mouse-clickable button? Is a buyer accepting the offer by clicking on that graphic image? Is payment absolute or conditional? That is, if a buyer pays a merchant with digital cash, but the issuer of the cash fails before the merchant can receive the credit, can the merchant pursue the buyer? Jurisdictional issues are raised with an imaginative example of buying from Georgia (Russia) with Mongolian digital coins purchased with Cook Islands coins paid for by EFT from Australia. The difficulties of collecting transaction taxes (credit, debit, and sales taxes) on Internet purchases is covered and a restructuring of taxation is suggested.

Can consumers expect the same level of protection when using the new payment systems? Chapter six begins this topic by looking at codes of practice, such as the EFT code of conduct, and the banking, credit union and building societies' codes of practice. Evidence suggests that consumers use digital cash more like credit than they do paper currency, that is they spend significantly more on average. Over-commitment can become a problem. So can unauthorised use of the payment instrument. Further, irksome fees might follow the widespread adoption of smart-cards and other digital payment systems: issue, monthly and transaction fees, for example. Commercial pressure might also marginalise those who are unable to obtain digital cash. Tyree cites a study indicating that two-thirds of non-English speaking low-income people have no access to EFT or chequing, and thus are almost entirely dependent on cash for purchases—problems not covered in the codes of conduct.

As competing systems emerge and compete we notice varying degrees of privacy in transactions. Some systems offer complete anonymity, even from the merchant, others provide a transaction history like a credit or store card: information that could be used in ways abhorrent to some consumers. Yet privacy is usually traded off against a need for government control of illegal activity and taxation revenue. Tyree examines existing privacy regulation in some depth: international, Australian and New Zealand legislation and codes of practice and conduct are discussed. Tyree also describes a 'key escrow' model which has been proposed by the Australian Attorney General's department which would permit government access to 'weakly' encrypted consumer traffic. The discussion shows clearly that such models are useless at preventing criminal use of encryption because 'strong' encryption is readily available.

Digital Cash is not a technical book for computing and network staff. Rather, it is a précis of the technical detail in order to demonstrate the legal and policy problems for bankers, lawyers and technology policy-makers. Some knowledge of legal terminology is assumed. The book addresses the Australian and New Zealand legal environments, thus it provides an alternative to the North American and European treatments available elsewhere.

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Higher Education or Education for Hire?: Language and Values in Australian Universities

Ian Reid

Rockhampton, Queensland, Central Queensland University Press, 1996, v + 171 pp., AU$19.95, ISBN 1 875998 13 6

The author of this book is a senior university administrator at Curtin University of Technology in Perth, Western Australia. It has a provocative title and is a thoroughly

entertaining and challenging contribution to our understanding of the complex process of change taking place in Australian universities. While addressing the Australian context, this book is of relevance to other countries since the issues are not unique to one country.

Higher Education or Education for Hire? has eight chapters, each dealing with a point of tension in the university system. Chapter 1 explores the tension between price and value in education and Chapter 2 examines the complex issue of quality and academic standards. Strategic planning is the theme of Chapter 3 while Chapter 4 deals with the link between getting a degree and securing employment. Other chapters deal with the debates over skills and a generic education, the role of English, the contribution of the university to culture and the importance of a liberal education. Each of these themes is at the forefront of discourse about change in our university system and Ian Reid has done an excellent job in exposing the many complex threads that make up political arguments in these areas. For anyone working in a university or indeed just interested in the process of change, I would describe Ian Reid's analysis as enlightening and educative.

The subtitle of this book explains that it is about language and values. The analytical lens that Reid uses is discourse analysis:

> Higher education can benefit from reflection of key episodes from earlier times. But in order to interpret the institutional past intelligently and to shape a worthwhile future for our universities, it is also necessary to develop a critical awareness of the ways in which policies and practices are shaped by patterns of discourse. The term discourse is used by scholars in a wide range of disciplines and interdisciplinary areas to refer to particular ways of using language to construct or constitute bodies of knowledge, subjects and concepts. Similarly, higher education is always discursively framed, and the tensions between value and price result from different vocabularies that reflect different assumptions about the nature of universities (p. 3).

Reid is consistent throughout that text in the way he explores the contested meanings surrounding disputed terms. He is concerned to be even-handed in the way he explores large questions such as where are our universities going and what is their distinctive role. As he explains 'The response developed in this book tries to avoid not only cynicism but also the opposite extreme—pure idealism. They are two sides of the same coin' (p. 2). The result is a realistic treatment of complex issues with the author not being afraid to imprint his own values on the analysis. This reviewer's values seem to mesh pretty well with the author's but I could imagine that anyone to the right or left of this could have difficulty. For example, in the introductory chapter, Reid proposes that a field of inquiry can claim a legitimate place in one of our institutions of higher learning only if it fulfils four functional requirements: a capacity to advance knowledge (through disinterested investigation); a capacity to be socially useful (through application to material needs); a capacity to enhance cultural awareness (through creative or critical arts); and a capacity to reflect on itself and on the language that constitutes it (p. 19). This may not go down well with those university administrators who seem to think that it is a sufficient justification for introducing a new course just because there are 'plenty of takers' or to push a line of research just because 'there's a big grant available ' (p. 20). Reid is explicit in his values when he writes

> But once a marketplace economy is allowed to determine whether something should be taught or investigated, universities have surrendered their distinctive function, which is essentially to pursue the informed development and evaluation of knowledge regardless of fashion or profit (p. 20).

This pithy sort of statement is throughout the book. However, it is in the final chapter that Reid directs his analysis (quite appropriately in my opinion) towards those who 'claim that science and technology are dutifully serving national interests while academics in the arts fields are waywardly ignoring that responsibility' (p. 141). He hones in on an Australian Science and Technology Council (ASTEC) report from 1992 which states that 'Research in the social sciences and humanities seems unrelated to contemporary national concerns, and needs to be aligned more closely with economic and social imperatives'. Using discourse analysis Reid dissects ASTEC's assertion to expose the hidden assumptions behind such statements. For example, ASTEC's assertion assumes that 'contemporary national concerns' are clearly defined, widely shared and beyond disputation and that those concerns are in obvious harmony with supposedly urgent but unspecified socio-economic imperatives. Reid concludes:

> What ASTEC overlooks is the fact that a prime function of research in the social sciences and humanities has always been to scrutinise critically such facile assumptions ... The real ideological divide is not between science and technology on the one side and the humanities and social sciences on the other. It is between those who regard a current orthodoxy about 'economic and social imperatives' as a sufficient criterion for determining the absolute worth of an academic discipline, and those who see the need for other measures of value as well (p. 142).

In sum, this book is well worth reading and it should have value for many years to come. This reviewer believes that it is not only necessary and appropriate to re-assert the distinctive role of universities (as this book does) but also to ask what role the university should play in the information economy. It may also prompt some thinking on whether or not we are comfortable with the values of the information economy as we experience them today.

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