Index

 $\it Note:$ Page numbers followed by "n" indicate notes.

Abacus 2.0, 104	agent-employee, 115, 131–134,
Abstraction, 39	148, 150, 152–154
Action, behavior $vs.$, 203	agent-problems, 10, 64, 90, 92,
Active docility, 74–76	118, 123–124, 129–132, 148,
Active externalism, 53	176, 198–199, 204
Additive, 18	agent-resources, 150–152
Agent-based computational	All-encompassing perspectives, 61–63
organizational cognition (AOC),	Altruistic behavior, 73, 81, 113, 170
12-13, 203-205	Altruism, xxiii, 72, 81, 83, 116, 168,
Agent-based modeling (ABM), 2, 16,	170, 176–177
18, 63, 87–89, 129–130,	Ambiguity, 40, 46, 96, 100, 108,
169-170, 191-193	142–143, 193, 199, 201
data, 197–199	Amplifiers of cognitive activity, 49
descriptive $vs.$ simple model,	Analogy (modeling purposes), 92–93
89–90	ANOVA, 103, 118, 134
dynamics of, 89	reverse F -test, 103, 118, 134
emergence, 92	Artifacts, 7, 11–12, 29, 38, 47, 49–52,
of intra-organizational diffusion	54, 59–60, 76–77, 89, 124, 155,
processes, 98	161, 166–169, 175, 184,
of plasticity, 143	186–187, 204
for science, 92–94	cognitive, 49
stochastic processes, 90–91	external, 53, 64
time and space, 91	material and immaterial, 7
uniqueness, 201–202	social and non-social, 11
Agent(s), 89	use of, $47-50$
agent-based approach, 179, 189,	Artificial intelligence processes, 4
192-202	
agent-based computational	Bandwagon, 83, 96–99, 104, 106,
simulation modeling, 8–10, 87,	108-109, 114, 121, 123, 173, 185
191	Bayesian models, 193
agent-based simulations, 8, 10, 87,	Behavioral theory of firm, 27–28
191	Being There, 37, 52

Belongingness, 79–80	Cognitive science, 2–4, 9, 17, 33, 35,
Betweenness (b) , 24–25, 32	39, 57, 62–66, 68
Biases paradigm, 19	Cognitive strategies, 12, 169–170,
Bibliographic coupling analysis,	173, 176, 178
30–33	concentration strategy, 174–175
Bibliometric analysis of general	differentiation strategy, 174
publishing trends in OC,	enabling mechanisms, 176–178
21-33	inquisitiveness and competence,
Bounded rationality (BR), xix, 10,	175–176
11, 19, 27, 29, 63, 72–74, 83,	Cognitive systems, 7, 9, 51, 68–69,
113–115, 192, 205, 207	78, 166, 183
Brain-centered approach, 3	Cognitivism, 4, 17, 39–41, 62–63
Brain-only approach, 3	Combination, 18, 40, 123, 125–126, 150, 154, 156, 160–161, 175,
Centrality, 24, 31, 41	178, 187, 197, 201
Ceteris paribus assumption, 144	Common sense, 44–45, 71, 124
Classic EDEC view, 180–181	Community, 9, 12, 45, 79–80,
Closeness (c) , 24, 32, 130	93–104, 124, 127–129, 168–169
Co-citation analysis, 21, 25–29, 35	of cognitive scientists, 37
Cognition (C), 2, 18–19, 29, 32–33,	part-taking, 79
37, 60, 72, 167, 180, 184, 202n6	of reference, 126
(see also Organizational	Competence, 91, 128–139, 148–149,
cognition (OC))	152, 154, 158–160, 175–176,
cognition-related simulation	183–184
models, 10	Composition and division (fallacy), 7
complex, 6–8	Computational and Mathematical
distribution of, 46	Organization Theory, 96
through doing, 74, 76–77	Computational organizational
embodiment proposition, 38–46	cognition, 194, 202
explorations on, 46–47	meaning of computation, 202–204
extended cognition, 52–54	rationality, 204–206
Hutchins, 51–52	Computational revival, 3
managing expectations, 50–51	cognition complex, 6–8
use of artifacts, 47–50	cognitive science, 3–4
Cognition Beyond the Brain, 60	organizational cognition, 8–9
Cognition in the Wild, 28, 34, 37, 47,	organizations as complex systems,
51-52, 57, 68	4-6
Cognitive backbone, 76–78	Computational simulation, 10, 12,
Cognitive event analysis (CEA),	62, 87–89, 92, 94, 101, 118, 176,
59-60	179, 188, 195–198, 201–202
Cognitive organization, 22	Computer science, 57
Cognitive processes, 6, 12, 35, 39, 47,	Concentration strategy, 161, 169,
42, 54, 59, 64, 124, 169, 180,	173, 174–175
183, 186, 189	Conditional cognition, 18
Cognitive psychology, 57, 64, 68	Conformity, docility vs., 104–106
Cognitive revolution, 9, 11	Content, problem of, 64
=	/ E / -

Coordination, 49–51, 60–61, 180, Distribution of cognition, 46–52, 80, 184, 186 169 Docile, 2, 12, 72-73, 78, 81, 114, 116, classic EDEC view, 180–181 SDC view, 181–183 124, 170, 174, 178 Copernican shift, 29 behaviors, 76, 79, 82, 114, 119, 123 Coping strategies, 156, 159–161 organization, 81, 83 Coronavirus, 142 Docility, 12, 72, 98–99, 101, 104, 113, Cost, 81, 113, 116, 118–119, 121, 150, 169–171, 178, 192 123, 170, 174-178 cognitive backbone, 76–78 Coupling, 54, 65, 180, 184, conformity vs., 104–106 193 - 194effect, 81, 98, 114 coupling-constitution fallacy, enabler, 100–101, 152–153 64 - 65idea, 73–74 COVID-19 pandemic, xxiii, 5, 91, operational boundaries of, 113-121 97-98, 145 passive vs. active docility, 74-76 Criticisms, 63–69 preconditions, 78–80 Cultural niches, 58, 60 public availability of information, DACM (see Dynamic adaptive Secchi and Bardone's take, 73 (cognitive) mechanisms (DAM)) setting, 78–80 Decisions, 2, 5-6, 19, 40, 72, 94, 98, Simon's take, 72–73 104, 128–129, 144, 173, 205 truth about, 110 Decision making, 18, 23, 24, 25, 27, Dynamic adaptive (cognitive) 32, 33, 74, 143, 171 mechanisms (DAM), 124, 126 Depression, 22 Dynamic capabilities, 27, 32 Description (modeling purposes), Dynamical systems theory, 62, 180 5-6, 47, 49-51, 61, 90, 92-93, Dynamics of ABM, 89–92 99–100, 116, 130–131, 149, 185, 203 E-cognition, 29, 62 Ecological cognition, 29, 62 Descriptive model, 90 Differentiation strategy, 160–161, Ecological perspectives, 61 174 - 175Ecology, 9, 12, 60 Diffusion model, 95 Economizing effect, 139 diffusion of innovation, 95–96 Ecosystem, 60 Efficiency, 144, 161, 181–184 docility, 98–99 parameters, 99–101 code, 129 procedures, 101–103 ratio, 174–175 reasoning on diffusion, 97–98 system's, 181 DIO1.0 model, 115-117, 121, 123, trade off, 144 126, 169–170, 176–178, 115, 204 Eigenvector (e), 24, 30, 32 Embedded cognition, 29, 76 Disorganization, xxiii, 128, 142–145, 146-147, 161 Embeddedness, 29, 62, 76 management, 128 Embodied, distributed, and extended Disruption, 145–146 cognition (EDEC), 58–59, 61, Distributed cognition, xix-xx, 3, 9, 67, 72, 166 $12,\,23,\,29,\,33,\,37,\,49,\,55,\,58\text{--}60,$ approach, 65, 126, 166 65, 68–69, 76–77, 180 attacks, 63

paradigms, 2, 9–10, 12, 58–59	Externalization, 77–78, 167–168
perspectives, 2, 9–10, 12, 67, 72,	Extra-role behavior, 159, 177
74, 76–78, 91, 115, 124, 161,	
165-166, 168-170, 173, 175,	Feelings of belongingness, 80
177, 179-180, 185, 187, 202-203	Fitness improvements, 123
Embodied action, 42–46	Functional effect, 144
Embodied cognition, 29, 37, 48, 52	
Embodied Mind, The, 37, 39, 57	Garbage Can Model, 10, 141
Embodiment, 12, 39, 46, 60, 62,	General Data Protection Regulation
76–77, 80	(GDPR), 145–146
Embodiment proposition, 38	Groupthink, 123, 171
cognitivism, 39–41	Guiding heuristics, 66
conditions of science fiction, 38–39	
embodied action, 42–46	Heuristics paradigm, 19
nature of mental representations,	Holism, 125–126
41 – 42	$Homo\ oeconomicus,\ 74$
opposite, 41	Human capital, 71
Emergent properties of system, 8, 92	Human cognition, 3, 7, 60, 206–207
Enacted cognition, 29, 65	Human factor, 71–72
Enactivism, 62	Human interactivity, 59–61
Enterprise, 38, 48	
Environment, xxii, 7, 39, 41–42, 47,	igraph package, 21
60-62, 66, 72-73, 77, 79, 88-91,	Illustration (modeling purposes),
99, 104, 106, 115, 118, 126,	92–93
130-132, 145-148, 151, 157,	Imitation, 96, 98, 171–172
166, 171-172, 186, 192	Implausibility clause, 63–65
Evidence-based Human Resource	Individual task performance, 154
Management, 147	Individualistic approach, 157–158
Existence of information sharing	INQ1.0.1 model, 124, 126, 131-132,
channels, 79	138, 169, 172, 175, 183–184, 204
Explanation (modeling purposes), 9,	Inquisitiveness model, 124, 126,
27, 46, 48, 92–93, 144	141–143, 169, 175–176 (see also
Extendable Rationality, xix-xx, 19,	Wild inquisitiveness)
63, 115, 206	docility, 126–127
Extended cognition (EC), 29, 37, 52,	parameters, 129–130
58-59, 64, 148-149, 152,	presence of communities, 128–129
154–155, 158, 160, 166	procedures, 130–134
active externalism, 53	sense of community, 127–128
cognitive processes, 52–53	Intelligent docile
couplings, 54	agents, 116
Extended cognitive task	individuals, 170
performance, 154	Interactivity, 58–61, 180, 184, 186
Extended mind, The, 37, 52, 62	Intersection, 18, 39, 196
Extended mind hypothesis, 62	Invoice case, 59–60
Extensions, 57–58	IOP2.1.2 model, 148–149, 153–154,
ecological perspectives, 59–61	161, 169, 173, 182–184, 200
EDEC paradigm, 58–59	IT department, 127–128

Knowledge organization, 22	theory of social organizing, 185–189
Locally estimated scatterplot smoothing (LOESS), 135–137	NK models, 88, 201
8 (1 111/), 11	Objectivity, 42–43, 52
Macro approaches, 24	OLS regression analysis, 193
Macro domains, 186	OpenABM, 13, 103n6, 130, 148n4
Management and organization	Operational boundaries of docility
research (MOR), 1, 8–11,	findings, 118–121
124-125, 141-142, 145, 185,	individual fitness enhancement,
192-201	113–114
Management theory	model, 115
standard, 142	parameters, 116–117
traditional, 144	procedures, 117–118
Managerial and organizational	before step into model, 114–115
cognition (MOC), xx-xxi, 1-3,	understanding limits, 121
8, 12, 17, 31, 34–35, 51, 68–69,	Organizational citizenship, 177
166, 186 - 187, 192 - 196, 198 - 202	behavior, 22, 125
Mathematical modeling, 88, 93, 192,	Organizational cognition (OC), xx,
201	1, 8-9, 11-13, 17-18, 34, 165,
McGregor's	192 (see also Extended
Theory X, 172	cognition (EC))
Theory Y, 172	alternative approaches to, 18–19
Mechanic decision making, 171	bibliographic coupling analysis,
Mental representations, 41–46, 53, 62	30–33
nature of, 41–42	bibliometric analysis of general
Meso domains, 126, 186–187	publishing trends in, 21
Micro domains, 186–187, 189	co-citation analysis, 25–29
Micro self-centered perspective of	cognitive strategies, 173–178
cognition, 23	computational, 202–206
Micro-meso-macro model of	docility, 167–168
organizational cognition (3M	keywords co-occurrence, 22–25
model of organizational	in literature, 19–21
cognition), 187	organizational "focus", 166–167
Mindfulness, 99, 122, 124, 169, 171	reflections on OC trends, 33–35
Monte Carlo simulations, 192	3M model of, 187
Multilevel random coefficient	types of prosocial dispositions,
models, 193	170–173
Natural-Born Cyborgs, 37, 52, 54	Organizational learning, 23–26, 28, 93
NetLogo	Organizational tools, 7
6.1, 103	Organized anarchy, 141–142
software, 115	OrgBand2.0 model, 99-100, 102-103
Neuroscience, 28, 57, 66n4, 203–204	114-115, 117, 121, 123,
New paradigm	$169-173,\ 185$
coordination, 180–183	
direction, 183–185	Passive docility, 74–76
EDEC perspectives, 179	Perceptual organization, 22

Pico-dynamics, 60	Simon's concept of docility, 113
Plasticity, 54, 142–143, 146–147, 151,	Simple model, 90
175, 192, 206	Smallest Effect Size of Interest
disorganization, 142–145	(SESOI), 155
resilience, 145–146	Social approach, 157
PLS-SEM, 193	Social beings, 124–126
Polynomial regressions, 193	Social channels, 2, 74, 113, 129
Prediction, 6, 66	Social distribution of cognition, 71
EDEC criticism 66n4	concept of docility, 72–80
modeling purposes, 92	human factor, 71–72
Prima facie, 180	operationalization of concept,
Procedural modeling, 89	80–84
Programming language, 89	Social identity theory, 27
Prosocial disposition types, 73, 168,	Social learning (modeling purposes)
170–173	92–93
Prosocial information exchanges, 168	Social network analysis (SNA), 21,
Prospect Theory, 28	24
	Social organizing, 9, 126, 180,
R software, 21	188-189
Radical embodied cognitive science	theory, 3, 13, 165, 179, 185–189,
(RECS), 62	192
Random elements, 90	Socially distributed cognition theory
Rationality, 11, 204–206	(SDC theory), 3, 9, 12, 72, 78,
Re-projecting process, 78, 84, 167	81, 83, 95, 128, 168–169, 171,
Reality, 10, 41, 42, 63n3, 67	173, 175, 177-179, 181-183,
Reductionism, 125–126	192, 203
Reductionist, 124	Socially-oriented task performance,
Relaxing assumptions	154
findings, 134–138	Space (time and), 91–92
groupthink, 114	Stability, 145–146
implications of wide sociality,	Standard management theory,
138-139	142
inquisitiveness model, 126–134	Star Trek (TV show), 37–38
social beings, 124–126	Statistical modeling, 192–193
Resilience, 143, 145–147, 161	Stochastic processes, 90–91, 192
Reverse F -test, 118, 134	Structural effect, 144
Reverse logic, 199–201	Structural elements, 176
ABM uniqueness, 201–202	Substantive modeling, 89
G 1:	Super-docility, 176
Sardinian, xxiii, 45	System Dynamics, 62, 88, 180, 197,
SARS-CoV-2, 142	201
Science, ABM for, 92–94	Systemic cognition, 58, 60–61, 69,
Scientific logic, 200	185–186
Selfishness, 72, 74	The least of the second of the
Sensemaking, 11, 18, 23–24, 26–29,	Task efficiency ratio, 158–160
33–35, 187	Task-oriented behavior, 183–184
Shared competences, 133–134	Theoretical exploration (modeling
Shock, 6, 146, 148	purposes), 92–93, 197

Theory of docile society, 82 ugly truth about docility, 110 Theory of Planned Behavior, 27, 93, zooming in on thresholds, 106–110 199 US Academy of Management (AoM), Theory-inspired approach, 18 xx-xxi, 1, 17, 34 Thinking, xxiii, 2, 51, 53, 60–61, Vendemmia, 45 67-68, 74, 124n1, 125, 171, 176,Venn diagrams, 18 186, 193, 202 VOSviewer software, 21, 22, 25 Third Agent-Based Models of Organizational Behavior Wide cognition, 65–67 Workshop (ABMO3), 143 Wide sociality, implications of, Time, 91, 105, 149, 151, 184, 194–195 138 - 139theory development, 196–197 Wild inquisitiveness, 141 timescales, 195–196 effects of plasticity, 147–148 Traditional management theory, 144 findings, 154-159 Garbage Can Model, 141 Uncertainty, 41, 46, 96, 142, 151n5, 193, 199 model, 147 organizations, 141–142 Unintelligent docile individuals, 170 parameters, 148–151 Unusual diffusion model, 95 plasticity, 142–147 configuration of parameters, 103 - 104procedures, 151–154 docility vs. conformity, 104–106 two coping strategies, 159–161 Writing, xxi, xxi, 3n1, 12, 28, 48, 63, model of diffusion, 95–103

results, 103

74, 76–77, 89, 94