Adams, Fred, 6, 10 Amundson, Ron, 171 Anomalous monism, 29 Antecedent physicalism, 32 Antireduction. See Reduction; Autonomy Antony, Louise, 64, 161, 191, 195 Argument from Nuh-uh, 7-10 Aristotle, 100, 164 Armstrong, David, 26, 44, 78, 97, 106 Artificial intelligence, 133 Strong AI, 81 Weak AI, 105, 108 Autonomy, 159, 190-198, 201-211. See also Explanation argument from, 192–196, 201–209 colloquial use, 209

Bealer, George, 6 Bechtel, William, 5, 16, 21-25, 28, 32-33, 51-52, 61 Behavior, 216-217, 220, 225 Behaviorism, 74-75 Berkeley, George, 57 Bickle, John, 5–6, 16, 32, 195 Bigelow, John, 169–170 Binding problem, 244 Biopsychology. See Psychology, biopsychology Blindsight, 229, 241, 245 Block, Ned, xxii, 28, 131, 152, 158, 187, 189, 214, 229-232 Boyd, Richard, 61 Brain imaging studies, 52, 54-56, 108. See also Brain maps

Brain maps, 17–18, 23–25, 53–54 Brain states. See Identity conditions, of brain states Brentano's thesis, xxi–xxiii, 87–88, 149, 167, 176 Broad, C. D., 44 Brodmann, Korbinian, 23–25 Bundles. See Sensations, bundles; Persons and personal identity

Carnap, Rudolf, xvii Causal exclusion argument. See Exclusion argument Causal roles, 64, 94, 98, 116, 120, 150, 182, 230. See also Function, causal role; Properties, causal theory of Causation. See also Mental causation; **Exclusion argument** macrocausation, xx, 161, 163 quausation, 128 strong efficacy, 128-129, 148, 150, 167, weak efficacy, 127-128, 168 Center of narrative gravity, 246 Chalmers, David, 2, 37–38, 63, 127, 131, 214, 218, 239 Churchland, Patricia, xv, 54, 127, 195 Churchland, Paul, 15, 30, 75, 85 Clark, Austen, xv Computationalism, 67, 80-81, 93, 105, 117–118, 120, 127, 140, 148–149, 151, 158. *See also* Artificial intelligence Conscious inessentialism, 227

Craver, Carl, 196-204

198, 200, 210, 227-229, 233, 236, Cummins, Robert, 92-93, 101, 104-107, 113, 146-51, 162, 183-186, 196, 240, 243 199-200, 224 corkscrew, 208 cricket, 48, 56-57, 67 Darden, Lindley, 196–204 friendly physicist, 202-203, 207-208 Hinkfuss's pail, 131, 153, 231-232, 242 David, Marian, 28 Davidson, Donald, 29, 170 instant hibernation, 167 Davies, Paul, 168, 171 liquid enjoyed by George Washington, Deductive-nomological (D-N) 45-46 explanation, 63, 165, 205, 211-240, lumps of clay, xx, 47-48, 66 mousetrap, 197 octopus, 8, 22, 26–27, 155 244, 246 Dennett, Daniel, xv, xxii, 35 intentional stance, 88, 108 pain and c-fibers, 7, 42, 51, 57-58, Multiple Drafts model, xxii, 234 61-63, 75, 79, 82, 96, 154, 157, 220, physical stance, 231 245 on zombies (see Zombies) petri dish, xxvi, 242-243 platypus, 227–229, 233 Descartes, René, xv Disjunctive view. See Identity, speciesplumbing and pipes, 229-231 being president, 84 specific or local Dretske, Fred, xxii, 90-93, 128-129, schoolchild's art project, 47-48 140, 165-172, 176 square peg and round hole, 203-204, Dualism, 178 207-208 Cartesian, xviii, 79, 239 thermostat, 15, 131, 231-232, 242 property, 37 urn, 47, 66 water and H<sub>2</sub>O, 40-48, 59-60, 64, 67, Eliminativism, 126-127, 192, 196 132, 231-232 widgets and thingamajigs, 48, 61 Enc, Berent, 15, 30, 44 Epiphenomenalism, 126, 129, 160-161, Exclusion argument, 160-164, 184, 175, 192, 205, 222–230, 233–234 causal-role, 127, 225–230, 234, 237 207-208 Explanation, 104, 108, 196, 203-205, etiological, 224-227, 230-236 **2**09 spandrels, 224 mechanical, 209-211 strict-metaphysical, 127, 224, 235-237 pluralism, 200-211 vs. prediction, 36 Essence and essentialism, 39, 42-43, 60-63, 82, 96, 98, 119-120, 167, 189, psychological, 150, 154-156, 191, 203, 231 (see also Psychology) 191, 195, 201 nominal essence, 82, 96, 99, 157 unification, 203-208 real essence, 33, 82, 96, 157, 179 Explanatory gap, xxv, 63–70 Evolution, 100-102, 107, 164-168, Explanatory hooks, 65 Feigl, Herbert, 78 Evolutionary psychology. See Psychology, Field, Hartry, 81, 143-144 evolutionary psychology Examples Flanagan, Owen, xv-xvi, xx, xxii, 1, 28, aliens and Martians, xiii, 12, 14, 15, 58, 64–65, 165, 168, 172, 174, 207, 220, 224, 246 19, 21, 26–27, 131, 155, 170 Amos the mouse, 169-170 fMRI (functional magnetic resonance imagining), 52–56, 108 ashtray, 48 automobile, 52, 153, 198, 243 (see also Fodor, Jerry, 28, 71, 80-81, 86-87, Examples, carburetors and fuel 90-93, 107, 115, 133, 144, 150, 182, injectors) 191, 194-195 bricks and windows, xx, 161-162 Folk psychology. See Psychology, folk or caffeine, xv common sense Cal Ripken, Jr. and Lou Gehrig, 83 Function carburetors and fuel injectors, 19-20, abstract, 73-74, 140-149, 215, 234

biological or natural, 73-74, 113, 165, 190 (see also Function, teleological) 149 causal role, 73-74, 95, 101, 104-105, 107, 113, 122, 145–164, 168, 171–176, 182-186, 190, 196, 200, 206, 210, 215, 224 computational, 140-152 (see also 242 Function, abstract) etiological, 101, 113, 165-175, 206, 210, 215 (see also Function, teleological) hybrid, 168, 172–177, 190 indicator, 165, 176 propensity, 169-171 proper function (see Function, etiological) teleological, 74, 164-176, 187, 206, 210 (see also Function, etiological; Function, propensity; Function, hybrid; Function, biological or natural) Functional analysis, 104-107, 150, 196, Functional duplicates, 170, 213-217, 225–229, 233 Functional equivalence, 143-145, 148–149, 182 Functionalism. See also Generic Functionalism anatomy of, 72-74, 109, 137 computational, 72-73, 140-152CTP-functionalism, 183-185 direct-teleological, 165-167, 170-175, 178, 210 explanatory, xxv, 73–75, 85, 99–106, 109, 159, 182, 193, 200–202, 208, 211-213, 230 hybrid, 172-177, 210 intentional, xxv, 73-75, 85-89, 91-92, 105, 149 machine (see Machine functionalism; Functionalism, computational) and mechanism (see Mechanism, confused with functionalism) metaphysical, xxv-xxvi, 72–85, 92, 97–100, 105, 108–110, 124–127, 133, 139-142, 144, 150, 157, 159, 167, 171, 176-177, 181-182, 191, 211, 234 methodological, xxv, 73-75, 85, 106–108, 158–159 minimal (see CTP-functionalism) psychofunctionalism, 108, 156, 157,

158, 186 semantic, xxv, 73-75, 86-95, 140, standard formulation, 81-85 strong sense, 79, 85, 93, 114, 144, 152, 155, 157, 159, 171, 183 teleofunctionalism, 164-172, 182, teleological, 165-166, 172 (see also Functionalism, teleofunctionalism; Functionalism, direct-teleological; Functionalism, hybrid) theoretical, xxv, 73-75, 85-86, 92-100, 154-155, 158-159 varieties of, 71-78, 109, 137, 181 weak sense, 79, 85, 93, 144, 152 161 Functional specification, 199 de dicto, 82–85, 98, 108 de re, 82-85, 98 meaning fixing, 82-84, 98, 154-157 nonconventional, 130, 151, 154, 177 reference fixing, 82-84, 98, 157-159 Functions all the way down, xxvi, 182-191, 206 Generality (of psychology) argument, 161-164. See also Multiple realizability Generic Functionalism, 110, 125–139, 146, 152–155, 158, 160, 163, 165, 168, 171, 178–179, 183–186, 240 biological abstractness, 126, 133-134, 155–159, 163–169, 177–178, 184–186, 190-193 causal efficacy, 126-129, 148, 169, 177 - 178objectivity, 126–131, 148, 151, 154–156, 164–165, 169–172, 178, 184-185 synchrony, 126–133, 168–171, 178

causal efficacy, 126–129, 148, 169, 177–178
objectivity, 126–131, 148, 151, 154–156, 164–165, 169–172, 178, 184–185
synchrony, 126–133, 168–171, 178
Gillett, Carl, 116–118, 121–124
Godfrey-Smith, Peter, 104, 108, 151, 153, 164, 166, 173–174
Gould, Stephen J., 224
Graham, George, 22–23, 66
Grain and granularity, 20–23, 26, 61, 69, 188, 219
grain project, 22–23, 66
Grantham, Todd, 102–103
Griffiths, Paul, 168
Güzeldere, Güven, 214–215, 218

Hardin, C. L., 65 Heil, John, 5–6, 116, 118, 121, 124 Hempel, Carl, 63, 195

Heuristic identity theory, 32 Hill, Christopher, 14-15 Homology, 23–24, 240 Homunctional organization, 173, 187, 198, 201 Horgan, Terence, xxii, 16, 22-23, 66, 116–120, 128, 147, 161, 216 Hume, David, 174, 244, 245 Identity a posteriori or scientific, 37–38, 40, 43, 45, 51, 67 apparently contingent, xxiv, 40-44, 48, 51, 59, 66, 157, 241 brute, 36-37, 65 illusion of contingency (see Illusion of contingency; Identity, apparently contingent) necessary, xxiii, 36, 40-43, 45, 51, 67, species-specific or local, 14–15, 19–20, 26–29, 30–31, 33, 69, 155–157, 241 Identity conditions, 45–51, 60, 79, 82, of brain states, 50-59, 68-69 candidacy, 45-48 compatibility, 48-50, 60 of sensations, 50-51, 68-69 Identity Theorists' Hall of Fame, 44 Illusion of contingency, 39-70. See also Identity, apparently contingent candidacy model, 49-51, 58-63, 66-68 epistemic model, 41-44, 59, 62, 68 Implementation, 111, 113, 117. See also Realization Individual differences. See Multiple realizability, individual and intraindividual differences Instantiation. See Realization Intentionality, xxii, 73, 87, 89, 91, 121, 149, 167 Intraindividual differences. See Multiple realizability, individual and intraindividual differences Introspection, 86, 133

Jackson, Frank, 37–38, 63, 128, 129, 132, 226 James, William, xiv

Kim, Jaegwon, 2, 5–6, 10, 15, 28, 30, 33, 78, 95–96, 107, 110, 114, 116, 121–124, 142–143, 150–151, 160–162, 188, 208

Kim–Adams reply. *See* Multiple realizability, Kim–Adams reply Kirk, Robert, 217 Kripke, Saul, xxiv–xxv, 38–70, 156, 181, 216, 239

Language of thought, 85, 89-90 Lauder, George, 171 Laws of nature, 37, 102, 104, 158, 182, 194, 203, 207, 216 Leibniz's Mill, 243 Levels and orders, 161-164, 187-188, 196-198, 200-201, 205, 208, 241 Levine, Joseph, xxv, 63-66, 161, 191, 195, 239 Lewis, David, 15-16, 26-28, 32, 71, 93–95, 98–99, 106, 154–156, 217 Lewontin, Richard, 224 Loar, Brian, xxii Locke, John, 47 Lycan, William, xxii, 23, 42-44, 72, 80, 84, 89-90, 96, 140, 162, 165-169, 172-174, 179, 182, 186-190, 201, 206-207

Machamer, Peter, 196-204 Machine functionalism, 72-73, 80, 94, 120, 131, 140-141, 149, 152. See also Functionalism, computational Machine program, 141-142, 151 Machine table, 94, 141-145. See also Machine program Marr, David, 117, 158 Materialism. See Naturalism McCauley, Robert, 5, 21, 32 McGinn, Colin, 33, 239 Mechanism and mechanistic explanation, xxvi, 52, 64, 102, 159, 181–182, 196–213, 222, 226–233, 241 - 245confused with functionalism, xxvi, 211-214, 222, 235-240 schema, 198-199 sketches, 198-200, 228 Mental causation, xxiii, 3, 35, 70, 87, 127, 158, 161, 163, 173, 241. See also Causation Mereology, 121–122, 161–162, 197–198, 205–206, 241 Millikan, Ruth, 87, 90-93, 101-107, 113, 165-169 Moral value, 231-232, 237-238 Multiple realizability, xxiv, 1–39, 64, 69, 110, 117, 126, 133–136, 146, 157,

166, 168-169, 177, 184, 186, 189-195, 222, 230, 236, 241 empathetic, 12-17, 69, 155 and identity theory, 30-33 individual and intraindividual differences, 16-17 Kim-Adams reply, 10-12, 16-17, 20–21, 23, 26–29, 33 radical MR, 6-11, 15, 17, 29-31, 134, 136, 151 SETI MR, 6, 11-12, 18-19, 21, 30-31 standard MR, 6–11, 15, 17, 21, 24, 29-31, 134-136, 151, 230 weak MR, 6, 11, 19, 21 Mundale, Jennifer, 5, 16, 21-22, 24-25, 51-52, 61

Nagel, Ernst, 195
Nagel, Thomas, xix-xx, 14, 239
Natural method, xv-xx. See also
Naturalism
Naturalism, i-xix, 36, 95, 124, 183, 185, 192
Naturalized metaphysics. See
Naturalism
Neander, Karen, 101, 107, 166
Nichols, Shaun, 102–103
No Ghosts Rule, xviii-xix
Normativity, 90–91, 102–103, 152, 165, 167, 173–174, 210
biological, 165, 169, 172

Oppenheim, Paul, 63, 195 Orders. See Levels and orders Other minds. See Problem of other minds

Pargetter, Robert, 169–170 Perry, John, 32 Persons and personal identity, xxvii, 48, 231-232, 241-246 Pettit, Philip, 128-129, 132 Physicalism. See Naturalism Pitt, David, xxii Place, Ullin T., 44 Plasticity, 17-18. See also Multiple realizability, individual and intraindividual differences Platitudes, 97–98, 154–155, 157, 245. See also Psychology, folk or common sense; Ramsey-Lewis method Poland, Jeffrey, 116-120, 124-125 Polger's brain, 55-56 Pragmatism, xvii, 174, 201

Problem of inputs and outputs, 152, chauvinism, 152, 186, 187, 189 liberalism, 152, 186, 187 Problem of other minds, 33-35, 235-239 Properties, causal theory of (CTP), 182-186, 206. See also Mechanism, confused with functionalism Propositional attitudes, 86, 96 Psychofunctionalism. See Functionalism, psychofunctionalism Psychology. See also Explanation, psychological; Generality (of psychology) argument analytic, 96, 99, 106, 154, 157, 186 autonomy of, xxvi, 190-196 (see also Autonomy) biopsychology, 101-104 evolutionary psychology, 101-104 folk or common sense, 96-99, 106, 154, 157, 186 scientific, 86, 96-99, 103-107, 154, 157, 186, 191 Psychophysiology, xv Psychosemantics, 86, 90 Putnam, Hilary, xxiii-xxiv, 3, 15, 22, 24, 28, 40, 61, 69, 72, 79–80, 88–89, 96, 106, 131, 140, 145, 156, 158, 177–182, 185–86, 191, 195, 203–208, 241-245 Putnam's intuition, 3-4. See also Multiple realizability

# Qualia

absent, 189, 214, 218, 232 alien, 214, 217, 218 dancing, 214, 217, 218 inverted, 189, 214, 217, 218

Ramsey–Lewis method, 94–100, 106–107, 151, 182–183
Ramsification. See Ramsey–Lewis method
Realization, xxiv–xxv, 310–113, 116, 139–179
and describability, 143, 147–148, 228 dimensioned view, 124 flat view, 122–124, 144 functional, 36, 113, 178–179, 230 general metaphysical notion, 116–125 as the hardware/software relation, 112, 117 as having a function, 113–114

Realization (cont.)

as mapping, 148-149 (see also Functional equivalence) multiple (see Multiple realizability) not a single relation, 112-114, 178 orthodox view, 112-113, 140 realization theories, 119, 124 subset model, 122-124 transitivity of, 117, 147 Reduction, xxi, xxvi, 37–38, 126, 193-196, 201-205, 208, 209-210. See also Autonomy and identity, 193-194 and multiple realizability, 5, 30-32 new wave, 32, 195-96 Reflective equilibrium. See Natural method Representation, xxii, 93, 147, 167, 176 Rey, Georges, 75, 85, 96, 99-100 Rigid designators, 39–43, 61 Rorty, Richard, xvii Ryle, Gilbert, 78, 99 Salmon, Wesley, 202-207 Searle, John, xiii-xiv, 81, 105, 108, 131 Sejnowski, Terence, 54 Self. See Persons Semantics, functional role, 90, 93. See also Functionalism, semantic Sensations. See also Identity conditions, of sensations bundles, 243-246 eccentric, 33-35, 69 Shapiro, Lawrence, 5, 11, 208 Shoemaker, Sydney, xxii, 6, 79, 85, 91-99, 106, 114-116, 121-124, 144, 152–159, 182–186, 189, 205–206, 214, 217, 232 Sidelle, Alan, 45-48 Siewert, Charles, xxii Skepticism, xv, 36, 238-239 Skinner, B. F., 75 Smart, J. J. C., 2, 44, 78-79, 94, 97, 157 Sober, Elliot, 5, 81, 205 Sociobiology, 103 Species-specificity. See Identity, speciesspecific or local Structure of experience reply, 65, 67 Supervenience, 78, 114, 116, 121–122 Swampman, 170

Teleofunctionalism. *See* Functionalism, teleofunctionalism; Functionalism,

teleological; Functionalism, direct-teleological; Functionalism, hybrid Teleology, 100, 102, 164, 173
Thales, 40
Tienson, John, xxii, 116–120, 147
Topic neutral, 94–95
Turing machine, 141–143, 145, 149, 151–152, 206. See also Machine table Turing test, 131, 220, 235
Two-Levelism, 187–189
Tye, Michael, xxii, 82, 89, 132, 140

Van Gulick, Robert, 65, 75, 79, 85, 91–92, 108, 134, 144, 148, 152, 155, 159, 168, 172–173, 185, 189

Watson, John, 75 What-it-is-like, xix-xx Wilson, E. O., 103 Wilson, Robert, 116, 118, 121, 124 Wright, Larry, 101, 107

Zimboes. See Zombies, zimboes Zombies, xxvi, 35, 170, 213–24 and conceivability, 239 Dennett's challenge, xxvi, 213–214, 218–219, 223, 233 Dennett's challenge as a dilemma, 223, 227, 234–235 varieties of, 214–217, 225 zimboes, 219–223, 225 Zombie Scorecard, 215–217