

process model which views writing as integrated or even identical with learning, rather than regarding writing as a transparent means of display; in the context of research writing, this process is often tightly interwoven with the research processes themselves. Although this is acknowledged, greater emphasis could perhaps have been placed on the fuzziness of these boundaries between research, critical interpretation of literature and the production of writing; and the fact that the obstacles to publication for some academics may in fact reside in lack of confidence when conducting the actual research, rather than in the writing up alone. However, a full examination of this issue lies beyond the scope of this extremely useful book.

The authors provide a highly useful reflective and practical framework for the individual academic, which is likely to be well received by new and more experienced writers. But perhaps more importantly, they raise fundamental questions about assumed limits and potential scope of development in an area where traditionally academics have effectively been expected to 'sink or swim'. In doing so, they implicitly challenge common assumptions as to the role of the individual researcher/writer, and ultimately ask questions about the locus of responsibility for developing written scholarship throughout academic careers.

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From knowledge to wisdom: a revolution for science and the humanities, 2nd edition, by Nicholas Maxwell, London, Pentire Press, 2007, 484 pp., £8.99 (paperback), ISBN 0-95-522400-3

Immanuel Kant, towards the end of *Critique of Pure Reason*, identifies three fundamental questions that reason, in its different forms, can try to answer:

What can I know?

What ought I to do?

What may I hope?

Over many years the philosopher of science Nicholas Maxwell has been engaged in a project that one could describe as seeking to promote a correct understanding of the relationship between these questions, interpreted as questions not for individuals but for humanity collectively. Regular readers of *London Review of Education* will have encountered Maxwell's ideas as recently as July 2007, in a special edition on wisdom for which Maxwell served as co-editor. His own article in that issue, 'From Knowledge to Wisdom: The Need for an Academic Revolution', could serve as an excellent summary of the contents of this book.

Modern academic inquiry, Maxwell complains, has been devoted overwhelmingly to the pursuit of knowledge. But the fundamental aim of intellectual inquiry is to find answers to the question of what we should do, in a world in which humanity faces urgent problems of climate change, war, and injustice. The acquisition of knowledge must serve this more fundamental aim. Unless we can find 'cooperatively rational' ways of addressing our problems of living, the best we can hope for is dire.

For this central message, *From Knowledge to Wisdom*, published in its first edition in 1984, had and still has the potential to be a very important book. Given Maxwell's own statement of priorities, the book demands to be assessed not only for its intellectual quality but also for its capacity to effect some practical change. Against this background it is a pity that it is not a better book than it is. It reads as if Maxwell was never quite sure what readership he was

addressing, or how best to structure the argument, or at what level to pitch his arguments. He develops sophisticated and detailed arguments within his own discipline of philosophy of science, while stressing that his concern is with intellectual inquiry generally. When he turns to questions of values – even though these questions are, by his own argument, fundamental – his writing is at a different level, almost in a different genre, seemingly innocent of philosophical ethics and political philosophy (fields which were changing rapidly in 1984 and have seen further important developments since then). Without much groundwork being laid, one comes across statements such as the following:

The richness and diversity of value is made possible, from a neurological standpoint, by the vast structured complexity of our brains, with their 10^{10} neurons. A casual perception, a fleeting thought or feeling, of any person in life has a beauty and profundity greater by far than that of even the greatest works of art, such as a tragedy by Shakespeare, a mass by Bach, a symphony by Mozart or Beethoven. (270)

The problem with this is not that it is untrue. It is that, without the detailed attention to concepts that goes with an approach to philosophy to which Maxwell gives short shrift, it is impossible to know what to make of this claim and therefore impossible to assess its truth or falsity.

If the remarks above would mostly apply to either edition of this book, what has been added in the second? The opening and closing pages of the volume present many favourable comments from reviewers of the first edition and other works by Maxwell. Maxwell adds a new preface in which he bewails the fact that the first edition did not prove more effective. He updates the chapter detailing the dominance in the academic world of the philosophy of knowledge, as opposed to the philosophy of wisdom. Finally he adds three new chapters.

The last and longest of these is also the one that will be most difficult for many readers to follow: with considerable technical detail it presents an improved version of Maxwell's favoured approach to inquiry, Aim-Oriented Empiricism. It contains a number of diagrammatic representations of different variations of this approach, in one case generalising it to a social methodology for 'implementing aim-oriented rationality in pursuit of civilization' (372).

From a wider philosophical perspective the second of the new chapters, in which Maxwell replies to critics of the first edition, is the one that will repay most thought. To present the critics' arguments and his own replies is a valuable service to readers, even if Maxwell is a little too ready to charge critics with not having read his text carefully enough. For all Maxwell's emphasis on the scope for diversity of value within the individual brain, I am not convinced that he has satisfactorily handled the criticism of the philosopher John Kekes and others that he gives too little weight to diversity of values across cultures and traditions. When, for instance, in the social methodology just mentioned, he labels one level of civilisation as 'a world that is democratic, liberal, just, sustainable, rational and wise' (372), he shows not just optimism but perhaps little awareness of the sheer scope for multiple interpretations.

The first of the new chapters includes a survey of a number of interdisciplinary initiatives in British universities that Maxwell takes to be furthering the cause of wisdom inquiry. Much the same information is available in the article by Mathew Iredale in the aforementioned special issue of *LRE*. One should presumably take this overlap as an instance of the cooperative rationality for which Maxwell argues; following links on Maxwell's website soon reveals that Iredale is a collaborator with Maxwell in some practical endeavours to promote wisdom inquiry.

There is a certain irony in Maxwell's call for cooperative rationality since, despite his efforts to promote his message outside academia, in this book he tends to project himself as a lone voice crying in the wilderness. In his replies to critics and his explanations of the neglect of his message there is sometimes a rather querulous tone. More importantly, he seems to have neglected some of the possibilities for academic cooperation. Perhaps from the beginning a collab-

oration was needed between philosophy of science and moral philosophy, political philosophy and philosophy of education. Maxwell says very little about education, though what he does say is enough to show that the revolution he calls for would affect education as well as research.

Though there is room for some reservations about the way Maxwell presents his message, it is one that merits wide attention. The little-known publisher Pentire Press has taken a step in the right direction in producing this thick paperback at a remarkably reasonable price.

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Stratification in higher education: a comparative study, edited by Yossi Shavit, Richard Arum and Adam Gamoran, Stanford, Stanford University Press, 2007, 484 pp., £42.50 (hardback), ISBN 0-80-475462-0

This collection brings together work in 15 countries to report changes in inequalities of access to higher education over a period of expansion, of restructuring and of privatisation. It uses a collaborative, comparative methodology, where chapter authors met to agree commonalities of approaches to data collection and analysis of country case studies. The claim is that

The chapters provide a detailed description of how variation in expansion, differentiation and privatization shape access to higher education in advanced countries. It is only through understanding these institutional effects that effective education policy and social theory can be developed. (35)

An initial overview chapter is followed by the 15 country case studies, of varying quality, categorised under three labels – diversified, binary and unitary – with Australia as the ‘other’. Those are not all accurate in summarising the structures and systems. The German writers claim a tri-partite system; Sweden is more of a binary than diversified; the ‘Great Britain’ label as a binary is valid only because the analysis is 10 years out of date and residual binary characteristics were even stronger than in today’s diversified provision; ‘diversified’ turns out to be a euphemism for ‘stratified’.

The conclusions will not surprise anybody. Inequalities persist, relating to social and economic capital – father’s qualification and occupation are dominant conditioning factors. In South Korea their impact has increased substantially – from children of graduates being twice as likely to enter university as those of fathers with only secondary-level qualification, to being five times as likely in more recent cohorts (109). There has been an increased impact in Italy, too, though of lower magnitude.

Unitary systems – Italy and the Czech Republic – are elitist, because of the influence of the academic professionals. Italy has had one of the lowest changes in inequality, and in the Czech Republic, inequality has not just persisted, as it did under the former regime, but has increased since the collapse of Communism, reflecting greater social and economic inequalities under capitalism. Levels of participation in both are low, and Italy also has a low retention rate. Within other systems, the tendency is for elite elements to become more unequal and exclusionary – the Ivy League in the USA, Grandes Ecoles in France – on both class and gender factors, and, for the USA, race (not considered in other case studies).

So, in systems other than unitary, where they may not get in at all, students from disadvantaged backgrounds are ‘diverted’ to less prestigious strata of provision, though the editors claim four systems where that was not so. Privatised systems, such as Japan, are more diverse and