Index

A Common Faith (Dewey), 188–189
a priori doctrines, 122–123
Abrahamic monotheism, 174
academics, 248–249, 258
accountability, 268, 278–282
  autonomy and, 283
  free play of free intellects and, 267
  unpredictability and, 282–283
acquired characteristics, 242
actants, 102
action, 153–154
  desirabilities and, 97
  noncognitivism and, 167–168
actionable findings, 274
activism, 1, 15
  auxiliary motives and, 156
  epistemic frailty and, 43–44
  food security and, 229, 234
  gap argument and, 154
  noncognitivism and, 158
  scientific humanism and, 151
  scientific world-conception and, 149
  standpoint theory and, 164–166
  value freedom and, 170
Adam (biblical figure), 40
Addams, Jane, 127, 143–145
Adorno, Theodor, 25
aesthetics, 142, 146
  objective thinking and, 61
  religion and, 188–190
  religious function of science and, 191
affirmative action, 215, 261
Africa, 228
  Bt cotton and, 226
  knowledge and, 221
agency, 92–93
  desire and, 93–94, 96–98
  ethical agency and, 144
  perception and, 98–99, 101–102
  practical agency and, 88–92
  practical attitudes and, 167
  practical form of, 84–85
  self-assertion and, 41
  theoretical agency and, 84–85
  see also practical agency; theoretical agency.
agriculture, 224–225, 229–230
  biodiversity and, 230–231
  Bt cotton and, 225–226
  development and, 233–236
  GM crops and, 227–229
  modernization and, 220
  Shiva and, 222–223
  sustainability and, 233
agronomy, 274
Agta women (Philippines), 250
AIDS research, 274
aims of science, 28–33, 182–184
  research priorities and, 281–283
alienation, 57–58
All Quiet on the Western Front (Remarque), 114
allegory of the Cave (Plato), 115
alloparenting, 252
Althusser, Louis, 46
American Economic Association, 208
American Humanist Association, 15
  Center for Education of, 17
  "Humanist Manifesto," 28
analytic philosophy, 65, 88, 107–108
  history of, 107–108
  logical empiricism and, 147
  science and, 124
Andrews, Glenda, 248
Anglicanism, 87, 104
animals, 126, 128, 131, 133, 140, 247
  domestication of, 260
anthropocentrism, 25
anthropology, 240, 261
antibiotics, 282
anti-humanism, 37
  anti-science and, 114
  Bacon and, 44
  original sin and, 45

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

anti-intellectualism, 237
antiquity, 19–21, 117
  Renaissance and, 38–40
antirealism, 31
anti-religionism, 172
anti-science, 114–115, 216, 218–219
  epistemic corruption and, 237
  GM crops and, 227
  New Orthodoxy and, 222–223, 227, 237
apartheid, 222
Apostolou, Menelaos, 257
applied science, 30, 174
Arctic hunter-gatherers, 250
Aristotelianism, 42
Aristotle, 86, 100
  Christianity and, 185
  Feyerabend principle and, 192–193
"Aristotle's Principle" (Feyerabend), 192
Arrogance of Humanism, The (Ehrenfeld), 37
Art as Experience (Dewey), 181, 188
Artificial Intelligence, 70
artists, insight of, 262
Ascent of Man, The (Bronowski), 112
Asia, 228
Association of Black Psychologists, 207
astrology, 39
atheism, 18
Atom and Cosmos (Reichenbach), 122
Aufbau (Der logische Aufbau der Welt) (Carnap), 150
authoritarianism, 220
authority, 22
  denial of, 191
  Latour on, 216–217
  lovable science and, 237
  New Orthodoxy and, 218–220, 222, 232, 237
autonomy, 283–285
  subjectivity and, 50–52
auxiliary motives, 152–154, 156–157

Babbitt, Irving, 126, 128, 130
Bacillus thuringiensis, 225
Bacon, Francis, 21–22, 197–200
  Baconian ideal and, 35
  contemporary science and, 200–201
  idola mente and, 44
  science's promise and, 211, 215
Baconians, 130
Barash, David, 249–250, 252
barbarism, 58
basic science, 30, 173, 175–177
  co-created science and, 275
  significance and, 180
Bateman, A. R., 254
Bayesian decision-theoretical frameworks, 168–169
Beast and Man (Midgley), 47
Beck, Ulrich, 270
behavioral sciences, 170
"Being Black Is Not a Risk Factor" (project), 208
being-in-the world, 57–59
  existential humanism and, 55–57
belief, 94–96
  James on, 183
  objective aspect and, 79
  perception and, 100–101
  religionism and, 172
  scientific inquiry and, 183
  superempirical virtues and, 182
belonging, 191
Bennett, Jane, 102
Bernal, J. D., 283
Biddle, Justin, 276
biodiversity, 220, 225
  conservation and, 230–231
biology, 46–48
  sociobiology and, 240–241
biomedical research, 211
  replication crisis in, 205
bio-power, 53
bipedalism, 243
Black Americans, 206–208, 211
  deficiency, pathology, and inferiority of, 208–209
  footrace metaphor and, 214
Black Lives Matter, 206
Blank Slate, The (Pinker), 239
Blondiaux, Loïc, 269–270
blue sky science, 275, 278
Blumenberg, Hans, 41
Bolsonaro, Jair, 219
Bonney, Rick, 271
bonobos, 255–256
Borlaug, Norman, 224, 227
Boyle, Robert, 102
brain size, 242–244
  intelligence and, 244–247
Brazil, 228–229
British Humanist Association, 37
Bronowski, Jacob, 112–113
Brown, Matthew, 132, 137
Bt cotton, 225–226
Buen Vivir, 220
Burkina Faso, 226, 228
Bush, Vannevar, 34, 275
  progress and, 263, 280
  science's promise and, 199–200
Bushmen hunter-gatherers, 251
Buss, David, 254

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

Cadogan, Sir John, 278–279
Canada, 201, 210
capitalism, 181
  conservation and, 231
Carnap, Rudolf, 64, 108–110, 149–152
  expressive meaning and, 66
  Neurath and, 156, 158
  noncognitivism and, 166–170
  scientific humanism and, 113
  value freedom and, 148
  value neutrality and, 164, 170
  Weber and, 160–161
  Weberian value neutrality and, 159–160, 162–163
Cartesianism, 50
cascade model, 280–281
categorical imperative, 158
  hypothetical imperatives and, 160
Caucus of Black Economists, 207
celebration project, 215
Centers for Disease Control and Prevention, 223
Chicago, Illinois, 144
children, 130, 139–140, 142–143
  childcare and, 249–252
  division of labor and, 260
  long childhood and, 245–246
  single motherhood and, 262
  women's productivity and, 259
chimpanzees, 255–256
China, 19
Christianity, 41
  Aristotelianism and, 42
  Aristotle and, 185
  corrupting influence of, 126
  human flourishing and, 212
  perceptible value in, 86
  war on science and, 202
Cicero, 20
citizens, 264–273, 284–285
  co-created science and, 275–277
  collaborative science and, 274
  contributory science and, 271–274
  global research and, 277
Citizens Convention for Climate, 269
class, 155–157
Classics, 127
  falsehoods propagated by, 134
climate change, 25, 194, 216–219, 222–223
  agricultural production and, 229
  community resilience and, 235
  denialism and, 202–203, 219, 237
  science system contradictions and, 221
Climate Science Legal Defense Fund, 202
co-created science, 272, 275–277
cognitive inferiority, 241
  see also intelligence.
cognitivism, 60, 63–65, 160, 166–170
  social values and, 155
Cole, Jonathan, 259
collaborative science, 271, 274–277
Collins, Harry, 216, 218
  lovable science and, 222, 237
colonialism, 25, 35, 222, 261
color, 102
commercialization, 33, 104, 209
  research priorities and, 267
commodification, 209
  biodiversity and, 231
  research priorities and, 267
community, 190
  citizen science programs and, 284
  moral imagination and, 189
community-based research, 272, 275–277
comparative advantage, 259–260
comparative ethology, 240
Condorcet, Marquis de, 111
consensus conferences, 272
conservation biology, 230–231
Consortium for Socially Relevant Philosophy of/in Science and Engineering, 212
consortship, 255–256
Constantinople, 20
contextual empiricism, 152–153, 155
contextualism, 32
contingency, 42–43, 45
  perplexities and, 137
contributory science, 271, 273–274
control, 21
  Foucault on, 53
conversion experience, 172
Conway, Erik, 202–203, 209
Cooper, David, 23–24, 38, 50
  existential humanism and, 55
  opposing worldviews and, 30–31
  Renaissance tradition and, 38
cooperative breeding, 252
Copernicus, 21
corporations, 222–223, 230
  epistemic integrity and, 227
  murder sponsored by, 229
cosmology, 17
Cottingham, John, 52
COVID-19 pandemic, 194, 203, 263
  Black Americans and, 206–207
  food insecurity and, 224
  intellectual property regimes and, 230
  science's promise and, 215
  trusting science and, 216–218
  unpredictability and, 282

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

Coyne, Jerry, 187
craftwork, 216–217, 222
creation narratives, 17
creativity, 39–40
  essentialism and, 48–49
  rational subjectivity and, 51
critical rationalism, 38
critical reflection, 77
  limits of objectivity and, 78–80
critical thinking, 14, 140
criticisms of science, 220–222
Critique of Practical Reason (Kant), 84
Critique of Pure Reason (Kant), 84
critiques of humanism, 23–26
culture, 116, 160–161
  as value concept, 163
  cultural movements and, 39
curiosity, 140–141, 278–280
  Kitchener's "natural curiosity" and, 178
  significance and, 179–180
  uselessness and, 181

Danish Board of Technology, The, 272
Darwin, Charles, 133, 145, 240
  contemporary impact of, 263
  women's intelligence and, 242
Darwinism, 129, 133, 240
Dawkins, Richard, 177, 187
De Ridder, Jeroen, 63
Declaration of Nyéléni, 234
dehumanization, 53–54
deliberation, 98–100
  morals and, 144
demarcation problem, 212
democracy, 14, 104, 239–240
  contemporary changes in, 269–270
  expertise and, 277
  laser-type unpredictability and, 283
  nonobjectivism and, 266
  research priorities and, 268, 273–274, 281, 285
Democracy and Education (Dewey), 127, 142
Dennett, Daniel, 239
deontology, 158
desacralization, 86–87
Descartes, René, 185, 247
desire, 95–97, 99–101
  practical agency and, 93
detachment, 88–92
  detached gaze and, 96–97
DeVore, Irven, 261
Dewey, John, 11, 126–127, 131–135, 137–138, 141–144
  appreciation and, 136
  Baconian ideal and, 35
  habits and, 138, 140
  institutions according to, 139
  More and, 130
  religion and, 187–191
  religious function of science and, 175, 191–192
  science-values synthesis and, 30
  spectator conceptions of knowledge and, 154
  sympathy and, 144–145
  on usefulness, 181
  warranted assertibility and, 183
dignity, 1, 20
  degradation of, 23
  essentialism and, 47
  Hull-House and, 144
  natural piety and, 189
  Renaissance and, 40–42
disciplinary matrices, 69–71, 74–75
  paradigms and, 72–73
disenchantment, 174
dispossession of land, 233
distribution, 231, 235–237
  distributive justice and, 232–234
distrust of science, 209
divine, the, 86
  existential humanism and, 56
  independence from, 40–42
Dogma of Evolution, The (More), 129
domestication, 259–260
domesticity, 241, 259
Dowd-Uribe, Luna and Brian, 226
Down to Earth (Latour), 219
Du Bois, W. E. B., 127
  lovable science and, 238
dualism, 21, 27–28
  human nature and, 133
  Husserl's warning about, 58
  mind-body as, 126
  transcendental idealism and, 50
Duhem, Pierre, 152–153
Dunbar, Robin, 246
Dupré, John, 47
duty of care, 28

early modern period, 42
  natural philosophy and, 44
  reason and, 111
  Renaissance and, 39, 41
Eco, Umberto, 56
economics, 147, 149–151, 155, 158
  anti-racist initiatives in, 211
  Carnap on, 167
  denial of discrimination by, 206
  distributive justice and, 232
  growth in, 263

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

moral judgments and, 162
Neurath's socialism and, 164
polygamy and, 262
rational economic planning and, 159
research priorities and, 267
unpredictability and, 283
usefulness and, 182
Eddington, Sir Arthur, 18
Eden, Fall from, 197–198
education, 23
Dewey on, 127, 132, 134–137, 142–143
humane values in, 140–142
literary humanism and, 131
saving science and, 211
scientific authority and, 192
see also children.
egalitarianism, 214–215
anthropology and, 261
inegalitarian democracy and, 285
Ehrenfeld, David, 24
The Arrogance of Humanism, 37
Einstein, Albert, 177, 249
Einsteinian science, 121–122
elected representatives, 268
Eliot, Lisa, 245
emotion, 52, 99–101
women and, 259
empathy, 137, 142
empiricism, 34, 152–155, 160, 162–164
education research and, 192
objective thinking and, 63–65
pragmatism and, 175–177
rational subjectivity and, 50
scientific worldview and, 186
Weber on, 161, 169
see also logical empiricism.
emptiness, 56–57
enchantment, 88
endogenous problems, 266, 279, 281, 283–284
engagement, 88–91, 270–272
agency and, 92–93
just science and, 236
local scale of, 284
nonparticipative forms of, 271
research priorities and, 264
see also participation.
engineering, 21
English philosophy, 44, 88
Enlightenment humanism, 13, 22–23, 26–28
deviance and, 51
disenchantment and, 174
German Enlightenment and, 111
independence from the divine and, 41
Kant on, 115
naturalism and, 36
rational subjectivity and, 49
Renaissance and, 39
scientific humanism and, 111
twentieth century as sequel to, 30
unethical consequences of, 23–25
Vienna Circle movement compared to, 151
Enlightenment Now (Pinker), 51
entanglement (of fact and value), 154–155, 159, 170
entrepreneurial science, 279
environment, 24–25
meta-ethical claims and, 98
modernism and, 37
epistemic authority, 16–19, 21, 34
epistemic corruption, 222–223, 237
epistemic elitism, 266–268
epistemic fecundity, 283–284
epistemic frailty, 42–45
epistemic silencing, 220
epistemic values, 147
affirmative action and, 215
pure science and, 175
epistemology, 69
action-oriented thinking and, 153
co-created science and, 275–276
Enlightenment and, 22–24, 27
epistemic value and, 142
essentialism and, 47–48
extraordinary science and, 72–76
intersubjectively authoritative method and, 66–69
metaphysics and, 14–15
modern science's rejection of, 124
normal science and, 70
political struggle and, 170
rational subjectivity and, 52–53
Renaissance and, 20–21
research and, 283–285
social relations and, 155–156, 165
sociology and, 71–72
utilitarian aims and, 281
equality, 26
biology and, 240
Erasmus, Desiderius, 42
ergon (function), 49
Escobar, Arturo, 220–222
essentialism, 261
aims of science and, 281
evolutionary theory and, 133
phenomenology and, 57
Essentialist Humanism, 25, 27, 38, 45–48
biology and, 46–48
function and, 49
vital conception of science and, 48

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

estrus, 255
ethics, 14–16
  Addams and, 144
  cognitive meaninglessness of, 158
  Dewey and, 132–133
  human nature and, 239
  More and, 129–131
  objective content and, 65
  objective thinking and, 61, 80
  as perceptual discipline, 98
  romanticism and, 128
  unethical consequences and, 23
  value properties of nature and, 87
Ethics (Dewey and Tufts), 145
Ethics (Spinoza), 111
Etzkowitz, Henry, 279
eudaimonia, 49
eugenics, 130–131
Europe, 228–229
  New Orthodoxy and, 219
  Shiva condemnation and, 222
European Commission, 268
evaluative vocabulary, 91–92
Evans, Gareth, 94–96
evidence, 210
  theory and, 184
evolution, 47
  brain development and, 244–245
  child-rearing and, 251–252
  concept of the human shifted by, 133
  Darwinism and, 129
  female form and, 257
  hunter-gatherers and, 249
  long childhood and, 245–246
  sex-linked traits and, 244
  social and political applications of, 240
  socialization hypothesis and, 246
evolutionary biology, 17
evolutionary psychology, 240
  monogamy and, 253, 256–257
exemplars of scientific achievement, 68–72
"exile of God" ("Deus absconditus"), 86
existence, essence preceded by, 46
existential humanism, 31, 38, 55–57
  activist stance and, 43
  critiques of, 57–59
"Existential Criterion of Reality" (Feyerabend), 192
existentialism, 41
  scientific transformation and, 48
exogenous problems, 266–267, 275, 279, 281, 283–284
experience, 127–128, 131–133, 135–139
  Addams and, 144
  Dewey on, 140–143
  empiricism and, 64–65
  lit up world and, 58
  pure science and, 176
  religion and, 187–189, 191
  science of, 146
  usefulness and, 181–182
Experience and Nature (Dewey), 181, 187
expertise, 217, 245, 247–248
  consensus and, 222
  epistemic elitism and, 267
  just science and, 232
  production of, 276–277
  reflexivity and, 270
explanation, 32, 88–90
extramarital partners, 258
extraordinary science, 62–63, 67–68
  "isms" and, 75
  Kuhn and, 72–75
  limits of objectivity and, 78
  scientism and, 75–76
ExxonMobil, 203

facts, 95–96
  entanglement of values with, 154–155, 159, 170
  value pluralism and, 160–161
  value properties and, 82–83
  values distinguished from, 92–93, 167–168
faith, 189–191, 194
Falk, Dean, 247
Fall of Man, 42
Fallist movement, 221
Farewell to Reason (Feyerabend), 53
fascism, 31
Feigl, Herbert, 30, 38, 149–151
feminism, 147–148
  alternative visions of society and, 220
  demarcation problem and, 212
  math test scores and, 248
  Neurath and, 157
  science's promise and, 209
  sociobiology and, 241
  standpoint theory and, 155, 166
  Vienna Circle and, 149, 152
fertility, 246, 252–255, 258
fertilizers, 233
Feyerabend, Paul, 53, 186, 192–194
  conquest of abundance and, 58
  lovable science and, 238
Feynman, Richard, 278–279
Figuerdo, Aurelio José, 245
fine art, 137–138
Fleming, Alexander, 282
flexibility, 127, 133–135, 143
  inflexibility and, 140

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

flourishing, 11–13, 24
  Dewey and, 126
  eudaimonia and, 49
  nonobjectivism and, 266
  progress and, 264
  saving science and, 211
  scientific humanism and, 117
  usefulness and, 182
Floyd, George, 207
food, 233–235
  insecurity and, 224–225
  preparation of, 247–248
  provision of, 250–251
  security and, 222, 229, 234, 236
  sovereignty and, 234, 236
Ford, Franklin, 134–135
fossil fuel industry, 203
Foucault, Michel, 50–51
fragility of science, 218
frailty, 40, 42–45
  existential humanism and, 56, 59
France, 117, 265
  Citizens Convention for Climate in, 269
Frank, Philipp, 152, 154–155
Fraser, Nancy, 232, 234–236
free play of free intellects, 180, 200, 267
  research priorities and, 280
free will, 40
freedom, 14
  abstract principles and, 26
  Dewey on, 141–142
  experience and, 136
  rational subjectivity and, 51
  research priorities and, 280
Freire, Paulo, 238
From Copernicus to Einstein (Reichenbach), 122
funding, 202, 204–205, 210
  research priorities and, 268, 277, 279–281
  saving science and, 211

Galileo, 102
gamete size, 253, 255
gap argument, 154, 157, 159, 164
Gattungswesen (species-essence), 48
genetically modified organisms (GMO), 227–229
  Bt cotton and, 225–226
  production of expertise and, 277
genetics, 225, 227
  reproductive strategy and, 254
  selfish genes and, 252
genius, 54, 248–249
"Genuine Problems and the Significance of Science" (Brown), 178
geometry, 21
German culture, 114, 116–117
  philosophy in, 122
Gibbons, Michael, 279
global justice, 216, 220, 236–237
  depeasantization and, 225–229
  injustice and, 229–231
  three dimensions of, 232–235
Global North, 219–220, 227, 230, 235
Global South, 219–222
  agricultural modernization in, 234
  GM adoption in, 228–229
  vaccine access in, 230
global warming, 210
  see also climate change.
God, 86–87
  Dewey's definition of, 190
  intellectual love of, 111
Goethe, Johann Wolfgang von, 117
Goldman, Alan, 142
goodness, 126–130, 143
  Dewey on, 137, 142, 145
Gould, Stephen Jay, 18, 177
governance, 219, 230–232, 236
  citizen participation and, 272
  entrepreneurial science and, 279–280
  participative societies and, 269–270
Grafton, Anthony, 20
Grandmother Hypothesis, 245–246
Greece, 20, 117
  skepticism and, 42
"Green grabbing", 230
Green Revolution, 220, 224

Habermas, Jürgen, 270
habits, 132–136, 138–143
  appreciation and, 137
  skills and, 138–139
  tastes and, 135–138, 142–143
Hadza hunter-gatherers, 251
Hamlet (Shakespeare), 164
Harding, Sandra, 238
Harman, Gilbert, 91
harms, 3, 24
  collective administration and, 35
Harper, Stephen, 202, 210
Hawkes, Kristin, 245–246
Hawking, Stephen, 177
Heidegger, Martin, 45, 57–58
Heisenberg, Werner, 74
heliocentrism, 21
Hellenism, 41
Hensel, Paul, 116–117
hermeneutical tradition, 88
higher will, 126–128, 140

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

history of science, 113, 117–120, 124
homosexuality, 256
Honneth, Axel, 234
Horkheimer, Max, 25
How We Think (Dewey), 140
Howard, Don, 155–157
"How to Defend Society from Science" (Feyerabend), 193
Hrdy, Sarah, 247, 252, 257
Huckleberry Finn (Twain), 141–142
Hull-House, 144
human condition, 1, 14, 22, 58, 201, 239
  Dewey on, 132, 141, 143
  experience and, 128
  metaphysics and, 38
  nature of reality and, 43
  science of experience and, 146
Human Genome Project, 268
human nature, 128–134, 239–240
  Bronowski and, 112
  Carnap and, 110
  essentialism and, 45–48
  hunter-gatherers and, 250
  natural piety and, 189
  theory of women and, 262
Human Nature and Conduct (Dewey), 127
human rights, 16
  abstract principles and, 26
human sciences, 34, 239–241
  theory of women and, 261–262
human welfare, 21
  global ecosystem and, 28
  harm to the environment and, 24
Humanism and America (Foerster), 129–130
"Humanist Manifesto" (American Humanist Association), 28
humanist organizations, 13, 15, 41
  religion and, 17
Humanists International, 15, 28
Humanists UK, 16
humanitas, 20
Hume, David, 87–88, 160
  norms following facts denied by, 158
Humeanism, 101
Humphrey, Nick, 246
hunter-gatherers, 242–243, 245–251
  division of labor and, 260
  sexual behavior and, 257–258
Husserl, Edmund, 57–58
Huxley, Thomas, 129
"I" (personal pronoun), 89

ideal rational acceptability, 183
idealism, 164
idealist value theory, 163
ideals, 190
  Said defense of, 27
ideology, 54
idola mente (idols of the mind), 44
imagination, 127, 129, 131–132, 136, 146
  Addams and, 144–145
  Dewey and, 188–191
  Huckleberry Finn and, 141–142
  morality and, 194
impartial spectator figure, 145
imperialism, 25
imperialist scientism, 47
incentives, perversion of, 204–206, 210, 212, 215
inclusive development, 236
inclusive science, 264, 266, 268, 273
  collaborative science and, 274
  objectivity and, 276
incommensurability, 68
India, 19
Indigenous communities, 230, 234–235
  expertise of, 34
individualism, 25, 127, 129–131
  just science and, 232
  untenable epistemology of, 52
inductive risk, argument from, 158–159
industrialization, 149, 228
industry, 144–145
inequality, 229–230
  procedural forms of, 236
infidelity, 254
inner check, the, 126, 133–134
inner kinship, 150, 152
institutional religion, 188
institutions, 260
  accountability and, 268
  reform of, 139
instrumental features of science, 32
instrumentalism, 132, 137, 141, 143
  pure science and, 176
integrity, 216–218, 221–222
  co-created science and, 276
  corporations and, 227
  epistemic corruption and, 223
  epistemic forms of, 237
"Intellectual Autobiography" (Carnap), 108
intellectual history, 1–2, 4, 7, 11–14
  analytic philosophy and, 107–108
  degradation of dignity and, 23
  high philosophy and, 86
intellectual property, 230
intelligence, 43, 242–243
  evolution and, 244–245
  expertise theory and, 247–248
  Hawkes's Grandmother Hypothesis and, 245–246

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

IQ distribution and, 248–249
Miller on, 243–244
socialization hypothesis and, 246
two tails phenomenon and, 244
two tails phenomenon and, 244
intelligent sympathy, 145
intentionality, 104
interdisciplinary collaboration, 209
STS and, 217
Intergovernmental Panel on Climate Change, The, 223
internationalism, 120
participatory strategies and, 285
interpretation, 77
limits of objectivity and, 78–80
intersubjectively authoritative method, 64–67, 70, 72
intersubjectivity, 55–56, 73–74
accountability and, 151–152
intersubjective aspect and, 79–80
Weberian value neutrality and, 161–163
IQ, 248–249
Isis (journal), 118
important patrons of, 120
"isms", 67
extraordinary science and, 75–78
methodology and, 79
scientism and, 72
Itaipú hydroelectric dam, 229
Italy, 20

James, William, 31, 175, 187–188
religious experience and, 189
religious function and, 192
successful belief and, 183
Janack, Marianne, 61
Japan, 265
Jaspers, Karl, 56
Jastrow, Robert, 203
Johnson, Lyndon, 213
The Joint Caucus of Socially Engaged Philosophers and Historians of Science, 212
judgment, 144–145, 157
justice, 216, 220, 235–237
in agricultural production, 227
injustice and, 229–231
lovable science and, 237–238
natural piety and, 190
three dimensions of, 231–235

Kang, S. T., 252
Kant, Immanuel, 26, 84
practical reason and, 88
pursuit of knowledge and, 111
rational subjectivity and, 50
value properties of nature and, 87
vocation and, 115–116
Kantianism, 50
rejection of philosophical doctrines and, 122
Kaplan, Hillard, 247
Kepler, Johannes, 21
kin selection, 252
kindliness, 141
King, Martin Luther, 213–214
Kingdom of Ends, 111
Kitcher, Philip, 178–180, 218
epistemic elitism and, 266
on expertise, 217
GM crops and, 227–229
well-ordered science ideal and, 273
knowledge, 3, 6
Bronowski on, 112–113
constraints on, 45
dogmas of, 35
equal distribution of, 134
"for its own sake," 30
high and low-grade forms of, 61
Reichenbach view of, 123
science as a source of, 14
spectator conceptions of, 154
knowledge production, 209
agriculture and, 225, 228–229
citizen engagement with, 271–272
modes of, 280
K-strategy of reproduction, 245–246
Kuhn, Thomas, 62, 67–72, 75–76
extraordinary science and, 72–75
five criteria for theory and, 184
research priorities and, 279

labor, division of, 241, 250, 259–261
male dominated occupations and, 262
Lacey, Alan, 21
Landless Workers' Movement (MST), 229
language, 74
cognitive use of, 64
metaphor and, 103
socialization hypothesis and, 246
lasers, 281
unpredictability and, 282–283
Latin, 19–21
Latin America, 228
Latour, Bruno, 102, 218
authority and, 221
Down to Earth, 219
politics of things and, 104
Laughlin, William, 242
Lebensphilosophie (philosophy of life), 114
Lebenswelt (life-world), 57

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

legitimacy, 199–200
  of demand for accountability, 278, 281–282
  of expectations, 285
  of social values, 212
  values and, 232
LGBTQ, 209
liberal-rational humanism, 46
liberation movements, 27
Limitations of Science (More), 129, 131
linguistics, 103
  philosophical distinctions vs., 92
Lipton, Peter, 18
literary humanism, 126–129, 131, 133
  Dewey and, 137, 140
  pragmatism and, 145
  secondhand values and, 136
literary intellectuals, 111–112
"lit up" world, 55–56, 58
local contexts, 269–270, 272, 274–275, 277, 284
Locke, John, 102
logical atomism, 107
logical empiricism, 29–30, 63–65
  analytic philosophy of science and, 124
  objective thinking and, 80
  reevaluation of, 147
  scientific humanism and, 113
  scientism and, 71
  spectator forces of knowledge and, 154
  unity of science and, 120–121
  values strictly separated by, 31
"Logic of Judgements of Practice, The" (Dewey), 142
Long, Pamela, 20
longevity, 245–246
Longino, Helen, 152–153
lovable science, 216–217, 237–238
Luhmann, Niklas, 270
Lutheranism, 45
Lynn, Richard, 241, 244

Macron, Emmanuel, 269
male dominated occupations, 262
Man the Hunter (Lee and DeVore), 242, 250–251
Marcel, Gabriel, 56
  ontological humility and, 59
"March for Science" (US), 210
marginalized communities, 236
market economy, 33, 267
  unpredictability and, 283
marriage, 256–257
  artistic insight and, 262
Marx, Karl, 48
Marxism, 46
  noncognitivism and, 158
  standpoint theory and, 155–157
Mātauranga Māori, 220
mate choice, 256–257
materialism, 127–128, 130, 133–134, 138, 144
mathematical ability, 248–249
mathematics, 20–21
  scientism and, 64–66
McCarthyism, 31
McDowell, John, 86, 95
meaning, 59
  cradle of meanings and, 56
  crisis of, 74
  Dewey on, 189–190
  intersubjective authority and, 64
  pragmatism and, 188
  religious function and, 192
  scientific humanism and, 115–116
mechanization, 144
medieval period, 12, 19–20
  epistemic frailty and, 42
  self-assertion and, 41
  women working in, 252
Merchants of Doubt (Oreskes and Conway), 202, 222
Mesopotamia, 252
metaethics, 98
  modern science's rejection of, 124
  noncognitivism and, 149, 157, 166
  politics of things and, 104
  value properties of nature and, 87
metaphor, 18, 102–103
metaphysics, 157, 163
  anti-metaphysicians and, 147
  Carnap on, 169–170
  Dewey's skepticism of, 133, 145
  ego illusion and, 51
  Enlightenment and, 22, 24, 27
  epistemic frailty and, 43
  epistemology and, 14–15
  Feigl on, 150
  metaphor and, 103
  naturalism and, 38
  Neurath on, 159
  objective content and, 65
  objective thinking and, 61, 80
  religion and, 16–17
  Renaissance and, 20–21
  science dabbling in, 129
  scientific worldview and, 186
  theoretical agency and, 85
Midgley, Mary, 47
Miller, Geoffrey, 243–244

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

mind, states of, 87, 99
desirabilities and, 94–96
desire and, 93, 101
mind-body dualism, 126
misogyny, 259
modern science, 121–124
modernity, 107–108
environmentalism and, 37
progress and, 124
Renaissance and, 19
superstitions of, 104
value pluralism and, 161
modernization, 122, 124
agriculture and, 220, 225, 233–234
monarchy, 261
monism, 192
Monod, Jacques, 187
monogamy, 241, 262
myth of, 253
Monsanto, 227
Montaigne, Michel de, 44
Mooney, Chris, 201
moral evaluation, 162
moral imagination, 189, 194
moral philosophy, 41
moral sentiments, 88
desirabilities and, 95, 101
desire and, 93
morality, agency and, 100–102
animal behavior and, 131
deliberation and, 144
desirabilities and, 99
Dewey on, 129, 133, 136, 141–142
judgment and, 145
romanticism and, 128
unprovable demands of, 158
More, Louis Trenchard, 128–131
More, Paul Elmer, 126, 128
Mota de Oliveira, Valmir, 229
motivation, 99, 101
desire and, 97
Murray, Charles, 241, 261
music, 135
as "auditory cheesecake," 40

Nagel, Ernest, 108
National Black Child Development Institute, 208
National Economics Association, 207
National Medical Association, 207
National Science Foundation, 208
natural philosophy, 12
ancient texts and, 20
early modern period and, 44
Scientific Revolution and, 27
natural piety, 189–190, 194
natural selection, 240–241, 258
intelligence and, 242
natural theology, 38
naturalism, 108
Carnap and, 169
Enlightenment and, 22, 36
essentialism and, 46
humanism and, 150
literary humanism and, 131
metaphysics and, 20
More and, 129–130
Neurath and, 152, 157
new humanism and, 117
religion and, 17–18
religious experience and, 189
science as a source of knowledge and, 14
unconditional value statements and, 160
values properties and, 87
Weberian value neutrality and, 163
naturalistic humanism, 38
independence from the divine and, 40
nature, 85–88
control over, 21
as Creation, 198
duty of care for, 28
as human resource, 58
perception and, 102–103
properties of, 104
Reichenbach on, 122–123
relation and, 189–191
religion and, 192
state of, 261
value properties of, 84
Nature (journal), 268–269
Nazism (National Socialism), 25, 37
as humanism, 37
neo-Kantianism, 163
Vienna Circle and, 163
neoliberalism, 181, 220
neopositivism, 151
Neurath, Otto, 150–158
lovable science and, 238
noncognitivist standpoint theory and, 164–167, 169–170
utilitarianism and, 161
value freedom and, 148–149
Weber and, 162
Weberian value neutrality and, 159–160, 162–164
New Atlantis (Bacon), 198, 215
new humanism, 116–117
Sarton and, 118–120
"New Humanism, The" Hensel, 117
New Orthodoxy of Value-Laden Science, 216–224, 227, 231, 237

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

New Yorker (magazine), 222
Newton, Isaac, 87, 177, 249
  contemporary impact of, 263
Newtonian science, 84, 87–88
niceness, 257–258
Nierenberg, William, 203
Nietzsche, Friedrich, 40
  drives for power and, 54
  existential humanism and, 55–56
nihilism, 114
NIMBY syndrome (Not in My Backyard), 270
Nobel Prize, 205, 267
  GM crops and, 227
Noether, Max, 117
noncognitivism, 149, 157–158, 170
  Carnap and, 166–170
  neopositivism and, 151
  standpoint epistemology and, 166
  Weberian value neutrality and, 160
non-epistemic values, 148, 151–155, 158, 164
  auxiliary motives and, 156
  unconditional statements and, 164–166
non-governmental organizations (NGOs), 236
  GMOs and, 277
non-incentives, 205, 212, 215
non-objectivism, 264–266, 270, 277
non-pragmatic epistemic criteria, 175, 182–185
nonreproductive mating, 255–256
normal science, 62, 67–72, 75–77
  extraordinary science and, 72–74
normative demands, 84, 94, 97
  metaphor and, 102–103
  practical agency and, 102–103
North America, 150, 203
  Bt cotton and, 226
  New Orthodoxy and, 219
  religious humanists in, 17
  Shiva condemnation and, 222
noumena, 84
Novum Organum (Bacon), 21
Nussbaum, Martha, 49

objective content, 65, 75–77
objectivity, 60–64, 66–67, 78–80
  co-created science and, 276
  craftwork and, 217
  just science and, 232
  Longino on, 153
  New Orthodoxy and, 218–219
  objectivity deficit and, 77–78
  problems and, 110
  scientism and, 71, 78
  standpoint theory and, 165–166
  unconditional value statements and, 161
  value freedom and, 147–148, 155
  vocabularies of value and, 82
Okruhlik, Kathleen, 155–158, 165–166
On Human Nature (Wilson), 46, 261
ontological naturalism, 108
opportunistic mating, 255
optatives, 168–170
Oration on the Dignity of Man (Pico della Mirandolla), 40–41
Oreskes, Naomi, 202–203, 209, 216–219, 222
  trust and, 222
original sin, 42
  anti-humanism and, 45
Otto, Shawn, 201, 209
Ottoman Turks, 20
ought/is principle, 160, 239

pain, 100
paradigms, 62
  extraordinary science and, 75–77
  intersubjective aspect and, 79
Paraná, Brazil, 229
paraphraseability, 103
parental choice of mates, 256–257
Paris Climate Accord, 203
Parmenides, 193
participation, 271–274, 285
  global priorities and, 277
  non-participative forms of engagement and, 270
  participative societies and, 264, 266, 269–270
Pascal, Blaise, 44
paternal involvement, 253, 256, 262
patriarchy, 261
Pauli, Wolfgang, 74
peacock's tail theory, 243, 245
peasants, 228
  de-peasantization and, 224, 235
  dispossession and, 233
  misrecognition and, 234
pedophilic activity, 256
Peels, Rick, 66
peer review, 205–206, 211, 274
  saving science and, 211
Peirce, Charles S., 183
perceptible world, 84–85, 88, 104
perception, 100–102
  beliefs and, 100–101
  ethics and, 98
  motivation and, 99
perfectibility of humanity, 111
"Personal Life and Class Struggle" (Neurath), 155
personal religion, 188–189

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

persons with disabilities, 54
perspective, 89–92
  detachment and, 92–93
pesticides, 226, 233
Pfizer, 227
"Philosophical Significance of Modern Physics" (Reichenbach), 121
phenomenology, 55–56
philosophy, 77
  extraordinary science and, 73–74
  history of, 2
  rejection of, 122
  science preferred to, 239
philosophy of science, 2, 121, 124
  aims of science and, 32
  contextual empiricism and, 153
  demarcation problem and, 212
  depoliticization of, 217
  diversity of scientific practice and, 223
  Global North and, 220
  knowledge production and, 209
  Kuhn and, 68
  logical empiricism and, 29, 147
  Marx's contributions to, 48
  Neurath and, 155–156
  New Orthodoxy and, 218
  pragmatism and, 175
  Sarton and, 117
  Science Wars and, 53
  standpoint theory and, 165
  well-ordered science and, 273
  World War I and, 113
Pico della Mirandolla, Giovanni, 43
  essentialism and, 45
  Oration on the Dignity of Man, 40–41
Pielke, Roger, 277
Pinker, Steven, 39, 49, 239, 262
  women's emotions and, 259
Plato, 115
  literary humanism and, 126
pleasure and pain, 162
Ploeg, Jan Douwe van der, 224
pluralism, 32
  essentialism and, 47
  scientific worldview and, 186
  social division and, 269
Plutarch, 20
Poincaré, Henri, 152
Polanyi, Michael, 284
political economy, 104
  meta-ethical claims and, 98
political institution building, 15–16
political philosophy, 15, 232
  recognition and, 234
  science and, 238
politics, 281
  blue sky science and, 278
  Enlightenment and, 151
  epistemological risks of, 275
  fact-value distinctions and, 167
  meta-ethical claims and, 98
  Neurath and, 152, 156–158
  objective thinking and, 61
  of things, 104
  political action and, 124
  production of expertise and, 276–277
  research agendas and, 284–285
  standpoint theory and, 155, 164–166
  unpredictability and, 282
  value freedom and, 170
  Vienna Circle and, 147–149
  visibility and, 104
  Weberian value neutrality and, 159–161
polygamy, 253, 262
Pomponazzi, Pietro, 40
Popper, Karl, 38
popularization of science, 177
populism, 219, 222–223, 227, 237
  anti-science and, 216–218
positive knowledge, 118, 120
possessive relationships, 255
postcolonialism, 35
postmodernism, 27
post-partum depression, 252
poverty, 224–225
  biodiversity and, 231
  pro-poor technology and, 225–226, 228
power, 285
  rational subjectivity and, 54
practical agency, 82, 84–85, 90–92
  desire and, 93–94, 96
  perception and, 101–102
  value properties and, 88, 97
practical attitude, 166–167
practical reason, 84, 88
  Carnap and, 169–170
pragmatism, 30–31
  Addams and, 144
  American pragmatism and, 4, 30–31, 110
  Dewey and, 126–127, 132
  empiricism and, 175–178
  function of science and, 172–175
  instrumentalism and, 181
  justification for science and, 109–110
  literary humanism and, 128, 145
  metaphor and, 103
  non-pragmatic criteria and, 182–185
  problem-solving inquiry and, 186
  religion and, 187–188
  scientific worldview and, 187

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

prediction, 32, 88–90
and control, 172–178, 182–184, 186
see also unpredictability.
prescientific thought, 38
"Pretensions of Science, The" (More), 129
prevention project, 213–215
primates, 255–256
primitivism, 128
privilege, 214–215
probability, logical foundations of, 110
problems, articulation of, 109
solution of, 109–110
Proctor, Robert, 202
professional training, 284
non-professionals and, 271–272, 274–276
progress, 118, 263–264
Bush on, 280
modernity and, 124
normal science and, 71
progressivism, 131–133, 141, 146
properties, 101–103
visibility and, 104
see also value properties.
Protagoras, 20
pseudo-science, 129
psychology, 129
anti-racist initiatives in, 211
literary humanism cordoned off from, 131
racism in field of, 208
replication crisis in, 205
public health, 222
distribution and, 235
distributive justice and, 233
food sovereignty and, 234
GM crops and, 227
health sciences and, 230
pesticides and, 226
science system and, 231
trusting science and, 216–217, 221
public opinion, 263
public sphere, 4, 13, 33
Punjab, India, 220–221
pure science, 30, 175–177
puzzles, 69–70, 180
usefulness and, 182

quantum physics, 121–122
engineering and, 263
lasers and, 282
"questions of life," 29
quietism, 43–44
Quine, W. V., 108, 152
ethical noncognitivism and, 157

racism, 206–208, 211, 240
footrace metaphor and, 213–215
saving science and, 211
value freedom and, 147–148
Vienna Circle and, 149
rape, 254
ratiocentrism, 52–53
rational subjectivity, 23, 38, 49–53
dehumanization and, 53–54
existential humanism and, 55
see also subjectivity.
rationality, 85
deliberation and, 99–100
deviance and, 51
existential humanism and, 55
liberal-rational humanism and, 46
noncognitivism and, 167
religious structure and, 42
scientific humanism and, 109–111
value functions and, 168
Raven's Progressive Matrices, 241
Rawls, John, 270
reality, 43, 45
Aristotle's principle and, 192–194
"isms" and, 61–63
pure science and, 175
reason, 13–15
antiquity and, 20
auxiliary motives and, 157
Bacon's "idols of the mind" and, 200
Enlightenment and, 22–24
Enlightenment critiques and, 26–27
human welfare and, 21
lovable science and, 237
metaphysics as narcotic to, 169
moral vocation of, 111
non-scientific reasoning as, 34–35
nonverbal testing and, 241
the other of, 167, 170
vocation of, 116
will and, 167
rectification project, 213, 215
reflexivity, 167, 170, 222
increasing trend of, 269
reform, 126–128, 130–131
institutions and, 139
Reichenbach, Hans, 107, 121–124
scientific humanism and, 113
Reilly, David, 248
relativism, 68, 172
just science and, 232
religion, 126
Bacon's promise and, 198, 200
epistemic authority and, 16–19
existential humanism and, 58–59

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

natural theology and, 38
pragmatist views of, 178, 187–191
science as, 34, 172, 174–175, 191–192
scientific worldview and, 185, 187
religionism, 172, 174, 185, 192
religious existentialism, 56
Religious Humanism, *17*
Remarque, Erich Maria, 114
Renaissance humanism, 12–13, 19–21, 36–42
creativity and, 48
critical attitudes toward dogma and, 26
epistemic frailty and, 45
essentialism and, 45, 47
existential humanism and, 56
historical narrative and, 41–42
limitations of truth and, 43
new humanism and, 117
new science and, 198
rational subjectivity and, 54
science's promise and, 199
replication, 205
replication crisis and, 209–210, 212
representation, 231–232, 235–237
reproduction, 245–246
age window for, 258
strategies for, 254–258
reproductive skew, 257
Republican War on Science, The (Mooney), 201
Republicans, 201–202
"Republic of Science, The" (Polanyi), 283
research, 266–269, 271–272, 281–285
accountability and, 282–283
cascade model and, 280–281
collaborative science and, 274
community basis for, 263–277
global priorities for, 272–273, 277–280
grants and, 204
journals and, 205–206
non-objectivism and, 270
original ideas for, 205
participatory action and, 236
priorities for, 264–265
research-intensive countries, 264–265
Responsible Research and Innovation (RRI), 268
revolution, 11, 77
philosophy's alienation from, 123
revolutionary science, 67–68, 72
Rhodes Must Fall movement, 221–222
Rhodes, Cecil, 221
Rickert, Heinrich, 163
Ridley, Matt, 254
right-wing politics, 212
Rise of Scientific Philosophy, The (Reichenbach), 123
ritual, 86
Romans, 20, 117
romantic attachment, 256
romanticism, 127–128, 130–131
Roosevelt, Franklin, 199
Rosenberg, Alex, 66
Rousseauvian romanticism, 128
Royal Institution, 87
Royal Society, 87, 104, 278
Bacon and, 198
Russell, Bertrand, 107

Sabin Center for Climate Change Law (Columbia University), 202
sacredness, 86–87
Sagan, Carl, 177, 187
Said, Edward, 27, 35
Sarewitz, Daniel, 205
Sarton, George, 113, 118–121, 130
Reichenbach compared to, 123
Sartre, Jean-Paul, 46, 55
Schlick, Moritz, 149
Schmitt, David, 254
Science and Moral Imagination (Brown), 186
science and technology studies (STS), 217, 237, 279
Science in a Democratic Society (Kitcher), 227
science system, 219–221, 235–237
contradictions with, 221–223, 229–230
"Science As Craftwork With Integrity" (Collins), 216
"Science as Vocation" (Weber), 115
"Science Must Fall" (Harris), 221
"Science – The Endless Frontier" (Bush), 263
"science with a human face", 218
scientia, 12
scientific community, 69–71, 73–74
accountability and, 279–281
collaborative science and, 274
endogenous problems and, 266
scientific convergence, 82–83
scientific fraud, 205
scientific humanism, 110–111, 113–114, 124
Bronowski and, 112
Carnap and, 108–109, 120
human nature and, 46
Reichenbach and, 117–118
Snow and, 111
Vienna Circle and, 29
Weber and, 115–116, 123
scientific literacy, 270
three forms of, 273
scientific method, 16
replication fundamental to, 205
study of human behavior and, 128
Vienna Circle and, 109, 149

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

scientific naturalism, 41
scientific practice, 72
  diversity of, 223
  food sovereignty and, 234
  intercultural dialogue and, 235
  just science and, 232, 236–237
  theoretical agency and, 85
scientific realism, 45, 173–176, 182, 184
  antirealism and, 31
  convergence and, 83
  overconfidence in, 193
Scientific Revolution, 22
  Enlightenment and, 27
scientific rules, 70–72, 74
  commitment to, 68
scientific significance, 178–180
  usefulness and, 182
scientific thinking, 61–62
scientific unpredictability, 282–285
scientific value freedom, 147
Scientific World-Conception, 37, 150, 156
  pure science and, 176
scientific worldview, 175, 185–187
  construction of, 177–178
  pragmatism and, 174–175
  pure science and, 176
  religion and, 188
  religious function of science and, 191, 194
"Scientific Conception of the World, The" (Vienna Circle), 29, 150
scientism, 34, 60–64, 66–68, 75–76, 81–82
  anti-scientism and, 83, 88
  existential humanism and, 58
  imperialism of, 47
  intersubjectively authoritative method and, 64–66
  "isms" and, 72
  limits of objectivity and, 78–80
  resistance to, 84–85, 87–88
  theory of women and, 261
  traditional ways of life and, 192
  value freedom and, 217
  value properties and, 104
secular humanism, 36
  independence from the divine and, 40
  religion and, 16
secularism, 14, 19, 22, 36, 42
  faith and, 189–192, 194
  rationalization of the world and, 174
Seigfried, Charlene Haddock, 144
Seitz, Fred, 203
self-knowledge, 95
  Bronowski on, 112
self-perspective, 89–90, 92
self-standing mental states, 94, 96–97
sexism, 54, 240
sexual selection, 243–244
sexual specialization, 241
Shapin, Steven, 54, 124
Shiva, Vandana, 220–223
  Bt cotton and, 226
silenced voices, 54
Silencing Science Tracker, 202
silo problem, 209
Singer, Fred, 203
situated knowledge, 228
skepticism, 42, 67
Skoyles, John, 247
slavery, 136, 142, 260–261
Smith, Adam, 88, 145
Snow, C. P., 111–112
social change, 147–148, 150–151
  social epistemology and, 155–156, 165
  socialism and, 164
social differentiation, 155
social engineering, 261
social environment, 128, 133–135, 139, 142
social intelligence, 246
social justice, 16
social learning, 259
social practice, 52–54
social roles of science, 224
social science, 156–157
  Neurath as, 158
  Weber and, 161–163
social utility, 278, 282–283
social-environmental crises, 223, 229–230, 232, 237
  GM crops and, 228
socialism, 31, 149, 151, 158–159
  Neurath and, 164
socialization hypothesis, 246–247
society, 6
  agricultural science impact on, 224–227
  alternative visions of, 220
  cascade model and, 280–281
  consequences of laissez-faire approaches to, 35
  contemporary democracy changes and, 269–270
  contemporary science and, 200–201
  interface of science and, 223
  just interface of science and, 238
  just science and, 236
  legitimate values of, 212
  modern science's benefit to, 197–200
  science's responsibility to, 30
  social unrest and, 206–208
  see also participation.
Society for Philosophy of Science in Practice (SPSP), 212

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

sociobiology, 240–241
sociological humanism, 127
sociology, 129, 218
  extraordinary science and, 74
  intersubjectively authoritative method and, 66–67
  Kuhn and, 68–69
  Marxism and, 157
  normal science and, 71–72
  science as artifact of, 142
  Weber and, 159
Socrates, 21
Sophists, 21
South Africa, 221
Soviet Union, 31
Spengler, Oswald, 113
Spinoza, Baruch, 111
Spriggs, William, 207
Sputnik 1, 31
stakeholders, 232, 236, 285
  co-created science and, 275–276
  food system and, 233
standpoint theory, 155–157, 161, 164–166, 170
  practical attitudes and, 167
Starr, Ellen Gates, 144
Structure of Scientific Revolutions (Kuhn), 67
Studia Humanitatis, 20
subject, theory of the, 50–51
subjective value, 110
subjectivity, 55
  intersubstitutability of, 165
  pseudo-science and, 129
  sociocultural contexts and, 218
  subjective aspect and, 79–80
  values constructed by, 88
  "view from nowhere" and, 148
  see also rational subjectivity
superempirical virtues, 177, 182–184
  pure science and, 175
supernaturalism, 15–16
  Dewey and, 190
  James and, 189
  pragmatism and, 188
  protection by, 109
  religious function of science and, 191
  religious humanism and, 19
  secular humanism and, 36
  Vienna Circle and, 149
superstition, 151
  of modernity, 104
supervenience, 92–93
Switzerland, 265
sympathetic understanding, 143–145
Syngenta, 229
Tallis, Raymond, 47
Taylor, Charles, 36, 49
teaching (as vocation), 116
technology, 1, 3
  pro-poor forms of, 225–226, 228
  usefulness and, 181
The World (Descartes), 185
theoretical agency, 84–85, 89, 91
theoretical reason, 83, 88
  agency and, 84–85
theory
  construction of, 177
  Kuhn's five criteria for, 184
  non-pragmatic criteria and, 182–183
  pragmatism and, 185–186
  scientific realism and, 173, 176
  scientific worldview and, 174
  successful features of, 32
  theory-ladenness of observation and, 101
  underdetermination of, 172
things, politics of, 104
Thought News (newspaper), 134
tobacco strategies (Proctor), 202
tradition, 130–131
  Dewey and, 134, 141
  scientific realism and, 193
  scientific worldview and, 187, 192
transcendental idealism, 50
transcendentalism, 56
  "strange empirico-transcendental doublet" and, 50
transdisciplinary research methods, 236
triumphalism, 42
Trivers, Robert, 261
Trump, Donald, 201–203, 210, 219, 223
truth, 32, 82–83
  finality of scientific claims and, 34
  intelligible meanings of, 168
  noncognitivism and, 170
  pragmatism and, 31
  pure science and, 175
  Renaissance and, 43
  science's aims at, 182–184
truth-valuability, 151, 154, 160
Tufts, James, 145
Turner, Chris, 201
Twain, Mark, 136
twenty-first century science, 33
two tails phenomenon, 244
  right tail of, 248

Ubuntu, 220
unconditional statements, 160–162, 164–166, 170
underdetermination, 152, 157, 164, 172, 177

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

undernutrition, 233
understanding, 32
Unheimlichkeit (eeriness), 56
unified science, 29
Union of Concerned Scientists, 210
Unitarian Universalist Humanist Association, 17
United Kingdom, 265
United States, 126
  denial of scientific authority in, 192
  hostility to advocacy in, 31
  "March for Science" in, 210
  setting research agendas in, 265
  social unrest and, 206–208
  war on science in, 201–204
United States Congress, 201
United States Office of Scientific Research and Development (OSRD), 199
unity of science, 117–118, 120
  and disunity, 119
  value relevance and, 163
  Weber-Rickert denial of, 163
universal standards, 128
urban poverty, 224–225
useful science, 180–182
useless science, 175, 178, 181–182, 185
  Kitcher and, 178–180
utilitarianism, 158
  community-based research and, 275
  epistemic aims and, 281
  research priorities and, 280

vaccines, 216, 227, 230
valuation, 133, 135, 142–143
value abstraction, 26–27, 33, 239
value chains, 225
value freedom, 147–148, 152, 155, 170, 217–219
  Weberian value neutrality and, 158–161
value functions, 168–169
value illusions, 101
value neutrality, 162–166, 170
value pluralism, 161–163, 165
value properties, 82–83, 87–88, 91–93
  desire and, 93–94
  metaphor and, 103
  perception and, 98–99, 101–103
  practical agency and, 97
  resistance to scientism and, 83–86
value relations, 163
value relevance, 163–164
value statements, 162, 164–167, 169–170
value terms, 91
value theory, 14–15, 20–21
  Enlightenment and, 22–23, 25–28
  epistemic authority and, 16
value-laden science, 218
values, 2, 6
  appreciation and, 136
  cognitive forms of, 66
  Dewey on, 131–132, 142–145
  education and, 140
  egalitarianism replacing racism and, 214
  empathy and, 141–142
  fact-value distinction and, 167–168
  food sovereignty and, 234
  intercultural dialogue and, 235
  justice and, 232
  moral evaluation and, 162
  Nietzschean table of, 41
  noncognitivism and, 166–168
  perception and, 100–102
  prioritization of, 34
  religious function of science and, 191–194
  saving science and, 212
  separation of, 31
  subjective values and, 110
  value-free ideal and, 54
  vitalism and, 103
  vocabulary of, 91
Varieties of Reference, The (Evans), 94
Verein für Sozialpolitik, 159, 161
verstehen tradition, 88
Vienna Circle, 29
  left-wing of, 147–149, 152, 170
  logical empiricism and, 113
  neo-Kantianism and, 163
  scientific humanism and, 109
  Scientific World-Conception and, 37, 150
  Weber and, 159–160
violence, 256
Violence of the Green Revolution, The (Shiva), 220
vitalism, 103–104
Vives, Juan de Luis, 45
vocation, 116

Wageningen University and Research, 229
Wai, Jonathan, 248
waist-to-hip ratios, 257
Walker, R. S., 256
war on science, 201–203, 206, 209–210, 215, 232
  New Orthodoxy and, 218
  Science Wars of 1990s and, 53, 124
War on Science, The (Otto), 201–203, 209–210
War on Science, The (Turner), 201–203
Weber, Max, 159–162, 169
  disenchantment and, 174
  value neutrality and, 162–164
  World War I and, 115–116
Weberianism, 88, 170
well-ordered science, 227, 273

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

Western science, 33
  expertise outside, 34
Whewell, William, 12
Whisperings Within, The (Barash), 249
White Americans, 206
Why We Can't Wait (King), 213
"Why We Should Trust Scientists" (Oreskes TED talk), 216
will, the, 123
  fiats of, 139
  higher ethical will and, 126–128, 140
  noncognitivism and, 166–169
Williams, Bernard, 45, 82–83
Williams, William Carlos, 127
Wilson, E. O., 46, 254, 261
Wittgenstein, Ludwig, 100
women, 240–242
  academia and, 258
  childcare and, 249–252
  comparative advantage and, 259–260
  evolution and, 244–245
  expertise theory and, 247–248
  Hawkes's Grandmother Hypothesis and, 245–246
  intelligence and, 242–243
  IQ distribution and, 248–249
  measurable differences between men and, 259
  Miller on intelligence in, 243–244
  monogamy myth and, 253–254
  recognition and, 234
  reproductive strategies for, 254–258
  role divisions and, 260–261
  socialization hypothesis and, 246
  theory of, 241, 261
  two tails phenomenon and, 244
  work outside the home by, 252–253
wonder, 191
world, 55–57
  being in, 57–59
  perspective on, 90–93
World Health Organization, 203
World War I, 113–115, 117
  New Humanism and, 119–120
  Weber and, 115–116
World War II, 199
worldview, 25
  continuity between, 121–122
  experience and, 191
  opposition between, 31
  unified scientific world-conception as, 29
  see also scientific worldview.
Wright, K. I., 252
Wylie, Alison, 155

Young, Iris Marion, 234

Zuckerman, Harriet, 259
Zuckmayer, Carl, 114

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018

Downloaded from https://www.cambridge.org/core. UNIVERSIDAD AUTONOMA METROPOLITANA, on 12 Nov 2026 at 07:17:21, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/9781009626880.018