The Philosophic Habit of Mind: Aristotle and Newman on the End of Liberal Education

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John Henry Newman first read Aristotle in 1818 as an undergraduate at Trinity College, Oxford. For his degree examination in 1820, he prepared three of Aristotle's works, the Rhetoric, Poetics, and Nicomachean Ethics. After he was named a Fellow of Oriel College in 1822, Newman worked closely for six years with the influential Dr. Richard Whately, whose textbook on logic replaced the manual used at Oxford for over a century. Whately's entire project during this period was to vindicate and revitalize Aristotelian logic. Newman contributed essays to Whately's work and published early essays of his own which were influenced by Aristotelian thought. Dr. Whately, writes Newman. "taught me to think and to use my reason [He] was the first person who opened my mind, that is who gave it ideas and principles to cogitate upon."1 The ideas and principles given were those of Aristotle, whom Newman would later praise as having proposed "the boldest, simplest, and most comprehensive theory which has been invented for the analysis of the reasoning process."² Over and again, throughout his voluminous writings which span the nineteenth century, Newman quotes from "the grand words of Aristotle" and frequently mentions his intellectual debt to "the great Master."

How strange it seems, then, that this formative influence of Aristotle on Newman's thought has been so neglected by Newman scholars. Writes Edward Sillem, who in 1969 edited and published *The Philosophical Notebook* of Newman: "[I]t is difficult to understand why the part that Aristotle played in the development of Newman's thought has been overlooked till quite recently." Yet, in stressing Newman's critical and selective admiration of Aristotle's thought, Sillem himself oddly claims that "... there are no traces of the Aristotleian idea ... of the intellect ... in any of [Newman's] works." Against Sillem's claim, I shall argue that Aristotle's idea of the intellect's specific excellence constitutes for Newman the goal of university education in its very "essence."

In the Nicomachean Ethics, Aristotle argues that intellectual excellence, like moral excellence, is an acquired possession. We are born with the capacity for this possession, but intellectual virtue or excellence can only be instilled, actualized and acquired through the proper energetic exercise of that capacity, that is, through training and repeated practise. Aristotle writes, "Virtue, then, being of two kinds, intellectual and moral, intellectual virtue in the main owes both its birth and its growth to teaching (for which reason it requires experience and time) Neither by nature, then, nor contrary to nature do the virtues arise in us; rather we are adapted by nature to receive them, and [they] are made perfect by habit." When fully achieved, intellectual excellence is firmly established in the soul as a personal possession. But, for Aristotle, this possession is not a thing had, any more than mind is a thing had. Knowing is a vigorous and formative activity. It is, in fact, the most noble activity of which human beings are capable. What is actually possessed by the educated intellect is a firmly established disposition toward attaining truth. What is acquired, then

possessed, through teaching and repeated practise is a characteristic attitude or habit (hexis) of the mind.

Aristotle uses the Greek word hexis throughout the Ethics for this developed disposition, characteristic, or habituation of the mind which results from education and practise, and which can lead to the attainment of truth. Hexis comes from the Greek verb echein, which means "to have," or "to hold as a possession," or "to be in a certain condition." It designates an ever present attitude or manner of comprehension that has been established by repeated action. Hexis was translated into the Latin of the philosophers by the word habitus; in English, "habit." The healthy, cultivated intellect, then, is the one that is energetically well-disposed toward the pursuit and comprehension of truth.

Newman, too, understands the cultivation of the intellect as habituation. "[T]he bodily eye, the organ for apprehending material objects, is provided by nature; the eye of the mind, of which the object is truth, is the work of discipline and habit." When Newman discusses the end of liberal education, contrasting it with the goals of simple instruction, he describes it as "illumination" and defines it as an acquired and permanent "state or condition of mind." "[S]uch knowledge is not a mere extrinsic or accidental advantage, which is ours today and another's to-morrow [sic], which may be got up from a book, and easily forgotten again, which we can command or communicate at our pleasure; it is an acquired illumination, it is a habit, a personal possession, and an inward endowment."

Newman expresses the wish that English, like Greek, had some definite word to state, simply and generally, the proficiency or perfection of the intellect, as we ascribe health to the body, or virtue to our moral nature. Words like talent, ability and genius apply to the raw material or subject matter of intellection, not to the mental disposition that results from exercise and training. Words like judgement, taste, and skill refer to particular kinds of intellectual perfection, habits bearing upon practise or art, not "to any perfect condition of the intellect, considered in itself." The term "wisdom" has too direct a relation to conduct; the term "knowledge" in its ordinary sense means but one of the intellect's circumstances; and the term "science" has unfortunately been appropriated in recent centuries by but one aspect of the subject matter of knowledge. So, says Newman, "in default of a recognized term, I have called the perfection or virtue of the intellect by the name of philosophy, philosophical knowledge, enlargement of mind, or illumination." This sense of the term "philosophy," while foreign to modern ears accustomed to a more exclusively ratiocinative and analytical sense of the term, is in interesting accord with the ancient (and certainly Aristotelian) sense of the word, which means, essentially, vision and insight (wonder, contemplation, speculation) as well as ratiocination (logical inference, analysis).

Proceeding in his university discourses to inquire what "this mental breadth, or power, or light, or philosophy" consists in, Newman distinguishes truly liberal knowledge form "mere" knowledge, that is, from "learning" or merely passive acquisition of the facts of a given subject matter. The enlargement or illumination proper to the habitually liberal intellect presupposes and goes beyond the elementary condition of receptivity to ideas and facts; it consists in the mind's vigorous and illuminating action upon these acquired ele-

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ments. "Knowledge is called by the name of Science or Philosophy, when it is acted upon, informed, or if I may use a strong figure, impregnated by Reason." 11

Aristotle's *De Anima* (of which Sillem says, wrongly, I believe, that Newman appears to have made no use¹² makes precisely this distinction between receptive mind and active intellect, which latter Aristotle, too, describes as illumination.

Since in every class of things, as in nature as a whole, we find two factors involved, (1) a matter which is potentially all the particulars included in the class, (2) a cause which is productive in the sense that it makes them all ..., these distinct elements must likewise be found within the soul. And in fact mind ... is what it is by virtue of becoming all things, while there is another [element of mind] which is what it is by virtue of making all things: this is a sort of positive state like light; for in a sense light makes potential colours into actual colours.¹³

Surely Newman speaks from this Aristotelian understanding of these two powers of mind when he writes that liberal education's "enlargement consists. not merely in the passive reception into the mind of a number of ideas hitherto unknown to it, but in the mind's energetic and simultaneous action upon and towards and among those new ideas, which are rushing in upon it. It is the action of a formative power, reducing to order and meaning the matter of our acquirements."14 Humans differ from brutes in being able to take hold of and appropriate what meets the senses, rather than simply gazing upon sights and letting sounds come in. "The intellect of man ... energizes as well as his eye or ear, and perceives in sights and sounds something beyond them It gives them a meaning, and invests them with an idea ...," writes Newman. Philosophy in its elementary idea is nothing other than this "habit of viewing," which throws into system the objects of sense. He emphatically concludes: "the true and adequate end of intellectual training and of a University is not Learning or Acquirement, but rather, is Thought or Reason exercised upon knowledge, or what may be called Philosophy." In addition to being distinct from the mere receptivity and accumulation of knowledge as subject matter, the end of illumination and enlargement is also distinct from all "useful" knowledge, that is, from the gaining of practical, professional, moral and religious knowledge. The habit of mind cultivated by liberal education has its full and proper end in its own excellence, the natural perfection of the intellect. In his well-known fifth discourse on university education entitled "Knowledge Its Own End," Newman quotes from Aristotle's Rhetoric to summarize his own position on the nature of liberal knowledge. "Of possessions, those rather are useful, which bear fruit; those liberal, which tend to enjoyment. By fruitful, I mean, which yield revenue; by enjoyable, where nothing accrues of consequence beyond the using."16

For Aristotle, theoretical wisdom is necessarily desirable in itself, even if it produces nothing, simply because possessing and actualizing it makes one happy. We may speak of theoretical wisdom "producing" happiness, but it does so in the way that health makes one healthy, not as medicine may make one healthy. Because theoretical knowledge is sought only when the necessities of life are supplied, it would not be so desired for some advantage other than itself. Aristotle writes: "[A]s the man is free, we say, who exists for his own sake and

not for another's, so we pursue this as the only free science, for it alone exists for its own sake." For Newman, too, liberal knowledge is free, "... valuable for what its very presence in us does after the manner of a habit, even though it be turned to no further account, nor subserve any direct end." 18

The discourses comprising *The Idea of a University* were first presented by Newman as lectures and pamphlets to the people of Dublin with the explicit purpose of persuading them to support a Catholic University for Ireland. Yet, Newman insists that a university is not a monastery, a seminary, or a place of catechesis. "It is as real a mistake to burden [knowledge] with virtue or religion as with the mechanical arts, [for] knowledge is one thing, virtue is another; good sense is not conscience, refinement is not humility, nor is largeness and justness of view faith." Liberal education, viewed in itself, is simply the cultivation of intellectual excellence.

All things have a "best" of themselves, which is the object toward which they develop. "To open the mind, to correct it, to refine it, to enable it to know, and to digest, master, rule, and use its knowledge, to give it power over its own faculties, application, flexibility, method, critical exactness, sagacity, resource, address, eloquent expression, is an object as intelligible ... as the cultivation of virtue, while, at the same time, it is absolutely distinct from it." ²⁰

In his discussion of moral excellence in the Nicomachean Ethics. Aristotle defines virtue as a disposition or habit of the soul by which the mean between two extremes is sought and chosen--not the absolute mean, but the mean relative to us. For example, courage is the mean between being fearful and being rash, but the amount or courage necessary for virtue may differ somewhat for the naturally timid person and the naturally bold person. The mean relative to us is not an objective mean in itself (as six is the objective mean between two and ten), but is, rather, a mean in relation to the person involved. (If eating ten pounds is too much for a particular athlete, and two pounds is too little, it does not necessarily follow that the trainer will prescribe six pounds.)²¹ Aristotle is here discussing moral virtue specifically; he does not intend this differentia of virtue, the mean relative to us, to apply to intellectual virtue, for there could be no such thing as an excess, say, of wisdom. But I wonder if the mark of proportion and balance in relation to a human agent, which Aristotle here attributes to the moral median, might have suggested to Newman a way of understanding the characteristic deposition or attitude of intellectual excellence as well.

The key passage in Aristotle reads:

If it is thus, then, that every art does its work well--by looking to the intermediate and judging its works by this standard (so that we often say of good works of art that it is not possible either to take away or to add anything, implying that excess and defect destroy the goodness of works of art, while the mean preserves it; and good artists, as we say, look to this in their work), and if, further, virtue is more exact and better than any art, as nature also is, then virtue must have the quality of aiming at the intermediate 22

If indeed this is the way that every art perfects its work, by developing it to that point where nothing can be subtracted from or added to it, and if to it artists look to this standard in their work, then perhaps, Newman may have reflected, so, too, is the work of the liberal artist and the excellence of the artwork, the cultivated intellect.

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Through his theory of the mean, Aristotle is recognizing the necessity of introducing system or symmetry into the many and diverse tendencies within us. "[T]hat which is proportionate both produces and increases and preserves ..."²³ The habit of mind that is the specific excellence of the intellect, Newman would say, is not the median point between two moral extremes, but rather the point of view, the enlarged and illuminated perspective, that delivers the balance and symmetry of all aspects of knowledge, the various sciences taken together proportionately as a unity. "That only is true enlargement of mind which is the power of viewing many things at once as one whole, of referring them severally to their true place in the universal system, of understanding their respective values, and determining their mutual dependence." To have even a portion of this illuminative reason or philosophy, Newman concludes, is the highest intellectual state to which human beings can aspire.

The habit of philosophy of which Newman speaks is, interestingly, not directly teachable in itself. Although the formal object of liberal education, it emerges as a kind of by-product of the work of the university, which teaches all knowledge only by teaching all branches of knowledge. Aristotle, too, would distinguish between the scientific knowledge (episteme) proper to each theoretical discipline, and the capacity for universal judgement that is the concomitant of liberal knowledge (paideia): "We only ascribe universal education to one who in his own individual person is thus critical in all or nearly all branches of knowledge, and not to one who has a like ability merely in some special subject. For it is possible for a man to have this competence in some one branch of knowledge without having it in all." 25

Newman understands each science in itself to be an abstraction, an aspect, a partial view of the unity of knowledge whose ultimate subject matter, the created universe, is one whole. Although the sciences proceed on the principle of a division of labour, there are no real lines between them drawing clear boundaries. Each science is a view relative to us, not a simple representative or informant of things as they really are; a science is true in terms of its own principles and methods, yet, at the same time, it remains partial and "notional" by its very nature. Not every science equally, not any one singly, "enlightens the mind in the knowledge of things, as they are, or brings home to it the external object on which it wishes to gaze." ²⁶

Just as Aristotle's median point serves to eliminate excess and deficiency in moral activity, so Newman's point d'appui, the philosophic habit of mind, preserves the balance, symmetry, and wholeness of intellectual excellence. The sciences "have mutual bearings on one another, and an internal sympathy, and admit, or rather demand, comparison and adjustment. They complete, correct, balance each other." The systematic omission of any one science from the complete circle of knowledge prejudices the accuracy and completeness of our knowledge altogether, and that, in proportion to the importance of what is omitted.

What happens when any one science is dropped from the circle of knowledge is excess and usurpation. "You cannot keep its place vacant for it; that science is forgotten; the other sciences close up, or, in other words, they exceed their proper bounds, and intrude where they have no right." If ethics were to disappear, for example, sociology, psychology, and law might exceed their proper boundaries by rushing in to fill the gap. Deficiency of view, on the

other hand, is seen in what we call "the man of one idea." This person knows things, perhaps even truths, from only one viewpoint or aspect, but there is no breadth or flexibility to this person's mind, no interpretation or restraint from other views, and, accordingly, there is the tendency to think of him or her as obstinate, bigoted, and erroneous--in a word, small-minded. As with Aristotle's moral extremes, so with one's viewpoint, excess and narrowness can equally throw off the well-tuned and proportionate balance of the hale and whole intellect.

In Newman's view, the science of theology is a branch of knowledge, an intellectual aspect of education like the other sciences, and, therefore, must be included in any university education which is worthy of the name. As one view within the complete circle of knowledge, theology is influenced by the other sciences and has a mutual bearing upon them. With differing emphasis, Aristotle makes theology to be "first science" on his map of knowledge. He writes:

There must, then, be three theoretical philosophies, mathematics, physics, and what we may call theology And the highest science must deal with the highest genus. Thus, while the theoretical sciences are more to be desired than the other sciences, this is more to be desired than the other theoretical sciences For the most divine science is also most honourable All the sciences, indeed, are more necessary than this, but none is better."²⁹

As the science that investigates the first principles and causes, and the supreme cause and end of the whole of nature, theology for Aristotle ranks and orders all the other sciences. "[T]he science which knows to what end each thing must be done is the most authoritative of the sciences, and more authoritative than ancillary science ..."

Newman, indeed, adopts much of Aristotle's schema of knowledge, attributing to Aristotle the very idea of systematic thought: "Aristotle, the most comprehensive intellect of Antiquity, [is] the one who ... conceived the sublime idea of mapping the whole field of knowledge, and subjecting all things to one profound analysis" For both thinkers, it is "first philosophy" (theology for Aristotle, philosophy for Newman) that constructs the map of knowledge, and it is liberal education that communicates it. Writes Newman, "Not to know the relative deposition of things is the state of slaves of children; to have mapped out the universe is the boast or at least the ambition of philosophy." 32

It is interesting that while Newman would hardly disagree with Aristotle concerning the pre-eminence of theology's subject matter, the ordering science for him is not Aristotelian theology, but the "Architectonic Science [of] Philosophy ... which is itself the arbiter of all truth, and which disposes of the claims and arranges the places of all departments of knowledge which man is able to master." 33

[T]he comprehension of the bearings of one science on another, and the use of each to each, and the location and limitation and adjustment and due appreciation of them all, one with another, this belongs, I conceive, to a sort of science distinct from all of them, and in some sense a science of sciences, which is my own conception of what is meant by philosophy, in the true sense of the word, and of a philosophical habit of mind.³⁴

One reason for this difference in emphasis (for Aristotle, the architectonic

science being theology, for Newman philosophy) may be that, for Newman, each of the sciences, even theology, yield but aspects or partial views of reality, whereas for Aristotle, the "so-called special sciences ... cut off a part of being and investigate the attribute of this part." The "science of sciences" for Aristotle is ultimately metaphysics, the real object of which is "being quabeing." According to Newman, however, all of the particular sciences, even when taken all together by the illumined philosophic mind, yield but a "notional," intellectual, or scientific knowledge of how things stand in relation to one another and to the human mind, not the "real" and exhaustive knowledge of things as they are. For Newman, a thoroughly modern, post-Kantian thinker, there is an ultimate incommensurability between human understanding and the things in themselves.

[S]ciences are the results of that mental abstraction ... the logical record of this or that aspect of the whole subject- matter of knowledge. As they all belong to one and the same circle of objects, they are one and all connected together; as they are but aspects of things, they are severally incomplete in their relation to the things themselves, though complete in their own idea36

For Newman, in contrast to Aristotle, the further attainment of a personal and living knowledge of reality requires an additional "illumination," namely, the habit of divine grace and religious faith, whereby things are known as they really are, that is, in the mystery of their created being and in relation to their Creator. "He has so implicated Himself with [the universe], and taken it into His very bosom, by His presence in it, His providence over it, His impressions upon it, and His influences through it, that we cannot truly or fully contemplate it without in some main aspects contemplating Him" This latter illumination, however, is not the concern the university qua university. The essential function of liberal education is to instill the philosophic habit of mind. The essential object and mission of the university is not as an instrument of the Church, not training in moral and religious duty, not preparation for a career. "Its function is intellectual culture; here it may leave its scholars, and it has done its work when it has done as much as this." 38

To say that the "essence" or "idea" of a university is the communication and perfecting of a liberal or philosophic habit of mind in its students implies the unequivocally central place of teaching in the university. The opening sentence of the Preface to *The Idea of a University* states that the view taken in the following discourses is that a university is "a place of teaching universal knowledge." Aristotle's meaning of intellectual excellence also focuses upon the indispensable role of teaching in its development as an acquired perfection: "Intellectual virtue in the main owes both its birth and its growth to teaching." 40

Newman places the personality of the great teacher at the birth of the entire university movement. In the lead articles he wrote for "The Catholic University Gazette" while he was rector of the Catholic University in Dublin, he imaginatively depicts the Athenian "freshman" as encountering the great master, Plato, never again to be the same: "Such is the spell which the living man exerts on his fellows, for good or for evil." The general principles and facts of any study may be learned at home from books; but the detail, colour, and tone which illuminate an idea and bring it to life can only be "caught" from

those in whom it lives already. The philosophical habit of mind, once again seen as not *directly* teachable, is like a fire caught by those who desire insight from those who have attained it. "An academical system without the personal influence of teachers upon pupils is an arctic winter; it will create an ice-bound, petrified, cast-iron University, and nothing else." 42

From the Nicomachean Ethics, Newman quotes "the grand words of Aristotle: "We are bound to give heed to the undemonstrated saying and opinions of the experienced and aged, not less than to demonstrations; because, from their having the eye of experience, they behold the principles of things." And Newman himself comments on these words of Aristotle: "Instead of trusting logical science, we must trust persons, namely, those who by long acquaintance with their subject have a right to judge." In this way, the student gains "mental insight into truth, whatever its subject-matter may be." For no books can get to the minute questions and felt difficulties, the special spirit and delicate peculiarities of a subject in the same and certain way that can come from the sympathy of mind with mind, through the eyes, the accent, the manner, the casual expression and unstudied turns of familiar conversation. "[I]f we wish to become exact and fully furnished in any branch of knowledge which is diversified and complicated, we must consult the living man and listen to his living voice." 44 It is in the assemblage of such great minds-lecturing, conversing, inquiring, guessing, colliding, one with another--that books themselves are originated and that the great maps of knowledge are created, advanced, and passed on.

To say that the "essence" of university education is the teaching of universal knowledge, and that the university's direct and proper "end" is the cultivation of the philosophic habit of mind, is not in any way to preclude other contingent reasons for the university's existence (such as the writing of books, the advancement of knowledge, professional training), as well as indirect benefits for its members (such as social, moral, and religious development). Newman's intention in the discourses of *The Idea of a University* is simply and strictly to define the "essence" of a university, the central idea that is the nucleus of its reality. But much more than what is required for its being is necessary for the university's well-being or "integrity."

Newman recalls that Aristotle carefully defines happiness in itself but then goes on to state that external goods are necessary to happiness, about which, however, the definition said nothing. A thing's nature, its definition, or idea, is but "bare and necessary"; in order for it to be whole and entire, however, more is needed.

By the "integrity" of anything is meant a gift superadded to its nature, without which that nature is indeed complete, and can act, and fulfil its end, but does not find itself, if I may use the expression, in easy circumstances. It is in fact very much what easy circumstances are in relation to human happiness. This reminds me of Aristotle's account of happiness.

Newman himself uses the example of breath, which comes to human beings from without and is not a part of "essence" of human nature, but is certainly a *sine qua non* of human existence. "Things are not content to be in fact just what we contemplate them in the abstract, and nothing more; they require something more than themselves, something as necessary conditions of their being, sometimes for their well-being." 46

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In the opening paragraphs of *The Idea of a University*, Newman states that, practically speaking, the Church is necessary for the university's "integrity," assisting and steadying it in its office of intellectual education. What this means is spelled out more fully in the "Gazette" articles where Newman notes that, for the university's "sure and comfortable existence, we must look to law, rule, order; to religion, from which law proceeds; to the collegiate system, in which it is embodied; and to endowments, by which it is protected and perpetuated." Discipline is the great counter-balancing principle which complements the university's *essential* characteristic of personal influence in teaching.

Order, system, and rule, formally symbolized by Rome (both empire and church) must be superadded to spontaneous, free individual action (symbolized by Athens and its great teachers) in the development and establishment of the university. The (Athenian) "gentleman" of cultivated intellect embodies the end of university education as such; but without the balancing discipline brought by the simultaneous maturation of moral virtue and religious faith, the powerful intellect, however liberally educated, is likely to deem itself absolute, that is, self-sufficient, answerable to nothing and to no one, and the final arbiter of all morality and truth. To the prideful intellect, conscience is but taste, religion mere sentiment, and authority but wrongful imposition from without. For Newman, it is the residential or "collegiate" system within the university that ultimately provides the balance and truly well-rounded education.

Although Newman's presentation of the relation of college and university is given in the context of the British university of his own day, it would seem that his view of "the college principle" as balancing, correcting, and completing "the university principle" can apply--in terms of the *principles* involved, both to the residential life of Catholic universities and to the small Catholic communities on secular university campuses. For Newman, the colleges (or "residence halls," or "Newman Centres," or small Catholic communities) take over where the family left off by providing all that is implied in the name of home—a refuge, shelter, a place of companionship, prayer, and instruction, "the shrine of our best affections." Newman writes:

Regularity, rule, respect for other, the eyes of friends and acquaintances, the absence from temptation, external restraints generally, are of first importance in protecting us from ourselves Small communities must be set up within [the university's] precincts, where [the student's] better thoughts will find countenance, and his good resolutions support, where his waywardness will be restrained, his heedlessness forewarned, and his prospective deviation anticipated.⁴⁸

These small communities are the place where, in addition to intellectual needs, the personal, moral, and religious needs of the student are met. By "discipline" as the corrective and complement of "influence," then, Newman means not only a life lived within the institutional authority and traditions of the university and the Church, but also the discipline or submission of a regular and ordered personal and social life, according to the dictates of the Image of God within oneself and others.

Aristotle's view of the intellectual excellence achieved by liberal education, although indeed integrally incorporated into the life of the *polis* as the "gentleman" pursues the good for human beings, is not in the end commen-

surate with Newman's image of the balanced and whole human being whose ultimate end transcends that of nature. But Aristotle's view is, emphatically, according to Newman, the essential foundation upon which the university is constructed and upon which the intellectual attributes of personal wholeness are initiated.

While the world lasts, will Aristotle's doctrine on these matters last, for he is the oracle of nature and of truth. While we are men, we cannot help, to a great extent, being Aristotelians, for the great Master does but analyze the thoughts, feelings, views, and opinions of human kind. He has told us the meaning of our own words and ideas before we were born. In many subject-matters, to think correctly, is to think like Aristotle; and we are his disciples whether we will or no, though we may not know it.⁴⁹

Notes

¹John Henry Newman, Apologia Pro Vita Sua, ed. David J. De Laura (New York: Norton, 1968), 22, and letter to William Monsell, Oct. 10, 1852, in The Letters and Diaries of John Henry Newman, ed. Charles S. Dessain (London: Nelson, 1961-72), Vol. XV.

²John Henry Newman, Newman's University Sermons (London: SPCK,

1970), 259.

³Edward Sillem, ed. *The Philosophical Notebook of John Henry Newman* (Louvain: Nauwelaerts Publishing House, 1969), Vol. 1, 150.

⁴Sillem, 157.

⁵Aristotle, Nicomachean Ethics, tr. W.D. Ross, 1103a, 14-16, 23-25. (Hereafter Ethics). All references to Aristotle are taken from The Basic Works of Aristotle, ed. R. McKeon (New York: Random House, 1941).

⁶See especially Ethics 11.5, where Aristotle defines the genus of virtue.

⁷John Henry Newman, *The Idea of a University*, ed. I.T. Ker (Oxford: Clarendon Press, 1976), 135. (Hereafter, *Idea*.)

⁸Newman, *Idea*, 105.

⁹Newman, *Idea*, 114. ¹⁰Newman, *Idea*, 115ff.

¹¹Newman, *Idea*, 103.

¹²Sillem, 157.

¹³Aristotle, De Anima, tr. J.A. Smith, 430a 10-17.

¹⁴Newman, *Idea*, 120.

¹⁵Newman, *Idea*, 125-25.

¹⁶Newman, *Idea*, 102 (Newman's emphases).

¹⁷Aristotle, Metaphysics, tr. W.D. Ross, 982b 25-28.

¹⁸Newman, *Idea*, 98.

¹⁹Newman, *Idea*, 110.

²⁰Newman, *Idea*, 112.

²¹Aristotle, Ethics, 1106a31-1106b4.

²²Aristotle, *Ethics*, 1106b8-15.

²³Aristotle, Ethics, 1104a18.

²⁴Newman, *Idea*, 122-23.

²⁵Aristotle, Parts of Animals, tr. William Ogle, 639a9-13.

- ²⁶Newman, *Idea*, 54.
- ²⁷Newman, *Idea*, 99.
- ²⁸Newman, *Idea*, 73-74.
- ²⁹Aristotle, Metaphysics, 1026a15-23; 983a6-10.
- 30 Aristotle, Metaphysics, 982b4-6.
- 31 John Henry Newman, Historical Sketches (London: Longmans, Green, & Co., 1903) Vol. III, 193. (Hereafter H.S., III.) Newman was well aware of other "maps" of knowledge quite different from Aristotle's, specifically those of Coleridge, Bonaventure, and Bacon. See The Imperial Intellect by Dwight A. Culler (New Haven: Yale University Press, 1955), 181.
 - ³²Newman, *Idea*, 105.
 - ³³Newman, *Idea*, 87.
 - ³⁴Newman, *Idea*, 57.
- 35 Aristotle, Metaphysics, 1003a25. On Newman's use of the term "view," see Dwight Culler, op. cit., 195-97.
 - ³⁶Newman, *Idea*, 57.
 - ³⁷Newman, *Idea*, 57.
 - 38 Newman, *Idea*, 114.
 - ³⁹Newman, *Idea*, 5 (Newman's emphases).
 - ⁴⁰Aristotle, Ethics, 1103a14.
- ⁴¹Newman, H.S., III, 41-42. The twenty lead essays Newman wrote for the "Catholic University Gazette" originally appeared in 1856 under the title "Office and Works of Universities." In 1872, Newman exchanged that title for "Rise and Progress of Universities" and placed them in their present position in the Historical Sketches.
 - ⁴²Newman, H.S., III, 74.
- 43 John Henry Newman, An Essay in Aid of a Grammar of Assent, ed. I.T. Ker (Oxford: Clarendon Press, 1985), 268.
 - 44Newman, H.S., III, 8.
 - 45Newman, H.S., III, 180.
 - ⁴⁶Newman, *H.S.*, III, 74.
 - 47 Newman, H.S., III, 74.
 - ⁴⁸Newman, H.S., III, 189-90.
 - ⁴⁹Newman, *Idea*, 102.