Contents

	List of figures and tables	1X
	Foreword by Peter Worsley	xiii
		xix
	Preface	xxiii
	Acknowledgements	
<u>(1)</u>	A new mode of industrialisation	1
(J)	The alphal option	2 3
	A new mode of industrialisation	6
	Things to come	U
2	The international division of labour, industrial	
Ø	change and territorial development: Theoretical and	9
	methodological issues	9
	m dovolonment	12
	Day and day theory and world-systems analysis	16
	The 'now' international alvision of wood	
	Identifying the determinants of globalisation.	24
	A note on method	
3	Semiconductor production: Labour processes,	27
-	markets, and the determinants of globalisation	28
	The industry and its product	30
	y I mmoogees and technical change	50
	The formation of the core complex. The Silicon	34
	tz-ll phanamenan	,
	Capital deepening, markets, and the determinants	42
	of globalisation	
	East Asia: The emergent regional division of	
4	East Asia: The emergent regional division of	49
	Globalisation of production	49
	Globalisation of production	

vii

Globalisation of high technology production

	The regional division of labour	55
	Articulation of the divisions of labour	60
	Growth of semiconductor production complexes	63
	The state and social change	72
5	Hong Kong: The making of a regional core	77
	Hong Kong and the world-system	. 77
	Growth of the electronics sector	80
	The making of a regional core	101
	The semiconductor production complex	111
6	Scotland: The European connection	118
Ü	American semiconductor production in Scotland	119
	Determinants and the development of semiconductor production in Scotland	124
	Semiconductors, Scotland, and the international division of labour	134
7)	Prospects for globalisation and development	139
7	Global restructuring	140
	Territorial implications	146
8	Semiconductors, development, and the changing	
	international division of labour	154
	Beyond the 'new' international division of labour	150
	Development and the new mode of industrialisation	162
	Notes	160
	Bibliography	17
	Index	18

List of figures and tables

Figui	res	
0		32
3.1	Semiconductor labour processes	32
3.2	International division of labour in US semiconductor production: Selected companies and locations, circa 1976-9	46
4.1	US-owned semiconductor plants in the developing countries of East Asia, 1985	52
4.2	International division of labour in US semiconductor production: Selected companies and locations, circa	56
6.1	The Scottish semiconductor production complex	135
Tabl		
1.1	Semiconductor production: Selected leading national producers, 1985-7	7
3.1	Regional Origin of US semiconductor snipments	31
3.2	Occupational structure of the electronic components and equipment industry in Santa Clara County, California	33
3.3	US domestic semiconductor shipments by major	37
3.4	Trends in electronics employment in the San Jose Standard Metropolitan Statistical Area, 1966–78	39
3.5	Santa Clara County high technology employment by	40
3.6	US and Japanese transistor output during the transition	44
4.1	Hourly compensation of production workers in the East Asian electronics industry: Relative and absolute values	54

Globalisation of high technology production

4.2	US semiconductor plants in East Asia: Numbers and employment size, 1985	59
4.3	Hong Kong and Singapore: Imports and exports of integrated circuits (selected regions/countries), 1981	62
4.4	Semiconductor production complexes in the East Asian division of labour: Locally owned plants, 1985	64
5.1	Industrial structure of Hong Kong: Changing contribution to Gross Domestic Product, 1961–86	82
5.2	Changes in the distribution of the Hong Kong labour force by industry, 1961-87	83
5.3	Export contribution of Hong Kong's manufacturing industries, 1961-87	85
5.4	Establishments and employment in the Hong Kong electronics industry, 1961-87	86
5.5	Foreign direct investment in Hong Kong's manufacturing industry, 1971-87	88
5.6	Foreign control of the electronics industry in Hong Kong: Selected years, 1972–87	91
5.7	Foreign investment in the electronics and manufacturing industries of Hong Kong: Country sources, 1981, 1984	92
5.8	and 1987 Market share of electronics exports from Hong Kong, 1976–87	95
5.9	Principal sources of assembled semiconductor devices imported into the United States under Tariff Items	07
- 10	806.30 and 807.00	97
5.10	Hong Kong: Exports of semiconductors, 1974–87	99 100
5.11	Semiconductor manufacturers in Hong Kong, 1986	
5.12 5.13	Work stoppages in Hong Kong Comparative annual wage rates: Electronics engineers	108
3.13	and technicians	116
6.1	Employment in the Scottish electronics industry, 1960-84	120
6.2	Employment in the Scottish electronics industry by product area, 1978-85	121
6.3	Semiconductor employment in Scotland, 1985	121
6.4	Electronics and all manufacturing output: Scotland,	12.
	1978–84	123
6.5	Engineering and technical labour at selected American	100
	semiconductor plants in Scotland, 1985	123
6.6	World Market for semiconductors, 1980-5	125
6.7	Employee benefit costs met by employers as a proportion of total earnings (selected EEC countries,	
	1984)	129

6.8	Semiconductor support industries in Scotland	133
7.1	World market for standard and custom integrated	
	circuits, 1986	142