Aristotle's Understanding of Human Cognition

Lonergan Institute for the "Good Under Construction"

Turning now to Aristotle's logic of discovery (although he did not use this type of language), as we have already noted. Aristotle assumes or adheres to the truth of a realist understanding about the nature of our human cognition. More accurately put, if we encounter persons who are entrenched within a skeptical frame of mind about the powers of the human mind (the scope of our human cognition), the best antidote is for us to get them to talk and to keep on talking since, as their thinking accompanies their way of talking and speaking, they should soon realize that they would want to argue their case in an intelligent manner (in as intelligent a manner as this is humanly possible) and so avoid any contradictions or arguments that would tell against the truth of their particular claims. With Horace thus, as a consequence of engaging in this dialectical form of argument and discussion, as we work to stimulate the kind of cognition which belongs to another human being, we should all eventually realize the reality of an operational truth which says that, yes, naturam expellas furca, tamen usque recurret [you can drive nature out with a pitchfork, but it will always return].² Hence, performatively speaking, necessarily, whether we should refer to ourselves or to the being of other persons, at some point, we would all have to admit that, in some way, truths can be known by us through our knowing (as human knowers) and that a knowledge of truths is entirely proper and natural to us as human beings within the context of our ordinary day to day living. Whether we are skeptics or not, whatever we should want to think of ourselves or call ourselves, in the context of our self-understanding, to the degree that we can grow in any kind of self-understanding and to the degree that we can attend to the kind of data which belongs to our inner experience of self, eventually, we should all realize that apprehensions of truth and reality are normally given to us as human beings through a combination or an interaction of different powers: a combination of active and passive acts (where some acts exist for us as activities while others exist as receptions). Together, all in all characterize and together they reflect the data or the experience which we have of ourselves in our sensing, thinking, understanding, and knowing, the experience of intelligibility coming to us thus as a species of receiving or as the reception of an act that is given to us although, most frequently or commonly, within an initial prior context which is characterized by conditioning activities of questioning and imagining in ways of thinking which encourage us or which create a species of openness and reception which now exists in us when, at unexpected moments, when we least expect it, an understanding of some kind is finally given to us as a gift or as a blessing which we cannot simply produce at will through all of our different acts of cogitative willing despite all that we might do in all our various acts of pondering, questioning, imagining, and thinking.⁴ In our human

¹Lonergan, *Insight: A Study of Human Understanding*, p. 354; *Second Collection*, p. 53; Meynell, *Redirecting Philosophy*, p. 257, citing Aristotle, *Metaphysics*, 4, 4, 1005b35-1006a28.

²Lonergan, Insight, p. 570; p. 772, citing the Roman poet, Horace, Epistolae, I, 10, 24.

³Please note at this point that, always, our inquiry and learning begins from a point of departure that is not without some prior understanding and knowledge. Our human condition is not characterized by a complete lack of knowledge about anything. Some things we already understand and know and so no questions need to be asked. From within a context which can be referred to in terms which can speak about *a priori* apprehensions of being, we can move toward *a posteriori* apprehensions of being which would emerge for us if we can engage in acts of inquiry which can lead us toward new possible acts of experiencing, understanding, and judgment which would add to the content and the sum of that which we already understand and know.

⁴Meynell, "On Being an Aristotelian," Redirecting Philosophy, pp. 259-260; John Herman

cognition, in the being of our active intellects and in the being of our passive intellects, these two parts together form the kind of fluid or dynamic whole which is distinctive of our human cognition, pointing to its nature and revealing the manner of its operation. We move from initial givens (from that which we already understand) and then, from there, through the kind of encouragement and promotion which exists within our acts of inquiry (the work of our active or agent intellects), we move toward that which we might begin to understand (what we have yet to understand).

Hence, through the operation or the functioning of our human cognition through its active and passive aspects, it has become a commonly admitted fact for us that the thesis of skepticism, in its alleged truth, is a teaching which always acts against itself. It undermines and contradicts itself. To argue the truth of skepticism is to propose the truth of an alleged truth and so, through acting in this way, implicitly, we would be admitting that apprehensions of truth and reality are, in fact, sometimes given to us, to our human minds, to our understanding, in a manner which points to an intimate association which must always exist between apprehensions of truth (the truth of truths that we have come know about in their truthfulness and reality) and experiences of intelligibility and understanding which must always come to us with the experience of these apprehensions. Through intelligibility and understanding, truths are known in their being and reality (they are known with respect to their truthfulness). Metaphorically speaking and from the context of a metaphysical interpretation as we can find this in Aristotle, if, in our understanding, we should want to refer to the kind of light which would exist in us as an invisible kind of light that exists within us and which exists in its species as intellectual light (as *lumen intellectuale*),⁵ to reject the kind of light or the kind of illumination that is cast for us by the lighting or the dawning of our understanding is to reject how, in fact, we exist as human beings and how or why, as human beings, we cannot exist as some other kind of living being (with an altered or different nature) if we should to insist and claim that we exist as human beings.⁶

Randall, Jr., Aristotle (New York: Columbia University Press, 1960), pp. 99-100.

5Martin Rhonheimer, *Natural Law and Practical Reason: A Thomist View of Moral Autonomy*, trans. Gerald Malsbary (New York: Fordham University Press, 2000), p. 262. Citing text from Aristotle: "For man there is nothing divine or holy apart from the one thing that is worth all the trouble: namely, that which is in us of understanding and spiritual power. This alone seem[s] imperishable of that which we possess, this alone seems divine. Thanks to our capacity to have a share in this, our life is so wonderfully equipped, despite its natural poverty and wearisomeness, that man seems like a god in comparison with other creatures. For the poets are right when they say, 'The *nous* is god in us' or "human life has some part of a god in itself'." Cf. Aristotle, *Protrepticus*, B 108-110, as quoted by Rhonheimer, p. 291, n. 13.

6Please note that, in some quarters, such a claim is disputed and, at times, it is rejected. In the philosophy of John Locke, it is argued that, if there exists a distinct human nature, this nature is such that, unfortunately, it can never be known. However, subsequently, in the philosophy of Jean Jacques Rousseau, it was argued there that a human nature is something which, in fact, does not exist. It is to be regarded as but a fiction (as an illusion). Belief in the existence of human nature is something which is to be rejected. Hence, from this, as a new possible point of departure, as we move from this dogmatically stated point of view toward any salient conclusions which can be reasonably and rationally drawn as apt consequences, a thesis accordingly presents itself to us to the effect that how we exist and live as human beings determines that which would exist for us as our human essence (as some kind of human nature). Simply put as the central thesis of an existentialist type of philosophy: our existence precedes our essence. Existence determines essence. From existence we work toward our essence. We can make ourselves into whatever we would like to do and be. Through various forms of

With respect then to the particulars of Aristotle's theory of learning, his logic of discovery can be gleaned by us in a way which points to a wider understanding of method and procedure in science and philosophy than a notion of method which is restricted to the practice and the study of syllogistics in logic. Logical operations notwithstanding - they exist as but one species of cognitive act - if we attend to how a philosophy of inquiry is articulated by Aristotle in a way which points to a philosophy of scientific questioning and a basic set of questions which must be asked within every kind of scientific inquiry, then, in this way, from this subjective but thematized (objectified) point of departure, we will be able to move toward an understanding of human cognition which will encompass a number of different kinds of cognitive act: operations which are not limited to the being of logical operations even as they work with the being of logical operations. Hence, within this larger wider context, prior acts of sensing can be adverted to and, eventually, through our inquiry and the asking of different kinds of questions, acts of understanding can alluded to as they emerge in the wake of our prior acts of human sensing.

In adverting then to the kind of order which exists within Aristotle's philosophy of inquiry, a corresponding or a reflective order of acts can then be determined by us in a way which refers to the constitution or the kind of order which belongs to the nature and the functioning (the operation) of our human cognition. Determine first how a given kind of question leads to a distinct species or type of cognitive act and, then, from the sequential and cyclic ordering of different questions as these form a circuit of their own (moving from acts of sense and then returning to acts of sense), determine an ordering of acts which then serves as a basis for determining another corresponding species of order which is constitutive of the being of existing things that can be known by us through our various acts of human cognition. The kinds of questions which we ask specify how, subjectively, we should respond with new acts or new operations if we are to participate or attend to the genesis, the ingress, or the progress of our personal individual human learning or, in other words, as we advert to the being of the different kinds of questions which we ask, these should reveal a logic or a recurrent pattern of acts and discovery which in turn explains how, in our human cognition, we can move from a condition of knowledge which exists initially at A toward an augmented condition of knowledge which would exist at B.

Two observations merit attention at this point. First, as Aristotle had noticed and as we should also notice, perennially in our learning, within our discovering and knowing, we are perpetually moving from a cognitive condition which exists at A toward a cognitive condition which would exist as B: from some kind of understanding (or some kind of knowledge) that is somehow already given to us because already, about certain things, no questions have to be asked. Nothing more needs to be understood and known. Some understanding is already given to us in a prior *a priori* kind of way and in a manner which immediately points to the relativity or the incompleteness of our human ignorance and, at the same time too, to the relativity or the incompleteness of our human knowledge where, through the understanding and knowledge that we already have about the meaning or the truth of certain things, we can then begin to move through inquiry and questions toward other possible

intervention, we can, for example, select our own sex and perhaps too, through other forms of intervention, we can turn ourselves into some other kind of living being and so cease to live and exist as human beings. Cf. Pierre Manent, *The City of Man*, trans. Marc A. LePain (Princeton, New Jersey: Princeton University Press, 1998), p. 138.

⁷Aristotle, Posterior Analytics, 2, 2, 89b36-90a34.

determinations which can begin to know about the being of other things that we have yet to understand and know, or the being of things that we have not understood and known to the degree that we should understand and know them. What we already understand and know always conditions the individual questions that we would like to ask as we move toward new determinations of questions within our individual concrete contexts. Through the genesis and determination of these new questions, specifications of ignorance can be alluded to, known, and identified as unknowns which exist now as known unknowns.

Secondly, with respect to the kind of wonder or curiosity which belongs to us as human beings, the wonder which exists as a species of generating first principle, echoing Plato, as Aristotle observed when entering into a discussion about the science or the study of being as this is given to us in the inquiries that are constitutive of the science of metaphysics: "all human beings *by nature* stretch themselves out toward knowing [my italics]." Appositely and more bluntly: "all men naturally desire to know." An interest in the existence of all things, an interest in understanding that which is the beingness or the existence of all things, is an inclination or an orientation which is rooted in a point of origin which refers to the inherent existence of our human wonder as a species of motivating, existential dynamic. Citing, again, some of Aristotle's own words: "it is owing to their wonder that men both now begin and at the first began to philosophize." In the curious property of the science of all things are property or the science of motivating.

Attending thus to this wonder in greater detail in terms of how it exists: as experienced thus within ourselves through the inner experience which we have of ourselves, the sense of wonder that we have admits or it knows that we have a sense of our own ignorance that we would like to escape from.¹¹ By its very nature, our human wonder anticipates that something is to be added to the data of our sensible human experience; something is to be added to the data and content of our human imagination.¹² In wonder, in questioning, our curiosity is "never idle."¹³ A cognitive desire exists among other possible desires and interests, ¹⁴ and this desire is to be viewed and judged to exist

⁸Aristotle, the first line of the *Metaphysics*, as quoted and translated by Caldecott, *Beauty in the Word*, p. 8.

⁹Aristotle, *Metaphysics*, 1, 1, 980a21-24, citing another translation of the same text. 10Aristotle, *Metaphysics* 1, 2, as cited by Sullivan, *Introduction to Philosophy*, p. 3.

¹¹For more information, see also D. C. Schindler, "Giving Cause to Wonder," *Catholicity of Reason*, pp. 163-228.

¹²J. Michael Stebbins, *The Divine Initiative: Grace, World-Order, and Human Freedom in the Early Writings of Bernard Lonergan* (Toronto: University of Toronto Press, 1995), p. 22.

¹³J. A. Stewart, *The Myths of Plato* (London: Macmillan, 1905), p. 10. As Stewart argues to the effect that the origins of myth and science all lie in the givenness or in the experience of human wonder and curiosity: "To know the cause' is matter of practical concern to the savage as well as to the civilised man..." Whether we deal with mythological explanations or with scientific explanations, we work with a species of "scientific" curiosity.

¹⁴Aquinas, *Summa Theologiae*, 1a2ae, q. 32, a. 8. See also *Summa Theologiae*, 1a2ae, q. 3, a. 8 where Aquinas links our desire for understanding and also our desire for happiness with the kind of desire for understanding which exists among religious believers in a way which directly leads to the emergence of theology as a scientific discipline. According to Aquinas's argument: if we happen to know or believe that God exists, we are not happy until we should know about why or how God exists in the way that he seems to exist for us within the world that is first given to us through our various acts

as a pure desire to understand and know. It differs from all irrational forms of curiosity that would want to understand causes which are of lesser importance than those causes which exert a more primary influence in determining the meaning and existence of things which exist as effects that come from causes, stemming from causes.¹⁵

The existence of this natural human desire, which exists as an appetitive "seeking principle," ¹⁶ accordingly explains why our human knowledge exists in a way which is completely natural and proper to itself, being entirely natural from our human point of view. It is proper and right for us, as human beings, that we should enjoy the kind of knowledge which is proper to us as human beings, a natural knowledge of things that we can rightly acquire and enjoy and which joins us, as human beings, to desired or intended objects which, potentially, could refer to the whole of reality or the whole of being, this whole constituting a world or a universe which would exist as an order of truly existing things. As Plato, Aristotle's teacher, had himself noted in an earlier context (at another time): "wonder is the feeling of a philosopher, and philosophy begins in wonder." ¹⁷

In order then to determine the kind of order which exists thus within the structure of our human cognition, our fundamental point of departure is accordingly our experience of self with respect to the kinds of questions which we find that we are asking now at this time and now at some other time, questions which accordingly function as an internal species of mover or as interior operators that we experience and find within ourselves (within our consciousness of self) in an awareness which knows that, in some way, we are all conscious and alive, exercising a degree of self-government and self-control in how we live and exist as human beings: ¹⁸ functioning and living thus not merely or only as substances or as inert things but as agents or subjects who can also do certain things at a certain time

of human sensing. Granted the existence of something which exists, we want to know about how or why it exists. We move from effects to causes. Hence, in our desire for an understanding of divine things, we discover a trajectory that exists within ourselves which, in turn, points to a solution which can only be had if we should speak about some kind of eventual union with God and how, in our being, we can be joined to the kind of being which God has. Cf. Frederick E. Crowe, "The Exigent Mind: Bernard Lonergan's Intellectualism," *Spirit as Inquiry: Studies in Honor of Bernard Lonergan*, ed. Frederick E. Crowe, S.J. (Chicago: Saint Xavier College, 1964), p. 29, n. 17.

15Summa Theologiae, 2a2ae, q. 167, a. 1 & ad 3.

16Martin Rhonheimer, *Natural Law and Practical Reason: A Thomist View of Moral Autonomy*, trans. Gerald Malsbary (New York: Fordham University Press, 2000), p. 32.

17Plato, *Theaetetus*, 155, as cited by Sullivan, *Introduction to Philosophy*, p. 3.

18An oblique reference to the possible strangeness of our human consciousness refers to how, possibly, we can experience two kinds of consciousness within a kind of oneness which belongs to our consciousness of self. One kind refers to the awareness of self that we have prior to the introduction or the advent of some kind of physical or clinical death. The other kind of consciousness refers to the experience of self that, possibly, we can have in the wake of some kind of physical or clinical death. In the transition which allegedly occurs, our self-consciousness perdures. Our awareness of self endures and continues and, in this awareness, a person does not cease to exist or to not believe that he or she is alive although, on the basis of reports that have come to us from persons who have had near-death experiences (NDEs), in the wake of physical clinical death, persons find that they begin to live within a new dimension of existing things (another kind of ontological context). Cf. Robert Spitzer, *The Soul's Upward Yearning Clues to Our Transcendent Nature from Experience and Reason* (San Francisco: Ignatius Press, 2015), pp. 173-203.

and who can also receive other kinds of experience at other times that can be given to us from points of origin that exist externally to ourselves with respect to the kind of being which we happen to have and be.

Tersely put then, as we attend to the kind of data and the verification which exists within our interior experience of self and when we look at how Aristotle investigates the nature of scientific inquiry in the context of the Posterior Analytics, we find that he reduces all questions to four basic types (four basic species): (1) whether there is an X; (2) what is an X; (3) whether X is Y; and (4) why X is Y. However, if we examine these four questions and as we examine Aristotle's subsequent discussion, we should find that Aristotle reduces these questions to two basic types.²⁰ In terms of their characteristic objects or their proper terms, two basic types of questions point to the being or the genesis of two basic operations of the mind that differ from each other, operations of the mind also differing from the kind of operation which belongs to our different acts of human sensing. The first basic type of question combines or groups together "What is an X" with "why X is Y."²¹ These two questions then reduce to one basic type of question because these questions can only be answered by a proposed or a proffered hypothesis which allegedly grasps and relates a number of distinct unseen elements or parts into a relation that is itself unseen. The relation joins the parts into a distinct unseen whole. To understand what something is, its essence, its being, or its ousia, 22 requires an answer or an explanation which can say why something exists in the way that it happens to be and exist. What questions translate into why questions where here what means why.²³ By way of an example:²⁴ if we ask "what is a man?", to answer this question we must transpose, rephrase, and say: "why is this a man?" The this refers to an experience of material or bodily parts that we can indicate to ourselves and to others through our various acts of sensing and by means of appropriate physical gestures. However, the answer which directly responds to a why can only be known or grasped by us and other persons through an intervening act of understanding which transcends any givens which exist for us by way of our acts of sense: hence, by an act of cogitating which exists as an act of understanding or, in other words, by an "insight into sensible data" which can be conceptualized in a way which refers to the being or the hypothesis of an unseen, invisible human soul, a soul which, as human, is other than the being of any other kind of soul if, in fact, it is to explain why something is, in fact, a man and not some other kind of thing (whether living or dead).

In the kind of understanding which deals with what and why questions, in the language of Aristotle and Aquinas, this act of the intellect or this act of understanding refers to an act which exists as a "simple apprehension" ["the first action of the intellect is the understanding of...things, by which it conceives what something is"]²⁵ although, in the context of his own language and the kind of analysis which he uses to effect a transposition which moves from the conceptuality of Aristotle to a conceptuality which is the product of his own understanding, Bernard Lonergan prefers to speak about an apprehension which exists as a direct act of understanding. If, on the other hand however, we should choose to refer

¹⁹Aristotle, *Posterior Analytics*, 2, 2, 89b36-90a34 as cited by Lonergan, *Verbum*, p. 26, n. 53. 20Aristotle, *Posterior Analytics*, 2, 2, 89b36-90a6; Aquinas, *In Aristotelis libros Posteriorum analyticorum*, 2, 1.

²¹Lonergan, Verbum, p. 26.

²²Meynell, "On Being an Aristotelian," *Redirecting Philosophy*, p. 242.

²³Lonergan, *Understanding and Being*, p. 29.

²⁴Lonergan, *Understanding and Being*, pp. 29-30.

²⁵ Aguinas, In Aristotelis libros Posteriorum analyticorum, 1, 4.

to these kinds of acts as abstractive acts of understanding, we would then work with a designation which refers to how these kinds of acts exist as acts of abstraction within our understanding where, here, an intellectual or a formal component is removed or it is distinguished and separated from that which exists as an empirical or material component. The term of this kind of intellectual act is to be identified as a meaning or as an intelligibility that is now known for what it is as the term or as the content of our understanding. Term accompanies act. It comes with act. It exists as a meaning or an intelligibility, relative to its point of origin (as it comes to us from a particular, given act of understanding), although, as a species or type of being, it can be conceptualized or, more directly and honestly, as as species of being, it has been conceptualized within an order of metaphysical terms which speaks about how, through inquiry, the content or the term of an act of direct understanding is something which exists as a form. The language which exists about forms (as we find this within the corpus of Aristotle's writings) is to be understood as a transposition: it transposes the cognitive type of language which prefers to speak about ideas and, from there, it moves toward the being of ideas as we move from the order of our human knowing toward the order of existing things as this exists within the order of metaphysics (more about this later). Where, for instance, Plato speaks about separately existing Ideas, Aristotle prefers to speak about Forms which have an eternity of their own (they exist as idealities) even if or as they exist within the being of sensible, changing things which, as sensible things (as bodies), are directly known by us in a way which refers to our different acts of human sensing.

Summarizing the gist of Aristotle's thesis in a manner which points to the presence of a qualification within the extent of Aristotle's understanding: "it is the form of a thing which is in the intellect and not the thing itself," where, within this context, if we should work with both a metaphysical way of speaking and a metaphorical way of speaking, we would speak about the migration or the transference of a form from one location to another: through its being understood or its being grasped by us in an act of understanding, a form is invisibly moved from the interiority of an embodied, material thing or the interiority of an experienced, sensed body into the interiority of an understanding intellect, an understanding mind. Hence, Aristotle does not speak about a simple identity between the being of our intellects (the being of our understanding) and the being of a thing which is known by our understanding. Instead, in attending to a conception of knowing which thinks about knowing in term of a cognitional form of identity between a knower and that which is known, an identity which exists however as an intellectually intended identity, Aristotle is presented to us or he is seen as the originator of this viewpoint within the philosophy of human cognition. Our human

²⁶Giorgio Pini, "Scotus on Concepts," unpublished paper, p. 3; John Milbank and Catherine Pickstock, *Truth in Aquinas* (London and New York: Routledge, 2001), p. 5.

²⁷Linus Kpalap, "The Knower and the Known," unpublished paper given at Sogang University, Seoul, Korea, June 3, 2010, p. 7. See also Aristotle, *De Anima*, 3, 4, 429. Please note, however, that if we delve into the earlier history of Greek philosophy as it existed prior to Socrates, in the cognitional philosophy of Empedocles of Agrigentum (*ca.* 490-430 BC), we can find words and statements which, in effect, point toward the principle of identity as this exists with respect to the dynamics of our human cognition. Bluntly put or simply put: "like is known by like." "All cognition is of like by like." Cf. Elizabeth A. Murray, "The Classical Question of Immortality in Light of Lonergan's Explicit Metaphysics," *Lonergan Workshop* 25 (2013): p. 271; W. K. C. Guthrie, *Presocratic tradition from Parmenides to Democritus*, vol. 2, pp. 228-231. Although Empedocles did not distinguish between

knowing exists not by way of some kind of confrontation that exists between a would be knower and something which is known but by way of a species of identity which exists between a knower and that which is being known.

Moving on then in the context of Aristotle's analysis, the second basic type of question groups together "whether there is an X" with "whether X is Y": hence, questions about truth. Is this so? Is this true? What possible truth has been grasped by us through the reception of a prior act of understanding as this has been given to us by a prior, direct act of understanding? This distinct type of question can only be answered by pronouncing a verdict of some kind, saying either "yes" or "no," true or false, 28 or by deciding not to make any kind of decision or judgment. Hence, from this, the second basic operation of our human minds exists as the making of a rational judgment (in Aristotle's language, signified as an act of "composition or division").²⁹ In other words, in an affirmative judgment, we say or declare that something is so (something is true and not false); and, conversely, in a negative judgment, we would say or declare that something is not so (something is false or something is not true). To distinguish the intelligibility that comes to us from our acts of direct understanding from the intelligibility that comes to us from our acts of reflective understanding, within the order of reflection which can exist for us within the kind of reflection and science which exists within the study of metaphysics, instead of form, we can possibly speak about the kind of being which exists as act. Act would succeed form as truth succeeds the being of a meaning or being of an idea. In this context thus, that which exists as a species of conceptual or formal being would be succeeded by something which exists as a species of real being

acts of sensing and thinking (according to Aristotle's criticism of him), two fragments forming a lengthy quotation say that knowing occurs through an identity or a sameness between what exists as a precondition within a knower and that which exists outside a knower in something which is being known by a given knower. Without some kind of identity between internal and external conditions, there can be no knowing, no proper acts of human cognition. Citing some of Empedocles's words as they have come down to us:

With earth we see earth, with water water, with air the divine air, but with fire destructive fire, with Love Love and with Strife we see dismal Strife; for out of these are all things formed and fitted together, and with these they think and feel pleasure and pain.

Hence, citing Aristotle's paraphrase of Empedocles's position: "knowledge is by similars, ignorance by dissimilars." Cf. Guthrie, p. 229.

28Aristotle, *Posterior Analytics*, 2, 2, 89b36-90a34; Aquinas, *In Aristotelis libros Posteriorum analyticorum*, 2, 1.

29Lonergan, *Verbum*, p. 61; *Incarnate Word*, p. 391; Thomas Crean and Christopher Friel, *Metaphysics and the Thought of St. Thomas Aquinas* (Birmingham, England: Maryvale Institute, 2011), p. 15. Less ambiguously with respect to the meaning of judgment and the effects or the consequences of judgment: "To know the...relation of conformity [between one's self as a knower and a thing that is known] is nothing else than to judge it so to be or not to be in reality." As Aquinas works with the kind of language, the kind of conceptuality, that he finds in Aristotle in order to speak about how judgment exists as a second fundamental operation of our human minds: "this is to compose and divide, and hence the intellect knows truth only in composing and dividing by its judgment." Cf. Aquinas, *Peri Hermeneias*, 1, 3, 9, as cited by Peter Hoenen, *Reality and Judgment according to St. Thomas*, trans. Henry F. Tiblier (Chicago: Henry Regnery Company, 1952), pp. 4-5.

if we should choose to speak in this way about what, in fact, happens when we move from the order of speculative understanding which exists in our "simple apprehensions" (or our "direct understanding") toward the kind of understanding which seems to exist if we should refer to a real difference which exists between the kind of understanding which exists in "simple apprehension" and the kind of understanding which exists in the reflections of judgment ("simple apprehension" versus "complex apprehension"). If our context is an understanding of human cognition and a study of this cognition which would exist as a science of its own, acts of reflective understanding have a nature of their own. They differ from acts of direct understanding because of a difference which obtains between the kind of operation which exists in acts of reflective understanding versus the kind of operation which exists in our acts of direct understanding. While acts of direct understanding engage in acts of abstraction, acts of reflective understanding attend to how we have moved from acts of sensing to acts of understanding and if there exists any evidence which points to the truth of a meaning which has been grasped and understood. Our self-reflection and an experience of difference within our consciousness of self points to a real distinction which must exist between acts of direct understanding as this exists in "simple apprehensions" and acts of reflective understanding which would allegedly exist through the being of "complex apprehensions."

As a species of qualification, however, about what has been said so far, please note thus that, in the kind of analysis which we find in Aristotle and also in the manner of his conceptualization and language, in our acts of judgment, a dual nature is distinguished or two natures are indicated in a way which seems to juxtapose one nature with another. Two natures exist instead of one nature. A synthetic, constructive element is alluded to, on the one hand, and, on the other hand, an affirmative, declarative element. Hence, questions exist (later questions were posed) which asked if Aristotle was successful in clearly distinguishing between the being of these two different aspects (existing as two distinct elements, each having its own distinct nature).³⁰ Did he, in fact, clearly distinguish between acts of direct understanding and acts of reflective understanding which exist as acts of judgment since, in Aristotle, judgment engages in two different kinds of tasks. On the one hand, allegedly within our judgments, (1) a composition or a putting together of different concepts occurs or, on the other hand, a separation of concepts when we realize that some concepts should not be combined or joined with each other. If an act of direct understanding (which, as noted, Aristotle conceptualizes as an act of "simple apprehension") moves through the instrumentality of an imagined fertile, apt image (existing as a phantasm) toward a single, distinct concept or a definition which expresses the fruit or the grasp of one's prior act of understanding (in Aristotle's understanding of the nature or the intelligibility of all our direct acts of understanding as we move from the being and the order of sense to the order and the being of understanding: through images which exist as phantasms: ta men oun eidê to noêtikon en tois phantasmasi noei; the "intellect grasps forms in images; 31

³⁰Lonergan, Verbum, pp. 61-62.

³¹Aristotle, De Anima, 3, 7, 431b, as cited by Sala, Lonergan and Kant, p. 161, n. 72.

"understanding...understands the forms in the images;"32 "insight is into phantasm"33), a fortiori, if we should speak in this way about the being of a "simple apprehension," then, to a greater degree, if we are to speak about how two or more concepts can be put together to reveal a greater unity or a link that exists between these concepts (leading to a larger, more general concept), then, in order to identify and to distinguish this species of intellectual act, we should or we must speak about the being of a "complex apprehension." These exist allegedly as judgments. These judgments introduce an order which should exist among our ideas and concepts. However, if, for us, the intellectual object is not simply the apprehension of a conceptual complex unity but if, in fact, (2) it is an understanding which wants to declare or know about the reality or the truth of one or more concepts (whether we should speak about simple concepts or about complex concepts), then, within this larger, greater, more demanding context, in Aristotle, a second understanding of judgment presents itself to us in terms of how it seeks to posit a relation or a synthesis which has been grasped by us in our prior acts of understanding. The object here is not essentially a synthesis, the apprehension or the grasp of a synthesis which points to a higher or a wider understanding of things but, instead, the taking of an already understood synthesis and further acts which would work toward an act of understanding which can conclude or move toward a declaration of its reality or a declaration of its truth (or which can deny the factuality of its reality or the factuality of its truth). This is so. This is not so. Either way, in affirmation or negation, a truth is known and it is grasped by us as known. In our awareness, a truth is known in terms of its reasonableness or cogency: hence, its being, its reality. consciousness or experience that we have of evidence points to the being or the reality of a truth and, as an effect which would thus follow from this, with Aguinas, we would say about ourselves that "knowledge exists as one of the effects of truth" [cognitio est *quidam veritatis effectus*].³⁴ The one comes from the other.

In Aristotle thus, depending on which passages or texts are being studied, a clear distinction does not exist between that which exists as understanding and that which exists as judgment (acts of direct understanding versus acts of reflective understanding) because judgment, in the language of "composition and division," resembles acts of direct understanding in terms of the unities which are being grasped and understood by them (by our acts of understanding): unities which transcend pluralities and multiplicities as these exist initially among the givens of the data of our sense perception. However, in Aristotle, the being of judgments is such that they also seek to determine if a correspondence exists between that which exists as a form of mental synthesis within ourselves and that which exists as a species of real synthesis within the being of truly existing things (the being of truly existing objects). A real distinction

³²Aristotle, *De Anima*, 3, 7, 431b, as cited and translated by Patrick H. Byrne, "Situating Insight," *Divyadaan: Journal of Philosophy & Education* vol. 28, no. 1 (2017): 5, citing Bernard Lonergan's *Insight: A Study of Human Understanding*. In other words, understanding or insight is into phantasms. Understanding emerges from phantasms or apt images and not from prior concepts or prior conceptions which exist within our minds.

³³Bernard Lonergan, as cited by Patrick Byrne, "Situating Insight," p. 5.

³⁴Aquinas, De veritate, q. 1, a. 1, as cited by Sala, Lonergan and Kant, p. 147, n. 71.

accordingly exists between the type of answer that is given to this kind of question and the type of answer which is given to a question which asks about how concepts can be related to each other in ways that could lead to the understanding and eventually the expression of a new, more general concept.

On the basis then of this real distinction and as a species of new first principle, in the later work of Aquinas and also in the later work of Bernard Lonergan, clarifications were introduced into the thinking and the conceptuality of Aristotle's analysis in a manner which attempted to introduce degrees of clarity that had not been too obvious to anyone or to most persons who had attempted earlier to read into the corpus of Aristotle's philosophy in order to find, within it, a coherent understanding about how things exist within the reality of the world within which we all live (a reality which includes the kind of being which we have and which we are as human beings where our kind of being includes the kind of knowing which belongs to us as human beings and which does not belong to other kinds of living being). From an incoherent understanding about the nature of our human judgment (from an incoherent understanding about the nature of our human cognition), we can thus wonder if, for some in the subsequent history of reflection within philosophy, the result has been a defective, incoherent understanding about the nature of existing things where, in metaphysics, we turn to this science in order to move toward a comprehensive or a general understanding about the nature of all existing things qua the nature of being in general as it applies to all things which enjoy some form of real existence. What can be implied about the nature of our world if our point of departure is a particular belief or a particular understanding about the nature of our human knowing, an understanding which could be lacking in the degree of rationality which should belong to it?³⁵

Moving on thus from here, with respect *principally* to judgment and on the basis of the kind of rationality which would seem to exist in our different acts of judgment (which exist as acts of understanding), we can begin then to understand in a more exact manner why the kind of realism which belongs to Aristotle's understanding of human cognition is such that it can be differentiated and referred to in terms which speak about how it exists as a critical form of realism, Aristotle existing (reputedly) as the father of critical realism.³⁶ Talk about a critical form of realism immediately suggests or points to a naïve form of realism since the meaning of one kind of realism immediately suggests the other and so, if it said or if it is argued that our human knowing is characterized by a critical form of realism, we can understand why, as a species, naïve realism is not to be attributed to the kind of cognition which properly belongs to us as human beings. It does not mesh or jive with the nature of our human cognition and all the operations which properly belong to it although a naïve form of realism can be ascribed to the functioning of our human cognition if we should hold to a truncated understanding of our human cognition or if we should advert to truncated forms of cognitional activity as these can exist among us within the lives of other human beings (persons that we may know or sometimes ourselves when we think back and reflect on cognitional operations that we have been engaging in). By way of a fuller explanation:

³⁵Randall, *Aristotle*, p. 6.

³⁶Anthony M. Matteo, *Quest for the Absolute The Philosophical Vision of Joseph Maréchal* (DeKalb, Illinois: Northern Illinois University Press, 1992), p. 11, citing a conclusion that comes to us from the thought of Joseph Maréchal.

To understand how we can move from a thesis about naïve realism to a thesis about critical realism, with Aristotle, let us distinguish between our acts of sensing and our acts of understanding. Suppose at the start (as a premiss) that an act of sensing is unlike an act of understanding. Whether we move from an act of understanding toward an act of sensing or from an act of sensing toward an act of understanding, one does what the other is not able to do. However if we should suppose that understanding is akin to what we do in our various acts of human sensing, then, if we attend to our acts of human sensing (given allegedly their primacy) and if we should want to know if something is truly known as real (if it truly exists as a reality), it would seem that we would have to engage in the following simple three step procedure. First, (1) we would look at "reality" as this exists outside of ourselves (as it somehow exists for us in an external kind of way) and then, secondly, (2) we would look back at an idea or a datum that somehow exists within ourselves (within our cognitive consciousness of self): possibly within our minds or possibly within our perceptions as we experience these perceptions. At this point, we do not distinguish between that which exists within our minds and that which exists within our perceptions. The idea or the datum that we have on our side, as it exists within our minds or our perception, allegedly reflects or it should reflect the content of that which we have been seeing or that which we have been sensing through our various acts of human sensing. Then, third and lastly, (3) we would compare these two contents with each other to see if there is a fit between them (a congruence between the two). The realism or the reality of our human knowing is explained or it is reduced here to a criterion which comes to us from the kind of performance or the kind of activity that belongs to our different acts of human sensing, a realism which is then taken and applied to all of our cognitive acts. Hence, within this tradition of philosophic analysis, we have the species of realism which exists for us as a specification of naïve realism since, within this context, no real distinction is drawn between the extroverted, empirical kind of realism that properly belongs to our various acts of human sensing and the introverted, self-reflective kind of realism which properly belongs to us in our various acts of understanding (as, interiorily or inwardly, through the asking of various questions, our acts of direct understanding move us or they dispose us toward the kind of reception which exists in our experiencing and receiving acts of reflective understanding that could be given to us and then, from this, the consequent emergence of judgments and evaluations which would then distinguish between the being of notions and ideas which happen to be interesting and arresting although false and these same notions or ideas which happen to be true). Naive forms of realism are to be associated with acts of human sensing; critical forms of realism, with acts of understanding (principally when these acts of understanding exist as the reflective kind of understanding which exists in our acts of human judgment).³⁷

³⁷For a fuller understanding of naïve realism and that which exists as critical realism, see Étienne Gilson, *Methodical Realism*, trans. Philip Trower (San Francisco: Ignatius Press, 2011), p. 21; Matteo, *Philosophical Vision of Maréchal*, pp. 8-12. As Matteo proceeds initially to argue his case (p. 20), in the opposition which exists between the kind of knowing which exists in ultra-realism and the kind of knowing which exists in nominalism, in ultra-realism we have a way of speaking or a philosophy which is grounded in the beliefs and assumptions of naïve realism - a way of speaking which holds that forms, essences, or universals can only be known by us in a manner which exists apart

To sum up then, on the basis of Aristotle's philosophy of inquiry in science and philosophy, two distinct kinds of questions accordingly intend two distinct kinds of object which, in turn, point to the being of two distinct kinds of cognitive, mental operation (grounding the being of two distinct kinds of mental operation). Through the mediation of our questions, distinct acts go with distinct objects. We say that distinct acts intend distinct objects. Always, with respect to how these two acts differ from each other, the kind of distinction which exists between them is never to be understood as a species of separation or as a disjunction between them since simple apprehension or direct understanding, as a first species of intellectual act, conditions or we say that it leads us toward acts of reflective understanding which would exist as judgments, these judgments existing as a second species of intellectual act which, in turn, when given, shapes or imparts to our human knowing a unity and a

from our acts of understanding, acts of understanding which can belong to us as cogitating human subjects.

Through another form of contrast however, which can add to our understanding of naïve realism in terms of how naïve realism differs from the specifics of critical realism, in his An Introduction to Bernard Lonergan (Victoria: Sid Harta Publishers, 2010), pp. 172-174, Peter Beer distinguishes between critical realism, on the one hand, and the being of dogmatic realism, on the other hand. Critical realism and dogmatic realism both admit, as a cognitional fact, that reality is known by us through the mediation of our true judgments (respectively speaking as we move from one type of realism to the other: in critical realism, judgments refer to a knowledge of reality which is given to each of us or which is proportionate to our human acts of cognition; in dogmatic realism, other judgments refer to a knowledge of divine things that is given to us and which is mediated down to us by way of our submission and our adherence to the truth of the official teaching of the Catholic Church as this refers to truths of divine revelation and an order of real objects that is then known by us through the truths of faith which we profess, accept, and believe as confessing Catholics). Cf. Giovanni B. Sala, "1. The Encyclical Letter "Fides et ratio": A Service to Truth," Vernuft und Glaube, p. 47, n, 7. However, in a manner which differs from the kind of reasons that can be given by the Church's official teaching and through the obedience and submission of dogmatic realists, critical realists can give reasons which point to the validity of judgments which exist in an individual, personal way. While naive realists point to sensible configurations of one kind or another as their point of individual reference, critical realists point to reasons or understandings that have been understood by them and which they have put into communicable concepts.

Sounding another note: with respect to a positive relation which can exist between differing admixtures of naïve and dogmatic realism, in order to move from the order of understanding and belief into the kind of order which is conditioned by parameters and variables that refer to space and time (terms or experiences which belong to our acts of human sensing), dogmatic realists will picture or imagine that which they believe and accept as the truths of their religious faith and, as a consequence, this picturing and imagining will point to the kind of imagery that we typically find within the visual arts which officially the Church encourages for religious reasons that directly relate to her sense of mission and purpose: (1) in order to express what she believes and professes for the sake of the good which can be encouraged among her own members and believers and (2) in order to move the minds and hearts of other persons who might not know about the truths of the Church's Catholic faith, stirring them in their desires, perhaps creating a new openness or a new willingness that they had not existed before but which, now, they can begin to have.

completeness that, otherwise, it would not have as we move from our initial experiencing that is given to us in our acts of sense toward the kind of experiencing that is given to us in our acts of understanding.

The interrelation which exists thus between our acts of sensing and our acts of understanding accordingly points to a species of mutual, reciprocal priority or a species of mutual, reciprocal causality which best explains how our sensing, understanding, and judging exist as cognitive acts which interact and relate with each other in a way which points to the being of a complex type of intelligible unity. These acts all rely on each other in a context which moves from our initial acts of sensing toward our later acts of understanding and then, in judgment, back toward new acts of human sensing if evidence within our acts and data of sensing is to be found and alluded to for any affirmations of being that are desired through the kind of reflection which belongs to us in the making of prospective judgments.³⁸ To the degree that our human understanding begins with our acts of human sensing and the kind of data that is given to us through our various acts of human sensing and to the degree too that our acts of understanding find meaning within this data of sense, to the same degree also, our acts of reflective understanding must return to our acts of sensing and the kind of data which belong to our acts of human sensing if we are to know about the relevance or the bite which should allegedly exist within the grasp of our initial acts of understanding: the groundedness or the rootedness which should allegedly exist and which must exist if a given act of understanding is to be known by us as a truthful or telling act of understanding or if it is to be judged (more moderately) as an apt or likely act of understanding (the best that we can possibly have within a given, restricted context). Whether true or apt, whatever, if a given judgment concludes to the being of truth or the being of aptness or suitability, then that which is known by us through a direct act of understanding is said to sufficiently explain or to correctly explain why something exists in the way that it happens to exist (according to how we have understood it) because, between our acts of sensing and our acts of understanding, a positive connection is to be alluded to, identified, and communicated to others in a way that should elicit the same kind of verification and confirmation which exists when other persons attempt to make the same judgments which we have also made or judgments that, perhaps, others have also made.

With respect to how direct acts of understanding lead to reflective acts of understanding and the nature of reflective acts of understanding: always, in our judgments, by the kind of self-reflection which exists in judgment, we refer to how, in a given case and context, we have moved from the experience of a datum in our sensing toward the experience of an idea in our understanding. If, through our first acts of inquiry, we have moved or are moving from the givens of sense toward an apt image that we have imaginatively fashioned from the prior givens of sense and which, in turn, points to a meaning or an understanding which is being suggested to us by the pregnancy or the suggestiveness of an entertained apt image (the order which exists within a pivotal apt image pointing to another order which is to be grasped by us in a direct act of understanding), similarly, through the kind of inquiry which exists in our subsequent acts of reflection, we move from the givens of our understanding toward the givens that can be found by us in new possible acts of human sensing: either adverting to our prior acts of human sensing (possibly repeating them in a new way) or possibly moving and engaging in other new acts of human sensing which, before, had not been known or experienced. The order which exists within the apprehension of an initial act of understanding (a direct act of understanding) points to a chain of reasoning that has moved from prior acts of sense through to direct acts of understanding and, if, through our self-reflection, we can identify this chain of reasoning as we can find it and as we can

³⁸Meynell, "On Being an Aristotelian," Redirecting Philosophy, p. 258.

retrace it within the data of our cognitional awareness of self, from this, we can be directed toward new acts and data of human sensing which would exist for us as apprehensions of evidence that can be specified in a manner which relates it to an idea whose truthfulness is being shown and known, either now with a degree of certainty or with a degree of probability which points to the likeliness of a given truth.

By way of a useful illustration, please distinguish here between the kind of evidence which initially led to a Copernican understanding of the universe in the 16th Century and the acceptance of a heliocentric view of the world in the 17th Century and the kind of evidence that emerged in the 19th Century which served to turn the heliocentrism of the world into a truth which is no longer probable because it is now known with a necessity and a certitude which points to its undeniability.

To understand how a transition can occur between determinations of probability as these can exist within our scientific judgments and determinations of certitude which can also exist within our judgments, see Thomas S. Kuhn's The Copernican Revolution: Planetary Astronomy in the Development of Western Thought. Prior to the 19th Century, it was not possible to take measurements from the earth to a given star or other planetary object which could determine if, in some way, the earth has moved, relative to the taking of readings that are taken at different times. If the earth is stationary, no difference in one's angle of vision should be possible. But, if the earth moves and is not stationary, one's angle of vision should vary if, at one time, one attends to a planetary object and if one then attends to the same object at another time. Readings which could determine differences in angle only became possible in the 19th Century and this development or progress in the kind of evidence which we can have at any given time points to differences in rational ground which can exist within our judgments. An ingress or a collection of probabilities points to an experience of judgment which can be experienced as certain (virtually certain; hence, entirely rational) although, on the other hand and strictly speaking, a real distinction must always exist between that which exists as a probability and that which exists as a certainty even if we must admit that, within the data of our cognitive experience, an accumulation of probabilities will always tend to lead us toward apprehensions of truth and knowledge that are regarded as certain and not probable.

In either case thus, whether we should deal with probabilities or with certainties, perhaps for the first time, in a reflective act of understanding (in a judgment), the truth of an idea is being known by us at a given time and this change in us immediately points to a growth in the understanding and knowledge which now personally belongs to us as human knowers. Or, in other words, within this context of judgment, if we should refer to the kind of personal experience which exists within our newly emerging, immanently generated knowledge of things as this exists for us for the first time, the truth of an idea is not known simply because or merely because it is believed to be true or because it is assumed or presumed to be true if we are then to ask new questions that could lead us to newer acts of understanding. Its truth is now known by us in an inward fashion because of an intellectual kind of proceeding which exists within ourselves in a judgment, a proceeding which properly belongs to the being of our rational consciousness and the experience that we have of this same consciousness (a consciousness which differs from our sensible, sensing consciousness and from the kind of intellectual consciousness which belongs to how we experience the reception of an idea that has been grasped by us in an act of understanding). As apt images trigger acts of direct understanding, apprehensions of

evidence trigger acts of reflective understanding which posit the reality or the truth of an understood idea. In the kind of proceeding which exists in the proceeding or in the emergence of an inner awareness which exists as the revelation of a conclusion, a realization or a verdict of some kind is interiorily uttered in terms of how we are to speak to ourselves about that which we have come to understand and know.

In the general scheme of things which accordingly exists within Aristotle's understanding of human cognition, everything begins with the givens of sense and a first species of conscious act which exists as our acts of human sensing, a contention which can be proved if, with Aristotle, we attend to how we experience ourselves as we engage in our various acts of human cognition. In our experience of self, we should notice that our knowing always begins with our differing acts of human sensing and the givens that belong to our differing acts of human sensing. Bluntly put in the kind of language which Aristotle uses: "if one perceived nothing one would learn and understand nothing." Art [technē] and science [epistēmē] "arise from sense-perception," from an apprehension of particulars in sense perception since, from these particulars, from our understanding, we can then move toward something which exists as a general principle. Citing a simple example that comes to us from Aristotle: in the matter of our observations, looking about, we notice that a skilled pilot is the best pilot of a moving ship and then, in another context, we also notice that a skilled charioteer is always the best charioteer to manage and drive a chariot. Hence, on the basis of an initial experience of these particulars, we can surmise and move toward a species of general conclusion or a general principle which would simply say that a skilled man is always the best person to have to do any particular activity. 41 Apprehensions of particularity yield to apprehensions of generality in an orientation and a shift that points to our acts and data of human sensing as a fundamental point of departure for the kind of order which belongs to all the acts of our human cognition since, as Aristotle argues, "if some perception is wanting, it is necessary for some understanding to be [also] wanting."42 From our experience and the induction of particulars and only from this induction, only then can we move toward a possible apprehension of universal truths although, as Aristotle notes in the context and manner of his analysis, "it is impossible to get an induction without perception [without our acts of perception which exist as our acts of human sensing]."43

³⁹Aristotle, *De Anima*, 432a6, tr. Hugh Lawson-Tancred (Harmondsworth: Penguin, 1986), p. 210, quoted in Tim Lynch, "Human Knowledge: Passivity, Experience, and Structural Actuation: An Approach to the Problem of the A Priori," *Method: Journal of Lonergan Studies* 17 (1999): 142. This same passage is translated by J. A. Smith in *The Complete Works of Aristotle: The Revised Oxford Translation*, ed. Jonathan Barnes (Princeton, New Jersey: Princeton University Press, 1984) as "no one can learn or understand anything in the absence of sense."

⁴⁰Aristotle, *Posterior Analytics*, 2, 19, 100a5-11, trans. Hugh Tredennick (Cambridge, Massachusetts: Harvard University Press, 1989), p. 259.

⁴¹Aristotle, *Topics*, 1, 1; 100a25-100b23; 1, 12; 105a10-19, as cited by Berman, *Law and Revolution*, pp. 133-134, citing Richard McKeon, ed., *The Basic Works of Aristotle* (New York: 1941), p. 188; p. 198.

⁴²Aristotle, *Posterior Analytics*, 1, 17, 81a38; Lynch, p. 142, n. 31. See also Michael P. Maxwell, Jr., "Lonergan's Critique of Aristotle's Notion of Science," *Lonergan Workshop: Lonergan's Openness: Polymorphism, Postmodernism, and Religion*, vol. 18, ed. Fred Lawrence (Boston: Lonergan Institute, 2005): 161.

⁴³ Aristotle, Posterior Analytics, 1, 18, 81b1-6.

In another way of speaking which points to how, in Aristotle, a transition moves from the order of human description to the order of human explanation, if we should want to go into detail about the kind of knowing which initially exists in our different acts of human sensing according to the way of thinking and speaking that comes to us from various texts which belong to the corpus of Aristotle's writings, it can be noticed that, in his *Metaphysics*, Aristotle reiterates a thesis which says that our knowledge of particulars comes to us from the kind of knowing which exists within our different acts of human sensing. To us, from them, we have "the most authoritative knowledge of particulars." 44 Sense knows particulars in a manner which refers to how they exist in an external outward manner (given the extroversion which essentially belongs to our acts of human sensing when objects are perceived to exist in a way which is somehow external to us in our being as sensing subjects). We think here about the being of descriptive traits which exist as descriptive properties or which exist as descriptive conjugates. In the kind of language that comes to us from the Aristotelian tradition, these traits exist as "external accidents." In his Latin, Aguinas speaks about exteriorum accidentium. 45 Examples which can be cited refer to how we experience certain things in terms of their "whiteness." their "sweetness," their "hardness," and so on and so forth. 46

From sense thus and as a perpetuation of everything which is known in sense and which belongs to sense, from all our different acts of human sensing, as a later, subsequent point of departure, everything else follows in terms of our acts of memory and recollection and, from our memory and recollection, an anticipation of how things should be or what we will possibly find:⁴⁷ we can grow in the extent of our life experience and in the reach and depth of our practical knowledge and wisdom; we can acquire technological skills and knowhow; and we can move toward the possibility of a form of scientific knowledge that is only interested in understanding the truth of things before any other questions can arise about how we should respond to the truth of things that we have come to understand and know.⁴⁸

To explain these matters in a manner which attempts to move from the order of description toward a way of speaking which proffers a species of suitable explanation (an adequate understanding): in the *Confessions* of St. Augustine, St. Augustine speaks about these categories of Aristotle in a way which reveals their descriptive, anticipative, heuristic character as this can be derived by how we can analyze our ordinary linguistic usage in terms of how subjects and verbs relate to each other (how they can be said to relate to each other). From an understanding of grammar and the kind of order or the kind of structure which exists in our human speech, from there, we can move toward a species of predication that can be described in terms which would refer to the kind of description which exists for us as scientific description and how, possibly, from the givens of a scientific description, we can then move toward the givens or the order of a scientific explanation. Scientific explanation is preceded by scientific description, one good conditioning the emergence of a second good. Quoting own Augustine's words as they come to us from the text of the *Confessions*:

The book [The Ten Categories of Aristotle] seemed to me to speak clearly enough of substances, such as a man is, and of what are in them, such as a man's figure; of what

⁴⁴Aristotle, *Metaphysics*, 1, 981b10-1. See also William B. Stevenson, "The Problem of Trinitarian Processions in Thomas's *Roman Commentary*," *The Thomist* 64 (2000): 621-622.

⁴⁵Aquinas, De Veritate, q. 10, a. 6, ad 2; 2, p. 29; Summa Contra Gentiles, 4, 11, 15.

⁴⁶Sullivan, *Introduction to Philosophy*, p. 54.

⁴⁷Aquinas, De Veritate, q. 10, a. 2.

⁴⁸Aristotle, *Metaphysics*, 1, 1, 980a22-982a2.

quality he is; his stature; how many feet tall he is; his relationships, as whose brother he is; where he is placed; when he was born; whether he stands or sits; whether he is shod with shoes or armed; whether he does something or has something done to him; and the innumerable things that are found in these nine categories, of which I have set down some examples, or in the category of substance.⁴⁹

In his *Insight: A Study of Human Understanding*, in the context of his own day, in a manner which resembles the teaching of Augustine, Bernard Lonergan speaks about Aristotle's ten categories in a way which also attests to their heuristic descriptive character:

A naturalist will assign the genus, species, and instance (substance) of an animal, its size and weight (quantity), its color, shape, abilities, propensities (quality), its similarities to other animals and its differences from them (relation), its performance and susceptibilities (action and passion), its habitat and seasonal changes (place and time), its mode of motion and rest (posture), and its possession of such items as claws, talons, hooves, fur, feathers, horns (habit).⁵⁰

However, in his *Understanding and Being*, an explanation is given about how Aristotle could have arrived at the categories that he, in fact, gave in the listing which he provides within his *Ten Categories*, an understanding that we can replicate within the context of our own personal experience:

We arrive at Aristotle's categories most simply by going into the woods, meeting animals, and asking, What kind of an animal is this? How big is it? What is its color? What relations does it have? and so on. They are categories of descriptive knowledge, and descriptive knowledge is science in a preliminary stage.⁵¹

In his logical treatise, the *Categories*, sometimes cited as the *Ten Categories*, after distinguishing between a knowledge of the meanings of words and a knowledge of judgments that are made with the help of words or through the use of words, in, allegedly, an exhaustive set of 10 categories, Aristotle lists 10 general items in speech which we can use to define any given thing or all manner of things. These consist of substance (a thing or a thingness which exists as the primary or basic category, all other categories referring to it, and 9 accidents (attributes or conjugates) which belong or which inhere within the being of a given substance or thing. They determine that which is a substance or a thing as it exists objectively within the being of a larger, extra-mental world (the world of things which exists beyond our own thinking and understanding), substance being the primary category that all else supposes and presupposes. Accidents consist of: quantity, quality, relation (for example, "He is a father"), place, time or date, position, state (for example, "He is armed"), action, and passion. These categories all possess an "external" ontological aspect (they are endowed with an ontological significance and determination) and so, as we have already noted in the context of Aristotle's realist

⁴⁹Augustine, *Confessions*, 4, 28, as cited in *The Confessions of St. Augustine*, trans. John K. Ryan (New York: Doubleday, 1960), p. 110.

⁵⁰Lonergan, Insight: A Study of Human Understanding, p. 420.

⁵¹Bernard J. F. Lonergan, *Understanding and Being: The Halifax Lectures on Insight*, eds. Elizabeth A. Morelli and Mark D. Morelli; rev and aug. by Frederick E. Crowe with the collaboration of Elizabeth A. Morelli, Mark D. Morelli, Robert M. Doran, and Thomas V. Daly (Toronto: University of Toronto Press, 2000), p. 199.

understanding of human cognition, they are not to be understood as referring to some kind of purely logical intra-mental subjective schema as this can exist within us or as it allegedly exists within the data or the experience of ourselves in our experience of human thinking and knowing.

With respect to the kind of difference which exists between a substance and any accidents or categories which can apply to it in ways that can indicate what kind of substance exists in a given context, because accidents come and go with respect to how a given thing or substance exists, for this reason on this basis, in Aristotle, a real distinction (as opposed to a material or linguistic difference and an ideational, conceptual difference) exists between the nature or the intelligibility of a thing or substance and the nature or the intelligibility of an accident.⁵² In other words, the kind of reality which belongs to one is not the kind of reality which belongs to the other. Compared to the being of that which exists as accidental attributes or as accidental events, the nature or the intelligibility of a thing or a substance is something which tends to endure through time and space. It does not come and go as accidents come and go (things or substances are stable, relative to the being of accidents) although, with respect to the being of accidental properties, proper accidents in their being are to be distinguished from the being of incidental accidents. By attending to the nature of a given thing and by understanding the nature of a given thing, we can begin to understand why some accidents are to be regarded as normal and proper to it (they exist as substantial accidents) and why other accidents are to be regarded as incidental or as purely circumstantial. For instance, the having of bodily hair for human beings is a proper accident (it is a proper attribute for us) although, possibly, a human being can exist in a way which is without any hair. The absence of hair points to the presence of a defect: a nature which is defective versus a nature which is intact and healthy. But, on the other hand, hair color, relative to the being of a substance or thing, is an attribute or an accident which is not proper or essential to it (it exists as a circumstantial accident) although, in relation to the being or the givenness of our bodily hair, in this case, it would be a proper or an essential attribute. It is a proper accident. The kind of relation which exists between one thing and another thing (a given accident or attribute as it pertains to this other accident or attribute) determines how accidents are to classified and understood in terms of the nature of their importance (their rating).

However, when Aristotle moves from an account of descriptive categories toward an understanding of science which thinks in terms of *causes* and the necessity of a knowledge which should always think in terms of an order of complementary causes that are distinct from each other (material, formal, instrumental, and final causes;⁵³ causes which distinguish between the givens and terms of sense and the givens and terms of understanding), he moves from a common sense kind of knowledge toward a notion of science which attends to the being of explanations and to the necessity and the primacy of explanations. Explanations transcend descriptions, the being of our descriptions. Science is true or real knowledge through a knowledge of causes (apprehending the being of causes, distinguishing the kind of being which belongs to them, identifying the differences which exist between causes, converting one's understanding of causes into speakable, definable words and concepts, and then moving toward verification and judgments which can then affirm the reality and being of the causes which have been initially understood and grasped).⁵⁴

⁵²Bernard J. F. Lonergan, *The Triune God: Systematics*, trans. Michael G. Shields, eds. Robert M. Doran and H. Daniel Monsour (Toronto: University of Toronto Press, 2007), p. 193.

⁵³Aristotle, *Physics*, 2, 3-5; *Metaphysics*, 1, 3-7, as cited by McCarthy, *Authenticity as Self-transcendence*, p. 61.

⁵⁴Aristotle, *Metaphysics*, 1, 1, 981a15-981b13.

In conclusion then, with respect to the kind of understanding which comes to us from Aristotle about the nature of our human cognition, an order of acts encompasses an order of operations which bind logical and non-logical operations with each other in a way or in a relation which thinks in terms of a unity amid many diversities or which joins dialectical aspects with complementary aspects in a manner which reduces everything to an understood whole. Acts of human sensing differ from our acts of human understanding. Yet, each plays a role which points to a species of self-transcendence which exists within the course or the order of acts which is constitutive of our human cognition. As human knowers, we transcend ourselves whenever, through our understanding and our knowledge of truths, we are joined to a world of real objects which exist independently of whether or not they are being known by us through our different acts of reflective understanding (our judgments which can determine if an ideal object exists as only as ideal object or if it also exists as a real, true object). The simplicity which characterizes the kind of knowing that belongs to animals is surpassed by the differentiated kind of knowing which belongs to us as human beings given how, in metaphysical terms, as human beings, we exist as a union of body and a species of soul (our souls including a rational or a reflective element) and how, on the basis of this interacting complex unity, we can cogitate in a manner which reflects the order of being that is constitutive of us in terms of how we exist as human beings. Function follows form or, in other words, how we know is determined by how we happen to exist and be.

In the realist understanding of human cognition that we accordingly have from Aristotle, scientific proofs are to be regarded as a distinct species of human cognition (existing as a distinct entity). As cognitional events, they can be separated from other kinds of cognitive act within as these acts exist within our human knowing. As noted or as we have previously suggested, these proofs exist for us within the data or the consciousness that we have of ourselves engaging in our acts of cognition although, admittedly, things exist within reality not always in terms of how we could be anticipating them with respect to the nature of their existence, nor always in terms of how we could be wishing to conceive of them if we should want to use words and to construct definitions for purposes of communication (either with ourselves or with others).

In the transition which exists in Aristotle as we move from acts of sensing toward our acts of understanding, universals do not exist as separately we might want to think of them or to conceive of them by way of our acts of understanding as we move from our direct acts of understanding through to our reflective acts of understanding and then, from there, on into the kind of articulation which exists as our acts of definition and conceptualization (despite Plato's views on the separate kind of being which should be ascribed to the being of universals). Amid these differences however, both philosophers hold to the reality of that which would exist as a species of universal. That which is really real exists as some kind of universal and the reality of universals is reached through the kind of universalizing activity which belongs to us as human beings in our cognition where, in Aristotle, our intelligence reaches universally existing things by way initially of our different acts of human sensing (from our different acts of human sensing): through a kind of application which exists as we move through inquiry toward our reasoning from our different acts of human sensing and as we also move from our reasoning and our understanding back toward our acts of sensing and the givens of sense. By way of the kind of reception or passivity which exists within us in receiving or experiencing our acts of understanding (differing from the kind of reception or passivity which exists with respect to our different acts of sense), a universalization of things always occurs in and through our acts of understanding. A particular knowledge of things that is sensate in nature (according to the kind of being which it has and the kind of being which we are) is converted by our cogitating, our

understanding, and our knowing into a universalized knowledge of the same things that, as knowledge, is both intelligent and intelligible and not sensing and sensible. More to the point in terms of the objectivity of our human knowledge, a datum or an object of sense or that which has been sensed (as an other, as an externally existing thing) is turned through understanding (from direct understanding to reflective understanding) into another kind of externally existing thing: something which exists now as an understood known and which enjoys, in its own way, a form of external existence if, admittedly, it exists as the intelligibility of an externally existing thing.

Simply put, using the kind of language which has been traditionally used, the sensible is also the intelligible or that which is sensible is that which is intelligible (or, alternatively, that which can be sensed is also that which can be understood) because or, through the mediation of a species of ordering which exists within the work or the effects of our understanding - the self-transcending kind of ordering which we have as human beings and which is to be identified with the kind of understanding which properly belongs to us as human beings - the species of ordering which exists within our knowing participates in and, at the same time, it also reflects or it mirrors the parameters and the assembly of elements which belongs to a like order which exists within a greater world of truly existing things. The intelligibility of our understanding, as understanding, combines or it also belongs to the intelligibility of real objects as these exist within a greater world of externally existing things. The subjectivity of human knowing is such that it exists with an orientation that is inherently directed toward an experience of objectivity which would then serve as a point of departure for the later study of the science of metaphysics and hence the study of the being of all existing things which is the proper object of the kind of inquiry which belongs to metaphysics as a discipline that differs from the study of human cognition. In Aristotle and also in Plato, in the experience of our understanding, a fundamental oneness exists between that which exists as the Mind and that which exists as the Cosmos. If a real distinction exists between the order of the cosmos and the disorder of a chaos, similarly, a real distinction exists between the ordering of our minds and the disorder which commonly belongs to the data of our sense perception.