INDEX

Accelerators, 17
Action design research (ADR), 259–261
Adaptive challenges, 224
Adaptive system, 222–225
Adidas, 159
  digital design transformation at, 173
Adobe Visual Trends Report, 5
Adoption, 17, 27
Aesthetics, 24–25
Agency, 256
Agile, 20
Alexander, Christopher, 82
Ambidexterity, 17
Apple Store, 23
Appreciative inquiry, 209
Architect, 86
Architecture, 5
Art and craft of making, 82
Artifact, 47
Artificial intelligence (AI), 51
Artificial neural networks (ANNs), 51
Aspirational emotions, 170–171
Assembling, 222
Attachment theory, 58
Attention, 140
Attributes, 85–86
Augmented/virtual reality (AR/VR), 15
Autonomy, 136, 140, 141, 197
Autopoiesis, 254
Availability, 140, 141

Back talk, 82
Bassett, Danielle S., 53–54
Bauhaus, 81
Beginner's mind, 20
Behavioral intent, 175
Behaviorism, 49
Bergson, Henri, 254–255
Binding, 254
Bodily functions, 53–54
Boundary crossing, 87
Boundary object, 80, 84–85
Brain imaging technique, 58
  electroencephalogram, 51
  functional magnetic resonance imaging, 50
  functional near infrared spectroscopy, 204–205
Brain-mind dialectic, 62
Brainstorming, 22–23
Bricolage, 83–84
Bruecker, Joern, 37–38
Bruner, Jerome, 202
Buchanan, Richard, 82–83
Business as usual situation, 29
Business contingencies, 36
Business Value Propositions (BVP), 42–43
Buxton, Bill, 81–82

Call to action, 232–234
Carney, Sean, 42
Catalysts, 120–121
Central executive network, 55–56
Central nervous system (CNS), 60
Champions of Innovation, 200–201
Change
  agents, 24
  new challenges for, 25–29
Change management, 23, 25, 65–66
Chief Design Officer (CDO), 42
Chief Learning Officer (CLO), 39
Choosing, 222
Citizenship, 201
Co-creation, 222
Coaching, 136
Cocreate, 256
  methodology, 108–109
  program, 42–44
Cocreation of meaning, 96–99
Cognition, 7
  embodied cognition, 60
  situated cognition, 60
Cognitive bias, 65
Cognitive boundaries, 87

Cognitive functions
bodily functions, 53–54
executive functions, 53–54
Cognitive neuroscience, 56, 68–69
Cognitive science, 49–50
Cognitive transition, 209
Cognitive user experience design, 51–52
Collaboration, 16–17, 170
Collaborative efforts, 263
Collaborative inquiry, 100–101, 103, 259–261, 263, 265
Collaborative story-making, 264
Collage, 127
Collective, 133, 189–190
challenge, 135–136
consciousness, 58–59
energy sustainable at Sorgenia, 145
experience, 137, 142, 149, 154
insights and reflections, 142, 144, 154, 158
insights on engaging, 201–202
reflection, 213, 218–219
research design, 137
shaping, 213, 220–221
Sintetica's human-centered organization, 133–135
Sorgenia's challenge, 146
Sorgenia's research design, 146–149
space, 103
Command and control, 136
Communication, 139
Communicative inquiry, 90
Community for collaboration, 98
Community of practice, 3
Competencies, 50
Complex systems or environments, 82–83
Comprehension, 140
Computational theory of mind (CTM), 49–50
Concept Design Games [Habraken], 72–73
Confidence, collaboration, creativity [three "C's"], 173
Consciousness, 58–59
Container for collaboration, 98–99
Convergence, 6–7, 192–193
Converging, 222
Corporate sponsorship, 261
Cosplays, 125, 127, 200–201
COVID-19, 32
Craft of making objects, 70–71
Creativity, 57, 140
Critical thinking, designing needs, 192–193
Critique, 22–23
Culture, 253

Data intelligence, 161–162
Data-rich design objects trigger imagination, 191–192
Deep ecology, 223
Democracy, 93–94
Design, 38, 45–46, 81–82, 99, 208, 253–257
call to action, 232–234
community, 173
dialog, 79–80, 87, 91
dialogical engagement, 208–211
D^2T narrative, 229–232
as Ecotone, 79–80
games, 72–73
ideals as adaptive system, 222–225
as making, 68, 74, 126, 228–229, 253
methods movement, 21–22, 69
model and framework, 207–208
objects, 80, 84
pragmatism, 207
science, 6
squiggle, 73
thinking, 17, 20–22, 68–70, 187–188, 193
tools, 189
typologies, 71
work, 83–84
*Design as Dialog*ue, 211
Design Council, 232–233
Design Fiction, 260
Design Thinking Awareness Session, 120, 130–131
Design Thinking Coach Certification Program, 120
Design your life, 28
Design-Driven Dialogue, 207–208, 211, 222–223
Design-driven transformation [D^2T], 6–7, 207–208, 225, 229, 232
Design#Business, 38–39
Designer, 70

Designerly activities, 150–152
Designerly acts, 69–70
Designing, 69
Dewey, John, 200–201
Diagnostic OD mindset, 235–236
Dialogic OD, 210–211, 224–225, 261
Dialogical engagement, 208–211
Digital Acceleration Team (DAT), 38
Digital Days, 37, 39
Digital design
  process, 178–179
  transformation at Adidas, 173
Digital transformation, 1, 25–26, 203, 205
Digital Transformation Platform (DTP), 43
Digitalization, 14, 16
Direction, alignment, and commitment (DAC), 75
Direction, 128
Disrupted innovation, 14–17
Distributed (or decentralised) autonomous organisations (DAO), 261
Divergence, 50
Diversity, 114
Double Diamond, 232–233
Double-loop learning, 209
Drivers, 245
Dschool, 83–84
Duffy, Frank, 82
Dyads, 204–205
Dynamic capabilities, 99

Early adopters, 15–16
Ecole des Beaux-Arts, 261
Ecology, 66, 223
Ecotone
  cocreation of meaning, 96–99
  framing meaning, 92–96
  ideals' action research model, 99–103
  images, 91–92
  innovation, design, and leadership as, 79–80
  language and design dialog, 87–91
  meaning of type, 84–87
  object in design, 80–84
Eight-step change model, 26
Electroencephalogram (EEG), 51
  hyperscanning, 57–58
Elicitation, 178
Eliciting, 217
Embodied cognition, 93
Embodiment, 51–52
Emergence, 16–17
Emotional engagement, 140, 175
Empathy, 22, 57–58, 128
Energy sustainable at Sorgenia, 145
Engagement, 2, 27, 77–78, 167–168, 178, 198–199
  images, 198
  statements, 198
Enterprise venture management, 41
Entrepreneur, 21
Environment as mold, 83–84
Ethics, 140
Equitable Enterprises, 252
European Entrepreneurship Competence Framework (EntreComp), 21
Executive functions, 53–54
"Expert consulting" model, 261
Expertise, 15–16
Explicit knowledge, 127
Exploration and exploitation, 66
Externalization process, 127

Features, 90
Feedback, 15–16
Feel-good neuromodulators, 60–61
Ford, Henry, 24
Forecasting, 257
Foresight, 245
Form, 3
Forrester Research, 1
Frames, 92
Framework for Innovation, 232–233
Framing, 80
  meaning, 92–96
Frankl, Viktor, 62
Freedom Tower in New York City, 86–87
Friction, 114
Fuentes, Agustin, 65
Fuller, R. B., 240
Full Spectrum Thinking, 240
Functional magnetic resonance imaging (fMRI), 50
Functional near-infrared spectroscopy, 204–205

Functional plasticity, 59–60
Futures
  self, 78
  studies, 245
  thinking, 245
Futurology. *See* Futures studies

Gehry, Frank, 72
Generative images, 94–95, 208
Generative metaphor, 127
Gifts, 96–98
Github, 75–76
Goodman, Nelson, 91
Google Sprints, 20
Growth mindset, 59–60
Guggenheim Effect, 72

Happiness, 130
Hashtags, 192
Headquarters (HQ), 175
Healthcare practitioner, 230–231
Healthy maternity, 111, 116–117
Homeostasis, 61
Homo economicus (economic man), 252
Homo Faber, 254
Human capital, 21
Human consciousness, 58–59
Human-centered innovation, 39
Human-centered organization (HCO), 133, 135–136, 140, 141, 201
  vision, 142
Human-centric design, 21–22
  with humans designing objects, 65
Human-centric stories, 141–142

Ideals, 2–4, 8–9, 184, 257, 261
  action research model, 99–103
  as adaptive system, 222–225
  design, 253–257
  experiment, 111–114
  futures of, 235, 243, 245
  iterating, 204–205
  journey, 187–188
  movement, 264–265
  navigating transformation in digital era, 235–236
  Nestl′e's journey across ideals, 36–41
  new perspectives for, 63–66
  Philips' journey across ideals, 41–44
  research mandate, 46–47
  scenario, 35–36
  search for meaning, 240–244
  See systems, 246–253
  spectrums, 236–239
  transformation in digital era, 44–46
Identity, 6, 122
IKEA effect, 65, 80–81, 211
Images. *See also* Brain imaging technique, 91–92
  enhancement, 195
  negation, 195–196
Imagination, 57
Imagining, 70
Incubators, 17
Incumbent process-centric perspectives, 3
Individuals, 107, 189–190
  challenge, 109, 111, 120–121
  experiments, 114, 117, 125, 131
  innovation champions at Nestlé, 118–120
  insights and reflections, 117–118, 131–132
  insights on engaging, 200–201
  reflection, 213, 216
  research experience design, 111, 114, 121–122
  shaping, 213, 217–218
  space, 103
  strengthening shared care team with Philips design, 107–109
Industries, 26
Infinite cortex, 58–59
Informative learning, 209
"InGenius", 37
Initial image proposal, 195
Innovation, 1, 20, 23, 37, 134–135, 145, 262
  catalysts, 17–18
  champions at Nestlé, 118–120
  change management, 23–25
  design thinking, 17–20
  disrupted, 14–17
  ecosystem, 119
  as Ecotone, 79–80
  leaders, 3
  as meaning, 66, 68, 228, 253
  new challenges for change, 25–29

as service, 119
theories and methods, 2, 4
thinking, 126
tools, 119
transformative, 13
Innovation Academy, 40, 119–120
Innovation methodologies (IM), 37–38, 119
Innovator
new dilemma, 31–34
new scenario, 29–31
Institute for Entrepreneurship, Technology Management, and Innovation (EnTechnon), 259–260
Institute For The Future, 58–59
Integrated value proposition (IVP), 42–43
Intelligence, 254–255
Inter-brain synchrony, 57–58
Intrapreneurs, 229
iPhone, 66–67
Iteration, 6

Johnson, Ron, 23
Joint enterprise, 76

Keywords, 125
Knowledge, 136
acquisition, 128–130
Kurzweil, Ray, 92

Language, 87–91
Leadership, 39, 46
being, 126
as community, 229, 253
as Ecotone, 79–80
as making shared meaning, 74–77
Lean Startup, 20
Learning, 216
by designing, 209
learning-by-doing, 119–120
Lévi-Strauss, C., 218
Lewin, Kurt, 26
Lewin's approach, 26–27
Libeskind, Daniel, 86–87
Limbic friction, 60–61
Liquefied natural gas (LNG), 159–160
Long-term potentiation, 59–60
Luisi, Pier Luigi, 223

Malafouris, Lambros, 62
Mandela, Nelson, 62
Manzini, Ezio, 16
Marzano, Stefano, 42
Maslow, Abraham, 127
Massively multiplayer online games (MMO games), 263
Material Engagement Theory (MET), 253–255
Material objects, 82–83
Me and Stolt, 167
Meaning. *See also* Learning, 67
meaning-making, 68
search for, 239–243
of type, 84–87
Meaningfulness, 198–199
Memphis movement, 69
Mental models, 92
Merit, 140
Metaphor, 93
Mind as machine, 49, 63–64
Mirror neurons, 57–58
Modus cognitionis, 261
Modus operationalis, 260
Modus transformationis, 261
Moment of meaning, 55
Mondragon Corporation, 252
Mood boards, 195
Morality, 58
Motivation, 26
Mutual understanding, 87

Narrative, 202
Near-infrared spectroscopy, 57–58
Negation, 195–196
Nest, 66–67
Nestlé
innovation champions at, 118–120
journey across ideals, 36–41
Network
complexity and technologies, 251
neuroscience, 53
science, 251
Networked organization, 252
Neuro-Revolution, 51
Neuroarchaeology, 255
Neurochemicals, 53–54
Neurocognitive Model of Emotional Contagion (NMEC), 57–58
NeuroDesign, 51–52

Neuroimaging techniques, 204–205
Neuroleadership, 51–52
Neurological engagement, 67
Neurological networks, 53–54
Neuromodulators, 60–61
Neuronal clusters, 54, 58
Neuronal ensembles, 54
Neuronal network, 54, 236–237
Neurons, 53–54
Neuroplasticity, 5, 59, 62, 209
Neuropragmatics, 88–90
Neuroscience, 49
  design as making, 68–74
  engagement, 77–78
  history, 49–51
  innovation as meaning, 66–68
  insights on engagement, 63
  leadership as making shared meaning, 74–77
  neuroplasticity, 59–62
  new perspectives for ideals, 63–66
  perspectives, 64
  reframing brain, 53–59
  signals of revolution, 51–53
  subspecialties, 66
Neuroscience, 204–205
Neurotransmitters, 53–54
Niche construction, 255
Nudges, 52

Objects, 197
  in design, 80–84
  of digital world, 91–92
Obstetrician-gynecologists (OB-GYN), 109–110
Oldowan toolmaking, 89
Operant conditioning, 49
Operating system, 70–71
Organisation for Economic Co-operation and Development (OECD), 245
Organizational citizenship behavior (OCB), 139
Organizational development (OD), 210–211
Organizational leaders, 17
Organizational models, 251
Organizational transformation, 192–193
Ownership, 73–74

Parasympathetic nervous system (PNS), 61
Parfit, 78
Participatory design, 85
Pasmore, Bill, 28–29
Passion, 135–136, 140
Passport, 125, 128
Patterns, 92
Perception, 49
Peripheral nervous system (PNS), 60
Personal care product (PCP), 13
Phantom pain, 229
Phase-gate model, 20
Philips
  journey across ideals, 41–44
  Philips Experience Design, 108–112
  strengthening shared care team with Philips design, 107–109
Philips, Royal, 107–108
Philosophical Investigations [Wittgenstein], 72–73, 88, 90
Pierce, Charles, 253–254
Pitches, 22
Polak, Fred, 91
Poll Everywhere™ online survey tool, 166
Porter, William, 87–88
Positive attitudes, 203
Post-amputation phenomenon, 229
Post-it®, 193
Pragmatism, 207
Pre-seed accelerator, 42
Precedents, 81–82
Preferred futures, 235–236
Primitive Hut, The, 85–86
Problem space, 83–84
Problem-solving, 21–22
Process, 128
  consulting, 261
  maps, 84
Processing, 50
Project Springboard, 159, 161–162, 168, 170, 208, 220–221
Prototyping, 22
Purpose, 244

Radical circle, 73–74
Rajon, Bertrand, 39–40
Reflective conversation, 90
Reflective Practitioner, 208–209
Regenerative culture, 32
Regional networks, 55, 236–237

Relativism, 2–3
Representations, 45–46, 68
Research and Development (R&D), 15
  manager, 18
  spending, 15
Research experience design, 111, 114, 121–122
Research reflections
  ideals journey, 187–188
  insights on engaging collective, 201–202
  insights on engaging for transformation, 202–203
  insights on engaging individual, 200–201
  iterating ideals, 204–205
  research patterns and signals, 189–199
  socio-technical experiments, 188–189
Research through design (RTD), 260
"Research–design–validate" process, 118
Resilience, 241
Resource paradigm, 20
Resource-based view (RBV), 21
Respect, 140
Responsibilities, 140, 141
Restorative culture, 3
Return on investment (ROI), 15

Scaffold, 230
Scenery, 82
Schein's model, 261
Schemata, 92, 209
Schön, Donald, 82–83
Science of design, 69
Science of Storytelling, The, 246, 247
Science of the Artificial, The, 50, 80–81
See systems, 246–253
Self, 64–65
  loss of self, 125
  self consciousness, 60
  self-actualization, 98, 241
  self-dose dopamine, 62
  self-motivation, 127
  self-organization, 210–211
Sense of belonging, 140
Sense-making, 67, 80
Sentiment analysis, 170, 199
Services, 82
Set, 82
Shallow ecology, 223
Shape-shifting organizations, 251
Shared
  language, 25
  meaning, 2, 74, 252, 264
  representations, 99
  space, 87
  vision, 71
Shared Care Team, 109–111, 114, 116–117, 200
Sharing, 145
Shearing layers, 82
Shell, 82
Shrek models, 81–82
Sidewalk Labs, 72
Signals, 245
Signatures of learning, 61–62
Signatures of meaning, 61–62
Silicon Valley Innovation Outpost (SVIO), 37
Simon, Herbert, 49
Simulation, 203
Sintetica, 133
  cultivating collective at, 134
  human-centered organization, 133–135
Sketches, 228
Sketching, 51–52
Skills, 136
Skinner, B. F., 49
Small worlds, 55–56
Smarter shipping, 161–162
Smile, 140
Smiling, 136
Social
  autopoiesis, 254
  glue, 58–59
  network, 57
  neuroscience, 58
  synapse, 54, 58, 236–237
  synchrony, 58–59
Social and Solidarity Economy (SSE), 252
Social, technological, economic, environmental, and political trends (STEEP trends), 245
Socio-technical experiments, 188–189
Sorgenia, 133
  challenge, 146
  energy sustainable at, 145

experiment to engage employees around Sorgenia's new direction, 149–154
research design, 146–149
Sottass, Ettore, 69
Spectrums, 236–239
of value, 239
Spirograph™, 215–216
Square of Opposition, 195–196
Stolt and the market, 167–168
Stolt Tank Containers, 161
Stolt Tankers, 159, 161
Project Springboard, 159–161
Stolt-Nielsen Limited (SNL), 159–161
Stolt-Nielsen portfolio, 159–160
Stolthaven Terminals, 161
Story-making, 202
encourages synchronization, 194
Storytelling, 200–201
Strategic design, 247
Strategic foresight, 245
Strategy, 245
Sustainability, 145
Sustainable Development Goals (SDGs), 247
Swiss manufacturing sites, 133–134
Sympathetic nervous system (SNS), 61
Synapses, 54
Synaptic strength, 59–60
Synchronization, 58
Systems View of Life, *The*, 223

Tacit knowledge, 122
Talking, 222
Tangibility, 15
Theory U [Scharmer], 26–27
Things, 80–81
Threats, 167
Three Horizons Framework, 33
Thriving reef, 79
Tipping point, 27–28
Toolmaker's Paradigm [Reddy], 96, 98–99
Traditional change management approach, 24
Traditional engagement metrics, 190
Transformation, 31, 34, 103, 159, 189–191
challenge, 161–162, 173–174
digital design transformation at Adidas, 173
in digital era, 44–46
experience, 165, 169, 175, 180
insights and reflections, 169, 172, 180, 184
insights on engaging, 202–203
research design, 162, 165, 174–175
Stolt Tankers' project springboard, 159–161
Transformational change, 225
Transformative innovation, 3, 13–14, 265
Transformative learning, 209
Transition design, 248
Transparent information, 136
Triple bottom line, 32
Tripod ontology, 75
Trust, 65–66, 136
Type theory, 85–86

Understanding, 141
United Nations (UN), 247
University of Ghana, 39
User-centric design, 21–22

Value, 140
creation, 252
Verela, Francisco, 223
Virtual reality (VR), 229
for homecare, 229–232
Vision
boards, 195
diagrams, 84
Volatile, uncertain, complex and ambiguous (VUCA), 8–9
Voting, 193–194
Vulnerable women, 107

Wahl, Daniel Christian, 3
Warm-up, 166
Wicked problems, 225
Wittgenstein, Ludwig, 72–73
Word clouds, 127
Words and images, 82–83
World System Mandala, 247
World-building, 246

Xbox, 66–67