CONTENTS

		Page
	of Figures of Tables	vii xi
Pre	face	1
1.	Introduction	5
	Part I. URBAN SETTLEMENT INNOVATION: EMPIRICAL EVIDENCE	
2.	Introduction	15
3.	Lisbon Vitor Matias Ferreira	33
4.	Rome Armando Montanari	67
5.	Liverpool Bill Chandler, Helen Fitton, Leslie Forsyth, David Massey	93
6.	Thessaloniki Pavlos K. Loukakis, Eleni Paraskevopoulou, Maria Sfougari, Maria Kouroukli, George A. Giannopoulos	121

7.	Aachen	
	Gerhard Curdes, Andrea Haase	135
8.	Bari	100
_	Domenico Di Bari, Francesco R. Nitti	163
9.	Kecskemét	
10	Katalin Korompay, Nora Hörcher	179
10.	Tromsø	
	Halina Dunin-Woyseth, Gunnar Ridderström	203
Pa	rt II. INNOVATION AND URBAN DEVELOPMENT:	
	SELECTED ITEMS	
11.	Introduction	000
12 .	The influence of transport innovation on urban form	229
	George A. Giannopoulos	237
13.	Spatial effects of 'new-technologies': an approach to	201
	process analysis	
1 4	Andrea Haase	261
14.	Spatial organization of towns at the level of the	
	smallest urban unit: plots and buildings Gerhard Curdes	
15.		281
10.	Innovation and the European city centre Bill Chandler and David Massey	
16.	Changing life styles versus urban built form	295
	Halina Dunin-Woyseth	
17.	The development of public space as the basis for	313
	urban life	
	John Allpass	005
l8.	Innovation and economic transformation of the urban	337
	waterfront: recent developments and prospects for	
	the luture	
	Armando Montanari	373
		0,0

FIGURES

		Page
1.1	From a case-study to a thematic approach	11
2.1	Lovels examined in each case study	26
2.2	Development patterns of the road and rail	30
3.1	Lisbon, Core-continuous built-up area: stages of	38
	development	45
3.2	Lisbon, Metropolitan area: county towns	71
4.1	Rome, Map of the metropolitan area	78
4.2	Rome, Via della Conciliazione	85
4.3	Rome, Tor di Nona	89
4.4	Rome, Palazzetto Lancellotti	97
5.1 5.2	Liverpool, Planning policies since 1945 Liverpool, Core-continuous built-up area: stages	
	of development Liverpool, Development of the University and	101
5.3	hospitals district	112
6.1	Thessaloniki, Core-continuous built-up area:	405
	stages of development	125
7.1	Anchon Ilrhan area	136
7.2	Aachen, Core-continuous built-up area: stages of	
	development	146

7.3	Aachen, Development of the core-centre	150
7.4	Aachen, Development of the university	153
7.5	Aachen, Innovations in the transport network	155
7.6	Aachen, Important innovations in town planning	160
8.1	Bari, Core-continuous built-up area: stages of development	
8.2	Bari, Boundaries of the Town Councils (after 1934)	164
9.1	Kecskemét, Core-continuous built-up area: stages	165
9.2	of development	184
9.3	Kecskemét, Development of the core-centre Kecskemét, Specific area of change adjacent to the core	189
9.4	Kecskemét, Specific area of change adjacent to the core	193
10.1		195
10.1	Tromsø, Troms County	205
10.2	Tromsø, Core-continuous built-up area: stages of development	
10.3		207
10.4	Tromsø, Development of the core-centre	215
12.1	Tromsø, Development of the urban form	221
12.1	The interaction process betweeen transport and urban structure	
12.2		239
12.2	Diagrammatic representation of the process of	
12.3	urban change	241
12.4	Time periods of 'universal' transport innovations	251
12.4	Timing and time span of infrastructural	
12.5	innovations in public transport	252
12.0	Timing and time span of infrastructural	
14.1	innovations in private transport	254
$14.1 \\ 14.2$	Form of parcels	283
14.2	Form of blocks and land division: square block, rectangular block, hexagonal block, triangular	200
	block	
14.3	Regular nineteenth century blocks	283
14.4	Irregular blocks (Aachen)	283
14.5	Free arrangements of buildings	283
16.1	Changing life styles versus urban built form	292
16.2	Changing life styles versus urban built form: stage of urbanization	316
16.3	Changing life styles versus urban built form: stage of suburbanization	321
		324

16.4	Changing life styles versus urban built form: stage of desurbanization	326
105	Changing life styles versus urban built form:	
16.5	stage of reurbanization	329
17.1	The market-towns ('købstæder') around 1536 in Denmark	340
17.2	The thirteenth century town. Ragnar Blomqvist's reconstruction of Lund in Sweden	341
17.3	The development of open air marketplaces into	344
	towns	347
17.4	Copenhagen 1674 according to Resen's map	041
17.5	Eighteenth-century Dutch single-family houses	349
	in an urban setting	350
17.6	Copenhagen 1757 according to Gedde's map	390
17.7	Gråbrødretorv in Copenhagen in the early	352
	eighteenth century	302
17.8	Lower middle-class and working-class dwelling	054
	at the end of the nineteenth century in Sweden	354
17.9	An urban block in Gammelholm, Copenhagen as	255
	built around 1870	355
17.10	The development of courtyards in urban blocks in	
	Conenhagen around 1920	356
17.11	Hornbækhus at Borup's Allé in Copenhagen,	
	built in 1922	357
17.12	The urban block Solgården (The Sun Yard),	
	Copenhagen, built 1929-31	359
17.13	Rynarken, Copenhagen, 1931	362
17.14	The development of the street in the period 1600-	
11.14	1970	363
17.15	A suburban public housing area in Copenhagen	
11.10	as built in the 1960s and a proposal for	
	improvements from the late 1980s	365
17.16	A suburban public housing area in Copenhagen,	
17.10	proposal for improvements from the late 1980s	366
18.1	New York, Battery Park City: location of the	• • •
18.1	project in the metropolitan area and its planimetry	378
10.0	New York, Battery Park City: axonometrical	0.0
18.2	view of the World Financial Center and Plaza	380
100	London, Canary Wharf: location of the project in	000
18.3	the metropolitan area and within the context of	
	the metropolitan area and within the content of	382
	the docks redevelopment plan	302

18.4	London, Canary Wharf: plan	383
18.5	Naples, Management Center: location of the	900
	project in the metropolitan area and its planimetry	385
18.6	Naples, Management Center: plan	385
18.7	Yokohama, Minato Mirai 21: location of the project in the Tokyo Bay	900
18.8		386
	Yokohama, Minato Mirai 21: project planimetry	387
18.9	Yokohama, Minato Mirai 21: plan of the complex comprising an international congress center, an	007
	international and international congress center, an	
10 10	international exhibit center and a hotel	388
18.10	Kobe, Rokko Island: location of the project in the	700
	Osaka Bay	000
18.11	Kobe, Rokko Island: plan of the project, with part	389
	of the Kobe urban area in the background,	
	squeezed in between the mountains and the sea	389
	with the sea	

TABLES

		Page
3.1	Lisbon, Expansion to the north and densification of the core 1850-1920	39
3.2	Lisbon, Political control and urban planning 1930- 1948	41
3.3	Lisbon, Demographic intensification and the suburban expansion of the peripheries 1950-1967	42
3.4	Lisbon, The structuring of Lisbon's metropolitan area 1969-1980	43
3.5	Dispersion and dependence of Lisbon's agglomeration 1890-1920	47
3.6	Differentiation and density of Lisbon's agglomeration 1930-1940	48
3.7	Suburbanisation of Lisbon's agglomeration 1950- 1964	49
3.8	The structuring and expansion of the metropole of Lisbon 1965-1980	51
5.1	Liverpool, Innovation in each time period on each level	115
7.1	Aachen, Outline of urban development 1874- 1977	137

8.1	Bari, Outline of urban development 1874-1977	166
10.1	Tromsø, Innovation on each level	
12.1	Life span of innerestions—1:1.1	223
13.1	Life span of innovations which do not exist today Identity-value of locations of public and private	253
	space	276
14.1	Hierarchy of morphological transformations	287
14.2	Innovations in basic urban arrangements and in the concepts for basic urban elements	
18.1	Battery Park City, Canary Wharf, Naples Management Centre, Minato Mirai 21, Rokko Island: cost, size, land use, employees and residents	289
	1001/0011/00	390