Journal of the Royal Society of New Zealand

ISSN: 0303-6758 (Print) 1175-8899 (Online) Journal homepage: www.tandfonline.com/journals/tnzr20

Looking Back to Tomorrow: Reflections on twenty-five years of computers in New Zealand

B. G. Cox

To cite this article: B. G. Cox (1986) Looking Back to Tomorrow: Reflections on twenty-five years of computers in New Zealand, Journal of the Royal Society of New Zealand, 16:3, 303-304, DOI: 10.1080/03036758.1986.10423351

To link to this article: https://doi.org/10.1080/03036758.1986.10423351

a copy, but I do not feel that the purchase price is justified, since most scientists will only find a few of the papers of direct relevance to their field of study.

Malcolm P. Francis
Fisheries Research Division
P.O. Box 297
Wellington

REFERENCE

Singleton, R. J., and Cole, A. G., 1972. Underwater camera system for deep-sea bottom photography. *N.Z. Journal of Marine and Freshwater Research* 6: 185-93.

Looking Back to Tomorrow: Reflections on twenty-five years of computers in New Zealand, edited by W. R. Williams. Published by the New Zealand Computer Society, P.O. Box 12-249, Wellington, 1985, pp 210. NZ$25, cased. ($19.95 to members of RSNZ).

This book was published by the New Zealand Computer Society to commemorate the celebration of its Silver Jubilee Year. It is a most welcome addition to the very limited literature about the use of computers in New Zealand. Consisting of ten chapters written by different people, there was a distinct risk that it would lack coherence and unity, but in fact there is a surprising uniformity of style in the volume.

The book is in three parts. The first (*Setting the Scene*) contains two interesting articles. One of these (*Aotearoa before the Computer* by W. Winiata) describes the information systems used by the Maoris which depended almost entirely on human memory, and gives an immediate uniquely New Zealand emphasis to the book. The second (*From Monsters to Micros* by G. J. Tee) outlines the development of computers, and again has a local emphasis with its description of the contributions of people like L. J. Comrie (mathematical tables and the use of adding machines for scientific calculation) and George Julius (automatic totalisators), as well as noting the relics of Babbage's work that have been discovered in New Zealand.

The second and larger part, *Looking Back*, is a set of chapters describing the development of the use of computers in New Zealand, from the installation of the first computer (the IBM650 at the Treasury) through to the impact of the microcomputer. The descriptions of the impact of computers on the public sector (by A. C. Shailes) and on banking (by I. H. Archibald) provide an important record of these areas, and combine a wealth of information with a leavening of humour and incident. The reproduction of a Minhinnick cartoon is appropriate, but it is a pity that it is incorrectly referenced in the text. Ian Archibald captures the spirit of frenetic days and nights that witnessed the introduction of our unique trading bank computer system. The broad spectrum of the use of computers in business and industry (by S. J. Bell) is too wide to cover in a single modest chapter, and this account wisely concentrates on some of the more important aspects, like the role of machine companies, the efficacy of systems, the changes in approach over 25 years, and the influence of government policies such as the 40% Sales Tax. There is the interesting note that there has been a relative lack of direct application of computers in the primary and manufacturing industries compared with some other countries. The chapter on Expert Systems (by W. R. Williams) does not sit alongside the other topics in *Looking Back* very comfortably, and it would have been better placed in the third section; these systems have not played a significant part in the past, but will in the future. *Personal Computers* (by S. Arrow) describes the microcomputer phenomenon of the last ten years, and is informative and interesting. The final chapter in Part 2 is in some ways the least satisfying. *Computers in Education* is a substantial topic, and in attempting to describe the use of computers from Primary School to University and to record the New Zealand Computer Society's contributions to that development the author (C. J. Potter) has had to omit many topics of historical interest and importance. For uniformity of style it would have been more satisfactory to have recorded more historical events, and to have made less direct reference to the Society's involvement.

The final section, *Tomorrow*, looks forward. *The Social Implications of Computers* (by P. Bieleski and J. Higgins) gives a balanced view of the likely short term changes in our society, but for a more detailed account than is possible in a book of this nature, the reader would be better to obtain a copy of *Computer Culture* by Colin Beardon from their public library. The final chapter *A New Industry for New Zealand* (by M. S. Kaiser) outlines the exciting prospects, and the problems, of a software industry. With the availability of packet switching services like electronic mail, this is one industry where we could deliver products within minutes to other countries, and respond to queries with equal speed. It was a fitting note on which to complete the main part of the text.

For some of us who have been involved in the industry from its inception, the Annex to this

volume gives particular pleasure. As part of the Jubilee celebrations, the Society commissioned the Oral History Archive Team to record interviews with some of those involved from the beginning. Ann Else, a Wellington journalist, prepared some brief notes from these tapes on some of the pioneers, and they are delightful.

It is fitting for a volume of this nature to record something of the Society itself in its 25th Jubilee year, and a few pages are reserved for a brief history and a record of its major office-bearers. The whole volume is enlivened by the inclusion of historic photographs, and line drawings by Judy Williams.

All in all this book is a success, in recording twenty-five years of computing in New Zealand, and in noting the Society's involvment in that development. The Society deserves full credit for the vision of marking its jubilee in such a way, and the editor our thanks for putting it all together effectively. It would be a useful and interesting addition to many bookshelves.

B. G. Cox
Department of Computer Science
University of Otago

NOTICES

Late Cenozoic Volcanism in New Zealand, edited by I. E. M. Smith. The Royal Society of New Zealand, Wellington, Bulletin 23, pp. 371, 1986. NZ$68, limp.

This volume reviews the present state of knowledge about the most recent, and still continuing, period of volcanism in New Zealand. There are eighteen chapters arranged in geographical order from north to south, after the initial overview of the distribution and tectonic setting of the volcanism. The central volcanic region is the youngest, most extensive and presently active region, and receives the most coverage; and with it two geophysical studies and one devoted to the hydrothermal systems which are of economic importance both to the energy and the tourist industries. The book was prepared for the centennial year of the 1886 eruption of Tarawera, New Zealand's largest volcanic event since the arrival of the Europeans, and is not only a review of previously available information but also contains a high proportion of material which is essentially new. It must remain, for a considerable time, the definitive unified text on New Zealand volcanism.

(Note from the Royal Society of New Zealand Office: Any copies of this book which show signs of weakness in the binding may be returned for strengthening, free of charge).

The Nature of the Environment: an advanced physical geography, by Andrew Goudie. Basil Blackwell, Oxford, 1984, pp. 331. NZ$31, limp.

The purpose of this book, by the Professor of Geography in the University of Oxford, is to update previous general physical geography texts to accommodate the new, near-revolutionary advances of recent years in ecology, hydrology, geology (plate tectonics) and pleistocene history. Additionally there is the need to integrate physical geography with human geography, to become more concerned with natural hazards and environmental problems, and to assess the role of man in changing his own environment. The first half of the book deals with the global framework (climate and geology) and the major world zones (polar regions, mid-latitudes, deserts and tropics). The following section deals with mountains and coasts, two special environments that occur in any one of the four main zones. The final section considers landscapes and ecosystems, and the way human activities have altered them. The illustrations and diagrams are excellent and plentiful. There is a significant northern hemisphere bias in text and illustrations, but after all most of the earth's landmass is in that half of the globe, and the book is good value for its reasonable cost.

Moa: the story of a fabulous bird, by Philip Temple, illustrated by Chris Gaskin. Collins, Auckland, 1985, pp. 32. $14.95, cased.

Children (the scientists of the future) need a sense of the history and pre-history of their own land, and simple, accurate picture books, pitched at their level, to stimulate their imagination and ideas about the past. Such books are extremely rare in New Zealand, so this one is particularly welcome. The text is set out on two levels—a simple story following the life of one individual moa (*Dinornis maximus*) from hatching to death in Pyramid Valley swamp, and, in a different