1989

Technology and the Australian state: the changing political discourse on technology in Australia 1975-1985

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TECHNOLOGY AND THE AUSTRALIAN STATE

The Changing Political Discourse on Technology in Australia 1975-1985

A thesis submitted in fulfilment of the requirements
for the award of the degree of

DOCTOR OF PHILOSOPHY

from

THE UNIVERSITY OF WOLLONGONG

by

Paul K. Couchman, N.Z.C.Sc., B.Sc., M.P.P.

Department of Science and Technology Studies

1989
DECLARATION

This work has not been submitted for a degree to any other university or institution.

PAUL K. COUCHMAN
ACKNOWLEDGEMENTS

In the Preface of the first bound edition (1861) of her classic Book of Household Management, Mrs. Beeton confessed "I must frankly own, that if I had known, beforehand, that this book would have cost me the labour which it has, I should never have been courageous enough to commence it." That is precisely how I feel about this thesis! But although it was I who (arduously) spun this web of words, and I who am solely responsible for it, the thesis owes much to many.

First and foremost, I must pay tribute to my wife, Judith, and my children, Toby and Lucy. In my search for the "Holy Grail" of knowledge, I have dragged them around the world and have often been "absent without leave". Despite this, they have shown remarkable forbearance and have given me considerable support in every way. I cannot thank them enough.

To my supervisors, Richard Badham and Ron Johnston, I also owe much: for their cheerful encouragement, intellectual stimulation, challenge and, above all, faith. Thanks chaps! Thanks are due to the rest of the staff in the Department of Science and Technology Studies, and to my fellow post-graduate students, for their friendship and valuable discussion. Above all, I would like to thank Richard Joseph for his continuing friendship, his example and his insights into the Australian bureaucracy: without these, I would not have survived and the thesis could not have been written. Many other academics in Australia and the United Kingdom also gave me encouragement and helpful advice, most notably Ken Greene, Ian Miles, Stewart Russell, Robin Williams and Brian Wynne.

I would like to acknowledge the valuable time, information and other assistance given to me by the many bureaucrats within the Australian state that I interviewed. Particular thanks are due to Peter Bryant, Ian Colley, Gary Donnison, Marie Keir, Peter McCann, Malcolm MacIntosh and Ian Maclean. Thanks are also due to my work colleagues in the
New Zealand state, Roberta Hill, Gerard Fitzgerald and Julie Warren, for their patience, moral support and friendly encouragement.

Thanks to those who helped me produce the manuscript: Judith Couchman, Lynda Megson, Lyn Anderson and, latterly, Dave Anderson, Erik Norder and Gerard Fitzgerald.

Finally, the endeavour was made possible by a National Research Advisory Council Post Graduate Fellowship. For this I thank the NRAC Fellowships Committee, the D.S.I.R. and the taxpayer of New Zealand.
ABSTRACT

The thesis brings contemporary social theory into the analysis of science and technology policy. In doing so it draws on two broad areas of theory, on the social nature of technology and on the state as an institution of political domination. Technology is important to the state for it provides new means for state actors to achieve desired ends (state actors thus have an instrumental interest in technology), and it sets an agenda of policy problems for the state to deal with. Conversely, the state is important to technology for it is a major orienting agent and an organisational locus for much technological development.

The thesis advances a number of central theoretical themes on technology and the state. While technology is a social construction, the product of deliberate choices and actions by particular social actors, it is also socially structuring in that technologies are ways of building order in the world and can therefore have political properties. Technologies embody the values and interests of those groups informing their development, so inherent in any new technology there is a potential for conflict between those responsible for it and those affected by its social implementation. The state is an independent political actor which has its own power base and which can mobilise its own administrative, coercive and ideological resources. However, the state in capitalist society has to act within a national and international context which both constrains and influences its capacity to exercise its power. The societal context enmeshes the state in contradictions, and in seeking to resolve these, foster consensus and mobilise acceptance of their policies, state actors deploy ideology, political language and symbolic action as political resources.

Drawing on this theoretical framework, the thesis analyses the changing political discourse on technology in Australia from the mid-1970's to the mid-1980's. During this period, against a background context of growing economic crisis, there arose a technological change debate in which a "technology as threat" perspective prevailed. The
central themes in this were that the rate of technological change was increasing and was moving beyond human control, and consequently the associated social dislocations (particularly the prospect of widespread "technological unemployment") were becoming a major problem. What was sought by many groups was some form of centralised control over technological change to ensure that the costs and benefits were equitably distributed. This perspective, and the demands arising from it, presented a challenge to the economic order, its decision-making structures and the ideologies that legitimated them.

Governments within the Australian state responded to these challenges, and two such responses are analyzed in the thesis: the Fraser Government's Myers Inquiry into Technological Change in Australia and the New South Wales Technology Research Unit. Both embodied the concept of technology assessment, but in different forms. These responses were important symbolic actions, for they not only provided symbolic reassurance through the propagation of a rhetoric of control (technology can be managed to the benefit of all) and a legitimation of the order by reasserting the ideology of technological progress, they also were attempts to contain subordinate group pressures. Such actions went some way to rehabilitating technology in the political discourse, and they marked the beginning of the end of the technology as threat perspective therein.

Another aspect of the political rehabilitation of technological change was the promotion of the strategic economic importance of technology through the rhetoric of "technology as opportunity". Through this state actors have sought to gain the positive acceptance of the technological order and a consensus on the desirability of new technology. In order to mobilise consent, the rhetoric of technology as opportunity has been embedded in a language of crisis ("there is no alternative"), strategies to improve the public image of science and technology have been deployed, and the concerns about the social implications of technological change have been displaced from the policy arena. These activities have been most successful under the auspices of the Hawke Labor Government's "Accord". In a context of "cooperation among social partners", a policy of public support for private
technology has been implemented, consensus maintained and dissent contained. If in the technological change debate, technology had been politicised, in a political climate where technology as opportunity dominated, technology had become depoliticised.
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