

Index

- a priori, 133, 137–9, 169, 220, 244
 operational, 244
abduction, 250
abundance, 215, 236
acid, 140, 145
action, standard story of, 28
active knowledge, 17–23, 63
active realism, 209
activist realism, 8, 208–16, 251
 served by pluralism, 237–9
activity, 15, 33, 41, 218
 analysis of, 38
 constitution of, 39
 representational, 113
activity-based analysis, 35
activity–principle pair, 135
aether, 54, 57, 246
aim-oriented adjustment, 25, 49, 53
aim-oriented coordination, 24
aims
 adjustment of, 48
 inherent, 36–7, 39, 57
 iterative development of, 246
 renunciation of, 246
Ampère, André-Marie, 53
ampliative inference, 215, 250
ampliative inquiry, 215, 250
Ankeny, Rachel, 15
anti-realist practices, 210
Arabatzis, Theodore, 99
Arrhenius, Svante, 141
atom, concept of, 242
atomism, 92, 110, 211, 246, 248
Austin, J. L., 87, 120, 171
axiom, 177
- ball-and-stick molecular model, 112, 115
belief, 4, 19, 23, 28, 41, 48, 73, 106, 169, 184,
 189, 198–9, 202, 221, 224–5
Bergson, Henri, 62, 136
Berkeley, George, 61, 103
- Big Bang, 89, 104
black hole, 124
Black, Joseph, 242
bog-walking, 240
Bohr, Niels, 193, 196
Bokulich, Alisa, 237–8
Boltzmann, Ludwig, 211
Boon, Mieke, 125
bootstrapping (in particle physics), 159
Bose–Einstein condensate, 188
box project, 80
Boyd, Richard, 145, 171
Boyle, Robert, 158
Brading, Katherine, 108, 113
Brandom, Robert, 174
Brexit, 9
Bridgman, Percy Williams, 3, 16, 35, 215
Brønsted, J. N., 141, 146
Brown, Matthew, 71
Buber, Martin, 31
Buddhism, 212
Button, Tim, 70, 84, 91, 227
- caloric, 107, 184, 194
Cao, Tian Yu, 171
capabilities (or, capacities), 29, 34
Capps, John, 202
carbon dioxide, 189, 242
carbon monoxide, 189
carbon, tetravalency of, 112, 188
Carnap, Rudolf, 72, 122, 149, 220, 229
Carnot, Sadi, 248
Cartwright, Nancy, 64, 113, 130, 149, 237–8
cash-value, 198, 202
Cassirer, Ernst, 74
Catinaud, Régis, 38
cave, Plato's, 80, 82
central dogma, 111, 130
certainty, 26
Chakravarthy, Anjan, 137, 149, 231
Chalmers, Alan, 64, 92

- Chew, Geoffrey, 159
 Chirimutta, Mazvita, 61
 circularity, 42, 104–5, 166
 classical mechanics
 as a closed theory, 238
 formulations of, 230
 classical vs. quantum mechanics, 87, 172, 188, 238
 semiclassical mechanics, 238
 closed theory, 237
 coherentism (in epistemology), 42
 common sense, 216, 226
 complementary science, 251
 compositionism, 157
 concept, 72, 77, 125, 129, 230, 243
 concept-development, 136, 139–41
 by epistemic iteration, 241–4
 conceptual engineering, 122, 129, 175
 conceptual framework/scheme, 72–3, 118, 132, 149, 155, 223, 230
 concept-validation, 142
 confirmation, 181, 185
 conservatism, as a feature of epistemic iteration, 240
 constellations, 125, 147
 constraint (by nature), 169
 constructive empiricism. *See* empiricism, constructive
 constructivism, 42, 124–5, 211, 218, 230–1
 blending with realism, 211
 continuity of inquiry, 217
 continuity of rules, 63
 contradiction, 193, 195
 convenience vs. truth, 190
 convention, 107, 177
 cookie-cutter metaphor, 81
 coordination of activities, 38–40
 coordination, aim-oriented, 40–8
 coordination, problem of, 76, 104
 copy theory of knowledge, 198
 correspondence, 5, 70, 77, 79, 180, 200, 219, 222–4
 in practice, 111–14
 Putnam's notion of, 226
 correspondence realism, 68–100
 correspondentitis, 79
 critical realism, 150
 Crull, Elise, 108
 Curiel, Erik, 99
 Damnjanovic, Nic, 164
 Darwall, Stephen, 31
 Dawid, Richard, 211
 definition, 16, 137, 143, 177
 deflationism, 164–5, 176
 Dewey, John, 20, 25, 46, 62–7, 74, 169–70, 198, 208, 212–13, 241, 244, 254
 Diamond, Cora, 207
 dinosaurs, 123
 direct realism (or, natural realism), 228
 disease, 154
 disquotation, 81, 164, 219
 DNA, 110–11, 169
 Douven, Igor, 250
 duck–rabbit, 196
 Duhem, Pierre, 246
 Dummett, Michael, 86
 Dupré, John, 126, 156
 earthquake, 168
 Eddington, Arthur, 154
 effective false beliefs, objection from, 189
 effective theory, 171
 Einstein, Albert, 54, 57, 88, 117, 137, 177, 195, 246
 electromagnetism, 52
 electron, 97, 99, 186, 233
 Elgin, Catherine, 42, 171, 245
 Emerson, Ralph Waldo, 61
 empirical domain, 167
 empiricism, 205, 252
 and activist realism, 248
 constructive, 69, 125, 205, 247
 relentless, 60, 252
 traditional, 61
 Engels, Friedrich, 219
 Enlightenment, 212
 entity, 139
 entity realism, 122, 249
 epistemic activity, 16, 35–6, 86
 epistemic agents, 19, 27–33
 epistemic iteration. *See* iteration, epistemic
 Epstein, Brian, 30
 etymology of 'know' and 'can', 18
 evening star and morning star, 96
 existence, 146
 experience, 61, 142, 225, 252
 experimental realism, 120, 150, 247
 explication, 122
 exploratory experimentation, 53
 extensionalism, 92–3
 external realism, 71, 84
 externalism, 219, 224
 faith in science, 100–11
 fallibilism, 76, 150
 falsity, 192
 Faraday, Michael, 53
 Feyerabend, Paul, 102, 232, 236, 238
 fictionalism, 186

Index

277

- Fine, Arthur, 173, 206
 fire-analysis, 158
 fixed air, 242
 flat-earth theory, 190, 240
 Fleck, Ludwig, 49
 Føllesdal, Dagfinn, 32
 force, 142
 Forman, Paul, 210
 foundationalism, 240
 Fourier, Joseph, 248
 framing, etymology of, 132
 Frege, Gottlob, 96
 Friedman, Michael, 137, 139, 220, 244
 Frigg, Roman, 114
 frigorific radiation, 151
 function, external, 36
- Gabriel, Markus, 128
 Galilean strategy, 222
 Galilei, Galileo, 64
 Galileo's law of free fall, 250
 Galison, Peter, 41
 geocentrism, 234
 Giere, Ronald, 81, 113, 208, 229–31
 glasses in the mirror, 241
 Global Positioning System (GPS), 4, 41, 239
 God, 77, 86–7, 89, 128, 189, 201, 217, 252
 God's Eye point of view, 7, 71, 74, 118, 217,
 224, 232
 gold, 93, 95–6
 Gómez, Juan Carlos, 22, 95
 Gooding, David, 53
 Goodman, Nelson, 128, 138, 229, 233–4
 Gosse, Philip Henry, 85
 gravity, 110–11, 179, 187, 238
 Grene, Marjorie, 5, 18, 133
- Haack, Susan, 214
 Hacking, Ian, 4, 13, 61, 94, 113, 120, 122, 124,
 130, 150, 153, 227, 247, 249
 Hales, Stephen, 242
 Hardcastle, Gary, 80
 hardness, 191
 harmony, 43, 47
 Heisenberg, Werner, 237
 heliocentrism, 102
 Henne, Céline, 26
 hermeneutic dimension, 24, 36
 Herschel, William, 151
 Hesse, Mary, 105
 high-energy experiments, 159, 187
 Hoefer, Carl, 97
 Hofmann, August, 112, 115
 Hookway, Christopher, 58, 201
 Hornsby, Jennifer, 28–9, 33
- Horwich, Paul, 164, 202
 Hoskenfelder, Sabine, 211
 Hoyningen-Huene, Paul, 18
 Hughes, R. I. G., 113
 humanism, 62, 228, 252
 humility, 253
 Husserl, Edmund, 28, 32, 61
 hylomorphism, 157
- ideal type, 36
 idealization, 229
 identity of indiscernibles, principle
 of, 135
 inaccessibility argument, 123
 incoherence, 41, 46, 181
 incommensurability, 98, 195–6, 230
 semantic, 195
 individualism, 31
 individuation, 31
 inductivism, 235
 inevitability, 201
 Infeld, Leopold, 117
 inference from success to truth, 234
 inference, everyday meaning of, 250
 infrared radiation, 151
 inquiry, 24–6, 48–57, 63, 213, 240, 243
 ampliative, 250
 end of, 198
 iterative, 244
 restricted vs. unrestricted, 50
 unrestricted, 56, 103
 instrumentalism, 69, 186, 192, 204
 intelligibility, 134
 intercellular matrix, 160
 internal realism, 91, 207, 219–29, 232
 Putnam's renunciation of, 228
 internalism, 207, 219, 223
 interpretation, 233
 invention, 125
 ism, meaning of, 208
 iteration
 in building of coherence, 143
 in development of aims, 246
 in emergence of sociality, 30–3
 epistemic, 208, 239–47
 in evolution of meaning, 99
 mathematical, 241
 as a mode of progress, 208
- James, William, 20, 62–7, 181–2, 192,
 225, 228
 on truth, 198–203
 Johnson, Mark, 81
 Johnson, Samuel, 103
 justification, 166

- Kant, Immanuel, 62, 74, 79, 90, 133, 137, 150–1, 179, 208, 219–21, 225, 232
- Keller, Evelyn Fox, 2
- Kellert, Stephen, 7
- Kelvin, Lord (William Thomson), 241
- Kendig, Catherine, 78
- Kenny, Anthony, 18
- kilogram, 99
- Kim, Sung Ho, 36
- kinetic theory of gases, 194
- Kitcher, Philip, 2, 17, 24, 59, 74, 98, 106, 150, 182, 207, 212–13, 221–3
- Klein, Ursula, 35
- Knorr Cetina, Karin, 34
- knowledge, value of, 209
- knowledge-as-ability, 18, 34
- knowledge-as-information, 17
- knowledge-by-acquaintance, 21, 95
- Kosolosky, Laszlo, 246
- Kosso, Peter, 7, 207
- Kripke, Saul, 94, 96, 98, 100
- Kuhn, Thomas, 14, 26, 72, 98, 105, 118, 195–6, 214, 220, 229
on normal vs. extraordinary science, 50
- Kusch, Martin, 30, 47
- Ladymar, James, 157
- Lakatos, Imre, 169
- Lakoff, George, 81
- Landry, Elaine, 113
- Laplace, Pierre-Simon, 184
- Laudan, Larry, 14, 98, 105
- Lavoisier, Antoine-Laurent, 16, 141, 145, 194, 243
- learning, 7, 22, 25, 29, 44, 49, 60, 62, 129, 204–5, 209, 215, 235, 247–8, 252
from the process of learning, 67
of methods, 63
- Lego, invention of, 160
- Legoism, 104, 160–2
sources of, 160
- Lehrer, Keith, 17, 23
- Leibniz, G. W. von, 135
- Lenoir, Timothy, 216
- Leonelli, Sabina, 15, 130, 151
- Lewis, Clarence Irving, 62, 66, 127, 137–9, 154, 169, 220, 229, 244–5
- Lewis, Gilbert Newton, 141
- light, 54, 138, 169, 177, 187, 195–6
multiple truths about, 172
as photons, 148, 195
ray, 147
- lime-water test (for fixed air), 243
- logic, 63–7, 169, 244
bivalent, 192
many-valued, 171
- logical positivism, 6, 58, 205
- Löhkivi, Endla, 207, 217
- Longino, Helen, 7
- Lowry, T. M., 141, 146
- Lynch, Michael P., 165, 174
- Lyons, Timothy, 107, 109, 186
- Mach, Ernst, 142, 246, 248
- Mäki, Uskali, 207
- Martí, Genoveva, 97
- Marxism, 217
- mass, 87, 142
- mass–energy conversion, 158
- Massimi, Michela, 208, 229–31, 239
- Maudlin, Tim, 84, 89, 119, 150, 233
- Maxwell, James Clerk, 195
Maxwell's equations, 183
- Maxwell, Nicholas, 20
- May, Theresa, 9
- McIntyre, Lee, 190
- McKenzie, Kerry, 207
- McLaughlin, Amy, 214
- McLeod, Alexus, 174
- meaning, 77, 85–90, 93, 241
- meaningfulness, 88–90, 99
- measurement, 208, 239
- mereology, 91
- Merleau-Ponty, Maurice, 61
- metaphor, dead, 81
- metaphors (various), 43, 80–1, 116, 183, 236, 240
- metaphysical realism, 8, 71, 84–5, 91, 150, 205–6, 224, 227, 249
- methane, 189
- methodology, 63, 244
- meter, 100, 177
- micreductionism, 157
- Miller, Alexander, 73
- mind-control, 71–2, 124, 126, 142, 169, 220
- mind-framing, 71, 77, 86, 93, 124, 131–41, 220–2, 230
- mind-independence, 70–3, 124, 169, 180, 201, 224
- individuative, 72, 132
- Misak, Cheryl, 25, 61, 164, 198, 207
- Mitchell, Sandra, 239
- model-theoretic arguments, 91, 227
indeterminacy argument, 227
permutation argument, 227
- Mol, Annemarie, 149
- monism, 201, 215
in Kant's philosophy, 232
- Moore, G. E., 103, 168
- Morgan, Mary, 113
- Morrison, Margaret, 113
- myth of the given, 74

Index

279

- naming, 95
- natural kinds, 244
- natural ontological attitude (NOA), 206
- naturalistic metaphysics, 130, 149, 162
- necessity, practical, 121, 183, 194
- Nersessian, Nancy, 113
- Neurath, Otto, 6, 25, 70, 205
- New York Times*, 163
- Newtonian mechanics, 87, 142, 147, 170, 172, 186, 234, 236
 - as approximation to relativity, 250
- Nguyen, James, 114
- Niiniluoto, Ilkka, 6, 69, 71, 82, 87, 100, 132, 150, 191, 219, 225, 234
- Noë, Alva, 49, 61
- Norton, John, 134
- noumena, 128, 219, 225
- noumena vs. phenomena, 74–5, 112
- noumenal jam, 82
- objectivism, 230
- observational reports, acceptance of, 169
- ontological principle, 134–6, 139, 161
- ontological realism, 73
- ontology, 27, 237
 - activity-based, 134–6
 - change by epistemic iteration, 241
 - as an internal matter, 224
 - rooted in practice, 221
- operational coherence, 4–5, 23–4, 31, 40–8, 126, 143, 167, 169, 181, 200, 245
 - attribution of, 47
 - as a matter of degrees, 171
- operational conception of reality, 119, 129–31, 149
- operational ideal, 2, 7, 12, 85
- operationalism, 3–4, 24, 235, 248
- Oppenheim, Paul, 156
- orbital, 152, 185
- ordinary-language philosophy, 120
- Ørsted, Hans Christian, 52
- oxygen, 16, 141, 145, 155, 194, 243
 - as de-phlogisticated air, 152
- Page, Sam, 71, 132
- paradigm, 14, 26, 33, 51, 132, 196, 218, 223, 229, 236–8
 - term used by C. I. Lewis, 137
- partial realism, 106
- part–whole relation, 157
- past, argument from the, 73, 123
- Pedersen, Nikolaj J. L. L., 165, 175
- Peirce, Charles Sanders, 25, 46, 58, 61, 197, 200, 208, 213–14, 240–1, 250
- penguin, 94
- perfect model model, 207
- perpetual motion, 246
- perspectival realism, 222, 229–31
- perspectivity, three layers of, 229
- perspective, definition of, 229
- perspectivism, 81, 208, 237
- pessimistic induction, 98, 106, 186–7
- Peters, Dean, 106
- phenomenology, 61
- phlogiston, 151, 153, 155, 194, 233
 - phlogiston vs. oxygen, 195
- photon, 124, 159
- Piaget, Jean, 95
- Pickering, Andrew, 49, 211, 216
- Pihlström, Sami, 129, 133, 220–1, 225
- Pirsig, Robert, 23
- placebo effect, 121
- pluralism, 66, 110, 231–9
 - conceptual, 150
 - concerning progress, 213–15
 - concerning truth, 165, 172, 200
 - conservationist, 234–8
 - different types of, 237–9
 - epistemic, 149, 172, 234
 - as equal-opportunity realism, 153
 - foliated, 237
 - interactive, 238
 - and internal realism, 232–4
 - ontological, 148–55, 172, 233–4
 - and perspectivism, 232
 - tolerant, 237
- Poincaré, Henri, 107, 177, 246
- point, in Euclidean geometry, 88
- Polanyi, Michael, 19, 28–30, 50
- Popper, Karl, 51, 191
- positivism, 69, 204, 248
- positron, 121
- positron emission tomography (PET), 121
- post-truth, 164
- practical realism, 217–19, 221
- practicality, 5–6, 253
- practice, 34, 218, 221, 229, 253
 - of perception, 62
 - of representing, 120
 - semantic, 94
- practice-based realism, 217
- pragmatic realism, 216, 225
- pragmatic scientific realism, 220–1
- pragmatic sense-making, 24, 31, 44–8, 56, 134
- pragmatism, 4–6, 19, 57–67, 197–203, 252
 - as an action-oriented philosophy, 253
 - hybrid, 222
 - and realism, 216–23
 - as relentless empiricism, 60
- pragmatist maxim, 58

- pragmatist metaphysics, 129–31
- pragmatist realism, 206
- pre-figuration, fallacy of, 73–80, 90, 95, 104, 112, 116, 217
- preservationism, 105–8
- preservative realism, 106
- Price, Huw, 59, 165, 174, 176, 178
- Priestley, Joseph, 152, 194
- progress, 8, 117, 125, 247–51
 - abundant, 213
 - cumulative, 187, 215
 - imperative of, 209
 - iterative, 208
 - pluralist, 236
 - pragmatic, 213
 - promoted by activist realism, 211–16
 - self-improving, 240
 - teleological, 213
 - various modes of, 213–15
- proliferation, 238
- promiscuous realism, 126
- pronoun, gender-neutral, 21
- proper name, 96
- property-cluster, 141
 - homeostatic, 145
- propositional knowledge, 13, 17, 237
 - embedded in active knowledge, 20–3
- Psillos, Stathis, 98, 102, 106, 108–9, 184
- pursuit, 246
- Putnam, Hilary, 7, 71, 74, 79, 81, 84, 86, 91, 93, 96, 108, 150, 156, 207, 219–21, 223–9, 232–4
- quality, 23
- quantum field theory, 97, 99, 104, 148, 154, 159, 195, 234
- quantum mechanics, 41, 46, 87, 99, 152, 159, 170, 172, 186–8, 193, 234
 - as a closed theory, 238
- quantum wavefunction, 128, 147
- Quine, W. V. O., 96, 133, 227, 234
- Radder, Hans, 61
- Ramsey, Frank P., 15, 207
- rationalism as anti-realism, 248
- rationality, 45, 246
- Ray, Greg, 164
- real realism, 207, 222
- realism. *See also* Scientific realism
 - as an activist ideal of inquiry, 209
 - basic meaning of, 204
 - concerning science, 209
 - relation to empiricism, 205
 - realistic spirit, 1–3, 7, 205–8, 223, 228
 - reality (real entity), 72, 125, 127, 204
 - reality (real-ness), 72, 119–24
 - achievement of, 142–6
 - coherence theory of, 121
 - constitutive criterion of, 121
 - in degrees, 146
 - domain-specificity of, 147
 - judgements of, 120
 - reality, as the object of knowledge, 119
 - reality, external, 127
 - reality, formal, 126
 - reality, in fiction, 126
 - reclamation of terms, 205
 - reductionism, 155, 161
 - reference, 78–100
 - causal theories of, 97–8, 233
 - as interest-relative, 233
 - as internal, 226
 - reference-borrowing, 93, 97
 - reference-fixing, 93, 96, 100
 - reflective equilibrium, 245
 - Regnault, Victor, 143
 - Reichenbach, Hans, 76
 - relativism, 42, 173, 193
 - relativity
 - conceptual, 228, 233
 - ontological, 96, 150
 - relativity, general theory of, 87, 118, 154, 170, 172, 234, 238
 - relativity, special theory of, 54, 57, 87–8, 99, 137, 177, 187, 234, 246
 - pluralist interpretation of, 235
 - reliance, 121, 183, 194
 - representation, 111–18
 - representational activity, 80
 - Rescher, Nicholas, 128, 232
 - respect, principle of, 240
 - rigid body, 99
 - rigid designator, 98, 100, 233
 - Rorty, Richard, 74
 - Ross, Don, 157
 - Rouse, Joseph, 20, 25, 34, 214, 218
 - Rowbottom, Darrell, 109
 - Rumford, Count, 151
 - Ruphy, Stéphanie, 237
 - Russell, Bertrand, 17, 201, 203
 - Ryle, Gilbert, 13, 22
 - Sagan, Carl, 3
 - Scharp, Kevin, 165, 175
 - Schatzki, Theodore, 34
 - Scheffler, Israel, 232
 - Schiller, Ferdinand Canning Scott, 62, 198, 202
 - Schweber, S. S., 171
 - scientific method, 215

Index

281

- scientific realism, 1, 102, 171, 217, 226, 247–51
 - standard, 69, 78, 84–5, 207, 231, 235, 249
 - ultimate argument for, 108
- Searle, John, 32
- second-person interaction, 31, 49
- selective realism, 106
- self-improvement, 245
- Sellars, Wilfrid, 32, 74
- semantic move, 121, 170, 180, 203
- semantic realism, 219
- semantics as a tool for action, 255
- sense, 96
- Šešelja, Dunja, 246
- set theory, 91
- simultaneity, 89, 137
- single value, principle of, 135, 143
- Skulberg, Emilie, 124
- Slater, Matthew, 80
- Smart, J. J. C., 109
- Snowdon, Paul, 23
- sociality, 30–3
- Soler, Léna, 34–5, 38, 43
- Solomon, Miriam, 103
- Sosa, Ernest, 19
- spandrels, 107
- Spurrett, David, 157
- squirrel, 58
- Staley, Richard, 99
- stance, 7
- Standard Model, 159
- Stanford, P. Kyle, 98, 109
- Stang, Nicholas, 220
- Steinle, Friedrich, 53
- Stoljar, Daniel, 164
- Straßer, Christian, 246
- structural realism, 107
- Stump, David, 133, 244
- Suárez, Mauricio, 113
- substitution reaction, 189
- success, 44, 47, 106, 182, 189, 222, 235
 - realist argument from, 108–11, 250
- surrealism, 186
- Swoyer, Chris, 114
- system of practice, 16, 36–9
- Tarski, Alfred, 100, 164
- Taub, Liba, 43
- tautologies (various), 9, 71, 142
- tautology, 177
- telescope, 64, 222
- Teller, Paul, 15, 74, 86–7, 207, 229, 238
- temperature, 139, 143–6, 241–2
 - negative absolute, 145
 - in relation to heat, 144
- Thagard, Paul, 24, 42, 45
- theory-choice, 14, 196, 236
- theory-testing, 181
- theory-use, 181, 185
- thermometer, 64
- Thomson, J. J., 194
- tiger vs. shark, 194
- Tomczyk, Hannah, 188
- Toon, Adam, 112
- Torretti, Roberto, 7, 74, 134, 216, 225
- transcendental argument, contingent, 134
- Trump, Donald, 4, 179
- truth, 163–203
 - absolutism concerning, 170, 172
 - approximate, 171, 191, 250
 - constitution of, 166, 170, 180–2
 - correspondence theory of, 68, 170, 197–8
 - definition vs. criteria of, 203
 - in degrees, 87, 171, 185, 190, 199
 - domain-specificity of, 171, 186–7
 - empirical adequacy vs., 247
 - functioning in practice, 178
 - functions of, 165, 168, 170, 174, 199
 - in hybrid pragmatism, 222
 - as internal, 224
 - knowledge vs., 181
 - metaphysics vs. epistemology of, 180
 - as non-epistemic, 84
 - operational, 206
 - perspectival, 230
 - pluralism concerning, 179–201
 - pragmatist theory of, 60, 169, 197
 - primary vs. secondary, 165, 178–9, 223
 - primary, in empirical domains, 167, 180
 - Putnam's notion of, 225
 - as a quality, 171, 190–2, 200
 - secondary, in empirical domains, 170
 - utility vs., 202
 - various concepts of, 175
 - truth functionalism, 174
 - truth pluralism, 165, 172, 179–201
 - truth-aptness, 77, 86, 89, 167
 - truth-by-assertion, 176
 - truth-by-comparison, 178, 226
 - truth-by-decree, 177
 - truth-by-honesty, 177, 179
 - truth-by-operational-coherence, 167–70, 175–96, 223, 231, 235, 250
 - plurality of, 172, 193–5
 - Tuomela, Raimo, 32, 74, 82
 - two tables (Eddington), 154
 - uncertainty principle, 88, 99
 - understanding, 44
 - uniform consequence, principle of, 134

- unobservable entities, 1, 69, 146, 153, 205, 246–9
unrestricted inquiry, 236
- van Fraassen, Bas, 7, 69, 104, 108–9, 113–14, 125, 247–8
verificationism, 228, 248
verisimilitude, 191
Vickers, Peter, 106–7
Vienna Circle, 6
view-from-nowhere, 117
Vihalemm, Rein, 69, 78, 207, 217–19, 221
vision, 61, 153
- water, 93, 97, 116, 155, 195, 238
Waters, C. Kenneth, 7
wave-particle duality, 193, 196
Weber, Max, 36
Weinberg, Steven, 187
Westerblad, Oscar, 45
Wheaton, Bruce R., 194
- Whewell, William, 137, 244
whig realism, 103
Williamson, Timothy, 19
Wilson, Mark, 87
Wimsatt, William, xii, 2
winning, 175
Winther, Rasmus, 78
witchcraft objection, 172, 189
Wittgenstein, Ludwig, 16, 18, 26, 30, 70, 86, 111, 166, 168, 207
Woodward, James, 5
world, 70, 73, 75, 79, 84, 92, 104, 116, 127, 219
 external, 80
 multiple meanings of, 128
 ready-made, 74, 91
 versions of, 128, 223
Worrall, John, 107
Wray, K. Brad, 106, 109
Wright, Crispin, 175
Yi, Sang Wook, 241