

**Nicole Pohl**

# Mobility in Space and Time

Challenges to the Theory  
of International Economics

With 37 Figures  
and 8 Tables

**Physica-Verlag**

A Springer

# Contents

	page
1	Introduction: aims and conceptions . . . . . 1
Part A	A concept of mobility in space and time . . . . . 13
2	Mobility in the 21 <sup>st</sup> century: some empirical observations . . . . . 15
2.)	Mobility and global information . . . . . 15
	2.1.1 Access to information .. . . . . 15
	2.1.2 Information and organization. . . . . 19
2.2	Mobility in space: globalization, regionalization and localization. . . . . 20
2.3	Mobility and spatial patterns of development. . . . . 23
3	Mobility in space and time - structuring a complex phenomenon. . . . . 25
3.1	Mobility and agents - microeconomic foundations of mobility. . . . . 25

3.2	Spatial patterns, interaction and mobility - structuring space by analyzing mobility. . . . .	28
3.3	Mobility, agents and time-sources of change and decision-making in time. . . . .	31
3.4	Mobility in space and time - a comprehensive framework. . . . .	32
<b>Part B Mobility in the theory of international economics. . . . .</b>		
4	<b>General possibilities and restrictions of theoretical modelling. . . . .</b>	<b>39</b>
4.1	Mobility and agents in international economic theory - modelling the microlevel. . . . .	39
4.2	Dealing with space and time in economic theory. . . . .	41
5	<b>International flows of goods and factors - traditional theory of international economics</b>	<b>49</b>
6	<b>New trade theory and multinational corporations. . . . .</b>	<b>51</b>
7	<b>Non-linear dynamics and self-organization - New Economic Geography. . . . .</b>	<b>55</b>
7.1	The type of the models. . . . .	55
7.2	Core-periphery models and spatial dynamics . . . . .	58
7.3	Cities and endogenous spatial structures. . . . .	62
7.4	A critical point of view. . . . .	65
7.5	Agglomeration, cities and the service sector - some basic considerations. . . . .	68

Part C	Future agenda - towards a theory of mobility in space and time. . . . .	71
8	Between old and new concepts . . . . .	73
9	Economic agents, capabilities and relationships in space and time. . . . .	79
9.1	Evolutionary Economics and sources of spatial dynamics. . . . .	79
9.2	Interacting agents in a mobile society. . . . .	83
	9.2.1 <i>Heterogeneity of agents and externalities</i> . . . . .	83
	9.2.2 <i>Mobility and the option value of waiting</i> . . . . .	89
	9.2.3 <i>Heterogeneity of agents, space and time:           migratory biographies.</i> . . . . .	91
	9.2.4 <i>Territorial decision-makers in international           economics.</i> . . . . .	93
9.3	Patterns of interaction: networks, industrial districts and milieus. . . . .	97
	9.3.1 <i>The evolution of patterns of interaction           in time: the network approach.</i> . . . . .	97
	9.3.2 <i>Spatial ties of interaction: industrial districts           and innovative milieus.</i> . . . . .	108
	9.3.3 <i>Networks, mobility and change.</i> . . . . .	113
	9.3.4 <i>Networks-an ethnic phenomenon?.</i> . . . . .	124
9.4	Sociodynamics and stochastic approaches. . . . .	126
	9.4.1 <i>Modelling locational decision-making</i> . . . . .	126
	9.4.2 <i>Modelling innovative behaviour and           change.</i> . . . . .	137
10	Geography, culture, organization and politics as determinants of distance. . . . .	141
10.1	Culture and organization. . . . .	141
10.2	Historical organizational patterns and mobility . . . . .	156

10.3	An interplay of cultural, political and economic influences . . . . .	.161
	10.3.1 <i>Why do national borders matter?</i> . . . . .	.161
	10.3.2 <i>Borders, markets and ties</i> . . . . .	.164
11	Spaces of multinationalization . . . . .	.167
12	Novelty, capabilities and heterogeneity of agents . . . . .	.171
13	A new understanding of a complex matter - space and time . . . . .	.175
	13.1 Mobility in time . . . . .	.175
	13.2 Mobility in space 7-spaces of mobility. . . . .	.179
14	A formal model of mobility. . . . .	.181
Part D Between given knowledge and new challenges .		189
15	Conclusion . . . . .	.191
	15.1 What do old and new theories tell us about mobility? . . . . .	.191
	15.2 Achievements and open questions of the new approach... . . . . .	.198
	15.3 Empirical and theoretical research agenda . . . . .	211
	List of figures. . . . .	215
	List of tables. . . . .	217
	References. . . . .	218