

Contents

<i>Figures</i>	<i>ix</i>
<i>Tables</i>	<i>xi</i>
<i>About the author</i>	<i>xiii</i>
<i>Foreword</i>	<i>xv</i>
<i>Acknowledgements</i>	<i>xvii</i>
1. Introduction	1
2. Selection by the institutional environment	17
3. Learning regimes	33
4. Co-evolution of institutional environment and learning regimes	49
5. Implications of the co-evolutionary process	63
6. Methodology	81
7. The Dutch multimedia system of innovation	103
8. The Dutch pharmaceutical biotechnology system of innovation	135
9. Conclusions	167
<i>References</i>	<i>181</i>
<i>Index</i>	<i>189</i>

Figures

1.1	Combination of theoretical perspectives	12
2.1	Schematic representation of the relation between the institutional environment and institutionalized behaviour	18
3.1	Governance perspective of a learning regime	39
3.2	Relation between properties of the knowledge base and specific cognitive investments	41
3.3	Relation between network density and the potential for spillovers, social control and freeridership	43
4.1	Cycle of knowledge	50
4.2	Schematic relation between cycle of knowledge and institutional level model	60
6.1	Schematic relation between institutional environment and learning regime	85
6.2	Different levels of aggregation	92
7.1	Positioning of learning regimes along multimedia value chain	106
8.1	Emerging knowledge exploration value chain and learning regimes in the field of general platform technologies	143
9.1	Positioning of networks in multimedia and biotechnology in network typology	173

Tables

3.1	Archetypes of learning regimes from a competence view	36
3.2	Archetypes of learning regimes from a competence view and governance view	45
5.1	Types of environmental uncertainty and related function of network strategy	70
5.2	Potential benefits and risks of a non-dense network of ties strong in durability, in exploitation	73
5.3	Potential benefits and risks of a dense network with a low strength of ties, in exploration	77
6.1	Affinities of basic research forms with research designs in the social sciences	89
7.1	Analysis multimedia innovation system: learning regime 1	108
7.2	Analysis multimedia innovation system: learning regime 2	112
7.3	Analysis multimedia innovation system: learning regime 3	117
7.4	Overview of outcomes from confrontation of hypotheses and empirical findings for multimedia	129
8.1	Analysis pharmaceutical biotechnology system of innovation: learning regime 1	145
8.2	Analysis pharmaceutical biotechnology system of innovation: learning regime 2	150
8.3	Overview of outcomes from confrontation of hypotheses and empirical findings for pharmaceutical biotechnology	161
9.1	Four different types of networks based on density and strength of ties	170