CHE

Kagisano Number 9

THE AIMS OF HIGHER EDUCATION

March 2013

Kagisano Number 9

THE AIMS OF HIGHER EDUCATION

March 2013

The South African Council on Higher Education (CHE) is an independent statutory body established by the Higher Education Act, no. 101 of 1997, and is the Quality Council for Higher Education, advises the Minister of Higher Education and Training on all higher education issues and is responsible for quality assurance and promotion through the Higher Education Quality Committee.

Published by the Council on Higher Education (CHE) in 2013

1 Quintin Brand Street
Persequor Technopark
Brummeria, Pretoria
South Africa

Tel: +27 (0)12 349 3840

www.che.ac.za

ISBN: 978-1-919856-84-1
Set in Calibri 9pt / 11pt & Trajan Pro 16pt
Printed and bound by Cre8or Communications

CONTENTS

FOREWORD

The focus of this edition of Kagisano, which is on the aims of higher education, might suggest that what follows is a detailed discussion of a series of self-evident objectives. Indeed, in the policy terrain, the aims of higher education in South Africa are clearly set out in Education White Paper 3: A Programme for the Transformation of Higher Education, which states that higher education has "several related purposes":

- "To meet the learning needs and aspirations of individuals through the development of their intellectual abilities and aptitudes throughout their lives. Higher education equips individuals to make the best use of their talents and of the opportunities offered by society for self-fulfilment. It is thus a key allocator of life chances, an important vehicle for achieving equity in the distribution of opportunity and achievement among South African citizens.
- To address the development needs of society and provide the labour market, in a knowledge-driven and knowledge-dependent society, with the ever-changing high-level competencies and expertise necessary for the growth and prosperity of a modern society. Higher education teaches and trains people to fulfil specialised social functions, enter the learned professions, or pursue vocations in administration, trade, industry, science and technology and the arts.
- Contribute to the socialisation of enlightened, responsible and constructively critical citizens. Higher education encourages the development of a reflective capacity and willingness to review and renew prevailing ideas, policies and practices based on a commitment to the common good.
- To contribute to the creation, sharing and evaluation of knowledge. Higher education engages in the pursuit of academic scholarship and intellectual inquiry in all fields of human understanding, through research, learning and teaching".

However, the contributions to this edition, on the contrary, suggest that the aims of higher education are far from self-evident. As Sioux McKenna points out in the introduction, there is "no clear consensus as to what a university is or what its aims should be". This is not surprising. Higher education institutions, despite popular perceptions to the contrary, do not exist in splendid isolation from the societies in which they are located. They

reflect, reproduce, and to some extent, shape the social, cultural, economic and political values and relations that are characteristic of the broader society. This results in and gives rise to a range of tensions that are inherent in differing interpretations of the social and economic trajectory of a given society and the implications of the latter for the development of higher education.

These tensions are alive in and continue to characterise the post-1994 policy discourse on the aims and trajectory of higher education in South Africa. This is reflected in, amongst others, the arguments about the appropriate balance between enrolments in the humanities and the sciences; between skills training and education for citizenship; between different types of knowledges and their relative value, between pure and applied research and above all, between different institutional types that straddle the continuum between teaching and research. Indeed, the central question arising from such debates and that remains unresolved in the South African context is the form our higher education system should take, that is, whether and how it should be differentiated. Although the answer to this question may be self-evident to some, particularly in the light of views that there exists a plurality of knowledge types and a plurality of roles and purposes for higher education, it is contested precisely because of the racial fractures of the past that continue to impact on the development of higher education in South Africa. Such fractures serve to make the resolution of such debates to inform policy in this context even more complex, yet even more compelling and urgent.

What is evident, and relatively uncontested, is that until and unless we are able to re-imagine the higher education system, in particular the form of the system and the institutional types that are necessary to address the social and economic challenges that confront South African society and which respond to the needs of the students, the transformation of higher education as envisaged will remain unfulfilled.

It is against this background and the CHE's commitment to contribute to and to facilitate public debate on higher education, that the CHE is publishing this edition of Kagisano on the aims of higher education, which brings together the papers presented to a series of Roundtable Discussions on key issues in higher education convened by Rhodes University in 2010.

Ahmed Essop
Chief Executive Officer

INTRODUCTION

Sioux McKenna
Rhodes University

Despite hundreds of years of history, there is no clear consensus as to what a university is or what its aims should be. Some argue that the aims of higher education differ from country to country and across institutional types, and that the university of necessity reinvents itself to address current concerns and to adjust to contemporary contexts. Others are adamant that there should be a set of core aims that define the sector and give us a united project, and that shifts in the relationship between the state and higher education and changes in the public conception of the university need to be addressed lest they infringe on this set of core aims.

There is not even consensus as to whether a university education is for the elite or for the masses, serves social development or economic growth, is a private good or a public one. While most would argue that it can and should be myriad things and that universities should simultaneously attend to multiple aims, there are always tensions and constraints and attention to one aim will almost always be at the expense of another; grappling with the nature of the university sector and the particular aims of the individual institutions in which we work is thus an essential task for all academics.

This edition of Kagisano brings together six articles that tackle the issue of the aims of higher education from very different perspectives. Each article in this volume serves to educate and provoke, but it is also intriguing to listen to the conversations that emerge between the articles as the authors take up their contrasting positions of engagement or resistance.

Graham begins by presenting an array of universities to pose the question: 'What is a University?' Using philosophical historicism, Graham frames the conception of a university into three rationalized models: the University College, the Research University and the Technical University. The differences between these three models have attendant differences in social role, financial, administrative and management structures, as well as educational differences. By tracing the origins of each of these models,

Graham raises questions about the extent to which any singular university can simultaneously undertake research for its own sake, produce useful knowledge for society, provide an education for the individual enrichment of students and provide work-ready graduates to build the economy. Tensions between these aims go beyond those of time and resources and reveal significant differences in values. Graham interrogates curriculum structures, the relationship between teaching and research and the nature of knowledge to suggest that the Research University and the Technical University models are internally flawed. In calling for a revitalised University College, Graham develops an argument for professional education that links liberal and practical education in the service of developing intelligently responsible citizens.

Metz tackles the issue of the pursuit of knowledge 'for its own sake'; an issue Graham raised in relation to accusations that Research Universities can be Ivory Towers. Metz systematically discounts arguments that academic activities can ever be solely dictated by a cost-benefit analysis, can be determined by the desires of the majority, should only be for realising constitutional norms or should only be to produce practical or intellectual virtues. Metz then presents a resolution that accounts for why academics should sometimes seek blue-sky knowledge by arguing that it is on the basis of final goods that we should make judgements about academic activities and the funding thereof.

Nash uses a meta-level analysis of the contemporary university to provide a searing critique of the notion of excellence and illustrates the iniquitous consequences of this dominant discourse for today's university. His depiction of the patriarchal university makes it clear that the analysis of the ways in which neo-liberal agendas have taken hold through the allure of excellence is in no way premised on romantic notions of the past. Instead Nash presents a call for an ethical university where values are placed at the forefront of our work and are openly debated and contested, and where free deliberations about the aims of the university are welcomed.

Habib also tackles the issue of the corporatisation of the university and posits that there have been three responses to this process: some have welcomed it as an indication of the maturation of higher education, some

bemoan its incursion into academia but remain powerless against its forces and others engage with the context despite concerns about its effects. Habib, who places himself in this third category, calls for recognition of the socio-economic realities of the university in a neo-liberal era and argues that the way to shift the balance of power within a university is to work within the realities of the context. Habib's argument for structural reform is supported by examples of interventions aimed at subverting the system 'from within'. Habib indicates that there is a need for more conversations about managerial practices and the ways in which they do or do not support the aims of higher education.

Jones picks up on the discussion about knowledge production in the university by calling for students to be assisted in acquiring a reflective awareness of their epistemic situation. This, he explains, is the necessary underpinning for students' attainment of two intellectual virtues, intellectual confidence and intellectual humility, as essential dispositions with which to form beliefs. The intellectually confident and intellectually humble believer, Jones explains, is disposed to believe in a manner appropriate to her epistemic position. Higher education should provide the reflective element required to attain the complex balance between these virtues. At university, students should understand not only what it is that is being taught, but also why it is that they should accept it. Jones goes on to contrast the academic communities of the sciences and humanities and the different kinds of knowledge being constructed within them. By contrasting notions of dissent in these two communities, Jones illustrates the different basis on which knowledge is accepted into each community. Jones calls for a more explicit consideration of these epistemic positions and how these change in relation to what is being learnt in the classroom. By encouraging reflection upon the kind of learning being undertaken, Jones argues, we can develop the intellectual virtues that are the aim of higher education.

Like Jones, Winberg, Engel-Hills, Garraway and Jacobs also look at distinctions in knowledge types but they do so with a particular concern for professional education. In this they pick up on Graham's comment that professional education goes beyond technical excellence to the development of disciplinary expertise and intrinsic values. Winberg et al provide a theorised analysis of the professionally orientated curriculum and in doing so ask

what the aims of such education should be and how best it should meet those aims. In particular, they highlight the need for deep understanding of the professional knowledge system that underpins the balance between complex situated knowledge and disciplinary bases. The relationship between the two works is cyclical, and Winberg provide an illustration of how this occurs to ensure that students acquire epistemological access to both disciplinary and situated knowledge. The aim to develop competent practitioners who have a strong sense of civic and social responsibility necessitates such careful consideration of the curriculum.

This volume of Kagisano on the Aims of Higher Education and the previous in the series, on Academic Freedom, arise out of the Ford Foundation-funded Roundtable Discussions organised by Pedro Tabensky and held at Rhodes University in 2010. The Council on Higher Education's publication of these papers ensures that the debates herein are widely accessible so that on-going deliberation is secured.

Thanks are due to the following academics for undertaking blind review of the articles for this volume and for offering valuable feedback to the authors: Doctors Penny Niven, Lynn Quinn, Carol Thomson, Susan Van Schalkwyk, Jo-Anne Vorster and Sue Southwood and Professors Vivienne Bozalek, Brenda Leibowitz and Chrissie Boughey.

THE UNIVERSITY: A CRITICAL COMPARISON OF THREE IDEAL TYPES[1]

Gordon Graham
Princeton Theological Seminary

What is a university? More contentiously, what is a real university? It is reasonable to regard these questions as either rhetorical or empty. Even a brief glance at institutions of higher education in the modern world will show them to be astonishingly varied in size, history and function. For example, the Indira Ghandi Open University has approximately 3 million students; the University Center in Svalbard, the world's most northerly university, has about 300. Harvard, established in the 17th century, is universally acknowledged as an international leader in the advancement of the arts and sciences; the much larger Technical University of Uttar Pradesh, established in Lucknow at the start of the 21st century, serves largely local educational needs and does not figure in international research tables at all. Ave Maria University in Florida (founded 2003) is one of America's newest universities and its sole PhD program is in Theology; Princeton (founded 1726) is one of America's oldest universities and theology is not studied there at all. All these institutions, despite the radical differences between them, have been accorded the title 'university' and are recognized as such. Who then is to say which of them is a 'real' university? Besides, what is the point of such a question? What's in a name, after all?

I The Actual and the Ideal

Liberal nominalism of this kind often has something to commend it. Yet it cannot be the whole story in this context. The title 'University' does not merely classify; it accords a special status, and this means we can always ask if the status is warranted. This is shown by the fact that in a few instances,

---

[1] This article, based on the presentation at "The Aims of Higher Education", a roundtable at Rhodes University in 2010, will also be published as a chapter in Sugden, Roger, James R Wilson and Marcela Valania (forthcoming 2013) Leadership and Cooperation in Academia: Reflecting on the Roles and Responsibilities of University Faculty and Management Cheltenham: Edward Elgar.

the title 'university' is at best parasitic. Consider the case of Hamburger University in Oak Brook, Illinois, a suburb of Chicago. This training facility of McDonald's Corporation has 30 resident professors, classes in 28 different languages, and over 80,000 graduates. Though its purpose is undoubtedly an educational one - to instruct personnel employed by McDonald's in various aspects of the business – its use of the title 'university' is in some way whimsical. There is no serious intention here to enter the lists with Harvard, Cambridge, Tokyo or ANU.

These great four universities, of course, are special by any standard. They appear in the top 25 of the 2010 Times and QS rankings of the world's universities. It is not this fact that marks the crucial difference from Hamburger University, however. The Times list runs to 400, and the QS list to 1248, and in both lists a very large number of universities fall far short of Harvard and Cambridge in terms of reputation and attainment. Yet even those that come in at the bottom differ importantly from McDonald's Hamburger University. Even universities that get no higher than 600th share something important with Harvard. In contrast to even the very best educational institutions at primary and secondary level, they aim to be the sort of thing that Harvard is. That is to say, despite radical differences in their self-understanding and aspiration, they see themselves, not merely as part of a 'higher' or tertiary level of education, but as academic institutions that have ultimate responsibility for determining their own academic goals and standards. This is commonly realized in a commitment to free inquiry, and an authority to confer degrees. These familiar facts show that the title 'university', properly accorded, bestows a certain status, because it invokes an educational ideal and not just a sociological classification. Consequently, understanding what a university is, is not simply a matter of empirical investigation; it requires an exploration of educational norms.

To ask what the ideal of a university is, is at the same time to ask what it ought to be. Yet framing a conception of that ideal cannot be undertaken in abstraction from empirical facts and historical realities. If we are to avoid the danger of utopianism – i.e. inventing a concept that has never existed and precisely for that reason never will – we must somehow abstract critically from the past to the present and to the future. Philosophically speaking,

what is required is neither the idealistic rationalism of Plato, nor the empiricism of Locke and Hume, but the philosophical historicism of Hegel. As I understand it, Hegelianism seeks to determine the essential nature of things with the benefit of hindsight. Famously, the owl of Minerva takes its flight at dusk, which is to say that philosophical understanding consists in a conceptual re-construction of entities in their historical maturity. Applied to the idea of a university, this means we need to abstract from extraneous detail while according full weight to the character of the university as it has developed historically. In Hegel's own terms, we must avoid any inquiry in which "the Idea is seen as 'only an idea', a representation in the realm of opinion". The formulation of a mere 'idea' in this sense is fruitless because "what matters is to recognize in the semblance of the temporal and transient the substance which is immanent and the eternal which is present" (2001 p.20). This recognition requires us to give due weight to empirical facts about actual universities while at the same time according them a greater degree of coherence than they have ever actually possessed in any specific historical realization.

Hegel is well aware that conceptual ideals so construed emerge "in an infinite wealth of forms, appearances, and shapes". What we are in search of is a "core" concept that will enable us to "find the inner pulse" of the reality we want to idealize. Now it is arguable, it seems to me, that universities as we have come to know them do not have a single "inner pulse". Rather, there are at least three rationalized models of the university, all of which can be found to have played a significant part in the history of higher education. These are the university as college, as research centre, and as polytechnic. Though none of them has ever been fully realized, (and is unlikely ever to be so), setting them out as contrasting models can nonetheless be illuminating. It provides a conceptual orientation to the many problems that commonly confront contemporary universities, and it helps to clarify the potential choices those with responsibility for the future of the university must make. The core differences between them have proved to have important social and economic ramifications, and these have occasioned further differences in administrative style, social role and financial structure that are often taken to be characteristic. But for present purposes, I shall leave these aside and focus exclusively on more strictly educational and intellectual differences.

II The University College

The University as College is the oldest conception of the university. Its roots are Christian, and the pursuit of the ideal that underlies it shaped the universities of Europe for six hundred years or more. Education as the pursuit of learning lay at its heart. This is reflected in the fact that the distinctions between bachelor, master, and doctor did not separate members of the university in the way the class of 'student' is separated from the profession of 'teacher'. Bachelors, Masters and Doctors were in the original sense colleagues, members of a single body and related in an ascending order of educational accomplishment in which, nevertheless, those at the highest level were just as much engaged in learning as those at the lowest.

The purpose of this learning was not simply knowledge for its own sake. Given the college's Christian origins, this could hardly be the case. What drives us to seek knowledge of God is not intellectual curiosity as such, but the hope of salvation. Accordingly, a division between useful knowledge and theoretical inquiry, often taken for granted today, is deeply alien to the college ideal, and as a matter of fact, from earliest time, the universities of Europe were as much professional schools for priests and lawyers (and later for physicians), as they were centres of biblical and theological scholarship. Even the arcana of logic, at which the Scholastics excelled, served a practical purpose, since the value of logic ultimately lay in its power to assist theology in the avoidance of heretical errors.

Though the model of the university as college has medieval origins, its realization cannot be confined to the pre-modern period. The universities of the 18th century Scottish enlightenment – all of them colloquially referred to as 'Colleges' – while undergoing radical curricular and institutional change that left scholasticism behind, nevertheless preserved certain key elements, notably the integration of teaching and learning and the combination of the academic with the practical. It was people educated in these Scottish colleges who established fledgling institutions of higher education in the American colonies. They thus laid the foundations of several important universities in post-colonial America, all of which took the college model as their template.

Among the most famous are Princeton in New Jersey, Columbia in New York, University of Pennsylvania in Philadelphia, and William and Mary in Virginia.

What subsequently became known as the 'American College Ideal' departed from the medieval conception insofar as it separated liberal from professional education. This came to be provided for in separate law schools, medical schools and seminaries. Nevertheless, an education in the liberal arts was regarded as a necessary preliminary to professional training. Furthermore, liberal education retained an importantly practical orientation. A curriculum based upon mathematics, the classical languages and philosophy, and informed by religion, concluded in the final year with lectures on Ethics and Politics. Usually taught by the President of the College, the purpose of this course was to ensure that students emerged from their education well-versed in their civic and social responsibilities.

The College ideal struggled to survive in the second half of the 19th century. Across Europe, the connections between Church and University were seriously weakened, but the main pressure came from two disparate sources - an alternative conception of the university as research institution, and an increasing demand for more severely practical and technical education.

III The Research University

An early manifestation of the modern 'research' university' can be found in the establishment of the Lucasian Professorship of Mathematics at Cambridge in 1664. Henry Lucas, the founder, had made it a condition of his gift that the holder should not be active in the Church, and Isaac Newton, as its potential occupant, though himself a Christian, persuaded King Charles II that this provision should enable him (and his successors) to hold the Chair without submitting to the hitherto uniform requirement that Cambridge professors be ordained to the priesthood. Subsequently, thanks in no small part to Newton's own occupancy, The Lucasian became one of the most prestigious scientific chairs in the world, whose holders were (like Stephen Hawking) exceptionally gifted individuals engaged in scientific inquiry.

The most famous, and perhaps founding instance, of an entire institution intended exclusively for such individuals was the University of Berlin. Created in 1810 by William von Humboldt, this was, by intention, primarily a community of scholars and scientists devoted to intellectual inquiry for its own sake, and without any special emphasis on educational value or wider social function. Since lectures were given and students enrolled at Humboldt's university, the 'German' model may have found its purest example sixty years later in the United States. The establishment of the Johns Hopkins University in 1876 was accompanied by a statement of purpose in which its Board deliberately rejected the traditional American college model in favour of what it understood to be the 'German' research university. In language characteristic of the time, its first President, Daniel Coit Gilman, expressly drew a distinction between the old style 'college' and the ambition to be a 'university'. The aims of a university, he declared, were "the encouragement of research ... and the advancement of individual scholars, who by their excellence will advance the sciences they pursue". Despite appearances, this declaration was not in fact made in complete indifference to a social and educational role. Rather, it rested upon the conviction that the best way to fulfil both these functions was to create an institution that would be wholly devoted to intellectual research by gifted individuals. Universities were for the production and transmission of knowledge, and they served society best by sticking to this role.

Elements of the German or Humboldtian model have gained great prominence – one might say dominance – in the world of modern universities. Evidence of this lies in the emphasis that is given to research activity and reputation in the construction of comparative league tables such as the Times and QS Rankings cited earlier. This emphasis both reflects, and in turn strengthens, a policy within institutions of hiring leading scholars and researchers first and foremost, and only determining their contribution to the undergraduate curriculum thereafter. In effect, this makes additional measures of excellence - in student teaching, knowledge transfer, or impact within the wider community for example – secondary, despite the lip service that is often paid to them.

Generally speaking, then, in current thinking 'first class university' means first class research institution. The model has never been without its critics,

however. To begin with, it rather too easily fits the negative image of the 'ivory tower', a place for the pursuit of arcane interests that have no connection with or value for the business of ordinary life. The pejorative description, 'ivory tower', is especially damaging to universities dependent upon the public purse. Why should taxpayers be expected to pay the occupants of ivory towers? Johns Hopkins, of course, was founded on a private donation – worth the equivalent of several trillion dollars today (on some measures). Donations on this scale are exceptional, and almost all universities that aspire to something like the Johns Hopkins model rely to some degree upon state finance, either directly or indirectly. This makes them susceptible to other demands than that of pure inquiry. But even where there is no call upon the public purse, the perception that universities are ivory towers is sufficient to incline more practically minded people to seek both knowledge and education elsewhere.

IV The Technical University

In 1796, John Anderson, a Professor at the University of Glasgow, left a substantial sum of money for the establishment of an alternative 'university' that, freed from the Scottish liberal arts curriculum, could devote itself to 'useful' knowledge and thus serve the needs of tradesmen and industrial workers. Initially known as 'Anderson's University' the name had to be changed in acknowledgement that the institution actually lacked the legal status of a university (and did not gain that status until 1964, when it became the University of Strathclyde). 'The Andersonian' was the first of a large number of 'Mechanics Institutes' that came into existence in the course of the 19th century, not just in the United Kingdom, but also in Australia and Canada and other parts of the British Empire. Though many amounted to little more than reading rooms, some of them were subsequently incorporated into universities, or, like the Andersonian itself, became fully-fledged universities in their own right.

The counterparts to the Mechanics Institutes in the United States were a deliberate creation of an Act of Congress, signed into law on July 2, 1862. What came to be known as the Morrill Act gave grants of land to individual states to use as a means of financing new institutions of higher education.

The aim of these 'Land Grant' universities was "to teach such branches of learning as are related to agriculture and mechanical arts...in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life". Though this severely utilitarian conception of a university was tempered somewhat by the provision that agricultural and mechanical studies should be promoted "without excluding other scientific and classical studies", the spirit of the Morrill Act was to ensure that public resources devoted to universities would be used in a way that generated public benefit. One of the earliest universities founded under this initiative was Texas A&M established, as it happens, in the very same year as Johns Hopkins - 1876. For the first decades of its existence, Texas A&M combined practical education with military training, so that the State of Texas could be adequately provided with soldiers as well as farmers and mechanics.

The Morrill Act was passed during the American Civil War, and post-war reconstruction prompted important debates between competing conceptions of the university. In California, the liberal arts College of California somewhat reluctantly agreed to merge with a new 'Land Grant' state university, on the understanding that the resultant University of California would be more than simply a school of agriculture, mining and mechanics. Perhaps it is a measure of the difficulty this amalgamation presented, that Gilman, University of California's second President, served less than 10 years before moving to the East Coast as the founding President of the new 'research only' Johns Hopkins.

In Princeton, Harvard and Yale, the old Colleges acknowledged the need for change, but differed about what form it would take. James McCosh, President of the College of New Jersey, strove to transform it into Princeton University with a new emphasis on research and postgraduate education, while at the same time remaining faithful to the College ideal that he had inherited from his predecessors. In a series of public debates, he crossed swords with Charles Eliot, his counterpart at Harvard, who believed that a more radical break with the past (and with religion) was required.

The end result, almost inevitably, was an official subscription to all three models. Today, in addition to educating 39,000 students, Texas A&M

describes itself as a "research-intensive flagship university", thereby revealing the extent to which the Johns Hopkins model has been influential. Johns Hopkins, on the other hand, though starting out with an exclusive focus on graduate education, soon went the way of 'useful education' by establishing America's first university-based School of Nursing in 1889. A short time after, the venerable College of New Jersey celebrated its 150th anniversary by becoming Princeton University, and to this day describes itself as a 'world-renowned research university' with a 'distinctive commitment to undergraduate teaching'.

V Comparing the models

This express commitment to elements drawn from the three models I have described is consonant with the methodological principles deployed by both QS and Times in their compilation of world rankings. Universities, it seems, must aspire to combining intellectual research for its own sake, the supply and transfer of useful knowledge for the benefit of society as whole, and the provision of an undergraduate education that will enrich the lives of the individuals who undergo it. But while this is a multiple imperative by which academic managers universally feel driven, a question arises about the extent to which it is truly realizable. Those who work within universities are well aware that aspirations to excellence in intellectual research, student education and practical relevance generate competing demands on time and resources. The tension lies deeper than this, however. Often the competition for resources between these various purposes brings to the fore deep differences in the values that underlie them.

Open debate about these competing values is not easily conducted. The ever-present internal demands for academic significance and student satisfaction, alongside the external pressures brought to bear by official accreditors, financial auditors and public relations departments, give university leaders powerful reason to gloss over them. It is more politic, for the most part, to give general acknowledgment to academic research, student education and social relevance, than to confront the difficult decisions generated by any serious attempt to order them. Yet in view of the debates and disagreements that were of such

concern to their counterparts in times past, it is not implausible to think that in reality modern universities embody unresolved allegiances to incompatible models.

The now dominant ideal of a research-intensive university is in large part sustained by a belief that there is an essential connection between free inquiry and the growth of human knowledge and understanding. This belief explains the supposition of the founders of Johns Hopkins, that untrammelled inquiry by gifted individuals is the best way to maximize a university's contribution to human well-being. The contention draws much of its plausibility from a common perception that academic freedom of this kind has underlain the exceptional advances made by the natural sciences in the 19th and 20th centuries. The same ideas underlie contemporary defences of 'blue skies' scientific research supported by the public purse: scientific discoveries are necessarily unpredictable; accordingly, research has to be entrusted to a gifted few if society is to reap the benefits that new knowledge brings.

Widespread though this way of thinking is, as an account of the "inner pulse" of a university, it is highly problematic. To begin with, though the general picture fits the sciences since the Enlightenment rather well, it fits the traditional liberal arts over the same period only by stretching and straining the concepts of research and knowledge. Adam Smith, Immanuel Kant, Max Weber, Margaret Mead, and Suzanne Langer, for instance, who all worked at some point in universities, must number amongst the most gifted minds of their generations. Yet it is highly implausible to regard their studies in philosophy, history, literature and social inquiry as 'research' that resulted in a body of 'knowledge' comparable to established results in physics, geology or biology.

Some simple facts underscore the truth of this. Aristotle's physics is now of interest only to historians of science, but his philosophical endeavours continue to provide material for contemporary philosophical education and reflection. Historical and archaeological investigation has certainly substantially increased our knowledge of the past, but historians invariably insist on the necessity of new 'perspectives' for the interpretation of this knowledge. In the most 'scientific' of social studies, econometrics,

sophisticated theoretical developments are evident, certainly, but those who favour 'political economy' will deny that these developments are in any sense advances. While there is no turning the clock back when it comes to the theory of evolution, say, many students of literature have gladly abandoned 'literary theory' and returned to the kind of textual criticism that preceded it. And so on.

Still less can we say that, in general, work in the humanities (or even social sciences) produces 'useful' knowledge in any straightforward sense. Indeed, this cannot plausibly be said about science in general either. From time to time Nobel prizes in the natural sciences are awarded to highly innovative work that has huge technological potential. But the major advances made in cosmology, evolutionary biology, and plate tectonics have no evident practical application. It might be, of course, that implications with practical consequences emerge. Such a possibility cannot be ruled out. It took almost a century for James Clerk Maxwell's innovative work in electro-magnetism to gain practical value. It remains true, nonetheless, that the intellectual value of Einstein's theory of relativity, or Darwin's theory of evolution, remains intact, whether or not they ever prove to have practically valuable consequences. Conversely, immensely important, even world-changing technologies, can owe little to scientific research – the telephone, motorcar and airplane being especially striking examples. Thirdly, it is not true that 'pure' research, even in expensive cutting-edge science, must take place within the institution of the university. Many pharmaceutical laboratories, defence contractors, art museums and charitable foundations undertake fundamental research in biochemistry, engineering, history, archaeology and the social sciences. There is no reason to think, in other words, that significant or successful research has any necessary connection with educational function. It may in general be true that commercial laboratories rely on university-educated people, but some of the most innovative work in computer technology shows that this need not be the case.

VI Research and Education

It is with regard to the connection between research and education that the deepest problem lies. McCosh and others were especially anxious that a strong emphasis on the university as primarily a place of research would introduce

a radical division between researchers and teachers. This division, of course, found institutional expression in Johns Hopkins where initially there was no provision for undergraduate education at all. The educationalists' worry was that, with the elevation of the research university, the institution of the liberal arts college would come to be regarded as second-class precisely because of its commitment to undergraduate education. The possibility remains a common source of concern in many quarters today, and it is not difficult to find evidence that the adage "Those who can, do, and those who can't (or can't yet), teach" has made an appearance in universities. The result is that research has come to overshadow education in determining the academic status of both institutions and individuals.

One strategy for offsetting this distortion might be thought to lie in making it a requirement that even the most active university researchers continue to teach students at all levels. But this does not really touch the source of the difficulty. What is to determine the content of the curriculum that is taught? Once again, the issue can be seen to surface with particular clarity in late 19th century debates in the United States. A key element in Charles Eliot's modernization at Harvard was the introduction of electives in place of the core curriculum, which had hitherto been characteristic of the American college, and a direct result of the Scottish model that it copied. McCosh's objection to electives was twofold. First, electives presuppose that students know what is worth studying in advance of studying it. Secondly, electives leave faculty free to offer courses based on research interests rather than on the educational needs of the student.

It is the second possibility that is most significant in the present context. An important step in the move from liberal arts college to research university was the introduction of postgraduate courses, whose purpose was to provide higher-level study and instruction for new generations of scholars and scientists. McCosh oversaw the introduction of such courses at Princeton, but the danger he saw with electives was that they would transform undergraduate courses into preparation for postgraduate study. This is of course what has happened quite widely within universities. The curriculum in most subjects is structured so as to enable students to move up though the subject from introductory to advanced levels. The natural trajectory of such a structure leads to graduate work and eventually to original research.

The absurdity of this as a general curricular structure, and what puts it at odds with the college ideal, is the fact that only a tiny proportion of students will ever enter the ranks of professional scientists and scholars. It is not so much that one size is being made to fit all, but that a size already known to fit only a minority is allowed to determine the general provision for all.

In such circumstances, the values that underlie a liberal education have effectively been abandoned, and no amount of emphasis on pedagogical skill will counter this. The issue is not about excellence in teaching, but the value and relevance of what is taught. However brilliant the instruction, basic biochemistry cannot be of much value to those who never become biochemists, and a grounding in the techniques of formal logic is of equally limited value to those who will never become logicians.

VII Research and Practicality

At this point in the argument, appeal is likely to be made to the doctrine of transferable skills, which alleges that an education in biochemistry or logic can generate intellectual skills that will prove serviceable in a wide range of other contexts. This is very dubious claim, in my view, but even if we accept it, there is still the unanswerable objection that John Henry Newman brings in his lectures on The Idea of a University. If there are these transferable skills, why not teach them through the medium of knowledge that is also useful in itself? Let us suppose it is true that a biochemistry course teaches such things as analytical clarity, conceptual imagination, cogency and rigor of thought, even to those who never go on to work as biochemists. Newman's point is that these skills can also be taught in what he (unhappily perhaps) calls 'servile' subjects like mechanical engineering, accountancy, architecture and pharmacy, where what is learned will be directly useful in the occupations at which these subjects are directed.

This observation turns attention to the third model – the technical university – a place where practically useful knowledge is taught at an advanced level and in such a way that it inculcates the virtues of clarity, cogency and so on. This model need not be exclusive. The protagonist of the technical university can allow that there is a place for 'pure' research in institutions

that do not aim to generate practical benefit to either individual careers or society at large. Yet if the alternative separation between instruction and inquiry is to be avoided, the protagonist of the technical university must find a place for research there too. This is relatively easy to do, in a general way. The difficulty lies in finding a place for research of a certain kind - commonly referred to as 'pure' research - and for wholly free inquiry. The two concepts are related, of course, since it is one condition of an inquiry being free that it is not restricted by considerations of practical relevance.

Now it seems evident that a great deal of scholarly activity that is traditionally believed the proper province of universities is without immediate practical worth. This is especially true of research in the arts, humanities and social sciences. Even where economic connections with, for instance, tourism, publishing, historic conservation, or the 'leisure industry' can plausibly be anticipated, it seems perverse to claim that this is where the chief value of the research lies. The slogan 'knowledge for its own sake' is not as easily endorsed as is often supposed, since it is easy to find examples of real, but trivial knowledge. Yet it does gesture in a plausible direction. There is a clear difference between the pursuit of knowledge for the purposes of deepening our understanding, and its pursuit for advancing our practical projects. The clearest illustration comes from the study of history. The past is unalterable and thus beyond our practical reach. Nevertheless, historical inquiry can enhance and enrich our understanding of times and cultures of which we cannot be a part.

The general point does not apply to the arts and 'soft' sciences only. The same may be said of physics, chemistry and biology, where many of the most striking advances have had no practical relevance. Of course, in this context the 'blue skies' concept is often invoked to remind us that the practical value of scientific research cannot be known in advance, and that some of the most arcane inquiries have proved of immense practical value in the end. But this appeal does not really help. If what matters is a value that may or may not be realized, this requires us to suspend judgement on whether even the most innovative scientific discoveries are of any value.

In short, the rationalizing appeal to 'practical knowledge' renders even the greatest scientists and scholars mere 'underlaborers' (to use John Locke's term) in the service of others. Thus, life of the mind and the calling of the intellectual have no value in their own right. This I take to be a reductio ad absurdum of the conception of university as exclusively a technical institution.

Taken in combination, these reflections suggest that two of the idealizations of the university that I have been exploring are internally defective. The research university can find a place for undergraduate education, but only insofar as it constitutes the first stages of an intellectual trajectory that only a tiny minority of students will ever follow. By contrast, the technical university can provide educational courses across a very wide range, but the intellectual investigations of its faculty can be legitimated only insofar as they serve external purposes.

VIII Re-vitalizing the University College

Can the third model of university as college do any better? On the face of it, the answer would appear to be 'No'. The history of higher education in Europe and North America is one in which the traditional college has gradually been side-lined, the result in part of the generalist nature of a liberal arts education that does not easily lend itself to research specialization it seems, and especially the sort of advanced scientific inquiry that is highly esteemed. In addition, at least as traditionally conceived, education of this sort seems possible only for a minority. It is thus readily perceived as 'elitist' in the negative sense of that word, because suited to levels of participation that have become politically and socially unacceptable. Taken together, modern university 'systems' have seen increasing emphasis on highly specialized research and a major expansion in state provision for higher education. Taken together these create a context in which the college model seems ever more antiquated – for the most part, the vestige of a bygone era. Liberal arts colleges survive, of course, and they remain highly valued, especially in the United States, but even there they now constitute a very small proportion of the higher education system as a whole.

However, sometimes things that appear headed for the dustbin of history may have properties of particular value to the culture that is sending them there. There is an element in the college model that potentially offers a solution to the current problem of integrating the competing demands of research, teaching and practical relevance. This element is professional education, something that potentially combines all three. The medieval university aimed to offer professional education from the first, though the profession in view was primarily that of priest – now of marginal interest to the world of universities – though as noted earlier, the education of lawyers and 'mediciners' (physicians) also made an early appearance. There is no return to such a world, yet the general concept of professional education as the college model understood it, may still be able provide valuable pointers.

Professional education is practical, but it is not technical. We can best bring out the point at issue by exploring the contrast between a trade and a profession. The distinction is an interesting one, and repays sustained reflection. In this context, however, and for reasons of space, I shall simply have to assert that the core of the difference lies in this. It is enough for a trade to aim at technical excellence. By contrast a profession must have intrinsic values that go beyond technical excellence. Consider two examples. The pursuit of excellence in information technology requires education to a very high level in computer science. In itself, though, such excellence is indifferent to the purposes to which it is applied. We can assume that computer IT specialists should keep within the law like everyone else, but there is no conceptual barrier to their skills reaching the highest levels of excellence in service to criminals as much as to the police. And we do find, as a matter of fact, that equally astonishing levels of technical achievement underlie the most trivial computer games as much as the most intellectually significant scientific experiments. The pursuit of excellence in medicine, by contrast, cannot be indifferent to purpose in this way. Central to it is the promotion of a non-technical value – health. That is why health professionals cannot countenance the use of medical skill to other ends, judicial amputations, for example, and why there is always some pressure on cosmetic surgeons to connect their work with psychological or emotional 'health'.

In a similar fashion, 'bent' lawyers can be exceptionally skilled in law. The administration of justice is not just one among a number of ends that lawyers

may have. It is intrinsic to the profession. The defect in rogue lawyers is not their incompetence, but their willingness to use their knowledge and skill to unjust ends. The same point applies, if anything even more forcibly, to the profession of priest. This is revealed in the intriguing fact that a properly ordained priest fully conversant with the theology and liturgical practices of the Church was required for the celebration of the 'black' mass. The liturgical acts had to be faultless to be effective; their corruption lay in their being directed to the worship of Satan.

What all this shows is that professional education requires what the modern world calls 'values education'. This is not significantly different from an education in the liberal arts. To serve justice we have to know what it is. This is not empirical knowledge in any straightforward sense. It requires the sort of philosophical reflection and historical understanding characteristic of jurisprudence, alongside the study of criminology, broadly construed, so too with medicine. Contemporary curricular reform in medical schools has given new emphasis to 'medical humanities' in the education of physicians.

These examples serve to reveal a connection between a liberal and a practical education. This is a salutary counter to some of the divisions with which we are currently familiar. Nevertheless, it goes a very small way towards addressing the further matters of research excellence and large-scale tertiary education. Unfortunately, these further connections can only be hinted at here. It will have to suffice to note that the ideal of the college, as exemplified in 18th century Scotland and post-colonial America, understood education for citizenship and civil leadership as a key part of its role. The expression 'political education' can have unwelcome connotations, but in this sense it has just the same sort of structure as professional education – special competence informed by philosophical, historical and sociological reflection on ethics, politics and the arts, as well as a sufficient knowledge of, for instance, mathematics, the sciences, economics, and technology. The purpose of such an education is to form an intelligently responsible citizenry across all classes and groups, one that will be able to resist both tyranny and the sort of populism that can corrupt democracies. The role of free inquiry central to the idea of a university is to ensure that intelligent citizenship never degenerates into received opinion or ossified dogma.

This is a very brief sketch, but I think it is possible to elaborate this revitalized version of the university as college in a way that throws new and more profitable light on many of the problems that currently confront the academy. Chief among these, in my estimation, is the difficulty of continuing to assert the university's valuable social role, while resisting two recurrent threats to its autonomy - 'the state as social engineer' and 'the student as customer'.

References

Burgh, H., Black, A. and Fazackerly, A. (Eds) (2007) *Can the Prizes Still Glitter?* Buckingham, University of Buckingham Press.

Carter, J. and Witherington, D. (1992) *Scottish Universities: distinctiveness and diversity*, Edinburgh, John Donald.

Graham, G. (2008) *Universities: the recovery of an idea* (second edition) Exeter: Imprint Academic.

Hegel, G.W.F. (2001) Philosophy of Right Translated by S.W. Dyde from the 1821 *Naturrecht und Staatswissenschaft im Grundrisse, Grundliniender Philosophiedes Rechts*. Kitchener, Batoche Books.

Hofstadter, R. and Smith, W. (Eds) (1961) *American Higher Education: a documentary history*, in two volumes, Chicago, Chicago University Press.

Newman, J.H. (1852/1982) *The Idea of a University* (Ed) Martin Svaglic, Indiana, Notre Dame University Press.

Sloan, Douglas (1971) *The Scottish Enlightenment and the American College Ideal*, New York, Teachers College Press.

A DILEMMA ABOUT THE FINAL ENDS OF HIGHER EDUCATION - AND A RESOLUTION

Thaddeus Metz
University of Johannesburg

Introduction

It turns out to be exceedingly difficult to pinpoint what academics at public universities ought to be paid to do with their time. Of course they should be discovering and disseminating knowledge, but the tricky question is: which knowledge? It would be of interest to have a solid answer to this question, i.e., one that is comprehensive and makes good sense of comparatively uncontroversial judgements that most readers share about the matter. However, current theoretical reflection faces a dilemma about the proper aims of lecturers at state higher education institutions.

On the one hand, all dominant theories of how justly to spend public resources entail that academics should not pursue 'knowledge for its own sake' and should rather strictly devote their energies toward promoting some concrete public good such as development, justice or autonomy. After all, if the public is footing the bill, it makes sense that it should receive something it has authorized or that is at least of some concern to it.

On the other hand, this view of the academic enterprise entails the absurdity that some of the intuitively most important and interesting projects in the humanities and the sciences are inappropriate. For just two examples, if knowledge for its own sake were wrong for academics to pursue and to transmit, then it would not be permissible for them to enquire into syntactic theories of Shakespeare's writings or the ultimate fate of the universe, viz., whether it will expand forever or not.

In this article, I spell out this dilemma, and then suggest a new, promising way to resolve it. My strategy is to retain the idea that academics not merely may, but positively should, seek out certain kinds of knowledge for its own

sake, and to articulate a new theory of how state resources ought to be used that can accommodate that intuition. Specifically, I show that the dilemma can be resolved if the point of the state and its public institutions ought to be to balance the realization of final goods. I do not have the space to determine whether this account of the state's proper ends is independently attractive or not, something that must be undertaken in other work in order ultimately to determine whether the strategy I proffer is successful.

'Knowledge for its own sake'

The question I seek to answer is what the final ends of a public university ought to be, and, in particular, whether the discovery and transmission of knowledge for its own sake is among them. By the latter I mean intellectual activity that is very unlikely to realize a concrete public benefit such as economic development, social justice or individual autonomy to any substantial degree, or that is the least likely to do so relative to other kinds of reflection that academics could promote.

Notice, then, that I do not take the phrase 'knowledge for its own sake' literally, in two respects. First, it need not be knowledge, viz., warranted true belief, but rather a cognitive viewpoint that is, say, merely justified at a given time, but that could turn out to be false. Furthermore, it need not strictly speaking be enquiry for its own sake, but rather reflection undertaken for some aim other than one that is likely to realize a tangible social good such as Constitutional democracy, reduced poverty or the like.

Some, including Malegapuru Makgoba, have argued that the concept of knowledge for its own sake is incoherent and inapplicable (e.g., Makgoba 1998; Nabudere 2006: 7-8), but I have replied that he and those with similar views are taking the phrase too literally (Metz 2009a: 519-521). Instead of rejecting the concept based on a cramped reading of the words involved, the phrase should be used as a placeholder to facilitate debate about whether it is morally right for public academic institutions to pursue intellectual activity of a sort that is unlikely to contribute to society in terms of wealth, health, rights, self-governance or some similar benefit that is not 'free-floating'.

Key examples, then, of knowledge for its own sake, beyond the form of Shakespeare and the fate of the universe, include: 'Is there a black hole at the centre of every galaxy?', 'Is there intelligent life on other planets?', 'What is the ontological status of numbers?', 'Is scepticism refutable, e.g., can you know you are not dreaming right now?', 'How did fish evolve into terrestrial creatures?' and 'What killed the dinosaurs?'

As these examples indicate, it is not merely the humanities that would be affected by the claim that it is wrong for public higher education to pursue knowledge for its own sake, which contemporary debates often assume; vide titles such as Stanley Fish's essay 'The Uses of the Humanities' (2008), Martha Nussbaum's book Not for Profit: Why Democracy Needs the Humanities (2010) and, locally, John Higgins' 'Dilemma of the Humanities' (2011). Many pursuits currently far from the fringes in physics and biology would also be impermissible, if that claim were true.

Reasons to favour the down-to-earth over the blue-sky

Elsewhere, I have argued that what is currently the most developed thinking about whether a state university may promote knowledge for its own sake faces a dilemma between what I call 'macro' and 'micro' perspectives (Metz 2010). In the next two sections, I draw on this work to recount key aspects of the antinomy, after which I make a new suggestion about what I take to be the most promising way to resolve it.

Here, I focus on the 'macro' perspective of the way the state ought to deploy its resources, contending that all the dominant theories entail that the state ought to do so on behalf of the public in ways that appear to rule out knowledge for its own sake. To make this claim plausible, I show that four major theories of the proper ends of public institutions underwrite the claim that academics at them ought merely to pursue enquiry of the sort that would be likely to have some practical payoff.

Cost-Benefit Analysis

I begin by addressing a cost-benefit, or what philosophers call a 'utilitarian', account of proper state goals, according to which the state ought to spend public resources just insofar as doing so is expected, relative to other available options, to result in the highest net improvement to people's quality of life in the long run. So stated, this view begs the question of what counts an improved quality of life, but one need not be very specific about that, and need merely accept that it involves something akin to feeling pleasure instead of pain, satisfying desires instead of having them frustrated, and actualizing certain capabilities such as health, education and autonomy and avoiding correlative bads such as sickness, ignorance and slavishness.

It appears almost true by definition that a cost-benefit approach to the state would rule out seeking knowledge for its own sake, since the latter is defined as that which is unlikely to foster concrete social goods such as an improved quality of life. And, indeed, some South African educational theorists have made that point, invoking a cost-benefit analysis in defence of strictly 'relevant' or 'responsive' instruction. Dolina Dowling and Sipho Seepe approvingly cite one of the earliest and clearest Africanist statements against knowledge for its own sake from TM Yesufu:

> [T]he African university must not pursue knowledge for its own sake, 'but for the sake of, and the amelioration of the conditions of life and work of, the ordinary man and woman'. It must be fully committed to active participation in the social transformation, economic modernisation, and the training and upgrading of the total human resources of the nation.
>
> (Dowling and Seepe 2003: 45-48).

Concretely, discovering the fate of the universe or syntactic patterns in Shakespeare and then reporting the findings to others would produce much less expected social well-being than other types of knowledge that a university academic in general could produce.

Although I disagree that a public university, whether in Africa or not, must be 'fully'[1] committed to improving people's quality of life in the ways Yesufu, Dowling and Seepe have in mind, I agree with them that a cost-benefit approach to state resources entails that it should be. Interestingly, there have been some, notably from a South African context, who have tried to argue, in two ways, that a cost-benefit approach to public institutions in fact permits the promotion of knowledge for its own sake at a state university. It should be revealing for me to explain why they are incorrect.

First, there are some who have pointed out that we can never really know for sure what the long-term effects of knowledge will be,[2] and from this have concluded that academics ought at least to be free to pursue whatever knowledge they want, and do not act wrongly thereby. For example, in an eloquent and insightful report commissioned by South Africa's Council on Higher Education (CHE), Ruth Jonathan appeals to:

> the truism that the future cannot be predicted, perhaps most obviously regarding the directions that the development of knowledge and technology will take. Thus even within the natural sciences, physical and biological, in technology studies and in business administration, there could be no sound rationale for steering teaching in line with too tight a specification of relevance. There would be even less justification for so prioritising research, as most of the innovations making today's world what it is have taken even their originators by surprise.
>
> (Jonathan 2006: 21).[3]

Even if an instance of knowledge appears to be merely free-floating, chances are that its enquirer is on terra firma, so the argument goes.

The trouble with this rationale is that the alleged truism is patently false (Metz 2010: 541-543). Although it is correct that we cannot predict outcomes with certainty, we can and must do so on the basis of probability.

---

[1] Though it of course should be partially, indeed largely, so committed.

[2] In effect denying that there is any 'knowledge for its own sake' as I have defined it, viz., as reflection that, for all we know, is unlikely to have any tangibly desirable social impact.

[3] See also Makgoba 1998: 47 and Higgins 2000: 116.

In a situation in which there are scarce resources, the rational thing to do from the perspective of a cost-benefit approach is nothing other than to weigh up the expected values and disvalues and to choose the option that will maximize the net amount of expected value minus expected disvalue. And often we are in a position to have some estimation of which knowledge is more likely to benefit society compared with other knowledge, even if we cannot specify the probabilities in absolute terms. After all, a physicist seeking to discover the fate of the universe is much less likely to improve social well-being than is one working to develop solar power. It would be irrational, from the standpoint of wanting to improve people's lives, merely to flip a coin about which project to fund, supposing a state university were a utilitarian agent having to choose where to put its money.

Here is a second strategy some have used to attempt to show that utilitarianism can permit the pursuit of knowledge for its own sake. Articulated with most care in the South African context by John Higgins in an influential essay (2000), this rationale is that even if blue-sky knowledge would not be likely to do much good for society, the blue-sky knower would be. Citing the views of the British thinker Conrad Russell, Higgins remarks that 'the real value of the university lies in part with the teaching it does and the graduates it produces, graduates who "must be capable of wanting to pursue knowledge for its own sake" if they are to be socially useful' (Higgins 2000: 116). Why? Because those who pursue knowledge for its own sake come to prize the truth and to speak it more often than those who pursue other kinds of knowledge, where the more truth-appreciators a society has, the better off it is likely to be in the long-term.

This is a clever manoeuvre by which to try to demonstrate that pursuing knowledge for its own sake can be of long-term social benefit. However, I think it also clearly fails in its aims. If the core premise of the argument, that blue-sky enquirers are more faithful to the truth and willing to speak it to power than more practical scholars, were correct, then philosophers and cosmological physicists would be, on average, better in these respects than, say, sociologists and medical researchers. However, I am, and I presume the reader is, unaware of any evidence suggesting that is the case. So far as truth-appreciation goes, these scholars are all on a par with one another.

In addition, a plausible reason for doubting that blue-sky enquiry makes one a better truth-appreciator is that the aspects of blue-sky enquiry that foster an appreciation of truth are equally (or at least comparably) available when conducting more practically relevant enquiry. For example, take a physicist working on solar power. She could appreciate the non-utilitarian facets of her research, e.g., the symmetry of the physics underlying the work, or the elegance of the theorems she uses, and thereby become a useful truth-appreciator, while also discovering knowledge that is likely to make a real difference to the general welfare. Higgins' rationale, therefore, entails not that researchers should engage in blue-sky enquiry, but rather that they should engage in practical enquiry but along the way appreciate its non-practical facets, so as additionally to become truth-appreciators (cf. Graham 2008: 32-33). Such research and researchers are what would be the most utilitarian.

Majoritarian Will

Consider now, a different account of how state resources ought to be spent, one that appeals not to what would improve the majority's life, but rather what the majority most wants or has authorized. According to this democratic will, or 'social choice', theory of public institutions, they ought to deploy their resources in ways that comport either with what a majority has approved of via fair procedures, or what it would approve of, were it to be consulted. South African theorists whose views come close to such a perspective again include Seepe (1998), Dowling and Seepe (2003: 44-45) as well as Steven Friedman and Omano Edigheji (2006: 9-17). Dowling and Seepe provide a clear-cut expression of this view:

> A democratic society is expected to justify its investment in education. Thus, the question arises: what return does the country derive from its investment in higher education?... In short, there is a growing public expectation that universities should contribute to the economic, social and cultural development of society… (T)he traditional notion of the academic, with its emphasis on personal growth, implied that s/he worked in isolation from, or at least failed adequately to participate in, the wider life of society. Yet the very

> expertise and skills that academics have are desperately needed by society. Furthermore, as academics are paid from the public purse, society is correct to expect some return from this investment.
>
> (Dowling and Seepe 2003: 45).

In short, the thesis that institutions supported with public funds ought to deploy them for goals of which the public approves, combined with the plausible suggestion that the goals for state universities of which the public approves are solely to enhance economic and other forms of well-being, entails that it would be inappropriate for academics at such places to pursue knowledge for its own sake.

Of course, there are probably majorities in some societies who want publicly-funded academics to pursue knowledge for its own sake. I notice that often the most widely-read news articles on the BBC's website are those relating to cosmology, which suggests that a poll of British people might go in favour of blue-sky enquiry. However, that is very unlikely to be true of all societies, particularly those in sub-Saharan Africa, where the salient values among black peoples tend to be more pragmatic (on which see Metz 2009a, 2009b).

In addition, even if an appeal to majoritarian will could entail that academics at public universities should pursue some blue-sky enquiry, it would not plausibly explain why they should. Suppose a cosmologist were to make a major discovery about the fate of the universe. It would not be suitable to praise her merely, or even primarily, for having fulfilled one of the majority's aspirations. Instead, there is something about the object of her enquiry, viz., what she has discovered, that explains why she should have undertaken it and should be praised for having done so. A similar criticism applies to the utilitarian rationale above; it would be inappropriate to praise this cosmologist simply for having done something that is likely to foster goods such as health, wealth, autonomy or the like, even if, per impossible, one could specify exactly how it would do so (on which see Metz 2010: 543).

Constitutional Obligations

The same problem faces the third major theory of the state's proper ends, the view that it is not merely carrying out democratic will that matters, but rather realizing Constitutional norms, or perhaps social justice more generally, that does. From this perspective, the state ought to spend public monies and other resources just insofar as doing so would help to satisfy Constitutional imperatives such as widening political participation, upholding the rule of law, preventing crime, improving access to healthcare and housing and so on. South Africans who have expressed such a perspective include Penny Enslin and Kai Horsthemke (2004) and Vierle Dieltens (2008), who defend a liberal political and educational philosophy. Such a view is also present in some of the documents published by the CHE (e.g., 2008), which can be read as appealing to the Constitution to serve as common ground on contentious matters in South Africa.

Suppose, for the sake of argument, that discoveries about the fate of the universe or pattern in Shakespeare happened to prompt people to fulfil their Constitutional obligations; it would nonetheless be odd to value these findings for that reason. Again, there is something about these discoveries 'in themselves', apart from their consequences for social justice or similar goods, that makes them worthy of public funding and appreciation. Furthermore, this supposition is implausible; that is, it is extraordinarily unlikely that reflection about the ultimate direction of the universe or the structure of Shakespeare would do much in terms of helping to promote social justice, whether conceived in Constitutional terms or otherwise. So, if the state's resources were rightly deployed only insofar as they were likely to realize Constitutional imperatives, then it would be wrong for academics at public universities to reflect on such matters.

Human Excellences

The fourth, and last, theory of the proper ends of the state that I consider in this article is on the face of it more likely than the other three to be consistent with academic blue-sky enquiry. It is known as a 'perfectionist' account in philosophical lingo (Hurka 1993), the basic idea being that the state should seek to 'perfect', i.e., to develop, what is valuable about human

nature. The state ought to spend public resources just insofar as doing so produces intellectual and practical virtues, and reduces corresponding vices, among its residents.

Applying this principle with care would require a full account of what human excellences and their opposites are, but I need not provide that in order to evaluate the principle's likely implications for knowledge for its own sake. What is crucial to grasp is the distinction between welfarist values, associated with utilitarianism, and perfectionist ones. There are important differences between self-interest and self-realization, between benefits and accomplishments, between well-being and virtue, between what is good for a person and what a good person is, between when a person is well off and what a person does well. Athletes and artists are exemplars of human excellence, but need not be, and rarely are, characterized as being particularly happy.

The same is true for academics. It is fair to contend that the acquisition of certain kinds of knowledge is a human excellence, something valuable about us that animals cannot exemplify, meaning that the present theory appears to have a decent chance of underwriting the judgement that it is permissible for lecturers to promote knowledge for its own sake. It was, in fact, this kind of perspective on the role of higher education that motivated John Henry Newman, who inaugurated Western debate about 'the idea of the university' (1852), to support the claim that one of its aims should be to transmit[4] knowledge for its own sake. A perfectionist account of the state, in sum, appears able to avoid the two kinds of objections made to the other three theories; pursuit of certain kinds of knowledge for its own sake does appear to be likely to realize a human excellence, and the realization of human excellence does appear to be a suitable reason to prize certain kinds of knowledge for its own sake.

I cannot recall having encountered anyone in a South African context appealing precisely to a perfectionist account of the state, perhaps because it is a characteristically Aristotelian and classically European view (in addition to Newman see, for example, Husserl 1935). That said, there is

[4] But, interestingly, not to discover it.

of course a South African Marxist tradition, and it would fit neatly in that intellectual vein to think that the basic role of public institutions should be to develop valuable human capacities, which are stunted by poverty and more generally by dispossession of the means of production. In addition, many South African educationists find Martha Nussbaum's and Amartya Sen's capabilities approach to justice attractive, which approach is a close relative of perfectionism (e.g., Walker and Unterhalter 2010).

I lack the space to give this account of the state's proper ends the attention it deserves, but do highlight two major reasons for doubting that it can in fact permit the promotion of knowledge for its own sake, at least in ways that are intuitively apt.[5] First, this principle provides little or no reason to discover knowledge for its own sake; instead, as I have noted elsewhere, spreading among students and the broader public the blue-sky knowledge that already exists would be sufficient to promote the excellence (Metz 2009a: 528). If what is good about us, what makes us better people, is actualizing our capacity to reflect on or apprehend certain matters, then that can be achieved without finding any new such things to think about.

The second problem with deeming perfectionism to be consistent with the pursuit of knowledge for its own sake at public universities is a matter of the lack of 'bang for the buck'. Relatively few members of the public, or even undergraduates and Honours students, are interested in, or even capable of truly understanding, knowledge for its own sake of the sort that is prized by specialists, which means that, to maximize the spread of human excellences, a state university ought to focus on imparting other sorts (Metz 2009a: 528, 534). If the proper aim of the state were to produce as much virtue and to reduce as much vice as it can, then it would be irrational to fund rarefied and expensive enquiries into the fate of the spatio-temporal world or the syntax of one of the world's best writers, which could be appreciated only by a small handful. Instead, a state university ought to devote these resources toward developing students' abilities to think critically or to become good citizens, or satisfying the public's interest in knowledge it can grasp and is willing to learn.

---

[5] Elsewhere I intend to follow up on several hunches I have for doubting that knowledge for its own sake is a human excellence.

There are theories of just state goals besides the four I have examined, of course. However, the first three have been the dominant players in the South African context, the fourth is the most promising as a way to underwrite blue-sky enquiry, and the remaining theories are far less likely to succeed in that, for example, apprehending patterns in Shakespeare is unlikely to protect anyone's rights to non-interference (as per libertarianism), to foster communal relationships (communitarianism) or to fulfil a goal that rational agents living in a non-state society would expect to be fulfilled by erecting a state in the first place (contractualism).

Pruning the tree of knowledge

So far, I have spelled out the first horn of the dilemma about the final ends of state-sponsored higher education, that from the 'macro' perspective of the dominant theories of the proper aims of the state, academics may not pursue knowledge for its own sake. In this section, I articulate the second horn, which is that such a proposition is absurd. From the 'micro' perspective of those of us who make up a state university, it is wildly counterintuitive to think we must study and instruct only matters that are likely to have some concrete outcome.

Consider the cosmologist again. Suppose that, using a public university's resources, she ended up discovering that the universe will in fact expand forever, as opposed to collapsing back into a singularity or fizzling out into stasis. If the pursuit of such knowledge were impermissible, then she should feel guilty for what she has done, for she has misused public resources. In addition, she, and at least the line manager who authorized her to undertake this research, ought to apologize and to pay the public back for the misdirected funds. Still more, it would be objectionable for the university to celebrate what the cosmologist has discovered, given the wrongful means by which she did so. Finally, she and her line manager should be subject to disciplinary procedures for having wasted university time, money and lab equipment on work unrelated to its mission statement.

Similar reactions would apply to scholars who, say, figure out why Immanuel Kant believed that experience is possible only if the mind structures it, prove that we can never refute scepticism, determine precisely how sea-based creatures evolved onto land, show that ontogeny does indeed recapitulate phylogeny, or find decisive evidence of rational life elsewhere in the universe. Indeed, the same would apply to me for having written this article.

I presume the reader joins me in finding these implications preposterous. To be sure, having determined that few of us are willing to let go of the idea that some blue-sky enquiry is appropriate for an academic is not to have explained why we ought to retain the idea. I do not provide a full explanation of why in this article, but do, in the next section, indicate a promising rationale that is worth taking seriously and developing elsewhere by political theorists and philosophers of education.

A promising resolution of the dilemma

On the one hand, nearly all those working in an academic environment share the firm, considered judgement that it can be not merely permissible, but also praiseworthy for lecturers at publicly funded institutions of higher education to discover and to transmit some knowledge for its own sake, viz., beliefs or views that are comparatively unlikely to improve society with regard to justice, democracy, well-being, autonomy or the like. On the other hand, there presently exists no theory of the point of the state and its public institutions that can underwrite this judgement; all the salient views in the literature of what the state ought to be striving to achieve for its residents have the ultimate implication that academics may not pursue knowledge for its own sake. That is the dilemma.

Strategies for Resolving the Dilemma

One way to resolve the dilemma would be to 'bite the bullet' and give up the intuition that knowledge for its own sake is permissible at state universities. And I have encountered some Africanist scholars in the literature who appear willing to do that (Murove and Mazibuko 2008: 106). One wonders whether they appreciate the full ramifications of this view, i.e., just how much of the humanities and natural sciences would need to be cut away.

Regardless of whether they would change their minds or not, when a large majority of the most thoughtful enquirers on a given matter are confident of a belief, one has some weighty justification for holding that belief. The belief is not necessarily true, of course, for majorities of the best informed can be incorrect. However, if it is reasonable for me to believe that the sun is 93 million miles away from the earth because that is the firm consensus among those who have most studied the matter, it is similarly reasonable for me to believe that, say, I am permitted to compose this article despite its slim chance of improving South African society, because that is the firm consensus among those who have most thought about what academics ought to be doing at state universities.[6]

Therefore, I seek to resolve the dilemma in the other possible way, by rejecting the dominant theories of the proper final ends of the state and presenting a new one that permits the pursuit of knowledge for its own sake at a public university. In order conclusively to resolve the dilemma, I would have to demonstrate that this alternative view of the point of the state is independently attractive, i.e., warranted beyond its ability to underwrite knowledge for its own sake. I do not have the space to undertake that project here. Instead, what I do is articulate a prima facie attractive theory of the ultimate aims of public institutions and show that it makes decent sense of why lecturers at them should sometimes seek blue-sky knowledge.

How to resolve the dilemma (probably)

Here is a plausible principle about which ends the state ought to realize that promises to account for the judgement that lecturers may discover and transmit certain kinds of knowledge for its own sake: the state ought to spend public resources if, and only if, doing so is expected to balance the superlative realization of final goods. I explain this principle, indicate the way it would resolve the dilemma, and then, afterward, conclude the article by pointing to work that must be done elsewhere in order to have reason to think that the dilemma has been overcome.

---

[6] True, it has been mostly academics who have thought about what academics ought to be doing — but who else would be in a position to do so with care?

A final good is something that is valuable 'in itself' in the sense of being desirable not merely as a means to something else. Money is desirable, but is not a final good, for one invariably desires money merely as a means to acquiring to something else on a market, say, something that will give one satisfaction. Indeed, pleasure is the most often cited clear instance of a final good among philosophers, and much of the debate among them is about whether there is anything else besides pleasure that is finally good. Most in the field these days believe that there is; it is common to maintain that a person, a creative work,[7] or a loving, friendly or communal relationship can be good for its own sake, i.e., apart from what else it might bring about in the long run.

One might wonder what the difference is between a human excellence and a final good. Any human excellence or virtue is most likely a final good, but it is very unlikely that all final goods are human excellences. After all, neither the experience of pleasure, nor the bare existence of a person, is a virtue. And, yet, pleasure is worth promoting and persons merit respecting, because these are conditions that are valuable in themselves, and not solely as a tool to the production of something else.

The principle above says that the state ought to strive to realize final goods in a 'superlative' way, meaning that the most important final goods (considered by pair-wise comparison) should be promoted to an outstanding degree (considered in themselves). Intuitively, some final goods are better than others, e.g., a Picasso (or seeing it), a state of health and a good marriage are worth more than, say, the pleasure of eating a bowl of ice-cream. There is pro tanto reason for the state to focus its attention on the more highly ranked goods, and to promote them as much as it can.

This reason obtains, however, only on condition that the distribution of final goods is 'balanced'. Notions of balancing are familiar outside of a political context, but have yet to be developed in it, something I begin here. For example, when distributing goods such as time, attention and money in a family, one would not be right to give all of them to the most talented members so that they can maximally flourish, leaving the least talented

[7] Or the experience of it, which might not be pleasant.

behind. Neither should one parcel out resources in a strictly equal manner among family members, nor should one give all the resources to the ones who are worst off, particularly if they are handicapped so that there would be nothing left for those able to flourish at a higher level. Instead, it would be reasonable to spend more on the child capable of playing the piano, but to ensure that the handicapped child, or the one capable merely of board games, is not left out in the cold. Intuitively, in the context of a family, then, final goods should be promoted so that no one is utterly disregarded or so that all receive some substantial consideration (cf. Slote 2001: 63-76), viz., distributed in a balanced way.

Consider, now, the idea of the state balancing a distribution of final goods in its territory. Such a state would do what it could to promote conditions highly valuable for their own sake, while ensuring that all final goods, even those with the least value, were realized to some degree. Such an account of the state's proper ends can entail and plausibly explain why lecturers at a public university ought to promote knowledge for its own sake. It is reasonable to suppose that certain kinds of knowledge for its own sake are finally good. It is not important for there to be reflection on how many redheads there are in a certain city (cf. Hurka 1993: 100, 115), but it is important to study the ultimate fate of the universe or to apprehend the syntactic structure of the works of The Bard.[8] If some sorts of blue-sky enquiry were indeed good for their own sake, regardless of whether they produce anything valuable apart from themselves, then the present principle would direct the state to ensure that an adequate degree of them are realized, no matter how highly or lowly ranked they are relative to other final goods.

In sum, the category of final goods has a respectable philosophical pedigree, and plausibly captures the sort of knowledge for its own sake worth promoting, along with other conditions that the state ought to realize, such as a population free from sickness, injury and fear and able to engage in creative work and to sustain cohesive relationships. And the idea of distributing final goods in a balanced way, familiar from at least a familial context, is a plausible, even if under-theorized, way to allocate public resources.

---

[8] I realize I need to develop elsewhere an account of why these topics in themselves merit study, but, for now, the judgement that they do will suffice.

Conclusion

I have argued that current thought about the proper aims of academics at a publicly-funded university faces a dilemma. On the one hand, most of us judge that it can be right, and even praiseworthy, for such academics to pursue some knowledge that is not expected to have any notable concrete social benefits, but, on the other hand, none of the dominant theories of the proper aims of the state can make sense of that judgement. To resolve the dilemma, I have proposed retaining the first horn, viz., not giving up the intuition that it can be appropriate for a scholar, say, to ascertain the fate of the universe on the public's dime. Instead, I have suggested a novel theory of how to use public resources, which plausibly accounts for the intuition.

According to this theory, the state is obligated to spend public resources in ways that would balance the superlative realization of final goods. Supposing that certain kinds of knowledge for their own sake are finally good, and supposing that the balancing theory has independent justification, viz., can underwrite additional firm intuitions about the proper ends of the state, then the dilemma is resolved. However, elsewhere scholars should explore whether these suppositions are indeed correct — but only if blue-sky enquiry is indeed permissible for us![9]

[9] This article has benefited from comments made by audiences at a Roundtable on the Aims of Higher Education held at Rhodes University, and at the 3rd Annual PhD Weekend sponsored by the University of the Witwatersrand Faculty of Education. My thanks go to Pedro Tabensky and Kai Horsthemke for having invited me to participate in those respective gatherings.

References

Council on Higher Education, South Africa (CHE), 2008. *Academic freedom, institutional autonomy and public accountability in South African higher education.* Pretoria: Council on Higher Education. http://www.che.ac.za/documents/d000183/CHE_HEIAAF_ Report_Aug2008.pdf.

Dieltens, V, 2008. 'As long as the rain still falls we must cultivate': Africanist challenges to liberal education. *Journal of Education* 45: 29-42. http://dbnweb2.ukzn.ac.za/joe/JoEPDFs/joe 45 dieltiens.pdf.

Dowling, D & Seepe, S, 2003. Towards a responsive curriculum. In Naudé, P & Cloete, N (Eds), *A tale of three countries: social sciences curriculum transformations in Southern Africa.* Lansdowne: Juta and Co Pty Ltd, 41-53. http://chet.org.za/webfm_send/472.

Enslin, P & Horsthemke, K, 2004. Can ubuntu provide a model for citizenship education in African democracies? *Comparative Education* 40: 545-558.

Fish, S, 2008. The uses of the humanities, part two. *New York Times* 13 January 2008. http://fish.blogs.nytimes.com/2008/01/13/the-uses-of-the-humanities-part-two/.

Friedman, S & Edigheji, O, 2006. *Eternal (and internal) tensions? Conceptualising public accountability in South African higher education.* Pretoria: Council on Higher Education. http://www.che.ac.za/documents/d000135/.

Graham, G, 2008. *Universities: the recovery of an idea,* 2nd edition. Charlottesville, VA: Imprint Academic.

Higgins, J, 2011. Dilemma of the humanities. *Mail & Guardian* 24 June 2011. http://www.universityworldnews.com/article.php?story=20110701153332745&mode=print.

Higgins, J, 2000. Academic freedom in the new South Africa. *Boundary* 2, 27: 97-119.

Hurka, T, 1993. *Perfectionism.* New York: Oxford University Press.

Husserl, E, 1935. *Philosophy and the crisis of European man.* Quentin Lauer (translation). http://www.users.cloud9.net/~bradmcc/husserl_philcris.html.

Jonathan, R, 2006. *Academic freedom, institutional autonomy and public accountability in higher education.* Pretoria: Council on Higher Education. http://www.che.ac.za/documents/d000138/.

Makgoba, MW, 1998. South African universities in transformation: an opportunity to Africanise education. In Seepe, S (Ed), *Black perspective(s) on tertiary institutional transformation.* Florida Hills: Vivlia Publishers and the University of Venda, 42-62.

Metz, T, 2011. Accountability in higher education: a comprehensive analytical framework. *Theory and Research in Education* 9: 41-58. http://ahero.uwc.ac.za/index.php?module=cshe&action=downloadfile&fileid=410921021306350781790 3.

Metz, T, 2009a. Higher education, knowledge for its own sake, and an African moral theory. *Studies in Philosophy and Education* 28: 517-536. http://ahero.uwc.ac.za/index.php?module=cshe&action=viewtitle&id=cshe_559.

Metz, T, 2009b. The final ends of higher education in light of an African moral theory. *Journal of Philosophy of Education* 43: 179-201. http://ahero.uwc.ac.za/index.php?module=cshe&action=downloadfile&fileid=410921021242933054972 5.

Murove, MF & Mazibuko, F, 2008. Academic freedom discourse in post-colonial Africa. *Africa Insight* 38: 101-114.

Nabudere, D. 2006. Towards an Afrokology of knowledge production and African regeneration. *International Journal of African Renaissance Studies* 1: 7-32.

Newman, J, 1852. The idea of the university. http://www.newmanreader.org/works/idea/.

Nussbaum, M, 2010. *Not for profit: why democracy needs the humanities.* Princeton: Princeton University Press.

Seepe, S, 1998. Towards an Afrocentric understanding. In Seepe, S (Ed), *Black perspective(s) on tertiary institutional transformation.* Florida Hills: Vivlia Publishers and the University of Venda, 63-68.

Slote, M, 2001. *Morals from motives.* New York: Oxford University Press.

Walker, M & Unterhalter, E, 2010. *Amartya Sen's capability approach and social justice in education.* New York: Palgrave Macmillan.

EXCELLENCE IN HIGHER EDUCATION: IS THERE REALLY NO ALTERNATIVE?

Andrew Nash
University of Cape Town

I

Excellence, according to Bill Readings, "has become the unifying principle of the contemporary university" (1996, p.22). Excellence is the central category in the university's current self-conception, the point on which managerial authority believes itself to be at its strongest, and at times believes itself to be impregnable.

The only alternative to excellence in this discourse — or the only alternative that can be admitted — is mediocrity. In the South African context, this contrast can be given a political and racial edge, as in Mamphela Ramphele's claim that "Black people did not fight against apartheid only to settle for mediocrity" (2008, p.219).[1] Student struggles against apartheid raised the banner of freedom, rather than excellence, but these struggles can be used to legitimate excellence and to give retrospective content to the idea of freedom.

To think critically about excellence, we need to see it not just as an outcome but also as a managerial practice or system that impacts on every aspect of higher education.[2] We also have to see how it fills a pressing historical need within academic life. All too often, the advocates of excellence conceal that history, making it impossible for us to ask whether that need could be met in other ways.

---

[1] Ramphele's contrast of excellence and mediocrity, treated as the only alternatives, is conveyed throughout the chapter; see pp. 196, 198, 202, 226.

[2] It should be clear by now that excellence is treated here as a historically specific idea and practice, with its own requirements, tendencies and logic, capable of being problematized rather than accepted at face value. To avoid cumbersome formulations, taking all these dimensions into account, I will ordinarily refer to excellence in what follows, rather than to its idea or practice, its requirements or tendencies, etc.

In the university's self-conception and its official rhetoric, the idea of excellence can be seen as taking the place of the traditional idea of truth. In the organization of the daily life of the university, however, excellence provides a framework for justifying managerial authority — and the recognition and reward it dispenses — after forms of patriarchal authority had been called into question by the transition from elite to mass universities.

The pursuit of excellence seeks to create an academic equivalent for the ideology of the market, in which value can be quantified precisely, although not always by monetary value. The promotion of excellence in higher education has coincided with the adoption of neoliberal managerial techniques (treating academic disciplines primarily as cost centres, outsourcing, corporate partnerships, etc). As Readings puts it: "There is a clear parallel here to the condition of the political subject under contemporary capitalism. Excellence draws only one boundary: the boundary that protects the unrestricted power of the bureaucracy" (1996, p.33).

The critique of managerialism in higher education is often seen as nostalgia for a lost "golden age" of higher education. There is some truth to this charge, and this lost age — like many others — was by no means as "golden" in reality as it becomes in later recollection. Many people remember an educational experience which was less regimented and rule-bound, which allowed for life-changing encounters with teachers who were larger-than-life personalities, either inspiring or intimidating or both, and political and intellectual causes which demanded personal commitment and sacrifice. The managerial university, with its cost-benefit mentality and its focus on producing marketable skills for the labour market, seems shallow and monotonous in comparison. The thrill of discovery is still possible, but held in check by the need to package yourself as a saleable commodity.

In this now bygone age, higher education often resembled apprenticeship or initiation into a guild, within a patriarchal order, rather than the routines of the industrial assembly line. This traditional model of higher education is given expression, for example, in the critique of the written philosophical treatise in Plato's Seventh Letter. Philosophy, according to Plato, "is not

something that can be put into words like other branches of learning; only after long partnership in a common life devoted to this very thing does truth flash upon the soul, like a flame kindled by a leaping spark, and once it has been born there it nourishes itself thereafter" (1973, p.136).

Excellence has taken root precisely because it was able overcome the limits of the patriarchal order which dominated higher education from Plato's Academy to the mid-twentieth century. The patriarchal university was gradually undermined by the massive expansion of higher education enabled by the G.I. Bill passed in 1944 in the United States and similar benefits for returning servicemen in South Africa and elsewhere. It entered its terminal crisis with the student revolts in the advanced capitalist countries in 1968. The global economic downturn after 1973 and the emergence of neoliberalism as a powerful global ideology in the 1980s signed its death warrant.

Throughout its history, the patriarchal university was compatible not only with the kind of intellectual elitism upheld by Plato, but with many varieties of class, gender and ethnic prejudice and sometimes plain snobbery. The patriarchal order could be sustained for as long as higher education was restricted to a small elite. Once the changed economic and ideological context opened the doors to increasing numbers of students, new styles of management, teaching and research became inevitable. The historical achievement of the idea and practice of excellence was to provide a viable alternative to the patriarchal university.

Excellence emerged as the central ideal for universities that were being brought into line with corporate models of management. In this new model of the university, it was essential to establish and enforce uniform standards and efficient procedures for evaluation, certification and preparation for employment in a competitive labour market. In this way, excellence allowed higher education to become compatible with the needs of capitalism. Excellence challenged the idea of the university existing to serve a racial, ethnic or even national agenda. Excellence does not interfere with the university's role in preparing a minority for power and privilege; in practice, it generally reinforces the idea of the university as a ruling-class institution. But it also enables the university to help create a new kind of ruling class, no longer recruited only from the children of privilege.

None of this is to say that patriarchal authority has disappeared from the managerial university. Its role has probably been reduced, and it is often hidden from view. Arbitrary and unfair decisions have to be justified in new and more circumlocutory ways. Patronage cannot be openly declared. When there is no other way out, university managers will rely on legal technicalities or on legal procedures that will bankrupt colleagues who stand up to them.[3] It should surely be considered an advance that managerial power is no longer the exclusive preserve of men. But we should not believe that women are immune from the temptation to abuse it.

Excellence, in short, is rife with contradictions. Its strength lies in the belief that, whatever its problems, it is unavoidable. Not only the defenders of excellence but also many of its critics agree, in effect, that there is no alternative. This is illustrated by the work of Readings, perhaps the best-known and most penetrating critic of excellence in higher education, who limits himself to proposing that we "recognize that the university is a ruined institution, while thinking what it means to dwell in those ruins without recourse to romantic nostalgia" (1996, p.169).

This article seeks to explore the contradictions of excellence in higher education, seeking to understand its historical role in overcoming the limits of the patriarchal university, to recognize its own limits, and point the way towards a new kind of university capable of overcoming the limitations of excellence: what I will call the ethical university.

II

There are four main characteristics of the idea and practice of excellence in higher education that I wish to outline here.

First, excellence requires that the achievement of individuals, departments and institutions be quantified through bureaucratic processes. Everyone fills

[3] In the South African context, the best-known recent example is that of disciplinary proceedings initiated by University of KwaZulu-Natal management against Nithaya Chetty and John van den Berg in 2008. See also Ellen Schrecker, The Lost Soul of Higher Education: Corporatization, the Assault on Academic Freedom and the End of the American University

in the same form and is judged by the same standards. If the official who reviews the forms knows something of the discipline concerned, they should avoid making judgements based on that knowledge. The ideal is to impose a single standard across all the disciplines — accountancy, biochemistry, classics — however different they might be.

In this way, excellence removes the need for academics to read what their colleagues have written, or engage in discussion with them. In some contexts — for example, in a small department covering a number of areas of specialization — excellence effectively penalizes individuals who seek to grasp their discipline as a whole or to keep up with the work of their colleagues. The idea of excellence stands in opposition to the creation of intellectual community. A university may satisfy all the performance indicators required for excellence and at the same time be an "intellectual desert" in which "the task of creating a community of students and teachers [is] entirely neglected" and there is "no research conducted in common, no confrontations, no discussion."[4]

Second, excellence presents itself as ethically neutral. This is in some degree the outcome of its quantitative bias. Intellectual value, like monetary value, must be capable of quantification. The excellence aspired to by an individual or institution is measured by the number of peer-reviewed articles produced, the rankings of the journals in which they are published, citation indexes, funding raised, etc. In this perspective, a cure for cancer need be no more "excellent" than a technique for marketing cigarettes to teenagers; a theory of revolution can be as excellent as a justification of inequality. The excellence of either project is supposedly established by quantitative measures and independently of its ethical purpose or significance.[5]

---

[4] These formulations are taken from Paul Ricoeur's 1998 account of the Sorbonne in the 1960s in his Critique and Conviction: Conversations with Francois Azouvi and Marc de Launay, p. 28.

[5] It's hard to think of an academic article with greater impact than Fischer Black and Myron Scholes' announcement of a formula for pricing derivatives, published in the Journal of Political Economy in 1973 and leading to the award of the Nobel Prize in 1997. Their formula made it possible for investment banks, hedge funds and the like to create huge volumes of fictitious capital and inflate a series of asset bubbles leading to the global economic crisis that began in 2008 and still has no end in sight. No assessment of its excellence (or otherwise) could capture these contradictory outcomes. See also John Lanchester (2010), I.O.U.: Why Everyone Owes Everyone and No One Can Pay, especially chapter 2.

This appearance of ethical neutrality turns out to be false and misleading in important respects, however. In practice, excellence embodies a very specific ethic: the ethic of individual self-advancement, or what might be called competitive individualism. In principle, such self-advancement can be pursued by aligning your research, teaching and social outreach with any political or intellectual cause or with none. In practice, however, it can most efficiently be pursued by aligning your work with the interests of the wealthy and powerful, or at least by avoiding any real challenge to their interests. In some fields, research funding depends on alignment with the needs of major corporations, global institutions or government. But the larger orientation of the university towards the market brings about this alignment in many other ways.

This can be seen in the creative arts and humanities there is often more room for experiment and dissent, as class interests are less clearly defined in these fields. There is room for debate on affirmative action, for example, as there is division and uncertainty on this issue within the ruling elite. But the university committed to excellence — and seeking for that reason to cultivate funders and avoid controversy — will do what it can to marginalise debate on issues where the wealthy and powerful of the world are fundamentally in agreement. The Israeli occupation of Palestine is perhaps the most contested contemporary example.[6]

This pretence of ethical neutrality may be defended on the grounds that it prevents university authorities from openly imposing an official point of view on students and academics and from openly sanctioning them when they call it into question or deviate from it — as happened in Nazi Germany, the Soviet Union under Stalin, and to a much lesser extent at South African universities during the heyday of apartheid. But neoliberal capitalism does not require that kind of official dogma. In its context, the benefits of

[6] See John J. Mearsheimer and Stephen M. Walt (2007), The Israel Lobby and U.S. Foreign Policy, pp. 178-185. In the South African context, polemic around a panel discussion on Israel and Palestine, originally scheduled for March and eventually held in August 2011 provides a case in point; see "UCT professors at loggerheads over postponed Israel-Palestine discussion," Cape Times, May 31, 2011; "Four cross swords over Israel boycott," Cape Times, August 5, 2011; and subsequent exchanges in the Cape Times during August 2011.

pretended neutrality are outweighed by its ideological effects — that is, its role in mystifying the university's role in society in such a way as to ensure that ethical assumptions are implicit, unconscious and tend to conform to the existing social order.

This neutrality removes the option of collective debate on the ethical tasks and obligations of academic work. Because it effectively privatizes questions of ethics — reducing academic ethics to questions of plagiarism, copyright and the like — it shuts down debate on the ethical purposes of the university, perhaps even more effectively than would be done by outright repression. In a repressive regime, such debate is dangerous; in the context of excellence, it is redundant and sometimes even unintelligible.

Third, excellence creates and sustains an essentially competitive framework for higher education. Excellence is a relative rather than an absolute standard and can only be established by comparison — between individuals, departments, universities, even national systems of higher education. No doubt, much can be learned from such comparison, especially when it deals with large, systemic differences. But the focus of excellence is to require that academic effort be reconfigured in such a way as to satisfy the metrics of this comparison.

In this context, academics who neglect teaching to concentrate on research will often outperform their colleagues who take teaching seriously, as research is more easily quantified than teaching; those who design their courses to coincide with their specialized research interests will have the edge of their colleagues who design courses to provide students with the basic skills and perspectives essential for their discipline; academics who choose research projects which lead to frequent publication without any real development of their discipline will look better than their colleagues researching more original or intractable topics. In general, such systems will

favour the individuals, departments or institutions willing to cut corners, or even to falsify, at the expense of higher education as a whole.[7]

In all of these examples, and others, the system of oversight can be expanded to correct for these defects and then expanded again when new loopholes are found. But a more complicated and demanding collection of data will only serve to reinforce the essentially competitive nature of intellectual life within this context and diminish the possibility of establishing a genuine intellectual community, based on shared values and a sense of contributing to a shared intellectual project.

The main result of the competitive principle is to stifle any such sense of intellectual community. Within a competitive system, the achievement of any member of a university (or any university within a national system) is a threat to every other, as it raises the standards against which all must be measured. Within a collaborative system, the achievement of one is a benefit for all, adding to the resources everyone can draw on.

Fourth, in South Africa and globally, norms of excellence serve as a means of integrating individuals and institutions into a global system of higher education. But for the vast majority of institutions and national systems it cements into place a subordinate role within an unequal system and ensures that they take on an essentially dependent role. Put differently, to promote excellence in higher education at a South African university is to promote the recolonization of South African intellectual life.

---

[7] Reports on the falsification of data submitted for ranking systems by Claremont McKenna College in the United States, which appeared at the time of writing this article, indicate how such ranking systems can be gamed. Apart from outright falsification, it's possible for example to encourage hopeless applications in order to show a lower percentage of admissions, to measure indicators such as SAT scores of students and the percentage of staff who are full-time professors at times of the year which inflate these numbers; to increase the number of small classes by making large classes even larger; to boost numbers of alumni donors by asking for $5 donations from alumni; to report negatively on the reputations of colleges competing for roughly the same spot in the rankings, etc. See Jane Shaw, "Claremont McKenna Not Alone in Rankings Mischief," Bloomberg News, January 31, 2012; Richard Perez-Pena and Daniel E. Slotnik, "Gaming the College Rankings," New York Times, January 31, 2012.

The problem lies not in the global character of contemporary higher education, but in the uncritical acceptance of an unequal global order, leading to systematic distortions and deceptions pervading almost every part of the global system. Within this system, global standards are set by a handful of prestigious and wealthy universities, mainly in the United States. Other universities and national university systems measure themselves by those standards. Universities in South Africa and other countries ranked lower in the global league will generally prize publication in overseas journals or invitations to speak at conferences overseas above participation in the life of local communities. Rather than asking in any sustained way what distinctive contribution they have to make to the global system, they assume that the top universities, journals and awards set the standard for everyone.

But in copying the leading universities, to the extent that they can, universities in South Africa (or elsewhere in the postcolonial world) are in fact doing something entirely different from those they mimic. Academics at Harvard or Cambridge are participating in their immediate intellectual context by publishing in the journals held in high esteem by their postcolonial imitators. South African academics desperate to see their work in the same pages are often trying to tear themselves loose from the context of South African intellectual life, or to deny that it exists as anything except an instance of the global context.

In this way, excellence encourages academics to take on norms and problems which are not their own and which, all too often, they can understand only at a remove — in the way that someone understands instructions given from above rather than projects formed for yourself. Someone from a poorer country, when seeking excellence in this global context, learns to speak in a voice that resembles that of an audience they may never have encountered, or may have encountered only on brief visits to the global centres, rather than finding ways of engaging with the communities in which they work and live and the traditions developed in their own societies. In short, excellence brings the cost of a systematic alienation of the intellect.

III

When contrasted with the patriarchal university, we can see how the excellent university represents a kind of progress. It overcomes the limitations imposed on research and teaching by official dogma, class elitism and racial exclusion; it provides a reliable and objective means of holding members of the university accountable at regular intervals; it makes academics more productive and increases the number of them who present the results of their work for the scrutiny of their peers; universities in which academic work has been restructured along these lines are able to admit far larger numbers of students, from a wider range of backgrounds, and equip them more effectively for the workplace.

This argument for excellence does not concern itself with who studies at university and for what purpose; with who teaches or what they teach; or with what research is done and what it contributes to society. Precisely because the idea of excellence is not prescriptive in these matters, it allows a process of selection by the market to take place in higher education, clearing out the fond relics of academic tradition and reinvigorating that which is most valuable. But the argument assumes what it seeks to prove: that the market is the final and most reliable arbiter of value, and that this value can be measured in the annual increments of admissions, graduation rates, research output and the like.

The argument, in other words, is circular and focused on short-term gains and takes no account of questions of sustainability. When a university's annual publication count increases, for example, it could be a sign that research is flourishing or that researchers are learning to slice their data into smaller units or that more academic journals are willing to publish research which is trivial or derivative. The argument shows that the excellent university will consistently be able to "prove" its own excellence, for as long as it gets to decide how excellence is measured, and until the point is reached when excellence comes to a halt or turns out to be illusory.

In this respect, it is possible to compare today's universities of excellence with industrial and financial institutions that were hailed as success stories (and rewarded with massive profits) until the point at which it became

apparent that their strategy for success was built on sand. Enron Corporation was the sixth-biggest company in the world and rated "most innovative" in Fortune magazine's list of most admired companies for years in succession until it became the biggest bankruptcy in the world in 2001. Eskom was described as a "world-class" operation by the World Bank and others just before its rolling black-outs began in 2006. Economists from Alan Greenspan to assistant professors explained that the rise of derivatives had made recession impossible until such derivatives triggered the global recession of 2007–08, whose effects will be with us for years to come. In each case what began as a way of making these institutions look more attractive to ratings agencies and investors created a web of deception, with disastrous results.

IV

University managers sometimes defend the idea of excellence and its practices — systems of performance assessment, for example — by saying that these are a threat only to those who don't pull their weight — the notorious dead wood. But the accountancy of excellence impacts on every relationship in the university and the whole fabric of academic life.

Its impact may begin, for example, with academics producing shallow and uncontroversial research within narrow specialisations in order to meet the requirements of performance assessment. They learn to write in elliptical and abstract language, which can cause no offence to whoever referees their work for publication. This spreads into the curriculum when academics design their courses in such a way as to leave more time for research and teach their students to talk in the same euphemisms.

The next step is for academics under pressure to publish to ensure that their assignments are marked by tutors — easily exploited graduate students, who may not know much more about the course material than the students. Assignments are dumbed down accordingly, and students learn the habits of intellectual passivity, academic formalism and reliance on jargon, instead of learning to develop their own arguments and insights.

The same pattern spreads beyond the cycle of research and teaching. Editorship of a journal or membership of a national committee is also

quantified by the job and promotion market, so it comes to be pursued not only by those with a genuine interest in the work of the journal or committee, but also by those who see it as a means for self-advancement. Journals require authors to help them increase their impact factor by adding unnecessary citations of articles published in their own pages. The system allows for gradual corruption of its norms and this corruption has no necessary limit.

A narrow range of human types is unconsciously selected for in this process. It is not that these, or any other human type, can ever be rigorously excluded from academic life. But the shift to excellence favours, for example, the type who sees academic debates as "games" in which their performance is an end in itself. The borderline autism of the academic who never questions their own approach to the subject matter, easily ignores any argument which does not share their basic assumptions, and applies an established method mechanically, ensures their productivity. The reckless self-promoter will be able to take advantage of loopholes in the rules and anticipate how a specific course of action will look in an application for appointment or research funding. The uneven playing field of excellence favours them and ensures that they fill the ranks of the next generation of academics, continuing the vicious cycle.

In short, the excellent university systematically selects for the human type who is unable or unwilling — through whatever of these or other accidents of personality — to take responsibility for any but the narrowest area of activity in the most immediate short term. This process of selection will be relatively gradual — in comparison, say, with the selection of similar qualities among investment bankers and hedge-fund managers in the years when massive profits were being made by packaging subprime mortgages into complicated derivative forms and selling them on. Many will continue to be drawn to academic life by genuine intellectual curiosity, and this will offset whatever other qualities they have. But the logic described here will steadily erode the values, habits of mind and practices that make higher education sustainable across generations. Excellence in higher education is a way of burning the furniture to keep the house warm.

V

The idea of excellence, rather than being a self-evident truth, is a far-reaching attempt to transform higher education in ways which make its fundamental values redundant. The quest for excellence is not a more efficient means of achieving the traditional ends of higher education, but a radical subversion of those ends. If the analysis given here is even broadly accurate, then it seems certain that this process will do massive damage to higher education, at the expense of current and future generations.

I will not attempt an inventory of the ways in which the project of excellence in higher education could unravel, but will focus briefly on one of them: its ethical contradictions. A tobacco company or an investment bank can plausibly say they have no answer to the question which Aristotle put at the centre of human endeavour: what is the good life for man? But it is not so easy for a university to ignore this question, or to outsource it.

An institution like a university cannot avoid subjecting its members to constant guidance about how they should live, no matter how vigorously it avoids ever making this explicit. This question also looms large because universities engage so extensively with young people at the cusp of adulthood — often just removed from parental supervision, without the intensive supervision of military life or tribal initiation, required to give systematic thought to the world beyond family and school, and consciously deciding how they will relate to it. Even sex, drugs and rock-and-roll — the other side of the coin of rote learning and repeating what the lecturer said — can do only so much to drown out the question of the right way to live.

Hence the contradiction of a university that cannot avoid playing a major part in our collective ethical life, but also cannot acknowledge its role or countenance open debate on it. Instead, the excellent university seeks to make redundant the question of how we should live, or consign it to the private sphere. At the same time, it answers the question in the same way as the dominant discourse of contemporary capitalism: advance yourself, make yourself marketable, succeed at all costs.

A framework for describing this ethical impasse is provided by Alasdair MacIntyre's treatment of human practice as the basis of the virtues (1981). We define ourselves, in MacIntyre's account, through the practices in which we engage — coherent and complex forms of socially established co-operative activity with their own norms of achievement or their own goods. But the goods realized by a given practice can be either external or internal to it. MacIntyre gives the example of a child being taught to play chess, who is offered candy as a reward for their performance. "So long as it is the candy alone which provides the child with a good reason for playing chess, the child has no reason not to cheat and every reason to cheat, provided he or she can do so successfully." We hope a time will come "when the child will find in those goods specific to chess, in the achievement of a certain highly particular kind of analytical skill, strategic imagination and competitive intensity, a new set of reasons, reasons now not just for winning on a particular occasion, but for trying to excel in whatever way the game of chess demands." He concludes: "Now if the child cheats, he or she will be defeating not me, but himself or herself." (1981, p175-176).[8]

This distinction between the internal and external goods of a practice is vital for understanding its sustainability. External goods are limited, and are necessarily the property of some individual. Internal goods may also be the result of competition to excel, but "it is characteristic of them that their achievement is a good for the whole community who participate in the practice" (MacIntyre 1981, p.178).

In the terms set out in MacIntyre's After Virtue, the excellent university requires that its members pursue the goods external to intellectual practices, such as money or prestige, and devalue their internal goods, such as integrity, critical reflection on their own assumptions, commitment to truth and justice. The excellent university becomes like a chess school which always keeps open the option of cheating, as long as you can get away with it. It may be harder to cheat in academic life, the incremental gains of cheating may be relatively smaller, and the same management that allows

[8] MacIntyre's argument depends on a conception of excellence drawn from Aristotle (the Greek arête, also translated as virtue), which is entirely at odds with the contemporary, managerial conception of excellence.

for it may have systems of oversight to keep it within limits. But the moral logic that will destroy the chess school will in time destroy the excellent university as well.

VI

The argument for excellence in higher education, when all others have been exhausted, is that there is no alternative. Of course, it is the task of dominant systems to exclude alternatives. And those who make this argument often also ensure that no alternative can emerge. The best way to respond to this argument is by saying what an alternative model of the university might look like, and whether it can avoid a return to an idealized model of the patriarchal university.

I will try to do this through a rough contrast between three models of the university — the patriarchal, the excellent and what I will call the ethical — on the four points related to the characteristics of the excellent university outlined above. Unavoidably, this will involve a degree of generalization, an absence of concrete detail and perhaps some repetition of points already made.

Accountability

Within the patriarchal university, accountability was occasional and personal, rather than being regular and systematic. Because there were class barriers to admission and appointment, the university was not an intense site of competition. Relationships between older mentors and younger protégés, or patrons and clients, did not have to be regulated by official rules and varied according to the individuals involved.

The excellent university introduces a regulated system of accountability to academic life with rules concerning admission as a student, submission of assignments and theses, guidelines for supervision, making appointments, confirmation of tenure, annual reports on research activities, etc. There is an endless cycle of reporting, often by filling in forms. These systems of

accountability give the university management a considerable degree of control over research and teaching, without requiring any real engagement with its content.

The ethical university would require accountability of graduate students and academic staff but would take care to avoid a process of accountability which rewards the pursuit of individual self-advancement and which penalizes those who take responsibility for collective needs. Instead of rewarding conformity with existing power and wealth and penalizing critical intellectual work, it would allow both for achievement within dominant paradigms and critique of those paradigms. Above all, it would not rely on bureaucratic quantification but would require academic colleagues to be accountable to each other — that is, to read each other's research work and course outlines, attend each other's classes from time to time, constantly engage with each other and with their students on the direction of their department, and report to the larger university community on these activities.

Ethics

The patriarchal university has supported a wide variety of ethical teachings, often drawn from the dominant religion of the society concerned. For most of its history, it has been explicitly concerned with forming the moral character of the sons of the elite. At the margins of its curriculum, it allowed for ethical thought that challenged the established conventions, but ideas that challenged the existing order often led an underground existence and their public defenders were at times banished from the institution.

The excellent university aspires to ethical neutrality in its research and teaching. It continues with long-established traditions of outreach to the less privileged, and it often honours the moral icons of its time, but without implying any definite commitment to their causes. The pursuit of excellence which is central to its mission allows for no clear ethical commitments other than individual self-advancement. Its policies and curricula treat ethics as matters of individual choice, creating room for lifestyles that could not be countenanced in the patriarchal university. Avoidance of plagiarism is at the heart of its conception of academic ethics.

The ethical university would uphold the right to diversity of ethical commitment, but would make ethical questions central to the public life of the university, its curriculum and research programmes. It would actively debate ethical issues on which the university community can take an active stance, but would not seek to establish eternal truths or prohibit dissent. In the curriculum it would promote debate on ethical issues not only within disciplines such as philosophy and religious studies, but in order to give every graduate a sense of the possibilities their education enables them to bring to the world. Applied ethics would not focus only on professional codes of conduct within specific fields (medicine, business, etc), but also invite reflection on the ethical situations of these professions themselves, how they communicate and with whom. Ethics should not be a set of restrictions, but an invitation to broaden your horizons.

Competition and collaboration

The patriarchal university had clear hierarchies, often based on age and seniority. Competition allowed a minority of talented students from less wealthy families to enter university. But competition was not a constant principle of academic life. Where there was a general uniformity of ethical outlook among teachers, there was no great pressure to collaborate in shaping a curriculum or research agenda. Some collaboration was brought about from external sources — for example, by the need to prepare students for civil service or professional exams.

For the excellent university, competition is a constant and relentless principle, beginning with applications for admission as a first-year student and continuing through an entire academic career and sometimes into retirement, where meagre pensions have to be supplemented by other income. Even those whose work is recognized as outstanding within their discipline will continue to have their publications counted each year. Some of them will surely resist all temptation to cut corners and will retain their integrity throughout. But the larger pattern of pressures will inevitably produce inequality, isolation and various forms of hypocritical compliance.

The ethical university could not dispense with the principle of competition, in the sense that it must take into account who is best able to make use

of admission to a specific course and who best fills a vacant academic post. But it would take care to avoid a purely quantitative approach to this question. It would ask not just about the publication count of a candidate for appointment but also who they are writing for, and how this relates to the role the university seeks to play in society — for example, whether the candidate could enable members of excluded or marginalized groups within the university to find a voice of their own. In all its processes, the university would recognize not only individual achievement, but also those who take responsibility for collective needs and help to create a living intellectual community. It would depend on the force of example, rather than competition. The integrity of one person's work need not detract from that of any of their colleagues, in the way that the size of their research grant would.

Global context

The patriarchal university has often been a training ground for national or imperial expansion, and its related missions of conversion or civilization. Whether in Western Europe, the Ottoman Empire or China, higher education traditionally depended on firm belief in the superiority of their own cultural and religious inheritance. During the twentieth century, universities became instruments for modernization, mainly on the Western model, and sometimes sites of elite resistance to the terms of Westernization.[9]

The excellent university came to maturity as a global model with the end of the Cold War. In South Africa, its imperatives became clear as the end of apartheid approached. Excellence became an explicitly global standard, measured against the top-ranked universities in the United States and a few other countries. The dominant idea of excellence endorses the inequality of the global system, while seeking a better ranking within it. Even when the excellent university serves national needs, those needs are often defined by the norms of global competitiveness.

[9] This ambiguous resistance is dramatized, for example, in the novels of Natsume Soseki in Japan (2009) and Naguib Mahfouz in Egypt (2008).

The ethical university has no choice but to reject the fiction that Harvard and Cambridge represent the natural endpoint towards which all universities should be heading, and against which their progress must be measured. The achievements of Harvard and Cambridge are also the product of global inequality, to which the ethical university cannot turn a blind eye. That does not mean that the ethical university would turn its back on globalism. Instead, it would work towards a more consistent form of globalism, which relates to the world's oppressed as well as to the centres of global wealth and power.

In the university's ethical stance, this means challenging global inequality in solidarity with the global South, above all. In the curriculum, it means taking local context seriously, including South African intellectual history, but also viewing it in global context, understanding ourselves as the products of a complex global history, still being contested. In this way, we learn to contribute to creating a new global order by developing our addressing the issues of our own society. As Tim Parks (2012) puts it, "This is not an argument for staying at home, but for having a home from which to set out."

VII

To think about whether a different kind of university is possible is also to think about whether universities could play a different role in human history, and indeed whether — in the formulation of the World Social Forum — another world is possible.

This question is at the axis of Readings' argument about overcoming the limitations of excellence. The university can no longer play a wider social role, he argues, because it is "no longer linked to the destiny of the nation-state by virtue of its role as producer, protector and inculcator of an idea of national culture" in the way it has been since Humboldt and the Enlightenment. (1996, p. 3). The state has been hollowed out by capitalist globalization, resulting in a "loss of belief in an alternative political truth that will authoritatively legitimate oppositional critique" (Readings, 1996, p.47). In the context of higher education, at least, we have to act as if another world is not possible. The most we can do is seek to act honestly, within the existing order.

Readings developed his arguments in the years before his death in an aeroplane crash nearly twenty years ago in 1994. We may ask whether this limited aim is still realistic or attainable. In our own time, excellence in higher education can be seen not only as establishing a new and impoverished academic culture, but also as a modest but essential contribution to a larger project of transforming ethical life more generally, in accordance with the neoliberal belief that the market provides "an ethic in itself, capable of acting as a guide to all human action and substituting for all previously held ethical beliefs" (Harvey 2005, p.3).

From the earliest records of human thought, certain ethical precepts have been consistently upheld. A range of ethical traditions emphasize the unity of a human life and the need for people to live in accordance with their own nature, however defined. From almost the earliest times, their teachers have warned against the pursuit of short-term individual gain, with a frequency that suggests that temptation was present in many cultures. There are important differences between Aristotle's critique of the unlimited acquisition of wealth, the call not to store your treasures here on earth in Jesus's Sermon on the Mount, and the Buddha's warning against greed.[10] But all of these divergent teachings are overturned by neoliberal capitalism and — following obediently in its wake — the ethos of excellence in higher education.

The proponents of excellence — our deans and vice-chancellors, HR and marketing experts — are playing their modest part in creating a new moral agent who will abandon these age-old precepts in favour of managerial incentivization. This new moral agent need never understand what they are doing except insofar as they understand how to add to their own market value. In this vein, Readings says: "An order of knowledge and an institutional structure are now breaking down, and in their place comes the discourse of excellence that tells teachers and students simply not to worry about how things fit together, since that is not their problem. All they have to do is get on with doing what they have always done, and the general question of integration will be resolved by the administration with the help of grids that chart the achievement of goals and tabulate efficiency" (1996, p.191).

---

[10] See Aristotle, The Politics and the Constitution of Athens (Cambridge: Cambridge University Press, 1996), pp. 22-25; Matthew 6: 19-21; The Dhammapada (London: Penguin Books, 1973), pp. 83-85.

In many fields of material production, it has been possible to quantify increased production through processes that combine compulsion, incentivization and managerial oversight, without requiring those working on the assembly line or in the fields to understand what they are doing. The costs of doing the same in higher education would be enormous and potentially destructive of the whole enterprise.

To the extent that the university genuinely recognizes and resists the juggernaut of neoliberal capitalism, as embodied in the pursuit of excellence in higher education, it will also help to resist a form of society in which the majority of humankind are reduced to cogs in a productive machinery, without any part in deciding its purposes, or declared surplus to the requirements of capitalist profit. In order to achieve its goals, higher education requires an order which is transparent and rational in its working. It could make a modest contribution to creating a form of human society of the same kind.

Bibliography

Harvey, D. (2005) *A Brief History of Neoliberalism* Oxford: Oxford University Press.

Lanchester, J. (2010) I.O.U.: *Why Everyone Owes Everyone and No One Can Pay* New York, Simon & Schuster.

MacIntyre, A. (1981) *After Virtue: A Study in Moral Theory London,* Duckworth.

Mahouz, N. (2008) *Cairo Modern* New York, Anchor Books.

Mearsheimer, J.J. and Walt, S.M. (2007) *The Israel Lobby and U.S. Foreign Policy* London, Penguin Books.

Parks, T. (2012) "Writing Adrift in the World" *The New York Review of Books* www.nybooks.com/blogs/nyrblog/2012/jan/19/writing-adrift-world-mix.

Plato translated by Walter Hamilton (1973) *Phaedrus and the Seventh and Eighth Letters,* Harmondsworth, Penguin Books.

Ramphele, M. (2008) Laying Ghosts to Rest: *Dilemmas of the Transformation in South Africa* Cape Town: Tafelberg.

Readings, B. (1996) *The University in Ruins* Cambridge, Harvard University Press.

Ricoeur, P. (1998) *Critique and Conviction: Conversations with Francois Azouvi and Marc de Launay* Cambridge, Polity Press.

Schrecker, E. (2010) *The Lost Soul of Higher Education: Corporatization, the Assault on Academic Freedom and the End of the American University* New York: The New Press.

Soseki, N. (2009) *Sanshiro* London, Penguin.

REFLECTIONS OF A UNIVERSITY BUREAUCRAT INTERESTED IN ADVANCING A PROGRESSIVE SOCIAL AGENDA

Adam Habib
University of Johannesburg

South Africa's higher education system has been the focus of widespread attention in the last two decades. The impetus for this has been both global and domestic. At a global level, political elites across both the developed and developing world have subjected higher education systems to critical review with the goal of enhancing the relevance of learning and increasing the output of graduates. In the main, this review has been driven by assumptions informing conservative macro-economic policy paradigms. At a domestic level, South Africa's democratic transition has ushered new stakeholders and political elites into the societal mainstream. These have their own aspirations and needs and, as a result, have generated new challenges and priorities for the public higher education system.

However, almost all of the intellectual energy spent on researching and transforming the South African higher education system has been directed at the level of policy and, more recently, at its impact. The new Zuma administration, whose political priorities have, in part, been informed by the ANC's Polokwane conference, has reinforced this focus on higher education policy by initiating a widespread review of different elements of the higher education system. Even academic critiques of higher education reforms have been focused on policy and, more specifically, on detailing the negative impact it has on the system. The only exceptions to this focus on policy have been some of the mainstream media's assessments of universities' capacities and their rankings of these institutions. But, even here, these reflections have returned to a policy focus as opposition politicians used the relatively poor global rankings of South African universities as a basis from which to launch a critique of the government's higher education policies.

Missing in all of this debate is any reflection of higher education management practice. The only instances at which some reflection on management does take place involve capacity development initiatives within the system. But, even here, the focus is largely on enhancing administrative skill sets such as broadening higher education managers' understanding and knowledge of financial or human resource protocols. While these are important, they are not really the core of what management is about. At its most basic level, management is about understanding the context within which one is located, reflecting on the options one has for achieving desired ends, and then galvanizing the support one requires for implementing the choices that have been made.

The lack of reflection on management creates the impression that nothing more progressive is possible as long as we are subject to the current economic paradigm. But this is just not true. The varied performance of universities in South Africa suggests that much can be learnt from comparisons of practice especially since it is possible to identify South African cases where impressive transformation, productivity and efficiency gains have been recorded.

This, then, is the focus of this discussion. Methodologically, this article constitutes the reflections of a bureaucrat in a South African university who is interested in advancing a social agenda. Perhaps some may interpret this as the justifications of one who has been reduced to a cog in the wheel of the higher education system. However, this reflection is written in the hope that at least some may see the value of asking higher education executives to engage critically with their experiences as managers in the hope that lessons can be learnt for advancing a socially progressive higher education agenda in a less than perfect world.

South Africa's Transforming Higher Education System

Universities are the product of the political and socio-economic systems in which they are embedded. South Africa's political and socio-economic system has undergone significant transformation as a result of the country's democratic transition. This transition has been double-edged. On the one hand, we had a political transition that involved providing access to the institutions of governance and the state to all South Africans. On the other,

we had an economic transformation in which the South African economy has been increasingly integrated into the global economy with significant consequences for private and public enterprises.

The political transition has had a number of positive consequences for the higher education system. It has increased the pressure on universities to become more accountable. It has massified and diversified access to the nation's universities. While it has not yet de-racialised the academy, it has made it much more diversified than it was 15 years ago. It is true that one of the downsides has been that the state has become much more interventionist in the higher education system and this has resulted in some erosion of the autonomy of the universities. But on balance, the net effect on the universities from the political transition has been, I believe, positive.

The economic transition has also impacted significantly. This time, however, the impact, on balance, has been negative. As a result of a very conservative macro-economic agenda, especially in the first decade of the transition, state institutions and, through them other public entities like universities, have become increasingly corporatized. Management practices and accountability mechanisms from the corporate sector have often been imported unthinkingly into universities. Universities are increasingly treated like, and understand themselves to be, business entities, and power has shifted from structures like Senate (where academics predominate) to Finance and Council (where administrators and external stakeholders are in the majority).

The impact on South Africa's universities has been dramatic. Profitability rather than sustainability seems to be the driving ethos of universities. In real terms, academic departments have had their budgets slashed dramatically. The administrative workload on academics has increased significantly. There is a greater push for third stream income and qualitative indicators of performance have begun to proliferate. The effect of some of these developments is that the academy is no longer an attractive career prospect and the brightest graduates stay away from the universities. In addition, we have an ageing cohort of academics and researchers. As a result, alarm bells have begun to ring loudly in important quarters of the higher education system.

What is to be done? Four distinct responses have emerged to this state of affairs. The first is from those on the right and in business circles who have celebrated the corporatization of higher education. Such stakeholders view these developments as an indication that the sector is maturing and are blissfully ignorant of their negative effects on the academy.

The second response comes mainly from progressive quarters many within the academy although some also emanate from the state and other quarters. This response has largely involved the wringing of hands and bemoaning the current state of affairs. Sometimes, the past is romanticized and the apartheid higher education system and universities are projected as having been defined by a sense of collegiality. The problem with this response is that it is simply confined to critique. It does not involve any active attempt to do something about the current state of affairs. The past is also seriously misrepresented. The apartheid higher education system was not a friendly, collegiate place, either in the historically black universities, or in their historically white counterparts, especially for young black academics who were never able to become power brokers, either ruling or oppositional.

The third response is a more active and nuanced version of the second. Essentially it bemoans the current state of affairs, but tries to fight back by trying to keep at bay the worst consequences of corporatization dynamics. It is a response manifested in most universities in the country but is practiced most successfully where corporatization dynamics are least intense. This third response is seen as typically progressive. However, it is a response that is failing and is unlikely to be successful in the long term. For, while it may seem that a successful strategy is being waged, it is going to be impossible to create islands of collegiality in a market-oriented higher education system. This is especially so since universities are funded by the state by means of a formula that is itself market-oriented.

The fourth response, and this is where I would locate my own practice, involves a proactive engagement with the context sketched at the beginning of this article with a view to subverting it in the long term. It is akin to a strategy suggested by Saul (1992) entitled 'structural reform' and involves engaging with context with a view to initiating reforms that have the effect of enabling further reforms, all of which, in the long term, create a new

structured balance of power that enables the transformation of the very system itself. This is a response that tries to advance a progressive agenda located in the current context. It is a response that recognizes that there are negative consequences to the engagement, but nevertheless argues that it is better to advance a progressive agenda with some negative consequences than to do nothing at all.

It is a response that recognizes that there is a difference between a corporate culture and a managerial agenda, that there is a difference between profitability and sustainability and that there is a difference between corporate behavior and entrepreneurial leadership. It is a response that attempts to engage in ways that pluralize power in the higher education system because, as long as power is dispersed, checks and balances can emerge to contain authoritarian tendencies and enable progressive change. However, it is also a response that recognizes that there will be costs and, while it tries to mitigate these costs, it does not use these as an excuse for non-engagement.

What, then, are exemplars of this fourth response? The examples detailed below are not initiatives of my own. Rather they are a part of collective experiences I am, or have been, a part of in different organizations over the past decade. It is also worth noting that these organizations may have initiated other experiences that are more negative and that do not comfortably lie within the framework of this response. Thus institutions must not be imagined as homogenous entities where experiences coherently demonstrate one or other response.

A significant feature of this fourth response is a recognition that any serious restructuring of an academic institution is going to require strong academics that have the relative autonomy to focus on their work, are provided with an enabling environment in which to do so, and are rewarded for their efforts. Restructuring also requires resources and, if these are not immediately available, then they have to be mobilized, sometimes through hard choices about what gets sacrificed so that more crucial and core initiatives can be adequately supported. So, institutions that have been successful in restructuring and enhancing academic and research efficiencies, have hunted for academic talent and have secured this talent often by offering rewards which exceed those offered to other members of staff.

The university at which I currently work has created an environment in which productive researchers are rewarded. A small core of highly productive research and teaching staff receive a special non-pensionable allowance. In addition, an annual Vice-Chancellor's research award carries a prize of R500 000. The top new researcher receives R250 000. Three top teachers also receive awards of R150 000 each. A research incentive system, where between R22 0000 and R33 000 of the research subsidy is invested in individual academics' research accounts, has also been established. This investment in individual research accounts is intended to support the continuation of scholarship. Finally, internal investment in research activities has more than quadrupled.

The downside of this development is that it creates a more unequal academic environment. A number of positive effects also emerge, however. First, the systemic message for younger academics is that one does not have to leave the academy if one wants to earn a high salary. This message contradicts observations that institutional managers are better rewarded than academics involved in the core business of the universities. Now younger staff can identify role models within the academy - A and B rated researchers for instance – who also benefit from generous financial packages. Second, and perhaps even more importantly, the effect of this incentivized academic environment is the pluralisation of power within the academy because of the creation of a new group of privileged and empowered stakeholders. Suddenly, the Vice-Chancellor and the senior executives within the institution are not the only power brokers.

A second example of this fourth response is a New Generation Scholars Program. As I have already indicated, one of the biggest challenges currently confronting South Africa's higher education system is the ageing professoriate. Many South African students are no longer interested in postgraduate studies especially since scholarships intended to fund them are not attractive because they are structured on the assumption that students are middle-class with a range of external resources to call upon. Yet most South African students are first generation working class students under enormous pressure to earn a salary. The University of Johannesburg therefore developed a New Generation Scholarship program - in partnership

with Petro South Africa, Nedbank, Ford Foundation, Murray & Roberts – which offers Master's candidates a scholarship of R80 000 per annum for two years. On completion of their Master's degrees, the top 50 percent of graduates are offered a doctoral scholarship of R150 0000 per annum for three years, and are automatically offered a job on graduation. This final element is absolutely essential otherwise there is no incentive to continue studying.

A third example of this fourth response relates to third-stream income. This has become a major focus of South African universities driven either by declining public subsidies or by perceptions on the part of university executives that the pursuit of third-stream income represents modern global practice in academic management. Most universities around the world look to American institutions for models in this regard. The US context is overwhelmingly misunderstood, however. Although many assume that American universities are driven by private money, the US research and innovation platform is completely dependent on public investment. The National Health Institute, for example, has an annual budget in the region of $38 billion, of which at least $30 billion is targeted for deployment to the nation's universities. Comparison of this single institute's budget with that of South Africa's National Research Foundation (NRF) shows that the latter has a budget only in the region of R3 billion or just over $400 million. In the face of this observation, there can be little wonder that differentials exist in the research and innovation outcomes of the two societies.

Although student fees constitute a substantive portion of American university budgets, this is mainly the case for private institutions. South Africa is trying to use fees to fund higher education in a public university system with a student base that is much more impoverished. In similar circumstances, the European societies established a model of higher education that was entirely free. Although a free higher education system might sound laudable, this would not be possible without substantial additional investment if South Africa is not to follow the example of other African states where the provision of free higher education without additional investment resulted in a collapse of the systems themselves.

All is not doom and gloom, however. South Africa has a unique third-stream funding possibility – Black Economic Empowerment (BEE). BEE is an important driver of South Africa's post-apartheid political economy, and increasingly it has become mandatory that each BEE deal should have a developmental/broad-based component. Since there can be no investment more developmental or broad-based than the education of South Africa's next generations, BEE offers opportunities for universities not available elsewhere in the world. If universities had mobilized only 10% of BEE deals, which it is estimated had a total value of R500 billion in the last decade, in 2010 they would have had an additional independent asset base of R50 billion. On a 10 percent return, these institutions could have had an additional R5 billion to invest in scholarships, programs and infrastructure – twice the size of the state's annual infrastructure grant of the last few years.

A fourth example of this kind of engaged response with the current context would pertain to the procurement of academic and research journals for university libraries. The essential dilemma in this regard is that huge profits are made in the international publication industry. There are of course huge social costs to these profits. Most academic libraries cannot afford to purchase journals produced by these international publishers, with the result that hard choices have to be made regarding subscriptions. The more well-endowed universities manage to get the best journals, but the poorest do not. This effectively means that the least well-endowed universities, those that service the poorest of our citizens, do not have access to a quality academic journal base, which is an absolute necessity for quality higher education to be delivered. The better-off universities also feel the impact of the cost of these journals. Their budgets are being stretched, and every rand handed to wealthy multinationals is potentially a rand taken away from a poor South African student.

South Africa's higher education is confronted with three major priorities: produce a highly qualified human resource base essential for development, develop a new generation of academics to sustain our higher education system; and produce high quality research that can enhance our global competitiveness. All three priorities are dependent on access to academic journals and books that enable the dissemination of research results as well

as access to the work of other scholars. Such access is not widely available, however, because the profit-driven nature of academic publishing puts such books and journals out of the reach of many.

Some movement on the part of the state to address some of these problems is already evident. The Department of Science and Technology (DST) commissioned the Academy of Science of South Africa (ASSAf) to search for solutions. The Academy has recently proposed a set of measures to encourage and facilitate the publication of academic books in and from South Africa. It has also proposed the development of a cost-effective, high-quality indigenous journal platform to serve as an outlet for the free online dissemination of research results worldwide. The platform is called SciELO South Africa, and is embedded in the growing multi-country SciELO system created in Brazil.

A real problem standing in the way of improvement in the scholarly performance of our researchers, however, remains access to the high-impact 'international literature' emanating from North America and Europe. DST has requested ASSAf to investigate how other countries have been able to provide cost-effective access to this literature, with a view to making recommendations for a suitable local approach. Consideration is currently being given to what Brazil, Pakistan and Chile have done in this regard. In Brazil, CAPES, a major science institution, is mandated with the responsibility of buying access to international journal platforms for public universities with strong postgraduate degree programmes. Pakistan and Chile have a variant of this model which is much cheaper, and which provides public universities with access to a smaller range of journals. The implementation of either model would benefit South African universities for, not only would it be highly cost-effective in comparison with the present 'individual library budget' system, but it would also provide more equitable access, enabling students from Venda and UCT to have access to the same range of scientific journals.

Why has South Africa not implemented a system of procuring academic texts and journals for all public universities? Is it because of the competitive logic that has emerged among universities in the system or does this point to a lack of entrepreneurial imagination on the part of institutional managers?

These are just a few examples of what progressive entrepreneurial higher education management practice could entail. Obviously this does not exhaust the full list of reforms and/or practices. In addition, practice would need to be determined by the context of individual institutions. Larger institutions in urban settings may be able to use shifts in expenditure to drive reforms that enhance efficiencies. Universities in attractive geographic settings can use this to attract staff just as institutions in small rural towns may be able to draw on the safe and collegial atmosphere to achieve the same ends. Historically Black Universities in rural contexts would need to constitute themselves within the broader development agenda of the region in which they are located. The singular lesson to be learnt is that the focus must be on the local, and university executives need to develop a custom-made strategy for the specific conditions in which their institutions are located.

But what makes these examples of reforms transformative or structural? What suggests that they are not simply accommodative within the parameters of the existing political economy?

The examples of the reforms and practices detailed above have had some negative consequences including, for example, increasing inequality in remuneration packages. At the same time, however, they have also resulted in some positive outcomes for both the higher education system and for the University of Johannesburg in which they have been implemented. The hunt for academic talent by the University of Johannesburg has broken the ethnic logic of academic recruitment in the Gauteng region. Until recently, English-speaking academics, and a few Afrikaner academic dissidents, gravitated towards the University of Witwatersrand. Afrikaner academics, with a smattering of English-speaking dissidents who fell out with the academic mainstream at Wits, tended to locate themselves at the Universities of Johannesburg and Pretoria. The University of Johannesburg's active recruitment across the ethnic divide broke this logic, and created an open academic market which has enhanced the leverage of academics vis-à-vis their respective executive managements.

The infusion of new academics and the activation and empowerment of existing staff at the University of Johannesburg has enhanced the research

productivity significantly. In 2010, research output at 610 units was double what it had been five years earlier. These gains, moreover, were achieved in an institution that is increasingly integrated, both racially and ethnically, and that continues to service primarily a working and middle-class student base. The University of Johannesburg's student fees are still significantly lower than those of its regional and national counterparts, and it consciously acts to ensure that none of its campuses become de facto racial enclaves.

Other examples of progressive practice identified above have the potential to produce similar outcomes. The New Generation Scholars program has the potential to enable the development of a new generation of academics. BEE resources have the potential to enable poorer students to study at universities and to allow these institutions to provide better infrastructure, instructional and human resources. System buying of information resources in libraries has the potential to lower the cost of providing equitable access to academic journals across the system. But it is not these positive ends – however important they may be - that defines these reforms and practices as structural or transformative. What makes them so is that they begin, however timidly, to pluralize power and change its balance among stakeholders – a process which can then enable further reforms down the line. If the prevailing state of affairs in higher education is a product of the existing balance of power, then any agenda of change has to speak to the immediate context and be directed to changing this structured balance of power in the medium to long term.

New remuneration practices along with the drive to incentivize efficiency and productivity, while undermining the relatively egalitarian character of the academy, nevertheless serve to change the balance of power between academics and institutional executives. The New Generation Scholars' program, by creating a more diversified new generation of academics in the long term, has the potential of enhancing the legitimacy of higher education in society. This, together with independent BEE resources, would greatly enhance the power of internal institutional stakeholders, including academics and executive management, vis-à-vis external stakeholders such as bureaucrats in government and corporate executives. System buying of information resources would similarly enhance the leverage of universities vis-à-vis the academic publishing industry. These changes in the structured balance of power within both institutions and the higher education system more broadly create the conditions for further reforms down the line.

There are some within higher education who argue that these reforms cannot be transformative because they engage the market and permit increased inequalities in remuneration. But these critics do not speak to the realities of the moment, by not only assuming that it is possible to create islands of equality in an unequal world, but also by confusing means and ends. As a result they are forever trying to keep out unwelcome system pressures, and run the risk of a slow incremental capitulation to these very system effects.

Ends are important but perhaps even more important than ends are the means for change. Higher education executives need to recognize that sustainable progressive change is a product of engagement that is directed to changing the existing structured balance of power. Reforms and practices must be explicitly embarked upon because they deliberately alter the relations of power among stakeholders within universities and in the higher education system. In a sense the agenda must be to create structural conditions, meaning a balance of power, to enable further battles to be fought in the future.

As of now, higher education executives in South Africa, as elsewhere, fall in two camps. There are those on the conservative fringe who explicitly or implicitly see universities as business entities which should be treated as such. Other higher education executives are hostile to this idea, recognizing that universities can never be treated as corporate organizations with students as clients and academics as workers. Were this to happen, they realize that the higher education project itself will be compromised. I count myself among this progressive group of executives. But until now the mainstream of this progressive group has fought a rearguard battle to hold corporate systemic pressures at bay. Until we engage with these pressures by advancing reforms focused on transforming the balance of power within universities and the sector as a whole, we will not be successful in advancing a progressive social agenda.

Reference

Saul, J.S. (1992). 'Structural reform: A model for the revolutionary transformation of South Africa?' *Transformation.* 20: 1-16.

ACADEMIC COMMUNITIES AND THEIR STUDENTS

Ward E Jones
Rhodes University

Introduction

One difference between higher education and the levels that precede it is that higher education students tend to be in direct contact with working members of academic communities. University teachers and their students they *represent*, belong to groups of individuals engaged in inquiry about significant features of our world. We might say that it is at the level of an undergraduate education – the level at which the claims in this paper are most relevant – that academic communities first have their own students. In this paper, I defend an implication of this feature of higher education in both the sciences and the humanities.

There is a stark difference between the way in which students in the natural sciences are related to their lecturers' communities and the way in which students in the humanities are related to theirs. The nature of science entails that a scientific lecturer presents material to her students that, in general, has the backing of her entire community, but this is not true of the material presented by a humanities lecturer. A lecturer, then, will be bringing her student into an epistemic position that differs greatly depending upon whether she is a member of the sciences or the humanities.

A lecturer who is properly reflective in her teaching – as I think that we have every right to expect them to be[1] – will encourage her students to become aware of the nature of the epistemic position into which they are entering; the reflective lecturer will be teaching her students something about features of their own new-found knowledge. This has significant implications

[1] Saleem Badat put this point to me in the following way: As researchers, we are scholars in a discipline; as teachers, we should be scholars of a discipline, of what the researchers in our disciplines are doing and have done.

for the achievement of one of the main aims of education, the generation of intellectual virtues; because of its proximity to academic communities, reflective higher education teaching provides an excellent situation for a student's sophisticated development of intellectual confidence and humility. I argue that while both science and humanities teaching can encourage both of these virtues in their students, they will do so in different ways.

Intellectual Confidence and Intellectual Humility

The aim of education is sometimes said to include the development of *cognitive skills* (for example, see Siegel 1988). According to this thought, the properly-educated student will know how, for example, to think for herself, to be a critical thinker, to rehearse an argument, and to set up a basic empirical experiment. As has long been noted, there is an intimate relationship between virtues and skills. Both are learned through (an at least initially) self-aware, repetitive practice. However, virtues include a motivational element that is not necessarily present in skills. A person may know how to form beliefs in proper accordance with her epistemic position – that is, she may have the skills to do so – without being motivated to do so. At least one difference between the person with intellectual skills and the person with intellectual virtue is that the latter is *disposed to utilize* her cognitive skills, while the former may not be.[2]

I will not argue for the claim that an aim of education is to develop students' intellectual virtues (and not only intellectual skills). If educators could take steps to lead their students to develop intellectual virtues, though, there could be no objection to their doing so; to come to possess an intellectual virtue is, after all, to possess an intellectual excellence, and that could not but be a desirable thing for our students to achieve under our leadership. However, the fact that intellectual virtues require motivation has significant implications for educational practice. Educational practice must be in a

[2] The relationship between skills and virtues is far more complex than I have indicated here. Aristotle acknowledges that virtues are analogous to skills, but denies that virtues are skills (Nichomachean Ethics, especially Books II and VI); Bloomfield (2000) argues that virtues are a subset of skills. For a concise discussion of the point I have made in this paragraph, see Baehr (2011 p. 29-32) and for a more extensive recent treatment of the relationship between skills and virtues, see Annas (2011, Chapter 3).

position to encourage students to be motivated to believe in accordance with their epistemic position, and not just be *able* (i.e., have the skills) to do so. There are, no doubt, limits on how much institutional education can do in this regard: a student who, for example, knows how to believe in accordance with her epistemic position, but who is psychologically blocked from doing so through some *idée fixe*, may not be rectifiable by normal, institutional educational means. However, there is a more prominent, and more readily correctable, way in which a person can have the skills to believe in accordance with her epistemic position while not being motivated to do so, namely by *not knowing* what her epistemic position is. This, clearly, is a lack that an educational system can and should go some way towards correcting, namely by giving students a reflective awareness of their epistemic situation. A student who *knows how* to form and temper her beliefs in accordance with her epistemic position *will be inclined* to form and temper her beliefs according to that position *if she knows what that position is* (and if all else is as it should be with her). The skilled and reflective believer will be, in short, an intellectually humble and confident believer; she will possess the two virtues with which I am here concerned.

The recent wave of philosophical work in virtue epistemology reveals how varied the intellectual virtues are. One group of intellectual virtues characterizes our epistemic interactions with other persons, in how we go about teaching and learning from others: intellectual generosity, charity, and fairness. An important feature of these interactional virtues is that their goodness is not wholly dependent upon their relationship to truth. Having a disposition to distrust a certain group of persons, for example, may be bad not only because it may close the distrusting person off to important sources of testimony and knowledge; it can also be *morally* wrong, a kind of disrespect; if such distrust is widespread and systematic, it may contribute to the oppression of that group (see Fricker 2007). As important as the interactional intellectual virtues are, intellectual confidence and humility – the two intellectual virtues with which I am concerned in this paper – do not belong to this category.

In a recent book, Jason Baehr (2011) focuses on a second group of virtues, those related to *inquiry*. Baehr (2011, p.21) divides the inquiry-relevant virtues into six categories: (1) virtues related to *motivation* (e.g.,

inquisitiveness), (2) to *focusing* (e.g., attentiveness, carefulness), (3) to *consistency* (e.g., impartiality, open-mindedness), (4) to *integrity* (e.g., honesty, self-scrutiny), (5) to *flexibility* (e.g., creativity, adaptability), and (6) to *endurance* (e.g., perseverance, courage).[3] As his categories reveal, Baehr is interested not only in the intellectually-virtuous *believer*, but also in the intellectually-virtuous *actor*. The intellectually virtuous actor *acts* in ways that are appropriate to achieving intellectual goods; she acts attentively, openly, creatively, and with perseverance in her inquiries. The intellectually-virtuous actor is important, and sorely neglected in epistemology, but, again, I will not be interested in her here.

The two virtues that will concern me here are 'intellectual' in a narrower sense than those described above; they characterize an agent not in virtue of how she acts towards gaining her beliefs or treats other believers, but simply in the light of her tendencies to believe what she does. Intellectual confidence and humility, as I will conceive of them, are desirable dispositions of persons to form beliefs of strengths that are appropriate to their epistemic position. A person's *epistemic position* (or *situation*) with respect to a subject matter should be understood, for the purposes of this paper, as broadly as possible; it is her ability, if she is careful, to form a belief about the world that is either warranted (justified, rational, etc.), correct, or which will count as knowledge of that subject matter. Accordingly, the virtue of intellectual humility, in part, flows out of a proper grasp of the *limit*, *boundary*, or *weakness* of one's epistemic position; the humble believer does not believe when her epistemic situation does not call for it, and does not believe with more strength or intensity than her epistemic position calls for. The virtue of intellectual confidence, on the other hand, emerges from a grasp of the *strength* or *scope* of one's epistemic situation; the virtuously confident believer forms a belief when her epistemic situation calls for it, and does not believe it to less strength or intensity than her epistemic position calls for.[4]

---

[3] For two other, less discriminating, taxonomies, see Montmarquet, Epistemic Virtue and Doxastic Responsibility (1993, p.23) and Audi, 'Epistemic Virtue and Justified Belief' (2001, p.85). Aristotle offers his two-category taxonomy in Book VI of the Nichomachean Ethics.

[4] I will treat intellectual confidence and humility as 'factive', as appropriate responses to a correct view of one's epistemic situation. While I do not deny that a believer can be virtuously confident or humble in the light of a false view of her position, I will ignore this possibility here.

Intellectual humility is a surprisingly broad family of virtues. In their excellent discussion of intellectual humility, Robert C. Roberts and W. Jay Wood vividly illustrate this diversity by showing how many 'vice-counterparts' humility has:

> Humility is opposite a number of vices, including arrogance, vanity, conceit, egotism, grandiosity, pretentiousness, snobbishness, impertinence (presumption), haughtiness, self-righteousness, domination, selfish ambition, and self-complacency.
>
> (Roberts and Wood, 2003, p.258)

Roberts and Wood only discuss humility as it is opposed to arrogance and vanity. Humility, as I will discuss it, is the virtue opposed to self-complacency. The complacent believer may not be as vicious as the arrogant believer – that is, she may not have an unwarranted conception of herself as excellent or superior[5] – but she is nonetheless lacking an appropriate grasp of her epistemic limitations. The complacent believer is missing a sense of her limitations as a believer, she is missing a critical view of her epistemic abilities. The intellectually humble believer, in contrast, grasps her boundaries or weaknesses when she has them, and her beliefs appropriately reflect this grasp.

Some readers will find it surprising that I conceive of confidence as an intellectual virtue. We do speak of confidence not only as a feature of believing, but also a disposition of believer, but is it really an intellectual virtue? While I readily admit that confidence *simpliciter* is not a virtue, certain types of confident disposition are intellectually virtuous, appropriate dispositions for believers to have. In this regard, we could compare silence, which like confidence is both a state of being and a disposition; and which, as a disposition, can be virtuous. A person who is virtuously silent withholds her voice when it is appropriate for her to do so – as, for example, when her voice has had too much of an effect, or a negative effect, in her context, or when she knows that her input will have an unduly large effect in her context.[6]

---

[5] This is Roberts and Wood's analysis of intellectual arrogance (2003, Section III).

[6] The example of virtuous silence comes from Vice's 'Reflections on "How Do I Live in This Strange Place?"' (2011). Also see Roberts and Wood's discussion on caution, another intellectual virtue that is not always conceived as such (2007, Chapter 8).

Similarly, when conceived of as a virtue, confidence is opposed to unwarranted indecision or hesitation in believing given one's epistemic position. The intellectually confident believer is disposed to believe when and in a manner which is appropriate given the strength and scope of her epistemic position.

There is an intimate relationship between intellectual humility and intellectual confidence.[7] In particular, it looks as if intellectual confidence and humility are what Roberts and Wood call 'complementary virtues' (2007, p.234). They argue that courage and caution are complementary virtues, since both are related to our cognitive fears; the intellectually cautious person is 'properly attuned' to epistemic dangers, and the intellectually courageous person has the 'power to resist or overcome' those fears. Similarly, both intellectual confidence and humility could be seen as related to epistemic *poise* or *bearing*. The intellectually confident and humble person believes in a manner that is appropriate given her epistemic position. Because she is confident, she believes when her epistemic position calls for it, and she believes to an appropriate strength; because she is humble, she does not believe when her epistemic position does not call for it, or she believes weakly if her position calls for that. If humility is not gained, there is a danger of the virtue of intellectual confidence becoming the vice of *arrogance*; and if confidence is not gained, there is a corresponding danger of the virtue of intellectual humility becoming the vice of *intellectual cowardice*. The intellectually confident and humble person is thus cognitively balanced, believing as and when she should. Higher education, I will argue, is especially well-placed to achieve the reflective element in their students' education that will lead to their attaining this complex and difficult balance.

Higher Education and Academic Communities

Those who identify themselves with academic disciplines belong to communities of individuals who also identify themselves this way. The boundaries of these communities are both fluid and vague. An academic

[7] As there is, arguably, among all the virtues; for example see Annas, Intelligent Virtue (2011, Chapter 6). I do not discuss this explicitly in this paper, the claims of Section 5 below (in which I argue that the same reflective awareness of one's epistemic position should lead to both humility and confidence) could provide a starting point for understanding this relationship.

biologist, for example, belongs to a number of communities, all of which are embedded in the larger community of biologists. She may belong to the community of theoretical biologists, of evolutionary biologists, of biochemists, of cellular biologists, of molecular biologists, of biotechnologists, as well as to sub-communities of each of these communities. Other members of some of her communities may include scientists who do not consider themselves biologists at all; certain communities of biochemists, for example, may think of themselves as belonging to the broader community of chemists, and as not belonging to the broader community of biologists.

One of the distinguishing features of higher education is that its students are taught by working members of academic communities. There are exceptions, of course. Some higher education teachers are not active members of their communities; they do not attend conferences, give talks, write for publication, or even keep up with recent movements in their communities. Nonetheless, I take it that some involvement with an academic community to be both the rule *and* the ideal of university teaching. At a minimum, the university teacher is expected to be familiar with work which has been and is being done in her academic community, and her students are expected to be taught material that comes directly from the work done within that community. The norm, we might summarize, thus: the higher education student should be taught material generated within an academic community by a member of that academic community; the reflective higher education student will have a grasp of the epistemic position that this puts her in.

As I want to show, the epistemic position that is developed in a student is dependent upon the kind of academic community to which her teacher belongs, and upon what it means to be a member of that community. That is, the kind of epistemic position that a student develops in higher education learning is dependent upon the kind of epistemic position that people outside an academic community can form with respect to the claims being made within the community. Accordingly, if a higher education teacher is self-reflective in her teaching, then her students will come to grasp not only what they are being taught but also *why they should accept* what they are being taught. As a consequence, a properly-taught higher education student will come to understand his own epistemic position, and this can

contribute to the development of her intellectual virtues. In the remainder of this section, I will discuss a feature that all academic communities share, namely their inward-looking nature; in the next section I will look at how science and humanities academic communities differ and the importance of this to the epistemic position that the HE student gains.

One of the defining features of academic communities is that they carry out controlled *internal* dialogues; an academic community is a group of professionals talking to *each other*. Academic work is, by and large, inward-looking; the academic publishes – one of her primary aims *qua* academic – to be read by her peers, and her work is constructed to make a contribution to the conversation that her peers are having. A defining characteristic of an academic is that one of her primary tasks is to initially share her research with those in her community; academics write, at least in the first instance, for each other. In this respect, the academic community differs fundamentally from, say, literary and artistic communities, the members of which create work primarily for an audience wider than that of their peers. While the painter or composer may care a great deal what her peers think of her work, she is not creating fundamentally for her peers. The opposite is true of the greater part of academic creativity.

It is the inward-looking nature of academic work that provides the basis for the derogatory 'ivory tower' image of the academic – the academic as over-specializing, as using too much technical jargon, as making no effort to share her work with anyone other than her peers. While this image may hold a critical truth, there are very good reasons for the inward-looking nature of academic discourse that lies at the heart of the 'ivory tower' caricature. In the first instance, the fact that academics initially share their work with their peers means that any individual's academic work will be initially vetted by those who are well-suited to do so. Before her work is shared with the public, or utilized in decision-making or technology, it is subjected to the scrutiny of other members of her community, individuals who are familiar with the discussion that led to the work at issue and who, consequently, understand the presuppositions and assessment-criteria upon which the claims being made are based. The fact that academic work is in the first instance presented to an academic community also means that such work is contextualized within a larger discussion. This means that, when someone

from outside the immediate community (or, perhaps, from the community at a later time) wishes to engage with a piece of academic work, she has the option of readily discovering the discussion within which the work first appeared. If nothing else, this may allow her to find alternatives to the claim at issue. At least in the initial stages of debate, claims are surrounded by the differing approaches and contradictory claims of other members of her community.[8]

Most importantly for my purposes here, the inward-looking nature of academic discourse is vital to the *productivity* of academic discourse, for the fact that academics have narrowed their audience allows – indeed *forces* – the dialogue within the community *to press on*. An intra-focused, specialist community can make theoretical, conceptual, or imaginative progress in a way that a more open, inclusive community could not. In scientific communities this progress has tangible, often technological results, as scientists correct and build upon each others' findings; in humanities communities, this progress will be conceptual or imaginative, as the members push each other to explore new conceptual connections, reasons, and ways of expression. In both cases, such progress would be seriously hindered if academics had to spend a significant amount of their time sharing results with a wider audience.

While there may be truth to the 'ivory tower' image of the vernacular-speaking, inward-looking academic community, these much-maligned features have *a point*, one that is crucial not only to the productivity of academic communities, but to that which can be shared with their students. Academic communities carry out exclusive discussions, discussions which – ideally, at least – generate new claims, insights, questions, approaches, arguments, and technologies. These are, as we might call them, the *products* of academic discussion: the various results that inevitably emerge from the sort of local, controlled, and motivated discussions that academics have. It is these products that higher education lecturers share with their students. Higher education students learn, by and large, the products of academics communities pressing on. Exposure to these products is what students get from their close proximity to academic communities.

---

[8] This will be, perhaps, more important in the humanities than it is in the sciences, for reasons that I explore in the next section.

Scientific and Humanities Communities and HE Teaching

Once we look beyond the inward-looking nature of all academic communities, however, significant differences between different kinds of communities start to emerge. Such differences are, perhaps, most striking in communities that firmly belong within the sciences and the humanities.[9] The 'products' of these two kinds of academic communities are generated in very different ways, and this has consequences as to the 'exportability' of these products to students. I will not speculate on either the source or the importance of this difference between science and humanities communities; these are large and complex topics broached in various branches of the philosophy of science and elsewhere. In this section, I will look at one central difference, and what that difference means to learning in the sciences and the humanities. In the next section, I will return to the implications of this difference for the cultivation of intellectual confidence and humility.

Scientific Communities and Higher Education Teaching

One of the most important lessons about scientific practice to be learned from the work of Thomas Kuhn (1970) is that the final stage of theory acceptance is communal. The end of the process of investigation and debate is characterized by a remarkable unity in the scientific community in its acceptance of theories. Kuhn claims that this feature is a defining characteristic of scientific communities. A community is not a scientific community until it accepts theories with unity. Indeed, Kuhn also suggests that it is this characteristic that constitutes scientific progress (1970). Since the whole community accepts the theory, the community as a whole can move on to a new area of study. A practice of unanimous commitment will inevitably lead to clear and community-wide patterns of theory change, patterns that can be readily interpreted as progress. By contrast, in a field like philosophy, Kuhn suggests, the lack of communal agreement means that it is harder to come by any community-wide long-term change that can be construed as progress.

---

[9] Certain communities within the sciences and humanities may not work in the way I outline in this section, and certain communities outside these two broad fields (e.g., in the social sciences or history) may do so. I pick these communities because they most clearly possess the features I describe below.

Whether or not Kuhn is right to define either scientific communities or scientific progress in terms of unity in acceptance, there is something to his claim that such unity is a striking characteristic of scientific communities. Although there can be enormous and heated conflict between individual scientists on current areas of study, there is notable consensus on previously-debated claims. Conflict over theory acceptance inevitably ends in (at least temporary) community-wide acceptance.

One striking manifestation of the community-wide agreement that characterizes scientific communities is the possible emergence of a scientific 'dissident', a working scientist who disagrees with the consensus of her community. Scientific dissidents are rare and their voices are muted, but they do on occasion generate public attention. One of the more notable such occasions occurred in 2000, when the then president of South Africa, Thabo Mbeki, sought counsel with a handful of dissident scientists in the area of HIV/AIDS research. His doing so generated a vehement response from the HIV/AIDS research community, culminating in the so-called Durban Declaration, an open statement signed by over 5000 scientists and stating that the evidence supporting the link between HIV and AIDS is 'clear-cut, exhaustive, and unambiguous' (Johnston, Irwin and Crowe 2000, p.3).[10]

If there were not considerable unity in scientific theory acceptance, then the notion of a scientific 'dissident' would have no purchase. The very possibility of an intellectual dissident arises from an individual being set in opposition to a powerful and disagreeing opponent. While a *political* dissident is up against individuals who hold positions of power, such a hierarchy of power does not characterize science. Rather, scientific dissidents are dissidents from the scientific community (or the vast majority of the community). Again, we can contrast science with a field like philosophy, in which the kind of unified response to Mbeki, manifested in the Durban Declaration, is unthinkable. While there are dominant and prevailing views in philosophy, the philosophical community is not characterized by the unity that allows for a meaningful notion of a philosophical dissident.

---

[10] I have discussed this case, and the questions it raises for testimony from science in 'Dissident Versus Loyalist: Which Scientists Should We Trust?' (2002).

Essential to the community-wide nature of scientific theory acceptance is the public nature of scientific discourse. It is essential to the community's unity in acceptance that all members of the community have ready access to claims and their defences. In this regard, we can see scientific publishing, and scientific theory-acceptance, as a two-stage public peer reviewing process. In the first stage an article (with claims based on a set of observations or experiments) passes a given journal's editors and reviewers, and is published. It is made public, presented to the community at large. The entire community acts as the second stage of peer review for an article. If published claims are not challenged, then they are available for incorporation by the community in some form. Such findings can be said to be accepted into the community's theoretical edifice. If the claims made in a published article are not challenged by members of the community, and do not disappear into obscurity, then they become part of the community's commitments. Once this unity is achieved, scientific communities have strict mechanisms for marginalizing proponents of dissident positions. The 'creationist biologist' and the HIV-denier do not have access to the same kind of jobs or places for publication as those members of the biological or biochemical communities that toe the party line.[11]

The opposition that scientists have to dissidents in their community is that they ask the community to revisit the evidence for claims that the rest of the community treats – and wants to continue to treat – as having been settled. One feature of the widespread phenomenon of consensus in science is that once agreement is reached the *original* justification for a claim can be (over time) forgotten, and it need not be revisited. Unsurprisingly, this manifests itself in scientific teaching. A science lecturer asks her students to accept and understand claims that her community has agreed upon, on the basis of her *testimony*. She does not, in most cases, revisit the justification for those claims. The majority of undergraduate scientific education involves learning claims that the community no longer questions, without learning precisely why the community accepted them in the first place.

[11] Since the mid-1980s, sociologists of science have sought to understand the mechanisms of consensus-formation in science. For a recent addition to this literature, see Shwed and Bearman (2010).

This must not be exaggerated. I do not deny that science higher education teachers often address the evidence for particular claims being taught. More importantly, I do not deny that a science education involves giving students *a sense of* the justificatory procedures endorsed by a scientific community. Through research projects and laboratory exercises, science students learn, and learn how to carry out, the methodologies by which the claims they are being taught were justified. However, a science student does not have a grasp of the justification for much of what she learns; a science student would, in many cases, be surprised to find out how many of the claims that she has accepted were first established, and, in many cases, she may have no idea *how* they were established. I studied biology as an undergraduate student, and while my education gave me a good grasp both of the general principles and particular details in many biological fields, I could not have told you why most of what I learned was accepted – much less why it was accepted over its now-forgotten competitors. While I had a decent grasp on the theory of evolution by natural selection, I was very surprised at both the nature and enormous range of evidence that Charles Darwin rallies in *The Origin of Species* (1859), when I read it after graduation. The same is true of many of the details I was asked to learn; while I recall being fascinated in a lecture on the contemporary debate over undifferentiated animal-cell migration, my lecturer did not deem it important to tell us how the scientists involved in the debate were defending their trespective positions.

This is not a criticism of the science education that I had, nor of university science education in general. Much of an undergraduate science education involves being asked to grasp a certain picture of the world, and to accept it *because* it has been established and agreed upon by an academic community. Once a science student understands how science works, in particular that scientific communities reach a consensus on both particular and more general claims, she is invited to accept what her lecturer tells her. The products of scientific communities, the results of the interactions of their members, are these agreed-upon claims. Her epistemic position is the epistemic position of the person who receives testimony from an informant. In testimony, the hearer inherits her epistemic position from her speaker, even though she does not know the details of how her informant got to his own epistemic position. In the same way, when a science student inherits

her epistemic position, even if neither she nor her lecturer know the details of how their communities got to their own epistemic positions with respect to the claims the student is learning.[12]

Humanities Communities and Higher Education Teaching

Humanities academic communities are involved in projects that can be divided into two camps. Some communities strive to find new ways of conceiving human life and the world we live in and of defending those conceptions; these communities prominently include philosophy, cultural studies, critical theory, history, religious studies, and certain sub-communities in the social sciences. Other humanities communities seek to find new ways of approaching and interpreting literature, film, music, and art, as well as our spectatorship of them. These two categories are not exhaustive of humanities academics – they omit the creative writing and visual arts academic, for example – but they include the kinds of academic humanities communities with which I will be interested here, the discursive, inward-looking communities whose members engage in non-fictional writing.

The members of these humanities communities, in stark contrast to the science communities discussed above, harbour no expectations of converting all or most of their peers. While mechanisms for 'banishing' humanities academics who do certain kinds of work may exist at the sub-community level, in individual departments or journal editorial boards, they are not utilized by the humanities community as a whole. Of course, humanities academics would like to have *some* of their colleagues agree with them, but they do not expect community-wide agreement with their claims. More important than agreement, to the humanities academic, is *attention*; she wishes to be read and discussed by her colleagues, to have her claims found *interesting*.

[12] The claim I am making here is neutral as to whether the student must have positive reason to believe what his lecturer tells him. The 'reductionist' says that he must do so, see, for example, Fricker (1994), while the 'non-reductionist' denies this, see, for example, McDowell (1994).

This is not to say that members of humanities communities do not agree about *anything*. All disagreement takes place against a background of agreement; there must be a great deal of agreement before a group of persons can engage in any kind of discussion at all. What the members of humanities communities do not expect agreement upon are claims made by them to other members of the community *in their professional roles as academics*. Even if there happens to be a good deal of agreement on some issue of salience in a community, this will be less of an agreement than a *de facto* circumstantial convergence of the community-members' attitudes. Such convergence would not be something that the community will have sought. Indeed, I suspect that the members of many humanities fields would see community-wide consensus as undesirable, and to be treated with suspicion; a subject area that commands full agreement is a subject area that needs more work.

One consequence of this feature of humanities communities is that there always co-exist competing theories or competing (modes of) interpretation that are potential candidates for discussion and interrogation. Positions perennially exist alongside, and in many cases gain their identity from other, competing positions. A new and ground-breaking claim in the humanities does not *supersede* a currently-available position, in the sense of replacing it; the former more or less takes a place next to the latter. Certain members of the community may *see* a ground-breaking work as superseding previous positions, and the new position may garner attention that previously belonged to other positions. However, such attention will be both positive and negative. In contrast to the scientist, the humanities academic recognizes adherents to positions radically alternative to her own as still being part of her community. There are very few metaphysical idealists or ethical relativists in philosophy, for example, but they are nonetheless considered members of the philosophical community, and they are not 'dissidents', as they would be in the sciences.

A further consequence of this is that humanities communities do not 'leave behind' the justification for their theories or interpretative approaches. Because any theory or approach has (at least potential) competitors, and because those competitors are never 'off the table', the intra-

community discussion can at any time come to be about the reason(s) for accepting one theory or approach rather than another. It follows that the reasons in favour of a humanities theory or approach – some of which may have been added long after the theory or approach entered the community discourse – are, even if not currently being discussed in the community, both *readily available for* discussion and are more likely to be a *relevant topic of* discussion than such reasons would be in the sciences.

The looming presence of justification for the theories or interpretative approaches that are found in the humanities also has implications for humanities undergraduate teaching. Because a higher education teacher in the humanities teaches her students things that are not (except by chance) agreed upon by the entirety of her community, it is important that she discuss the justification in favour of the particular theories or approaches she is discussing. Humanities teachers do not ask their students to *simply accept* a theory or interpretation that they discuss. They also feel that it is important also to discuss the reasons for accepting a theory or taking some approach to interpreting art, dance, music, film, or literature. The same, as we saw above, is not true of teaching in the sciences.

The reason for this is not that a position in the humanities is never as justified as it is in the sciences. I have serious doubts that this is true. In the *Second Meditation*, René Descartes asks his reader to believe that he (the reader) exists (1996), and if a student understands why he should agree with Descartes here, then his justification for his belief 'I exist' will be at least as strong as any claim he was asked to accept in his biology class earlier in the day. The reason for the omnipresence of justification in humanities teaching is, rather, because the humanities student does not *inherit* his epistemic position from his lecturer or from his lecturer's academic community.[13] If a student's epistemic position with respect to what his lecturer discusses is going to change, it is going to have to be as the result of some effort of his own.

---

[13] Significantly, the same is true of Descartes and his readers, something of which Descartes himself was well aware, and the reason why he wrote his Meditations as meditations, that is, as invitations to his readers to spend time reflecting upon his words. See Descartes, 'Preface to the Reader', Meditations on First Philosophy; also see, for example, Hatfield, 'The Senses and the Fleshless Eye: the Meditations as Cognitive Exercises' (1986).

In a suggestive paper called 'Why Not to Trust Other Philosophers', Charles Heunemann writes that 'philosophers are concerned first and foremost with coming to understand something for themselves, or settle upon a belief through their own cognitive resources' (2004, p.257). I suspect that Heunemann may have overstated his point; I doubt that all philosophers would agree that this is their 'first and foremost' concern. Nonetheless, this is a concern, and it is a concern that philosophers have for their students. It is reflected, perhaps most prominently, in the attention they give not just to positions but to *reasons* – many, but by no means all, of which are arguments – for positions. They spend a great deal of time on reasons, and expect their students to grasp and engage with them. All of this is an acknowledgement that the philosophy student's changing epistemic positions with respect to what they are taught derive from their own, individual acts of grasping the force of reasons and argumentation.

Philosophy, of course, is not alone in acknowledging this feature of their fields in their teaching. A lecturer who offers her students an interpretation of, say, a novel will defend that interpretation by appealing to details in the novel, the effect that the features of the work have on its readers, the context in which the novel was written, or the personality or life of its author. In all of these cases, the lecturer aims to have the student grasp the appropriateness of the case she is making: the student's epistemic position with respect to this interpretation is unchanged until he reflects upon the effect that the novel or film has on his, or upon the relevance and importance of certain details of the novel or its author and her life in an understanding of the novel. Even though the student of literary studies has been *helped* by the lecturer, and even though the reasons for what he learns (may) have come from his lecturer or her community, the reason(s) he has for accepting his new-found commitment to an interpretation of a novel will not be inherited from anyone else. Just like the student of philosophy, he must achieve his new epistemic position through his own effort.

Intellectual Humility and Confidence in Science and the Humanities

Throughout this paper, I have been assuming that the ideal higher education teacher will encourage reflection from her students, so that her

students will in some manner or another grasp the kinds of considerations explored in the previous section. That is, the reflective higher education teacher would encourage her students to understand how their epistemic positions change in response to what they are learning in the classroom. When this happens, when a humanities or science student grasps the kind of epistemic position he has come to occupy with respect to his lecturer and her community, then such a student will have made a step towards being intellectually humble and confident with respect to these subject matters in particular and sophisticated ways.

The virtues that I introduced in Section 2, intellectual humility and confidence, arise from an agent's grasp of her epistemic position. The intellectually humble person believes appropriately in response to a proper understanding of the *limits*, *boundaries*, or *weakness* of her epistemic position, while the intellectually confident person believes appropriately in the light of her appropriate grasp of the *strength* or *scope* of her epistemic situation. In this final section, I will spell out how the attentive and reflective higher education student in the sciences and the humanities should be in a position to come out of her education having developed both of these virtues.

The student who is being taught the intellectual products of a scientific community, and who has a reflective understanding of how her epistemic position has changed in being taught, will realize that her position has a weakness, both in so far as it is wholly *dependent* upon the community from which the claim emerged and in so far as she herself does not understand the reasons that the community has accepted the claim.[14] An adequate understanding of this feature of much of what she has learned should lead her to a kind of intellectual humility: she will understand that she has inherited her position from a community to which she (as yet) does not belong. If she becomes intellectually humble with respect to scientific beliefs, she will hold this and similar beliefs that reflect this limitation, her recognition that with respect to most scientific beliefs she may come to hold, she is in a similarly limited epistemic position. Beliefs she forms about, for example, the effect that human beings are having on the global environment, the

[14] Joseph Kupfer emphasizes dependence as a central element in humility (2003, Section II and passim).

relationship between HIV and AIDS, the chemical composition of water, the importance of vitamins, or, indeed, just about anything she learns from a medical doctor, will be beliefs whose justification is understood only by others. If and when she comes to know these things, she does so in virtue of justification that someone else has.

However, our reflective higher education science student should also come to appreciate the strength of her new epistemic position, for her new belief has the backing of a community of professionals who have agreed that there is good reason – based on observation and/or experimentation – to believe what she has been taught. I am not claiming that she must have an account of the source of the justificatory power of scientific communities; any such account would be philosophically complex and controversial, and it would be unreasonable to demand that anyone have such an account before she is warranted in getting a belief from science. What we expect this student to grasp is that, *however* it is that the claim she has come to believe was first justified and accepted by the community, and *however* it is that this communal acceptance warrants her own acceptance of it, this claim does have the backing of a community the members of which understand and agree upon the justification for it. While she should be humble in the light of the fact that her epistemic position *is inherited*, she should be confident in the light of the fact that she inherited it *from the scientific community*, a community which is largely concerned with claims like this and which has agreed upon this particular claim. Should this student become intellectually confident in this way, she would form new scientific beliefs that are appropriate to this understanding. So, even though she does not have access to the particular reasons behind the community's agreement that HIV causes AIDS, for example, she would know that there are such reasons and that there has been such agreement; otherwise, her lecturer would not have taught her that HIV causes AIDS. Accordingly, she will recognize, for example, that she herself is not in a position to question this claim, nor to question other scientific claims that have similarly been agreed upon, nor to see other, similarly-positioned people who question scientific claims as being reasonable, and her believing will manifest the confidence that is appropriate to such recognition.

As we have seen, learning in the humanities is different. The reflective humanities student recognizes both that his epistemic position is in an important sense *not* inherited, but is rather an achievement of his own, and that any claim he accepts will not have the backing of the community from which the claim came. In contrast to the science student, the reflective humanities student will recognize that he is being asked to maintain a certain amount of separation and independence from his lecturer and her community. However, as with the science student, a reflective appreciation of his epistemic position well places him to develop both intellectual humility and confidence, although in very different ways from the science student.

The reflective humanities student recognizes that his epistemic position in coming to accept some claim he is taught is not an inherited one; rather, his humanities learning depends to a large extent upon his own effort. This kind of reflective experience can lead to virtuous humility, because the humanities student will realize that his position does not have the agreement of those around him, his lecturer, or the academic community to which his lecturer belongs, and that he is, essentially, *on his own* in coming to believe what he does. Should he become truly intellectually humble, this recognition will inform his future beliefs in humanities subject matters. He will remember that his occupancy of his position is the result of his own effort, and *he* – not those who disagree with him – may have missed something. This kind of humility is closely related to intellectual openness to others; those who are open-minded acknowledge that they may have a great deal to learn from others.

On the other hand, however, the reflective humanities student will realize that if he is careful, he *can* have an insight, a belief worth having, *even though* he is in a minority or alone in accepting the claim he does. Even though a student may be the only one in his class who accepts the argument being discussed, he may see himself as being right to do so. He may think that everyone else has missed something, or not quite understood the argument, but he need not have a *diagnosis* for everyone else's lack of insight in order to be convinced that he himself has gained insight. With this kind of epistemic experience, he is on his way to developing a virtuous confidence in his own cognitive capacities. He will have a proper trust his

own cognitive capacities, and will use and follow those capacities even in the presence of those who disagree with and challenge him.

If the above considerations are correct, then science and humanities teachers are in the position of being able to develop different strains of humility and confidence in their students. In the case of science, the reflective student becomes aware of her epistemic *dependence* upon the scientific community and their agreement on a certain claim. This dependence is both a position of epistemic weakness – because she has inherited her epistemic position from the community – and epistemic strength – because she has the backing of that community. Accordingly, the intellectual confidence and humility that she hopefully develops would amount to an appropriate epistemic balance in the face of that dependence and backing. In the case of the humanities, the reflective student becomes aware of his epistemic *independence* from the humanities community, an independence that mirrors that of individual members of the community itself. This independence is both a position of epistemic weakness – because the humanities student is, in a sense, on his own – and strength – once he discovers that he can achieve an acceptable epistemic position that has not been given to him by those around him. In the virtuous humanities student, then, we have an intellectual confidence and humility that, together, amount to an appropriate epistemic balance in the face of the fact that his epistemic position is one that he gains on his own.

The virtues of intellectual humility and confidence that I have been discussing in this paper arise out of an understanding of one's own epistemic position. Such recognition is not sufficient for becoming intellectually virtuous in these ways, as intellectual confidence and humility are not themselves states of awareness of one's epistemic position, but rather dispositions to believe in appropriate ways in response to that awareness. Nonetheless, I take it that this kind of reflective epistemic awareness is necessary for developing these particular intellectual virtues, and the right starting point for achieving both. If this is right, and if I have been right in assuming (throughout this paper) that encouraging the development of intellectual virtues is an aim of education, then it follows that – at some level(s), at least – science and humanities educators should encourage reflection upon the kind of learning being done in their classrooms. Grasping one's own epistemic position may

be a significant cognitive achievement, since epistemic positions can be very sophisticated – as the examples of the sciences and the humanities that I have discussed in this paper readily show. This makes it even more imperative that we lead our students to be reflective at some point in their educational careers.

Do the claims that I have defended in this paper entail that higher education students should be encouraged to study both the humanities and the sciences? I am inclined to think that they do so. On the one hand, our relationships to scientific communities have become more and more pervasive and important over the past two centuries, and the epistemic status – both limited and powerful – that we inherit from them has become more intricate; one might include that this pervasiveness and importance justifies an educational framework that leads all us to understand the intricate nature of science and our relationship to it. On the other hand, areas of our lives studied in the humanities are and always will be pervasive, even as we come to engage, say, with different kinds of narratives (e.g., more film and less poetry) and to think about ourselves and our treatment of others in different ways. While these considerations offer *prima facie* support for the necessity or advantage of encouraging both science and humanities study at the HE level, such a defence would need more attention than I can give it here.[15]

References

Annas, J. (2011) *Intelligent Virtue* Oxford, Oxford University Press.

Audi, R. (2001) 'Epistemic Virtue and Justified Belief', in Abrol Fairweather and Linda Zagzebski (eds.) *Virtue Epistemology* Oxford, Oxford University Press.

Baehr, J. (2011) *The Inquiring Mind* Oxford University Press, Oxford.

Bloomfield, P. (2000) 'Virtue Epistemology and the Epistemology of Virtue', *Philosophy and Phenomenological Research* Vol. 60 (1), p.23-43.

Descartes, R. (1996) *Meditations on First Philosophy*, translated by John Cottingham. Cambridge, Cambridge University Press.

---

[15] Thanks to Thad Metz, Mary Margaret O'Hara, and to members of the audience at the colloquium, 'The Aims of Higher Education", organized by Pedro Tabensky, at Rhodes University in 2010.

Fricker, M. (2007) *Epistemic Injustice: Power and the Ethics of Knowing* Oxford, Oxford University Press.

Fricker, E (1994) 'Against Gullibility', in B.K Malital & A. Chakrabarti (eds.) *Knowing from Words*, Dordrecht, Kluwer.

Hatfield, G. (1986) 'The Senses and the Fleshless Eye: the Meditations as Cognitive Exercises', in AO Rorty (ed.) *Essays on Descartes' Meditations* Berkeley, University of California Press.

Heunemann, C. (2004) 'Why not to trust other philosophers' *American Philosophical Quarterly* Vol. 41 (3) p.249-258.

Johnston, R., Irwin, M. and Crowe, D. (2000) *Nature* 406 (6791).

Jones, W. (2002) 'Dissident Versus Loyalist: Which Scientists Should We Trust?', *Journal of Value Inquiry* Vol. 36 (4), p. 511-520.

Kuhn, T. (1970) *The Structure of Scientific Revolutions* Second Edition Chicago: University of Chicago Press.

Kupfer, J. (2003) 'The Moral Perspective of Humility', *Pacific Philosophical Quarterly* Vol. 84 p.249-269.

McDowell, J. (1994) 'Knowledge by Hearsay', in B.K Malital & A. Chakrabarti (eds.) *Knowing from Words*, Dordrecht, Kluwer.

Montmarquet, J.A. (1993) *Epistemic Virtue and Doxastic Responsibility* Lanham, Rowman & Littlefield.

Roberts, R.C. and Wood, W.J. (2007) *Intellectual Virtues: An Essay in Regulative Epistemology* Oxford, Oxford University Press.

Roberts, R.C. and Wood, W.J. (2003) 'Humility and Epistemic Goods', in Michael Depaul and Linda Zagzebski (eds.) *Intellectual Virtue: Perspectives from Ethics and Epistemology* Oxford, Oxford University Press.

Shwed, U. and Bearman, P.S. (2010), 'The Temporal Structure of Scientific Consensus Formation', *American Sociological Review* Vol.75 (6), p.817-40.

Siegel, H. (1988) *Educating Reason: Rationality, Critical Thinking, and Education* New York, Routledge.

Vice, S. (2011) 'Reflections on "How Do I Live in This Strange Place?"' *South African Journal of Philosophy* Vol. 30 (4), pp. 513-16.

PROFESSIONALLY-ORIENTED KNOWLEDGE AND THE PURPOSE OF PROFESSIONALLY-ORIENTED HIGHER EDUCATION

Christine Winberg, Penelope Engel-Hills*,*
James Garraway and Cecilia Jacobs***
**Cape Peninsula University of Technology*
***Stellenbosch University*

Introduction

In this paper we argue that a common-sense understanding of the purpose of professionally-oriented higher education can have unintended consequences. We draw on accounts of the distinctiveness of disciplinary and situated knowledge (e.g., Bernstein, 1999; Barnett, 2006; Gamble, 2006; Muller, 2009) to describe the knowledge resources for professional programmes, to analyse the relationship between knowledge types and to show how they are represented in curricula. We draw on a number of empirical studies in the education of health professionals, engineers, designers, information technologists and office managers. Much work has been done on the nature of disciplinary knowledge and its selection and recontextualisation in curricula. We have, however, found that it is insufficient to provide a principled account of situated knowledge equipped only with a theory of knowledge difference. Without a theoretical conception of practice-based knowledge (e.g., Scribner, 1984; Chaiklin & Lave, 1993/2003) there is a danger that situated knowledge will be undervalued in relation to disciplinary knowledge. We thus found it necessary to draw on a variety of resources to theorise key issues in disciplinary and situated knowledge. The first section of the paper problematises common-sense understandings of professionally-oriented education and provides an historical overview of the complex and difficult relationship between higher education and the world of work. The second section addresses the representation of disciplinary and situated knowledge forms in curricula, highlights the importance of epistemological access to professional knowledge, and provides a model of

professional knowledge for curricular selection. The third section deals with the logic of professionally-oriented curricula. The conclusion returns to a consideration of the purpose of professionally-oriented higher education, in the light of the arguments developed. Our aim in this paper is to contribute towards an understanding of the relationship between disciplinary and situated knowledge in professionally-oriented education, and thereby to offer a theoretically consistent position on the purpose of professionally-oriented higher education.

The intentions of professionally-oriented university education

This paper grew out of a curriculum research project that was initiated at the Cape Peninsula University of Technology in 2011. The project comprises a number of empirical studies in the education of health professionals (radiographers and emergency health care practitioners), engineers (in the new field of mechatronics), information technologists, industrial, graphic and textile designers, and office managers. The studies describe the knowledge bases of the programmes, and attempt to show the relationship between theoretical and practical areas of knowledge in different programmes. The focus of this paper is the theoretical framework and the language of description developed to analyse the relationship between different forms of knowledge in professionally-oriented programmes. In addressing questions about the purpose of professionally-oriented university education, we have chosen not to focus on matters of institutional differentiation (e.g., universities of technology vs traditional universities and their respective missions), but rather on matters of knowledge differentiation. Debates around what a university of technology is and how it might be different from other forms of higher education avoids the central consideration of the purpose of professionally-oriented programmes and how students enrolled in such programmes should be prepared by higher education institutions (whatever label they are given) to engage meaningfully in the world beyond the university. The Higher Education Qualifications Framework (Government Gazette 2007) provides six higher education levels (Levels 5 – 10), with different qualifications requiring appropriate credits at different levels. While it is more common (given issues of capacity and resources) for universities of technology to offer diploma-level programmes in advanced vocational and technical fields, universities of technology can (and many

do) offer a full range of qualifications. It is useful to ask 'what is the purpose of a diploma?' and 'what is the purpose of a degree?', but in this paper our focus is more generally on the purpose of professionally-oriented university education.

By the term 'professionally-oriented' higher education we include traditional professional programmes, such as architecture, engineering, accountancy, law and medicine, as well as new and emerging professions, such as medical imaging, emergency medical care, mechatronics, software engineering, reconfigurable computing, robotics, and cellular technology. Also included are career-focused programmes such as industrial design, business informatics, and multi-media studies. In the interests of brevity, we refer to all such advanced technical, vocational, new and traditional professional programmes as 'professionally-oriented'. We are aware that some programmes at universities of technology (and probably in traditional and comprehensive universities as well) aspire to professional status, but that these programmes are either in extremely new areas and a lack a clearly defined status (e.g., there is no established professional council or similar body), or they might be programmes that are more appropriate to Further Education and Training colleges, but for various historical reasons have ended up in a university. In the tradition of Dewey (1916/1966), we have not distinguished programmes by their social status, but by their purpose in preparing candidates to engage meaningfully with the world beyond the university.

The common-sense view is that professionally-oriented programmes are expected to prepare graduates for competent practice in the world of work. However, as a critical reading of texts (such as the one below) reveals, the matter is not as straightforward as it might seem:

> Technical and engineering colleges [should] aim to convey both knowledge and practical skills, and to shape the personality of the students so as to make them fit readily into the hierarchical and authoritarian regime in the factories, the laboratories and bureaucracies.
>
> (Gorz, 1976: 179)

Although dated, the text above expresses common assumptions on the preparation of students for 'industry'. Clearly, the purpose of higher education should not be the reproduction of technical and social relations (Crozier & Reay, 2011), but rather the enablement of graduates to contribute to their fields of practice (Young, 2009), as well as their preparation for broader roles in the development of South African society (CHE, 2011). In order to achieve these aims, professionally-oriented education has to provide students with the disciplinary knowledge that underpins professional practice (Beck & Young, 2005), as well as facilitate the acquisition of specific skills and knowledge for competent practice (Wheelahan, 2010). Curricula that do not pay adequate attention to disciplinary knowledge – or that neglect the situated knowledge related to a field of practice – do not provide a coherent professional knowledge system for professional education. Students need to engage with a system of knowledge in order to understand how discrete elements of practice relate to the rest of the system. This paper thus argues that in order to ensure a strong basis for practice, students need disciplinary knowledge; while to develop an understanding of the field of practice, students need situated knowledge. For these reasons professionally-oriented education is said to 'face both ways' (Barnett, 2006: 152), that is, both towards the underpinning disciplines and towards the field of practice.

Attempts to define the relationship between higher education and the world of work have a long (and troubled) history. A language of description for distinguishing between different knowledge forms was made available by Aristotle, who differentiated theoria (ideas and theories) from poïesis (knowledge about practice) and praxis (action or conduct) (Di Pippo, 2000). Poïesis (derived from the word 'to make') is knowledge that has as its aim something beyond itself, for example, knowledge about shipbuilding that has the aim of producing a vessel. Poïesis informs techne (craft or design), while phronesis (reason-in-action) informs praxis: 'the state involving reason that is concerned with craft is different from the state involving reason-in-action' (Aristotle, 350 BC/1994). Subsequent theorists have tended to conflate poïesis and praxis, thereby establishing a tradition of understanding 'theory' and 'practice' as separate, unrelated domains.

A number of scholars categorise disciplines based on whether they are more theoretically or more practically oriented. Biglan (1973), for example, separates disciplines along two dimensions, concluding that there are four disciplinary types: 'hard pure' (e.g., physics), 'soft pure' (e.g., sociology), 'hard applied' (e.g., engineering), and 'soft applied' (e.g., education). Biglan's typologies and taxonomies invoke Habermas' (1984) classification of the knowledge worlds of the humanities, the 'empirical-analytic sciences', and the 'sciences of social action'. Whitely (1984) differentiates between disciplines according to their research practices, in particular the degree of 'technical task uncertainty' present in the field (how much variability there is in the problems being examined) and 'strategic uncertainty' (how much instability there is in the way that research is conducted). In Whitely's view, research in a field such as engineering is typified by 'technical task uncertainty' because, although it has long-established base disciplines (e.g., physics and mathematics), its research routines are subject to local considerations and exigencies. Organisation Studies, on the other hand, is noted for its 'strategic uncertainty', which is a result of the lack of paradigmatic consensus in the field, and concomitant theoretical and methodological openness or eclecticism. Bernstein (1999) identifies 'vertical' and 'horizontal' discourses; vertical discourses are associated with abstract, theoretical ways of knowing, while horizontal discourses comprise both everyday or common sense ways of knowing as well as 'uncommon sense' ways of knowing (e.g., the horizontal 'repertoires' of professionals that include multiple practices, most of which are not 'everyday' because even though they are context-specific, they develop from reservoirs of 'vertical' discourse). Max-Neef (2005) clusters disciplines according to whether they describe 'what exists' (the first, empirical level), what we are 'capable of doing' (the second, productive, level), what we 'want to do' (the third, planning, level), or what 'we should do' (the fourth, ethical, level). Muller (2009) describes disciplinary differences in terms of epistemological, methodological, communicative, professional, and educational variables, focussing on how these variables characterise general, professional and vocational curricula.

A number of scholars, following John Dewey (1916/1966), are concerned with the (presumed) benefits of engaging both 'heads' and 'hands' in curricula and pedagogy. Kolb (1981) characterises disciplines according to the ways

in which they demand that students learn; he places these disciplines along two continua which he calls 'active-reflective' (e.g., the social sciences) and 'abstract-concrete' (e.g., the natural sciences); while Neumann, Parry and Becher (2002) analyse different disciplinary orientations to teaching. Schön (1983) attempts to reconcile theory and practice through the concept of 'reflective practice', Lave and Wenger (1991) theorise 'situated knowledge', Kemmis (2005) proposes 'knowing practice', Titchen (2000) suggests a hybrid form of 'professional craft knowledge', Richardson, Dahlgren and Higgs (2004) propose an 'epistemology of practice', while Gibbons et al. (1994) and Nowotny and colleagues (2001) are preoccupied with knowledge production in contexts of application.

Contestation of the relationship between theory and practice persists in the ways in which the purposes of higher education are understood. Positions are taken in support of, or against, higher education qualifications frameworks, outcomes-based education, service learning, graduate attributes, industry/higher education collaboration, interdisciplinary programmes vs departmental 'silos'; one group will claim that the innovation or policy makes too many concessions to vocational higher education, while another group will claim it forces 'academic drift' in technical programmes.

Epistemological access to professional knowledge

We can think of professionally-oriented curricula as drawing on two distinct knowledge domains: disciplinary knowledge (the disciplines or areas of study that form the foundation of professional programmes) and situated knowledge (the knowledge underlying specific work practices and the contextual knowledge associated with the sites of practice). Universities that are in the business of offering professionally-oriented education need to engage students with both disciplinary and situated knowledge in ways that support the provision of 'epistemological access' (Morrow, 2003/2009) to professional knowledge. How universities could address this provision, and the purpose that shapes this provision, is the issue that we speak to in this paper.

This paper draws its basic premise from Bernstein's (1999; 2000) understanding of the internal and external relations of knowledge in

terms of 'vertical' and 'horizontal' discourses. Bernstein (2000) argues that vertical (or abstract theoretical) discourse underpins the knowledge base of professional practice. This 'powerful knowledge' enables 'more reliable explanations and new ways of thinking about the world than localised experiential knowledge, and acquiring it can provide students with a language for engaging in political, moral and other kinds of debates' (Young, 2009). Wheelahan (2010), developing these arguments, proposes that access to abstract theoretical knowledge in a university education is a question of social justice, because 'powerful knowledge' is not only the basis for professional work, but is the basis for participating in 'society's conversation', for engaging in debates and controversies in the field of practice, and contributing to its development.

Situated knowledge is not generally valued as 'powerful knowledge' in academic contexts but in professional practice it has significance. It would, for example, be unthinkable to educate doctors without access to the situated knowledge of clinical practice (Richardson et al., 2004); or architects without access to building sites (Young-Pugh, 2005). Developing graduates who are knowledgeable and competent practitioners requires coherent curricular selection from the disciplines that underpin the profession and the situated knowledge that enable its practice. In professionally-oriented programmes (both new and traditional) it is sometimes not clear why particular selections have been made. One could ask: 'what is the purpose of general physics (mechanics, optics, magnetism, acoustics, heat) in a software engineering curriculum?', or 'what is the purpose of a work-placement in a financial accounting programme?'.

Disciplinary knowledge in the professional curriculum

Disciplinary knowledge provides the scientific basis for the profession (Beck and Young, 2005). Mechanical engineering, for example, is based on the pure and applied disciplines of physics, mathematics, mechanics, and materials science. University teachers select and sequence disciplinary knowledge to develop a curriculum. Disciplinary knowledge, particularly the knowledge forms associated with the pure disciplines or 'singulars' (Bernstein, 2000) are strongly classified, 'internally oriented' (i.e., have a logic and coherence that is specific to the discipline), and have clear boundaries between

themselves and other areas of knowledge. Such disciplines are specialised knowledge areas, each having a unique name, such as 'Physics' or 'Sociology' (Wheelahan, 2007); they are made up of specialised languages with rules that stipulate what is included in the discipline as legitimate knowledge, how knowledge is created, how texts are written, as well as the rules of entry and reward (Bernstein, 2000: 52). The applied disciplines are described by Bernstein (2000) as 'regions' of knowledge that face outwards towards the field of practice. Bernstein explains that in applied disciplines, singulars are 'recontextualised', that is, codified into 'larger units' that 'operate both in the intellectual field of disciplines and in the field of external practice' (2000: 52). Applied disciplines are thus 'the interface between disciplines (singulars) and the technologies that they make possible' (2000: 52).

Professionally-oriented programmes usually include elements of both pure and applied disciplines. Beck and Young (2005) distinguish between the 'old' regions represented by the traditional professions, and the 'new' regions represented by new vocational or technical higher education programmes. They argue that professional identity is strongly built into the traditional regions because of the historical linkages between the professions and their knowledge bases. Traditional professions place strong emphasis on professional autonomy as well as professional control over training and admission to the profession, through defining the boundaries of their knowledge base, the development and enforcement of codes of conduct, and socialisation within the profession, or in other words, 'the creation of a professional habitus' (Beck and Young, 2005: 188).

The neglect of appropriate disciplinary knowledge, particularly in the new professions and emerging technical areas of practice, has been pointed out in critiques of competency-based education (such as unit standards-based programmes). Many new programmes, in preference to specifying knowledge domains, list topics or skills – with no pedagogic or curricular coherence, and even less relevance to practice. Wheelahan (2007) argues that such programmes ignore the essential unity of disciplinary knowledge that underpins practice. When students are not engaged in the study of the disciplinary bases of their field, they are not provided with the opportunity to learn how disparate elements are linked to a system of knowledge.

Wheelahan (2010) argues that it is important to provide students with opportunities to acquire systematic disciplinary knowledge to enable them to develop the kind of thinking that emerges from such engagement. But while disciplinary knowledge is increasingly seen to be important in professionally-oriented education, the introduction of disciplinary knowledge that is misaligned with the field of practice is not helpful. Studies that emphasise the importance of the theoretical knowledge that underpins all but the most routine work, often fail to point out the importance of appropriate and meaningful curricular selection. The inclusion of geo-history in soil formation in a Construction Management diploma (Allais, 2011), for example, is clearly not 'powerful knowledge' for this profession. Misalignment is a particular concern in new professions that do not yet have a clear and stable disciplinary base for their practice.

Situated knowledge

While knowledge forms in the pure and applied disciplines are well understood, knowledge forms that enable practice have been less researched. Perhaps because theorists and researchers are in the business of forming ideas and theories, and because of their particular role in the initial preparation and formation of professionals, they sometimes treat disciplinary knowledge as being of most worth, 'as if what is of most worth within the academy is also of most worth in the world beyond it' (Kemmis, 2005: 409).

Codifying situated knowledge

There are a number of difficulties to overcome when including situated knowledge in professionally-oriented curricula. Because much situated knowledge is not codified (and some practices are not amenable to codification), it is difficult to access situated knowledge outside of its context of use. Knowledge developed in practice is often tacit, and is acquired in a more social way, through participation in teamwork, mentoring, and so on. Richardson and colleagues explain some of the difficulties in medical practice:

> The move towards evidence-based practice provides an impetus for all practitioners to examine their practice. This can become a demoralising process when it is realised that so little professional practice has been researched and that existing research is often considered to be of such poor quality that little evidence can be gleaned from it for generalisation
>
> (2004, p.212).

One approach to the codification of situated knowledge can be seen in calls for 'generic' competencies that are largely drawn from the field of practice (and the ironic inappropriateness of codifying situated knowledge through appealing to the generic should be noted). There are a number of difficulties associated in describing 'performance' generically. Firstly, as Bernstein (2000) argues, generic capacities can only be loosely related to the practice for which individuals are preparing, because it is the specific professional practice (and traditions associated with that practice) that provide occupational identity. Thus a specific context is required in order to make sense of generic 'meta-thinking' and 'meta-learning' strategies. In generic approaches, the 'fit' between qualifications described in terms of outcomes, or other generic attributes, and the occupational destinations for which students are being prepared is therefore so imprecise that it is of little use.

Bernstein (2000) locates the driving force of professional identity as being centred on the relationship that practitioners have with knowledge, a relationship characterised as 'inwardness' and 'inner dedication'. Bernstein's analysis suggests that professionals operate within a context that includes not only the external conditions of change, but the internal basis of change and that an awareness of the interrelationship between the two at any particular time determines the nature of professional consciousness, commitment and rigour. Building on Bernstein's analysis, Beck and Young (2005) warn that the shift towards generic competencies undermines the training of critically-thinking professionals. As an exacerbating factor, Wheelahan (2007) points out that in many 'generic' descriptions (within vocational programmes in particular) the competencies are oriented outwards to markets and not to a field of

practice, which severs the link with disciplinary knowledge entirely, as well as changing the relationship between the higher education institution and the world of work.

Principled and procedural situated knowledge

The process of codification, as well as the nature and structure of university subjects, is such that situated workplace knowledge has to be adapted to the academic context. Academic discourse is able to recontextualise other discourses, such as the discourses of professional practice, but it does so by appropriating and transforming them to conform to its own distinctive logic (Maton, 2004), thus some of the distinctiveness of practice is lost. University teachers who have attempted to bring real projects into the classroom, for example engineering projects or medical case studies, will be familiar with these difficulties. In selecting appropriate cases for students to analyse, university teachers raise questions such as: 'Is there sufficient mathematics involved in this 'real' problem?' or 'How can I, as an academic biochemist, bring practical laboratory work into my curriculum?' On the one hand, 'recontextualisation' can be seen as advantageous because this process enables university teachers to adapt 'real life' problems and case studies to the particular needs of their students and the academic programme; but recontextualisation also means that the problem or case study is no longer authentic, and may cause confusion to both students and professional partners. As Barnett puts it:

> Situated knowledge … does not readily mix with, or easily relate to, disciplinary knowledge. It is often trapped within its context of application, while disciplinary knowledge generally aspires to some degree of context-independence.
>
> (2006: 146)

Gamble (2009) describes situated knowledge in terms of two main types: 1) principled and 2) procedural (reminiscent of Aristotle's poïesis and praxis). In terms of adaptation for curriculum development, these could be understood as 'codified' and 'uncodified' knowledge forms. Principled situated knowledge is likely to be codified, in that many of the principles of particular practices are founded on related disciplinary forms of knowledge.

Procedural situated knowledge is less likely to be codified (even though particular procedures may be documented, these procedures will be susceptible to contextual change). Procedural situated knowledge thus needs to be acquired through practice.

A model of professional knowledge for curricular selection

Thus far we have identified two knowledge types from which curricular selections can be made: disciplinary knowledge (comprising the pure and applied disciplines – both 'old' and 'new') and situated knowledge (the 'principled' and 'procedural' knowledge of professional practice). In most models of professional or vocational knowledge (e.g., Barnett, 2006; Muller, 2009) the two knowledge types are understood to occupy different ends along a continuum: situated knowledge developed in the world of work at one end and specialised scientific knowledge on the other. Barnett (2006) explains that the development of vocational curricula involves a process of 'double recontextualisation' in which both disciplinary and situated knowledge are 'recontextualised' into a curriculum. The concept of 'double recontextualisation' helps us to understand the structure and content of a professionally-oriented programme as one that both shifts the discourse of practice from its contextual base and relocates it within a university, and one that shifts the discourse of disciplinary knowledge towards an understanding of the world of work. This 'double recontexualisation' creates a space in which students can learn from the disciplines, as well as learn about, and from, their future places of work.

It should be remembered that Bernstein (1999) presents the distinction between vertical and horizontal discourses as 'ideal types' which, as Young points out, are analytical categories that 'do not describe different types of knowledge; they refer to features found to a different degree in all claims to knowledge' (Young, 2005: 11). All knowledge-based fields will therefore comprise aspects of verticality and horizontality in different combination. Thus it might be possible to understand the two knowledge domains as operating along two continua rather than along a single continuum.

From the above description, a model of professional knowledge emerges that is based on differentiation between disciplinary and situated knowledge – as well as the potential for a variety of different relationships between the two. Professionally-oriented curricula would contain both forms of knowledge, but within each of these forms, a further distinction between 'pure' and 'applied' disciplines, and 'principled' and 'procedural' situated knowledge can be made. We can use this model to distinguish between knowledge areas within a curriculum, but also to provide some of the detail that is missing from some knowledge-based approaches. In knowledge-based approaches, disciplinary knowledge tends to be foregrounded and valued, while situated knowledge tends to play a minor, supporting role. Figure 1 shows the distinctness of disciplinary and situated knowledge types, but also shows that there are potential relationships between these domains:

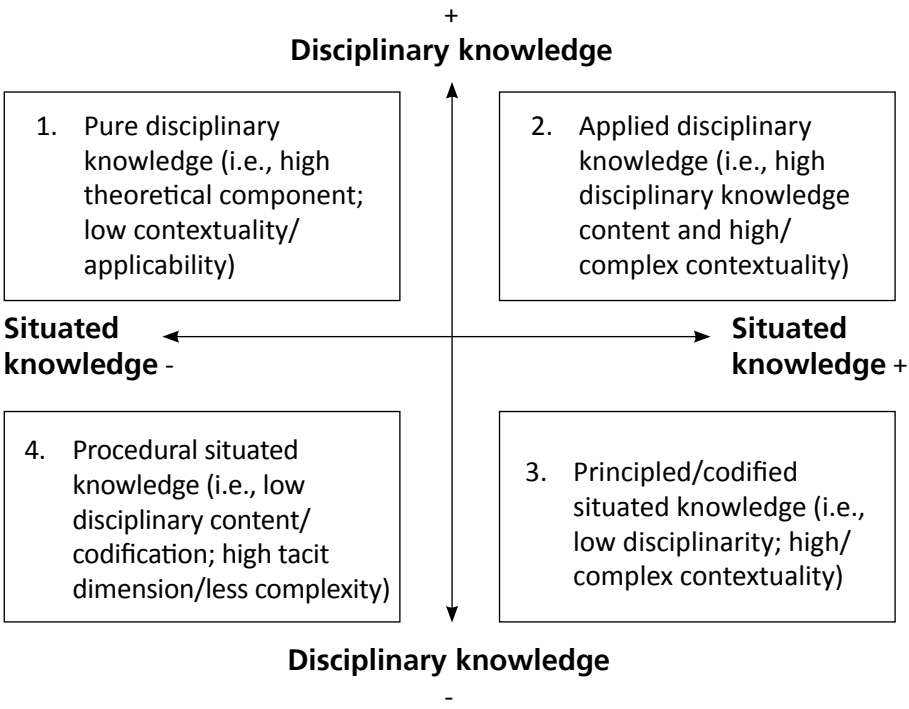

Figure 1: A model of professional knowledge

We can recognise Quadrants 1 (pure disciplinary knowledge), 2 (applied disciplinary knowledge) and 4 (procedural situated knowledge – also known as a practicum, work experience, internship, cooperative education, etc.) in many professionally-orientated programmes. Many professionally-oriented programmes include a work placement, and in the past in situ learning was the accepted way of acquiring professional knowledge (Ryan, Toohey & Hughes, 1996). However, when forms of apprenticeship were common, it was understood that acquiring the knowledge, skills and a broader set of attitudes and values associated with becoming a member of a profession developed over a considerable period of time, usually seven years or more (Allais, 2011). Some new professional programmes (or those that aspire to professional status) over-emphasise the practice-oriented 'know-how' (Quandrant 4) necessary for professional tasks, without paying sufficient attention to the disciplinary core (Quadrants 1 and 2), resulting in the knowledge base being weak on 'know-why' and professional identity (Muller, 2009). Examples abound in many three-year diploma programmes (e.g., in some engineering, design and business fields) where a whole year practicum is included, usually at the second year level. It is unlikely that students will have developed the systematic professional knowledge necessary for meaningful practice or contextual engagement after only one year of study. Principled situated knowledge (Quadrant 3), or knowledge about practice (Aristotle's poïesis) has tended to be neglected in the education of professionals, although such knowledge, which is usually codified, is central to the achievement of competent practice (Chaiklin and Lave, 1993/2003). There are programmes, in particular new four-year degree programmes in the health sciences, that include more systematic ways of preparing students for practice, and for relating the principles of practice back to their disciplinary roots.

The 'epistemological dilemma' and the logic of professionally-oriented curricula

The distinctiveness of disciplinary and situated knowledge types – and their centrality to the education of professionals – could be understood as an 'epistemological dilemma'. Because academic and situated knowledge domains are different, separate and bounded (Bernstein, 2000; Maton & Moore, 2010; Muller, 2009; Young & Muller, 2010), even within the same

professional knowledge system, there are strong arguments for keeping the knowledge domains distinct. This is supported by research that shows that meanings in science operate at a general and context-independent level (e.g., Saunders, 2006); if science is learned in a practical context there is a danger that the knowledge learned will remain bound to that context and its transfer capacity lost (Gamble, 2006).

The achievement of coherent selection and sequencing of disciplinary and situated knowledge is extremely difficult; but it is not the inclusion of situated knowledge in professional programmes that is problematic. Difficulties arise when curriculum developers assume that disciplinary and situated knowledge types are similar and interchangeable: "Knowledge is often viewed as undifferentiated – 'generic' skills or interchangeable packets of information – and the basis of its selection and sequencing in a curriculum seen as arbitrary" (Maton & Moore, 2010: 6-7).

The difficulties described above can partially be addressed by bringing disciplinary and situated knowledge into a more clear relationship within a logically sequenced programme. Resolving the 'epistemological dilemma' requires university teachers to consider not only when (in terms of curricular sequence and pace) disciplinary or situated knowledge is appropriate in a professionally-oriented programme, but how the particular academic and situated knowledge domains relate to each other, as well as the principles for their selection into academic programmes.

In making choices about selection, sequence and pace there is much to be learned from traditional professional programmes. Professional engineering programmes, for example, foreground disciplinary knowledge (e.g., mathematics, physics, strength of materials) in initial curricular selections, while only towards the final years of study are elements of the professional field (e.g., in the form of simulated workplace projects or actual work placements) introduced into the programme. Other professional programmes, particularly in the medical and the health sciences, bring the world of professional clinical practice into the curriculum from early on. From the student perspective, situated knowledge, in the form of engagement in work-based projects comprise some of students' more memorable learning experiences (Billet, 2009); while it is only in retrospect,

from the perspective of employment, that students come to understand and appreciate the importance of mathematics and physics in, for example, an engineering programme (Stiwne and Jungert, 2010). Whether the situated component is introduced earlier or later, in simulated or actual form, there should be a clear understanding of the professional knowledge system. Such systems underpin complex situated knowledge with clearly defined disciplinary bases. In curricula, this necessitates a logical movement from the disciplines to practice, rather than the other way around. This logical movement is represented in Figure 2:

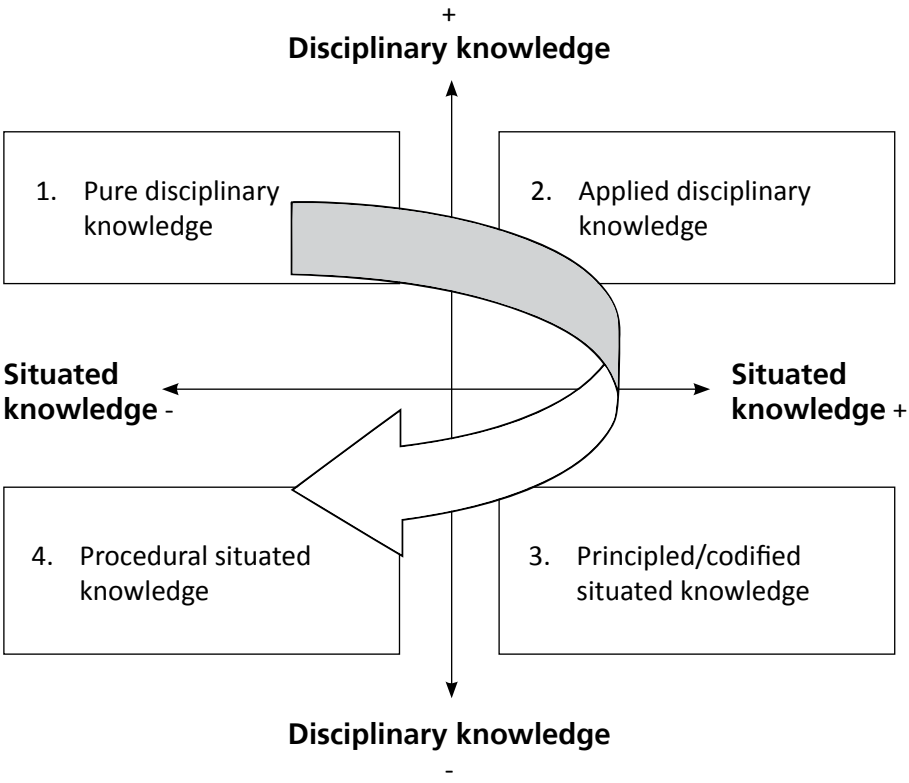

Figure 2: The logic of professionally-oriented curricula

A programme is the new field of Emergency Medical Care provides an example of a logical curricular sequence. The field has learned much from traditional health science programmes in which there is movement from theory to practice in several cycles. For example, students initially engage in a general study of the respiratory system through a (relatively) pure discipline, such as 'Anatomy' (Quadrant 1), this is followed by a more focussed, specific application within an applied subject, such as a module on the 'Theory of Resuscitation' (Beckers, Timmermann, Müller, Angstwurm & Walcher, 2009) (Quadrant 2). A third curricular shift occurs as students familiarise themselves with the principles and protocols of patient resuscitation that are codified for different contexts or different patient injuries, in a practice-based subject (Quadrant 3). In the practicum students develop their understanding as they carry out protocols (or have to attempt new actions) in sites of practice (Quadrant 4). In this way, the Emergency Medical Care curriculum develops students' reservoirs of disciplinary knowledge and the repertories (principles and protocols) for professional practice.

In professional practice (as distinguished from professional learning) there is what Bernstein calls 'circulation' between the disciplinary 'reservoir' and the 'repertoires' of practice in both directions (Bernstein, 1999); but this is not the logic of the professionally-oriented curriculum. Similarly, in knowledge building and research practice, or in advanced professional learning (clearly different from undergraduate learning) there is also movement from the field of practice back to the disciplinary worlds. Layton explains that 'Solving technological problems necessitates building back … all the complications of "real life", reversing the process of … recontextualising knowledge' (Layton, 1993: 59). In the research of emergency health care practitioners, for example, disciplinary knowledge can be extended and changed by the challenges encountered in new and different situations of medical emergency.

Conclusion: from professionally-oriented knowledge to the purpose of professionally-oriented higher education

Students in professionally-oriented programmes need epistemological access to both disciplinary and situated knowledge: they need opportunities

to immerse themselves in the academic disciplines that form the basis of their future professions, and they need opportunities to acquire poïesis and praxis, situated knowledge developed from, and within, the world of professional practice. They need to identify themselves as university students engaged in complex processes of disciplinary learning; as professionals-in-training, they need to be adequately prepared to engage with, and contribute to, the world of professional practice.

For professionally-oriented higher education to achieve its purpose of educating students to become competent practitioners, with a sense of civic and social responsibility, there should be 'a common understanding about the role of universities in development and the contribution of new knowledge to it' (Muller, 2011). Educating graduates who will be worthy representatives of their professional group, and of the service that they are responsible to provide, necessitates, on the one hand, protecting the underpinning disciplinary knowledge of the profession from short-term, utilitarian and instrumental ideas of education, geared only to the minimal preparation of practitioners for an assumed site of practice; but it must also be recognised that the underpinning values, proper scope and potential of the professional field can only be clarified if university teachers and students engage with practice and interrogate it, usually with the help of the discourses of appropriate disciplinary fields. The pure and applied disciplines (particularly the traditional disciplines) offer the resources of argumentation, the analytic and conceptual tools, for professional understanding. Competent professional practice requires appropriate disciplinary knowledge to enable cumulative theory building and the progression of the field of practice; but competent practice also implies knowledge about, and knowledge within, the field of practice. The key attributes of professional programmes that are fit for purpose involves both disciplinary specialisation and practical expertise; it is the purpose of professionally-oriented higher education to get this right.[1]

[1] The contribution of the following colleagues is gratefully acknowledged: Veronica Barnes, Marianne Bester, Frederika de Graaff, Vicki du Plessis, Jeanne Gamble, Shairn Hollis-Turner, Cheri Hugo, Bernie Millar, Sihlangene Mgudlwa, Joyce Nduna, Fundiswa Nofemla, Arie Rip, Roux Rossouw, Annadine Vlok, Karin Wolff and Bridget Wyrley-Birch. The authors also wish to thank the two anonymous reviewers, whose insightful comments helped to shape our thinking about professionally-oriented higher education.

References

Allais, S. (2011). What are skills? Reflections on policy in South Africa in the light of international debates. Paper presented at the Global Labour University Conference 28-30 September 2011.

Aristotle (350 BC/1994). Ross, W.D. (trans). *Nicomachean Ethics*. Available at http://classics.mit.edu/Aristotle/nicomachaen.html [Accessed 11 Dec 2011].

Baker, D.P. (2009). The educational transformation of work: towards a new synthesis, *Journal of Education and Work*, 22 (3): 163-191.

Barnett, M. (2006). Vocational knowledge and vocation pedagogy, in: M. Young & J. Gamble (Eds.) *Knowledge, curriculum and qualifications for South African further education*. Pretoria: HSRC Press, 143–157.

Beck, J., & Young, M. F. D. (2005). The assault on the professions and the restructuring of academic and professional identities: A Bernsteinian analysis. *British Journal of Sociology of Education*, 26, 183–197.

Beckers, S.K., Timmermann, A., Müller, M.P., Angstwurm, M. & Walcher, F. (2009). Undergraduate medical education in emergency medical care: a nationwide survey at German medical schools, *BMC Emergency Medicine* 9 (7), Available online at:http://www.biomedcentral.com/1471-227X/9/7 [Accessed 9 Dec 2011].

Bernstein, B. (1999). Vertical and horizontal discourse: an essay, *British Journal of Sociology of Education*, 20 (2): 157–173.

Bernstein, B. (2000). *Pedagogy, symbolic control and identity* (revised edition). Lanham, MD: Rowman and Littlefield.

Biglan, A. (1973). The characteristics of subject matter in different academic areas. *Journal of Applied Psychology*, 53 (3): 195-203.

Billet, S. (2009). Realising the educational worth of integrating work-experiences in higher education. *Studies in Higher Education*, 34 (7): 827-843.

Chaiklin, S and Lave, J. (1993/2003). *Understanding practice: Perspectives on activity and context*. Cambridge: CUP.

Council on Higher Education/Directorate Standards Development (CHE) (2011). Work-integrated learning: good practice guide. HE Monitor No. 12, August 2011.

Crozier, G. and Reay, D. 2011. Capital accumulation: working-class students learning how to learn in higher education. *Teaching in Higher Education* 16 (2): 145-155.

Dewey, J. (1916/1966) *Democracy and Education: an introduction to the philosophy of education*. New York: Free Press.

Di Pippo, A. F. (2000). The concept of poiesis in Heidegger's 'An Introduction to Metaphysics'. *Thinking Fundamentals, IWM Junior Visiting Fellows Conferences, Vol. 9: Vienna 2000.* http://www.iwm.at/publ-jvc/jc-09-03.pdf [Accessed 11 Dec 2011].

Engestrom, Y. (1999). Innovative learning in work teams: analysing cycles of knowledge creation in practice, in: Y. Engestrom, R. Miettinen & R. Punamaki (Eds) *Perspectives on activity theory*. Cambridge, Cambridge University Press.

Gamble, J. (2006). Theory and practice in the vocational curriculum, in: M. Young & J. Gamble (Eds.) *Knowledge, curriculum and qualifications for South African Further Education*. Pretoria: HSRC Press.

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P. and Trow, M. (1994). *The new production of knowledge: the dynamics of science and research in contemporary societies*. London: Sage Publishers.

Gorz, A. (1976). Technology, technicians and class struggle. In Gorz, A. (Ed.) *The division of labour*. London: Harvester Press.

Government Gazette (2007) *Higher Education Qualifications Framework* Schedule set out as policy in terms of section 3 of the Higher Education Act, 1997 (Act No. 101 of 1997).

Kemmis, S. (2005). Knowing practice: searching for saliences. *Pedagogy, culture and society*, 13 (3): 391-426.

Kolb, D. A. (1981). Learning styles and disciplinary differences. In Chickering, A.W. (Ed.) *The modern American college*. San Francisco, Ca: Jossey-Bass: 232-255.

Habermas, J. (1984). *The Theory of Communicative Action*. (McCarthy, T., translation) Cambridge: Polity.

Lave, J. and Wenger, E. (1991). *Situated Learning: legitimate peripheral participation*. Cambridge: Cambridge University Press.

Layton, D. (1993). *Technology's challenge to science education: cathedral, quarry or company store?* Buckingham/Philadelphia: Open University Press.

Maton K. (2004). The wrong kind of knower: education, expansion and the epistemic device. In Muller J., Davies B. & Morais A. (Eds.) *Reading Bernstein, Thinking Bernstein*. London: Routledge: 218-231.

Maton, K. & Moore, R. (2010). Introduction. In Maton, K. & Moore, R. (Eds.) *Social Realism, knowledge and the sociology of education: coalitions of the mind*. London: Continuum.

Max-Neef, M.A (2005). Foundations of transdisciplinarity. *Ecological Economics* 53: 5-16.

Morrow, W. (2003/2009). Epistemic values in curriculum transformation. In Morrow, W. (Ed.) *Bounds of Democracy: epistemological access in higher education*. Pretoria: HSRC Press.

Muller, J. (2009). Forms of knowledge and curriculum coherence, *Journal of Education and Work*, 22 (3): 205–227.

Muller, J. (2011). I once had a university in Africa… *University World News: Africa*, 3. Available online: www.universityworldnews.com. [Accessed 25 November 2011].

Neumann, R., Parry, S. and Becher, T. (2002). Teaching and learning in their disciplinary contexts: a conceptual analysis. *Studies in Higher Education* 27: 405-418.

Nowotny, H., Scott, P. & Gibbons, M. (2001). *Re-thinking science. Knowledge and the public in an age of uncertainty*. Cambridge: Polity Press.

Olson, J. & Lang, M. (2004). Science and technology and the didactics of citizenship. *Journal of Curriculum Studies*. 36(5) 543-553.

Richardson, B., Dahlgren, M.A. & Higgs, J. (2004). Practice epistemology: implications for education, practice and research. In Higgs, J., Richardson, B. and Dahlgren, M.A. *Developing practice knowledge for health professionals*. Oxford: Butterworth-Heinemann.

Ryan, G., Toohey, S. & Huges, C. (1996). The purpose, value and structure of the practicum in higher education: a literature review. *Higher Education*, 31: 355-377.

Saunders, M. (2006). From 'organisms' to 'boundaries': the uneven development of theory narratives in education, learning and work connections. *Journal of Education and Work*, 19 (1): 1-27.

Schön, D. (1983). *The reflective practitioner: how professionals think in action*. Aldershot: Avebury.

Scribner, S. (1984). Studying working intelligence. In Rogoff, B. & Lave, J. (Eds.) *Everyday cognition: its development in social context*. Cambridge, MA: Harvard University Press.

Stiwne, E.E. and Jungert, T. (2010). Engineering students' experiences of transition from study to work. *Journal of Education and Work*, 23 (5): 417-437.

Titchen, A. (2000). *Professional craft knowledge in patient-centred nursing and the facilitation of its development*. Oxford: Ashdale Press.

Wheelahan, L. (2007). How competency-based training locks the working class out of powerful knowledge: a modified Bernsteinian analysis, *British Journal of Sociology of Education*, 28: 637–651.

Wheelahan, L. (2010). *Why knowledge matters in education: a social realist argument*. Oxford: Routledge.

Whitely, R. (1984). *The intellectual and social organization of the sciences*. Oxford: Clarendon Press.

Young, M. (2005). The knowledge question and the future of education in South Africa: a reply to Michelson's 'On trust, desire and the sacred: a response to Johan Muller's *Reclaiming Knowledge'. South African Journal of Education*, 36: 7–17.

Young, M. (2009). Education, globalization and the 'voice of knowledge'. *Journal of Education and Work*, 22: 193–204.

Young, M. & Muller, J. (2010).Three educational scenarios for the future: lessons from the sociology of knowledge. *European Journal of Education*, 45 (1, Part 1): 11-27.

Young-Pugh, R.G. (2005). Architectural practice and education in South Africa: from local transformation to global participation. *Journal of Architectural Education*, 58 (3): 33-42.

CONTRIBUTING AUTHORS

PENELOPE ENGEL-HILLS teaches in the Nursing and Radiography Department at the Groote Schuur campus of the Cape Peninsula University of Technology. Her qualifications include an MSc. from UCT and a D.Tech from CPUT. She has been the chairperson of the Radiography and Clinical Technology professional board of the Health Professions Council of South Africa and has served on both local and national committees of the Society of Radiographers of South Africa. Engel-Hills is an expert member of a radiotherapy task team appointed by the International Atomic Energy Agency to investigate extending radiotherapy education and curriculum development in Africa.

JAMES GARRAWAY is the head of department of Academic Staff Development in the Fundani Centre for Higher Education Development at the Cape Peninsula University of Technology. He has a PhD in Higher Education Studies from UWC. He co-ordinates the extended programmes at the university, focussing on promoting research and publication in this field in collaboration with the four Cape universities, and teaches on the Higher Diploma in Higher Education and Training for academic educators. He is a rated researcher in the field of work and learning, working with staff in the faculties as both a collaborator and a supervisor.

GORDON GRAHAM is the Henry Luce III Professor of Philosophy and the Arts at Princeton Theological Seminary. He previously held positions at St Andrews University and Aberdeen University in Scotland, and is a Fellow of the Royal Society of Edinburgh. He is the author of 14 books, including Universities: the recovery of an idea (2nd edition, 2008), which appears along with his other writings on higher education in The Institution of Intellectual Values (St Andrews Studies in Philosophy and Public Affairs, 2005).

ADAM HABIB is Deputy Vice-Chancellor: Research, Innovation and Advancement at the University of Johannesburg. He studied at a mix of South African universities and at the Graduate School of the City University of New York, and has held academic appointments over the last decade at the Universities of Durban-Westville and KwaZulu-Natal and the Human

Science Research Council. Prior to being appointed at UJ, he served as the Executive Director of the Democracy and Governance Programme of the Human Science Research Council, the founding director of the Centre for Civil Society and a research professor in the School of Development Studies at the University of KwaZulu-Natal, and an Associate Professor in the Department of Politics at the University of Durban-Westville. Habib has served as co-editor of both the social science academic journal Transformation and the official disciplinary journal of the South African Association of Political Science, Politikon. Habib recently concluded a study on the state of academic freedom in South Africa, and sat on the task group on academic freedom and institutional autonomy established by the Council for Higher Education.

CECILIA JACOBS is the Deputy Director for the Centre for Teaching and Learning at the University of Stellenbosch. She holds a doctoral degree from UKZN and is co-leader of the Work-Integrated Learning Research Unit, a research niche area funded by the NRF and based at CPUT. She is a rated researcher and her research interests are in disciplinary literacies and how disciplinary knowledge is communicated through discipline-specific language. Current research focuses on the teaching of disciplinary literacies within disciplinary domains and its implications for academic developers and disciplinary specialists in higher education.

WARD E JONES teaches philosophy at Rhodes University and is editor of the journal Philosophical Papers. Educated at Berkeley and Oxford, he has published in the areas of epistemology, philosophy of mind, ethics, aesthetics, and metaphilosophy. He co-edited a book collection, Ethics at the Cinema, with Samantha Vice, published in 2011 by Oxford University Press.

THADDEUS METZ is Head and Professor (Research Focus) of Philosophy at the University of Johannesburg. His PhD is from Cornell University. An NRF 'A' rated scholar, he has had about 80 manuscripts accepted for publication on a wide array of topics in moral, political and legal philosophy, with some focus on African ethics, on the meaning of life and on theories of justice. Some of his recent work in the philosophy of education includes: "Communitarian Ethics and Work-Based Education," in Paul Gibbs (ed) Philosophical Perspectives on Work Based Studies (Springer, 2012);

"Accountability in Higher Education," Theory and Research in Education (2011); "A Dilemma regarding Academic Freedom and Public Accountability in Higher Education," Journal of Philosophy of Education (2010); and "Higher Education, Knowledge For Its Own Sake, and an African Moral Theory," Studies in Philosophy and Education (2009).

ANDREW NASH is an associate professor in the Department of Political Studies at the University of Cape Town, where he teaches history of political thought. Before that, he taught philosophy at the universities of Stellenbosch and Western Cape, and was editorial director of Monthly Review Press in New York. He was until recently chair of the UCT Academic Freedom Committee and is still active in the UCT Palestine Solidarity Forum. He is the author of The Dialectical Tradition in South Africa.

CHRISTINE WINBERG is Acting Director of the Fundani Centre for Higher Education Development at the Cape Peninsula University of Technology. Winberg's work includes academic staff development and programme evaluation. She is an NRF rated researcher and leader of the NRF supported Work-integrated Learning Research Unit. Her research focus is professional and vocational education. She holds a PhD from the University of Cape Town in English Language and Literature and maintains a research interest in technical communication. She is currently chairperson of the South African Association for Applied Linguistics.

THE KAGISANO SERIES

Kagisano is taken from the Sotho/Tswana term, which means "to build each other" or "to collaborate". Publications in the Kagisano series debate and discuss current topics in higher education, and include the proceedings of CHE colloquia. Contributions are usually in the form of a collection of essays addressing a related topic.

Other publications in this series have included:

1. Re-inserting the "Public Good" into Higher Education Transformation (2001)

2. Principles for Governance of South African Higher Education: Reflections on co-operative governance in South African Higher Education (2003)

3. The General Agreement on Trade in Services and South African Higher Education: What should South Africa do? (2003)

4. Ten years of Higher Education under Democracy (2006)

5. Universities of Technology (2006)

6. Community Engagement in South African higher education (2010)

7. Universities of Technology - Deepening the Debate (2010)

8. Academic Freedom (2013)

Titles in the Kagisano series are available from the librarian at the CHE Resource Centre.

ISBN: 978-1-919856-84-1