

INDEX

- adaptations, 59, 81, 106, 133, 145
 Agassiz, Louis, 46, 96
 Agricola, Georg, 28
 agriculture, 127–28, 131
 altruism, 112
 angels, 9
 animals, 9, 14
 Aquinas, Thomas, 9, 22, 26
 Aristotle, 10, 14–15, 25–26, 79
 arms races, 137–38
 asuras, 9
 atheism, 31
- Bacon, Francis, 33
 Bakker, Robert, 146
 Barth, Karl, 23
 beliefs, 22, 31, 88
 Bergson, Henri, 45, 99, 106, 142
 Bernhardt, Friedrich von, 156, 159,
 164
 Bible, 5
 Big Bang, 48
 biophilia hypothesis, 158
 blood, 14
 Boyle, Robert, 30–31, 39
 brahmas, 9
 brain power, 12, 19
 Brandon, Robert, 141, 144, 147–48
 Broad, C. D., 161
 Buddhism, 8, 10, 19
- Cain, Arthur J., 108
 Carnegie, Andrew, 155–56
 Carus, Carl Gustav, 98
 causal inadequacies, 145–47
 causality, 82
 change, 8, 138, *see also* adaptations
 Clifford, William Kingdom, 117, 132
 Coleridge, Samuel, 44
 communities, 155
 community, sense of, 96
 competition, 156
 complexity, 132–37, 140–41
 computers, 12
 consciousness, 16, 19, 115, 130
 convergence, 138–39
 Conway Morris, Simon, 138–39,
 144, 146, 148
 cooperation, 126, 168, 186
 Copernicus, 29
 Coyne, Jerry, 80, 109
 Creationist Museum, 24
 creationists, 17–20, 23, 94, 118
 creativity, 120
 Crick, Francis, 34, 72, 111
Crime and Punishment, 179
 culture, human, 16
- Dahmer, Jeffrey, 182, 185
 Darwin, Charles, 102–3, 132–33, 141,
 155

INDEX

- Darwin, Erasmus, 123–24
- Darwinian evolution
 after *Origin*, 68–71
 consilience, 60–65
 human prehistory, 48–55
 humans, 65–68
 molecular biology, 71–74
 theory, 55–60
- Darwinian metaethics, 176–80
- Darwinian Revolution*, 25
- Darwinism, 16
 normative, 171–73
- Dawkins, Richard
 human status, 11–12, 19
 mechanism, 91
 progress, 119, 133, 135, 138, 144
- deism, 31, 91
- Deleuze, Gilles, 106
- deoxyribonucleic acid (DNA), 36,
 38, 49, 78
- Descartes, René, 30, 33, 148
- Descent of Man and of Selection
 with Regard to Sex*, 66, 168
- devas, 9
- Dewey, John, 89
- Diderot, Denis, 123, 153
- dimensions, 9
- Discourse on Method*, 30
- Disquisition about the Final Causes
 of Natural Things*, 39
- diversity, 141
- division of labor, 59
- Dobzhansky, Theodosius, 110
 Darwinian evolution, 68,
 72–73
 progress, 119–20, 149
- dogs, 7
- Donne, John, 167
- Dostoevsky, Fyodor, 179
- double helix, 36–38, 71, 111
- drift, genetic, 105–6, 108–9
- dukkha, 8–9
- Dulles, John Foster, 178, 183, 186
- Dupré, John, 15–16, 19, 106, 109, 115,
 153
- duties, 158
- duty, 175
- Earth, 27
- Edwards, Anthony, 76
- Edwards, Jonathan, 95
- embryology, 63, 79, 107
- Emerson, Ralph Waldo, 46
- emotions, 172–73
- encephalization quotient (EQ), 12
- Encyclopédie*, 123
- Enigma Machine, 34
- Enlightenment, Age of, 122
- entanglement, quantum, 117
- epigenetics, 112
- ethics, 82, 157, 159, 172, 182, *see also*
 morality
- ethnicity, 76
- Euthyphro Problem, 151
- evolution, 12–13, 43, 47, 85, 112, 157,
 183, *see also* Darwinian
 evolution
- évolution créatrice*, 45, 142
- Evolution: The New Synthesis*, 125
- evolutionary development
 (evo-devo), 112
- evolutionary theory, 113

INDEX

- existence, 85
 existentialism, 183
Existentialism and Humanism, 18
- faith, 22–23, 84, 111
 families, 127
 farmers, 128
 Field Museum, 24
 final causes, 33, 39–40, 79–81
 finches, 62
 Fisher, Ronald A., 68
 Fitzgerald, F. Scott, 130
 Fodor, Jerry, 17, 107, 112, 153
 Ford, E. B., 69
 fossils, 62
 free will, 7, 95
 freedom, 20, 186
 Frost, Robert, 33
- Galileo, 29
 genera, 81
 genes (genetics), 68, 70, 128, 174
 God, *see* religion
God Delusion, 11
 Goethe, Johann Wolfgang von, 42
 Gould, Stephen Jay, 51
 organicism, 101–3, 109
 progress, 129, 141, 149
 Greene, John, 120
 group selection, 143
- habits, 80, 87–88
 Haeckel, Ernst, 96, 99
 Haldane, J. B. S., 68, 91, 146
 Hamilton, William, 112
 Hardy-Weinberg law, 70
- Harvey, William, 30
 Hegel, G. W. F., 162
 Heidegger, Martin, 18, 116
 heredity, 68
Histoire naturelle des animaux sans vertèbres, 44
History of Animals, 10
 Hitler, Adolf, 132, 157
 holism, 112
Homo sapiens, 75
 hostility, 164, 174, *see also* war
 humans as special, 91–95,
 113–18
 Humboldt, Alexander von, 152
 Hume, David, 82, 160, 171, 175, 179,
 186
 Huxley, Julian
 Darwinian evolution, 69
 morality, 157, 159, 161
 progress, 125, 137, 142–43, 148
 Huxley, Thomas Henry, 66, 98, 166
- immigration, 130
 immortality, 15
 imperative, categorical, 173
Individual in the Animal Kingdom,
 137, 142
 individual selection, 170
 industrialization, 131
 information, 83
 inheritance, 43
 intelligence, 20, 81–87, 131
 interdependence, 185
- judgments, 41, 83, 185
 justifications, 151

INDEX

- Kant, Immanuel, 41, 177
 mechanism, 82–84, 87
 organicism, 40–41
 Romanticism, 43
 Kepler, Johannes, 27, 29
 kin selection, 60, 112
 Kingsley, Charles, 98
 knowledge, 15, 21, 41, 82–83, 85,
 see also Kant, Immanuel
 Kuhn, Thomas, 24, 110, 116
- Lamarck, Jean-Baptiste, 43
 language, 148
 Leibniz, G. F. W., 115, 117
 Lewontin, Richard, 72–73, 76–77,
 101, 110, 146
 liberty, 95
 Lieberman, Daniel E., 75, 126
 life-histories, 104
 Linnæus, Carolus, 53
 Lowell Institute, 46
 Lucy, 53
 Luther, Martin, 23
 Lysenko, Trofim, 100
- machines, 27
 Mackie, J. L., 173
 Malthus, Thomas Robert, 58, 164
 Mayr, Ernst, 69, 72, 74
 McShea, Daniel, 135–36
 progress, 133, 135, 141, 144–45,
 147–48
 mechanism, 21–24, 107, 111, 183
 final causes, 79–81
 Homo sapiens, 75–79
 humans special?, 91–95
 intelligence, 81–87
 pragmatism, 87–89
 relativism?, 89–91
 root metaphors, 29
 triumphant, 33–38, *see also*
 organicism
 men, 66
 Mendel, Gregor, 68
 mental abilities, 65
 metaphors, 24–29, 108–13, 116, 149
 migration, 71
 Mill, John Stuart, 187
Mind, 161
*Mind and Cosmos: Why the
 Materialist Neo-Darwinian
 Conception of Nature Is
 Almost Certainly False*, 17
Monadology, 115
 monism, 117–18
 Moore, Aubrey, 93
 Moore, G. E., 161, 176, *see also*
 naturalistic fallacy
 morality, 82, 182
 morality, mechanist, 166–71
 clarifications, 173–76
 Darwinian metaethics,
 176–80
 normative Darwinism,
 171–73
 morality, organicist
 naturalistic fallacy, 159–65
 social Darwinism, 153–58
 two divisions, 151–53
 motives, 95
 Muller, Herman, 72–73
 mutations, 71–72, 106, 130

INDEX

- Nagel, Thomas, 16, 108, 115, 118
 National Research Council
 conference 1955, 105
 nationhood (nation), 157
 natural selection, 24
 human status, 17
 mechanism, 85
 organicism, 106
 progress, 119, 130, 141, *see also*
 Darwinian evolution
Natural Theology, 92
 naturalistic fallacy, 159–65
 nature, 32, 47, 86, 108
 New Atheists, 80
 Newton, Isaac, 29, 31, 56–57
 nibbana, 8–9
 niraya, 9
 nurture, 86
- obligations, 184
 Oken, Lorenz, 42, 46
*On the Origin of Species by Means
 of Natural Selection, or the
 Preservation of Favoured
 Races in the Struggle
 for Life*, 57
Ontogeny and Phylogeny, 104
 organicism, 21–24, 96–99, 114, 181,
 183
 humans as special, 113–18
 philosophers, 106–8
 problem of progress, 118–21
 redux, 39–42
 Romanticism, 42–47
 root metaphors, 24–29, 108–13
 Sewall Wright, 104–6
- spandrels, 101–4
 twentieth-century, 99–101,
 see also mechanism;
 morality
 organisms, 26, 28, 40, 62, 81, 158
 Owen, Richard, 62, 98
- Paley, Reverend William, 92,
 141
 panentheism, 120
 panpsychism, 132
 Peirce, Charles Sanders, 87
 Pepper, Stephen C., 26
 petas, 9
 Plato, 14–15, 26
Poetics, 25
Popular Science Monthly, 87
 populations, 78, 131, *see also*
 immigration; migration
 pottery, 127
 pragmatism, 87–89
Principia Ethica, 161
Principia Mathematica, 46
 processing, 84
 progress, problem of, 118–29
 arms races, 137–38
 causal inadequacies, 145–47
 complexity, 132–37, 139–41
 convergence, 138–39
 enthusiasm, 141–45
 naysayers, 129–32
 values, 147–50
 Providence, 122
 punishment, 9
- quantum entanglement, 117

INDEX

- races, 76–77, 155
 racism, 130
 rankings, 10
 Rawls, John, 171–72
 reason, 22, 32, 41, 181
 organicism, 114
 progress, 148
 reciprocal altruism, 169
 Reductionism, 112
 rehabilitation, 9
 reincarnation, 8
 relativism, 89–91
 religion, 5–10, 19, 21, 84
 responsibilities, 7, 158
 restraints, 186
 ribonucleic acid (RNA),
 38, 49
 Richards, Robert J., 152
 Romanticism, 42–47, 107, 123, *see*
 also organicism
 Rorty, Richard, 88, 94
 Russell, Bertrand, 46

 salvation, 7, 93
 Sartre, Jean-Paul, 18, 21, 94,
 184–85
 Schelling, Friedrich, 42, 44–45, 47
 science
 root metaphors, 24–29, *see also*
 organicism
Science and the Modern World, 46
 Scientific Revolution, 26, 29, 80
 secularism, 10–17, 19
 selection, 57, 104, *see also* natural
 selection
Selfish Gene, 144

 Sepkoski, Jack, 99, 136, 141, 148
 sexual selection, 59, *see also*
 Darwinian evolution
 sickle-cell genes, 71
 Sidgwick, Henry, 161
 Simpson, George Gaylord,
 69, 132
 sin, 7, 93
 skin color, 127
 Smith, Adam, 59
 Smith, John Maynard, 109
 social behavior, 60
 Social Darwinism, 153–59
 societies, 44–45, 89, 158
Sociobiology: The New Synthesis,
 13, 101
 Spandrels of San Marco,
 101–4
 specialisation, 59, 119
 species, 53, 55, 62, 105, 158
 Spencer, Herbert, 166
 morality, 154, 156, 164
 Organicism, 98–99, 105
 progress, 124, 143–44
 Romanticism, 43–44
 status, human, 5
 Creationists, 17–20
 religion, 5–10
 secular, 10–17
 Stebbins, G. Ladyard, 69
 Stove, David, 169
Structure of Scientific Revolutions,
 24
 success, 85
Summa Theologica, 9
 superiority, 20

INDEX

- superiority, human, 19
 survival, 58
- Thatcher, Margaret, 156
 theism, 31, 93
Theory of Justice, 171
*Third Critique, The Critique
 of the Power of Judgment*,
 40
 thought, 114
Timaeus, 14
 tools, 127
 tree of life, 59, 96
 truth, 83
- understanding, 84–85, *see also*
 Kant, Immanuel
 uniqueness, 16, 19
 unity of type, 63
 universes, 8
- value, 115, 118
 values, 94, 147–50, 162, 183, 186
- variation, 73–74, 79, 119, 130
 Darwinian evolution, 57, 72
 genetic, 77–78
 variation, genetic, 75
 violence, 164, 175
- Waddington, C. H., 100–1
 Wallace, Alfred Russel, 56, 66
 war, 137, 155, 159, 163, 170,
 175
Water-Babies, 98
 Watson, James, 34, 72, 111
 Wedgwood, Josiah, 142
 Whewell, William, 60
 Whitehead, Alfred North, 46–47,
 100, 118
 Wilson, Edward O., 13, 162, 164
 morality, 158, 160
 progress, 125, 143, 148
 spandrels, 101
 women, 14, 66, 170
 workings, bodily, 27
 Wright, Sewall, 68, 104–6, 118