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Résumé de l'article

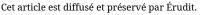
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Recovering Ancient and Medieval Contemplative Taxonomies as an Alternative to Bloom's Taxonomy of Educational Objectives¹

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Bloom's taxonomy has become a pedagogical orthodoxy in schools. This paper challenges Bloom's assumptions about thinking (the cognitive domain) and willing (the affective domain). A careful examination of ancient and medieval understandings—and of Thomas Aquinas' contemplative taxonomy in particular—demonstrates how Bloom's taxonomy is both disordered and radically incomplete. The thesis of this paper is that, if education is to be truly aimed at our "highest happiness," we must begin, in some small ways at least, to relate our educational efforts to the pursuit of wisdom. This pursuit, it is argued, involves engaging components of thinking and willing that transcend Bloom's taxonomy.

I. Introduction: A Recollection of Pre-Modern Ways of Knowing

We often use the word "contemplation" today to name any sort of deep thinking whatsoever. However, the ancient roots of this word have a specific meaning that has largely been forgotten today, and merits recollection. The ancient sense of "contemplation" (contemplatio in Latin, and theoria in Greek) names a particular kind of cognitive activity that must be distinguished from the critical-analytic reasoning (ratio) that is the mainstay of modern educational efforts. Rather than describing the laborious cognitive activity of a thinking subject standing over against its object (from ob-iectum, meaning "thrown against") as it moves from point to point in a line of reasoning, the ancient sense of "contemplation" refers to a direct or non-linear form of knowing; that is to say, it involves not the separation but rather the union of knower with what is known in the act of "seeing" (theoria). Not through the discursiveness of the ratio, but in the immediate apprehension of the intellectus does the loving gaze of contemplation unify seer with what is seen. And, where the discursive thought of the ratio is indeed a form of work, the passive, receptive gaze of the *intellectus* is not; rather, it is an effortless and immediate grasping of (or perhaps being grasped by) what is seen. Contemplative knowing is therefore associated not with toil, but with leisure. Our own language still pays lip-service to the important relation between contemplation, leisure, and education inasmuch as the word "school" is derived from the Greek word for leisure (schole). In ancient understanding, intellectus was always esteemed more highly than ratio as the mode of our perfection and our genuine happiness (eudaimonia in Greek, beatitudo in Latin), and Aristotle

¹ This paper is based on research drawn from my PhD dissertation. Special thanks to Professor Daniel Vokey for offering me helpful editing suggestions, and for asking thoughtful questions that challenged me to improve this paper for *Paideusis*.

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(2001) uses the word "immortalization" (to athanatizein; Nicomachean Ethics, X.vii.8) to describe the activity of the intellectus in relation to what is perfect or best (the Ariston). In modern times, however, the significance of the intellectus and contemplative activity has been drastically diminished (if not entirely forgotten) in favour of exclusive attention to the discursive operations of the ratio.

Where Latin authors used the terms ratio and intellectus to distinguish the discursive power of thinking from contemplative cognition, Greek authors spoke in terms of dianoia (thought) and noesis (intellection). Dianoetic thought includes the deductive, inductive, and evaluative use of fundamentals or principles (archai) discovered by the mind, whether these underlie the functioning of a specific scientific discipline, serve as the axioms (axiomata) of mathematics, the foundational principles of an art, or stand as the basic cultural presuppositions ("first things") of a culture or a community. In any case, dianoia extends these archai downward into the realm of human activity; noesis, by contrast, "takes up" (anairesis) all such archai towards their true beginning or ground (Arche). Noesis names that desire of the intellectus not just "to see" (theorein), but to see what is in its entirety: to unify through its gaze with the ground of all that is.

It is important to recognize that noetic and dianoetic activity can never be completely divorced from one another. The ancients held knowing to be a unity of *ratio* and *intellectus*. In today's educational systems where testing and accountability structures predominate, however, the dianoetic applications of reason are cultivated to the exclusion of noetic movements. But, according to ancient understanding, the exclusively dianoetic machinations and calculations of the *ratio* cannot bring about a knowledge of the Highest Good (*Summum Bonum*) that might enable us to know the true Measure (*Metron*) of all the other goods we enjoy. The movements of the *ratio* may enable us to innovate technologically or to "progress" scientifically, but they cannot tell us which innovations are good and which are not, or to what end we ought to innovate. In other words, the sort of learning that we do today in schools is insufficient to cultivate wisdom. Without also attending to and cultivating the noetic component of our rationality, we are left with only our own diverse passions and appetites as the means to make decisions about such things.

The sidelining and dismissal of *noesis* is the defining characteristic of our times; it is what separates modern understanding from the traditions represented by the ancient and medieval authors discussed in this study. Indeed, anyone who has read broadly from among ancient (pagan) and medieval (Christian church) sources can easily find significant points of agreement about the primacy of *noesis* and *intellectus*. Moreover, this consensus is not simply a Western phenomenon: if readers inspect Eastern traditions like Madhyamika philosophy and Buddhist *vipassana* meditation, if they examine Patanjali's writings on Hindu yoga or revisit ancient Samkhya philosophy, they will find that the noetic component of thinking and its concern with the *intellectus* are given soteriological priority over the sorts of thinking that have become the exclusive concern of education today. The larger project of this article is to point out this massive cultural-historical blindness that has infected our times, and to suggest as a corrective that we turn to the ancients and medievals in order to rediscover that portion of our heritage—and our own selves—that we have lost and forsaken. In short, this article invites readers to consider the virtues of incorporating wisdom-seeking contemplative activities into our educational practices.

Reawakening awareness of the *intellectus* in our pedagogy and incorporating noetic thinking into the classroom need not be considered an onerous or impossible task; the noetic activity of the *intellectus* might occur anywhere and at anytime. For instance, where an openness of spirit is cultivated, scientific investigation might lead naturally to philosophic questioning; so too might mathematical studies, investigations of literature, as well as reflection on our own experiences of love and suffering. Indeed, any sort of basic "understanding" (*intellectus*) that we have gleaned about *anything* already presupposes the operations of the *intellectus*, which *sees* or apprehends the truth directly. The *intellectus* is active in the student's immediate grasp of the axioms and principles (*archai*) of mathematics and the various sciences; it stands at the beginning (*arche*) of all our thinking, but it also appears at the end of a line of reasoning when the *ratio* moves us towards yet another *seeing* of a truth; and of course, the *intellectus* is active in the student's witness to beauty in its physical and non-physical forms. The joy of the *intellectus* in the union

of beholding its object is especially sought out by students in relation to their friends, in music, art, dance, or in any other pursuit they love for the beauty that they find in it.

Since the operation of the *intellectus* is omnipresent in thinking, the role of *schooling* when conceived of as genuine *schole* is not simply to see (theorein), but to take what one sees upward (anairein) towards its source noetically. Put another way, the challenge of *schole* is to offer the *intellectus* ever more beautiful sights and ever more joyful experiences of beholding the Lovable. The danger for students is not so much that they will not see, but rather that they will suppose that they have already seen everything there is to see—that they will close themselves off to the investigation of what *is*, that they will refuse to cultivate the broadest and most open form of listening, supposing their own cognition of beauty has already shown them what is truly Beautiful. In short, the danger for students in thinking is for them to suppose that they know what they do not know due to their ignorance or unfamiliarity with higher and better sights worth seeing.

Our emphasis in schools on being accountable to the predetermined "goals" and "outcomes" of the educational system, our inordinate stress on testing and assessment with its demand that students demonstrate their knowledge of the correct answers, certainly does little to promote openness and wonder, a readiness to question, or an eagerness to know the extent of their own ignorance. In fact, our educational system is arguably quite damaging noetically inasmuch as it encourages students to beware of demonstrating that they do *not* know—certainly, they are *never* to take delight in such a discovery; and yet this delight in the discovery which leads one to "know thyself" (*gnothi seauton*) is precisely the pleasure associated with the noetic movement towards the highest sights.

Most troublesome is the effect that this lop-sidedness in our education system has had on mass societal consciousness of reality; for when all of our knowing becomes a matter of standing over and against objects in a position of control, use, and mastery, we cease to see the contemplative or relational aspect of knowing as loving; our awareness of our own innate ability to gaze upon (theoria) what is and to experience loving union with what is through the contemplative movements of the intellectus fades. Yet our craving for this sort of knowing remains. The result of this modern confusion is that we seek to gratify our desires for such union through the only means of knowing with which we are familiar: namely, the calculative subject-object knowing of the ratio. What follows in this paper is an exploration of this confusion as it is reinforced through our educational commitment to Bloom's taxonomy. I argue that the solution to our modern day confusions about thinking involves the incorporation of wisdom-seeking pedagogies that might, with the relaxation of our focus upon assessment and accountability structures, cultivate noesis during the school day.

II. Pursuing Wisdom: A Medieval Taxonomy of the Contemplative Life

This paper does not suggest that there is only one sort of life – the contemplative life; nor is it my contention that it ought to be the project of any educational system to transform society into some strange order of monks or contemplative mystics. A "transformative" education implies neither of these radicalisms. Rather, this paper simply points to the importance of recognizing that *theoria* or *contemplatio* is a fundamental component of the pursuit of wisdom, that it is made possible in the enjoyment of *schole*, and that both *schole* and *theoria* or *contemplatio* are indispensable elements of education and human life. On this view, contemplation and the environment proper for its cultivation (*schole*) are necessary for the development of the noetic element of human nature that cannot rightly be neglected or denied legitimacy.

Following Aristotle in his *Nicomachean Ethics*, Thomas Aquinas (1966) distinguishes the "active life" (vita activa) from the "contemplative life" (vita contemplativa) as a division most befitting our rational nature. His position is that, inasmuch as human beings are "living things which move or operate from within themselves" in accord with reason, human life involves both the intellectual pursuit of knowledge and rational action in the world. In Aquinas' view, the distinction between the two lives is

largely one of emphasis; some human beings are simply predisposed to one activity over the other: "since some men especially dedicate themselves to the contemplation of truth while others are primarily occupied with external activities, it follows that human living is correctly divided into the active and the contemplative" (2a2ae.179.1). The division into these two lives is by no means absolute: each human being engages in both action and contemplation to various degrees and at various times with the result that the two lives are always combined in the individual lives that people lead. Nonetheless, there is a ranking of the two lives: following Aristotle, Aquinas asserts that the active life is subordinate to the contemplative life inasmuch as the contemplative life aims at the pursuit of our highest end in Divine Wisdom, whereas the active life has as its aim goods achievable through virtuous and prudent action in human affairs.

That the *vita contemplativa* is not an arcane or intellectually elite concept but rather a term to describe an essential element of any fully human life is clear from Aquinas' discussion of the variety of contemplative activities. He writes that something can belong to the contemplative life either "primarily" or "secondarily." In the first sense, "the contemplation of divine truth belongs to the contemplative life primarily because this contemplation is the goal of the whole human life." This "primary" sense of contemplation accords with Aristotle's writings, wherein our ultimate happiness is found in attending to the most lofty object of intelligence. However, in a secondary sense, "because we can arrive at the contemplation of God through divine effects ... so the contemplation of them also pertains to the contemplative life, because through them man is led to a knowledge of God" (Aquinas, 1966, 2a2ae.180.4). Hence, other activities through which we seek to know belong "secondarily" or "dispositively" to the *vita contemplativa*. It is in this secondary sense that the breadth of contemplation is recognized. Here, Aquinas affirms the life of moral virtue, certain acts other than contemplation, and contemplation of the divine effects as components of the *vita contemplativa*.

Aquinas furthers our understanding of the breadth and scope of contemplation in the *Summa* by pointing out that, although the contemplative life has gazing upon the Divine and pursuit of Divine Wisdom as its final and highest goal, there are nonetheless a variety of types of contemplation. Following Richard of St. Victor, he enumerates six species (2a2ae.180.4), rendered in the diagram below from lowest to highest:

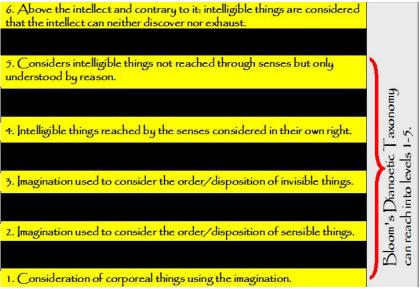


Figure 1: A Medieval Taxonomy of Thought (in yellow) as compared to Bloom's Modern Taxonomy

According to this pre-modern taxonomy, contemplative life spans a broad spectrum of activities. We are engaged in contemplative activity at the first and most basic level whenever we consider the things of sense; at the second level when we transition from sensible to intelligible things; at the third level when we think about the things of sense critically or analytically according to those of the mind; at the fourth level when we consider in their own right those intelligible things that have been reached through the sensible. Aquinas characterizes the fifth level as the consideration of intelligible realities that cannot be reached through the things of sense, but can be understood by reason (*rationem*). Such are the things we know through "revelation" – perhaps as when we consider myths, stories, inspired poetry and music, and the truths that may be unfolded therein through conscientious literary studies. Finally, with regard to the sixth level, he speaks of "the consideration of intelligible things which the intellect can neither discover nor exhaust; this is the sublime contemplation of divine truth wherein contemplation is finally perfected" (2a2ae.180.4).

As human beings, both teachers and students move through all of these various *species* of contemplation to varying degrees. The key question concerning the diversity of contemplative activities concerns the extent to which what we do in schools recognizes and cultivates learning across the whole range of this spectrum. Given that contemplation is related to our highest happiness as human beings, and that education should be about making human beings aware of and independently able to pursue their highest happiness as rational beings, to what extent do the contemplative exercises administered in our schools truly lead our students into such an awareness of the full amplitude of our human nature? And to what extent are teachers given any opportunity to pursue the richness of contemplative activities?

III. Bloom's Taxonomy in Light of Ancient and Medieval Understandings

The most popularized and standard model for considering the manner in which thinking forms a hierarchy in current educational practice is detailed in Benjamin Bloom's *Taxonomy of Educational Objectives* (1956).² Even today, new teachers are commonly taught that they must ensure that student learning incorporates thought processes at each of the levels identified by Bloom and following his ordering; moreover, as teachers, we are instructed that our modes of classroom assessment must measure learning across these "educational objectives." Figure 1 above already alludes to the most obvious omission in Bloom's "affective" and "cognitive" taxonomies (illustrated in Figure 2 below) – namely, that these hierarchies do not recognize the sixth and highest tier in Aquinas' medieval taxonomy. This point will be taken up in more detail below. However, if we study Bloom's work carefully in light of ancient and medieval understandings described earlier in this paper, we find further reasons to question the legitimacy of his taxonomy.

² For the purposes of this study, only Bloom's cognitive and affective taxonomies will be investigated. Discussion of the psychomotor dimension of Bloom's work in light of ancient and medieval taxonomies would be fruitful as the basis for future scholarly study.

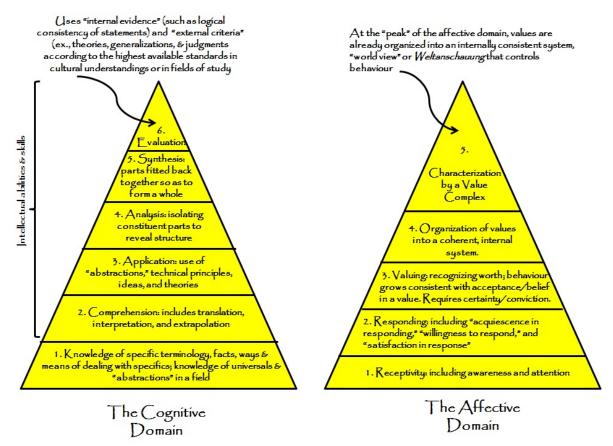


Figure 2: Bloom's "Cognitive" and "Affective" Taxonomies of Educational Objectives

For instance, Bloom's cognitive taxonomy reaches its apex in the "evaluation" of propositions according to their logical consistency, their avoidance of fallacious reasoning, and their degree of conformity to accepted cultural and disciplinary standards. However, in comparison to Aquinas's account of the contemplative life in relation to wisdom, this supposed apex of cognition is quite a low summit that does not recognize the full amplitude of our cognitive abilities and cognizable reality. For starters, Bloom's taxonomy does not carefully distinguish between the mind's powers of ratio and intellectus. Rather, his discussion of cognition emphasizes ratio at the expense of intellectus, which, if it shows up anywhere, is accorded some degree of recognition at the lowest level of cognition identified by Bloom - perhaps as basic "knowledge" or simple grasping of the axiomatic. However, among the ancients and medievals, intellectus was always ranked more highly than ratio as a superior form of knowing because it grasps its object directly. Intellectus, as we have already discussed it, is a power of the mind (mens) whereby the knower grasps what is known without resort to discursive reasoning. Bloom's simple "knowing" of facts and dates, of axioms and principles, is in some way related to intellectus as a basic form of immediate grasping of what is given. Yet Bloom's sense of "knowing" at this very basic and lowest level is also distinct from intellectus. Bloom correctly sees that one can "know" facts yet not understand them in their greater significance; one can "know" (by rote memorization, for instance) a range of data that one has been taught without ever having questioned its truth or significance or established its meaningfulness dialectically. Intellectus, on the other hand, is most often translated as "understanding," and it is precisely this sense of *intellectus* that is clearly not intended by Bloom at such a low level of learning. His taxonomy deigns to offer us a coherent and comprehensive elucidation of the full amplitude of cognition in its correct order; but in reality, he accounts only for ratio as a power of mens, leaving intellectus out of his cognitive taxonomy entirely.

Beyond his silence concerning *intellectus*, Bloom's elucidation of *ratio* is itself problematic. At the highest, "evaluative" level of cognition, our rational powers are described by Bloom as judging by preestablished "cultural" and "disciplinary" criteria. On the one hand, "evaluation," according to Bloom's taxonomy, proceeds by inspection of things thought according to "internal evidence"—that is, by examining how systematically coherent and logically consistent are the objects of thinking. On the other hand, in addition to the criterion of internal consistency, "evaluative" thinking also considers whether or not the objects of thought accord with the "external criteria" of cultural understandings, societal norms and values, and the highest available standards in any given field of study. Put simply, "evaluation" cannot proceed without basic acceptance of some pre-existent set of acknowledged principles, axioms, cultural beliefs, or values; judgment according to these beliefs or values must be the basis for all "evaluative" thinking in Bloom's taxonomy.

Drawing upon the ancient words used to articulate experiences of thinking discussed above, we may say that Bloom's elucidation of "evaluative" cognition is restricted to dianoetic operations; taxonomically, it does not rise to the level of noesis. To recapitulate: noesis, unlike dianoia, does not apply reasoning downward from the various archai, but rather takes these archai themselves upward (anairesis); the various axioms and principles of the disciplines and fields of knowledge are themselves tested, questioned, and taken up dialectically towards their true beginning and source in the Divine Arche. Wisdom's pursuit—whether it takes the dialectical form of philosophy or finds its embodiment in more traditional religious contemplative practices—takes noesis as its primary mode of cognition. Unlike Bloom's "evaluative" thinking, the noetic operations of philosophy transcend the archai as they are given both in cultural beliefs and in the "highest available standards" of the various arts and sciences. Whenever noesis is engaged—that is, whenever the mind reaches out for the ground of all its knowing and the source of all that is knowable—the axiomatic is itself judged dialectically according to its relation to the first beginning or Arche, which itself is grasped at the apex of noetic activity in the contemplative gaze (theoria). In this regard, Bloom's taxonomy is vastly deficient as a depiction of the full amplitude of the cognitive domain: while accounting for the dianoetic elements of cognition, it lacks any concern with or recognition of the important role of noesis—the primary mode of pursuing wisdom.

Apart from its deficient amplitude, Bloom's cognitive taxonomy (literally, his "customary ordering") also appears to be disordered, if not in some respects hierarchically *imerted*, hierarchically, when considered in light of ancient and medieval taxonomies. The most obvious difficulty is that Bloom's "lowest" taxonomic level is called "knowledge." According to ancient Platonic understanding, human beings exist in an "in-between" (*metaxy*). That is, we are neither in a state of complete ignorance (*agnoia*) nor knowledge (*episteme*), but rather inhabit the realm of opinion (*doxa*) between these two poles. Human *doxai*, being somewhere in this middle ground, must be tested dialectically for their truth content. The cognitive movement that constitutes education within the *metaxy* always intends towards knowing and away from ignorance; falsehood must be unearthed and rejected while truth, inasmuch as it is present in an opinion, must be identified and "taken up" (*anairesis*) so that the one "seeking to know" or engaged in *zetesis* might aspire towards knowledge. According to these Platonic and Aristotelian taxonomies, "knowledge" is not properly what one starts with, but rather what one aims at in one's desire to know. In this regard, Bloom's taxonomy seems to be inverted hierarchically with regard to "knowledge."

Some further clarification of the proper position of "knowledge" in any true taxonomy of cognition is needed at this point. Is knowledge to be found at the beginning or lowest level taxonomically? Or, is it found only at the highest summit? As is pointed out in Plato's *Meno* (1961, 80d-81e), just as one could never seek out what is wholly unknown to oneself without in some sense knowing of it beforehand, so too would no one ever desire to know anything if one already knew what one sought to know. In other words, the very fact of our Aristotelian "seeking to know" or *zetesis* implies *both* knowledge and ignorance. In ancient thought, then, no one who seeks to know is truly ignorant; inasmuch as we seek to know, we know at least that we do not know. And more than this: by

following Plato's discussion of recollection (anamnesis) in the Meno, there is also the notion that what we come to know we have always in some sense known through participation (metalepsis) in what Eric Voegelin (1990) has called "originary experiences" (pp. 52-54); essentially, our coming to know is best characterized as a kind of remembering of what we have always known to be the case simply by our participation in the order of being. Our anamnetic knowing, following Plato's account, arises through the development of our consciousness of the fact and reality of this metalepsis. In short, although it is certainly the case that our desire to know presupposes knowledge even at the lowest level, it is equally true that knowledge is not to be found at the beginning, but rather as the end-point of our inquiries. In this regard, Bloom's use of the word "knowledge" to name the lowest level in his taxonomy of cognition strikes me as being founded upon a perplexing inversion and denigration of the term.

Bloom's affective taxonomy suffers a similar inversion of order with regard to his judgements concerning the significance of "attention" on the one hand and "value consistency" on the other. To begin with the former, at the lowest level in the "affective domain," Bloom places willingness to receive or attend to the existence of phenomena and stimuli. Now, certainly it is the case that consciousness or awareness is a basic attribute of all sentient life, and so can be reasonably classified as a low capability. However, as we have seen, there is a higher sense to attentive awareness that must be acknowledged. The ancient and medieval authors in our study refer to this attentive gaze, this receptive awareness, as theoria or contemplatio. As the manner in which the highest object of knowing is ultimately grasped, it is this sort of attention or awareness that is the mainstay of philosophy as the pursuit of wisdom. In this regard, attention is not rightly conceived as the lowest form of affectation as Bloom contends, but rather its most sublime element.

The second inversion resides in Bloom's ranking of "value consistency" as highest among the objectives of the "affective domain." In order to understand what Bloom means by this phrase, it is necessary to retrace his steps backward through the lower strata of his affective taxonomy. After attention or "awareness" and "obedience," Bloom places "valuing," or the recognition that a thing, phenomenon, or behaviour has worth. The indicator for Bloom that this affective objective has been reached is that our actions follow consistently from our "acceptance of a value" or belief in which we have developed a degree of *certainty* or *conviction*. At the fourth level, Bloom places the "organization" of these "values" into a coherent and internally consistent "system." The fifth and highest affective objective, according to Bloom, is that our actions and behaviours are in harmony with this system—that "the individual acts consistently in accordance with the values he has internalized." The peak of affective achievement, for Bloom, is the coherent development of one's own "world view," or *Weltanschauung*.

This ordering within Bloom's affective taxonomy is problematic on many levels if compared to the ancient and medieval models discussed earlier. To begin with, awareness of reality at the primary level need not be understood at a higher level to give rise to "convictions" and "certainty" which must cement into "values," let alone "systems" of values. Rather, from the philosophic vantage point wherein wisdom is pursued—wherein all doxai are exposed to dialectical investigation, and wherein all archai are themselves "taken up" noetically towards their source in the Divine Arche – it is precisely our originary awareness of the anamnetic that inspires us to seek after what we do not know, and to question what we supposed we knew when in fact we did not. Philosophic movement up the hierarchy in the "affective domain" does not properly resolve itself in the solidification of "values" or in the creation of a "system" of values; it is rather the manner whereby all values are themselves brought into question. The pursuit of wisdom as it relates to activities spawned from the will in the affective domain does not necessarily resolve itself into actions "consistent" and in accordance with such values; rather, wisdom's pursuit most often will serve as a brake against all such actions proceeding from systematization or the application of "convictions" arising from a "world view." Essentially, the highest level of Bloom's affective taxonomy is a complete inversion of the proper ordering of the soul as articulated by ancient and medieval taxonomies. Such convictions and actions according to a coherent Weltanschauung might actually serve to undermine, deny, or subvert our awareness of reality at the primary level, when the "value" of our convictions is taken as what is real, and when the real that one knows through attentive awareness is forsaken in favour of the system's internal consistency.

Of course, it is nothing new in academia to criticize Bloom's taxonomy; but for better or worse, his ordering of "learning objectives" continues to drive the way that we teach and how we understand learning in today's classroom. This taxonomy has serious deficiencies. We can see these deficiencies more clearly if we revisit Thomas's six-part cognitive or contemplative taxonomy already discussed (See Figure 1 above). Bloom's taxonomy certainly recognizes the sorts of dianoetic thinking (or ratio) that occur at levels 1 through 5. But at the sixth level in which intelligible things are considered that the intellect can neither discover nor exhaust - "the sublime contemplation of truth wherein contemplation is finally perfected" - Bloom stops short. Such intellection requires recognition of wisdom as a "gift" or donum brought about not by human effort or inheritance, but dispensed by the god (Plato, 1961, 99e-100a; cf. 100b); that is, in order for this sort of cognition to arise, one must be willing to recognize that one's knowing is itself the result of awareness of a good that transcends all the goods that can be thought about discursively. At this sixth and highest level, the noetic rather than the dianoetic power the intellectus rather than the ratio - has sovereign resonance, and theoria or contemplatio is the mode of grasping what is the true source for knowing and understanding. Bloom simply does not admit this sort of cognitive activity, which transcends all systematizations of thought, as well as all critical, analytic, synthetic, and evaluative thinking.

Apart from cutting off the sixth level of contemplation, Bloom's own dianoetic constraints hobble thinking at each of the lower levels, since noetic activity and *intellectus* move throughout this hierarchy as well, and not solely at its highest end. For instance, even at the first level in the medieval taxonomy, wherein the things of sense are considered by the mind, wisdom may be pursued noetically; the intellect may certainly gaze upon being at any of these levels in the contemplative taxonomy; critical-analytic, synthetic, or evaluative thought need not be the only way in which the mind deals with its thought objects, contrary to what Bloom suggests.

Yet another way to evaluate Bloom's taxonomy in light of the ancient and medieval ones that incorporate the pursuit of wisdom is to inspect his ordering according to the three movements of the soul discussed by Aquinas and originating in the writings of Pseudo-Dionysius. In *The Divine Names* (1987, 705a-705b), Dionysius speaks of souls as making three sorts of contemplative movements: circular (movement around a stationary point), straight (movement proceeding from one point to another), and spiral (being the combination of the other two; see Figure 3 below):

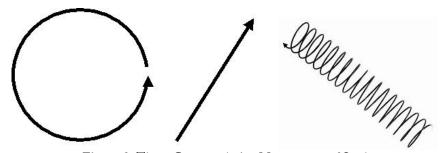


Figure 3: Three Contemplative Movements of Soul

Aquinas (1966) clarifies these three movements as they apply to human beings. He writes that the circular movement consists of several things, "of which the first is the withdrawal of the soul into itself from external things" (2a2ae.180.6). The second is "a certain concentration of its powers, whereby the soul is freed from error and outward occupation" (2a2ae.180.6); the third is "union with those things that are above the soul" (2a2ae.180.6). This uniform circular movement is not readily available to human beings without the correction of a "twofold dissimilarity." The first is that which "arises from the diversity of external things, and this requires that the soul withdraw from external things." Second,

the human soul operates using the *discursus* of reasoning. In order for the uniform, circular movement to be achieved, all operations of the soul must be directed "to the simple contemplation of intelligible truth." Once reasoning ceases, "the soul's gaze may be fixed on the contemplation of one simple truth." This sort of cognitive activity puts "everything else aside" and involves the dedication of oneself solely to the contemplation of God and the pursuit of Wisdom. Aquinas remarks, moreover, that in this circular motion of the soul, "there is no error," just as there is no error in the knowledge of first principles which we know by simple intuition (*simplici intuiti*, 2a2ae.180.6).

Studying Aquinas's articulation of the soul's circular movement, we can see how foreign it is to the taxonomy of educational objectives that drives instruction in our modern classrooms. Whereas Bloom's ordering stresses the cultivation of discursive, analytic, synthetic, and evaluative capacities, the circular movement calms these learning priorities, seeking their effective cessation. Whereas reasoning and classroom thinking—and for teachers, the *evaluation* of student achievement—involves the measurement and "progression" of rational capacities according to certain skill sets in thinking and cognitive development, the circular movement of the soul cannot be so evaluated, since by its nature it is separate from all *discursus*, and "free of error." The circular movement has no measure other than the Measure in which it participates by pursuing wisdom in contemplative gazing. Bloom's taxonomy is unable to account for this psychic movement, and not surprisingly, our own educational biases, modelled as they are on "accountability" in learning and assessment, do not recognize let alone cultivate such cognitive activities, even though such activities constitute the "highest happiness" for human beings according to the ancient and medieval taxonomies under study.

Next, after having parsed the circular movement into its components, Thomas (1966) indicates that the straight movement is not one thing but twofold. First, during such a movement "the soul goes out to those things that are around it" (2a2ae.180.6); second, "it is raised from external things to simple contemplation" (2a2ae.180.6). Put another way, the straight movement "proceeds from external objects of sense to the knowledge of intelligible realities"; it moves from externals of sense towards intelligible realities discursively, and reaches towards the non-discursive reality apprehended through contemplation in the circular motion.

Similarly, Thomas speaks of the spiral movement as arising from "the fact that the soul is enlightened in divine truths in a manner proper to reason" (2a2ae.180.6); it is said to be active in the soul inasmuch as "it uses divine revelation in reasoning" (2a2ae.180.6). Put another way, when the soul reasons (for reasoning is linear, moving from point to point) using the insights of *theoria* concerning primary or non-discursive reality, it moves in a spiral fashion. All such spiral and straight movements are "based on the differences of above or below, to the right or the left, forward or backward, and varying circles." All refer to the *discursus* of reason (2a2ae.180.6).

Interestingly, whereas before it appeared that only the circular movement of the soul would be denied by strict adherence to Bloom's taxonomy, we can now clearly see that all three movements are jeopardized, inasmuch as each is either the embodiment of the circular (as *contemplatio* or *theoria*), is directed towards the circular (as in the straight), or makes use of insights gleaned from the circular motions of the soul (as in the spiral). By denying credence to *one* motion of the soul, all the other motions that Bloom argues must be fostered and recognized in a fully educational program of teaching and learning are thrown into doubt; any soul thus educated is left stagnant and immobile as a result.

IV. Conclusion

If we accept the insights of the ancient and medieval writers discussed in this study, then it seems quite reasonable to suggest that the contemplative pursuit of wisdom through the fostering of *theoria* ought to be recognized as an essential component of any legitimate taxonomy of educational objectives. Bloom's taxonomy—widely accepted among educators, promulgated to teachers, and pushed in the majority of classrooms and evaluative systems—is, according to ancient and medieval insights about thinking,

fraught with difficulties. Through our investigation of its character when compared with ancient and medieval articulations of knowing, I have shown that Bloom's taxonomy is not a tenable ordering. Moreover, it is hoped that, to the extent to which we open ourselves up to recovering some of these ancient and medieval ways of understanding, so too might we begin to question and perhaps modify our own modern understanding of thinking and education; indeed, these largely forgotten taxonomies or ways of thinking about our thinking suggest in no uncertain terms that our modern educational proclivities make us prone to judge incorrectly the psychic amplitude of the cognitive and affective domains in which we move, which consequently hampers any hopes we might have of offering our students an education for happiness.

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