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Teaching Economics within John Henry Cardinal Newman's Ideal University: A Nineteenth Century Vision for the Twenty-first Century Scholar

Gregory C. G. Moore

"Now, please, let me bring out what I want to say, while I am full of it. I say then, that the personal influence of the teacher is able in some sort to dispense with an academical system, but that the system cannot in any sort dispense with personal influence. With influence there is life, without it there is none; if influence is deprived of its due position, it will not by those means be got rid of, it will only break out irregularly, dangerously. 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. You will not call this any new notion of mine; and you will not suspect, after what happened to me a long twenty-five years ago, that I can ever be induced to think otherwise. No! I have known a time in a great School of Letters, when things went on for the most part by mere routine, and form took the place of earnestness. I have experienced a state of things, in which teachers were cut off from the taught as by an insurmountable barrier; when neither party entered into the thoughts of the other; when each lived by and in itself; when the tutor was supposed to fulfil his duty, if he trotted on like a squirrel in his cage, if at a certain hour he was in a certain room, or in hall, or in chapel, as it might be; and the pupil did his duty too, if he was careful to meet his tutor in that same room, or hall, or chapel, at the same certain hour; and when neither the one nor the other dreamed of seeing each other out of lecture, out of chapel, out of academical gown. I have known places where a stiff manner, a pompous voice, coldness and condescension, were the teacher's attributes, and where he neither knew, nor wished to know, and avowed he did not wish to know, the private irregularities of the youths committed to his charge. Cardinal John Henry Newman, [1854] 1872, "1. The Rise and Progress of Universities". Historical Sketches. v3. London. Longmans, Green and Co. (New Impression 1909) 74-5. Emphasis added.

1. Introduction

John Henry Newman, the most prominent Victorian Anglican to convert to Rome, was appointed the inaugural president of the Catholic University of Ireland in November 1851. This institution was established by the Catholic authorities in response to Sir Robert Peel's 1845 policy of establishing non-denominational Queens' Colleges to appease the Irish Catholics, who believed that they could then enroll at the protestant denominated Trinity College, Dublin, only under conditions at variance with their religious principles. The Catholic authorities rejected Peel's "godless" colleges and recruited Newman to establish an overtly Catholic university as an alternative place of higher learning. Newman interpreted his brief in an innovative, if not controversial, way by stating that one of the primary goals of a university, even if Catholic, is the secular one of cultivating

the intellects of the students, and, further, by basing his Irish enterprise on some of the better practices of the innovative educational system that he had witnessed as an Anglican fellow of Oriel College, Oxford, prior to his conversion to Rome. Newman was the first to recognize that many aspects of the Oriel educational system were less than satisfactory and, indeed, he had resigned his Oriel tutorship in protest when the then Provost of that College, Edward Hawkins, had refused to implement changes that would have allowed tutors to exert a more systematic pastoral, religious and pedagogical influence over the students under their charge. He nonetheless freely accepted that the innovations implemented by the senior men of Oriel in the opening decades of the nineteenth century—particularly those engineered by John Eveleigh and Edward Copleston—had made Oriel the leading intellectual centre of Oxford, if not Britain. Newman, in other words, may have been deeply distressed by the way the lack of system in these innovations only allowed the best of what Oriel had to offer to break out irregularly (see the above epigram), but it is patent that he was also enamored with the way that the Oriel men awarded scholarships and fellowships on the basis of originality of thought rather than favour or honours won through swatting; conveyed the liberaleducation tradition via personal-cum-charismatic interaction with the student body; and, even if erratically, spent time developing the student's intellect and character as an integrated whole. Newman therefore sought to construct a university to promote his versions of these largely secular principles within a Catholic setting over and above his obvious intent of providing the Church with yet another instrument to achieve its larger goal of maintaining and promoting the one and true religion. He outlined this vision in a series of discourses before his new Irish constituency that were published as his widely cited, but seemingly rarely read, *The Idea of a University* ([1853-9] 1873).

In this paper I examine the implications of Newman's vision of a Catholic University, as explicated in The Idea of a University and other tracts, for the teaching of economics. Newman, though not an economist himself, was one of the first educators to consider the place of economics, or political economy as it was then called, within the university structure. This is less surprising than it first appears, since Oxford political economy in the 1820s had been driven by members of an Oriel set who were known to Newman; namely, Richard Whately (who was one of Newman's mentors), Copleston and Nassau Senior (who hailed from Magdalene but was under Whately's wing). Newman, however, concerned himself primarily with the place of political economy within the structure of a Catholic University and, especially in the *Idea of the University*, wrote far less liberally about the actual teaching methods that a political economist should employ. To shift the focus from the "place" of political economy in the university to the way it, or any disciplinary subject matter, should be taught, one needs to undertake a more complex exegesis of Newman's wider writings. Such an exegesis shows that Newman's preferred teaching methods were governed by a conservative philosophy—which itself is allied to the way Catholic doctrine should be interpreted—in which knowledge is sufficiently ineffable that it can only be conveyed within a tradition that is maintained through personal contact between master and student. This argument is developed in seven sections. In section two I argue that Newman's justification for the role of political economy in the university structure was effectively a device to show how theology was important as a means to constrain the imperialistic tendencies of this and other disciplines within this structure. In section three I show how the primary goal of an administrator who sets up this form of "theology constraining" university structure is to allow teachers to convey the rich, partly ineffable, traditions of the interconnected liberal disciplines. In section four I outline the way Newman believed that this tradition should actually be conveyed in a site-specific location. In section five I link this pedagogical approach to his theological writings. In the concluding section I relate this teaching process to an English conservative tradition dating from Edmund Burke, but exemplified in the writings of the likes of Michael Oakeshott and Michael Polanyi.

2. The Place of Economics in Newman's Ideal University

Newman's The Idea of a University ([1853-9] 1873) is a book that holds a particular fascination for economists with a scholarly bent because it provided the first extended justification for the place of political economy within those very slippery and ill defined institutions that we commonly (but in some cases incorrectly) refer to as universities.¹ This sort of 'institutional' defence was slightly different from earlier justifications of the fledgling discipline of political economy, which had invariably turned on defending it as a bona fide science or moral science or any discipline of worth in any given institution or domain (university or otherwise). Newman's arguments in favour of political economy within the university structure patently fed off the way that the young discipline of political economy was justified as a science by members of the aforementioned Oriel-set who devoted themselves to political economy. The line of reasoning advanced by both Newman and the Oriel men has fortunately already been made a subject of study, and hence these arguments may be dispensed within a tight compass. Specifically, Copleston, Whately, Senior and other members of the Oriel set led the revival in Aristotelian logic in the Oxford curriculum in the early decades of the nineteenth century and, given that they also pursued syllogistic reasoning in daily conversations in a systematic if not ruthless fashion, their contemporaries soon began referring to them as the Oriel Noetics (where Noetic is Greek for intellectual or reasoner). The chief publication of this movement was Whately's *Elements of Logic* (1826), which was in many ways the issue of Oriel as a collective, since, even though Whately's name correctly appears on the fly leaf of the publication, it was initially based on Copleston's lectures, Senior contributed an appendix on economic terms and, prior to his falling out with Whately and before his recognition of the excesses of the Oriel logic chopping, Newman effectively acted as an occasional assistant to Whately on this project. Copleston, Whately and Senior subsequently sought to harness this Aristotelian revival to formalize political economy (in what became its modern form) as an abstract-deductive, means-end and positivist discipline. However, as

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¹ The 1852 lectures that Newman presented (some in written form only) to his new Irish constituency on the nature of a university became the discourses that constituted the first half of the *Idea of a University* (and published in 1852), while his 1854 lectures became the discourses that made up the second half of this tract (and published in 1859). These two sets of narrative were brought together in the 1873 edition of the *Idea of a University* ([1852-9] 1873), which is often referred to the definitive edition. Note, however, that due to the different paginations of the many subsequent versions of this edition, reference is made to the discourse (D) and numerous section (S) numbers rather than to page numbers. For accounts of these lectures, see Harrold (1945, 1947), McGrath (1951) Culler (1955), Svaglic (1960), Dale (1972) and Ker (1988, 2011). The reader should also note that I have yet to obtain a copy of Stefan Collini's recently published book on higher education in which Newman's *Idea of a University* figures.

religious men in an institution in which religious sentiment was prominent, the ultimate ends dwelt upon by these scholars were not the secular goals of wealth and/or utility, which were the ends dwelt upon by the London Utilitarians, but the virtues that were delineated in the scriptures. They could so dwell on these ends without breaking the science-normative or is/ought dichotomy by presuming that there was a wealth-virtue nexus, namely, that economic man's pursuit of wealth induces industry and prudence and, ultimately, the attainment of various virtues, especially if this base, but evolving, creature is guided by the pastoral leaders who inhabit the established institutions of the Anglican ascendency. As the first Drummond professors of political economy at Oxford, Senior and Whately were the most forceful in articulating this line, especially in Senior's inaugural lecture in 1826 (which was published in 1827) and Whately's 1831 lectures (which was published in 1831 as *Introductory Lectures on Political Economy*).²

Newman eventually became disillusioned with this and other syllogistic and empiricist excesses of the Oriel Noetics, without ever abandoning his belief in the inherent worth of logic and empiricism, especially after his realization that such reasoning could neither completely solve the social problems of the age nor entirely explain the complexities of religious faith, a realization that grew alongside his leadership role in the High Anglican movement known as Tractarianism (or the Oxford movement) in the 1830s and 1840s and his associated theological evolution that led to his conversion to Rome in 1845. It was the totalizing and unqualified nature of the Oriel abstract-deductive system, particularly when considering subjects on which theological doctrines had some bearing, which played on Newman's mind when he came to write the discourse in which political economy figures in the *Idea of a University* in 1852. He was also probably prompted to think once again about Oriel political economy due to the poor reception of Lectures in Political Economy by his less able, more heretical and (and often estranged) younger brother, Francis William Newman, in 1851, even though these two siblings did not see eye to eye on either religious or on very nearly any other matter, and despite the fact that this tract does not figure in any of the older Newman's writings.³ In any event, Newman

² The complex interplay between the religious and economic beliefs of the Noetics has already been the subject of admirable, but very different, studies by Corsi (1987), Mandler (1990), Waterman (1991), and Moore and White (2010). For a more detailed list of references relating to the Noetics and their role in forming the economic policies of the day, see the last cited article, and for the wider context for the role of religion in economics at this time, see Hilton (1988) and Winch (1997). Newman's political economy has also already been made a subject of worthy study by Oslington (2001), while his argument that it should have a place in the university structure has recently been examined by Martinez (2009).

³ It is reasonable to presume that a sibling's publication may have turned an individual's mind to a certain discipline. Francis William Newman's *Lectures on Political Economy* (1851) is chiefly remembered by economists today for the rather scathing review of this work in the *Westminster Review* by John Stuart Mill (1851), who was then in the process of embracing cooperative socialism and hence not surprisingly dismissed, as simple minded, Newman's critique of socialism (as well as Newman's admittedly shallow reading of Malthus and Ricardo). The younger Newman, however, also produced heretical theological texts of some worth (and is now well regarded in that discipline) and some historians of economic thought, such as Bennet (1965), Shearmur (1997), Lipkes (1999) and Donoghue (2002), have since found one or two redeeming features in his political economy. Shearmur (1997), in particular, presents a convincing argument that the younger Newman anticipated Mises and Hayek in the calculation debates. Still, for all this, it is clear that John Henry Newman was considering the political economy of the Oriel Noetics from the 1820s and 1830s rather than the political economy of his younger brother or even the younger Mill's 1848 book (which is more surprising) in *The Idea of a University*. The condition of famine ridden Ireland,

first considered the place of (Oriel!) political economy within the university structure in discourse four, sections 10-11, of the *Idea of a University*. He argued that the pursuit of wealth is not *necessarily* frowned upon in the Christian teachings (or, as he would have it, a theological science) and demonstrated this by citing passages from the scriptures and referring to the articulated views of various men of the cloth (D4, S10). He added that there is also nothing wrong with constructing an abstract-deductive science (although he does not call it this), such as political economy, in which if something is assumed, such as the pursuit of wealth, then something else is predicted to follow (D4, S10). Newman did, however, take issue with his ex-colleagues from Oriel (citing Senior's introductory 1826 lecture in particular) for constructing an abstract-deductive science in which the pursuit of wealth was depicted as the chief means by which to maximize the end of virtue (D4, S11-12), with the focus on virtue here arising because of the aforementioned Oriel presumption that virtue rather than utility was the ultimate end to optimize within what we now call an objective function. Newman did not deny that the pursuit of wealth may, as Senior and Whately claimed, lead to more virtuous behaviour. In his words:

I grant, then, that ordinarily, beggary is not the means of moral improvement; and that the orderly habits which attend upon the hot pursuit of gain, not only may effect an external decency, but may at least shelter the soul from the temptations of vice. Moreover, these habits of good order guarantee regularity of a family or household, and thus accidentally provide the rising generation with a virtue of truth which the present does not.... (D4, S12, p 69).

But Newman did object to what he perceived to be the over-determined and totalizing nature of the Oriel argument. He contended that to claim that the pursuit of wealth (in all its forms) leads to the maximisation of virtuous behaviour (presumably itself a complex spectrum of ends) assumes knowledge that is normally acquired outside the political economist's proper sphere and, in particular, requires knowledge that is normally derived from the domain occupied by the theologian. This latter argument is, in fact, the principal point of Newman's analysis of the role of political economy in the university structure; that is, his primary reason for considering the political economy in The Idea of a University was less to justify a university place for a properly delimited discipline of political economy (or any of the several other secular disciplines he considered), and more to illustrate the necessity of giving theology a prominent place within a university structure to check the inappropriate growth of this and the other such secular disciplines beyond their proper spheres. Newman sought to show the intimacy of theology with all other disciplines by demonstrating how over-enthusiastic scholars in each secular discipline, made narrow and conceited by their successful pursuit of specialised knowledge (such as the Oriel Noetics!), over-step the mark by neglecting theology when pushing their ideas in an imperialistic fashion beyond their disciplinary boundaries (see also Ker 2012 on this point). In short, if theology is absent, if it is not cheek by jowl with other disciplines (abstract-deductive or not), then practitioners from these disciplines, trespass on its terrain and tarnish the reputations of their own disciplines in the process.

together with the voluminous literature on this topic, should also be considered as a possible prompt, not to mention the fact that Whately, his old sparing partner and now permantly estranged ex-colleague, had established (as the Arcbishop of Dublin) a political economy tradition at TCD down the road in the 1830s.

Political economy, then, has a place in the university structure, but a place that is carefully constrained and delimited by theology (and, as we will see in the next section, other disciplines). The more precise arguments that Newman leveled against the imperial over-reach of the Oriel vision are perhaps now easily explained away within the Mill-Keynes(senior)-Robbins tradition (with all of it means-ends, ceteris paribus and tendency law paraphernalia), the key elements of which, paradoxically, may in fact be found in the Oriel men's writings. Newman's arguments were nonetheless sound enough in the context in which they were delivered, and his more particular criticisms along these lines hit their target smartly (and, a century later, would have hit the less dexterous of the imperialistic Chicagoan economists equally smartly). Specifically, he took issue with Senior for laying down the wealth-virtue argument without reference to what the theologians have to say on the matter, and for thereby elevating the importance of the science of political economy above theology in the hierarchy of disciplines (D4, S11, 68); for claiming that the pursuit of wealth is the "great source", rather than just a possible source, of moral improvement, which seems to contradict "our Lord, St Paul, St. Chrysostom, St Leo and all Saints" (D4, S12, 69); and for claiming that no institution is more beneficial for raising the morality than that which raises their wish to pursue wealth, since this neglects the institution of Christianity, the teachings of which often provides contradictory advice (D4, S12, 70). The particular argument, however, to which Newman seemed to take greatest exception, was Senior's claim that religion is itself a function of the wealth-virtue nexus. As Newman put Senior's obnoxious (or should that be neat?) logic: "Wealth depends upon the pursuit of wealth; education depends upon wealth; knowledge depends on education; and Religion on knowledge; therefore Religion depends on the pursuit of wealth" (D4, S12, 70). In short, according to Newman, Senior neglects the possibility that wealth can also be the root of all evils and has failed to give a theological answer of when and where the pursuit of wealth leads to more virtue: "the sense needs to be defined and the statement to be kept within bounds" (D4, S12, 70). The "sense" and "bounds" is, according to Newman designed by the theologian.

3. The Ends of an Ideal University and its Shaping of the Teaching of Economics

Political economy is therefore given a prominent place within Newman's university, albeit in part as a rhetorical strategy to justify the pre-eminent place of theology in the hierarchy of the disciplines. My goal, however, is to comment less on the place of political economy in the university structure (even though it has a central bearing on discussion that follows) and more on the way political economy, once entrenched within Newman's university, should be taught. There is, surprisingly, very little in the *Idea of a University* about the actual process of teaching. Newman devotes most of the book to considering the constitution of his ideal university—with the aforementioned secular divisions neatly presented and carefully checked and delimited by a prominent theology faculty—and what its objects should be. The latter objects are nonetheless important for our purposes, since the nature of one's teaching is clearly dependent upon one's ultimate goals when teaching, and hence the ultimate objectives of Newman's ideal university require comment on my part. Newman famously argued that the ultimate end of a university is to cultivate the intellects of its students. He believed that the cultivation of

the intellect is an end in itself, and hence a university is not necessarily designed to improve virtue, to increase wealth, to serve the professions, or to achieve some other goal, even though these are usually worthy by-products of pursuing this primary end (D5). He justified this contention on the grounds that individuals possess an innate desire to cultivate their intellects in a way that allows them to understand the world around them and the university, as an institution that allows this cultivation to flourish, needs no more vindication than that it allows us to satisfy this desire. Thus, the university serves a deep human need, it sates an innate human craving, in the same way that a hospital is designed to heal the sick and the gymnasium is to exercise the limbs (D6, S1). The crass materialistic-cum-utilitarian model that drives most modern universities, including the many vocational-oriented Catholic universities, is not part of Newman's vision—even though, as we will soon see, and perhaps to the consternation of those who see Newman as the savior of the liberal-arts university, vocational courses do so figure in this vision.

Given that Newman was recruited to establish a *Catholic* university, it is also interesting that he was adamant that the way a university acts as an instrument to cultivate the intellect precedes—both historically and logically—the way it acts as an instrument of Church policy (D5). It must nonetheless be emphasized that Newman made Catholic theology loom large even within a university with this secular quest because the enlargement of the mind takes place via a traditional liberal education. Specifically, in Newman's world the enlargement of the mind does not entail the acquisition of particular knowledge or mere facts (even though the acquisition of facts is a pre-condition to enlarge one's mind), but rather the acquisition of the whole of the inter-related parts of all knowledge, including that which relates to theology. This particular enlargement of the mind, which Neman called the philosophical habit of mind, is "the power of viewing many things at once as one whole, of referring them specifically to their place in the universal system, of understanding their respective values, and determining their mutual dependence" (D6, S6, 103). The subjects associated with the liberal disciplines—such as logic, mathematics, history, theology, the critical reading of the Classics and so forth are especially important in this vision, since they provide the intellectual tools that allow individuals to see what Alfred Marshall later referred to as the 'many in the one and the one in the many' both in relation to the objects of any given discipline and across the different disciplines. This should be a self-evident truth to modern economists, since they clearly draw upon different disciplines (such as mathematics, inferential statistics, history, psychology and so on) and economics is, in turn, drawn upon by practitioners from other disciplines (such as sociology, politics, law, finance, accounting and so on). The idea of viewing the different parts of knowledge as a mutually dependent whole, which is itself derived from the Aristotelian traditions embraced by Newman, also explains why Newman occupied himself primarily with the twin goals of delineating the constitution of the respective parts of a university and defining its ultimate end. They are, to him, intimately connected: to pursue the end of cultivating a mind requires an understanding of many disciplines, even when an individual specializes in one, and hence all of the disciplines required to capture the inter-connected whole need to be singled out as worthy of being embedded in a university. ⁴ This vision also explains why theology is not merely

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⁴ The call for economists to have a broad understanding of the subject matter of disciplines outside the core that is economic theory, especially of the subject matters of history and mathematics, has a long history in

part of a university, but, as emphasised in the previous section, a pre-eminent part, since a strong theology division within the university prevents any one discipline (including the important liberal disciplines) from enlarging its domain sufficiently that its practitioners see the world from their own perspective rather than the interrelated whole. It certainly enriches our understanding of Newman's vehement censuring of the imperial excess of the (wealth-virtue nexus) vision of economics advocated the Oriel Noetics, while at the same time providing rich irony, since Newman himself also acknowledged that his belief in the cultivation of the intellect through the pursuit of liberal-arts education was itself derived from the Oriel position that had been cemented in their 1809-11 debates with the utilitarian-oriented men (at least in terms of education) of the *Edinburgh Review*.⁵

Newman's contention that a Catholic university is first and foremost an instrument to cultivate the intellect rather than a naked theological instrument of the Church was, as one would expect, a controversial argument to place before a Catholic hierarchy that was yet to be entirely convinced that a Catholic university was a priority given the many other spiritual needs of their Catholic parishioners in post-Famine Ireland. The prominence Newman gave to theology within the university structure undoubtedly softened the blow of the seemingly secular-oriented argument, but it would not have made it that much softer when we remember that this prominence was primarily designed to act as a check on the imperialistic ambitions of each discipline and thereby as a means to achieve the

the economics discipline. This is in spite the fact that this is the same discipline that champions the division of labour and comparative advantage (and even though to broaden oneself without also mastering the core is rather pointless). To paraphrase John Stuart's Mill's words of 1868 (in response to Robert Lowe's narrow vision of political economy): to be a political economist only is to be a poor political economist. It also should be noted that the phrase in the above paragraph, "many in the one and the one in the many", was used by Marshall to justify both abstraction and empiricisms in economic (see Appendix C of his Principles), such as the claim that abstract rational economic man is a component part of each real man, but each real man is composed of far more characteristics (although Marshall himself used the economic meaning of rent to illustrate the point). The felicitous phrase is nonetheless also applicable to claims relating to the interrelatedness of subject matter across disciplines, such as the conjecture here that economic doctrines are a component part of economics, history, sociology, and so forth, and all of these disciplines are, at the same time, composed of more subject matter than just economic subject matter. Finally note that Martinez (2009) and Ker (2012) examine the thorny philosophical issues surrounding the delicate balance between specialized and inter-disciplinary knowledge in Newman's writings, while for the Aristotelian flavour of Neman's position (but without mention of the Oriel Noetics) see Hochschild (2003). ⁵ Newman stresses the Oriel (and therefore the Aristotelian) origins of liberal arts views in *Apologia Pro* Vita Sua ([1864-65] 1913), his posthumous published autobiographical memoir (1903), and the *Idea of a* University itself (D7). Specifically, the Oriel Noetics defended a liberal education—chiefly consisting of a rigorous training in Aristotelian logic—against the 1808-9 attacks by the three "northern" critics of the Edinburgh Review (John Playfair, Richard Payne and Sydney Smith), who had taken the utilitarian line that it was wasteful to train men in useless "Classical" subjects, as they did at Oxford, when they could be trained in useful professional subjects. This critique of a liberal education was rebuffed in a particularly elegant fashion by Copleston in "Reply to the Calumnies of the Edinburgh Review" (1810). Newman took Copleston's tract as a template of style, replicated vast passages from it in the *Idea of a University*, and in many ways his plea for a liberal education is simply Copleston writ grand. Newman, in short, became tired of the excessive manner in which the Noetics pursued their logic chopping, and his own university structure was demonstrably designed to check the their imperialistic excesses, but he retained his Noetic heritage in many other ways. Unlike the role played by Oriel in influencing Newman's political economy, which is only considered by Oslington (2001), the Oriel connection in relation to Newman's liberal-arts vision is well canvassed in the secondary literature (see Moore and White 2010 for an account of this earlier debate).

secular goal of cultivating the intellect by allowing one to grasp the interconnected whole of the various liberal disciplines. There were, however, several other reasons motivating Newman to give theology (and for Newman, of course, this means Catholic theology) a central role in his ideal university; and these do indeed turn on treating theology as an instrument of Church policy. These reasons were, perhaps not surprisingly, driven by the sectarian controversies and Church politics of the time and place in which the discourses were written, and hence they were skated over quickly by Newman, the master practitioner of rhetoric, to avoid needlessly alienating sections of his audience. The first and most important of these arguments is that, for the newly converted Newman, Catholic theology is not only a science, but, unlike the secular sciences that portray only aspects of reality due to the need for abstractions and the (now widely accepted) limitations of naïve empiricism, also the sovereign science that considers higher ends and yields the absolute truth via revelation, and to which the other sciences are subordinate and which the other sciences cannot contradict. Newman's theology, in other words, does not merely check the imperialistic tendencies of each discipline, but also checks them from advancing facts in contradiction to the truths of Catholic Doctrine (since by definition they would then not be facts). Newman famously staked out this position a few years before (but it also clear from his numerous pamphlets of this time) in An Essay on the Development of Christian Doctrine (1845), in which he argued that the original Christian principles had been revealed from heaven and pronounced to the Apostles, and as if an echo, to the early fathers, and then, as broad and pregnant principles from which things grow (and only truly come alive) when applied to concrete particulars, transformed into an ever evolving Catholic doctrine that is overseen by Bishops made worthy by Apostolic succession. The revealed truth of the original principles is therefore carried over to evolution of the doctrine that follows, and the worth of the latter is itself demonstrated by historical enquiry via a number of tests (such as consistency, assimilation, anticipation and continuity of the associated historical statements relating to doctrine) that determine whether or not the doctrinal development—the unpacking of the original principles—has been corrupted. The term tests was, however, too much for the Catholic hierarchy (while they frowned upon both Newman and the book as a whole), and in the second edition (1878), in addition to placing greater emphasis on the concept of Papal infallibility that was then evolving, Newman changed the term "tests" to "notes", presumably to emphasize that his historical approach was designed to illustrate rather than to prove the worth of doctrines. In any event, this vision of a historicized theology is not outlined in the *Idea of a University* and the associated claim that Catholic doctrine is the inconvertible truth is side stepped whenever possible. The contention is nonetheless there on the page if one is looking and, further, theology is always referred to as the ascendant science that brooks no contradiction. Historical fact, for example, cannot challenge or lead to theological truth: "The evidence of History, I say is invaluable in its place; but, if it assumes to be the sole means of gaining Religious Truth, it goes beyond its place" (D4; see also Altholts 1964, 289). That this argument resides in the *Idea of a* University is an inconvenient truth for both the modern secular academics who swoon over Newman's liberal-art arguments in the same fashion that they swoon over a Jane Austen novel and modern Catholics who now practice a theology that is less Victorian in its stridency. The saving grace for these readers of Newman is that the claim that theology is essential because it is science that yields the absolute truth is secondary to the main claim that theology is essential because it allows one to achieve the secular goal of cultivating the intellect. It has also been allowed to drop from view as time has passed.⁶

Still another reason for the prominent role given to theology in the university structure, and at the time equally controversial as the preceding argument, was to combat the rise of what was then called mixed education, whereby students from all faiths were admitted and in which theological controversies were suppressed in those disciplines, such as history and theology, in which they had scope to break out. The establishment of Peel's 'Godless Colleges" in Belfast, Galway and Cork in the 1845 was, after all, the main prompt for the Catholic hierarchy to recruit Newman to establish a Catholic University in Ireland. Not all of those in his audience were, however, entirely convinced that this institutional development at that precise time was necessary, nor were they necessarily against mixed education (even though most were and the key Dublin authorities and Newman strenuously so), and hence Newman trod lightly on the matter. He did this mainly by accepting, as a given, that mixed education was a bad and thereby not dwelling on this issue to the same length as he did the more acceptable goal of expanding the mind (see McGrath 1951, 136ff for the letters relating to this point). It is nonetheless patent that Newman also sought an enlarged theology division (not to mention its presence in each discipline) to achieve the basic Church goal of maintaining the faith and moral values of the flock, which were in danger of straying under mixed-education, as well as the primary, and logically anterior, goal of establishing an institution that expands the mind. It should, after all, be remembered that Newman's university was always going to be a Catholic University; even if the second word in this descriptor, University, comes before the first word, Catholic, in order of priorities. Catholic educators have since found Newman's proposed order of priorities to be persuasive and, further, its value has been verified by the fact that all of the great Catholic universities that have since risen to prominence—such as Notre Dame Indiana and Georgetown—make the cultivation of the

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⁶ The flavour of this paragraph is in some ways an extension of Dale (1972), who (a) rejected the then standard interpretation associated with Harrold (1945, 1947) and Culler (1955) that Newman held a tolerant liberal arts vision for the university and (b) presented a strong revisionist interpretation of Newman as an uncompromising Catholic who wanted a sectarian university with a dominant scientific theology that contained superior truth. Dale (1972) puts forward a spirited and in many ways convincing argument and, given that many liberal arts advocates cite Newman unthinkingly to support their case, his narrative still acts as a useful tonic today. Newman was certainly no Matthew Arnold. Still, this revisionist position does not consider the possibility that the two interpretations are not mutually exclusive and, further, that Newman's call for the cultivation of an intellect through the study of interconnected disciplines is anterior to any other objective. Altholts (1964) similarly disabuses those who take the Development of Christen Doctrine as an example of the historical method in its modern scientific form. The historical facts are deployed to support Catholic doctrine; they are not decisive protocol statements to determine the Christian "truth", and this aspect of his position became more pronounced following the poor reception of the book by the Catholic authorities. Finally, it is difficult to determine how this bears on political economy, since, as Newman himself maintained, the Catholic principles are sufficiently broad that they only come alive in their application, and hence it is hard to find examples where economic relationships directly contradict them. Victorian economists were deft at making this point. Whatley, for example, contended that the scriptures requires one to give to the poor, but they do not state under what conditions, while John Stuart Mill stated that God said go forth and multiply, but not by how much. For all this, some of Newman's criticisms of Oriel political economy, and commented on in the previous section, could be interpreted as being driven less by its imperial over-reach and more by the way that it contradicts the scriptures.

intellect, in Newman's fashion, their primary (but never their only) goal. The principle is caught in Edward "Monk" Molloy (the ex-president of Notre Dame Indiana) contention that "to be a great Catholic university one needs first to be a great university" (in a verbal delivery at the University of Notre Dame Australia). Strange as it seems, these universities have become successful instruments of the Church by making this instrumental goal a thing of secondary importance. The administrators and guardians have harnessed their horses and carts in the appropriate order. Furthermore, as our increasingly secular age has unfolded, these administrators have expanded the role of this theological tool from sustaining the faith and moral values of their Catholic charges to imbuing all students (whether they be Catholic, non-Catholic or non-believers) with whatever timeless wisdom that might be derived from the scriptures. Given that numerous studies indicate that undergraduates studying economics became more self regarding as their studies progress, and given the increasing moral dilemmas they subsequently face at their excessively monetarized places of work, this is not necessarily a bad thing (even if certain of the moral values trafficked in the Catholic domain obviously stick in many people's craws). Marshall's call for economists to have "cool heads but warm hearts" still holds, even though in his day, Marshall was correctly more worried by the excess, rather than shortage, of "warm hearts"—times change.

Finally, given all of the references above to the importance of the interconnected nature of the *liberal* disciplines, it is important at this stage to expand on the contention made very briefly earlier in this section that, paradoxically, Newman did not wish to exclude the vocational-, or professional- or utilitarian-oriented disciplines from a university charged with the task of expanding the minds of its student. He considered this issue in the process of rejecting the arguments of those individuals who sought to maximize utility by transforming universities, holus bolus, into mere professional training institutions (D7). He accepted that specialized study in a particular discipline, including a professional discipline, is the chief means by which to advance knowledge in that discipline. But he also believed that something is lost in the process of such specialization and, further, that professionals with utilitarian goals in mind will only truly excel in their discipline if they first enlarge their minds via a liberal education. Indeed, like his ex-Oriel colleagues in their aforementioned debates with the northern critics in 1808-11, Newman believed that there is no real conflict between utilitarian and liberal educational goals, since a liberal education is a "good" in itself and hence is a "useful" end to pursue and, further, it is a necessary prerequisite for excelling in the professional discipline (D7, S5). In other words, a liberal education is both useful as an end and as a means to another useful end. This latter point is justified on the grounds that, in the same way that health allows the body to perform labour, the cultivation of the mind provides the tools for the professional to perform his or her skills (D7, S6). Newman then proceeded to contend that these professional-oriented studies are best housed within a university because this ensures that those engaged in these disciplines can see them, as if from above, sitting in a sea of mutually dependent disciplines, and hence they are induced not to claim too much for their own. This is, of course, just another version of Newman's argument that each discipline, as part of an interconnected whole, should be constrained within its proper disciplinary sphere. He believed that the professional educators, once ensconced in a university, will be constantly reminded of the boundaries of the nearby liberal disciplines and of the importance to their own profession of the elemental knowledge (whether it be mathematics or theology) derived in these nearby liberal disciplines. It also should be noted that, given that political economy at this stage had yet to develop to the point where it was considered (as it is today) to be a liberal discipline with an elemental knowledge and engine of discovery of its own, it is possible that Newman regarded it as one of these utilitarian-oriented divisions (even though he did not explicitly state this) and hence that the arguments leveled in this context (D7) were simply reinforcing his critique of the Oriel political economy (D4). Either way, modern liberal-arts advocates who wish to use Newman's educational vision a weapon to combat the growth of professional disciplines within universities should think again: he was explicit that the professional disciplines were to be housed within the university's walls. Newman would, for all this, have found the extent to which they vocational degrees dominate the modern university system, often at the exclusion of the liberal disciplines, uncongenial.

Newman's call for the cultivation of the student's intellect within a balanced university structure of interconnected disciplines (liberal and professional) should resonate with modern economists. The discipline of economics is, after all, one of the most interconnected of all disciplines. Historians of economic thought are particularly alive to the way that successive hordes from near-by disciplines have swept into the domain of economics and how each of these invasions, in turn, suffered from imperial over-reach and was forced into a partial retreat. It is seen in the excesses of the analytical-cumlogical model building that was championed at Oriel in Whatley's day and from Westminster by Ricardo's epigone (i.e. Schumpeter's infamous Ricardian vice), the subsequent quest to reverse this immoderate use of analytical modeling by drawing excessively upon the nineteenth century revolutions in historiography (which led to the tiresome Methodenstreit and endless dry-as-dust economic histories), the overkill in the use of mathematical physics in the mid-twentieth century with the arrival of the French Boubakianists and the revival of the Paretian program within the Harvard economic department (which had earlier been kept in check by Marshall's judicious use of mathematical appendices and his decision to "burn the mathematics"), the late twentieth century surge in inferential statistics that is yet to abate (even though we now have econometricians who seem to know nothing about price theory), and, I expect in the early twenty hundreds, a never-ending influx of psychologists into behavioural economics (the excesses of which has already started to irritate of late). These and other waves have left a contribution to economics that is immeasurable—and indeed, has made economics the great intellectual tradition that it is today—but all swept too far and left messy debris in their wakes. Each generation did not have the advantage of a dominant personality like Marshall, who, in the fashion of Newman, had the sense to see the interconnectedness of history, mathematics and analytical modeling, without allowing each to grow beyond its proper realm. The excesses of imperial over-reach is also, of course, reflected in the far more commented upon invasions in the opposite direction by economists (invariably led by Chicagoans) into allied disciplines, the successes of which has led to one having (almost) a greater likelihood of bumping into economists in North American politics or sociology departments than scholars trained in these sciences. Still, as already stated, the tortuous disciplinary history of economics has led to the great intellectual tradition that is economics and, since Newman's philosophy is driven by the idea of teaching a *tradition* rather than mere subject matter, a segue presents itself to now turn to this issue.

4. Teaching Intellectual Traditions.

The actual process of teaching within a liberal discipline, including now economics, may not take up a prominent place in the *Idea of a University*, but the nucleus of Newman's vision of the teaching process is, in fact, there stated in brief (D6, S9-10). The essential features of these teaching practices are, however, more fully outlined in The Rise and Progress of Universities, which was written in 1854-5, immediately after the writing of the two sets of discourses that eventually constituted the *Idea of the University*, and published first in serial form in the Catholic University Gazette, then as The Office and Work of Universities (1856), and finally under the present title in volume three of his Historical Sketches (1872). The ideas contained in The Rise and Progress of Universities are, in short, the product of the same temporal stream of thought. The most striking feature of the teaching process advocated by Newman is the relegation of delivering a lesson that is constituted by a series of articulated points to something of minor importance and the near complete absence of teaching techniques that seem to be the focus of today's "teachers of teachers". This is because Newman recognized that what is being conveyed (to expand a student's mind) is a living intellectual tradition, partly oral, in which extremely complex and interconnected ideas, which are sometimes ineffable or at least not easily articulated in the written form, are conveyed through extended personal interaction between teacher and students, and students and students, at a single physical site over an extended period of time and, as the reader would by now expect, with no one discipline growing beyond its proper place. The teacher is, in other words, an individual who assists in passing on the tradition, in which he or she has also been raised, to the next generation of students, who largely teach themselves in a social setting and thereby, in turn, keep the tradition alive for a next generation (D6, S10). Newman's "teacher", of course, also has responsibility for setting exams and delivering compulsory classes of the traditional sort, but Newman believed such duties to be mainly a tool to prevent the students from falling into idleness and losing their moral compass rather than to actually convey knowledge. 8 The Dickensian "M'Choakumchild" or the teacher as a conveyer of facts and cut-down ideas—via the ubiquitous "bullet point" slide show—certainly has a lesser role in Newman's university. In Newman's world, the modern university teacher as "lecturer", who professes to do so much, really does so little if he or she refuses to participate in the conversation that constitutes the living tradition.

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⁷ In the Twentieth Century numerous popular editions were published under the title *University Sketches* (see Tierney 1964), and this may be the title by which some readers know this work.

⁸ Indeed, Newman at times seems to belittle the role of the teacher in the knowledge "baton change" itself, suggesting that his or her participation in this process is just as much about preventing the self-educating students from developing intellectual arrogance and conceit as it is about assisting the students to immerse themselves in the tradition (D6, S10). I would nonetheless argue that, in spite of these occasional statements by Newman, the general drift of his narrative is to indicate that the teacher does have an important role as a guide to the traditional knowledge via personal, avuncular and inspirational interaction with the student. I would also add that the modern lecture, even perhaps replete with bullet points, also has a greater role than Newman seems to suggest: all students, after all, need to be presented with a structure. See also Ker (2012) on this and related points about teaching in Newman's ideal university.

Newman builds this argument in three steps. The first and most important principle that underpins this line of argument is that the complex and interrelated parts that constitute a lengthy intellectual tradition (hereafter occasionally referred to as traditional knowledge) cannot be articulated and conveyed in their entirety from one person to another in a written form, whether this form be a learned book, or a textbook or an article, or, in today's world, an overhead slide or a web-site. In modern terminology, the written expression of an idea is an inadequate abridgment of a larger and partly ineffable or unspecifiable body of knowledge. Newman expanded on this argument by considering the Victorian revolution in the transfer of knowledge that was, in many ways, equal to the information technology revolution with which we are confronted today. Specifically, the printed book, article and newspaper, like the web-pages of today, had become ubiquitous and cheap to access in the first part of the nineteenth century through advances in publishing and distribution technology. Newman recognized that this revolution questioned the very nature of the university: "Why, you will ask, need we go up to knowledge, when knowledge comes down to us?" ([1854] 1909 7). Newman welcomed this revolution in publishing, but he was adamant that the ubiquitous printed material could never replace the oral traditions that took place on the university campus. In his words:

whenever men are really serious about getting what, in the language of trade, is called 'a good article,' when they aim at something precise, something refined, something really luminous, something really large, something choice, they go to another market; they avail themselves, in some shape or other, of the rival method, the ancient method, of oral instruction, of present communication between man and man, of teachers instead of learning, of the personal influence of a master, and the humble initiation of a disciple, and, in consequence, of great centres of pilgrimage and throng, which such a method of education necessarily involves. ([1854] 1909 8-9)

Newman was not prepared to provide a precise theoretical or empirical justification for why this was the case. His hesitancy was possibly, in part, due to his belief that this contention was effectively indisputable, if not self evident, but it was also, in part, because it was beyond his abilities to explain. In his words:

I am not bound to investigate the cause of this, and anything I may say will, I am conscious, be short of its full analysis;—perhaps we may suggest, that no books can get through the number of minute questions which it is possible to ask on any extended subject, or can hit upon the very difficulties which are severally felt by each reader in succession. Or again, that no book can convey the special spirit and delicate peculiarities of its subject with that rapidity and certainty which attend on the sympathy of mind with mind, through the eyes, the look, the accent, and the manner, in casual expressions thrown off at the moment, and the unstudied turns of familiar conversation.

Till we have discovered some intellectual daguerreotype, which takes off the course of thought, and the form, lineaments, and features of truth, as completely and minutely, as the optical instrument reproduces the sensible object, we must come to the teachers of wisdom to learn wisdom, we must repair to the fountain, and drink there. Portions of it may go from thence to the ends of the earth by means of books; but the fullness is in one place alone. It is in such assemblages and congregations of intellect that books themselves, the masterpieces of human genius, are written, or at least originated. ([1854] 1909, 9-10).

Newman's unwillingness to give a more precise reason for why some knowledge cannot be articulated in the adumbrated form is, perhaps, one of the failings of his education vision, and will be addressed more fully in the next section when I draw upon a number the ideas of like-minded twentieth-century philosophers who designed a specific vocabulary to account for this knowledge-transfer problem. It is nonetheless almost self evident in the history of economics, particularly the way in which those economists trained in advanced mathematics or high theory at certain academies (such as the Cambridge Mathematical Tripos in the nineteenth century or Chicago post-graduate economic in the 1970s) have been able to master new problems emanating from certain research programme in days that would take a lifetime for others to solve via consulting the written works of these academies (see Moore 2005 on this point). It also should be noted that Newman did in fact seek to demonstrate the validity of this principle by way of illustration, which, as we will see in the next section, was also the favourite means by which twentieth-century philosophers (with endless references to cooking recipes) carried this argument home. Newman chose the example of teaching manners to a gentleman. He pointed out that the qualities that make a gentleman—"the carriage, gait, address, gestures, voice; the ease, the self-possession, the courtesy, the power of conversing, the talent of not offending; the lofty principle, the delicacy of thought, the happiness of expression, the taste and propriety, the generosity and forbearance, the candour and consideration, the openness of hand"—are not learned from books, but are absorbed via prolonged interaction with others in the physical places that constitute "society". In short, you "cannot fence without an antagonist, nor challenge all comers in disputation before you have supported a thesis"; and in like manner, "you cannot learn to converse till you have the world to converse with; you cannot unlearn your natural bashfulness, or awkwardness, or stiffness, or other besetting deformity, till you serve your time in some school of manners" (1909 [1854]: 10-11). In another illustration that seems to anticipate the examples from science later given by T. S. Kuhn and M. Polanyi, Newman argued that science is similarly not conveyed and propagated merely by books and investigations conducted in "silence" and "solitude". Not even scientific thought can dispense with the "suggestions, the instruction, the stimulus, the sympathy, the intercourse with mankind on a large scale, which such meetings secure". This, he argued, explained the rise of the national scientific meetings in his time:

A fine time of year is chosen, when days are long, skies are bright, the earth smiles, and all nature rejoices; a city or town is taken by turns, of ancient name or modern opulence, where buildings are spacious and hospitality

hearty. The novelty of place and circumstance, the excitement of strange, or the refreshment of well-known faces, the majesty of rank or of genius, the amiable charities of men pleased both with themselves and with each other; the elevated spirits, the circulation of thought, the curiosity; the morning sections, the outdoor exercise, the well-furnished, well-earned board, the not ungraceful hilarity, the evening circle; the brilliant lecture, the discussions or collisions or guesses of great men one with another, the narratives of scientific processes, of hopes, disappointments, conflicts, and successes, the splendid eulogistic orations; these and the like constituents of the annual celebration, are considered to do something real and substantial for the advance of knowledge which can be done in no other way. (1909 [1854]: 13)

The second principle, which is intertwined with the first to the point where the two can barely be discussed separately and hence has already been touched upon, is that any tradition which cannot be articulated fully via the written word must be conveyed through prolonged personal interaction at a specific physical site. Newman believed that the metropolises of the great countries, such as London and Paris, provide a university atmosphere of sorts even if one excluded the places of learning that are housed there. The individuals who contribute to newspapers, magazines, reviews, and periodicals; who attend the learned and scientific societies; and who study for the professions in the law courts and hospitals, necessarily invest the city "with the functions of a University; and that atmosphere of intellect, which in a former age hung over Oxford or Bologna or Salamanca". These citizens of the "virtual" university have become "acquainted with the habits, manners, and opinions of their place of sojourn, and done their part in maintaining the tradition of them" (1909 [1854]: 14). This is patently an asset for any country, but Newman believed that there was still a place for a university proper, where the "education sought and given should be based on principle, formed upon rule, directed to the highest ends" rather than "left to the random succession of masters and schools, one after another, with a melancholy waste of thought and an extreme hazard of truth" (1909 [1854]: 14). He placed particularly importance on the selection of the site, arguing that it should be central and needed to be a liberal and noble one that inspires those who attend (1909 [1854]: 24). The main purpose of a physical site, however, is to allow a tradition to develop through personal interaction. It will lead to the type of site-specific "oral tradition" that many prominent economists know well and obviously value, since they claim it (and thereby the associated greater nuance and sophistication not on their printed pages) for their site-specific schools even if this is not perhaps warranted (see, for example, Steindle 1990 for the dispute between Patinkin and Friedman over whether or not there was a Chicago "oral' tradition in the 1930s). Newman calls this site-specific tradition or spirit the *genius loci*, which in Roman religion was the protective spirit of a particular place. As he stated in the *Idea of a University* itself, the pupils that constitute a student body come from very different places, and with widely different notions, and "there is much to generalize, much to adjust, much to eliminate, there are inter-relations to be defined, and conventional rules to be established, in the process, by which the whole assemblage is moulded together, and gains one tone and one character" (D6, S10, 111). Eventually, a youthful community will:

constitute a whole, it will embody a specific idea, it will represent a doctrine, it will administer a code of conduct, and it will furnish principles of thought and action. It will give birth to a living teaching, which in course of time will take the shape of a self-perpetuating tradition, or a genius loci, as it is sometimes called; which haunts the home where it has been born, and which imbues and forms, more or less, and one by one, every individual who is successively brought under its shadow (D6, S10, 111).

The third principle relates to the precise mechanism by which the tradition is conveyed via personal interaction at the physical site. Newman's account of this process is, like his claim that traditional knowledge cannot be conveyed in the written form, less than satisfactory. Various references are made to oral delivery, personal interaction, the charismatic influence of a teacher, challenge and response within a dialogue, and so forth, but Newman delineates no set of mechanisms for conveying knowledge with any precision. Indeed, at times, he seems to imply that a tradition spontaneously forms via the students interacting over a prolonged period of time and, as mentioned earlier in this section, with little input from the instructor. He wrote of a multitude of "young men, keen open-hearted, sympathetic, and observant", who, coming together and freely mixing with each other, invariably "learn from one another, even if there be no one to teach them" (D6, S10, 110). Their conversation is "a series of lectures to each, and they gain from themselves new ideas and views, fresh matter of thought, and distinct principles for judging and acting, day by day" (D6, S10, 110). These sorts of passages are, however, invariably followed, after a passage or two, with references of the importance of a charismatic teacher to oversee the development of the tradition while, at the same time, always attending to the student's moral and religious needs. The general tenor is, in fact, that the academic leaders have the same stamp as the students, since they were educated within the same tradition in the same geographical site, and hence are participating in what Oakeshott would later call the same conversation (D6, S10, 111). They are acting as indispensible guides, and, not surprisingly given Newman's experience with charismatic Oriel dons of the likes of Whately, they must exert personal influence. In Newman's world, everything, including the rule of law and system, comes second to personal influence, personality and charismatic interaction: "I say then, that the personal influence of the teacher is able in some sort to dispense with an academical system, but that the system cannot in any sort dispense with personal influence" (1909 [1854]: 74-5). This last point is a broad side at what Newman called the "red-tapists", who, like the managerialists of the modern university, can manage everything but the personal, and thereby run a university as if the personal was of no consequence.

5. Newman's Concept of Teaching within Traditions and his Theology.

I believe that the three principles just articulated capture the nature of Newman's vision of teaching within intellectual traditions neatly, even if one is left asking for more about the specifics underpinning some of the contentions. To some extent a greater comprehension of Newman's concept of an evolving and a partly ineffable tradition within a site-specific university could be gleamed—and many of the particulars filled in—by interpreting it as an extension of his theological writings and his closely allied

conservative philosophy of the natural and social world. Answers could then be found in his famous religious tracts of this period. This herculean task of tracing these links, however, is slightly beyond the scope of this study and, more importantly, perhaps better left to professionally trained theologians. I therefore restrict myself to the broad outlines of his theological position that are relevant to my main point, which, of course, turns on the inadequacy of the written word and cut-down verbal deliveries as a means to convey sophisticated ideas in an inter-disciplinary setting. The connection is, in my view, clear enough, even if a little frightening to the liberally minded if pushed too far. Specifically, as a member of the 'Oxford Movement', and hence even before his conversion to Rome, Newman was vehemently opposed to the Evangelical belief that religious knowledge could be accessed directly from the Bible and the associated belief that such knowledge should be derived by private and independent judgment. The principles that were revealed from heaven and articulated on the page, he argued, were too broad in nature to convey their full meaning, too limited in scope to capture every required application, too often silent on important issues or figurative and unsystematic in nature, and too open to multiple interpretations and, worse, multiple interpretations that invariably induce religious schisms. The position was articulated in a particularly rich fashion in Development of Christian Doctrine (1845, 1878 [1927]), which was published shortly after his conversion and touched upon earlier in this essay in relation to Newman's belief that theology was the sovereign science. Newman argued that there were so many gaps in the presumed coverage of the scriptures that these gaps could only be part of God's original design. The scriptures therefore needed "completion" ([1878] 1927 62) and this was to be achieved by reading them within a living tradition, which he believed should be the Catholic tradition in which Bishops in the apostolic line oversee an evolving system of doctrines, the task of which is never complete ([1878] 1927, 78, 90).9 Within this vision, the scriptures are effectively pregnant texts—not unlike a Kuhnian paradigm or the positive heuristic of a Lakatosian research programme—out of which other things grow when they are subjected to exegeses and applied to, or confronted by, the unfolding problems of the secular world. My point, of course, is that Newman believed that all ideas, not just religious ideas, fail to be fully expressed in the written language and only come alive when applied to the concrete particulars within such traditions. Indeed, the similarities between Newman's censure of private judgment in relation to reading the Bible outside a tradition and his disdain (admittedly a little heavy handed) of Victorian man accessing the cheaply printed material outside a university tradition are sufficiently manifest that they need no further labouring on my part.

Newman's theological stance sweetly side-stepped one of the key criticisms that Protestants levelled at the Church of Rome, namely, that Catholic doctrine contains ideas that are not presented in the scriptures. Newman responded that this is precisely what is required. There remained, however, the related Protestant charges that the trajectory of

⁹Absorbing Newman second hand in a modern essay like this one is to some extent a mistake, since his lyrical style always conveys more than academic adumbration permits. In relation to the above point he writes: "It cannot, as it were, be mapped, or its contents catalogued; but after all our diligence, to the end of our lives and to the end of the Church, it must be an unexplored and unsubdued land, with heights and valleys, forests and streams, on the right and left of our path and close about us, full of concealed wonders and choice treasures" (1927, 71).

Catholic doctrine has been marked by controversies and inconsistencies, and in the process had been corrupted. The implication of this is that any intellectual tradition, secular or otherwise, may be corrupted and should not simply be accepted because it is tradition. Newman responded to these historical criticisms by deftly deploying what was soon to become known as the historical method to demonstrate that this was not so in the case of Catholic Doctrine. As mentioned in section three of this essay, this entailed the use of a series of tests (changed to notes in the second edition), which were seven in number, to demonstrate that the unpacking of the principles in the scriptures, themselves true by revelation and with the unpacking overseen by those in the Apostolic line, led to a healthy rather than corrupt development in doctrine. These tests are in some ways analogous to the tests that determine whether a particular Lakatosian scientific research programme is degenerating or progressive, but the number of differences are as numerous as the similarities—not least because Newman paradoxically starts with the presumption that his Catholic programme is the absolute truth and cannot be contradicted—that any such analogy must be drawn carefully. Still, it is an analogy worth making since economists who do recognize that their discipline is a tradition of evolving doctrines have sought (especially in the 1970s) to model (and test) this evolution along Lakatosian and other philosophical lines in a way that does not turn on a single prescriptive criteria, such as naïve falsification or verification. ¹⁰ In any event, Newman's seven tests were, specifically, (1) Preservation of a Type (1878 [1927] 171-8), by which any doctrinal growth should correspond to its rudiments and thereby ensure that a unity of type is maintained; (2) Continuity of Principles (178-85), by which the original principles are abstract and permanent while the doctrines relate to facts and develop, and, further, the latter should bring alive, but never, destroy the former; (3) Power of Assimilation (185-9), by which doctrinal developments should assimilate and incorporate other ideas to create a greater order; (4) Logical Sequence (189-95), by which the development, once complete, should be capable of logical expression in the sense that it is the logical issue of its origin; (5) Anticipation of its Future (195-9), by which vague and isolated aspects of an early idea should be seen, fully grown or realized, in subsequent developments; (6) Conservative Action Upon Its Past (199-203), by which doctrinal development should conserve and illustrate, rather than contradict, the preceding developments; (7) Chronic Vigour (203-208), by which the doctrinal development persists over long periods of time and is not transient. With this system, Newman effectively historicized theology in the English speaking world, and, along with John Stuart Mill, Auguste Comte and numerous other pre-Darwinian philosophers in other disciplines (including Victorian political economy), had dynamized once static categories in a startling an innovative way.

Newman finessed this argument by demonstrating the inadequacy of the rationalist and scientific processes, as they were interpreted in his day, outside an intellectual tradition of the type described above. This line of reasoning—which was embedded in his sermons

¹⁰ Entertaining sport could be made by transforming Newman's system into the Lakatosian frame, with Catholic categories mapped on to the hard core, positive heuristic, negative heuristic, protective belt, degenerating and progressive research programmes, and so forth, but ultimately none of Newman's test criteria are empiricist in nature and, as already mentioned, he presumes as true what he sets out to test, and hence it must remain an analogy only. A better analogy, however, is perhaps with the pluralist methodological approach advocated by economists such as Bruce Caldwell, in which many prescriptive criteria, rather than a single criterion, are used to demonstrate a theory's worth.

and pamphlets of the 1840s and 1850s, but particularly developed in Development of Christian Doctrine, and later in Grammar of Assent (1870)—clearly drove his understanding of how secular knowledge, not just theological knowledge, developed. Newman anticipates the anti-justificationist and post-structuralist writings of the twentieth century (from Popper to Derrida) by demonstrating the way that language, syllogistic logic and naïve empiricism are rarely able to achieve the end, namely objective truth with certainty, for which the Victorian man of science press gangs them. Newman, true to his Oriel heritage, never doubted the importance of logical reasoning and the use of one's senses (in the English empiricist tradition) in the process of making judgments (see Cameron 1962 and Horschild 2003 on this point), but he is adamant that they are of use only once their limitations are recognized. He believed that the object of out attention could not be grasped as a "whole idea" in an instant via the senses and especially cannot be captured in the written or verbal form (and certainly not through the study of a single discipline). In addition to skating over the normal anti-empiricist arguments (such as variations on Hume's problem, infinite regresses when tracking the empirical content of the premises in a chain of syllogisms, and the thorny issue of probabilities in scientific judgment), Newman argued that aspects of objects and their relations are grasped in different definitions, statements and hypotheses and at different times; these terms, concepts and contentions, as well as the syllogisms that constitute the scientific analysis, come alive only when they are deployed in different applications to concrete particulars; and they evolve in such a way that they strengthen and contradict each other until eventually they accumulate to approximate, but never capture, the "perfect image" of the reality ([1878] 1927, 56, 99, 125ff; 1870, 252 257, 267, 272, 340). Indeed, there are so many aspects to be considered that the successful conveying of the approximate "image" may be undertaken in entirely different ways: "Two persons may each convey the same truth to a third, yet by methods and through representations altogether different" ([1878] 1927, 56). The implication is that ideas become more clearly expressed the longer they are taught and the longer they have had time to evolve, even though, as we have seen, there is scope for their corruption (and presumably not all of the same tests would be required in the non-theological disciplines and hopefully one of these tests would be some sort of empiricist-oriented criteria to determine verisimilitude). 11 This evolution is also a collective effort rather than a simple product of individual judgment. Each individual does not grasp what he is trying to comprehend and is in a state of confusion and less than confident. Each individual's confidence, however, accumulates and each individual sees the modifications and perspectives of other individuals contributing to the tradition until the idea enters an institutional life of a society. Newman famously capped this analysis off in the Grammar of Assent by introducing the concept of an "illative sense" to describe how individuals finally give their personal assent to a contention relating to the objective world when the senses and logic do not quite permit this. Specifically, he argued that an implicit reasoning, driven

¹¹ The length of time that it takes for the image of the object at hand to come in view, which was often inter-generational, together with the broad nature of the articulated phrases eventually settled upon, explains why Newman became increasingly comfortable with the complex, and the then evolving, notion of Papal Infallibility. Judgments took so long to be derived and were open to so many interpretations once in their final form that a Catholic intellectual is rarely constrained in making his or her own judgments (see Dulles 1990).

by what he called ratiocinative faculty or illative faculty, allowed one to weigh the anterior probabilities of a contention, often sub-consciously, to close the gap between what logic allows and what assent requires (Newman 1870, 330ff). Furthermore, he believed that if an individual's mental powers are developed to dwell on higher values, this faculty is at a perfect pitch and is called the illative sense (as in good sense). This is itself derived from the Aristotelian tradition of developing ethical and intellectual virtues in an individual's constitution to allow him or her to make sound judgments. To Newman, it is this sense that drives the grammar of assent that is required for one's belief in God.

Newman's vision of doctrines (theological or secular) that evolve within a living tradition at a site-specific location, and which are tested by someone with a philosophical habit of mind to determine (or to illustrate in the case of Catholic doctrine) the extent to which the developments are healthy or corrupt (and to which assent is given via an illative faculty), was brilliantly innovative for the time in which Newman was writing. It was, however, also a very strange system to those of his contemporaries who were in the process of rejecting conventional religious beliefs while holding firm to the Lockian principle that conviction should be proportional to empirical experience that supports it. The superrationalist and hyper-critical Stephen brothers—the arch-conservative in the form of James Fitzjames Stephen (1870) and the radial liberal in the form of Leslie Stephen (1877)—consequently made good sport out of Newman's circular and gap-ridden logic, and what they stated then still makes entertaining and persuasive reading now. 12 Newman's anti-modernist inclination (held in check by his firm belief in the worth of logic and empiricism once their limitations were recognized) both anticipates the antijustificationist and linguistic-turn movements of our age and harnesses the conservative movements of his age. In fact, in relation to the latter, when taken out of its religious context and stripped of its innovations, his position is to some extent a mere as a riff on Edmund Burke's claim that an individual's judgment is necessarily flawed and that the "private stock of reason" is less than that contained in the living tradition. In other words, time and cooperation is necessary and we should all join Burke, as in his Reflections of the French Revolution, in availing ourselves of "general bank and capital of nations and of ages". It therefore has all the faults and merits of this approach. The claim that Newman's vision of the development of knowledge was a variation of English conservative political thought has been made many times before (see, for example, Kenny 1957), and it has validity, even if Newman was interested less in political stability and more in determining what is truth and right as Aristotelian ends in themselves. More

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¹² The Stephen brothers are a formidable force on this issue. Although they admired Newman's lyrical style and his capacity to argue (in their eyes) an unwinnable case, they ultimately thought that he was fraudulent in twisting reason for his own religious ends. Newman, they stated, presumed true what he set out to test; the tests (such as continuity, consistency and so are) can very well support any number of religions and, in any event, they are mechanisms that determine relative worth (such as Catholicism is superior to Protestantism), not absolute mechanisms that determine truth (since both religions could be wrong); any continuity and duration in Catholic Doctrine is due to the way that the Church was successfully established to serve the needs of the time at its birth, yet the results of continuity and strength that springs from this initial success are used to justify its existence in the present (which is a variation of the radical-liberal argument that there is no reason to believe any tradition embodies truth and virtue); assent via the illative sense does not lead to certitude and has little to do with establishing scientific truth; and so on. These and many other arguments, though themselves problematic in our post-modern world, provide a cool douche for those who accept Newman's admirable rhetoric in an unquestioning fashion.

recently, however, Alasdair MacIntyre (of *After Virtue*) has traced his non-Burkean defence of "tradition" to Newman, but without much explanation, and thereby has sent non-Catholics who are enamored with MacIntyre's approach back to read Newman both seriously and in a non-Burkean light (and invariably with an Aristotelian in hue; see Hochschild 2003). Whatever its precise roots, and for all its innovations, it is clear that Newman's higher-education vision did not materialize out of thin air, and it is itself part of an intellectual tradition that continues.

5. What is Missing in Newman's in Framework and Concluding Comments.

Thus, given the limitations of language, logic and empiricism and the inability to make personal judgments in an a-historical vacuum, students need to be prepared within a living tradition of interrelated disciplines so that they are raised to a sufficiently virtuous pitch (intellectually and morally, and captured in Newman's concept of the philosophical habit of mind) which allows them to make the right judgments. But the fact remains that, even with the insights gained from drawing on Newman's wider religious writings, there is a lack of comment on the precise mechanism by which any given tradition is conveyed from generation to generation. It is, I believe, insufficient to make references to selfperpetuating traditions, students teaching students, genius loci and charismatic dons. The reader is naturally left wanting more. The focus on the need for oral communication particularly leaves one unsatisfied. Surely instructors, like myself, who spend inordinate amounts of time trying to unpack the key strands of a tradition by articulating them in the written form, are not working in vain; surely their efforts to specify and map out the tradition in a written form, even if the result is never more than inadequate abridgments of this tradition, precedes (at least in the modern world) any discussion of this tradition with an interactive audience? Answers to these questions may, in part, be found within a broad-based intellectual movement that emerged in the mid-twentieth century (largely emanating from within the fields of the history and philosophy of science) that drew attention to the limitations of the Enlightenment quest to reduce knowledge to a set of articulated principles that could be taught, acquired and executed. Scholars from this period noticed that many intellectual activities seemed to be performed without the guidance of previously articulated rules and, further, that the unspecified knowledge actually guiding these activities could only be conveyed by demonstration within a master-apprentice system. One or two of these scholars (but *definitely* not all of them) also had clear sympathies with the liberal-conservative tradition established by Burke, if not the singular Anglo-Catholic tradition established by Newman, and hence their more precise accounts of what may be called the knowledge "baton transfer" problem may be interpreted as more sophisticated explanations of the issue with which Newman was grappling. Consider just four such prominent philosophers in turn.

Gilbert Ryle indirectly considered the transfer of ineffable knowledge in his critique of the mind-body dualism in the *Concept of the Mind* (1949) and attendant tracts. Specifically, in the process of rejecting the mind-body dualism of the "dogma of the ghost in the machine"—namely, our predisposition to make the category mistake of believing that any witnessable and intelligent performance (the machine) is preceded by a mental act of calculation involving previously learnt regulative propositions (the ghost)—

Ryle demonstrated that a range of activities (from cooking to fly fishing) are not performed by adhering to articulated rules; that even the limited number of regulative criteria do not have rules for their application to the varied scenarios; and that the more important skills for the successful performance of the activity are learnt, as acquired dispositions, via example, practice and criticism. Michael Polanyi, in his landmark publications Science, Faith and Society (1946), Personal Knowledge (1958) and The Tacit Dimension (1966 [1962]), similarly explained how ineffable knowledge is inculcated by introducing the concept of tacit knowledge. In addition to wheeling out the usual metaphors (from golf to swimming) to demonstrate how activities are not necessarily guided by regulative propositions and that such rules are no more than inadequate abridgements of the ineffable procedures learnt within the tradition of science, Polanyi argued that tacit knowledge—which is the subsidiary or instrumental knowledge that underpins the focal knowledge driving an intelligible action—is absorbed through imitation and criticism. ¹³ This imitative process, which on the primordial level of animals is called mimesis, requires students to place their confidence in, and bow to the authority of, those who are the leading practitioners in the field (1946, 206). It was in this context that Polyani famously drew parallels between scientific learning and the medieval guild system in which an apprentice absorbs knowledge by imitating a master (1946, 54). Thomas S. Kuhn took a similar line to Polanyi in *The Structure of Scientific Revolutions* ([1962] 1970), in which he expressed variations of the above ideas via the new lexicon of "paradigm", "incommensurability" and "scientific revolutions". Kuhn ([1962] 1970, 47) argued that the paradigm as "an exemplar" propels the paradigm as a "constellation of beliefs" into research activity, and explained how a novice immersing himself in a paradigm effectively learns by "finger exercise". Michael Oakshott, who is closest in alignment with Newman, also considered the transfer of ineffable knowledge in a range of works, but particularly in the essays contained in *Rationalism in Politics* (1962). He rejected the Enlightenment proposition that the discovery of abstract criteria would lead to unbounded prosperity and human happiness. ¹⁴ He drew on a range of metaphors (but particularly cooking) to show that much knowledge is imparted and acquired rather than taught and learnt. Such knowledge exists only in practice within an unfolding tradition, and the only "way to acquire it is by apprenticeship to a master—Not because the master can teach it (he cannot), but because it can be acquired only by continuous contact with one who is perpetually practicing it" (1962 [1947] 11). Any articulated rules are not

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¹³ The idea of tacit knowledge, now well worn, draws a distinction between the focal awareness of the object of our attention and subsidiary awareness of the instrument by which the object of our attention is manipulated. For example, when using a hammer to drive in a nail, the focus is on the nail being hammered even though it is the muscles of the hand which are being manipulated to conduct hammering (1946, 55ff). Thus the manipulation of the muscles, and therefore the hammering, is not undertaken directly (we are not focally aware of them), but indirectly via an examination of the hammer hitting the nail (the focus of our attention). Ability to manipulate the hammer is therefore subsidiary or instrumental knowledge rather than focal knowledge.

¹⁴ The similarities between the works of these scholars have drawn comment in the past. See Agassi 1981, 1-2 and Moleski 2006-7 for the sticky issue of the extent to which Kuhn drew upon Polanyi. (And see Masterman (1986 [1970]) for the different meanings of Kuhn's "paradigm" that have been used in the passage above). Lakatos (1971), Agassi (1981) and Franco (1990) have also drawn attention to the resemblance between the political traditionalism of Oakshott and the scientific traditionalism of Polanyi. For general a discussion of Oakshott, see Minogue (1975, 1991),

construed in advance of skilled activity and, as inadequate abridgements of the ineffable procedures actually followed, will never be more than a caricature of that activity.

Many other philosophers from the middle decades of the twentieth century could also be selected to illustrate the intense interest in the knowledge "baton transfer" problem at this time, but I believe that my key point has been made. These philosophers, at the very least, provide a vocabulary to better grasp the nature of Newman's argument that knowledge is most effectively transferred from master to pupil through extended contact in one location. Specifically, and with the full realization that a certain amount of lower-case "whig" historiography is at play, Newman's argument amounts to the claim that imitation, practice and criticism involved in the master-apprentice system is the best way that the unacknowledged tacit knowledge is transferred from generation to generation. This modern vocabulary also inadvertently draws attention to a point that may have troubled the reader throughout the above narrative; namely, the degree to which knowledge is actually ineffable. Nearly all of the aforementioned philosophers of the mid-twentieth century seem to restrict the idea of "ineffable knowledge", and hence the need to teach by demonstration, to certain activities that involve skill in applying traditional knowledge or to the deployment of procedures by which to expand traditional knowledge (i.e. the process of discovery and justification). Oakshott was the most explicit in delimiting that part of knowledge which is ineffable and that which is not by distinguishing between "technical knowledge", which is articulatable in a precise and logical form (and hence may be written down in a book, learned and put into use), and "practical knowledge", which is not susceptible to precise formulation and may only be inculcated through a living tradition. Ryle (1946) similarly distinguished between "knowing how" and "knowing that". This insight is of some importance, since Newman's vision may be unconvincing to those who believe that undergraduate economics is, in fact, accepted doctrine of the "technical knowledge" or "knowing that" variety.

I personally, however, do not think that it matters whether or not one thinks that economic knowledge is partly ineffable, even though I believe that some of it is patently so. The endless, effectively infinite, nature of the subject matter of economics is sufficient for Newman's model to hold and for ineffability to be effective by default. Specifically, the traditions that have been imposed on economics in the past by the various imperial disciplines that have swept over its domain, combined with the singular traditions that have emerged within its own boundaries, has created a body of knowledge that is impossible to convey in a lifetime, let alone a four-year degree, even if this knowledge is technical in the Oakeshottian sense. The effective limitless extent of this knowledge, combined with its Newmanite inter-connectedness, means that only elements of this knowledge and its relations can be absorbed, often as tacit knowledge, via personal and extended interaction at single site. Just consider the trivial exercise of teaching a constrained-optimization problem of the inter-temporal sort that may take up half an hour of an intermediate microeconomics class if resolved, via the ubiquitous bullet-point presentation, through the use of a Lagrangian. To fully comprehend the nuances of the constrained optimization problem (including the notorious problems that beset the problem) the student needs to be somehow made half-aware of a nest of complex, overlapping and unfolding traditions that include the energy-physics of

Marshall's day, the French mathematics of Euler's day, the syllogistic reasoning of Whatley's day, the risk-uncertainty ponderings of Knight's day, the husbanding of resources across real time of Smith's day, and so on and so on. The list is endless, and, even though articulating our thoughts in the form of lecture notes almost certainly assists the student in coming to grips with the problem, such written documents, and associated wooden presentations, will always be inadequate abridgments of the actual body of knowledge that is being brought to bear when working through this problem. The written document, useful though it is, simply cannot stand in for extended interaction in which a teacher, in response to a more inquiring student's question, states that the problem of real time has been considered elsewhere or, to enliven the proceedings on a tired class, provides an anecdote that Marshall was first trained in mathematical physics and that the mathematical methods on the page look somewhat borrowed, or, conveys an intuitive explanation of a mathematical tool in an absent-minded fashion that a student previously learnt by rote. These asides, anecdotes and off-hand hints sit in the student's mind to create a richer, usually unacknowledged comprehension of the tacit sort. The importance of what is being conveyed is often made by no more than a raised eyebrow.

This, I believe, is what Newman wished to convey. He may have been less than precise in his explication of the actual mechanisms that should be used to convey the complex traditions that are used in economics and elsewhere to enlarge a student's mind (in the Newman sense). The hints and illustrations he employed may have also been sufficiently opaque to allow me only tentatively to believe that his vision can be better gleaned by reading the works of Polanyi et. al. on tacit knowledge and the master-apprentice relationship. The reader of Newman is, however, at all times aware of what Newman believed to be bad teaching; namely, articulating blunt facts or adumbrated principles on an overhead that are disconnected from a tradition and which, in any event, are already contained in the text, and hence already available to the student:

Here then is real teaching...it at least recognizes that knowledge is something more than a sort of passive reception of scraps and details; it is something, and it does a something, which never will issue from the most strenuous efforts of a set of teachers, with no mutual sympathies and no intercommunication, of a set of examiners with no opinions which they dare profess, and with no common principles, who are teaching or questioning a set of youths who do not know them, and do not know each other, on a large number of subjects, different in kind, and connected by no wide philosophy, three times a week, or three times a year, or once in three years, in chill lecture rooms or on a pompous anniversary (D6, S10, 112).

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