

CONTENTS

<i>List of Figures</i>	vii
<i>List of Tables</i>	ix
<i>Acknowledgements</i>	x
1. Introduction	1
The Dominant Social Constituency of a Technological Process	3
Methodological Aspects	6
Structure of the Book	8
2. The Social Basis of the United States' Research and Development System from the Second World War to the Present	10
The Role of the Military	11
The Aftermath of the Second World War	19
Crisis and Loss of Confidence	22
The Resurgence of the Power Complex	26
Contradictory Trends	29
The Case Against the Military Burden	31
3. The Social Shaping of United States' Microtechnology from the Second World War to the mid 1970s	36
The Legacy of the Second World War	37
The Government-Military-led Development of the Postwar Period: 1945-mid 1960s	39
(a) Industrial Control	43
(b) Computer Systems	44
(c) Semiconductors	49
The Decline of Government-Military Influence	61
4. The Current Development of Microtechnology I	63
Re-strengthening the Links Between Corporate Capital, Government, the Military and Science	64
The Renewed Influence of the Military on the Current Development of Microtechnology	69
(a) The VHSIC and Sematech Programmes	70

(b) The Strategic Computing Plan (SCP)	76
(c) The ICAM and ManTech Programmes	78
(d) The Strategic Defense Initiative (SDI)	80
(e) Conflicting Views About the Wisdom of the Renewed Military Drive	89
5. The Current Development of Microtechnology II	99
Convergence of Technologies and Capital in the Electronics Industry	99
(a) AT&T and IBM on a Collision Course	101
(b) Convergence of Capital	104
Electronics Competition on a Global Scale	107
(a) Evolution of United States', European and Japanese Electronics Markets	108
(b) Current Trends in the Global Battle for Control of Electronics Markets	118
(c) Global Alliances in the Battle for Control of the Electronics Infrastructure	132
6. Foundations of the Future I	145
Dissecting the Dominant Social Constituency of the United States' Microtechnology	149
(a) The Science Constituent	150
(b) The Capital Constituent	152
(c) The Government and Military Constituents	154
Some Conceptualizations of the United States' Social Complex of Power	157
The Power Complex as Dominant Social Constituency of Microtechnology	160
7. Foundations of the Future II	163
The Present Constituency of Power: The Path Ahead	164
Searching for a New Social Constituency	172
<i>Appendix</i> Rise and Development of the United States' R & D System Prior to the Second World War	182
<i>Notes</i>	196
<i>Select Bibliography</i>	233
<i>General Bibliography</i>	235
<i>Index</i>	252