



Education Through the Liberal Arts

Edited by Geoffrey Caban



WARRANE COLLEGE  
THE UNIVERSITY OF NEW SOUTH WALES

# **EDUCATION THROUGH THE LIBERAL ARTS**



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**Edited by**

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## Introduction

Geoffrey Caban

The papers included in this collection address a range of theoretical approaches to teaching and learning in the liberal arts. The contributors, all of whom are experienced educators in the higher education sector, have discussed in their papers a range of teaching and learning theories that have relevance for their roles and experiences as educators. They are all involved in the delivery of a BA (Liberal Arts) degree that adopts an integrated approach to teaching and learning in a range of liberal arts subjects including History, Latin, Literature, Philosophy, Science and Theology. The papers were developed as part of a diploma course in teaching offered by the College of Teachers at the University of London Institute of Education.

In producing the papers, the contributors drew upon examples from their research and professional experiences. The themes include the concept of educating learners for freedom and the pursuit of 'noble leisure'; the contrasts between self cultivation of the individual and utilitarian vocational training; the place of ἀρετή or virtue in teaching and learning; the integration of scientific method and the humanist ethical tradition in the learning process; the development of critical thinking in students; the enhancement of the tutorial experience; and the pedagogical challenges faced by historians of science.

In 'Teaching the History and Philosophy of Science and the Sociology of Scientific Knowledge', Luciano Boschiero assesses the capacity of Jan Golinski's *Making Natural Knowledge* (Cambridge, 1998) to encourage students to employ a critical approach to science and learning. Golinski's book, aimed at undergraduates, charts the character and development of the field of History and Philosophy of Science. Boschiero reviews the book with the purpose of determining the pedagogical challenges faced by historians of science in the classroom, and to emphasise the interdisciplinary nature of the field that encourages students to think critically about how knowledge is 'constructed'.

David Daintree describes the process by which a higher degree of professionalism was introduced into the tutorial staff of a university residential college during a period in the 80s and 90s when morale was relatively low and college life a correspondingly unpopular mode of student life. 'Collegiality in the Senior Common Room: the experience of Jane Franklin Hall, University of Tasmania, 1984-94' describes how students at the college, aided and stimulated through the recruitment of well qualified tutors, were successfully encouraged to extend themselves into new and positive areas such as music, drama, and social service.

Luke Holohan's essay titled 'Education, Politics and Freedom: Aristotle's *Politics* and the political task for Christian theology', argues that Aristotle's view of education as preparing learners for freedom, as set forth in Books VII and VIII of *The Politics*, is relevant to an important point of difference between contemporary approaches to political theology. Of particular significance is Aristotle's high ranking of the study of the liberal disciplines as opposed to the useful arts, since they equip the learner to pursue noble leisure, free from all that might restrict the cultivation of the life of the soul. That branch of political theology that gives primacy to political praxis, exemplified in the writings of J.B.Metz, upholds the notion of freedom, but it is a freedom that is not circumscribed by the metaphysical structure of human nature, nor subject to the mediations of divine grace. An alternative approach to praxis and freedom is provided by John Milbank, a member of the radical orthodoxy movement, who upholds Maurice Blondel's philosophy of action. This has greater resonance with the Aristotelian view of freedom, insofar as the highest realities, the grace and charity which have a divine origin, give determinate shape and meaning to human activity.

Amitavo Islam in his paper titled 'Goldman and Siegel on Education, Critical Thinking and Trust' draws upon the work of Alvin Goldman and Harvey Siegel to debate varying approaches to the fostering of critical thinking in students. Goldman has argued that it is justifiable, in many contexts, for students to trust the testimony of their teachers without seeking independent evidence or argument to support the veracity of their claims. Siegel has argued against the *veristic* view of Goldman, claiming that trust in the

testimony of teachers cannot justify belief, or at least cannot be central to education. Islam attempts to do justice to the intuitions of both sides in this debate, while leaning towards Goldman's position and taking issue with the details of some of Siegel's arguments against *veritism*. He suggests an analysis of the issues according to which reliance on trust is often justified, but to differing degrees in different disciplinary contexts.

In 'Wilhelm von Humboldt and his Ideal of "Bildung" - the self-cultivation of man', Angela Kolar contrasts von Humboldt's concepts of "Bildung" - the self-cultivation of individuals, and "Ausbildung" - the vocational training of man for the usefulness of the state. Kolar argues that von Humboldt's essay "Limits of State Action" (1791-1792) opened the way for a new approach to the education of the individual. The concept of "Bildung" involves individuals taking responsibility to explore the creative resources within themselves, observing and reflecting on the natural and social world around them, listening to and analysing the experiences and insights of their expert teachers, and re-absorbing these educational experiences into a self-examination of the possibilities of their individual contributions to the larger community. The maturing process of this growth in learning is inextricably interwoven with a consciousness of the moral responsibility towards one's fellow-man in the giving and shaping of creative potential in the wider social context. The essay explores the challenges to this ideal philosophy of the education of man – the tensions between the ideal goals of liberal education and the practical goals of vocational education.

'Integrated learning: Some reflections on Mary Shelley's *Frankenstein*' by Stephen McInerney explores the challenge, in Mary Shelley's *Frankenstein* (1818), to the growing Enlightenment separation of scientific method from the larger Christian-humanist ethical tradition and from the insights of the humanities in general. McInerney argues that Shelley's novel explores the consequences of pursuing scientific inquiry without recourse to any ethical or metaphysical considerations, and that it does so by providing a careful and nuanced critique of a one-sided education that fails to open itself to any larger view of the human person. He contends that in reserving its greatest

condemnations for Victor Frankenstein, rather than for the monster, Shelley's novel condemns a reductionist, scientific account of reality which ignores other modes of knowledge such as the poetic and religious. At the same time, the novel recognises the limitations and dangers of the Romantic reaction to such Enlightenment rationalism. An emotionally charged and chaotic approach to reality undisciplined by the natural sciences, on the one hand, or religious doctrine on the other, mirrors the very reaction Shelley was witnessing among her contemporaries, and which is embodied in the novel by Frankenstein's 'monster'. While Shelley does not offer a cure for this eighteenth and nineteenth-century malaise, or – as an agnostic – even believe in a cure, she does successfully diagnose the malaise.

Susanna Rizzo, in 'The Problem of ἀρετή in Plato's Paideia' examines the possibility of teaching ἀρετή or virtue, something that has been regarded as central to Plato's philosophical investigations. The paper demonstrates how Plato's failure to provide a working definition of virtue led to the inevitable identification of the latter with the cognitive process itself, and hence to the development of an ascetic mysticism which ultimately disengaged the individual from the community. Thus the pedagogical program of Plato, which aimed inherently at addressing the political crisis investing the Greek polis in the IV century B.C., failed in achieving the very goal it had set out to attain. Rizzo argues that the merit of Plato's philosophy of education resides in the fact that it initialised an important discussion as to what should constitute the object of education, rather than in its intended and failed outcomes.

It is appropriate that these educators in the liberal arts should pursue in their papers a range of themes and issues that reflect their educational mission, which is to provide their students with an integrated understanding of the influences which have shaped the development of human culture.

## Papers

Teaching the History and Philosophy of Science and the Sociology of Scientific Knowledge

*Luciano Boschiero*

Collegiality in the Senior Common Room: the experience of Jane Franklin Hall, University of Tasmania, 1984-94

*David Daintree*

Education, Politics and Freedom: Aristotle's *Politics* and the political task for Christian theology

*Luke Holohan*

Goldman and Siegel on Education, Critical Thinking and Trust

*Amitavo Islam*

Wilhelm von Humboldt and his Ideal of "Bildung" - the self-cultivation of man

*Angela Kolar*

Integrated learning: Some reflections on Mary Shelley's *Frankenstein*

*Stephen McInerney*

The Problem of ἀρετή in Plato's Paideia

*Susanna Rizzo*

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# Chapter 1: Teaching The History and Philosophy of Science and The Sociology of Scientific Knowledge

Luciano Boschiero

## Introduction: Social Constructivism

As an Honours history of science student grappling with the philosophical underpinnings of my chosen field, I came across Jan Golinski's 1998 book<sup>1</sup> on the historiography of science, which assisted me greatly in my studies. Twelve years later, I wish to take this opportunity to return to this text in order to reflect on some issues about how science works and how the history and philosophy of science is taught at the tertiary level.

In his survey of the various historical and sociological approaches to the study of science, Golinski asks undergraduate students, to whom the book is directed, to dismiss the traditional, popular views of science as an esoteric organisation independent of broader social and political concerns and interests. Instead, Golinski draws the reader's attention to a large body of literature, predominantly from the second half of the twentieth century, which describes the social construction of knowledge. That is, that scientific knowledge claims are not factual, objective representations of nature, but instead reflect the social and political aims and interests that are embedded in scientists' modes of operating: the way they build their instruments, interpret their data, negotiate the efficacy of their theories, and communicate their conclusions. In other words, natural knowledge is constructed according to social and political interests, criteria and processes.

This understanding of how science works, according to Golinski, has been developed predominantly during the second half of the twentieth century under the rubric of Sociology of Scientific Knowledge (hereafter SSK). Its most effective application, he explains further, is to the study of the history of science. Golinski's aim, therefore, is "to explore the implications of what I have called a 'constructivist' view of science for the

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<sup>1</sup> Golinski, Jan, *Making Natural Knowledge: Constructivism and the History of Science*, Cambridge: Cambridge University Press, 1998.

question of how its history is to be written”.<sup>2</sup> This aim fits into an over-arching objective: to articulate the directions in which practitioners of the history and sociology of scientific knowledge are moving.

It will be argued here that despite some shortcomings, the value of this book over ten years after its publication is in its capacity to encourage students to employ a critical approach to science and to learning. Through an efficient survey of the various constructivist views of scientific knowledge, Golinski provides students with the opportunity to pull apart traditional and popular myths surrounding science and its history. Consequently, this review will reflect on the pedagogical challenges Golinski presents for tertiary instructors in the discipline of the History and Philosophy of Science (HPS).

### **From Kuhn to the Sociology of Scientific Knowledge**

The first two chapters survey an historical lineage of sociological studies from Thomas Kuhn, author of the widely read *The Structure of Scientific Revolutions* (1962; second edition 1970), to the post-Kuhnian emergence of SSK, especially in British universities in the 1970s and 1980s. Golinski reports how at Edinburgh during this period David Bloor and Barry Barnes developed Kuhn’s central arguments in order to yield a constructivist sociology of scientific knowledge.<sup>3</sup> Firstly, they valued Kuhn’s dismissal of the traditional perspective of science as an objective domain for obtaining natural knowledge. Kuhn insisted that the construction of knowledge was not governed by a scientific method for conducting objective and unbiased research, but by a set of conventions negotiated by communities of leading, authoritative scientists.<sup>4</sup> According to Golinski, Bloor and Barnes then identified those conventions as the social and

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<sup>2</sup> Ibid., p.ix

<sup>3</sup> David Bloor, *Knowledge and Social Imagery*, London & Boston, MA: Routledge and Kegan Paul, 1982; Barry Barnes, *T.S. Kuhn and Social Science*, London: MacMillan, 1982.

<sup>4</sup> See: T.S. Kuhn, *The Structure of Scientific Revolutions*, Chicago & London: University of Chicago Press, 1970.

political processes that assist producers of knowledge to “sustain consensus in scientific communities”.<sup>5</sup>

The second point made by Bloor and Barnes draws from the Kuhnian notion of paradigms. They were particularly interested in how disciplinary sub-cultures work—how scientists in particular communities develop paradigmatic tools, techniques and theories in different disciplines at particular times and places. That is to say that knowledge claims are based on the way communities of scientists choose to work—how they construct instruments, interpret data, and communicate their findings—in their particular local settings.

Golinski shows that these central tenets of constructivist thought, based on the study of scientific activity as if it were any other human practice subject to social and political practices and standards, opened the way to a wide range of possible empirical studies of science in the late 1970s and 1980s. This involved mainly ethnomethodological studies of scientists at work in the laboratory, including observations of their modes of communication in the lab and through journals.<sup>6</sup> Thus Golinski writes that case-studies carried out by researchers such as Harry Collins, Trevor Pinch, Paul Feyerabend, Bruno Latour, Steve Woolgar, Michael Mulkey and others in the late 1970s and early 1980s, proceeded along the lines that were earlier established mainly by the Edinburgh School.<sup>7</sup>

Yet Golinski makes it quite clear in Chapter Three that these empirical studies in the post-Kuhnian tradition were divisive. “There were” he explains “significant debates which were to lead to the fragmentation of SSK by the late 1980s. The crucial question

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<sup>5</sup> Golinski, op. cit., p. 22.

<sup>6</sup> The classic example of such an approach to science studies are: Bruno Latour and Steve Woolgar, *Laboratory Life: The Social Construction of Scientific Facts*, Beverly Hills: Sage, 1979; and G.N. Gilber and M. Mulkey, *Opening Pandora’s Box: A Sociological Analysis of Scientists’ Discourse*, Cambridge: Cambridge University Press, 1984.

<sup>7</sup> See especially: Paul Feyerabend, *Against Method*, London: New Left Books, 1975; Harry M. Collins, *Changing Order: Replication and Induction in Scientific Practice*, London, Beverly Hills, New Delhi: Sage, 1985; and Trevor Pinch, *Confronting Nature: the Sociology of Solar-Neutrino Detection*, Dordrecht: Kluwer, 1986.

concerned the characterisation of the social realm that was used to explain scientific practice and the nature of the explanation being offered”.<sup>8</sup> In particular, following the example of early twentieth-century sociologist, Robert K. Merton,<sup>9</sup> several analysts took a much broader approach to the study of science and its history. In particular, in a widely-publicised work in 1985, Steven Shapin and Simon Schaffer explored the wider cultural realm in which knowledge was constructed in the seventeenth century.<sup>10</sup> Notions of gentlemanly conduct in Restoration England, they argued, shaped the way that scientists at the Royal Society of London carried out their investigations and communicated their knowledge claims. This approach, therefore, investigates the social construction of knowledge beyond the walls of the laboratory and encourages an historiography and sociology of science based on broad cultural context.

Despite their differences, Mertonian and post-Kuhnian analysts over the past forty years have all raised some interesting and innovative points about the need for historians and sociologists of science to remain sensitive to local settings and alert to the ways in which scientists discuss and negotiate the significance of their claims. Indeed, even when Kuhn returned to the topic late in his life, almost forty years after publishing *Structure*, he reflected on the social complexities and processes that are inextricably entangled in the production of scientific knowledge. “It was those difficulties”, Kuhn reflected “which drove us to observations of scientific life and to history”.<sup>11</sup> Herein lies the heart of Golinski’s analysis: how various constructivist perspectives of science and scientific knowledge in the second half of the twentieth century have inspired revisionist investigations into the history of science.

With that in mind, in Chapters Four and Five Golinski turns his attention to the persuasive and authoritative rhetorical techniques adopted by scientists in their private

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<sup>8</sup> Golinski, *op. cit.*, p. 28.

<sup>9</sup> Merton, *The Sociology of Science: Theoretical and Empirical Investigations*, Chicago: Chicago University Press, 1973.

<sup>10</sup> Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump*, New Jersey, Princeton University Press, 1985.

<sup>11</sup> Kuhn, *The Road Since Structure: Philosophical Essays, 1970-1993*, with an Autobiographical Interview [ed] James Conant and John Haugeland. Univ of Chicago Press, Chicago, 2000, p. 107.

and public pronouncements in the past. Additionally, in the tradition of post-Kuhnian studies, Golinski outlines how scientific observations and experiments have historically been laden with theoretical preconceptions as well as the social and political interests of the observers. Thus according to Golinski, and post-Kuhnian sociologists, historical inquiry of science confirms the sociological critique that scientific knowledge is socially constructed at various levels of scientific sub-cultures.

### **The Foundations of Education in the History and Philosophy of Science**

This opens up some important questions for tertiary instructors in this field. Traditionally, especially since the modernist movements of the nineteenth century, the history and philosophy of science has been taught in secondary and tertiary institutions in a rather one-dimensional fashion: scientists of the past who have, in the eyes of the modern viewer, contributed to scientific progress, have been deemed heroes of Western history. Such figures include Galileo, Newton and Darwin. Their contemporaries who took opposing views are seen by the traditional modern historian as enemies of progress encumbered by religion or metaphysical superstition preventing them from seeing the truth.<sup>12</sup> In the popular and traditional realm, members of such institutions as the Catholic Church occupy this place in history.<sup>13</sup> In other words, the history of science has traditionally been taught as a story of progress through the accumulation of reliable and objective knowledge of nature. In such a story, current accepted theories and claims about nature are considered when making retrospective judgements about scientists in the past. This is re-enforced by secondary and tertiary science curricula that emphasise the authority of scientific inquiry on the basis of the ability of scientists, through the application of a reputedly unbiased and efficacious Scientific Method, to avoid subjectivity, including social and political interests and pressures.

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<sup>12</sup> This naïve approach to historical inquiry is known as 'whig history'. See: Herbert Butterfield, *The Whig Interpretation of History*, London: G. Bell, 1931.

<sup>13</sup> For an overview of some common myths in the history of science and attempts to debunk these myths, see: Ronald L. Numbers (ed.), *Galileo Goes to Jail and Other Myths about Science and Religion*, Cambridge, Mass: Harvard University Press, 2009.

In contrast to this tradition, well entrenched in popular culture, and even in some scholarly educational circles, the Sociology of Scientific Knowledge is a relatively new domain and Golinski's description of its applicability to the history of science reveals something of a dilemma for instructors in this field. How can we deliver to students a greater appreciation of the social dimensions of the sciences and the social construction of scientific knowledge? How can we encourage students to think beyond the traditional and popular perspectives in order to reflect more critically on the historically complex local settings and sub-cultures of particular cases in the history of science? Golinski offers one solution in his book—by surveying the works of the past forty years, students can learn about the philosophical depth of the field and its leading practitioners. Furthermore, through an understanding of Kuhnian and post-Kuhnian thought, as surveyed in his book, students might begin to appreciate the relevance of SSK and HPS arguments to various disciplines.

We could, however, extend this approach much further than what Golinski manages in his book. Pre-dating Kuhn were the early twentieth-century philosophers who critically evaluated the history and philosophy of science. Scholars of this period interested in ideals of scientific and technological progress and their association with trends in economic theory, social class structures and political philosophy, were relevant to the sociological constructivist approach later developed by Kuhn and his followers. And this should be a rather important dimension of Golinski's book since it begins to draw on some far-reaching pedagogical issues. In particular, from an appreciation of the entire breadth and depth of philosophical, sociological, and historical literature from the past hundred years pertaining to science, students learn a very important lesson: that the constructivist view of science advocated by Golinski is inherently interdisciplinary. Indeed, critical inquiry of how science works incorporates skills relevant to a variety of scholarly fields.

Such interdisciplinarity calls upon an approach to learning characteristic of the classical liberal arts, crucial to the foundations of tertiary education. The virtues of wisdom and rationality, valuable to Greco-Roman philosophy of nature, politics and ethics, as well as

the dialectic philosophers of the early medieval universities, are often lost in the modern education of the sciences, which have become isolated from the humanities. However, the type of approach to scientific knowledge and the history of science advocated by Golinski and embedded in the roots of historical and philosophical inquiry of the sciences, encourages students to analyse critically the construction of knowledge claims, rather than simply leave themselves hostage to a flawed rhetoric of unbiased and objective scientific method.

## **Conclusion**

Golinski's book does not manage to achieve fully the aims he set for himself. This book, while very helpful for undergraduate students, offers only a snapshot of recent sociology of scientific knowledge. It does not provide a deep insight into the interdisciplinary roots of such inquiry. Neither does it develop an insight into the future of SSK and HPS. He does not, in other words, articulate a complete picture of where practitioners of these fields have come from or a model for where they should go from here. For instance, in recent years, historians, philosophers and sociologists of scientific knowledge have been engaging in research focused on public, private and institutional rhetoric and language. No such research is indicated by Golinski as a possible avenue for further ethnomethodological inquiry of scientists in the past and present.

Instead Golinski retraces the stances that SSK has taken in the thirty years prior to his publication, with no real critique of its limitations and strengths. Despite this, Golinski still provides an excellent overview of the field for undergraduate students, and that is where the value of this book lies - in its pedagogical application; in its potential to encourage students to look beyond widespread popular and traditional perceptions of science, in order to examine, with a critical mind, the cognitive and social processes of knowledge-making.

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## **Chapter 2: Collegiality in the Senior Common Room: the experience of Jane Franklin Hall, University of Tasmania, 1984-1994**

David Daintree

I became Principal of Jane Franklin Hall, a college of the University of Tasmania, in 1984. It was a college that had been saved from disaster by my predecessor. In four years she had brought it from half to full occupancy and had started to instill in the students a new spirit of pride: 'Jane' was at the bottom of the college pecking order, attracting those students who could not gain admission elsewhere.

But most of the tutors were irresponsible and disinterested. They were the old-style tutors common in Australian colleges – recent graduates wanting cheap accommodation and unwilling (perhaps emotionally unready) to extract themselves from college life. Occasionally young postgraduates make good tutors but they are a minority: we had to find a better way.

In my first year, having 'inherited' seven tutors, I brought the Senior Common Room up to strength (10) by making appointments of my own from the same source – recent graduates. My appointments were no more successful than my predecessor's.

The problem, I became convinced, was a systemic one. What kind of postgraduates take on tutorships for a 50% discount in fees, and what kind of service are they likely to deliver? What kind of caring, pastoral contribution can one reasonably expect from a twenty-one year old just starting a PhD? Unless the college is especially prestigious it will tend to attract not the best such tutors, but the weakest.

One of the unfortunate consequences of a weak Senior Common Room<sup>14</sup> is that the full-time 'day' staff generally dissociate themselves from the tutors, who are not thought of as staff at all, but rather as students of negligible usefulness. Whether they ran with the

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<sup>14</sup> I use the term in the traditional sense to mean the body of resident tutors and fellows, together with the head of college.

foxes or hunted with the hounds was of little consequence to the 'real' staff - they simply had no value in the scheme of things. This lack of respect for the tutors inevitably communicates itself to the students, leading to a downward spiral in which the tutors seek popularity among the students and identify more with them, as the disrespect of the other staff increases.

When I went to Jane I was asked whether I would like a Vice-Principal or a Bursar/Conference Manager, for the college could not afford both. I chose the latter and have never regretted that, except that it left me alone with the college at night, without truly professional assistance.

My solution the next year was to promote my best tutor (the only tutor who was not a recent graduate) to the position of Senior Tutor, raise her remuneration level, and increase her responsibilities. This worked well. Subsequently I appointed a second Senior Tutor from outside the college to take particular responsibility for administration. The appointee was a clinical psychologist who became counselor to the college. That left me with vacancies for eight young tutors of the traditional kind.

At this point I changed direction, driven it must be admitted more by circumstance than by intelligent strategy. Instead of appointing those eight tutors I found and appointed as Tutors three more experienced professionals, each of whom received entirely free board and lodging plus pro-rata payment for academic tutorials. The position was now financially attractive and acquired prestige. Such vacancies as occurred in later years attracted excellent applicants. I think that colleges have by and large expected too much from their tutors for too little for too long: if you pay peanuts you get monkeys.<sup>15</sup>

To summarise, instead of ten young tutors on 50% fee reductions we now had five experienced leaders on a free-board basis, to whom I would offer appointments of longer duration than a year once satisfied with their performance.

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<sup>15</sup> I should point out that the replacement of younger tutors with older ones was not done inhumanely: tutors in colleges have always been appointed a year at a time, so it was easy and painless to phase in the new people as vacancies occurred.

Once the changes had been completed, the residential staff (and they were now indisputably *staff*) were a teacher with the Education Department, a professional musician, a translator with a United Nations agency, a lecturer in Chemistry and a social worker. Their average age was about 35. Their average length of stay was four years, giving us (and them) a high level of stability. Not only were they now accepted as staff members, but they had executive status and any one of them could serve as Acting-Principal in the event of my absence from college.

Why were there five? Because there are five nights in the working week, and each Tutor was rostered to be in absolute charge of the college for one night a week (and one whole weekend in every five). Moreover physically the college happened to be divisible into five parts with a suitable apartment for a Tutor in each. An additional allowance was paid to each Tutor to provide appropriate entertainment at his/her confidential discretion for the group of students (approximately one-fifth of the whole) under his or her particular care. Further, each tutor was required to organize an event or series of events for the benefit of the *whole* college each year. So one Tutor was dean of studies with responsibility for managing all academic tutorials, another edited the weekly newsletter, another was the SCR Representative on the Library Committee, another directed the college choir. The six of us together met regularly to make all significant decisions regarding the life of the College, to determine prize-winners, and to appoint RAs.<sup>16</sup>

When the new system had just begun, and certain old disciplinary problems were still occupying too much of our time, I contemplated engaging a resident 'Proctor' to take charge of disciplinary matters, leaving the Tutors to attend to pastoral and academic affairs. I recall with gratitude and respect the decision of the Tutors of the day to oppose the proposal, on the grounds that such an appointee would come between them and their students. That was true professionalism.

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<sup>16</sup> The term RA (short for Resident Assistant) is an American one which came into vogue here in the 90s and was adopted by many Australian colleges in place of such terms as 'junior tutor'.

This systemic change had an effect on the attitude of the students. Abusive behaviour, binge-drinking and vandalism diminished in frequency and became relatively uncommon. The Student Club enjoyed as much autonomy as ever, but exercised it more responsibly and without that sense of defiance which so often characterizes such associations of junior adults when they feel themselves oppressed and have no respect for their oppressors.

The Senior Tutors were assisted by specially selected senior students, known as RAs, who were appointed annually from among a large number of *internal* applicants. This innovation had two striking consequences: firstly it has won to the service of the administration some of the college's best students, and gave them a sense of shared responsibility for the good order of the community; secondly, together with our complementary practice of appointing casual academic tutors as far as possible from within the student body, it gave good students an incentive to stay in residence longer, and helped them meet their costs. The RAs received a small flat and a reduction of 20% in their weekly fee. They were paid extra for taking tutorials.

We tried to leave discipline to the students themselves, but students generally do not like to fine their peers, and the Tutors and RAs were in practice usually called upon to take an authoritative position in such matters. By contrast it was part of our strategy that the Principal had an almost exclusively 'appellate jurisdiction' in disciplinary matters: by this means familiarity does not breed contempt, and the Tutors feel better supported if they know that the Head is there to back them up. In my experience it is usually unwise for the Head to become involved in any disciplinary matter in the first instance. I was never rostered 'on duty' (in another sense, of course, I was always on duty) and I never attended a college function in a disciplinary capacity, but always only as a guest. I could do this because of the professionalism of my support staff, and I knew that my backup role was correspondingly supportive of them.

Another pleasing consequence of our system was that the Tutors enjoyed a good relationship with the Fellows, a relationship which led to the emergence of a truly integrated Senior Common Room, always a desirable thing in a university college.

The remaining challenge was to maintain and promote that feeling of pride, involvement and responsibility which students ought to have for their college. We involved the Fellows in a 'home hospitality' and mentoring scheme. A successful choir and a flourishing drama group also emerged. An important change occurred in enrolments: whereas a few years previously Jane could barely fill itself at the beginning of each academic year, places became highly sought after. At our peak we were getting nearly three applicants for each vacancy. Numerous factors contributed to that, but undoubtedly the notion of compulsory tutorials for first-years, reflecting as it does a serious commitment to the prior claims of scholarship, attracted the right kind of student. But that would not have happened without the good quality on-site professionalism provided by our Tutors in harmonious conjunction with the equally talented and committed day-staff.



## **Chapter 3: Education, Politics and Freedom: Aristotle's *Politics* and the political task for Christian theology**

Luke Holohan

The first part of this essay will summarise the foundational principles of education as set forth in Books VII and VIII of Aristotle's *Politics*. In the second part of the essay, Aristotle's overarching view of education as preparing learners for freedom will be applied to an issue confronting contemporary theology: the theological debate concerning how freedom is best conceived and promoted and how we are to justify political theology and theologically-based interventions in the political sphere.

### ***The Politics: Books VII and VIII***

*The Politics* deals principally with how the citizen attains his *telos* in the context of the *polis* that is properly organized and administered, the most advanced form of human society. Books VII and VIII consider the best form of government and the role played by education (*paideia*) in bringing it about since "a state's being sound requires the citizens who share in the constitution to be sound" (Aristotle, 1981, VII. xiii, 1332a, 429). Education thus has a civic role as it produces virtue in citizens. It is also properly considered to be a public rather than a private responsibility, in view of its importance for civic unity. Habituation is one of three ways in which citizens become virtuous, the others being nature and reason (Aristotle, 1981, VII, xiii. 1332a, 429). Whereas nature provides the basis for virtue to develop, education does what nature cannot do, namely, instill practical skills essential for citizenship and for governing, and also philosophical aptitude through listening to reasoned speech.

Not only does Aristotle uphold the importance of education for the *polis*; he also provides a rationale as to which subjects ought to be studied, ranking most highly those disciplines which promote learning for its own sake. He excludes those useful occupations "which will turn the participant into a mechanic... render(ing) the body or intellect of free men unserviceable for the uses and activities of virtue" (Aristotle, 1981,

VIII, ii, 1337b, 456). However, certain useful arts that are deemed to be “proper for a free man” (Aristotle, 1981, VIII, ii, 1337b, 456) ought to be taught . He argues that four things are to be taught to children, “reading and writing, physical training, music and drawing” (Aristotle, VIII, iii, 1337b, 455). Although their utility is acknowledged, they also assist a person in the experience of leisure, in which are contained “pleasure, happiness and the blessed life” (Aristotle, VIII, 1981, VIII, iii, 1337b, 456). This noble leisure, in which are practised “the civilized pursuits of free men” (Aristotle, VIII, 1981, VIII, iii, 1338a, 456), is best prepared for by the study of liberal disciplines, which might be considered as ends in themselves. The learning entailed in these subjects equips the student for theoretical reason, whereas the learning gleaned from the useful arts is directed at practical reason (*phronesis*). This division parallels the division of the human soul into “two parts, one that ‘possesses reason in itself’ and another that does not, though it is capable of obeying reason” (Lord, 1982, 38). However, learning acquired through useful arts may facilitate theoretical reasoning, since drawing and music may lead to reflection on what it means to be formed correctly and on what it is that constitutes and reflects beauty.

The leisure that Aristotle suggests as being the highest and noblest human activity, and for which education is an indispensable preparation, is of a different kind to what moderns regard as leisure. Far from being merely a rest from work to enable one to work more effectively, it is an end in itself insofar as it enables a person to engage philosophically about matters of utmost seriousness. Although those involved in politics use leisure time to pursue things that are necessary for the well-being of the *polis*, this is not noble leisure, which constitutes “the end of the best life or the true source of happiness for the citizens of the best regime” (Lord, 1982, 56). An obsession with a subject’s utility is “unbecoming to those of broad vision and unworthy of free men” (Aristotle, VIII, 1981, iii, 1338b, 457). Thus a life of activism is less worthy than a life of philosophical reflection, since a person who leads a busy life is not truly free. The best form of education will promote the flourishing of the *polis* by the cultivation of the life of the soul, thus enabling the learner to be free of all that impedes him from living the best life.

## Theology and Politics<sup>17</sup>

From the earliest years of Christendom, Christian theology assumed a pre-eminent place in the educational curriculum, as exemplified in the title “Queen of the Sciences” in the medieval universities. Its estrangement from the modern liberal academy in the post-Enlightenment era is largely attributable to the widespread disdain among intellectuals for the claims of revealed religion, as they responded dutifully to the Enlightenment-inspired imperative, “*Sapere aude*”. This rejection of a major part of the intellectual tradition bequeathed to modernity, which included the tradition of realist philosophy, was reflected in a similar rejection of the ancient tradition of aesthetic criticism. Thus the modern era’s “assumption of a sharp disjunction between aesthetic experience and ordinary experience, culture and society, ‘art’ and ‘life’” (Lord, 1982, 17) was as significant a rejection of Aristotle’s teaching on education as Cartesian skepticism was a rejection of Aristotle’s metaphysics. Carnes Lord summarises the effect of this new perspective as follows:

“If culture serves a purpose at all, that purpose is essentially private – the amusement of an imaginatively privileged few or of a public in search of entertainment. It should not – if it is genuine culture, it cannot – consciously undertake or indirectly serve to improve the tastes, educate the opinions, or shape the behaviour of the public or its leaders.” (Lord, 1982, 18)

Many modern theologians accepted these developments. However, one term that was central to Aristotle’s view on education retained great appeal, namely, “freedom” but it was used in such a way that Catholic theology appeared to move further away from its Aristotelian heritage.

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<sup>17</sup> The major part of the content of this section is based on a paper delivered by the writer at the Biennial Conference on Philosophy and Religion held at the Catholic Institute of Sydney in October, 2008.

One of the most controversial developments in contemporary theology has been its politicisation and its attempts to offer guidance on important secular issues. This has been most pronounced in Latin American liberation theology which has attempted to appropriate a Marxist ideology and integrate it with Christian doctrine. Political theology has a rich and varied history, with Augustine's *Civitas Dei* being perhaps the most famous foray of Christian theology into matters of secular morality. On the basis of the aforementioned arguments of Aristotle in *The Politics*, however, it would seem that such interventions represent something inferior to what should be the proper contribution of intellectuals to our understanding of the highest theological realities, which should be considered for their own sake and not for the sake of specific political outcomes.

The most prominent Catholic contributor to the movement known as twentieth century European political theology has been Johann Baptist Metz. Metz's political theology has its provenance in idealist philosophy and it is largely shaped by the shadow of the events of recent history, in particular, the impact of the atrocities of the Nazi regime. The hermeneutic he adopts is political – faith must necessarily express itself by way of social and political *praxis*. He issues a strong critique of a privatised religious sensibility, because of which society is at risk of succumbing to a distorted anthropology in which there is no place for interdependence and solidarity. Emancipatory social action is said to have a certain primacy in the theological project. However, there still needs to be a dialectic between *praxis* and theoretical principles which can function as interpretive and strategic criteria governing the *praxis*. This contrasts clearly with Aristotle's ranking of theoretical reason over practical reason. Metz would not concede the pre-eminence of philosophical reflection over political *praxis*.

According to Metz, an important aspect of the dialectical process is the attempt to articulate ways in which engagement in liberating *praxis* provides access to the transcendent reality of God's saving activity in and through the Christ-event. Metz has suggested that the basis of this process is Christian faith in the God of history, including the history which has yet to be lived and recorded. God is said to be no longer "above" history. He is himself "in" it as "its free uncontrolled future" (Metz, 1969, 22-3). The

*praxis* itself constitutes an actualisation of our freedom and it finds its ultimate explication in the hope-inspiring eschatological vision of a world renewed and transformed in view of its status as *God's* world (Metz, 1969, 89-90, 96). The Church's fundamental task is thus to claim responsibility for society, to act as the guarantor of its future (Metz, 1969, 50) and to assist in the shaping of the public ethos in ways which proclaim and reflect the freedom of Jesus Christ and which uphold that freedom as a "dangerous memory" (Metz, 1980, 88). On this basis, it would be entirely appropriate for theology to concern itself with politics, if we accept what Charles Davis has described as the right conception of politics, namely "the realm of human freedom and community in the pursuit of values" (Davis, 1980, 20).

There is probably no more severe critic of Metz' theology than Joseph Ratzinger, who claims that its main deficiency is its lack of metaphysical foundation. Thus, he argues, that for Metz, "no human nature exists for which history is the mediator, only the rough draft *man*, the ultimate form and scope of which is determined by *this* particular individual who, out of the rough draft, *creates* a man" (Ratzinger, 1987, 160). If we accept this description of Metz's view of nature - and the Hegelian pedigree of his ideas would help to account for it - then there are implications, too, for how we are to interpret the notion of freedom in Metz. The Belgian moral theologian, Servais Pinckaers, has classified the two versions of freedom in Catholic moral theology as "freedom for excellence" and "freedom of indifference" (Pinckaers, 1995, 327-378). Freedom for excellence, a concept that has a clear Aristotelian resonance, is said to "develop principally in us through a sense of the true and the good, of uprightness and love, and through a desire for knowledge and happiness" (Pinckaers, 1995, 357). It is a morality of attraction, and it is contrasted with a morality of obligation, stemming from freedom of indifference, the outcome of the nominalist attempt to defend divine freedom by asserting that God is free to command what he likes, unfettered by the restrictions of any supposedly immutable nature that is apprehensible to human reason. Pinckaers suggests that all versions of freedom based on "a human will to self-affirmation" fall into this category (Pinckaers, 1995, 338). Metz has buttressed his own treatment of freedom with an eschatological reference point and the hope that this engenders might suggest

that it qualifies as a freedom of attraction. But for Ratzinger, it nonetheless remains a freedom that is, for all intents and purposes, arbitrariness, and a political theology constructed on such a foundation will be susceptible to relativism.

If we thus concede that an Aristotelian account of freedom cannot accommodate a theological framework that exalts liberating *praxis* without first accounting for how this relates to human nature, we are left to contemplate the possibility that the project of political theology is fundamentally flawed and that the dialectic between *praxis* and theory will inevitably give greater prominence to the former over the latter, thus violating the order of priority set forth so clearly in Aristotle's *Politics*. In relation to this, John Milbank has defended the legitimacy of political theology by referring to the theory of action proposed by the French Catholic philosopher, Maurice Blondel. Blondel's phenomenological analysis of action upholds the "freedom for excellence" concept, even though its historicist methodology differs from classical formulations of philosophical realism. Action, it is argued, has the character of "self-immolation" and risk, based on a faith that a correct, non-arbitrary synthesis will be discovered, since there is a ground that holds together the products of our action (Milbank, 2006, 214-215). Thus freedom, for Blondel, is more than that capacity for self-actualisation which is a fundamental anthropological fact. It is a freedom exercised against the background of the unconditional gift that is God's creative and salvific economy. Indeed, human action is both a participation in and a response to that free divine gift, the profound depths of which we discover as we act. In this way, Blondel affirms the reality of a transcendent divine grace and the mediation of supernatural charity, so that our series of actions are, in Milbank's words, "the endless interplay of creative... redemptive and sanctifying... mediations" (Milbank, 2006, 216). Blondel's concept of self-dispossessing action and of "supernatural knowledge as mediated through human creative endeavour..., 'supernatural pragmatism'" (Milbank, 2006, 209), is said to be a helpful resource for the development of a social and political theology that is capable of an adequate critique of an existing secular order. But, so it is argued, European political theology is unable to achieve this because of its commitment to "foundational *praxis*" (Milbank, 2006, 209) which fails to adequately account for the contours of that *praxis*.

Although this is evidently a more exalted view of the active life than that of Aristotle in *The Politics*, it does accord pre-eminence to the highest realities, which in Christian theology consist of the workings of divine grace.

## **Conclusion**

Although modern political theologians such as Metz retain much of the vocabulary of Aristotle's *Politics*, particularly the way in which the goal of education and a fulfilled life is freedom, the metaphysical basis of this freedom is not established. Blondel's analysis has the potential to provide a basis for political activity that draws its inspiration from reflection on the most profound realities, in a way that is faithful to Aristotle's reflections on education, which stress that lower things are to be taught for the sake of higher things and that freedom is to be understood in terms of seeking and achieving what is best for mankind.

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## Chapter 4: Goldman and Siegel on Education, Critical Thinking and Trust

Amitavo Islam

### Introduction

Modern Era calls for the reform of education, from at least the publication of Rousseau's *Emile* onwards, but particularly in the twentieth century, have typically been couched in terms of advocating a move from a model wherein the student plays the role of a passive recipient of knowledge, a vessel to be filled, to a model involving the student's *active* and *critical* engagement.

The conception of the student as *active* as opposed to *passive* can itself be resolved into a number of components. It rests upon a conception of education as being about an ongoing *process* rather than a *static* end-state, and as involving the transformation of students not just in relation to given *thoughts*, i.e. the claims they accept as true, but in their intellectual *capacities*, *methods* and *dispositions* (cf. Siegel 2005). (The student 'learns how to learn'.) Moreover, the *intellectual* aspect of education is seen as intertwined with the *practical* – education affects how one acts or chooses to live, as well as how one thinks. (One doesn't just interpret one's world, one changes it.) Further, it rests on the idea that the driving force behind this dynamic process of intellectual/practical transformation derives from *within* the student him or herself. (The student's *free curiosity*, a particular disposition, is engaged.)

The related conception of the student as developing (to use Kantian terminology) a *critical* rather than a *dogmatic* intellectual disposition involves emphasizing that the student is being encouraged, via the process of education, to develop not just a disposition or tendency towards having *true* beliefs, but towards having only true beliefs that are held with *rational evidential justification*, in that the student can see for herself that they are rationally supported by the evidence, in a way that does not depend purely on trusting the opinion of others. That the teacher can see rationally that the claims in question are supported by the evidence, and indeed knows them to be true, is on this

conception not enough. The rise of this conception, emphasising a critical attitude, is an example of the unfolding, into particular departmental discipline, of an idea historically central to the Enlightenment – the idea that, in Locke’s often-quoted words “we may as rationally hope to see with other men’s eyes, as to know by other men’s understandings” (1997, Bk I, ch. iii).

In a relatively recent foray into the theory of education, the prominent contemporary epistemologist Alvin Goldman (1995) has argued, partly on the basis of work on the epistemology of *testimony* by C.A.J. Coady (1992), Richard Foley (1994) and others, that this model emphasizing *critical* thought may be of more limited applicability than most advocates of educational reform realise. He argues for an epistemological outlook he describes as ‘veritistic’, i.e. truth-oriented, which involves the following doctrines.

Firstly, that in certain cases where a claim is in fact true, one’s belief in the claim can be of epistemic value, and indeed one can be justified in believing it, even if one has not or cannot justify one’s belief in it *evidentially*. (I’ll take ‘evidential’ justification to amount, roughly speaking, to justification deriving from rational consideration of any evidence that might be available other than the evidence of pure testimony. It thus includes as a degenerate case any instances of purely *a priori* justification that might exist and excludes any justification that might accrue from pure testimony. No foundationalist connotations are intended by my use of the term ‘evidential’. In particular, incorrigibility is not of course being assumed as a precondition of a proposition’s counting as evidence. The support offered for a hypothesis by a justification may take the form of an epistemically ‘holistic’ or ‘coherentist’ choice between alternative theories explaining or explaining away the putative evidence, in some of which theories the hypothesis figures and in others of which it does not. Via a process of moving towards reflective equilibrium, we make an inference to the best overall explanation, thus ruling out the alternative theories. This picture may be contrasted with the less holistic picture of what it is for evidence to support a hypothesis that one finds in, say, classical accounts of induction, wherein the putative evidence is treated as given, and the ambient theories are ignored. The term ‘critical thinking’ is probably most aptly applied, to a process of

rational consideration of a hypothesis in the light of putative evidence, when that process is understood in a more rather than less holistic way – one subjects a hypothesis to criticism by considering how well theories containing it compare with alternatives that deny that hypothesis, a process that begins with the question ‘how might my hypothesis be wrong?’.)

The second doctrine involved in veritism is that even though evidential justification and critical thinking are of epistemic value, they are not so independently of their tendency to lead to true belief. Harvey Siegel, one of Goldman’s foils in his original paper, argues against Goldman’s view in (Siegel 2005) and for the view that the value of evidential justification and critical thinking (‘rational belief’, as he puts it) is not derivative of their being conducive to true belief. I’ll describe Siegel’s position here as the view that said value is *non-derivative*.

Siegel moreover subscribes to the position that

*... true belief simpliciter cannot be a suitable epistemic aim either of teaching in particular or of education more generally. Rather, the aims of true belief and rational belief (as well as that of fostering students’ informed and independent judgment) are tightly intertwined, and equally necessary, in any education worthy of the name. (p.350)*

Despite Siegel’s making statements that can be seen as sympathetic to the idea of a *plurality* of epistemic aims in education, this latter claim seems to me best read as a stronger one than the mere claim that rational belief is of non-derivative value and that it is therefore *one* of the epistemic aims of education. (The weaker claim is compatible with the view that true belief is *another* independent and important epistemic end and that true belief is therefore of *some* significant epistemic value even if it isn’t evidentially justified.) The stronger view is that true belief that isn’t evidentially justified isn’t worth having *at all* (or is of negligible value) - that true belief *simpliciter* not only cannot be *the* epistemic aim of education, it cannot even be *a* suitable epistemic aim. (This stronger

view can be held in a form in which it is conjoined with the view that evidentially justified beliefs that aren't in fact true are worth less than those that are, and hence conjoined with the view that true belief is, on the one hand, a *further* end in the sense of adding extra value and is thus equally necessary to a full measure of value, while nevertheless, on the other hand, being an end that requires rational belief as a *precondition* of its adding value, and being therefore not an *independent* end). I think that this is what Siegel means to affirm when he states, subsequently to the claim of non-derivativeness, as a separately numbered point, that 'it is critical thinking, rather than testimony and trust, that is educationally basic.' (Siegel, p.345) I am reading him, that is, as denying the first of the two above-mentioned doctrines accepted by Goldman as much as the second. In any case, whatever Siegel's own views may be, it is only really the first of the Goldman's doctrines that has strong practical consequences for education, because it is only if that doctrine is denied that we are forced to the strong conclusion that belief on the basis of the teacher's evidentially unsupported word should never be encouraged, as it is epistemically *worthless* (or, at least, of *negligible* epistemic value).

In the rest of this essay I'll discuss more fully the nature of Goldman's claims, and Siegel's response. My conclusions, such as they are, will be very tentative, as I am not at all sure that the above terms in which the issues have been couched are capable of being used to adequately characterise what is genuinely at stake. (This essay was originally written in a context in which I was not envisaging publication.) My aim will accordingly not be to come down definitively on one side or the other, though I will lean towards Goldman's view, but to merely outline some objections to certain elements of Siegel's response (*section 3*), and to discuss one possible analysis of their relevance for the question of how we should understand the role of critical thinking in education (*section 4*).

What I will try to show in section 3 is that, firstly, what Siegel calls his 'bare difference' argument the conclusion that the value of critical thinking is non-derivative is flawed. And secondly, while I am very sympathetic to the spirit of the idea that critical thinking is important to education – agreeing that the influence of that idea has typically been

conducive to good educational outcomes, especially in the humanities – I will suggest further that the above-mentioned *strong* form of this idea, according to which it is *never* educationally appropriate to encourage true belief based on trusting evidentially unsupported testimony, only makes sense given certain epistemological presuppositions (structurally akin to Cartesian infallibilism) that are by no means obviously correct. The ideal of strong student autonomy is in other words fine in many contexts when understood as a heuristic, but should not be taken overly literally.

In the light of these criticisms, I'll in section 4 indulge myself in some speculations suggesting a more or less veritistic alternative picture that is intended to give due weight to critical thinking while yet being consistent with a certain limited role for trusting evidentially unsupported testimony. This speculative line of thought involves a pragmatic distinction roughly congruent with that between the humanities and the sciences, and suggests that trust may have more of a legitimate role in education in the latter than the former, where something close to (but still weaker than) the strong form of the student autonomy doctrine arguably makes sense.

## **Goldman**

To explain Goldman's argument, it will be helpful to begin by clarifying the precise nature of the Enlightenment view embodied in the Locke quote above, of which the emphasis on developing a critical attitude in students is just one manifestation. (Many philosophers have since come to think that the Enlightenment world-view, when taken to a certain logical conclusion, is incoherent or unsustainable or importantly partial, but I'm at present concerned not with arguing for or against the position but simply with describing it.) The view embodied in the quote is that one's believing a claim will be intellectually unjustified if one's reason for doing so is *merely* the fact that it was asserted by supposed authority X, even if the supposed authority X genuinely *is* an authority, i.e. knows the claim to be true. Why is it supposed not to help, that the person making the assertion knows the claim to be true? One argument: Even though what supposed authority X says was actually true and known by X to be so, that fact was irrelevant to your believing it. For if you believe the true claim that *p*, but believe it on the

*mere* say-so of supposed authority X, then you would have believed it even had the claim been false. One result of this is that your policy of trusting the teachings of supposed authorities leaves you open to being fooled – it makes you *gullible* (Siegel, p. 359).

The Enlightenment view is, therefore, that: *pure deference to or trust in supposed authority never results in intellectual justification*. This is not to deny that if some authority has proved a reliable source of information in the past, you might be intellectually justified in believing what they say. But that presupposes that you have independent justification for believing them to be reliable. *Pure* or *irreducible* deference to supposed authority never confers intellectual justification. (Note that intellectual justification via testimony can not only *arise* but can count as *evidential* according to our earlier definition, as long as the reliability of the testimony is not simply taken on trust but has ultimately been established on non-testimonial grounds. What it won't count as is *non-testimonial*. “Non-testimonial justification” and “evidential justification” are thus not synonymous terms.) Again, you might be justified in some prudential sense in believing what some supposed authority says, if they say that they will make life hard for you if you don't make yourself believe it, but this is not the intellectual sense. Pure deference to supposed authority never confers *intellectual* as opposed to *pragmatic* justification.

This was felt to be an important departure from the philosophical practices of the medieval scholasticism. Scholastic practice was characterized by a certain *dialectical* method in philosophy and theology in which arguments from various authorities are systematically analyzed and weighed up against one another, and this was seen by later critics as a practice of weighing up the authorities rather than the arguments.

The Enlightenment ideal was that you should in contrast always think for *yourself*. Whether the person whose supposed authority you're following has good reason for making the claim is neither here nor there; the question is whether *you* have good reason for believing him. We are all free individuals with the intellectual responsibility to

not merely repeat formulae, but to internalize fully the reasoning justifying what we give assent to.

Goldman (1995) explains this view, in its application to education, as follows:

*Many writers on education stress the need to respect the student's autonomy. Students, like all people, have a prima facie right and responsibility to be self-governing, and in the epistemic sphere this seems to mean that they have the right and responsibility to make belief decisions for themselves. Now in a sense, this is trivial. There is clearly a sense in which everyone necessarily makes their own belief decisions. How can one person literally make a belief decision for another? What is presumably meant by a thesis of autonomy, then, has something to do with the rejection of trust. Strong autonomy would say that nobody should ever trust another in the sense of accepting what they say simply because they say so. If a hearer is justified in believing P because some speaker asserts P, it must be because the hearer has reasons to trust the speaker. Such trust has to be earned; it cannot come automatically. So teachers are not entitled to expect students to accept what they say simply because they say it.*

He then goes on to question the blanket applicability of this picture. He concurs with Coady (1992), and classically Thomas Reid, that we often accept the testimony of others as true on the basis of *trust* or *faith*, without our having independently established the reliability of our informants - without our even having the *ability* to do so - and that we have no choice but to accept that under appropriate circumstances this can be perfectly rational.

This won't amount to a *proof* of the belief thus formed, of course – only at best a *fallible* and *defeasible* justification, open to rational revision. As he (1995) puts it, following Foley (1994):

*when my own opinions conflict with those of a testifier, the prima facie authority of his testimony may be defeated or overridden by my opinions (especially when I take myself to have expertise on the subject in question). Thus, it isn't always appropriate to place*

*final trust in other people's say-so. Nonetheless, as a default position, trust in others is warranted even when one has no independent grounds for certifying their reliability.*

Note therefore that accepting the sort of role for trust that Goldman envisages by no means requires denying the Enlightenment tenet that all beliefs should be open to criticism. That trust or faith should sometimes be understood as being in order does not imply that immunity from criticism should also be so understood.

## **Responses**

Now, it is hard to deny that we often rightly take testimony to provide *some* measure of justification for belief in what is testified to. If someone tells me the time it is hard to deny that quite often I end up justified in believing that such and such is the time. The question that then divides the proponents of epistemic autonomy from others is that of whether this justified belief arises entirely from autonomous non-testimonial evidence to the effect that witnesses are likely to be reliable (based perhaps on induction from individual experience). Note, however, that although knowing the answer to this question is of obvious theoretical interest, it may be argued that it does not make much difference for practical purposes. For even if the affirmative answer more congenial to proponents of epistemic autonomy is correct – an answer that Hume argued for and that the likes of Coady (1992) more recently argue against – it will remain the case that we are entitled to live our lives in accordance with the general presumption that we can often justifiably base our beliefs on testimony, without the addition of any further non-testimonial reasons for belief peculiar to that particular case. Would this not in effect concede to theorists such as Goldman, who wish to redress what they see as an overemphasis on student autonomy, the practical question of the sort of epistemic policy students may legitimately be encouraged to adopt by educational authorities? If a stranger may justifiably rely on information provided by a passer-by (whether or not it is on the basis of some argument, not itself based on testimony, that such testimony is typically reliable), why can't a student justifiably rely on his or her teacher? (cf. Adler, 2006; Wiener, 2003).

One possible response would be to argue that, while deferring to the teacher's expertise is indeed a *minimally* epistemically legitimate course of action for the student, it is not, even when it leads to true belief (and even if a reductive non-testimonial explanation can be given of why it is minimally legitimate), the *best* available course of action, and hence ought to be discouraged. And one could argue that the reason why this is the case is as follows:

1. Being able to justify one's beliefs evidentially is always of intrinsic value over and above any instrumental value derived from the tendency of that ability to lead to true belief.
2. So possession of an evidential justification always *raises qualitatively* the level of worth of one's belief.
3. Moreover, even if a general principle of reliance on testimony can be justified evidentially, there is a *further qualitative difference* between different sorts of evidential justification, in favour of purely non-testimonial justifications over those that proceed via testimony.
4. So there is at least one qualitative difference between true belief on the basis of non-testimonial evidence and that on the basis of luck or testimony, whether or not a general principle of reliance on testimony can be justified evidentially.
5. So the best outcome with respect to any given truth would be for the student to believe that true proposition not just by luck or as a result of accepting testimony but as a result of entirely non-testimonial evidential justification.
6. So the best policy to advocate is for the student to positively pursue non-testimonially justified belief, which tends to produce true belief as well, and for the student moreover, on the negative side, not to believe his or her teacher's claims unless the student can see that they are justified in the light of such non-testimonial evidence.

Now, whether or not he would agree with this sort of reasoning, the initial claim that evidential justification is always of independent non-instrumental value *vis a vis* truth is what Siegel is indeed concerned to argue. (Note that this does not in itself conflict with the view that pure testimony provides *some* significant degree of justification and

amounts to more than pure luck. After all, additional evidence always raises the level of epistemic worth, even if the justification one has originally is evidential – this can hardly be used to argue that the original level of justification is therefore zero or negligible. Nor does this show that the original level of justification that might be seen as arising from pure testimony cannot rise to the level required for the true belief to count as knowledge. As noted above, however, Siegel in fact does seem to take the stronger position that pure testimony – ‘testimony and trust’ - is of zero or negligible epistemic value.) It is instructive here to consider what Siegel calls his ‘bare difference’ argument. He asks us to consider the example of Mario and Maria, who both believe the same true claim, but for purely lucky reasons in the former case and purely evidential reasons in the latter case. The bare difference is that there is evidential justification in Maria’s case and not in Mario’s. It seems plausible that the level of epistemic worth of Maria’s belief is higher, as Siegel says.

Nevertheless, there are a number of objections to be considered here. Firstly, Siegel’s ‘bare difference’ argument in effect moves from 2 above to 1 above. He says: ... *[the] superior value [of Maria’s belief] is independent of the belief’s instrumental tie to truth, since, by hypothesis, both Maria’s and Mario’s beliefs are true.* But 1 does not follow from 2. What the example does plausibly show is that the higher value of Maria’s belief (in the sense of her believing with respect to that claim – her belief in the sense of the proposition believed cannot be of higher value) is not a result of an instrumental tie to the truth of *Maria’s belief* (i.e. to Maria’s believing-truly with respect to *that* claim). For if leading to the truth of *Maria’s belief* (her believing-truly with respect to that claim) were all that was valuable in its being held on the basis of non-testimonial evidence, then Mario’s belief (his believing with respect to that claim), with respect to which the corresponding end - *its* being true (*his* believing’s being a believing-truly) - is already satisfied, should have the same level of value. What the example doesn’t rule out, however, is that what is valuable in Maria’s belief’s being held on the basis of non-testimonial evidence is that holding it on such a basis involves exercising, and therefore honing, a capacity for evidential reason that not only helped her reach the truth in this case but *will help her reach the truth in other cases*, and is only valuable as a means to

that wider end. This view, that 2 does not rule out, still describes the value of a belief's being held evidentially as being purely instrumental with respect to truth in general, though not with respect to the truth of the particular belief in question. We might describe this as the view that the value of evidential justification lies in its *global* as opposed to *local* truth-conduciveness. So, whether or not the claim of non-derivativeness is true, the 'bare difference' argument does not establish it.

Now, as a response to this, it might be argued that it doesn't really matter, for the concrete educational policy question of whether 6 indeed describes the best epistemic course of action for students to follow, whether 1 follows from 2, as long as 2 is indeed true (together with 3), because we can derive 6 from 2 (together with 3) via 4 and 5 whether or not 1 is true. (For the sake of argument, I'll grant the truth of 3, which may be argued for on the basis of the idea that judgements based on pure testimony are prone to error of a sort peculiar to that class of judgements, viz. errors stemming from mendacity or bad faith on the part of one's informant.)

This brings us, however, to a second objection, to the effect that 6 doesn't really follow from 2 (together with 3), because it doesn't really follow from 5. According to this objection, what does follow from 5 is that, *in any particular case*, it is better to have a true belief that is evidentially and non-testimonially justified (and thus valuable on, so to speak, three counts – being true, and evidentially justified, and non-testimonial) rather than a merely true belief (valuable on one count) or a mere true belief held on the basis of testimony (valuable on no more than two counts). But the policy of pursuing rational non-testimonial belief and eschewing belief unless it can be substantiated rationally and non-testimonially is not guaranteed to maximise value measured in this way. Following that policy would indeed have the outcome that certain truths would come to be believed on evidential non-testimonial grounds, thus maximising the value of ones relation to *them* (for otherwise they might well not have been believed at all, or might have been believed, but not on evidential non-testimonial grounds). But following the policy may also have the outcome, with respect to certain *other* truths that one isn't in a position to gather non-testimonial evidence for, that one's relation to *those* propositions

would be rendered *less* valuable than it would otherwise have been, because one could have believed those true propositions on testimonial grounds, or just by luck, had not one followed the policy. It is only if one entirely discounts the epistemic value of true belief that is possessed on testimonial grounds, or just by luck, that the latter prospect is guaranteed to represent no loss of epistemic value. Indeed, this might seem an obvious point – generally, that a certain feature has value doesn't automatically mean that, given the overall cost-benefit analysis, one should go about maximising it, if other features have independent non-zero value too. Certain trade-offs may be necessary.

Now, as noted earlier, Siegel does seem to be assuming what is necessary to make the argument under consideration work - that mere true belief is of negligible epistemic value. And for this sort of assumption there is a famous precedent. The policy of believing only what can be justified non-testimonially is analogous to Descartes' advocated policy of believing only that which is immune to doubt, i.e. certain, and eschewing belief in what is merely probable. And, analogously, Descartes' policy would make sense if one's only epistemic desideratum were that one should never believe a falsehood (or if, less categorically, one were to place overwhelming negative value on believing a falsehood relative to the value of believing any number of truths). If, however, one places some non-zero (or in aggregate significant) value (relative to the disvalue of believing a falsehood) on believing truths whether or not they are certain, then it is possible that following Descartes' policy will lead to missing out on believing some (or a sufficient number of) truths that one would otherwise have believed, and hence will lead to missing out on some non-zero (or significant) value that one would otherwise have enjoyed. As indeed was in essence noted soon after Descartes published the *Meditations*. What Siegel advocates, therefore, is arguably based on presuppositions structurally akin to those of Cartesian infallibilism – presuppositions that, equally, are not obviously true.

Another way of describing this analogy is as follows. With both the policy Descartes advocates and the policy of eschewing belief based on pure testimony, we have a putative source of information – in the one case, sensation, in the other testimony. In

both cases the supposed information could be in error. In both cases the question, then, is that of whether one's epistemic policy should be entirely driven by the negative desire to avoid having been led into error (as opposed to giving some weight to the positive desire to believe truths). The only difference is that in the latter case the policy in question is less totalitarian than in the former case – one eschews not all judgements that could be in error, but only those from a certain class (viz. judgements based on pure testimony) that are particularly prone to error, or to error of a certain sort, stemming from mendacity or bad faith or ignorance on the part of one's informant. One way to understand the motivation behind an affirmative answer is to see the motivation as lying in an analogy with our moral behaviour, in which most of us place far greater weight on the negative goal of avoiding acting in a morally blameworthy way, in contrast to the positive goal of acting in a supererogatorily praiseworthy way. A variant of this way of looking at the motivation identifies the affirmative answer to the question with a deontological as opposed to consequentialist picture; avoiding acting a blameworthy way is obligatory while supererogation is not, and no amount of good consequences – believings in truths – makes up for acting contrary to duty – believing on inadequate evidence. (cf. Siegel, p.354)

## **Speculations**

Now, let me describe a possible further moral that can be drawn from the just-described two objections to the numbered argument above. Drawing that moral involves one's accepting as plausible, in the light of the first objection, the thesis that *global* or *aggregate* truth-conduciveness is the primary desideratum for an epistemic policy, with any independent value possessed by evidential justification being secondary (if indeed the value of evidential justification is not, as the strict veritist would have it, entirely derivative). This is to take epistemic value as for the most part instrumental, as value arising from being a means to the end of truth in the aggregate. It also involves accepting as plausible, in the light of the second, the thesis that we should be thinking in vulgarly consequentialist *cost-benefit* terms of *trade-offs* between the goals of true belief at the global level, lack of false belief at the global level, and any positive value for autonomous evidential justification over and above those. I'll not jump to conclusions as

to whether these theses are correct, but will instead simply consider what their consequences might be.

We'll see that accepting these theses leads, via a set of considerations not exhausted by those I've already discussed, to the view that policies insisting on a *strong* conception of student autonomy (wherein premises asserted by the teacher to be true will be believed only if the student discovers or is presented with a non-testimonial evidential justification) are, in contexts of a certain sort, probably not even heuristically the best means to our epistemic ends. Moreover, it suggests that such policies can in those contexts hinder not only the pursuit of the goal of true belief but also the very process of critical thinking the advancement of which they might be supposed to encourage. On the other hand, it suggests also that such policies, or something close to them, may be appropriate in a different sort of context, for the reason that they are in those contexts arguably more truth-conducive than alternative policies that do not stress student autonomy. (The background machinery I will describe is similar to that developed in Goldman, 1999, ch.3,5.)

The difference between the two aforementioned sorts of context is roughly that between education in scientific disciplines and education in the humanities, and the considerations I'll examine can be seen as one articulation of the idea behind such commonplace observations as: *the history of philosophy is relevant to philosophical understanding in a way that the history of a science is not relevant to scientific understanding*, and: *topics that once fell under the rubric of 'philosophy' cease to do so after expert consensus is reached as to basic principles, and come to fall under the rubric of 'science'*. The distinction suggested by these considerations will be a largely pragmatic and contextual one, as opposed to any strong semantic or metaphysical distinction between the *Naturwissenschaften* and *Geisteswissenschaften*.

How does this line of thought proceed? To begin with, suppose that we are presented with a teacher's testimony that a certain set of claims is true. If *global* truth-conduciveness is our primary epistemic end, then the 'act' (so to speak) of believing

those claims will tend to raise epistemic value to a degree depending not only on whether *those* claims are true, but also on whether one's believing those claims tends to lead to one's believing *other* truths. That is, the act of believing those claims will be valuable to a degree depending to a great extent on how well they serve as a *springboard* to impel the believer on to belief in further truths.

And indeed any other act involving that claim can also be assessed in relation to its truth-conduciveness, its efficacy leading to an increase in true belief globally (quite apart from any independent epistemic value it may have, which for the sake of argument we are assuming to be secondary). In particular, the act of seeking a non-testimonial evidential justification for the claim can be assessed in this way. Now, as mentioned earlier, one way in which seeking non-testimonial evidential justification might have this effect is in virtue of honing the investigator's general capacity for evidential reason, thus increasing the likelihood that beliefs acquired in future will be true. Moreover, one's coming to grasp that such and such considerations constitute a justification for belief in a given claim is in itself a matter of coming to grasp a truth. And of course there is the obvious point that if the original claim in question is false, seeking a non-testimonial evidential justification for it and, presumably, failing to find one, will tend to weed it out.

We'll see, however, that another avenue via which such a search may be truth-conducive is that the consideration of alternative views involved in critically assessing a given true claim may in a certain way assist in deriving other true claims from it. A search for non-testimonial evidential justification may, in other words, serve in a certain way to improve the efficacy of true belief as a springboard to further true belief. Equally, we'll see that in other contexts engaging in such a search can hinder the efficacy of true belief as a springboard. The outcome of the cost-benefit analysis (of the policy of searching for a non-testimonial evidential justification for what is testified to) can differ from context to context.

To see how this context-dependence might work, some scene-setting may be in order. Consider the idea that it is at least heuristically useful to talk about a difference

between, on the one hand, disciplines in which there are more or less *no* object-level truths about the correctness of which there is an established expert consensus, and in which various competing views as to more or less *any* given principle or hypothesis may well each contain a significant element of truth, and on the other hand, disciplines in which there is such a thing as ‘normal science’, involving certain (of course fallibly) established theses about which there is expert consensus, the vanquished opposition to which can reasonably be treated as unlikely to contain any relevant insights. In the first category we have disciplines like philosophy and history. In the second we have disciplines like physics and mathematics.

We can take it for granted that ultimately critical thinking is crucial to education in both these categories of discipline. If the student is going to advance these disciplines, he or she will need to weigh up issues at the cutting edge of the field, over questions as to which there is no consensus. But arguably there is a difference at the beginner’s level.

In the first category, discussion of any matter (e.g. the causes of the First World War, or the nature of linguistic meaning) solely within the confines of a single one of the competing theoretical frameworks is worth relatively little. The student will miss out on the insights offered by rival schools. So, in such a context, beyond whatever intrinsic value critical thinking has, investing in it will pay dividends with respect to truth. (Recall that we are assuming that critical thinking, with respect to a hypothesis that has been presented to one, will typically take the form of an epistemically ‘holistic’ or ‘coherentist’ process of comparing the merits of alternative theories, in some of which the hypothesis figures and in some of which it does not.)

In the second category, the likely or expected return on investment in comparing a standard claim at the beginning level with alternative hypotheses may be far less. Had the astronomy student but world enough and time, there would no doubt be something that he or she could learn from being exposed to the details of, say, the ptolemaic theory of the solar system, but a more fruitful strategy in terms of truths believed would be to accept the principles of celestial mechanics as given and learn how to apply them.

Now this reasoning for the view that different courses of action are to be recommended with respect to the two different sorts of discipline is based on the assumption that within disciplines of the first sort, each of a number of theories that might be studied contains a significant element of truth not present in the others, whereas, within disciplines of the second sort, rivals to the standard theory can be presumed not to provide any significant insights not already provided by the standard theory. So that in the former context, but not the latter, sticking to the one theory involves foregoing exposure to significant insights. So in the former context, it pays dividends to diversify one's portfolio, so to speak. But in the latter, one doesn't typically bother to learn, just for the fun of it, what are overwhelmingly likely to be false theories containing no insights, because this involves an opportunity cost in relation to further parts of the true theory that one might have invested one's time and effort in learning.

But, having set the scene in this way, there is a *second* argument that can be offered for the difference in recommended course of action between the context of the typical humanities discipline and that of the typical science, one that applies even if we refuse to be ecumenical/syncretic about it and *don't* assume that in the former the various competing theories each contain significant elements of truth. Moreover, this second argument involves the notion of using one true belief as a springboard to others, in a way that the first one doesn't. According to this alternative argument, what is nevertheless the case is that in the humanities context it is all but impossible to come to understand a given theoretical perspective without at certain points contrasting it with rival accounts. That is, the student cannot develop his or her understanding while remaining entirely within the ambit of one consistent theory, even if that theory is the objectively correct one, but can only do so by considering various mutually inconsistent viewpoints. In particular, it is all but impossible to learn how to derive consequences (deductively or otherwise, but typically otherwise) from the relevant theoretical principles, without the aid of such contrasts. Derivation of consequences proceeds *dialectically*, in other words. For example, the student's coming to understand what the consequences a Kantian deontological moral theory has with respect to a concrete

situation will often require his or her appreciating the contrast with a consequentialist analysis. Or again, understanding the relevance, with respect to the interpretation of a particular text, of a manifesto expressing a reader-response perspective in literary theory will likely require understanding the contrast with a New Critical account.

There is no need to be overly categorical about this. Even in cases within the humanities where one *can* teach a theory in some form without drawing attention to such contrasts, appreciation of such contrasts would greatly *improve* understanding, which is at least partly a matter of increasing the net quantity of correct or appropriate applications (of the theoretical principles in question) that the student finds himself or herself able to make. That is, even where it might seem *possible* to teach a theory in the humanities in a completely monologic or ‘dogmatic’ fashion (as perhaps in certain particularly stereotyped treatments of scholastic metaphysics) it is hard to deny that such an approach is likely to yield importantly cruder learning outcomes than a dialectical approach – the student’s application, to novel concrete situations, of the theoretical point of view being expounded is likely to be mechanical at best and offer little in the way of fresh insight, and to be straightforwardly off the mark at worst. (Trying to avoid this was presumably part of the reason why the Medieval *questio* structure arose in the first place.)

Also, there is no need to deny that typically there will be large areas of the space of potential alternative accounts that will remain unexplored as part of the inferential process – it will typically not be the case that alternatives will be considered to *every* claim made as part of the theory. Many claims – including both high-level principles and very specific claims about particular cases - may be treated as common background assumptions accepted by all parties. The point is simply that investment in genuine consideration of *some* alternative views can pay very large dividends. (I say ‘genuine’ here because the dividends will typically not result if one caricatures the alternative positions in question – the opposing position needs to be drawn clearly and correctly if this is to serve the end of understanding clearly and correctly the nature of the position one wishes to expound.)

On the other hand, one can, according to this second argument, learn to see what follows from statements of *scientific* principles *without* the aid of such contrasts. One can learn to apply Newton's Laws and infer from them further truths about particular cases without considering any alternative theories. It may *somewhat* aid the learning process if the teacher contrasts a correct application of the theory with various incorrect applications, but typically one can do without them without significant loss of accuracy in drawing the appropriate inferences, and in any case they do not involve rival positions in a debate, in the sense of involving theses that have actually been espoused by parties to the debate. The idea is that there is a 'clarity and distinctness' to scientific concepts (the relation of which to the Cartesian notion of clarity and distinctness I'll leave open) that makes them amenable to being reasoned with relatively straightforwardly.

Note that the process of learning how to draw inferences from the principles may serve *implicitly* as a critical comparison with potential alternative theories, the assumption being that if the situation is that the observational consequences inferred using the laws are in accord with the facts, then the *prima facie* likelihood that any alternative principles we might devise will be similarly congruent is sufficiently low as to warrant our concluding that the laws in question are part of the best explanatory theory. But this does not require *explicitly* considering actually formulated rival theories (and still requires taking the teacher's word for it that the inferred consequences *do* fit the facts). Note, relatedly, that technically speaking the point is not so much that learning a scientific theory need never involve explicitly considering propositions inconsistent with the theory – one might, for example, find it necessary to derive a consequence from basic principles by something like *reductio ad absurdum*, which will involve considering the negation of the proposition one wishes to establish. Rather, the point is that in such a case the proposition that one considers will typically not represent part of an alternative view that any party to the debate has actually espoused.

In sum, the idea of the second argument is that in scientific contexts the *springboarding* process, via which coming to believe one truth leads one to further truths, can take

place in a *vacuum*, so to speak, whereas in humanities contexts the process requires the aid of an *atmosphere* consisting of alternative theories against which one can beat one's conceptual wings and thus correct one's trajectory. One can then argue, further, that in the humanities the more points at which one considers alternatives, the more accurate and fertile the springboarding process will be, hence providing a rationale for something rather like a strong student autonomy policy. It will fall short of such a policy in that it won't require that absolutely every claim be criticised by way of contrast with alternative views, but it will say that *ceteris paribus*, up to a point of diminishing returns, the more such criticisms we consider the better.

So, in the sciences, consideration of alternative viewpoints can be argued to be typically unnecessary for derivation of consequences from already accepted claims; in particular, for application of already accepted principles. And not only will a focus on explicit consideration of alternatives by students, as a preliminary to deriving consequences from principles, thus be contra-indicated on the basis of an argument that such a focus involves *opportunity costs* in terms of truths believed, one can argue as well that ultimately such a focus can *actively* hinder or interfere with the very process of critical thinking that it is intended to advance. Or, to put it another way, eschewal of a policy of encouraging (at every level of instruction including the most elementary) attempts at justification of principles (via comparison to alternatives or otherwise), as a *preliminary* to deriving consequences from them, is at least in the sciences arguably a decision that, far from being *at odds* with an emphasis on critical thinking (particularly at more advanced levels), rather works in *favour* of such an emphasis, when the notion of critical thinking is properly conceived. For critical comparison between various full-fledged theories that differ at the cutting edge requires *understanding* what the theories in question actually are, what the principles involved actually imply. And in the sciences, teaching a student to understand a given theory, which is a matter of understanding the implications of the principles involved, not only *can* precede (or, at least, proceed independently of) attempts at justification (via comparison to other theories or otherwise), it arguably *should*, on pain of courting confusion. (The 1960s experiment

with 'New Math' can be seen as providing an illustrative example of a similar point, *mutatis mutandis*, in the context of mathematics education.)

In other words, it is part of the student's learning to apply his or her faculty of critical thought, that he or she must develop a significant stock of thoughts to apply that faculty *to*, and in some cases taking certain principles on trust may be the best way to develop such a stock of thoughts; consideration of alternatives as a preliminary to deriving implications from them may in those cases be not just unnecessary, but may serve to confuse the student and interfere with the process of internalisation. Thus, not only is refusing to accept such claims on trust even provisionally sometimes the less effective policy in terms of truth-conduciveness, but applying it completely literally can be self-defeating, in that it may undermine the very process of justification that it seeks to promote. Where it seems arguable that pure trust can be reasonable, therefore, even if your ultimate goal is critical thought, is at least in cases where the teacher is introducing a student to a subject by making what are for the time being unsupported claims. It seems reasonable for the student to accept such claims provisionally, as postulates. (One may question whether such provisional thoughts need be *believed*, as opposed to merely *entertained*. Perhaps they *need* not. It is arguable, however, that they generally *are* believed, and reasonably so, in that taking them seriously in this way aids the process of evaluation. It is arguable, in other words, that to genuinely grasp a theory, a certain initial *cathexis* is required. This is something like the Natural Ontological Attitude, applied to truth.)

This last of my suggestions, then, with respect to the original issue of the role of trust, is that a strong student autonomy policy, mandating a strict eschewal of trust, can be counterproductive, whether one sees the main goal of education as true belief or as critical thought, because such a policy can in scientific contexts often work to *prevent* the student from developing (and hence coming to understand) the implications of a given principle to the point where it can be appropriately subjected to critical assessment (even if, in humanities contexts, in contrast, development of the

implications of a principle will typically *require* frequent consideration of alternative views).

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## **Chapter 5: Wilhelm von Humboldt and his Ideal of “Bildung” – the self-cultivation of man**

Angela Kolar

In the 1790's, when Napoleon was advancing a “democratic” vision throughout Europe with aggressive, oppressive militant means and with the “free” citizen at the centre of this vision for a bureaucratically controlled state, German thinkers responded overwhelmingly with a unique solution to the freeing of man. It was Wilhelm von Humboldt, predominantly, who came forth with the concept of “Bildung”, a very idiosyncratic German concept meaning not only the education of man, but also the inner, cultural self-development of the individual - that which shapes the unique qualities of individuals through a process of learning, discovery, examination, searching for self truth, and their relationship to the natural, physical and social world.

In his first major publication titled “Limits of State Action” (1791-1792)<sup>18</sup> Humboldt proposed minimum interference by the state on the freedom of the individual, so that each individual had the freedom to develop maturely in the sense of self-cultivation. His concept of “Bildung”, or free individual development, was later to be incorporated into an official program that introduced new initiatives in University education in Prussia as part of Heinrich Friedrich vom Stein's reorganization of the Prussian state. It was in his role of Minister for the Interior (February 1809 -1810) that Humboldt had the opportunity to reform the educational system. Friedrich vom Stein<sup>19</sup>, the inspirational leader opposing French imperialism, liberalized the Prussian state and provided the opportunity for Humboldt to unfold his philosophy of “Bildung” in a pragmatic program.

Although Humboldt had the talent to enter diplomatic service early in his career, he withdrew to contemplate the directions of man's development. The essay “Limits of

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<sup>18</sup> Wilhelm von Humboldt, Werke Bd I „*Ideen zu einem Versuch, die Grenzen der Wirksamkeit des Staats zu bestimmen*” 1792 pp 56-234

<sup>19</sup> Heinrich Friedrich Carl, Baron vom Stein (1757-1831) – Prussian Liberal statesman

State Action” was his first fruit of quiet reflection. It forms his first response and reaction to the French Revolution. It is a statement of an alternative form of development – that of an “organic development”, which is further developed throughout his essay “Theorie der Bildung des Menschen”<sup>20</sup> that encompasses the dynamic interaction of man with his natural and social environment and the inner processing of his individual responses. “... sucht man das zerstreute Wissen und Handeln in ein geschlossenes, die blossе Gelehrsamkeit in eine gelehrte Bildung, das bloss unruhige Streben in eine weise Thätigkeit zu verwandeln”<sup>21</sup> reflects the gathering of one’s learning and insights into focused and wise activity. An essential aspect to this organic development of the individual is the necessity of freedom, which is a central theme of his essay “Limits of State Action.” This deals with the minimal interference of the state in the inner development of an individual, and the necessity of the individual to mature to contribute to the dynamic organism of society, which will in turn strengthen the foundations of the state. So the emphasis is on the individual contributing in his learning and striving to the state, not on the state forming the individual.

Humboldt has a nostalgia for the Ancient Greek ideal of the focus on man himself. “Was nun dem character der Griechen das Daseyn gab, war dass in ihnen der Trieb, rein und voll Menschen zu seyn, sich durchaus herrschend zu machen verstand”<sup>22</sup> deals with the unfolding of his creative potential, physically, intellectually or artistically; the desire of man to perfect his creative potential into a work of art; and the contribution of each creative activity to a harmony of an organic society. The freedom of the individual enabled the freeing of the imagination to transform creative energy into practical activity,

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<sup>20</sup> Wilhelm von Humboldt, *Werke* Bd 1 c. 1794 pp 234-241 [Theory of the self-development of man]

<sup>21</sup> One seeks to transform the dispersed knowledge and actions in a directed, purposeful cultured self-development, the restless striving into wise activity. Wilhem von Humboldt *Werke* Bd I p.238

<sup>22</sup> Essay “Über den Charakter der Griechen” in Wilhem von Humboldt *Werke* Bd II p.67- That which determined the existence of the Greeks was their drive to have a sense of what is human in its purest and complete form.

“er besass daher gleichviel Fähigkeit zur reinen Spekulation, und gleichviel praktische Weisheit. Er war natürlich und idealisch, niemals chimärisch und phantastisch”.<sup>23</sup>

Following the Prussian reformer Stein’s defeat and domination by Napoleon, Humboldt had an opportunity to translate his desire to educate man to explore his own potential, and to release this potential within the framework of a supportive Prussian national social framework. In 1809-1810 Friedrich vom Stein gave Humboldt the opportunity to establish the University of Berlin and introduce his national program for the education of each person. The focus was not, as with Napoleon, on the state governing the role of the citizen through its civic code and bureaucratic structures. It was a counterpoint to that political, civic vision – one of freedom given to the individual to explore his own creative potential, to strive to impact upon the larger organic whole of the nation through his own personal evolving, and to seek the depths within himself to be drawn out and offered in creative activity to the organic whole.

A radical aspect of his program was that the nation was to contribute financially to the new University and educational program. He proposed that the University of Berlin would be supported by the endowment of crown lands and become financially independent. Education in the schools was to be open to all classes of people. The people of Prussia were not merely citizens of the state to contribute to the functioning of the state, but were individuals in their own right, to be valued as vessels of creative potential. The responsibility and independence of learning was to be returned to the individual. The individual was offered a rich educational framework to develop his potential across both the sciences and the arts.<sup>24</sup>

The professor - the expert, the specialist in his field - was to be the nurturing and inspiring teacher. The historian, the natural scientist, the philologist, the classicist, and

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<sup>23</sup> Ibid. p. 68/69 he [the Greek man of Antiquity] possessed an equal ability to think imaginatively and exercise practical wisdom. He was natural and idealistic, never whimsical and filled with phantasy.

<sup>24</sup> “*Antrag auf Errichtung der Universität Berlin Mai 1809*”0 [Application for the Foundation of the University of Berlin, May 1809] in Wilhem von Humboldt Werke Bd IV pp 29-38

the physician were to have freedom and space to continue researching and, from the activity of researching, to transmit the knowledge and ideas to the student, who in turn had the freedom to absorb, enquire, question and seek, and also develop the explorative activity of a researcher. The research was not only related to new intellectual ideas but could also be expressed in terms of translation to practical endeavours – physics, chemistry, the humanities and sciences were given equal value in their contributions to an organic whole of a maturely functioning society.<sup>25</sup>

This was a progressive program for the education (“Bildung”) of the individual and reflected the outcomes of an array of thinkers throughout the 1790’s on the refocus of the individual in contrast to the “freeing” of the citizen in the backdrop of the Napoleonic wars. Humboldt was a close friend of Schiller and in 1795 Schiller had produced a series of letters reflecting on the “Aesthetic Education of Man” (*Über die ästhetische Erziehung des Menschen, in einer Reihe von Briefen*). The mind of man was to refocus away from an emphasis on his position of power and reason and become inspired by beauty. The natural harmony and balance in the natural world was to be aspired to in terms of moral perfection and virtue – the soul contributing to peace within and to the social balances between man and man – “die schöne Seele”<sup>26</sup> (the beautiful soul), a concept originating in antiquity and developed further through the Christian, spiritual overtones of Pietism. But for Schiller ultimate beauty was to be attainable through art – through the subtle and refined formation of the creative imagination. It was to be the mediating force between the reason of the Enlightenment philosophers and the sensibility of our inner world. Art was a tangible expression of the mystery of the soul - not of its passions but of its need for transcendence into moral dignity. In *Anmut und Würde* (1793), an earlier essay, Schiller expressed this need for man to strive for the balance between grace and dignity. This essay lay the foundations for the unfolding of the thoughts on the aesthetic education of man.

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<sup>25</sup> See Wilhem von Humboldt *Werke* Bd IV “Berichte , Anträge, Denkschriften aus der Sektion für Kultus und Unterricht 1809/1810” [Reports, Submissions, Memorandums from the Department of Culture and Education]

<sup>26</sup> „Über Anmut und Würde“, Schiller, *Werke* Bd 4, p. 173

Schiller's reflections inspired romantic philosophers and writers to extend the notion of beauty further into the realm of the aesthetic whole, the "Bildungsanstalt" - the entire society engaged in interactive and creative development striving for artistic balance between inclination and duty, between sensibility and reason. Examples of these writings are Schleiermacher's *"Versuch einer Theorie des geselligen Betragens"* (1799); Schlegel's *Ideen* (1800); Schelling's *System der transcendentalen Idealismus* (1800); Novalis' *Heinrich von Ofterdingen* (1802). Novalis extended the aesthetic idea further into the "wonder of the world", the magic of the mystery of life arousing the power of contemplation.

Humboldt made every effort to pragmatically translate the notion of the "Bildungsanstalt" into the establishment of the University of Berlin, heralding a new age in the educational development of the individual. It was a contrast to the *École Polytechnique* in Paris established in 1802, a result of the educational reforms of Napoleon embracing at its centre the thrust of developments in rationalist Enlightenment thinking. Its focus was on vocational training, namely the training of citizens in being useful to the activities of the state.

In his inaugural address as Professor of German to the University of Durham in 1959, one hundred and fifty years after the proposal to establish the University of Berlin with a reformed educational program, Professor Scott highlighted another strong feature of the Humboldt reforms to University education – the encouragement of "Wissenschaft", the pursuit of knowledge and specialization in all the sciences and arts, paving the way for the expert. However, this was not without its dangers. The increased specialization led to an aloofness from life, a remoteness from reality, which taken to its extreme undermined the highest aim that Humboldt gave to freedom in the search for truth in each of the intellectual disciplines, which was to encourage a moral responsibility to the community as a whole in the transfer of knowledge/wisdom to the "organic" community. The individual has freedom for self-growth to mature sufficiently to impart his creative development to the harmony of the organic social community. As observed by

Schnabel, a renowned historian<sup>27</sup>, if the ideal of “Wissenschaft” is to be pursued in its clinical sense to the study of scientific detail, without reference to a greater whole the progress of the intellectual process can be undermined by an impoverishment of spiritual/moral values.

The tension between the educational ideals of Humboldt and the pragmatic aims of the era of Napoleon is a tension that has mounted and woven its way in a variety of forms to this day, two hundred years after Humboldt’s pronouncement of a new University with new ideas of the education of man.

The exponential growth in the sciences and corresponding industrialization led to formation of technical institutions responding to demands of practice and diminishing the freedom of expansion of the Liberal Arts. By 1890 Theodor Mommsen (renowned German historian 1817-1903) had coined the term “Grossforschung”<sup>28</sup> for large teams working in large laboratories co-ordinated by a research leader. This marked the beginnings of the division of research labour in the sciences and medicine, squashing the true Humboldt concept of the collegial research community where each member respected the creative, intellectual freedom of the researcher. Adolf von Harnack (renowned German theologian 1851-1930) stated the rapid developments in science had allowed its domain to become the prey of capitalism and to be exploited by large commercial concerns to increase the wealth of the state.<sup>29</sup> The Liberal Arts was increasingly pushed into the shadow of the large expansion and exploitation of the sciences.

Nationalistic cultural norms were being established in the large universities of the early 1900’s in Germany. It was difficult for intellectuals of minority groups to gain entry into academic positions, and an anti-semitic sentiment was infiltrating the “freedom” of the pursuit of learning. This cultural norm was extending itself also to exclusion of persons

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<sup>27</sup> Scott, *Wilhelm von Humboldt and the Idea of a University* p. 18

<sup>28</sup> Ruegg, “The Crisis of the German Model” in *A History of the University in Europe*, Volume III: *Universities in the nineteenth and early twentieth centuries* (1800-1945), p. 60

<sup>29</sup> Ash, *German Universities Past and Future: Crisis or Renewal?*, p. 7

of a particular political conviction, such as socialists. The open collegial community of the university was being dominated by nationalistic student associations. Nationalistic fervour mounted in Germany to the outbreak of World War I.

The outbreak of war threatened other forms of self-development. The need arose for the engagement of labour to support the war efforts, and for the further engagement of science in developing weapons and auxiliary mechanisms such as developments in aviation.

In the post World War I developments of the Weimar Republic, the renowned German economist Max Weber (1864-1920) made an exasperated claim that the Humboldt idea was dead, 'a myth from the past'.<sup>30</sup> Wilhelm Dilthey, (a prominent German philosopher prior to World War I 1833-1911), was also calling for a regain of the Humboldt ideas on University education.<sup>31</sup> However, during the Weimar Republic of the 1920's, in the years of the great inflation and depression, the Universities suffered lack of funding and students were forced to find alternative economic means to support their "individual" learning and self-development, therefore diminishing the opportunities for the necessary "freedom" to unfold and seek.

The rise of the National Socialist dictatorship further threatened the unfolding and regain of the Humboldt principles of learning – which only exemplifies the further strains and tensions between the University and the State. It could also be argued that the Humboldt ideals of moral responsibility, balanced out by intellectual freedom in the pursuit of truth, had crushed the moral conscience of the intellectual/scholar through the increasing exploitation of knowledge for the political and economic advancement of the state, and that this road of utilitarian developments had prepared the way for the political dictatorship of the National Socialists. The "Gleichschaltung" (conformity to the party line) of the National Socialists in the increasing exploitation of knowledge for the

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<sup>30</sup> Blueckert, "The first Crisis of the Humboldtian University" in *The European Research University: an historical parenthesis*, p. 117

<sup>31</sup> Ash, *German Universities Past and Future: Crisis or Renewal?*, p. 20

political and economic advancement of the state, had weakened the courage of the intellectual to speak out in favour of the harmony of the whole of society.

It was after the World War II that German intellectuals cried out for a return to the Humboldt ideal of the combination of “Einsamkeit und Freiheit”<sup>32</sup> – solitude and freedom in scholarship, in research and teaching – which involved the space for contemplation, the space for evaluating moral obligations along with advancement in knowledge, and the space to inspire the youth to think according to the values of responsibility towards their social counterparts in the larger social organic unity.

However, these ideals were again threatened by the crisis of mass student education in the 1960’s and beyond in a climate of ever expanding technology and correspondingly the rise of bureaucratization of mass educational institutions, reflecting the constant tension between “Bildung” (self-development and self-cultivation) and “Ausbildung” (vocational development). It was bitterly ironic that, in the post-war period of the divided Germany, the Humboldt University of East Berlin was situated in the capital of the totalitarian communist state of the “Free Democratic Republic” of East Germany.

As the totalitarian Communist regimes collapsed in Eastern Europe in 1989/1990 and opened up free market developments, and as technology advanced towards the development of the Internet of the 1990’s, the new phenomenon of “globalization” initiated the Bologna Process of Education in Europe. Its beginnings were at the Sorbonne Declaration of 25 May 1998 involving only a small number of leading players (France, Germany, Italy, The United Kingdom) followed by the Bologna Declaration 19 June 1999 incorporating 25 more countries including the major countries of the European Union and some non EU countries. The Bologna Process has been

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<sup>32</sup> “ Da diese Anstalten ihren Zweck indess nur erreichen können, wenn jede, soviel als immer möglich, der reinen Idee der Wissenschaft gegenüberstellt, so sind Einsamkeit und Freiheit (my emphasis) die in ihrem Kreise vorwaltenden Principien“. „Über die innere und äussere Organisation der höheren wissenschaftlichen Anstalten in Berlin“ [On the inner and outer organization of the higher educational institutions] in Humboldt, *Werke* Bd IV, p.255. See also Blueckert, *The European Research University*, p.99ff and Ash, *German Universities Past and Future*, p.10

developed along the lines of more modern forms of government-controlled accreditation and regulation procedures. These are developed first on national levels, but through the Bologna Process these regulation mechanisms are to cross national boundaries throughout Europe. The Bologna Process introduces norms across a historically diverse range of academic traditions. It introduces the post-modern forms of accreditation ranking, quality assurance (the governance and bureaucratic management of traditionally based academic institutions to support internationalization of students and faculty appointments), and increased mobility of students and the labour force across the European Union.

Globalization has also brought further new trends in management and business degrees originally imported from the USA (another post-World War II phenomenon) where education is applied to the economic activity of the state to increase its wealth and consequently its security and protection for its citizens. The concept of the MBA (Master of Business Administration) has not yet infiltrated the European forms of high education on a large scale, but certainly has expanded its base with its practical benefits for the economic welfare of society in England.

Nevertheless the Humboldt model of free research along classical lines has been resistant to these major infiltrations, although this resistance is now being tested through the Bologna Process. The challenge of the Bologna Process is to establish a “European Knowledge Society”, that is a “Europe of Knowledge” to become a world reference by 2010 <sup>33</sup> . We have arrived again at “Wissenschaft” (knowledge) for its own sake, as a means to establish power as a counterpoint to the economic imperialism of the United States. Has the individual in this mammoth Bologna process the opportunity to explore his moral and social obligation in relation to his new position in a larger more anonymous “standardized” society of Europe?

I had the good fortune to research and pursue doctoral studies at the University of New South Wales when Professor Michael Birt was Vice-Chancellor. On the occasion of the

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<sup>33</sup> Mazza, *European Universities in Transition: Issues, Models and Cases* p. 118ff

symposium to mark the centenary of the death of Cardinal Newman, held at Warrane College, University of New South Wales on October 13<sup>th</sup> 1990, Professor Birt addressed the symposium on the topic “Newman’s University – Idea and Reality”. Cardinal Newman was a visionary in his goal to establish the ideal university. In one of his major publications titled “the Idea of a University” (1852), Newman argued that the ultimate aim of university education is to be intellectual, to have the freedom to explore all areas of learning objectively. However, the added dimension was that the spirit of religion was not to be constraining the energy of the intellect, but this spirit would ensure a “unity of understanding”.<sup>34</sup>

Professor Michael Birt was an admirer and devotee of Newman’s contribution to educational development, and as a result of Newman’s influence upon him since childhood he was quite progressive in his introduction of Liberal Studies for students of Sciences at the modern University of New South Wales. All students enrolled in courses in Sciences or Applied Sciences were required to enrol in some Liberal Arts units to extend the horizons of their learning experience. However, Professor Birt reflected in his address that this inclusion of components of the Liberal Arts was not enough to enrich a student’s educational experience. There is a further deeper level now neglected in the modern, utilitarian universities. He posed the question as he considered the new developments of the inaugural establishment of the Notre Dame University in Western Australia and the Australian Catholic University in 1990:

“Will they, I wonder, have any chance to restore Newman’s ‘Idea’ – that of a Christian education in which all the secular sciences are treated fully, openly and frankly and all are related to the basic science, theology, which must embrace them all because its subject matter is the nature of the Divine Being? Can an approach of this kind again give coherence and significance to what (increasingly in the modern university) is an array of unrelated and apparently unrelatable disciplinary specialties? I hope that in the

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<sup>34</sup> Prof. Michael Birt “Newman’s University – Idea and Reality” in Birrell, *Newman and the Nature of a University* p.16

fullness of time the new universities will reopen and perhaps revivify enquiry into these issues”<sup>35</sup>

Cardinal Newman strove hard to keep his vision of his new University alive in Ireland, but it only survived seven years – he felt that his experiment had been a failure, albeit an honourable failure. The complex administrative processes to structure the university certainly provided a hindrance to the purity of dialogue between student and lecturer, but there were many other challenges - the politics within the world of the university and the politics without in the religious, cultural context of Ireland. As Prof. Birt well knows from experience as a senior administrator, “the linking of ‘idea’ and ‘reality’ was not simple”.<sup>36</sup> And so it was also with the grand vision of Humboldt arching over 200 years of educational history in Germany, but this still provided an inspiration, an ideal, a model to hold onto to this day, in spite of the changing forces of “reality”.

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<sup>35</sup> Ibid. p. 16

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## Chapter 6: Integrated learning: Some reflections on Mary Shelley's *Frankenstein*

Stephen McInerney

*"The relationship between science and the humanities is in an awful mess, and if we don't sort it out the role of the universities in husbanding and enhancing human civility will probably wither away."*

– Robert Young, *Sciences and the Humanities in the Understanding of Human Nature*<sup>37</sup>

Mary Shelley's *Frankenstein* (1818)<sup>38</sup> challenges the growing Enlightenment separation of scientific method from the larger Christian-humanist ethical tradition and from the insights of the humanities in general,<sup>39</sup> and laments (though it does not offer an alternative to) the loss of a governing metaphysic. Her novel explores the consequences of pursuing scientific inquiry without recourse to any ethical or metaphysical considerations, and it does so by providing a careful and nuanced critique of a one-sided education (whether focused on the sciences at the expense of the humanities, or vice versa) that fails to open itself to any larger view of the human person. In reserving its greatest condemnations for Victor Frankenstein, rather than for the monster, Shelley's novel condemns a reductionist, scientific account of reality which ignores other modes of knowledge such as the poetic and religious. At the same time, the novel recognises the limitations and dangers of the Romantic reaction to such Enlightenment rationalism – an emotionally charged and chaotic approach to reality undisciplined by the natural sciences, on the one hand, or religious doctrine on the other – the very reaction Shelley was witnessing among her contemporaries, which is embodied in the novel by Frankenstein's 'monster'. While Shelley does not offer a cure

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<sup>37</sup> Inaugural Lecture as Professor of Psychotherapy and Psychoanalytic Studies, Centre for Psychotherapeutic Studies, University of Sheffield, 25 May 2000. <http://www.human-nature.com/rmyoung/papers/pap131h.html> Downloaded 30/3/2010.

<sup>38</sup> Mary Shelley, *Frankenstein* (London: Penguin, 1992). All subsequent references to the work will be incorporated into the body of the essay.

<sup>39</sup> R.M. Young traces the separation originally to the seventeenth century, and, in the first instance, to Rene Descartes's *Discourse on Method* (1637). He describes the divide, forcefully, as 'stupid'. James Taylor pursues a related theme in his study, *Poetic Knowledge: The Recovery of Education* (Albany: State University of New York Press, 1998).

for this eighteenth and nineteenth-century malaise, or – as an agnostic – even believe in a cure, she does successfully diagnose the malaise.

Shelley's first reflection on education comes when Victor Frankenstein describes his childhood. An implicit contrast is established here between Victor and his closest companions – his step-sister Elizabeth and his friend Henry Clerval. To turn to Elizabeth first, we are told: "Harmony was the soul of our companionship, and the diversity and contrast that subsisted in our companionship drew us nearer together" (36). She is "calmer", while he is more "intense...sometimes violent, and [his] passions vehement" (36-7). While Elizabeth busies "herself with following the aerial creations of the poets, and in the majestic and wondrous scenes which surrounded our Swiss home" (36), Victor claims to be interested only in the "causes" of things – not the metaphysical causes of things, it should be stressed, but the physical causes (36). Still, as long as Elizabeth is with him, there is no problem. Without her civilizing influence, however – and here she clearly stands for the civilizing influences of *belle lettres* on emotional development – Victor, the would-be-scientist, claims he would have become "rough through the ardour of my nature, but that she was there to subdue me to a semblance of her own gentleness" (37). In this relationship, the romantic and the rational tendencies embodied by each are held in harmony, the diversity and the contrast drawing them nearer together.

Victor is also contrasted with his best friend, Henry Clerval. Like Elizabeth, Henry immerses himself in literature, not simply to satisfy his spirit of adventure, but also to understand morality and to imitate virtuous behaviour. He performs in plays, reads chivalric literature and delights in histories. Explaining the significance of this, Victor concludes:

*Clerval occupied himself, so to speak, with the moral relations of things. The busy stage of life, the virtues of heroes, and the actions of men were his theme; and his hope and his dream was to become one among those whose names are recorded in story, as the gallant and adventurous benefactors of our species (37).*

Victor, by contrast, while he follows “the routine of education in the schools of Geneva” (39), explains that he is not interested in grammar, law or political history: “I confess”, he says, “that neither the structure of languages, nor the code of governments, nor the politics of various states possessed attractions for me. It was the secrets of heaven and earth that I desired to learn” (37). Rejecting the humanities, and ignoring the theological implications of “the secrets of heaven and earth”, Victor exclaims: “Natural philosophy [science] is the genius that has regulated my fate” (37). After he discovers the works of the magician Cornelius Agrippa, whose ideas he takes seriously as science – as did some of Shelley’s contemporaries – his fate is determined: he reads only the works of ‘natural philosophers’ (in fact pseudo-scientific magicians) “with a fervent longing to penetrate the secrets of nature...the philosopher’s stone and the elixir of life” (39). This imbalance in intellectual formation sets him on his disastrous course, away from Elizabeth and Henry (and what they represent: the humanising effects of the humanities), to the University of Ingolstadt, where he comes under the “evil influence” of M. Waldman (45), and where he eventually creates his monster. The symbolism is clear: science, unrestrained by the insights of the humanities, itself becomes irrational and gives birth to irrational ‘monsters’.

Where does the much lamented monster fit in to this schema? Shelley’s novel is, among other things, an exploration of the influence of education on the *tabula rasa* of the creature. Having been abandoned by his creator, the monster is, in a very really sense, an autodidact, discovering knowledge about himself and the wider world first with the use of his five senses and – once these are developed – through his discovery of liberal learning. Once again, the monster which goes in search of his origin is the inversion of Victor Frankenstein, whose studies do not teach him to look for the author of life (the subject of metaphysics) but only to abstract the natural principle of life. This difference cannot be emphasised enough. Consider the questions the monster asks: “Who was I? What was I? Whence did I come? What was my destination? These questions continually recurred, but I was unable to solve them” (125). These are questions that one finds in catechisms, the great questions of existence; they are also

the questions that inspire liberal learning, questions which all true philosophy and all great art seeks to explore, and which religion seeks, definitively, to answer.

The monster's discovery of Milton's *Paradise Lost* (representing poetry) and Plutarch's *Lives* (history), and other works, represents his engagement with the humanities (124). As for Henry Clerval, so for the monster: the literature he reads has civilising effects. His study of Plutarch's *Lives* is particularly efficacious. As the monster tells Victor: "[T]his book developed new and mightier scenes of action... I felt the greatest ardour for virtue rise within me, and abhorrence for vice" (125). These subjects take the monster only so far, however, for he needs science (or natural philosophy, as it was then called), to complete his education – and he needs ultimately to move beyond both humanities and science to theology, which he traces through the 'scriptures' (Victor's diaries and papers) to his creator, who is simultaneously representative of the natural sciences and, beyond these, a type (though he proves to be a very inadequate type) of God. In finding the one, the monster should have found the other, except that Victor proves to be anything but a loving father; and so, in the end, in being rejected by and rejecting Victor, the monster is symbolically rejected by *and* rejects the insights of both the natural sciences and religion, and so becomes the violent, murderous creature who is slave to his feelings, "unchecked by reason" (127).

Frankenstein's abandonment of his creature clearly symbolises eighteenth and early-nineteenth-century man's abandonment of the traditional Christian view of God and hence, his apparent abandonment *by* God who, far from becoming incarnate to be with man (as he does in traditional Christianity), recedes to become the absent or idle God (*Deus otiosus*) of the deists, and ceases thereby to be an object of religious devotion or theological inquiry. In the world of the novel, in keeping with Lockean empiricism, all knowledge is now knowledge derived from – and reducible to – the senses.<sup>40</sup> While for Aristotle and Aquinas sensory knowledge leads to the apprehension of realities beyond

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<sup>40</sup> For a discussion of the influence of Locke's *Essay Concerning Human Understanding* upon Shelley's novel, see Maurice Hindle, "Introduction", Mary Shelley, *Frankenstein* (London: Penguin, 1992), p. xxx-xxi.

the senses,<sup>41</sup> for both Frankenstein and his creature, as the creature laments, “the human senses are insurmountable barriers to our union” (140). Because they cannot ‘see’ beyond the sensory realm, they cannot be joined. While what this literally means is that the physical ugliness of the monster makes him unloveable to his maker who cannot see through it to his human heart, the deeper significance is that the reduction of reality to the material, sensory order prevents the true union of all creatures, because it ignores their ultimate integration in something immaterial – namely, God – beyond the visible realm.

Ironically, while Dr Frankenstein explains that his own education was “directed to the metaphysical”, to “discovering the secrets of heaven”, he qualifies this by saying: “or in the highest sense, the physical secrets of the world” (37). Although he says he will “explore the unknown powers, and unfold to the world the deepest mysteries of creation” (47), his inquiry in fact excludes a metaphysic and excludes any concern to answer the questions: “Who was I? What Was I? Whence did I come? What was my destination?” The monster, on the other hand, seeks to answer the great questions of existence through liberal education, although he never gets beyond the humanities to natural philosophy, or beyond both to religious inquiry, as symbolised by his failure to unite with his maker, Victor Frankenstein, who is both scientist and “God” to the monster. The analogy operating in the novel is clear: just as the monster seeks his father (the scientist), so the humanities seek the sciences – the two need each other – but both ultimately ‘seek’ beyond themselves to something still higher, the immaterial origin that is the subject of theology. In seeking each other, both will recognise their respective roles and their respective limitations, and ultimately their subservience – and service towards – a governing metaphysic, for the integrating whole is necessarily greater than the sum of the parts. However, when science rejects the humanities, and when both reject the insights opened by religious intuition, the results are disastrous, ending in the violence, death and dis-integration characteristic of modernity. In the end, Victor remains alone, without family, friends or meaning, for Elizabeth and Henry (and

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<sup>41</sup> See chapter 2, “The Philosophic Foundations of Poetic Knowledge” and chapter 3, “Connatural, Intentional and Intuitive Knowledge”, in James Taylor, *Poetic Knowledge: The Recovery of Education*.

the civilizing humanism they represent) are destroyed by the creature he abandons, “unchecked by reason” (127).

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## Chapter 7: The Problem of ἀρετή in Plato's Paideia

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In the western world the question regarding what should constitute the object and objective of education has been at the centre of an acrimonious and unsettled debate among philosophers and pedagogues since early antiquity. Should education be centred on the mere transmission of a set of ideas or standardised notions? That is should it be normative or prescriptive, setting out to inculcate a set of behavioural patterns, or should it be concerned with the formation of the individual, namely the development of his capacity of reasoning, the structures and processes of thought so to assist in the acquisition or creation of truthful or new knowledge? It is obvious that underlying both of these models or ideas of education is a distinct anthropology or conception of man and his social function.

Plato's philosophy represents the most enduring legacy and the brightest and most influential achievement of Greek thought. His philosophy incorporates and is founded on an educational method without precedents for its time: in a vain attempt to restore the inexorable political and moral decay of his time, he was the first who called for the establishment of an education system to support the proper functioning of the state and the introduction of a pedagogy based on the development of an individual's latent potentialities, which not only aimed at serving the state, but was intended also to place him on the road to knowledge and virtue. This essay will briefly address what has been regarded as central to Plato's philosophical investigations, namely the possibility of teaching ἀρετή or virtue<sup>42</sup>. It will demonstrate that Plato's failure to provide a working

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<sup>42</sup> The problem regarding the nature of the concept of virtue in Plato has been the object of many studies. Just to mention some of the recent contributions to the debate: Desjardins R., 'Knowledge and Virtue: Paradox in Plato's Meno', *Review of Metaphysics*, 29, 1985, pp. 261-281; Weiss R., *Virtue in the Cave: Moral Inquiry in Plato's Meno*, Oxford University Press, Oxford, 2001; Sternfeld R. & H. Zyskind, *Plato's Meno: A Philosophy of Man as Acquisitive*, Southern Illinois University Press, Edwardsville, 1978; Benson H.H., *Socratic Wisdom: The Model of Knowledge in Plato's Early Dialogues*, Oxford University Press, New York, 2000; Stone A.D., 'On the Teaching of Virtue in Plato's Meno and the Nature of Philosophical Authority', 2010 at [people.ucsc.edu/~abestone/papers/short\\_meno.pdf](http://people.ucsc.edu/~abestone/papers/short_meno.pdf). This essay does not wish to enter into the merits of the debate nor to take sides, but merely to take a fresh look

definition of virtue led to the inevitable identification of the latter with the cognitive process itself, and hence to the development of an ascetic mysticism which ultimately disengaged the individual from the community. The pedagogical program of Plato failed in achieving the very goal it had set out to attain.

Platonic philosophy was concerned with pedagogy as much as with epistemology. The theory of knowledge propounded by Plato, in fact, was founded on and supported by a precise philosophy of education which would have allowed the individual to reach, through the discovery and actualisation of certain innate potentialities, truth and hence happiness. Virtue or *arête* (ἀρετή) was the means by which truth or *aletheia* (ἀληθεία), literally ‘what is covered’, could be ‘dis-covered’. As Werner Jaeger points out at the beginning of his unsurpassed masterpiece on Greek education, “*arête was the central ideal of all Greek culture.*”<sup>43</sup> Consequently the identification of what constitutes virtue and whether it can be taught becomes central to Plato’s epistemology.

Plato, whose teachings were inspired by Socrates, was reacting to the moral and intellectual relativism purported by the sophists. As with many intellectuals of his time, Plato was convinced that it was the hubris and individualism prompted by sophistic anthropocentrism and its intellectual and moral relativism, coupled with the claim of agnosticism and disdain for tradition, that had caused the downfall of the Athenian *polis*.<sup>44</sup> It was this conviction that prompted him to expose the failings and dangers of sophistic teachings, which privileged *techne* (τέχνη) over *sophia* (σοφία) or *episteme* (ἐπιστήμη), and to purport a ‘new way’, a *methodos* (μέθοδος), to attain virtue and truth, regarded as the only valid foundations to socio-political justice, stability and happiness.

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at the treatment of the concept of virtue in some of Plato’s dialogues, in particular the Meno and the Theaetetus.

<sup>43</sup> Jaeger W., *Paideia*, vol.I, trans. G. Highet, Oxford, 1943, p.15.

<sup>44</sup> *Republic*, 487b-497a.

Although, as Jacob Burckhardt once romantically wrote, “we see with the eyes of the Greeks and use their phrases when we speak”<sup>45</sup>, concepts and words have undergone a profound change in meaning so that, in order to understand Plato’s concept of virtue, one must cast the entire discussion within its appropriate epistemological, semantic and historical context. Etymological strategies, adopted by philologists and linguists alike, indicate in fact that moral values have definite historical and cultural origins: the meaning of certain concepts change over time, according to which value-system appropriated them. The etymology of the word *αρετή* points to a specific original pragmatic context, namely the military. The virtues of justice, temperance, wisdom and courage, listed by Plato in the Republic as being essential to the ideal statesman, have an intrinsic military flavour. Hence the virtues, which Plato is trying to define and eventually teach, are above all military-political.<sup>46</sup> Furthermore, the ancient Greek world did not operate a distinction between the three fields of ethics, politics and aesthetics, as the modern world does. The modern *Weltanschauung* is based on the separation of these three ‘domains’ to a point that they come to be regarded as antinomies. The Greek concept of *καλοκαγαθία*, literally meaning the ‘sum of all virtues’, for instance, etymologically points to the identity between beauty and goodness, of morality and aesthetics, and assists in explaining the important ‘mediating’ role of *Eros* in Platonic thought<sup>47</sup>; on the other hand Aristotle’s *Politics* reveals that *ethos*, namely ‘custom’, is inherently tied to the political or ‘life in the polis’. Only such an epistemological positioning would allow for the full appreciation of Plato’s philosophy of education.

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<sup>45</sup> Burckhardt J., *The Greeks and Greek Civilisation*, trans. S. Stern, ed. O. Murray, New York, 1998, p. 12.

<sup>46</sup> *Politics*, 1288b. One should not disregard the fact that the ancient Greek Polis had its origins in the great military revolution of the VIII-VII century which led to the creation of the hoplite phalanx.

<sup>47</sup> Symposium, 203c-e; 210a-212a. Cfr. Republic 403c. The importance of *Eros* is further developed in the Phaedrus in which *Eros* is conceived as ‘nostalgia of the Absolute’. See: Phaedrus 250d-251b. The concept of *Eros* as a driving force towards the contemplation of the supreme ‘Idea of the Good’ will return in the pedagogy of Augustine expounded in the *De Doctrina Christiana*. In books II, 148, Augustine, quoting from Paul’s First Epistle to the Corinthians, states that the pursuit of knowledge for the sake of knowledge “puffs up, but loves builds up.”

*Paideia* literally means ‘things related to the child’ and hence, in *sensu lato*, ‘education of children’. Although Plato’s pedagogy was not only directed to children or adolescents, it inherently meant that one should be ready to revert to the condition of a child if one wants to attain ‘knowledge of the truth’ or ‘truthful knowledge’. It implicitly called for a sort of *kenosis* (κένωσις) or ‘emptying’ of the mind of all the false understandings and prejudices acquired: the myth of the cave can be regarded as indicating the various stages through which the neophyte must go in order to reach the highest order where he will contemplate the supreme idea of the good. The first phase of the ‘Socratic Method’, in fact, aimed at leading the learner to become aware of and admit his own ignorance or *amathia* (αμαθία).<sup>48</sup> It was only at this stage that the process of learning could begin as a process of introspection which would have gradually led the individual to the discovery of the self and the latent ideas concealed in the soul or *psyche* (ψυχή).<sup>49</sup> Plato, in fact, makes no mystery in the Socratic dialogues that behind Socrates’ teachings stood the ancient Delphic aphorism of ‘Know thy Self’. The Socratic technique of *maieusis* is then employed to assist in ‘bringing forth’ the true self of the individual.<sup>50</sup> By this process of introspection the individual was able to rediscover the ‘forms’, already known to the soul or *psyche*.<sup>51</sup>

The *Meno*, which deals with the question regarding the possibility of teaching virtue, is probably the Platonic dialogue in which the maieutic technique or method, founded on the idea of reminiscence (ανάμνησις), is fully explored and outlined. In this dialogue Plato narrates how a slave boy was able to solve a geometrical problem having received no formal instruction in mathematics. He claims that the slave’s understanding of the mathematical proof demonstrated that his soul or *psyche* knew already the argument *in se*, concluding therefore that “knowledge will not come from teaching but

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<sup>48</sup> *Meno*, 80b. The word αμαθία derives from the verb μανθάνω ‘to learn’) + privative alpha and literally means therefore ‘defecting learning’.

<sup>49</sup> For Plato the soul is not a tabula rasa, but had once received vision/cognition of the ideas but has forgotten them. For the concept of immortality of the soul, metempsychosis and anamnesis see his dialogues *Phaedon*, *Phaedrus*, *Meno* and *Republic*.

<sup>50</sup> *Theaetetus*, 150.

<sup>51</sup> *Phaedrus* 246a-249d; 253c-257.

from questioning”.<sup>52</sup> Consequently for Plato all knowledge is *a priori* and this knowledge can be recovered through a process of analysis and synthesis, the dialectic method, which is outlined in *The Republic*<sup>53</sup> and which Plato regards as “the coping-stone that tops our educational system”.<sup>54</sup> The curriculum of studies, which he outlines in both *The Republic*<sup>55</sup> and *The Laws*<sup>56</sup>, mainly based on logic-mathematical studies (arithmetic, plane geometry, solid geometry, astronomy and harmonics), is aimed at developing the faculty of reasoning (*διάνοια*) or ‘dialectical’ skills (τέχνη διαλεκτική), the only path (μεθ’ οδου) to knowledge, and which is regarded as indispensable to the excellent statesman.

Plato’s *paideia* therefore consists in a specific educational method which is based not on the decanting or transmission of contents from an instructor to a student, but on providing the student or learner with specific skills which would allow him to identify truthful statements and values. Plato, in fact, uses the word *phronesis* (φρόνησις) for ‘knowledge’ and not the words *sophia* (σοφία) or *episteme* (επιστήμη), which are used to refer to particular forms of ‘knowledge’.<sup>57</sup> *Phronesis*, in fact, literally means ‘knowledge of virtue (*αρετή*)’.<sup>58</sup>

The central question therefore is not how or whether virtue can be taught, but what are the means or necessary skills which would allow for the identification of virtue. The

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<sup>52</sup> *Meno*, 85c-d.

<sup>53</sup> *Republic*, 533d.

<sup>54</sup> *Republic*, 534e.

<sup>55</sup> *Republic*, 521c-541a.

<sup>56</sup> *Laws*, 811d-824a.

<sup>57</sup> Bruno Snell argues that the Greek, or to be more precise, Attic word *επιστήμη* means knowledge but embraces ‘practical connotations’, unlike the Ionian words denoting knowledge and understanding, such as *σοφία*, which refer only to ‘theoretical cognition’. See: Snell B., *The Discovery of the Mind in Greek Philosophy and Literature*, Dover Publications, New York, 1982 (originally published in 1953), p. 185. In Plato’s *Republic* (522), in fact, the word *επιστήμη* appears to be used in conjunction with *τέχνη* (craft) in the expression, *τέχναί καί επιστήμαι* crafts and arts. The word *σοφία* is used, besides in the sense of ‘knowledge, as meaning ‘wisdom’ or ‘common sense’ or ‘ability. See Plato’s *Protagoras*, 321. It must be pointed out, however, that in Plato *επιστήμη* is used to refer to the ‘knowledge of the real world of the forms’ and is often contrasted with *δόξα*, namely ‘opinion’ or ‘appearance’. See *Phaedrus* 248a. Cfr. *Republic* VII, 514b-521b.

<sup>58</sup> The word *φρόνησις* has moral connotations deriving from the verb *φρονέω* which means ‘to be sane or wise’. See *Philebus*, 13; 63. It is associated with the derivative *σωφροσύνη* meaning ‘temperance’.

debate was central to Athenian politics since the V century B.C. because of its bearing on the important question of *eunomia* (εὐνομία) or 'good government'. It is known that Gorgias of Lentini, one of the leading sophists in V century Athens, invoked a sort of moral agnosticism claiming that virtue could not be taught<sup>59</sup> nor could a comprehensive, universally accepted definition of what virtue was be provided.<sup>60</sup> Plato himself in the *Meno* declares that virtue cannot be taught simply because it is not knowledge, nor is it a natural gift, but is acquired by divine dispensation.<sup>61</sup> Plato's conclusion derives from the realisation that virtue defies definition. Jaeger points out that all Plato's attempts "to define the nature of a specific virtue end in the conclusion that it must be a kind of knowledge", and that he attempts to overcome the inherent tautology of his inquiry by ultimately not caring "so much for the distinction between several virtues- namely, the definition of each one – as for the common element they all share, namely, 'virtue in itself'."<sup>62</sup>

The pinnacle of Plato's philosophy is represented by the realm of knowledge concerned with *arête*, which nobody can approach directly, but only through appropriate training. In *Letter VII* he clearly indicates that the process of knowledge is a lifelong assimilation of the soul (*psyche*) to the nature of those virtues it wishes and strives to understand,<sup>63</sup> since "neither facility in learning nor a good memory can make a man see if his nature is not akin to the object."<sup>64</sup> Socrates concludes by stating that 'virtue [*in se et per se*] is knowledge', obtained, I might add, through an *adequatio mentis ad rem*.

Plato's statement, however, besides appearing paradoxical, looks as if it were tautological in character and is implying a sort of 'intellectual and moral agnosticism' in the sense that knowledge *in se et per se*, since it is identical to virtue, is practically impossible. In order to overcome the apparent *aporia*, Jaeger believes that Socrates-Plato appears to purport that the experiential and theoretical knowledge of virtue does

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<sup>59</sup> *Meno*, 95c.

<sup>60</sup> *Meno*, 71e.

<sup>61</sup> *Meno*, 99b-110e.

<sup>62</sup> Jaeger, *op.cit.*, p.64.

<sup>63</sup> Jaeger, *ibid.*, p. 230.

<sup>64</sup> *Letter VII*, 344a.

not necessary imply *ipso facto* the capacity of a practical actualisation of it. It is simply a mere potentiality.<sup>65</sup> Plato, in fact, claims that one can attain knowledge of single virtues, such as justice, good, wisdom, temperance, all of which participate in the essence of true virtue, while simultaneously holding that true virtue is ontologically one and indivisible and that a man cannot possess one without having also the others.<sup>66</sup> From this stems the ethical intellectualism of Plato's thought, according to which 'nobody errs willingly',<sup>67</sup> which pushed to its extreme consequences is not less dangerous than the moral relativism preached by the sophists. Jaeger, in fact, claims that it represents "the sharpest and boldest expression of the paradox of Socrates' educational wisdom"<sup>68</sup>, although Jaeger himself fails to grasp the profound and dangerous moral implications of such an axiom. The paradoxical nature of the statement, however, can be easily overcome by implying that Plato is working on the assumption that the *a priori* knowledge present in human beings acts as a sort of categorical imperative, a natural entelechy or *élan vital* driving an individual's actions towards the 'good'. Hegel states that Plato's Socrates appears to claim that "virtue is perception", namely the process of thinking itself, something for which he will be criticised by Aristotle.<sup>69</sup> In the *Teaetetus*, in fact, Socrates will at one stage claim that knowledge *in se et per se* is perception,<sup>70</sup> and from this one might conclude that knowledge of virtue is nothing but perception.

However it was the claim that nobody willingly errs which, according to Jaeger, marked "the decisive point in the history of *paideia*", throwing "new life on the purpose and duty of education".<sup>71</sup> Education, as envisaged by Plato, is not the cultivation of particular abilities or skills, nor the communication of a certain knowledge, but the pathway which allows man to reach the true goal of his life, a goal which coincides with the Socratic-Platonic search of *phronesis* or 'knowledge of virtue'. Thus Plato constructs his philosophy of education on a particular conception of man, as a being born for

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<sup>65</sup> Jaeger, op. cit., p. 65.

<sup>66</sup> Protagoras, 331b.

<sup>67</sup> Protagoras, 345d; 358d.

<sup>68</sup> Jaeger, op. cit., p. 67.

<sup>69</sup> Hegel W. F., *Lectures on the History of Philosophy- vol. I Greek Philosophy to Plato*, University of Nebraska Press, Lincoln, 1995, p. 412.

<sup>70</sup> *Teaetetus*, 158e-161b.

<sup>71</sup> Jaeger, *ibid.*, p. 69.

education. It is through education or *paideia* that man can attain his moral and intellectual definition.

Although Plato's philosophy of education attempted to restore the obligations of the individual towards the community and the respect for the traditional communitarian virtues in order to reverse the inexorable decline of the polis, it paradoxically had the opposite effect of prompting the search for personal self-actualisation and/or redemption. The stress of the maieutic method on exercise or *askesis* (ασκήσις) and introspection through questioning had the effect of accelerating the disengagement of the individual from the community. For Plato the true philosopher is he who longs to live a true life, which implies the death of the body. Therefore philosophy becomes the exercise or practice of true life, which is present in the pure dimension of the spirit.<sup>72</sup> In the *Teaetetus*, in fact, Plato writes:

*"The elimination of evil is impossible...there must always be some force ranged against good. But it is equally impossible for evil to be stationed in heaven: its territory is necessarily mortal nature...That is why one should try to escape as quickly as possible from here to there. The escape route is assimilation to God in so far as this is possible, and this assimilation is the combination of wisdom with moral respect for God and man."*<sup>73</sup>

The attempts of Plato to define virtue in order to place it at the centre of his philosophy of education failed and led to the development of mystical-ascetic practices that defeated the initial political purpose. However for the modern reader Plato's pedagogy still has some merits, having placed at the centre of the educational project man, not only as a physical entity but as an intellectual and moral being; in developing a concept of education which envisaged the development of such qualities rather than being a mere operation of decanting contents; and initiating a debate, still raging today,

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<sup>72</sup> Reale G., *Storia della Filosofia Antica, -Platone e Aristotele, Vol.2, Vita e Pensiero: Pubblicazioni della Universita' Cattolica, Milano, 1987, p. 247.*

<sup>73</sup> *Teaetetus*, 176a-b.

regarding what should be the contents of teaching and what its objectives should be for the individual and society at large.

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