

Index

- ADHD. *See* attention deficit hyperactivity disorder
- air, 28–30, 94
- alcoholism, 221
- allotrope, 105
- alpha particle, 170
- Alzheimer’s disease, 1, 143–144, 221
- American Psychiatric Association, 189
- ammonia, 101
- amoeba, 217
- amphibian, 70
- analogy (biological), 132–133, 136
- ancestry, 45
 - common ancestor, 45, 51, 131, 136
- Andreasen, Robin, 236
- ant, 217
- antineutrino, 1, 25
- antiproton, 25
- aquatic animal, 61–62, 64, 214
- argon, 29, 106
- Aristotle, 35, 124
- Armstrong, David, 5–12, 17, 39, 209
- arthropod, 133
- artifact, 1, 5, 142
- artificial selection, 137, 147–149
- atmosphere, 30
- atom, 26, 84, 114, 121, 136, 166–167, 170, 172, 213, 220, 228
 - atomic nucleus, 25, 38, 70, 96, 106, 114–115, 117, 122, 136, 139, 170–171, 220
 - atomic number, 13, 114–115, 117, 122, 141, 166, 168, 205
- attention deficit hyperactivity disorder (ADHD), 1, 188–199, 216, 225
 - ADHD-HI (hyperactivity-impulsivity), 190, 193, 195, 197–199, 215
 - ADHD-I (inattention), 190, 193
- bachelor, 22
- Bacon, Francis, 222
- bacteria, 113
- Ball, Philip, 139
- Bambrough, Renford, 18
- Barker, Matthew, 73
- Barkley, Russell, 192
- Batterman, Robert, 92
- bee, 132, 138
- belief revision, 15
- Benditt, Theodore, 186
- benzene, 128
- beryllium
 - beryllium-8, 70, 115, 171
- beta-minus decay, 24, 70, 115, 167, 171
- Bialystok, Ellen, 144
- big bang, 105, 134, 139
- bilingualism, 144
- biochemistry, 82, 177, 220
- biology, 4, 21, 57, 70, 74, 77, 82, 84, 125–129, 138, 158, 165–166, 189, 199–200, 207, 226–227
 - biological systematics, 75
 - biological taxon, 131
 - biological taxonomy, 26, 45, 130
 - developmental biology, 70
 - marine biology, 63
 - microbiology, 177
- bird, 131, 133, 138
- Bird, Alexander, 132–133
- black hole, 105–106
- Block, Ned, 38
- Bogen, James, 147
- Boltzmann’s constant, 85
- boson, 39, 83, 228
- Boyd, Richard, 72–73, 76–78, 80, 123, 143, 183, 200, 221
- brain state, 40
- bridge principle, 92
- Brigandt, Ingo, 43, 73
- bug, 28
- butyric acid, 217
- cancer, 181–188
 - cancer cell, 1, 181–188, 229
 - lung cancer, 187–188

Cambridge University Press

978-1-107-52172-8 - Natural Categories and Human Kinds: Classification in the Natural and Social Sciences

Muhammad Ali Khalidi

Index

[More information](#)

242

Index

- carbon, 171
- carbon dioxide, 182
- Cargile, James, 209
- Carlson, Stephanie, 192
- Cartwright, Nancy, 105
- cat, 132
- category, 5, 227
 - aesthetic category, 63
 - artificial category, 196
 - common-sense category, 58
 - crosscutting category, 72, 115, 118, 122
 - disjunctive category, 91, 110, 191–192, 194, 203
 - evaluative category, 160, 194
 - folk category, 56–64
 - monothetic category, 184
 - normative category, 159, 194
 - polythetic category, 180, 184
 - projectible category, 62, 202, 214
 - scientific category, 11, 43, 46, 49, 55–56, 58–60, 72, 159, 197, 217, 219, 222–223
 - social category, 162–163, 197, 224
- cation, 70, 72, 167
- causation, 4, 40, 80, 92–93, 95–98, 123–124, 157, 162, 169, 198, 203–204, 208–215
 - causal closure, 96
 - causal criterion of reality, 209
 - causal epiphenomenalism, 40
 - causal exclusion argument, 95, 97, 208
 - causal exclusion principle, 96–98
 - causal history, 130–136
 - causal mechanism, 73–74, 77, 80, 141, 192
 - causal network, 174–176, 199–200, 203, 207, 212, 214, 228–229
 - causal overdetermination, 40, 96
 - causal pattern, 92, 111, 121, 123, 129, 134–135, 149, 156–158, 160, 165, 174, 176, 188, 195, 203, 210–211, 216, 218–219, 222, 227
 - causal power, 8, 17, 93, 96, 112, 133–135, 137, 195, 209
 - causal priority, 99, 204–205, 207
 - causal process, 77, 94, 100, 106, 108, 113–114, 120–121, 124, 127–128, 131, 139–141, 156–158, 164–165, 167, 176–177, 179–181, 184, 186, 198, 200, 207, 209, 219–222
 - causal relation, 39–40, 73, 78–81, 90, 92, 95, 98–99, 104, 107, 109–112, 117, 121–122, 124, 156–157, 164–165, 176, 199–200, 203–204, 207–213, 222
 - interventionist account of causation, 97, 204, 208
 - mental causation, 40, 96
 - simple causal theory, 78, 80, 82–83, 99, 124, 166, 201, 203, 211–212
 - special-science causation, 40
- cell, 177–178, 180, 182–188, 226
- ceteris paribus* clause, 104, 107–108, 173, 212
- Chakravartty, Anjan, 14, 42, 228
- charge (electric), 8, 10, 20, 23, 31, 70
- Chemero, Anthony, 217
- chemistry, 4, 20, 57, 74, 82–83, 118, 121, 138, 166, 171, 227
 - chemical bond, 93, 106, 128, 170, 172, 206, 212
 - chemical compound, 29, 37, 67, 108, 117, 138, 140, 149, 228–229
 - chemical element, 13, 21, 26, 37, 138–139, 141, 166, 169, 205
 - chemical formula, 26–27, 90, 94
 - chemical reaction, 121, 138, 167–168, 212
 - chemical substance, 1, 27, 29–30, 94, 138, 173, 196
 - chemical theory, 27
 - ecological chemistry, 82
 - organic chemistry, 82
- child abuse, 1, 159, 161–163, 195, 215–216, 221
- child television viewer, 145–146
- Clark, Andy, 217–218
- classification, 200
 - biological classification, 61
 - classification of isotopes, 70
 - crosscutting classification, 136, 179
 - folk classification, 56, 60–61, 63
 - natural vs. artificial classification (Mill), 48–49
 - ordinary language classification, 56
 - phylogenetic classification system, 179–180
 - scientific classification, 48, 58, 60–61, 63, 70
- climate change, 225
- cocktail party, 152–155
- cognitive science, 125, 134, 192
- concept, 202, 224
 - kind-concept, 15
 - scientific concept, 15, 45, 59
- conjunction, 10
 - conjunction of universals, 9–11
- consumption, 59, 64
- convention, 154, 157, 208
- Cooper, Rachel, 149, 191
- copying process, 136–142, 205
- corrigibility, 43, 199, 211
- cosmic microwave background radiation (CMBR), 134, 217
- cosmology, 134
- Craik, Fergus, 144
- Craver, Carl, 76, 78, 80, 123, 199, 201
- Crawford, Dorothy, 177, 181
- Cronbach, Lee, 203
- crosscutting, 70, 116, 199, 228
 - crosscutting system, 70, 120, 122, 170, 176, 180
 - crosscutting taxonomy, 119

Cambridge University Press

978-1-107-52172-8 - Natural Categories and Human Kinds: Classification in the Natural and Social Sciences

Muhammad Ali Khalidi

Index

[More information](#)

Index

243

- Dennett, Daniel, 121, 123, 210
 deoxyribonucleic acid. *See* DNA
 Devitt, Michael, 143, 149
Diagnostic and Statistical Manual of Mental Disorders, 189–194
 discoverability by science, 13–14, 41–42, 44–55, 59, 80, 82
 disease, 59, 181, 185–186
 disjunction, 17–18, 33, 203
 disjunction of kinds, 87
 disjunction of laws, 87
 DNA, 1, 37, 138–139, 149, 171–172, 177–179, 182–183
 dsDNA (double-stranded DNA), 178
 ssDNA (single-stranded DNA), 178
 dog (*Canis familiaris*), 147–149, 213, 221
 domain, 122, 129, 166, 199, 203, 210, 214, 219, 228–229. *See also* science, scientific domain
 domains contrasted with levels, 121, 220
 Donnellan, Keith, 28
 Douglas, Mary, 147
 DSM. *See* *Diagnostic and Statistical Manual of Mental Disorders*
 Dupré, John, 56, 60–64, 72, 125, 219

 ecological niche, 180, 218
 economics, 102
 economic market, 103, 155
 Elder, Crawford, 97, 137
 election, 151
 electromagnetic radiation, 132, 134
 electron, 24, 31, 36, 38–39, 70, 72, 101, 106, 115, 136, 167, 171
 electron emission, 70
 electron orbital, 122, 220
 elementary particle, 1, 24–25, 37–40, 82, 84, 113, 117, 138, 211, 228–230
 Ellis, Brian, 9, 12, 21, 37
 emotion, 158–160
 engine oil, 94
 enzyme, 139
 epidemiology, 188
 epistemology, 4, 65, 216
 epistemic interest, 71, 225
 epistemic objectivity, 150–151
 epistemic purpose, 63–64, 124, 162–164, 202, 216, 222
 epistemic subjectivity, 150
 equilibrium, 80, 200
 Ereshefsky, Marc, 75, 77, 125, 180
 essence, 12–14, 34–35, 47, 71, 76
 extrinsic essence, 36
 nominal essence, 47
 real essence, 13, 48, 55

 essentialism, 12–15, 17, 21, 24, 31, 34–35, 37, 41–43, 47, 71–72, 76, 158, 175, 201–202, 215
 “counter-essential” statements, 24
 Aristotelian essentialism, 35
 folk essentialism, 76
 microphysical essentialism, 40
 origin essentialism, 34
 ethylene, 172
 etiology, 130–137, 162, 180. *See also* causation, causal history
 Euthyphro problem, 79
 evolution, 141, 147, 159, 180, 218. *See also* natural selection
 convergent evolution, 131–132, 138, 140
 evolutionary theory, 45, 67, 130, 132, 226
 executive function, 192–194, 198
 explanation, 54, 78, 92, 95, 98, 159, 197–198
 causal explanation, 92, 95, 97
 explanatory efficacy, 62, 163
 explanatory unification, 91, 109, 111
 scientific explanation, 91–92, 95
 externalism (mental), 119
 eye, 132–133, 135, 138

 family (phylogenetic taxon), 6, 131
 FAO. *See* Food and Agricultural Organization of the United Nations
 Faraone, Stephen, 198
 father, 24
 Fay, Brian, 163–164
 fermion, 36
 financial interest, 196–197, 216
 fish, 60–64
 aquarium fish, 64, 214
 fluid, 84, 90–91, 94, 109–111, 113, 118.
 See also Newtonian fluid
 fluid diffusion, 84–85, 89, 100, 110–111, 113–114, 118
 fluid flow, 84–87, 89, 100, 106, 108–109, 111, 113, 118, 128, 173, 212
 fluid mechanics, 84–121, 128
 Fodor, Jerry, 84, 123
 folk, 60–62, 64
 Food and Agricultural Organization of the United Nations, 62
 Foucault, Michel, 225
 fox
 gray fox, 131
 red fox, 131
 Frankfurt school, 164
 Franklin, C. L., 67
 Franklin, F., 67
 Freedman, Morris, 144
 function, 139, 141, 186
 normal function, 184, 186, 188

Cambridge University Press

978-1-107-52172-8 - Natural Categories and Human Kinds: Classification in the Natural and Social Sciences

Muhammad Ali Khalidi

Index

[More information](#)

244

Index

fundamental particle. *See* elementary particle
 Furman, Lydia Mary, 197

Garson, Justin, 134

gas, 84–87, 89–90, 99–100, 102, 106, 109, 128, 138, 198

gaseous phase, 113, 173–174

noble gas, 106

gender, 226

gene, 57, 109, 177, 182

genetic material, 177–179

genetic mutation, 75, 77, 113, 181–188

genetics, 226

genome, 178

oncogene, 187

population genetics, 111–112

generalization

basic-science generalization, 104–105

causal generalization, 156, 163, 178, 212

empirical generalization, 54, 100, 108,

110, 112, 123, 126, 134, 138, 140, 161,

179, 229

inductive generalization, 72

special-science generalization, 92, 99–101,

103–108

genome, 187

genotype, 73, 132, 136, 180, 182

genus, 6, 131

geology, 82, 133

giraffe, 217

gold, 28, 47, 89

Goldstein, Sam, 192–194, 199

Goodman, Nelson, 3, 14, 202

government, 221

Graham, Janice, 162

Gratzer, Walter, 173

Greene, Brian, 24

Griffiths, Paul, 34, 43, 76, 157–162

Grosberg, Alexander, 173

Guala, Francisco, 154

Gutting, Gary, 225

H₂O. *See* water

Hacking, Ian, 3, 52, 144–149, 152, 155–156, 159, 161–164, 214–215, 224

hadron, 25, 35, 39

Hamilton, W. D., 109

Hanahan, Douglas, 181–183

Haslam, Nick, 69

Haslanger, Sally, 147, 164, 226

Hawking, Stephen, 24

Heil, John, 7–8, 37–38

helium, 29, 106

helium-3, 139

helium-4, 139

helium-8, 70, 115, 171

Hendry, Robin, 67, 119, 206

Hey, Jody, 130

hierarchy thesis, 69–72. *See also* mutual exclusivity thesis

Hitchcock, Christopher, 101

homeostasis, 73, 77, 139, 184, 200

homeostatic mechanism, 73, 75–76, 78

homeostatic property cluster account, 72–79, 123, 183

imperfect homeostasis, 73

homology, 1, 131–133, 136

Horgan, Terry, 98

Hull, David, 21

human being, 1, 24, 34, 142, 144, 148, 152, 160,

164, 186, 189, 197, 219, 221, 223–224

human genome, 187

human mind, 142, 144, 147, 152, 156, 165, 221, 227–228

Hume, David, 209

hydrogen, 9, 24, 213

hypertension, 221, 223

hysteria, 1, 59, 64, 214

ichthyology, 63

ICTV. *See* virus, International Committee on Taxonomy of Viruses

imago, 77

induction, 58, 78

inductive inference, 14–15, 173, 204

innate quality space, 58

insect, 70, 72, 109

intentionality, 84, 139

intrinsicity, 12, 31–36. *See also* property, intrinsic property

iridium, 25

isobar, 70, 115, 171

isomer, 67, 108, 117, 206

isotope, 70, 139, 141, 167–168, 205, 229

jade, 87, 89–91

jadeite. *See* jade

Karbasizadeh, Amir Eshan, 105

Kendler, Kenneth, 199

Keynes, John Maynard, 21

Khalidi, Muhammad Ali, 25, 46, 59, 70–71, 120, 146–147

Khokhlov, Alexei, 173

Kim, Jaegwon, 31, 84, 87, 90, 92–93, 95–98, 119, 126, 129, 208–209, 211

Kincaid, Harold, 107

kind, 5–7, 11, 227

artifactual kind, 5, 136, 142

Cambridge University Press

978-1-107-52172-8 - Natural Categories and Human Kinds: Classification in the Natural and Social Sciences

Muhammad Ali Khalidi

Index

[More information](#)

Index

245

- artificial kind, 1, 5
- basic-science kind, 83, 120
- biological kind, 77, 125–142, 148, 150, 157, 164, 180, 186, 195, 227
- causal kind, 135–137, 154
- chemical kind, 138–141, 171
- cluster kind, 16, 22–23, 63, 65–66, 73–74, 184, 205, 228
- cluster theory of kinds, 16
- coextensive kinds, 11
- common-sense kind, 58
- conventional kind, 152–157
- copied kind, 136–142, 148, 165, 205
- crosscutting kind, 69–72, 115, 117, 176, 220
- definable kind, 16
- designed kind, 129
- discrete kind, 65
- disjunctive kind, 17–18, 89, 128, 169, 203
- epistemic kind, 43, 65, 78, 117
- essence kind, 227
- eternal kind, 136–141, 205
- etiological kind, 130–138, 165, 180, 186, 188, 200
- evaluative kind, 158–164
- focal member, 66, 69, 170, 176, 223
- functional kind, 87, 128, 171, 187, 200
- fuzzy kind, 65–69, 108, 170, 175, 177, 188, 192, 206, 214, 223–224
- gerrymandered kind, 55
- graded membership, 19, 66, 169–170, 177, 223
- historical kind, 136–137, 148. *See also* kind, copied kind
- homeostatic property cluster kind, 74
- human kind, 64, 125, 147–148, 157, 165, 195
- institutional kind, 152–157
- interactive kind, 145–150, 152, 155–156, 165
- investigative kind, 43, 158–159
- kind-concept, 15–16, 52, 224
- kind membership, 7, 19–22, 66, 99, 174–175, 200
- marginal member, 66, 169
- mental kind, 221
- microlevel kind, 37
- microphysical kind, 39
- microstructural kind, 87
- microstructural kind, 20
- mind-dependent kind, 143, 150–151, 155–156, 165, 222
- monothetic kind, 16–17, 19–20, 63, 167, 177, 205
- multiply realizable kind, 88, 128
- neural kind, 120, 197, 221
- nominal kind, 5
- non-natural kind, 5, 10, 12, 20, 24, 29–31, 42, 51
- normative kind. *See* kind, evaluative kind
- polythetic kind, 16–21, 51, 63, 65–66, 73–74, 169, 184, 205
- projectible kind, 18–19, 156–157, 160, 222
- psychiatric kind, 192, 197, 199, 221
- psychological kind, 120, 143, 192, 195, 221
- real kind, 3, 5, 24, 26, 30, 49–50, 60
- scientific kind, 24, 43, 45, 58, 71, 79–80
- selected kind, 129
- social kind, 125, 129–130, 140–165, 195, 221, 224–227
- socially constructed kind, 224
- sociological kind, 227
- special-science kind, 40, 83–84, 86, 88–93, 120, 123, 126, 129, 132–133, 138, 165
- stellar kind, 116
- stipulative kind, 52
- structural kind, 200
- weighted cluster kind, 65–66, 74
- weighted cluster theory, 19
- Kistler, Max, 123, 209
- Kitcher, Philip, 91, 202, 218, 220, 226
- Kornblith, Hilary, 14, 123, 228
- Kripke, Saul, 26
- Ladyman, James, 38, 102, 121, 123, 210–212, 219
- Langton, Rae, 33
- language, 5
 - natural language, 1, 58
 - philosophy of language, 28
- LaPorte, Joseph, 26, 34, 60
- larva, 1, 70, 72, 77, 207
- law
 - basic-science law, 101, 105, 107
 - causal law, 128–129, 156, 173, 212
 - exceptionless law, 101, 106
 - Fick's first law of diffusion, 85, 87, 91, 99, 109–110
 - Galileo's law, 105
 - law of mass–energy conservation, 105
 - law of nature, 4, 8, 33, 36–37, 39–40, 54, 87, 90, 99–109, 112, 123, 126, 136, 138, 140–142, 158, 205, 207, 213, 229
 - law of physics, 108
 - Mendel's law, 105
 - Navier–Stokes equation, 89, 128
 - nomological necessity, 101
 - phenomenological law, 100
 - qualitative law, 100
 - quantitative law, 100
 - Schrödinger equation, 107
 - second law of thermodynamics, 105, 107
 - special-science law, 88, 92, 140
- lepton, 25, 39, 82, 228
- level, 112, 114, 118, 120–121, 169, 208, 211, 220
- level of explanation, 105, 112

Cambridge University Press

978-1-107-52172-8 - Natural Categories and Human Kinds: Classification in the Natural and Social Sciences

Muhammad Ali Khalidi

Index

[More information](#)

246

Index

- level (cont.)
 - level of reality, 112, 203
 - levels contrasted with domains, 122
 - ultimate level of reality, 38–39, 96, 106
- Lewis, David, 7, 9, 32–33, 38, 86, 214
- Linnaeus, 48–49
- liquid, 84–87, 89–91, 99, 103–104, 109, 128, 198, 212
- List, Christian, 97
- lithium, 13–14, 70–71, 114–115, 166–171, 176, 188, 212–213, 229
 - lithium isotopes, 167–169
 - lithium oxide, 72
 - lithium-6, 70, 114, 167–169
 - lithium-7, 70, 114, 136, 138, 167–169
 - lithium-8, 114, 171
- Locke, John, 47–48, 54–55, 204, 218
- Longino, Helen, 197
- looping effect (Hacking), 145–150
- López-García, Purificación, 180
- Lowe, E. J., 7
- macaque monkey, 125
- magnesium
 - magnesium oxide, 72
- Mallon, Ron, 150
- Mandik, Peter, 217–218
- Marras, Ausonio, 97
- marriage, 151, 221
- mass, 8, 20
- mass number, 114, 122, 167–168, 170, 205
- Matthen, Mohan, 77
- mechanism, 77–78
 - copying mechanism, 140
 - homeostatic mechanism in biology, 76
- Medawar, Peter, 177
- medicine, 158, 181, 186, 189, 223
- Meehl, Paul, 203
- Mellor, D. H., 28
- melting point, 169, 212
- mental state, 40, 119, 122, 143, 223
- Menzies, Peter, 97
- metal, 167
- metaphysical realism. *See* Realism (uppercase *R*)
- metaphysics, 65, 124, 216
- meteorite, 1, 133
- meteorology, 82
- methodology
 - philosophical methodology, 3, 98
 - scientific methodology, 203, 222
- microphysical fundamentalism, 37–40, 96, 211, 229
- microstructure, 12, 26–28.
 - See also* microstructural property
- mild cognitive impairment, 162–163, 214, 216
- Mill, John Stuart, 3, 5, 8, 47–55, 62, 65, 67–68, 71, 80–81, 158, 172, 202, 208
- Miller, Richard, 164
- Millikan, Ruth, 136–142, 148, 205
- mind-dependence, 145–153, 155–157, 165, 221–222, 224, 227
- mind-independence, 142, 165, 222, 227
- Miron, Louis, 224
- Mitchell, Sandra, 101, 104–105
- Mlodinow, Leonard, 24
- modality, 100
 - counterfactual possibility, 25
 - counterfactual statement, 24, 101
 - de re* necessity, 24–25
 - first modal necessity thesis, 22–26, 34
 - modal necessity, 12, 21–31, 34
 - second modal necessity thesis, 22–23, 26–30, 34
 - temporal possibility, 25
- mode (metaphysics), 7
- mole
 - European mole, 131
 - marshy mole, 131
- molecule, 38, 57, 84–85, 87, 93–94, 113, 139, 149, 172
 - molecular structure, 67
- monarch butterfly, 72
- Monck, W. H. S., 67
- money, 151
- monomer, 171–172
- Moreira, David, 180
- mud, 28–30
- Mukherjee, Siddhartha, 187
- multiple realizability, 84, 86, 88, 92, 112, 118–120, 123, 133, 187, 198–199
- Mumford, Stephen, 27
- muon, 25
- Murphy, Dominic, 195
- mutual exclusivity thesis, 69, 71.
 - See also* hierarchy thesis
- Naglieri, Jack, 192–194, 199
- natural law. *See* law, law of nature
- natural science, 4
- natural selection, 77, 84, 113, 126–130, 132, 137, 140–141, 229
- naturalism, 4, 80, 82, 98, 123–124, 201, 204, 220, 227–228
- nature, 4, 20, 67, 223
- necessary and sufficient conditions, 15–16, 18–22, 66, 72–73, 76, 122, 167–169, 175, 177, 184, 187, 200, 206
- necessity. *See* modality, modal necessity
- Needham, Paul, 119, 171
- neon, 106

Cambridge University Press

978-1-107-52172-8 - Natural Categories and Human Kinds: Classification in the Natural and Social Sciences

Muhammad Ali Khalidi

Index

[More information](#)*Index*

247

- nephrite. *See* jade
 neuron, 40
 neuroscience, 82, 119, 134, 159, 198
 neutrino, 25
 electron neutrino, 115
 neutron, 24, 38, 136
 Newman, William, 110
 Newtonian fluid, 1, 84, 86, 89–91, 99–104, 109,
 118–119, 128, 138, 174, 198, 206
 nitrogen, 29, 170
 nothing-but argument, 38
 nucleosynthesis, 139
 nucleotide, 149
 nuclide, 70, 106, 114–118, 121, 171, 220.
 See also atom, atomic nucleus

 objectivity, 151, 165
 observer relativity, 121
 Okasha, Samir, 34
 ontology, 6, 84, 121, 123
 ontological objectivity, 150–151
 ontological subjectivity, 151
 owamosk (artificial category), 30, 50, 52
 oxygen, 29, 72, 128, 170

 pain, 127, 129–130
 Pamilo, Pekka, 110
 Papineau, David, 84, 126–130, 132
 pattern of decay, 115
 Pauli exclusion principle, 36
 Peirce, Charles Sanders, 52
 periodic table, 13, 106, 166, 169
 permanent resident, 1, 154–157, 208
 Pettenger, Mary, 224
 pharmaceutical corporations, 196–197, 216
 phase of matter, 94, 113, 170, 173, 176
 phenotype, 45, 61, 73, 131, 133, 136, 140, 148,
 180, 195
 philosophy of language, 4
 phosphorus, 50
 photon, 39
 physics, 4, 25, 39, 74, 82–83, 121, 138, 210, 227
 astrophysics, 115–117
 biophysics, 82
 elementary particle physics, 82, 103, 210–211,
 228–229
 fundamental physics, 20, 39, 102, 210–212
 geophysics, 82
 nuclear physics, 114
 physical theory, 35, 38, 83
 quantum physics, 96, 106–107, 211, 229
 solid-state physics, 82
 superstring theory, 36
 physiology, 181, 186, 189, 195
 Pickering, Andrew, 224

 pion, 10
 placebo effect, 59
 planetary science, 133
 plant, 49, 53
 Plato, 5–6, 209
 plutonium, 213
 polyethylene, 171–172, 221
 polymer, 171–177, 184, 200, 206, 223
 copolymer, 172
 polymerization, 1, 105–106, 212
 polystyrene, 1, 171
 population genetics. *See* gene
 possible worlds, 21–30, 34
 prediction, 2, 54, 198
 predictive value, 92–93, 197
 pressure, 133, 217
 private property, 151
 projectibility, 13–14, 18–19, 54–55, 69, 76, 80,
 89–90, 92, 98, 109, 123, 134, 157–159, 163,
 169, 203–204
 proper name, 28
 property, 4–7, 11
 accidental property, 14
 basic-science property, 87
 categorical property, 8
 causal property, 115, 128, 130, 157, 172, 174, 181,
 187, 198, 222
 chemical property, 70, 167
 conjunctive property, 9
 conventional property, 157
 determinable property, 8, 206
 determinate property, 8, 206
 disjunctive property, 17, 33
 dispositional property, 8, 33, 170, 178,
 181, 206
 essential property, 12–14, 21, 33, 35–36, 48
 etiological property, 131
 extrinsic property, 31, 35, 131
 functional property, 86–87
 fundamental property, 36
 higher-level property, 40, 86–87
 “important” property (Mill), 48, 54, 172
 inexhaustibility of properties, 49–52, 158
 intrinsic property, 31–33, 35, 94, 131
 lower-level property, 220
 macrolevel property, 12, 220
 macroproperty, 27–28, 90, 119, 128, 169–171
 microphysical property, 12, 39, 47
 microproperty, 29, 94, 119, 128, 169–170
 microstructural property, 37–41, 87.
 See also microproperty
 modal property, 30
 multiply realizable property, 198
 natural property, 11, 33, 36, 214
 neural property, 40

Cambridge University Press

978-1-107-52172-8 - Natural Categories and Human Kinds: Classification in the Natural and Social Sciences

Muhammad Ali Khalidi

Index

[More information](#)

248

Index

- property (cont.)
 neuropsychological property, 167
 nuclear property, 70, 167
 physiological property, 188
 primary property, 79, 169, 174–175, 200, 205–207, 213–214
 projectible property, 44, 54, 80, 134, 204
 property cluster, 9, 14, 19, 66, 74, 77, 168–169, 174, 176, 199–200, 207
 psychological property, 199
 secondary property, 79, 169–170, 205, 207
 set of properties, 156–157, 201
 special-science property, 83–84, 86, 88–89, 91–92, 123, 126, 129, 132
 statistical property, 173
 superficial property, 14, 44
 weighted property cluster, 19, 170, 207
protein, 79, 177–179, 182
proton, 1, 7–8, 10, 20, 23–25, 28, 38–39, 70, 72, 101–102, 136, 139, 230
 proton decay, 25
 proton emission, 167
psychiatry, 82, 159, 189, 197–199
 psychiatric condition, 198
 psychiatric diagnosis, 192
 psychiatric disorder, 196
 psychiatrist, 191, 195
psychogeriatrics, 162
psychology, 84, 102, 119, 125, 192, 229
Putnam, Hilary, 26–28, 37
pyrite, 89
quark, 35–36, 38–39, 82, 226, 228, 230
 down quark, 39
 top quark, 103, 217
 up quark, 9, 39
Quine, W. V., 6, 56–60, 64, 218
Raatikainen, Panu, 97
raccoon, 131
raccoon dog, 131
race, 226
radioactive decay, 1, 26, 96, 115, 167, 171
radioactivity, 167, 170
radius bone, 131, 134–135
realism, 5, 42, 123, 143, 150–151, 155, 165, 204, 209, 215–220, 222
 antirealism, 150, 215, 217–218, 223–224
 mind-independence criterion for realism, 149
 promiscuous realism, 63, 219
 scientific realism, 42, 55, 64
 structural realism, 210
Realism, 5, 8, 10, 12, 41–42
 anti-Realism, 6
 Realist view of kinds, 11–12
 Realist view of properties, 7–9, 11
recession, 152, 154–155, 221
reduction, 109
 classical reduction, 87
 functional reduction, 86, 93
reflective equilibrium, 3–4, 98, 202
refugee, 1, 146
representation
 problem of selective representation, 217–218
retrodiction, 135
revisability, 44–45, 51–52
ribonucleic acid. *See* RNA
ribosome, 178, 206
rigid designation. *See* term, rigid designator
Ritchie, Karen, 162
RNA, 177–179
 mRNA (messenger RNA), 178, 206
 ssRNA (single-stranded RNA), 178
rock
 igneous rock, 133, 135
 metamorphic rock, 133
 sedimentary rock, 133
roentgenium, 1
Rorty, Richard, 215, 217
Ross, Don, 38, 84, 102, 105, 121, 123, 210–212, 219
Ruddon, Raymond, 185
Ruphy, Stephanie, 115–117
Russell, Bertrand, 21, 210
Sagan, Carl, 110
Salmon, Nathan, 27
scattering experiment, 38
Schaffer, Jonathan, 38
schizophrenia, 189
Schwartz, Stephen, 28
science, 13–14, 24, 42–44, 46, 48, 53–55, 80, 91, 98, 135, 209, 214
 basic science, 12, 82–88, 100–101, 104–108, 126, 170–171, 228
 immature science, 58
 scientific discoverability. *See* discoverability by science
 scientific domain, 103, 122–123, 227
 scientific evidence, 4, 201
 scientific inquiry, 15, 24, 38, 44, 51–52
 scientific practice, 223
 scientific progress, 55
 scientific theory, 1, 4, 6, 11, 15, 24, 41–43, 45–46, 71, 79, 82, 130, 144, 199, 211
 scientism, 56
 scientist, 60–61, 223
 special science, 82–84, 87–89, 92–93, 97–124, 129, 173, 210–212, 228–229
Searle, John, 150–154
Seidman, Steven, 224

Cambridge University Press

978-1-107-52172-8 - Natural Categories and Human Kinds: Classification in the Natural and Social Sciences

Muhammad Ali Khalidi

Index

[More information](#)*Index*

249

- semantics, 27–28
 Seppä, Perttu, 110
 sex, 226
 Shapiro, Lawrence, 84, 88–89, 119, 126, 129
 sickle cell anemia, 142
 silicon, 90, 171
 similarity, 7, 56, 58, 75, 172
 brute similarity, 7
 innate similarity standard, 56
 Simon, Herbert, 114
 Slater, Matthew, 79
 Smolin, Lee, 211
 Soames, Scott, 12, 28
 Sober, Elliott, 21, 77, 170
 social constructionism, 224–227
 social institution, 140, 156, 195
 social science, 4, 82, 84, 125–126, 138, 157–158,
 161–166, 189, 197, 199–200, 224,
 226–227
 critical social science, 163
 social scientist, 162–163
 sociolinguistics, 61
 sociology, 82, 226
 sociologist, 163, 226
 solid, 86
Sophist (Plato), 209
 species, 6, 21, 26, 34, 36–37, 62, 66, 73–78,
 113, 121, 129, 131, 135, 138–141, 179–180,
 229
 ancestral species, 34, 77
 phylogenetic species concept, 68
 ring species, 68
 sexual species, 140
 speciation, 26, 67–68, 75, 77
 species extinction, 26
 spin (quantum number), 8, 10, 20
 Spurrett, David, 84
 star, 1, 114–117, 122, 138–139
 Steinberg, Philip, 224
 Sterelny, Kim, 28
 Stich, Stephen, 218
 Stokes–Einstein equation, 85
 substrate neutrality, 84, 86
 sulfur, 50, 105, 212
 supervenience, 92, 95, 119, 123, 228–229

 taxonomy, 179, 200
 biological taxonomy, 26, 75
 cladistic taxonomy, 62, 75, 130, 135
 folk taxonomy, 60
 phenetic taxonomy, 130, 135
 phylogenetic taxonomy, 6, 68
 scientific taxonomy, 60
 special-science taxonomy, 88
 taxonomic practice, 184, 200, 214

 temperature, 85, 90, 93–95, 99, 104–105, 108,
 118–119, 121, 127, 133, 170, 212, 217
 ten-dollar bill, 151–153
 term
 general term, 2, 27–30, 47
 natural kind term, 26–30
 rigid designator, 28
 singular term, 28
 thermodynamics, 39
 thermostat, 127, 129
 Thomasson, Amie, 152, 154
 tick, 217
 tiger, 29, 136, 140
 Towry, M. H., 50, 67
 trope (metaphysics), 7
 truthmaker, 7–8
 tuberculosis, 59, 64
 Twin Earth, 26, 28–30
 typological thinking, 77

Umwelt, 217
 unification, 130
 universal, 5–11, 41
 cluster of universals, 11
 conjunction of universals, 9
 universe, 31, 37, 71, 96, 101–103, 135, 139, 141, 143,
 213, 217, 219

 Vallentyne, Peter, 32
 value-ladenness, 157–160, 186, 191
 Van Valen, Leigh, 180
 Venn, John, 3, 14
 vertebrate, 44–45, 51, 131, 133–134, 159
 virology, 177, 229
 virus, 1, 177–181, 184, 188, 206–207, 213, 228
 Baltimore classification system, 179
 International Committee on Taxonomy of
 Viruses, 179–180
 virion, 177, 213
 viscosity, 84–95, 99–100, 103–106, 108–113, 128,
 173–175, 198, 212

 war, 153–156
 water, 26–28, 30, 88, 90–91, 94, 99–103, 108, 128,
 171, 213
 Weatherston, Brian, 35
 weed, 28, 53
 weighted cluster theory, 19
 Weinberg, Robert, 181–183
 Weisberg, Michael, 108, 119
 Weiskopf, Daniel, 133
 whale, 60–62
 Whewell, William, 62, 158
 Wilkerson, T. E., 12–13, 21
 Williams, Neil, 186

250

Wilson, Robert A., 73, 180
Wimsatt, William, 113–114
Wittgenstein, Ludwig, 18
Woodward, James, 97, 101

XYZ, 27

Index

Yablo, Stephen, 97

Zachar, Peter, 199
Zemach, E. M., 28
Zhang, H. M., 110
zoology, 82