Index

aprioristic approach 54, 74, 102, 103,	demonstrable truth 52–3
328–9	as habitual disposition to act 101–2,
abduction 103	107
absorptive capacity 217–18, 221–2,	as preconception 107–8
349, 378, 502, 508	as predictive 247–9, 258
accessibility 185, 203-4	Wieser, see Wieser: the role of beliefs
action	Bergson's theory 494, 495–7
behaviourism 131, 343, 347-40	bias 29–30, 199–202
beliefs and 101, 107	Boulding's mental image 121–6
Boulding, see Boulding's mental	change, adjustment/resistance to
image	123–5, 135–6, 505
cognition as basis and result of, see	differentiation 127
embodied cognition	Hayekian theory and 132–6
collective action 114–15, 506–7	image knowledge and perception
logical and non-logical 26-33, 41	122–6, 133
Marshallian organization 61–2, 65	imaginative capacity 126–7
Paretian, see Paretian theory	information flow 123, 497, 504–5
situated action 343-4, 350	overview 121
skilful action 386–7	public image 125
transaction 102–3, 114–15	regularities 123
adaptation 354–5, 449–53	scientific critique of 127–8
adaptive learning, see game theory	subjective nature of knowledge and
Allais's paradox 150, 188–90	132–4
allocation 274–6, 275–6, 277	transcription/symbols 125
altruism 156	value image 122
artificial intelligence 194, 489–90	see also framing effects
aspiration 157, 437–9	boundaries of the firm 356–8, 428–9,
association 111	435
attention 491–2	bounded learning 134–6
Austrian tradition 12, 73–4	bounded memory 260–61
authority 102, 466–7, 472–3	bounded rationality 145, 155–8, 161,
automatic processes 10, 185, 203–7, 378, 389, 491–2, 493, 494	246, 438
axiomatic approach 52–3, 68, 187	capabilities 154, 391–2
Allais paradox 150, 188–90	capital 49, 292-3, 395
framing effects and 195–7	Carnegie-Mellon School 151–2 causality 106, 109–10, 113
Bargh's theory 492–3	change in knowledge 488–511
Bayesian theory 320–21	automaticity and the
behaviourism 131, 343, 347–40	'institutionalized mind' 506–8
belief 54, 67, 84	automatism 491–2, 493, 494
common knowledge and 419–20,	Bargh's focus on the procedural
422, 424	492–3

Boulding's theory 123-4, 504-5	STI mode 304-6, 307
co-evolution of declarative and	tacit knowledge and 229-31, 372-3,
procedural memory 494-5, 504	377–8, 385
cognition and motivation in	transcription/symbols 125
memorization 495–7	the work process 300–303
cognitive automatisms 491–2	cognitive approach 183–207
consciousness and freewill in	'as if' hypothesis 184, 190
memorization 493–5	axiomatic approach 187, 188-90,
consecutive change process 106–7	195–7
declarative and procedural memory	bias: search processes and
10, 205, 489–91, 501–3	computational complexity
emotions 497–8	199–202
evolutionary insights 494–5, 503–4	bounded rationality 184-5, 193-5
general equilibrium and 50	constructivist view 205–6
images as regularities and frames for	evolutionary aspects, introduction
entrepreneurs 504–6	of 183–4
individual forms of knowledge	evolutionary justification of
489–98	rationality 190–93
individual to organizational 500–501	framing effects 196–7
institutional level 504–8	Friedman's theory 184, 187
mimetic/myopic behaviour 9–10, 507	Harrod's evolutionary theory 183–4,
mindful reflexivity 10–11, 498, 509	190–91
motivation 492–3	Hayek, see Hayekian theory
motivation, knowledge absorption	industries' marginalist approach 191
and change 508–10	Kahneman and Tverksy's approach
organizational and declarative and	195–7
procedural memory 501–3	Kahneman's accessibility 185, 203–5
organizational level 499–504	Kauffman's 'traits' (organisms)
organizational memory as	191–2
anthropomorphic 499–500	overview 13–14, 151–2
overview 488–9, 510–11	Pareto's action theory and 33–6
plasticity of declarative and	profit maximization debate 183
procedural memory 497–8 routines as doubly recursive 500–501	psychology and economics, separation of 186–7
see also evolutionary perspectives	rational choice and psychology of
Chicago School 154, 206	choice 185–6
co-evolution 173, 412	sub-optimal solutions and strategies
co-relational structure of knowledge	198–201
212–17, 219, 222–3	tacit versus explicit knowledge 203–6
coalitions 413–14	see also economic theories; memory/
codification	memorization; psychology-
in academia 297–8	based theories
as transforming and refining	cognitive distance 340, 349, 350, 352,
knowledge 303	356–7, 361–3
in business sector 298	cognitive economics 128, 136, 151,
DUI mode 306–7	184–5
experiential knowledge and 269–72,	cognitive platforms 419–22
278	cognitive science 340, 491–2, 495–7,
expert systems 298–300	510
in relation to innovation 304–6	coherence 140

collective action 114–15, 506–7	social anthropology of learning 404, 405–6
collective imagery 125	
collective knowledge 498–510	strategic management approach and
collective opinions 315	404, 405–6, 427–8
common knowledge 419–20, 422, 424, 459	sunk costs 415–16
	trust/common values 411–13, 416
common values/trust 408, 411–13, 416	see also knowledge generation and
Common's theory 110–15	utilization; organizations:
collective action 114–16, 506–7	management of knowledge competition 31–2, 170, 231–2, 233–5
'futurity' 112, 113–14 going concerns 115	
influences on 111–12	computational complexity 199–202 connectionism (neural nets) 346–8
interaction/transaction 12, 99,	consciousness 13–14
114–15	and mechanism 54–7
rationality: habit and rules 115	as a priori 54
typology of ideas 112	automatism and 10, 185, 203–7,
communication 125, 229–30, 371	491–2, 493, 494
communities in the firm, types 358–60,	free will and 56, 491, 493–5
414–15	pragmatist view 104
communities of practice 358, 409–10	somatic markers 390–91, 497–8
communities, scientific 327–8	subsidiary and focal awareness 387,
community approach to theory of the	389
firm 403–29	constructivist perspectives 205–6
alignment of interests (hierarchical)	consumerism, see demand analysis
418–19	consumption, see demand analysis
cliques in network theories and 414	(consumption)
coalitions and 413–14	contracts 469
cognitive platforms (common	convention, financial 325–9
knowledge) 419–22	coordination 74
communities in the firm, types	advantages 415–17
358–60, 414–15	by authority 466–7
communities of practice 409-10	balance of knowledge held and
coordination advantages 415–17	463
coordination disadvantages 417–19	costs 464–5
epistemic communities 408–9, 410	disadvantages 417–19
evolutionary economics approach	under a general equilibrium view
404–6, 429	176–7
firm as a platform for communities	under a knowledge-based view 177
419–26	knowledge generation and utilization 226–9
firm as processor of knowledge 403	
functional coordination groups and 413	knowledge integration and 470–72 knowledge integration, artefacts
hierarchical structures and 422–6	477
interaction between communities 420–21	knowledge integration, individual capacity 477
knowing communities 407–14	knowledge integration, processes
knowing communities, properties of	478–9
410–14	correlation and co-relation 215
knowing communities, types 408	creativity 62, 126–7
project teams and 413	cultural determinants 5, 354

Darwinian ideas 53–4, 66, 106, 347 decision making biases 199–202 codification in the business sector 298 conjectural division of (sub-problems) 7, 200 expected utility theory, see expected utility theory framing effects (choice problem) 7–8, 9–10 game theory, see game theory normative approach 186–7	knowledge integration and 470–72 knowledge integration, artefacts 477 knowledge integration, individual capacity 477 knowledge integration, processes 478–9 knowledge transfer 456–6 modularization 460, 463, 480 structure as coordination mechanism 473–7 study implications 479–81 uncertainty, pervasive 468–9 division of knowledge 79, 305
organizational forms 441–3 rational choice theory 144–6, 149–50, 154	division of labour 51, 56–7, 224–6, 460 distributed knowledge coordination and 226–9, 464–5, 467–8, 479
rules and aspirations, adaptive concept 438–9 Sah and Stiglitz's theory 442–3 Simonian theory, <i>see</i> Simonian	doubt, <i>see</i> uncertainty Durkheimian political economics 313–14
rationality somatic markers 390–91, 497–8 sub-optimal solutions 198–9 uncertainty, see uncertainty see also problem solving demand analysis (consumption) 58–9,	e-commerce 326–7 economic theories absolute rationality 145 associationist psychology 108 Austrian tradition 73 economies of scale 461
66–7, 76–7, 80–81 democracy 104	economies of specialization 462–3,
determinism 56, 263 deterministic and probabilistic choice 249–50, 251 Dewey's social theories 102–3, 104, 498	economies of speed 463 efficiency theory 317–22 expected utility theory 149–50 futurity/security of expectations
distributed knowledge 458–81 authority (hierarchy) 466–7, 472–3 coordination and balance of	general economic equilibrium theory 1–2
knowledge 463 coordination costs 464–5 definitions 4–6, 458–61 diseconomies limiting 463 division of labour and 226–9, 464–5, 467–8, 479 economies of scale and 461	and knowledge 167–80 Marshall, see Marshallian theory neoclassical approach 154–5, 159–60, 286–7 public good 288–9 rational choice 287–8, 315 utility 186–7
economies of specialization 462–3, 464 economies of speed 463 effects of, on organizations 469–70, 479–80, 502 exploration and exploitation balance 467–8 intermediate situation 461	see also cognitive approach economic theory and knowledge-based economy 167–80 collective dynamics, examples 177–8 decentralization and interdependence 167–8 general equilibrium model and 167–8, 169, 174–5, 176

information 168–71	levels and variety (interactionism)
information and knowledge,	351–3
distinctions 171–2	linguistic semantics 341–2, 350–51
locality/path dependent models	overview 339–40, 363–4
169–70, 391–2	as beyond rational calculation 350
macroeconomic perspectives 174–8	representational-computational view
microeconomic perspectives 173–4	and 340–43
questions raised by 178–80	situated action 343-4
social distribution of information	theories of organization (firm
169	theory) 353–5
see also knowledge pools	see also knowledge, experiential;
economics	knowledge, tacit and personal
Boulding's 'resistance to change' 124	emotions 33, 34–5, 497–8
competition 234–5	empiricism 51–3, 100, 111–12
coordination mechanisms 466–7	entrepreneurship 9–10, 504–8
increasing return 63	equilibration 65–7
knowledge, its economic	equilibrium 50, 65–7, 68–70, 246
characteristics 369–79	ésprit de géométrie 6–7
market failure 274–7	evolutionary economics 404–6, 429
Marshall's theories, see Marshallian	evolutionary perspectives
theory	'bottom-up' 178
money 58–9, 80–83, 85, 91–2	continuum of transactions 104
Pareto and, see Paretian theory	game theory, see game theory
and psychology, separation from 58,	individual and organizational
186–7	knowledge, see change in
tacit knowledge and 390–92	knowledge
uncertainty, see uncertainty	industries' marginalist principles
see also finance, objective value	191
versus convention	institutions, see Wieser: the role of
economics of knowledge 286–96	beliefs
effectiveness 154–5	Kauffman's 'traits' (organisms)
efficiency theory 317–22	191–2
efficient market 319	locality/path-dependent models 169
egotism 156	Marshallian 53–4, 59–61, 65–6
electrical circuits analogy 440	network representation of
elites 36	knowledge 218–19
cliques 414	neurology and 347, 388–90
protectionism 36–43	observation and modification 213–14
specialization 78–9, 82, 462–3	pragmatist philosophy 102–4,
Wieser's analysis of power 87–8	105–10
embodied cognition 339–64	progress and equilibrium 65–6
boundaries of the firm and 356–8	rationality, theoretical justifications
cognitive distance 340, 349, 350, 352,	of 155, 183–4, 190–91, 190–93
356–7, 361–3	routine and 191–2, 503–4
cognitive identity 355	Smith on (2002 Nobel Lecture)
communities and firms 358–60	70–71
connectionism and neural	see also change in knowledge
Darwinism 346–8	expected utility theory 149–50, 158, 160, 186–7
embodied cognition perspective 348–51	Allais's paradox 150, 188–90
J 4 0-J1	Anais s paradux 130, 100–90

experiential knowledge, see knowledge, expected payoffs 248-9, 258-64 experiential Fictitious Play processes 259–61 experimentation 62 forward-oriented criteria of exploration/exploitation dilemma performance 248–9, 258–64 467-8, 507 framework of study 246-7 external environment and mental local interaction 261-4 representation 212–16, 219–20 overview 14 externalities 274–7, 278–90 performance evaluation procedures 248-9 facsimile reproduction 272 probability distributions 248, 260 finalist and mechanist philosophy realized payoffs (reinforcement) 109 - 10finance, objective value versus received payoffs (imitation) 253–8 convention 313-35 stochastic process 264 concept of modelling 319-20 strategic environment 247–8, 250 consensual opinion 332 general equilibrium theory 1–2, 50, 167-8, 169, 174-5, 176-7, 232, 318 Durkheimian political economics 313-14 generation, see knowledge generation non-stationary system (conventional and utilization 211–43 predictions) 324-9 genetics 129, 132–3, 191–2, 226 globalization 303, 394-5 objectivity of the future (efficiency theory) 317–22, 329–30 group dynamics overview 315-17, 333-5 communities 413-14, 417 self-referential process 331–2 distributed memory 501 subjective estimate idea 321–9 knowledge transfer processes 465 uncertainty 320-22 Marshallian theory 62–3 see also economics Paretian action theory 36–43 firm, theory of the, see community Simmel's theory 351–2 approach to theory of the firm growth 60, 62, 173, 286 firms, see organizations, management of knowledge habit 101–2, 107, 111, 115 framing effects 7–8, 196–7 Harrod's evolutionary justification 183, free will and determinism 56, 491, 190-91 493 - 5Hayekian theory 1 authority/limited span of control Friedman on rational behaviour 153-6 466-7 functional groups 413 future/futurity 112, 113-14, 317-22 information and knowledge irreducible subjectivity of 322–9 differentials 130, 134, 147–8 knowledge and uncertainty 152–3 game theory 159, 246–65 knowledge, nature of 5–6, 56, 74, adaptive learning 247–50 132 - 4backward oriented criteria of learning, role of 135 performance 249, 250–58 'map' and 'model' 129 Bayesian learning and 247 neuropsychology of perception beliefs 247-9, 258 (genetics) 129–30, 132–3 bounded rationality and 246 perception 121, 129-30 contagion 263-4 heuristics 157 deterministic and probabilistic hierarchical structures 422–6, 442–4, choice 249-50, 251 466–7, 472–3 deterministic process 263 hybrid forms 444–5, 447–9

Commons's theory, see Common's

power/authority 36, 87–93, 102 theory Hume's radical empiricism 111 Menger's theory, see Mengerian theory Wieser's theory, see Wieser: the role idealism 100 images, see Boulding's mental image of beliefs imagination 121, 126-7, 137 see also organizational theory imitation 82, 88, 89, 253–8 intellectual property rights, see increasing return 63 property rights individual and organizational intelligence generation 464 knowledge, see change in interaction 9 knowledge communication 125, 229-30, 371 individual forms of knowledge 489-98 embodied cognition 343-4, 351-3 individualism 75, 287 individual decision making and 159, inductive and deductive cognizance 167 24–6, 103 innovation and 360-63, 506-8 inflation 59 local 261-4 information and retrievable/ repetitive and qualitative 420-21, interpretive knowledge structure 425-6 social character of 292-3 217 - 18information as objective/factual 130, internalized action 344-6 217 internet search engines 294 information processing 6–7, 464, 491 information technology, see Kahneman's theory 159, 160–61, 195-7, 203-4 codification information, knowledge and economic Keynesian theory 15, 173, 331-2 theory Knight: uncertainty and risk 147, 148 collective dynamics, examples knowing communities 407–14 177 - 8knowledge, collective 498–510 corporate knowledge and 172-4 knowledge, distributed, see distributed distinctions between information knowledge and its coordination and knowledge 171-2, 217 knowledge, economic characteristics general equilibrium (GE) and 1–2, 369-79 168 - 71codification and 372–4, 377–8 knowledge of mind, body and soul public- and private-good 374–9 291 see also knowledge generation and macro theory and 174-7 utilization innovation 171-2, 212 knowledge, experiential 267-83, 294 absorptive capacity and 217-18, allocation 274–6, 277 221-2, 502, 508 analytical framework 274–7 codification 304-6 codification as depersonalizing image and entrepreneurship 126, 505 271–2, 278 by interaction 360–63 codified script (reproduction) 269–71 procedural knowledge and 502 as disturbing and disruptive 273 as revitalization of experiential disinvention and deactivation of knowledge 280 272 - 4transfer and localization 392-5 economic aspects 272 externalities 274–7, 278–90 inquiry 103, 106 institutional theory 73-4, 99, 107-8, industrial organization 112–17, 488, 504–8 (maintenance) 279-80

management 404, 424-5

innovation (maintenance) 280 integration (maintenance) 281–2 knowledge reproduction and transmission 268–72 market failures 274–7 museum solution to maintenance 277–8 partial reproduction 271 private and collective 268 status and maintenance of 278–82 see also embodied cognition; knowledge pools knowledge, growth of 50, 57–61, 63, 76 knowledge, individual and collective 75, 83, 85–6, 89–90, 136	knowledge bases of firms 235–41 knowledge generation and utilization 211–43 adaptive learning 247–50 applicability and focus of study 211–12 co-relational examples 215–16, 219 co-relational structure of knowledge 212–17 'cognitive' and 'technological' processes 224–5 connectivity 228 coordination 226–9 disciplines, observable spaces 219–20, 225–6, 227–8, 233
knowledge, subjective nature of 5–6, 25, 26–7, 130, 132–4	division of labour 224–6
25, 26–7, 130, 132–4 knowledge, tacit and explicit 203–6, 219–31, 291–3, 296–306, 369,	econometric equations 216 external environment 212–16, 219–20, 227
403–4	inseparability of processes 224-5
knowledge, tacit and personal 383–98	knowledge bases concept and 235–41
biology of 388–90	lexicographic analysis 238–40
decision making 390–91 implications for economics 390–92	local character of knowledge 219–22 measurement of properties 240
information and knowledge	measurement: relationship of KB
distinctions 171–2, 391	properties and performance 241
knowledge management and 384–5	mental models 231–2
memory/rules 389–90	network (static and dynamic)
overview 396–8	218–19, 221
Polanyian overview 3-4, 372, 383-4	objective knowledge 223
skilful action 386–7	observables and variables 213-15,
subsidiary and focal awareness 387	222–3
technological learning and capability	overview 241–3
391–2	pattern recognition 232
transfer and localization 392–5, 466	production of knowledge
transfer and reproduction 268–9	(generalities) 223–35
see also embodied cognition	retrieval and interpretative structure
knowledge and information 1–2, 130, 134, 147–8, 171–2, 391	217–18, 219, 222 specialization/disciplines 224–6
knowledge and rationality, see	storage, expression and transfer
Simonian knowledge and	370–72
rationality	tacit and codified knowledge 219–31
knowledge as intersubjective 104	theories of knowledge and 222-3
knowledge-based society 211	see also community approach to
knowledge-based theory of the firm,	theory of the firm; knowledge,
see community approach to	economic characteristics
theory of the firm	knowledge integration 470–72, 477–9
knowledge-based economy, see	knowledge management 422–6, 435–54
economic theory and knowledge-	knowledge organization, see
based economy	organizational design

knowledge pools 285–309	technological and sectoral 172-3,
codification, innovation and 304–7	391–2
codification in academia 297–8	levels of needs 351–2
codification in the business sector	lexicographic analysis 238–40
298–300	local character of knowledge 63–4,
codification of the work process	219–22, 272
300–303	locality/path dependent models 169–70
economics of knowledge 286–96	localization 395–6, 508
know-what/why/how/who 293–5	logical and non-logical action 26–33,
knowledge of mind, body and soul	41
291–2	Lucasian theory 320, 321
knowledge transfer 289–90, 307	
neoclassical economics and 286–7	macro/microeconomics 174-8
overview 308–9	management 384–5, 404, 424–5
public good (property rights)	management information systems
288–90, 292–3, 294–6	298–9
rational choice 287–8	management literature on knowledge
social interaction 292–3	distribution 471–2, 480
tacit/codified knowledge and	marginalism 183, 190–93
296–306	market failure 274–7
see also economic theory and	marketability 80–81
knowledge-based economy;	Markov chain 260–61
knowledge, experiential	Marshallian scholarship 51–3
knowledge reproduction and	Marshallian theory 49–71
transmission 268–72	activities and wants (demand) 58-9
knowledge transfer 289–90, 307, 371–2,	character 57–8
392–5, 456	consciousness and mechanism 54-7
	dialectical processes in 60–61
learning	evolutionary approach 53–5, 59–61
adaptive, see game theory	growth and equilibrium 50, 65–7
biology of tacit knowledge 388–90	growth of knowledge 50, 57-61, 63
bounded learning 134–6	imagination 126
discretionary 301–2	the industrial district 63–4
DUI mode 306–7	model of the mind 59-60
image and 123	organization 61–5
imitation 82	overview 11–12, 49–50, 67–70
implicit 466	principle of substitution 60
knowledge of mind, body and soul	productive activity 60–61
291–2	psychological elements 52, 53-4,
knowledge transmission 269	57–8
lean production learning 303	true knowledge/empiricism 51-3
locality/path dependent models	mechanism 54–7, 202
169–70	memory/memorization 279, 389
Menger's emergence of money and	bounded memory 260-62
80–83	cognition and motivation in 495-7
neurology of 129	consciousness and freewill in 493-5
organizational learning 198–9	declarative and procedural memory
productivity gains through	205, 489–91, 501–3
specialization 462–3	declarative and procedural memory,
reflexive 498	co-evolution of 494–5, 504

declarative and procedural memory, plasticity of 497–8 emotions 497–8	static and dynamic 218 neural Darwinism 347 neurophysiology 133, 134, 383,
individual to organizational, risks	388–90
499–500	New Economy convention 325–9
local character of knowledge 220–21	non-logical and logical action 26–33,
see also cognitive approach	normative approach 186
Mengerian theory 75–83	
complementarity and substitutability 79–80	objective end and subjective purpose 27–9
consumption and knowledge (means	objective knowledge 223
and ends) 76–8	'objective spirit' 89–90
division of knowledge and 79	objective values, see finance, objective
knowledge, growth of 76	value versus convention
knowledge, individual and collective 75, 83	observation and modification 213–14
learning (emergence of money)	opinion 314–15, 316, 331–3 organic and pragmatic institutions 74,
80–83, 85, 91–2	86
organic and pragmatic institutions 74, 86	organization design (knowledge organization) 435–54
overview 94	behavioral theory and 437–40
selection process and prior	cognitive ability and screening
knowledge 82	function 440–41, 445–7, 450
specialization (fragmented	cost 447
population) 79	decomposability/adaptability
subjectivist concept of value 75–6	449–53
time constraints 78–9	goals 437–8
value 75–6	hierarchy and polyarchy structures
mental models 231–3, 343–4	442–5, 447–9
metaphor 341–2, 350–51	hybrid forms 444–5, 447–9
microeconomics 2, 173-4	market structure and 447, 448
middlemen 79	modeling 445–9
mimetic behaviour 9–10, 507	organization of knowledge as
mindfulness 10–11, 509	structure 441–5
Misesian theory 74	organizational forms, typology 445,
modular systems 460	457
money 58–9, 80–83, 85, 91–2	organizations as architectures
motivation 10, 351–2, 492–3, 508–10	440–49
manalassical ammunach 154 5 150 60	overview 435–6, 439
neoclassical approach 154–5, 159–60, 183, 286–7	problemistic search 439 organizational learning 198–9, 300–301
network	organizational theory
externalities/effects 82	boundaries 356–8
heterogeneity 361	collective knowledge 498–510
knowing communities and cliques	communities 358–60
414	competence 353
network economy 339	coordination 464
representation of knowledge 218–19,	corporate knowledge 172–4
221, 232, 239, 471	firm size 356, 359–60

inclusiveness and tightness (myopia	
risk) 357–8	protectionism) 36–43
interaction, distance and innovation	n inductive and deductive cognizance
360–63	24–6
legal identity 355	intentional nature 27
Marshallian theory 61–5	'interests' 35–6
organizational focus 354–6,	knowledge and logical and
357–8	non-logical actions 26–33
organizational learning 198–9	knowledge building, categories 33–6
selection and adaptation 354–5	logico-experimental method
Smith's theory 70	(economics and sociology) 24–6
theory of the firm (embodied	method of successive
cognition) 340, 353–6	approximations 25
work process 300–303	overview 11, 23
see also institutional theory	pursuit curve 30–32
organizations, management of	'residues' 33–4
knowledge 435–54	typology of actions 27–30
codification of 'know-why' 298	Peircian theory 101–2, 103, 104
design of, see organization design	Penrosian theory 60, 62–3, 127, 353, 394
distributed knowledge, see	
distributed knowledge	perception 121, 129–30
expert systems 298–300	performance, see knowledge generation
industrial districts and innovation	and utilization
64–5	Piaget and Vygotsky 344–5
knowledge bases of firms 235–41	pleasure 55–6
localization 395–6	Polanyian theory 3–4, 372, 383–4,
maintenance of experiential	386–7, 390
knowledge 279–80	political economics 313–14
mindfulness and 10–11, 509	power/authority 36, 87–93, 102, 466–7,
overview 435–6	472–3
performance, see knowledge	pragmatist theory of knowledge
generation and utilization	100–105
scientific communities 327–8	abduction 103
Simonian theory, see Simonian	beliefs 101–2
rationality	collective dimension 104–5
tacit knowledge and technology	definition and variants 100
transfer 392–5	evolutionary, see Veblenian theory
tacit routine 393–4	institutionalist conception, see
work process 300–303	Common's theory
see also community approach to	knowledge and beliefs 100–105
theory of the firm	main propositions 105
Oxford Research Group 183	mental processes and beliefs
	100–102
parallel distributed processing 347	naturalization of mind/function of
Paretian theory 23–44	thought 101
action theory 24–6	reflexive learning 498
chart of free trade/protectionism	relation and inquiry (ontology and
choice 39–40	method) 102–3
'derivations' 34–5, 41	scientific methods 102, 103
'elites' 36	private property, see property rights
	1 1 1 3/11 1 1 3/11

probability 248, 249–50, 251, 260, 318, 320–21, 468–9	reinforcement learning 251–3 relation, pragmatist ontology 102–3
problem solving 6–7	religous belief 53
bias and non-logical actions 29–30	repetition 494
Rubik's Cube 199–200	representational-computational view
'satisficing approach' 157, 195, 197	340–41, 342
sub-optimal solutions 198–9	retrieval and interpretative structure of
see also decision making	knowledge 217–18, 222
procedural rationality 7, 66, 145,	Rhône-Poulenc 238–40
157–62, 205	risk 145, 147, 320, 468–9
product development 471, 502	routine
productivity gains 462–3	double recursiveness 500–501
profit-maximization 183	evolution of knowledge and 488, 495
property rights 36–43, 288–9, 292–3,	evolutionary economics 404–5
308, 375–9	habit 101–2, 107, 111, 115
prospect theory (Kahneman and	knowledge, learning and 8–11
Tversky) 159, 160–61, 195–7 protectionism 36–43	mechanism and 55–6, 60–61 organizational change 62–3, 503–4
psychology-based theories	organizational knowledge 478
ésprit de géométrie 6–7	sub-optimal solutions and strategies
historical development of 130–31,	198–202
147	tacit versus implicit knowledge
implicit knowledge 387	203–6
internalized action 344-6	within firms 393
knowledge and uncertainty 147–9, 152–3	rules 6–7, 115, 389–90, 438–9
Marshallian theory and 52, 53–4,	Sah and Stiglitz's organization 441–4
56–8	Schumpeterian theory 68, 328
memory processes 494	science-technology-innovation
perception 129–30	sequence 304–6
see also cognitive approach	scientific community organization
public good 275, 276–7, 280, 369,	327-8
374–9	scientific knowledge 273–4, 276–7, 281,
property rights and 288–90, 292–3, 294–6	384 scientific method 102, 103, 222, 3
2,1.0	scientific method 102, 103, 222–3, 226
R&D, see innovation	securities market 317, 323–9
rational choice theory 144–6, 149–50,	selection process, Menger's 82
154, 184 rationalism 100	semantics, linguistic 341–2, 350–51 shared knowledge 458–9, 465
rationality 77, 286	Simonian knowledge and rationality
evolutionary justification of 190–93	121, 144–62
logical and non-logical action 26–33	absolute rationality 145
rational choice 287–8, 315	analysis comparative to Friedman
Simonian, see Simonian knowledge	154–5
and rationality	auxiliary assumptions 155-6
reality/truth 5–13, 102, 212–13	bounded and procedural rationality
reflexivity 498, 509	relationship 145, 157-8, 161
regularities 123, 504–6	bounded rationality 155–6, 158,
regulation approach 178	193–5, 438

divergence (economic and human) 145	Squire's cognitive science 495–7 stochastic process 264
empirical foundations and social	strategic management approach 404,
interactions 159	405–6, 427–8
limited cognitive resources 467	alignment of interests 418–19
mathematical models 439	knowledge management 422-6
nature of human rationality 146	structuralist theories of science 222
organizaiton knowledge and design 436, 439	sub-optimal solutions and strategies 198–202
organizational learning 198–9	subjective expected utility 158
procedural rationality 7, 66, 145, 157–62, 205	subjectivism 5–6, 25, 26–7, 130, 132–4 subjectivity of fundamentalist
procedurality, comparative analysis	estimates 322–9
158–61	substantive rationality 26–7, 32, 116
rational choice and psychology-	success 90–91
based theories 147	Suchman theory 4
'satisficing approach' 157, 195	, , , , , , , , , , , , , , , , , , ,
substantive rationality 26–7, 32	tacit and explicit knowledge 203-6,
uncertainty and knowledge 152–3,	219–31, 291–3, 296–306, 369,
157–8	403-4
uncertainty and rational choice	tacit and personal knowledge, see
149–52	knowledge, tacit and personal
utility function 155–6	Taylorist organization 300–302
situated action 343-4, 350	teams 413, 477
situated knowledge 4–5	technological knowledge 172, 391-2,
small decisions 275–6	501
Smith, Vernon 70, 205–6	teleological behaviours and cumulative
Smithian tradition 51–2, 167, 224, 305,	causation 108–10
308, 462	tenacity 101–2
division of labour, see division of	terminology of knowledge 290–91
labour	theology 52–3
social dimensions	time constraints 78–9, 136
democracy 104	transaction 102–3, 114–15, 320
economics, uncertainty and	trust 411–13, 416
specialization 78–9	truth/reality 51-3, 102, 212-13
image and 125, 127	Tversky, decision theory 203
interaction, see interaction	
Pareto's free trade/protectionism choice 36–43	uncertainty 101, 103, 124, 146, 152–3, 320–22, 328
social character of knowledge 292-3	and rational choice (expected utility
socially distributed knowledge 6, 176	theory) 149–51
somatic states 498	distributed knowledge and 468–70
transactions, going concerns and	knowledge and 147–9
institutions 104, 114–16	security of expectation 113-14, 144
social value 275	unemployment 67
social welfare 37	unified general theory 229
somatic markers 390, 497–8	utility 155–6, 186–7
specialization/disciplines 51, 56–7,	
78–9, 82, 224–5	value 75–6
Spencerian theory 54, 57	Commons' futurity 113–14

530 Index

dualist explanations (subjective/
objective) 85–6, 89–90
objective, see finance, objective value
versus convention
subjective 75–6
Veblenian theory
evolutionary economic theory 108
human behaviour (cumulative
causation) 108–10, 503–4
perceptions (changing reality)
105–7
preconceptions, emergence and
evolution 107–8

Walrasian theory 2, 69 Weberian theory 112, 216 Wieser: the role of beliefs 83–94
law of upward mobility of classes 91
Menger's emergence of money and
85, 91–2
methodological individualism and
holism 85–6, 89–90
notion of institutions 86–7, 93, 94
'objective spirit' 89–90
overview of theory 83–4, 94
power (internal and external) 88–9
power (masses and leaders) 87–8, 92
power (supra-social nature of) 92–3
social egotism 90–91
work process 300–303

zone of proximal development 345