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

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DECLARATION

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

PAUL K. COUCHMAN
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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.

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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 legitimization 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.
CONTENTS

Declaration i
Acknowledgements ii
Abstract iv

1. INTRODUCTION 1

2. TECHNOLOGY AND TECHNOLOGICAL CHANGE 10

THE NATURE OF TECHNOLOGY AND TECHNOLOGICAL CHANGE 11
1. A Multi-dimensional Conceptualisation of Technology 11
2. Science and Technology 12

THE SOCIAL CONSTRUCTION OF TECHNOLOGY 14
1. Perspectives on the Social Shaping of Technology 14
2. Technology Practice in its Social Context 19

THE TECHNOLOGICAL STRUCTURING OF SOCIETY 26
1. Technological Dynamism: Autonomy in Technology Development 28
2. Technological Politics: The Determinism of Technology 32
3. Technology as Contentious Domain 35

3. THE STATE IN CAPITALIST SOCIETY 42

TOWARDS A THEORY OF THE STATE 43
1. The Nature of the State 43
2. Perspectives on the State 44

THESES ON THE STATE IN CAPITALIST SOCIETY 47
1. The Autonomous State 47
2. Imperatives of State Action 49
3. Contradiction and Crisis 54
4. Corporatist Tendencies in the State 57
5. Political Language, Ideology and Symbolic Action 58

THE AUSTRALIAN STATE 62
1. The Australian State as an Institutional Ensemble 62
2. The Australian State in Capitalist Society 63
### 6. THE MYERS INQUIRY PART I

**INSIDE MYERS: THE INQUIRY PROCESS**
- 1. Public Drama: The Committee of Inquiry
- 2. Private Analysis: The Inquiry's Secretariat
- 3. Inquiry Dynamics and the Management of Dissent

**NEW TECHNOLOGY AS THREAT OR NECESSITY?**
- 1. The Contending Views of Key Actors in the Debate
- 2. The Quickening of Trade Union Concerns
- 3. The Issues in Contention
- 4. Recommendations

**PERSPECTIVES FROM WITHIN THE STATE**
- 1. Government Intervention and the Management of Change
- 2. Laissez-Faire and the Primacy of Markets
- 3. Pluralism and the Mediation of Industrial Conflict
- 4. Consensus and the Facilitation of Change

**OVERVIEW: THE CENTRAL THEMES IN THE DEBATE**

### 7. THE MYERS INQUIRY PART II

**OUTCOMES: INQUIRY FINDINGS AND RESPONSES TO THESE**
- 1. "Untroubled Optimism": The Findings of the Inquiry
- 2. Responses to the Inquiry's Findings

**PROCESS VERSUS PRODUCT: THE INQUIRY AS SYMBOLIC ACTION**
- 1. The Inquiry as Ritual
- 2. The Ideological Terrain
- 3. Conclusion: The Rehabilitation of Technology

### 8. THE TECHNOLOGY RESEARCH UNIT

**ORIGINS AND ESTABLISHMENT OF THE UNIT: 1978-1979**
- 1. The Unit's Political Origins
- 2. The Bureaucratic Machinations
- 3. Political Rhetoric and Great Expectations