Note: Page references in italics indicate photographs and diagrams.

abduction, 52, 55, 65
accommodation, and interpretation, 20–1, 22–4
action, divine:
  and downward causation, 100
  and emergence, 232
  and indeterminacy, 100
  in Islam, 138–9
  and pure information, 101
  through laws of nature, 93–4
  through persuasion, 96–8, 207
  through secondary causes, 94–6
Adams, John Couch, 121
Age of Reason, and Deism, 29–31
agency, double, 96
agency detection, 187
Alexander, Samuel, 230–1
allegory, 20, 136–7
Alpher, Ralph, 152
Alston, William P., 110–11, 123–4, 126
altruism, and evolutionary biology, 170–2
analogy principle, and Aquinas, 106
analytical schools of psychology, 182
Anderson, Carl, 113
anthropic principle, 153–6, 218, 228
anthropology, Christian, 222
anthropomorphism, and evolution, 105, 166
Aquinas, Thomas, 95
  and attributes of God, 99
  and cosmological argument, 61
  and divine action, 94–6
  and natural theology, 111, 112, 114, 118
  and principle of analogy, 106
  *Summa contra Gentiles*, 118
  and teleological argument, 63, 65
Aristotle:
  and Islamic science, 137
  and secondary causes, 95
art, creation as artistic expression, 88
atheism, scientific, 1, 2, 4; see also Atkins, Peter; Dawkins, Richard
Atkins, Peter, 1, 148, 155
Atran, Scott, 187
Augustine of Hippo, 57, 111–12, 113–14, 168, 188, 215
Ayala, Francisco J., 41, 165
Ayer, A. J., 69–70, 69
Bacon, Francis, 26
Balthasar, Hans Urs von, 113
Barbour, Ian G., 45, 47–50, 106–7, 206
and critical realism, 83, 210
Issues in Science and Religion, 205–6
and process thought, 49, 97, 205, 206–7
Barrett, Justin, 184, 185, 187, 187
Barrow, John D., 153, 153
Barth, Karl, 116, 199–200
and dialectical theology, 160–1
objections to natural theology, 115–17, 215
Baumeister, Roy, 3
beauty of nature, 113–15, 202–3
Behe, Michael, 41
belief:
and cognitive science of religion, 184–9
counterintuitive, 188
and evolutionary psychology, 172–4
and experience, 122
justification, 67–75, 118
and reductionism, 175, 179, 181, 231
see also worldviews
Bergson, Henri, 163, 165, 223
Bernoulli, Daniel, 76
Bhaskar, Roy, 83, 226
Bible:
and Copernican revolution, 19–20
see also interpretation, biblical
big bang theory, 62–3, 96, 151–2
biology:
and design, 31, 163–8
and religion, 4
and teleology, 36, 40, 163–8
see also evolution
biotechnology, and ethics, 4, 48
Blackett, Patrick, 113
Blake, William, “Ancient of Days,” 85
Bohm, David, 100
Bohr, Niels, 107–8, 157–8, 158, 160–1
Bondi, Hermann, 152
Bossuet, Jacques-Bénigne, 23–4
Boyer, Pascal, 184, 185, 185, 186, 187
Boyle, Robert, 113
Brahe, Tycho, 19
British Association, meeting of, 1860, 14–15
Broad, C. D., 230–1
Buddhism, and science, 140–1
Buffon, Georges, 35
Bultmann, Rudolf, 214
Calvin, John:
and natural sciences, 20–1
and natural theology, 114, 118
Cantor, Geoffrey and Kenny, Chris, 49
Carnap, Rudolph, 68, 69
Carr, B. J., 153
causation:
downwards, 100, 223–4
and emergentism, 230–2
and evolutionary biology, 165–6
and existence of God, 61–3, 65
in Islam, 138–9
multiple, 176
and persuasion, 97, 207
primary and secondary causes, 94–6, 138
and reductionism, 223, 231
Center for Theology and the Natural
Sciences, Berkeley, 234
Chalcedon, Council (451), 161
Chalmers, Thomas, 40
chaos, and doctrine of creation, 86, 88, 112
Christianity
and complementarity principle, 160–2
and Darwinism, 36, 39–40, 233–4
and Deism, 29–30
and doctrine of creation, 84, 85–92
and explanation of reality, 56–7, 219–20, 227
and Freud, 180
Index

Christianity (cont’d)
and suffering, 123–6
and use of models and analogies, 107–8, 210–12
see also natural theology; religion; theology
Christology, 160–2, 214
Ciampoli, Giovanni, 14, 22
Clayton, Philip, 57, 229–32
clergy, and study of science, 11
Cobb, John B., 98
cognitive science, and religion, 182, 184–9
complementarity principle, 157–62
concepts, minimally counterintuitive, 185, 187
conflict (warfare) in science–religion relationship, 1, 4, 9–11, 13, 14, 45–6, 49, 60, 147–8
consciousness, and matter, 194
conservation principle, 94, 101, 159
construction, creation as, 87–8
contingency, and laws of nature, 88, 91, 215–16
convergence, evolutionary, 166–7
Conway Morris, Simon, 166–7, 167
Copernican revolution, 15, 17–23, 81–2, 178
Copernicus, Nicolaus, 18–19, 18, 21, 26
cosmology, 151–6
anthropic principle, 153–6, 218, 228
big bang theory, 62–3, 96, 151–2
Buddhist, 140–1
cosmological argument, 61–2
and design, 28–9
and fine-tuning, 153–5, 219, 228
standard model, 15
see also solar system
Coulson, Charles A., 90, 201–3, 202, 218
Coyne, Jerry, 12
Craig, William Lane, 62–3
cranes and skyhooks, 170
creation, 84–92
and argument from design, 28, 31, 164
as artistic expression, 88
as construction, 87–8
and Deism, 29–30
as emanation, 87
as event and process, 41, 168
and evolution, 1, 12, 14–15, 37–8, 46, 49, 84
and fine-tuned universe, 153–5, 219
in Hinduism, 139–40
in Islam, 139
in Judaism, 84, 85, 136
and knowledge of God, 111–18
and laws of nature, 88–92, 215–16
and order, 86, 88, 89–92, 97, 112–13, 202–3, 217–18
special, 35, 53–4
static view, 31, 37
creationism, 2, 46, 84–5
evolutionary theism, 41
Intelligent Design, 40–1
old earth, 40
Vedic, 140
young earth, 39–40, 84–5
critical realism, 78–9
and Barbour, 83, 210
and McGrath, 226–7
and Pannenberg, 214
and Peacocke, 210–12
culture, and science, 12
Cupitt, Don, 82
Darwin, Charles, 12, 14, 34, 46, 178–9
Beagle voyage, 33–4, 54, 55, 128
The Descent of Man, 37, 38, 39, 170
and inference to best explanation, 53–4, 60
The Origin of Species, 4, 33, 35, 36–9, 54, 105, 134
and Paley, 31, 34, 64
and use of analogy, 104–5
see also evolution; selection, natural
Darwinism, 15, 17, 33–41
and Dawkins, 60–1, 164
and evolutionary psychology, 169–74
Index

and religion, 37–8, 46, 148–9, 169–70, 233–4
social, 171
universal, 2, 169–70
Davidson, Donald, 223
Davies, Paul, 89, 91, 151, 153
Dawkins, Richard:
and Darwinism, 60–1, 164, 166
and ethics, 3
and faith and proof, 59, 149
The God Delusion, 145, 149
and Paley, 37, 146, 164
and radical reductionism, 232
and scientific atheism, 1, 2, 46, 145–9, 146
and scientific positivism, 52
The Selfish Gene, 145–6, 149, 173
de Broglie, Louis, 160
Deism, 29–31
and laws of nature, 90–1, 93–4
Dembski, William A., 41
Dennett, Daniel, 145, 169–70
Descartes, René, 55
design:
and existence of God, 63–5, 94, 110–11, 146, 153–5, 164–8
and Paley, 28–9, 31, 34, 37, 53, 64–5, 94, 146, 163
and Ray, 31, 146
see also Intelligent Design movement
Desmond, Adrian, 15
development of theories, 128–34
Devitt, Michael, 77
dialectics, and Barth, 160–1
dialogue in science–religion relationship,
47–8, 49, 115, 162, 192, 198, 206–7, 209–10, 215; see also Barbour, Ian;
Clayton, Philip; McGrath, Alister E.;
Murphy, Nancey; Pannenberg,
Wolfhart; Peacocke, Arthur;
Polkinghorne, John
Dirac, Paul, 113, 115, 217
Docetism, 161
doctrine:
development, 133–4
and reality, 133
Draper, John William, History of the Conflict
Between Religion and Science, 10, 10, 46
Driesch, Hans, 165, 223
Drummond, Henry, 202
Duham, Pierre, 121–2, 122, 123, 125–6,
132
Duhem–Quine Thesis, 122
Dunn, James D. G., 222
Dyson, Freeman, 12, 154
Ebionite heresy, 161
Edwards, Jonathan, 88, 113, 114, 114
Einstein, Albert, 136, 136
and photoelectric effect, 158–9
and relativity theory, 55, 59, 72, 129,
152
electrons, 70, 81, 102–3, 103, 107, 113, 153,
158–60
emanation, and creation, 87
emergentism, 230–2
empiricism:
constructive, 80–1
and religious belief, 177–8
and scientific realism, 77–8
and verification, 72–3
and Vienna Circle, 67
energy, 101, 113
conservation principle, 159
and quantum theory, 158–9
Enlightenment, 30–1, 184, 226–8
ethics:
and evolution, 170–2
and science, 3–4
eugenics, 171
European Society for the Study of Science
and Theology, 210
evidence
and complementarity principle, 157–61
and proof, 59–61, 71–2, 149, 218
Index

evil, problem of:
and Alston, 123–4, 126
and Aquinas, 95
empirical approach, 125–6
logical approach, 123–5
in process thought, 97–8, 207
evolution:
and psychology, 169–74, 187
in scientific knowledge, 71, 131
evolution, biological:
convergent, 166–7
and creation, 1, 12, 14–15, 37–8, 46, 49, 96
and Dawkins, 145–6, 164
and ethics, 170–2
in Hinduism, 140
and humanity, 38–9
in Islam, 139
in Judaism, 136–7
and process thought, 96–7, 207
and religion, 163–8, 210
and Teilhard de Chardin, 194
and teleology, 36, 40, 163–8, 195–6
and world faiths, 135–6
see also creationism; selection, natural experience:
and idealism, 79–80
and justification of belief, 67–75, 122
and realism, 77–9
religious, 175–82
experiment, and theoretical anomalies, 121–2, 131
explanation:
causal, 52, 147, 165, 230
and coherence, 230
and “God of the gaps,” 202–3, 217–18
inference to best explanation, 52–5, 56–7, 59–60, 65, 147, 167, 230
and meaning, 3, 57
psychological, 175–82
and religion, 51, 56–7, 219–20, 229–30
and science, 51–5, 59–60, 128, 218, 229–30
Trinitarian, 219–20, 227
and unification of scientific theory, 52, 55, 129, 147
and use of models and analogies, 102–4, 211–12
extinction, 34, 35, 53–4
faith, and proof, 59, 61, 149
falsification, 67, 71–4, 126, 132
Faraday Institute, Cambridge, 234
Farrer, Austin, 96
father figure, and religious belief, 179–81
Feinstein, Moshe, 137
Feyerabend, Paul, 221
Flew, Anthony, 73
Foscarini, Paolo Antonio, 22–4
foundationalism, and Aquinas, 118
Frazer, Sir James, 229
free will:
and divine agency, 100
and evil, 97
and evolution, 169
and supervenience, 223
Fresnel, Augustin Jean, 130
Freud, Sigmund, 17, 175, 178–81, 178, 187
The Future of an Illusion, 179, 181
Totem and Taboo, 179–80
Freudianism, as pseudo-science, 71–2
Friedman, Alexander, 152
Friedman, Michael, 52
fundamentalism, religious, and science, 1, 4
Galileo Galilei, 11, 14, 21–4, 21, 26, 46, 49
Gamow, George, 152
Genesis, creation narratives, 15, 20, 35, 38, 39–40, 86, 111, 136
genetics, and Mendel, 55, 163
al-Ghazali, Abu Hamid Muhammad, 95, 138–9
Gilkey, Langdon, 47
God:
attributes, 97–8, 99
as creator see creation
and limitations of human language, 105–6
as primary cause, 95–6
see also action, divine
God, models and analogies:
   artist, 88
clockmaker, 29–31, 34, 94, 117
   father, 102, 106, 157
   king, 29, 106, 157
   master builder, 87–8
   rock, 157
   shepherd, 29, 106, 157
Gold, Thomas, 152
goodness:
   and altruism, 172
divine, 123–4
gravitation, and Newton, 27–8, 129
Gregersen, Niels Henrik, 192
guilt, and Freud, 180
Guth, Alan, 155
Guthrie, Stewart, 187
Hacking, Ian, 210
Hanson, Norwood R., 52–3
Hartley, L. P., 8
Hartshorne, Charles, 98, 99
Hawking, Stephen, 90
Hempel, Carl, 53
Herbert of Cherbury, Edward Herbert, Lord, 29
Herman, Robert, 152
Herschel, Sir William, 120
Hick, John, 70
Hinduism, and science, 12, 139–40
Hinshelwood, Sir Cyril, 209
history:
   of nature, 215
   philosophy of, 213–15
   relevance, 8, 9–16, 49–50
HMS Beagle, 33–4, 54, 55, 128
Hobbes, Thomas, 29
Hood, Ralph W., 181–2
Hoyle, Fred, 152
Hubble, Edwin, 152
humanity:
   biological origins, 37, 38–9, 178
   Christian view, 222
   created in image of God, 38, 111–12
   and evolutionary psychology, 169–74
   in Islam, 139
   and physicalism, 222–3
   and reason, 111
   and the unconscious, 179
Hume, David, 29, 63, 65, 67, 90, 91
Humphreys, Paul, 52
Hutton, James, 35
Huxley, Thomas Henry, 14–15, 36, 171
Hyperactive Agency Detection Device (HADD), 15, 187
hypotheses, crucial and auxiliary, 121–2, 125, 132, 221
idealism, 79–81
illusion, religion as, 179, 182
image of God, in humanity, 38, 111–12
independence, and science–religion relationship, 2, 46–7, 49
indeterminacy, and divine agency, 100
inference:
   abductive, 52, 55, 65
   to best explanation, 52–5, 56–7, 59–60, 65, 147, 167, 230
   and observation, 70–1
information, pure, 101
instrumentalism, 81–2, 159
integration, and science–religion relationship, 48–9
Intelligent Design movement, 40–1
interpretation, in science, 52
interpretation, biblical:
   accommodation approach, 20–1, 22–4
   allegorical approach, 20, 136–7
interpretation, biblical: (cont’d)
and evolution, 38
literalist approach, 15, 20, 21, 23, 38
interpretation, Qur’anic, 137–8
Islam:
and doctrine of creation, 85
and kalam argument, 62–3
and science, 12, 46, 137–9

Jaki, Stanley L., 152
James, William, 59, 78, 83, 175, 176
The Varieties of Religious Experience, 176–8
Jastrow, Robert, 2
Jesus Christ, identity, 160, 161–2
John Paul II, Pope, 47–8, 48
Judaism:
and doctrine of creation, 84, 85, 136
and evolution, 136–7
Julian of Norwich, 230
Jung, Carl Gustav, 141, 181, 182

K-T (Cretaceous-Tertiary Mass Extinction) event, 51
kalam, 137
kalam argument, 62–3
Kant, Immanuel, 79–80, 79
Kepler, Johann, 19, 20, 26, 27–8, 82
Khayyam, Omar, 12
kinematics see mechanics
Kingsley, Charles, 168
Kipling, Rudyard, Just So Stories, 173
Kitcher, Paul, 52
knowledge:
and critical realism, 214
evolution, 71
and idealism, 79
and mental schema, 78–9, 227
and scientific method, 148
and sense perception, 68, 69, 227–8
sociology of, 122–3, 133
and understanding, 51
see also natural theology
Kuhn, Thomas S., 60, 127, 130–3, 131
Lakatos, Imre, 132, 221
Lamarck, Jean Baptiste de Monet, 39
Lampe, G. W. H., 209
language, limitations, 105–6
Laplace, Pierre-Simon, 94
Lauden, Larry, 130
laws of nature, 64, 71, 81, 88–92
and Deism, 90–1, 93–4
and divine action, 93–4
and miracles, 215–16
Le Verrier, Urbain, 121
Lenz, John, 29
Lenzen, Victor F., 70
light, as waves and particles, 104, 158–60
Linnaeus (von Linné), Carl, 35
Lipton, Peter, 52
literalism, biblical, 15, 20, 21, 23, 38
Livingstone, David, 49–50
Locke, John, Essay Concerning Human Understanding, 30
Loder, James E. and Neidhardt, E. Jim, 160–1
logic:
logical positivism, 68–71, 73
and problem of evil, 123–5
Lovell, Sir Bernard, 151
Lyell, Charles, Principles of Geology, 35
Mach, Ernst, 80
Maimonides, 136
Mansfield, Victor, 141
Marxism:
and philosophy of history, 213
as pseudo-science, 71–2
mathematics:
and beauty, 114
and ordering of the world, 91, 113
matter, and consciousness, 194
Maxwell, James Clerk, 55, 76, 129, 147, 159
Mayr, Ernst, 165–6, 167
McCauley, Robert N., 188–9
McGrath, Alistair E., 48, 83, 225–8
McMullin, Ernan, 192, 210, 234
meaning:
  and explanation, 3, 57
  and falsification, 73
  and verificationism, 68–70
measurement psychology, 182
mechanics, and Newton, 9, 26–31, 64, 129–30
Medawar, Peter, 148
Mendel, Gregor, 55, 163
Metanexus institute, Pennsylvania, 234
metaphysics:
  and Darwinism, 169–70
  and Popper, 74
  and Vienna Circle, 67, 71
method, dialectical, 160–1
method, scientific:
  as atheistic, 144, 147–9
  deductive-nomological, 53
  positivist, 52, 56, 60
  and realism, 77–8, 211
Michelson–Morley experiment, 104
Midgley, Mary, 172
miracles, 215–16
Mitchell, Basil, 56
models and analogies, 102–8, 157–61, 211–12
models of science–religion relationship see conflict; dialogue; independence; integration
Moltmann, Jürgen, 213
Monod, Jacques, 164–5
Moore, Aubrey, 46
Morris, Henry Madison, 4, 40, 46
motion:
  argument from, 61
  Newtonian laws, 27–8, 55, 80, 120–1, 128–30
multiverse, 149, 155–6
Murphy, Nancey, 221–4
mysticism, characteristics, 176–7
Nagel, Ernest, 81
National Academy of Science, 47
natural theology, 110–18, 200, 215
  and beauty of nature, 113–15, 202–3
  and critical realism, 226–8
  definition, 110
  and God as clockmaker, 29–31, 34, 94, 117
  and inference to best explanation, 57, 65, 167
  and Islam, 137–8
  objections to, 115–18, 214
  and ordering of the world, 112–13, 202, 217–18
  and reason, 111–12
  see also McGrath, Alister E.; Paley, William; Polkinghorne, John
nature:
  beauty, 113–15, 202–3
  constants, 153–4
  as contested notion, 226–7
  divine action in, 93–101
  history of, 215
  and knowledge of God see natural theology
  laws, 64, 71, 81, 88–92, 215
  theology of, 214–15
  see also design
Nelson, David W., 137
neo-Darwinism, 55, 146, 163
neo-Platonism, and Augustine, 111
Newman, John Henry:
  and development of doctrine, 134, 134
  and Paley, 146–7, 168
Newton, Sir Isaac, 27, 188
  and celestial mechanics, 9, 26–31, 64, 129–30
  and cosmic order, 90
  and laws of motion, 27–8, 55, 90, 120–1, 128–30
  and scientific revolution, 26–31
nonrealism, and theology, 82
Numbers, Ronald L., 46
object relations schools of psychology, 182
observation:
observation: (cont’d)
  and explanation, 128, 131–2, 230
  and falsification, 73–4, 126, 132
  and idealism, 80
  and instrumentalism, 81–2
  and scientific realism, 77–8
  as theory-laden, 226–7
  and verification, 70–1, 72–3
occasionalism, 95, 138–9
O’Donovan, Oliver, 89–90
Ogden, Schubert, 98
Oktar, Adnan, 135
Omega, in Teilhard de Chardin, 195
omnipotence, divine, 97, 123–6, 206–7
order, and creation, 86, 88, 89–92, 97,
  112–13, 202–3, 217–18
Osiander, Andreas, 82

paleontology, and theology, 193
Paley, William, 64, 226
  and design, 28–9, 31, 34, 37, 53, 64–5,
    94, 146, 164
  and special creation, 53–4
  and teleology, 64–5, 163
panentheism, 207, 210
Pannenberg, Wolfhart, 213–16, 214, 234
paradigm shifts:
  in religion, 133–4
  in science, 60–1, 130–3
Peacocke, Arthur, 41, 49, 83, 101, 209–12,
  210, 223, 234
Peirce, Charles, 52
Penzias, Arno, 152
perception:
  and critical realism, 78, 227–8
  and phenomenalism, 80
perfection, divine, 98
persuasion, in process thought, 96–8, 207
  phenomenalism, 79–80
phenomenological psychology, 182
Phillips, D. Z., 56, 230
Philo of Alexandria, 136
philosophy, as verification tool, 69
philosophy of history, 213–15
photoelectric effect, 158–9
photons, 152, 159
physicalism, nonreductive, 222–3
physics:
  and complementarity principle, 157–61
  laws of, 91
  and Newton, 27–8
  and realism, 77
  and religion, 4
  and theology, 151, 153–4
  and theoretical anomalies, 121–3
  and use of models and analogies, 104
  see also quantum theory
Picard, Jean, 28
Pittendrigh, C. S., 164
Planck, Max, 108, 158–9
planets, planetary motion, 19–20, 26–8,
  120–1, 128
Plantinga, Alvin, 56, 117–18
Polanyi, Michael, 60, 60
Polkinghorne, John, 1, 102, 217–20, 218,
  223, 234
  and creation, 84, 218–19
  and divine agency, 101
  and integration model, 48
  and natural theology, 112–13, 217, 219
  and realism, 76–7, 83
Pope, Alexander, 27, 90
Popper, Karl, 71–4, 71, 130, 132
positivism:
  logical, 68–71, 73
  and scientific method, 52, 56, 60
process thought, 49, 205, 206–7
  and divine action, 96–8
  and evolution, 96–7, 207
professionalization of science, 11
progress, scientific see development of
  theories; paradigm shifts
proof, 59–65
  and faith, 59, 61, 149
  in religion, 59, 61–5, 227–8
  in science, 59–61
Protestantism, and biblical interpretation, 23–4
providence, 94, 167
pseudo-sciences, 71–2
psychoanalysis, 179, 180–2
psychogenesis of religion, 179–80
psychology:
and Buddhism, 140–1
evolutionary, 169–74, 187
of religion, 175–82
Ptolemy, Claudius, 18
Putnam, Hilary, 78, 210
quantum theory, 157–62
and beauty, 115
and complementarity principle, 157–61
Copenhagen approach, 100
as counterintuitive, 188–9
Quine, Willard Van Orman, 122, 123
Qur’an, interpretation, 137–8
Radda, Sir George, 225
Ramsey, Ian T., 106, 209
Raven, Charles, 48–9
Ray, John, 31, 146
realism, 76–9
alternatives to see idealism;
instrumentalism
critical, 78–9, 83, 210–12, 214, 226–7
and theology, 82–3, 133, 198–200
reality:
mathematical, 91
as process, 96–7
reason:
and Deism, 29–30
and Enlightenment, 30–1
and logic, 68
and natural theology, 111–12
and religion, 46
Redhead, Michael, 77
reductionism:
and human nature, 222–3, 231
and religious belief, 175, 179, 181, 231–2
Rees, M. J., 153
Reformed tradition, and natural theology, 113, 114, 117–18
regularity, in nature, 88–91, 94, 95
relations between science and religion see conflict; dialogue; independence;
integration
religion, general theory, 55, 72, 129, 152
religion:
and anomalies, 123–7
cognitive science, 182, 184–9
and complementarity principle, 160–1
and development of theories, 128, 133–4
and evolutionary biology, 163–8
and evolutionary psychology, 172–3
and explanation of experience, 51, 56–7, 219–20, 229–30
and falsification, 73–4, 126
problems of definition, 4–5, 45, 141, 185
and proof, 59, 61
psychology of, 175–82
universal, 30
use of models and analogies, 102, 105–8, 157, 160–1, 211–12
and verification, 69–70
repression, in Freud, 179
resurrection, as public historical event, 214
revelation:
and history, 214
and natural theology, 115–17
and reason, 29, 30, 198–200
and science, 141
Rheticus, G. J., 19
Rig Veda, 139–40
Roman Catholicism, and biblical interpretation, 23–4
Rowe, William, 125–6
Russell, Bertrand, 68
Rutherford, Ernest, 103–4, 103, 107–8
Ryder, Richard, 39
Salmon, Wesley, 230
schema, mental, 78–9, 227
Index

Schleiermacher, F. D. E., 177
Schlick, Moritz, 67, 68
Schofield Reference Bible, 40

Science:
and anomalies, 120–3, 127, 129, 131
and atheism, 1, 2, 4, 145–9
and complementarity principle, 157–61
and culture, 12
and development of theories, 128–33
and ethics, 3–4
and evidence, 59–61, 218
and explanation of experience, 51–5, 59–60, 128, 218, 229–30
explanatory success, 76–8, 129, 131, 133, 219
and “God of the gaps,” 202–3, 217–18
problems of definition, 4
professionalization, 11
and proof, 59–61
and provisionality, 60, 211, 215
and religious questions, 1–2
as subversive, 12
and theology, 5, 12–13, 185, 189, 198–9, 214–15
use of models and analogies, 102–5, 103, 107–8, 157–60, 211–12
see also biology; physics

Science and Christian Belief, 234

Science and religion:
and biblical interpretation, 15
collaborative approach, 13
complementarian approaches, 3–4
essentialist fallacy, 12–13
and explanation and meaning, 3, 57, 219–20, 229–30
and lack of master narrative, 11–12, 13
myths and stereotypes, 13–15, 102–8
in non-Christian faiths, 135–41
as nonoverlapping magisteria, 2, 46–7, 203
and relevance of history, 8, 9–16, 49–50
see also conflict; dialogue; typology, 45–50; independence; integration

Science and Religion Forum (UK), 210
Science and religion studies, 1
scientific revolution, 26–32, 137
and argument from design, 28–9
and paradigm shifts, 60–1, 130–3
selection:
artificial, 36, 105
natural, 34–9, 53–5, 104–5, 128, 163–8
Sidgwick, Isabella, 14
Singer, Peter, 39
skyhooks and cranes, 170
social Darwinism, 171
Society of Ordained Scientists, 210
sociobiology, 170–2
solar system:
and anomalies, 120–1
geocentric model, 17–18, 19–20
heliocentric model, 18–22, 26, 82
soul, 222
species:
distribution, 33–5, 54
extinction, 34, 35, 53–4
fixity, 35
origin, 34–7
speciesism, 39
Spencer, Herbert, 170, 171, 171
suffering, 123–6
evolutionary, 95, 207
supervenience, 223–4
Swinburne, Richard, 56
tacking paradox, 74
Teilhard de Chardin, Pierre, 96, 163, 193–6, 194, 214
teleological argument, 63–5, 155
teleology, and natural selection, 36, 40, 163–8, 195–6
teleonomy, 164–5
Temple, William, 209
theism, 29
evolutionary, 41
theology:
and complementarity principle, 160
and limitations of human language, 105–6
of nature, 214–15
and nonrealism, 82
and physics, 151, 153–4
and realism, 82–3, 133, 198–200
and science, 5, 12–13, 185, 189, 198–9,
214–15
systematic, 117, 188, 197, 200, 213,
225–6
and universal history, 213–15
use of models and analogies, 105–8,
211–12
see also natural theology

Theory and Science, 234
theory, scientific:
and anomalies, 120–3, 126–7, 129, 131
and beauty, 114–15
and complementarity principle, 157–60
as counterintuitive, 188–9
crucial and auxiliary hypotheses, 121–2,
125, 132, 221
development, 128–34
and empirical adequacy, 128–9
fertility, 129
and idealism, 79–81
and instrumentalism, 81–2
and internal coherence, 129
and realism, 76–9, 133
scope, 129, 220
underdetermination thesis, 122–3, 129,
133, 149
unification, 52, 55, 129, 147
Tindal, Matthew, 30
Tipler, Frank J., 153
Torrance, Thomas T., 5, 108, 189, 198,
225, 234
and complementarity principle, 160–1
and creation, 88
and natural theology, 115–17, 200
and theological realism, 83, 198–200
Toulmin, Stephen, 81, 132
transcendence, divine, 98, 226
transpersonal schools of psychology, 182
Trinity:
and explanation of reality, 219–20, 227
psychological analogies, 111–12
unconscious, in Freud, 179
underdetermination thesis, 122–3, 129, 133
understanding, and knowledge, 51
unification of explanation, 55, 129, 147
uniformitarianism, 35
universe:
as expanding, 152
inflationary, 155
and multiverse, 149, 155–6
steady state, 152
Uranus, orbit, 120–1
Van Fraassen, Bas, 80–1, 80
Van Till, Howard, 41
verification, 67, 68–71
eschatological, 69–70
and the past, 70
and the unseen, 70–1
Vienna Circle, 6–9, 67, 68–71
Voltaire (F. M. Arouet), Philosophical Letters,
30
Watts, Fraser, 176
Weinberg, Steven, 114–15
well-being, and religious belief, 175
Weyl, Hermann, 113
White, Andrew Dickson, The Warfare of
Science with Theology in Christendom,
10, 10, 46
Whitehead, Alfred North, 96–8, 97, 205,
207
Wilberforce, Samuel, 14

251
### Index

<table>
<thead>
<tr>
<th>Name</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilson, David Sloan</td>
<td>172</td>
</tr>
<tr>
<td>Wilson, Edward O.</td>
<td>170–2, 172</td>
</tr>
<tr>
<td>Wilson, Robert</td>
<td>152</td>
</tr>
<tr>
<td>Wisdom literature, and creation</td>
<td>86</td>
</tr>
<tr>
<td>Wittgenstein, Ludwig</td>
<td>106, 229</td>
</tr>
</tbody>
</table>

**Worldviews:**

- Darwinist, 170
- Mechanistic, 28–9, 30–1, 93–4, 117
- See also Belief
- Geocentric, 17–18, 19–20
- Wright, Edward, 21
- Wright, N. T., 79
- Zygon, 234

*Index compiled by Meg Davies (Fellow of the Society of Indexers)*