sharply delineate between truths of faith and truths of reason.

Particularly disastrous was the typically modern separation of rational philosophy and empirical science. Already late scholasticism had neglected the empirical roots of the Aristotelian natural and human sciences, relying on texts rather than observation, and often refused to take new empirical discoveries into account. A dogmatic attitude came to prevail in the Suaresian „Schulpolosophie“ which dominated the late 17th and 18th Centuries. From this philosophical dogmatism, empirical-experimental, natural and human sciences increasingly emancipated themselves, refuting one Aristotelian school thesis after the other. The school philosophers, who meanwhile had absorbed a good bit of Cartesian rationalist methodology, were soon in full retreat. Christian Wolff provided them with a saving solution: he placed metaphysics at the beginning of philosophy and drew out of that metaphysics a non-experimental, rational philosophy of nature and rational psychology, ethics and social theory, thus turning the Aristotelian-Thomasic scheme on its head. Though this solution promised to shield philosophy from the attacks of the empiricists, it was soon wiped out by the criticism of Immanuel Kant.

The skewed approach of neothomism

Meanwhile the Thomistic tradition had pretty well dried up. Wolffian rationalism was ended by Kant. The dramatic social changes marked by the French Revolution put an end to the classical Enlightenment. After 1815 reaction was in the air. In the spirit of romanticism, the Middle Ages were rediscovered and with them scholasticism. Unnerved Cartesians read Thomas’ Summen and thought they found there a new basis for their rationalistic and fideistic ways of thinking. This was the birth of neoscholasticism.

Soon the neoscholastics believed themselves strong enough to enter into conversation with modern philosophy, Kant in particular, and with the modern empirical sciences. This was particularly true of the Louvain School founded by G. Maréchal and of the Transcendental Thomism represented in the present by Karl Rahner and Bernard Lonergan with their disciples. Neothomism tended by and large to discount the Aristotle commentaries as though Thomas intended in them only to present Aristotle’s views, not his own. Instead, the neothomists sought to exerpt Thomas’ philosophy from his theological works by selecting from them what they saw as truths of reason as opposed to truths of faith. These truths of reason were then inserted into a systematic scheme closer to Christian Wolff than to Aquinas. Little attention was paid to the careful methodology of science outlined by Thomas in his commentaries on Aristotle. As a result, the critical distinction made by Thomas between knowing from below and knowing from above was blurred. Thomas’ philosophy was seen as an ontology from above, based on an „intuition of being“ that, according to E. Gilson, was
first made possible by the revelation of the divine name and thus could serve as the foundation of a specifically „Christian philosophy“. This opinion can still be found among leading Thomists. For them Thomas was not a pure Aristotelian, instead, they assert, he attempted to synthesize Platonism and Aristotelianism. With a distinction between intuitive-rational philosophy and empirical-rational science the tensions between philosophy and science were papered over. In this way, the neothomists were able to achieve notable successes; they are taken seriously by modern philosophers and scientists. However, the positions they take have little in common with the real thinking of Thomas as science from below. To this real Thomanic philosophy, historical research had to burrow through mountains of prejudices and false assumptions.

In theology the situation is little better. For the most part Thomistic theology was taught by the thesis method of the manualists. Definitions were apodictically postulated, rather than being methodically constructed on the basis of perceptual experience. Thomas’ explanations were reduced to rational proofs. Even when, as in the Dominican Order, systematic theology was taught on the basis of the *Summa theologiae*, the dialectical methodology of Thomas was little attended to. Connections with modern biblical exegesis or natural and human sciences were largely ignored. Biblical exegesis and systematic theology were rigidly separated. Exegesis exhausted itself in text criticism and realia; biblical theology was seldom explicitly treated, and when, then completely cut off from speculative dogmatics and ethics. Thomas’s biblical commentaries were hardly attended to. Theories of doctrinal development fortified the cleavage between the Bible on the one side and dogma on the other. Not the Bible but rather the oracular declarations of the magisterium were most often taken as the foundations of systematic theology. For many neothomists, Thomas Aquinas had pretty well settled all the major questions of systematic theology, at best there remained place at the periphery for new deductive discoveries in the fields of Mariology and Josephology. Small wonder then, that historical research has had to remove so much debris to recover the real theology of Thomas Aquinas.

**The future of Thomasic thinking**

The revolution in the Catholic Church in the wake of Vatican II has swept away Neothomism of the old style. Historical research has opened up a way to rediscovering the real intentions of Thomas Aquinas in distinguishing between knowledge from below and knowledge from above. This gives us a chance for a new beginning.