

working to improve the operations of labour markets via award restructuring before the (now) Commonwealth Industrial Relations Commission. This (insider) Report has not even alluded to any of these pro-competitive initiatives elsewhere in the economy, let alone developed any arguments as to why deregulation is not appropriate for the medical labour market. In fact, the Committee can note, **without comment**, that the Colleges have reduced entry to specialties, motivated by the self-interest of those who have already entered (p.311). Later, the Committee justifies this on the grounds that College "members are expert in assessing standards of practice" (p.502).

On the size of the medical workforce, The Commonwealth ministers would be well advised to ignore this Report and call for the joint submission from the Department of Health and the Australian Institute of Health. (I suspect that this is contained in Submission 400, listed on p.563, from the Commonwealth Department of Community Services and Health.) While studying Chapter Eleven, I felt a desire to read this submission, as it seemed to me that the authors were not engaged in special pleading of some kind. Furthermore, from the extracts reproduced in the Report, it seemed to me to contain some analysis, something to which this Committee, on the basis of its Report, is averse. In making this comment, I have in mind the nonsensical discussion of supplier-induced demand and the discussion of over-supply of medical practitioners (pp.455-61). Some of us would have been well served if this joint submission had been reproduced as an Appendix, rather than the statements of the Royal Australian College of Obstetricians and Gynaecologists entitled 'Policy on continuing certification' (Appendix 13), and 'Australian Bicentennial health initiative' (Appendix 12).

To return to the trade-off issue referred to at the beginning of this review, in terms of policy content the trees that perished so that this Report could be published, died in vain.

REFERENCES

1. Committee on Medical Schools, *Expansion of Medical Education*, AGPS, Canberra, 1973.
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Copyright Protection of Computer Programs by Beth Gaze

(Federation Press, New South Wales, 1989), \$50.00, ISBN 86287 015 2

Beth Gaze declares her objective to be "the presentation of an accessible account of the development of computer copyright law in USA and Australia, as a basis for understanding the present situation and future developments". In this

enterprise she is conspicuously successful. After a competent description of the computer technology, Beth Gaze traces the development of computer copyright law in America and Australia. The latter third of the book explores some of the problems of computer program copyright. The short final chapter examines the subject of copyright and information technology at large.

The number of books and articles on the subject of computer copyright published over the last five years must now run into triple figures. Within this burgeoning literature Beth Gaze's book is a worthy Antipodean contribution, containing as it does 30 pages of analysis of the litigation in *Apple Computer Inc v. Computer Edge Pty Ltd* in the Federal and High Courts of Australia, as well as the Federal Parliament's legislative response to that litigation, in the form of the Copyright Amendment Act 1984.

What explanation is there for the incredible volume of scholarship in this rather esoteric area of intellectual property law? Part of the answer is the interest and excitement generated by the revolutionary developments in computer technology. Hitherto fairly dry areas of the law have been able, vicariously, to take on the glamour of the new technology. More importantly, these technological developments have challenged the applicability and efficacy of the established intellectual property regime.

It is a trite observation that the principles of copyright law originated in eighteenth century statutes promulgated to deal with expressions of creativity which necessarily utilised the technology of that time. One of the first principles laid down in the courts was that the law of copyright did not protect ideas, but only the forms by which ideas were expressed. Copyright protection was considered to subsist only in literary, artistic, musical and dramatic works.

Much of the literature concerned with computer copyright describes the ways in which the courts have grappled with the problem of putting the new technology into its eighteenth century Procrustean bed. Thus Beth Gaze describes the way in which the judges of the Australian courts in the Apple cases sought with varying degrees of success to characterise computer programmes as literary works. In the United States, similar judicial ingenuity has been directed to the characterisation of computer programmes as artistic works.

The effect of these judicial endeavours is to erode traditional copyright principles. For example, the 'look and feel' cases in the United States, which have been concerned with user interaction with a computer program through menu hierarchies, and functions and the elements of sequence and arrangement of menu screens, have been perceived to have caused a merger of the idea/expression dichotomy.

The fact that computer programs are evolved by teams of systems designers and programmers over a period of time, has challenged the traditional applicability of authorship principles. The individual chapters or portions of a novel are protected by copyright law, but such protection is doubtful for sentences and impossible for the words of a novel. Open to questions is the level at which copyright protection for a computer program is lost. Is it at the level of module, sub-routine, or command?

Another problem with the application of traditional copyright principles to computer programs is that the duration of copyright protection — fifty years after the death of the creator — is manifestly excessive. Additionally, in calculating the date of free availability of copyrighted programs which have been produced by a co-operative effort, the person seeking to utilise the work is obliged to embark upon a sophisticated investigatory task to identify the persons involved in the creation of those parts of a program which that person seeks to utilise.

An area where copyright law is singularly ill-adapted to protect computer programs is the principle that the rights of a copyright owner are exhausted by the first sale of a copyrighted work. Given the ease with which computer programs can be copied, it is imperative that the controls exerted by a creator be extended beyond the first sale.

Finally, a difference between computer programs and the traditional subjects of copyright protection, such as books and paintings, is that the latter have tended to be items of trade in their own right, whereas computer programs are usually incorporated in other articles which are the primary subject of trade. The current law is unclear on the question of any implied consent to incorporation.

Although Beth Gaze does allude to the difficulties with copyright protection as the means of preserving the rights of the creators of computer programmes, her book contains little discussion of the solutions which have been proposed for these problems. For example, Jon Bing, Director of the Norwegian Centre for Computers and the Law, has proposed the development of the principles of 'industrial copyright'.¹ He suggests recognising the more overtly commercial flavour of computer programs, that different standards of originality and literariness should be applied, as well as a more limited duration of protection.

A fairly persistent proposal has been the adoption of *sui generis* protection for computer programs. This was suggested by the World Intellectual Property Organisation (WIPO) in model provisions formulated in 1978 for the protection of computer programs. As the deficiencies of copyright protection for computer programs are progressively identified; for example, in the long line 'look and feel' cases in the United States, the *sui generis* argument has been repeatedly urged.²

As with a number of authors in this area, Beth Gaze takes the view that, as most countries appear to have followed the copyright route, this is the obvious regulatory regime to accommodate computer technology. However, a significant development for the *sui generis* school of thought is the recent Treaty on Integrated Circuits formulated at the Washington Diplomatic Conference of May 1989, which adopted a *sui generis* approach to the protection of the architecture and design of integrated circuits. Given the close relationship between integrated circuits and computer programs, an inevitable merging of the two systems of protection is now not too fanciful.

REFERENCES

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