
TECHNOLOGY AND WORK

EAST—WEST COMPARISON

Edited by Peter Grootings



CROOM HELM

London • Sydney • Dover, New Hampshire
in association with the
European Co-ordination Centre for Research
and Documentation in Social Sciences

CONTENTS

List of Tables	
List of Figures	
Introduction by Peter Grootings	1
PART I THEORY AND RESEARCH ON TECHNOLOGY AND WORK IN EUROPE	5
1. Technology and Work: An Outline of Theory and Research in the Western Social Sciences by John Child	7
Preface	7
Introduction: Conceptual and Theoretical Issues	8
Conceptual Issues	8
Theoretical Issues	13
The "Technological Implications" Tradition	17
Levels of Employment	18
Structures of Employment and Job Characteristics	22
The Experience of Work and Industrial Behaviour	32
Management Organization and Supervision	40
Social Analyses of Technology and Work	45
The Politics of Technology and Work	45
Technology and the Wider Context of Work	49
References	55
2. The Concept of Technology in the Sociology of Socialist Countries by Jolanta Kulpinska	67
Introduction	67
The Scientific-Technological Revolution	69
Technology and Character of Work	74

Technological Progress and Social Structure	81
Introduction of New Technology	85
Practical Applications of Sociology of Work	88
Conclusions	90
Notes	93
References	95
3. Self-Management and Technology	
by Bogdan Kavcic	103
Some Relevant Characteristics of the Yugoslav Social System	103
The New Role of Workers in Self-Management Organizations	106
Organizational Structure	108
Self-Management in Basic Organization of Associated Labour	110
The Power of Workers in the Political System	112
Self-Management Requires a New Quality of Workers	113
Technology and Self-Management	116
Technological Development in Yugoslavia	117
The Problems Most Frequently Discussed	119
Concluding Remarks	133
Notes	136
PART II THE EXPERIENCE OF THE AUTOMATION AND INDUSTRIAL WORKERS PROJECT	139
4. Case History of a Research Project on Work and Technology: A Participant Interpretation	
by Liisa Rantalaiho	141
Introductory Remarks	141
Automation and Industrial Workers Project:	
External Facts of the Research Process	143
The Story of the Automation Project	149
Incubation: From the Idea in 1968 to Erlangen 1972	150
Construction: From Erlangen 1972 to Lauf 1975	153
Frustration and Readjustment: From Lauf 1975 to Bellagio 1977	164
Erosion and Endurance: From Bellagio 1977 to Vienna 1979, and on...	173
Concluding Remarks	176
Notes	178

5.	Automation and Industrial Workers: The Preparation and Implementation of an International Project	185
	by Boris Koval and Mihail Nochevnik	
	Introduction	185
	The Specificity of International Comparative Studies in Social Sciences	185
	The Study of Social Consequences of Automation	189
	The International Project "Automation and Industrial Workers"	191
	Socio-Psychological Aspects of Scientific Cooperation	200
	Conclusion	202
	Notes	203
	References	204
PART III RECENT EUROPEAN COMPARATIVE RESEARCH		207
6.	A Societal Analysis of New Technologies	209
	by Francois Eyraud and Frédérique Rychener	
	Principal Aspects of the Societal Analysis	209
	The Assumption of Incomparability	209
	Interaction Versus Direct Causality	211
	New Technologies and International Comparison	213
	General Hypotheses	213
	Methodology	214
	Choice of the Sample and Persons to be Interviewed	214
	Method of Analysis	217
	Conclusion	228
	Notes	229
7.	Technology and Work in the Two Germanies	231
	by Dietrich Hoss	
	An Astonishing Parallel: New Strategies of Labour Use	231
	The New Production Concept	231
	Scientific Work Organization	240
	Different Pressures and Barriers for a Non-Tayloristic Use of Labour in the FRG and GDR	251
	Conclusions	265
	References	269

PART IV CONCLUSION	273
8. Technology and Work: A Topic for East-West Comparison? by Peter Grootings	275
Introduction	275
In Search of a New Paradigm: Anti-Technological Determinism	277
From Cross-National to International Comparative Research	283
International Comparative Research on Technology and Work	289
Problems of Research Design	289
Problems of Organization	291
Conclusions	295
Notes	296
References	296
CONTRIBUTORS	303