

Index

- AAAS. *See* American Association for the Advancement of Science
- abortion, 145–146, 152, 160–161
- activism, 159–160, 168. *See also* Women’s Health Movement
- ad hoc* hypothesis, 15, 17, 28–29
- ad lib* sampling, 96–97
- Adaptationism, 201
- Evolutionary Psychology and, 212–214
- reverse engineering and, 214–216
- adaptations, 202
- adaptive traits versus, 213
- Evolutionary Theory and, 202–203
- genetic, 58
- predictions of, 208–209
- sexual behavior and, 60–61
- social structure of savannah baboons and, 80
- The Adapted Mind: Evolutionary Psychology and the Generation of Culture* (Barkow, Cosmides, Tooby), 200–202, 206–209
- adaptive behavior, 213
- adaptive function, 206–209
- adaptive problems, 209, 211–212
- “Ain’t I a Woman?” (Truth), 33–34
- “alpha males,” 90
- Altmann, Jeanne, 83, 88–89, 96–97
- American Association for the Advancement of Science (AAAS), 227, 234–235
- Anderson, Elizabeth, 40–41
- androcentrism (versus sexism), 2–3, 6, 66
- developmental biology and, 115–116
- “equity issues” and, 9
- fertilization and, 121–122
- Longino and Doell on, 42–46
- “Man, the Hunter” theory and, 45
- in medicine, 135–136
- in primatology, 85
- recognizing, 97–100
- scientific content and, 9
- sex determination and, 115–116
- androgens, CAH and, 187–188
- anthropological genetics, 59
- anthropomorphism, 77–78
- Araji, Sharon, 216–217
- Aristotle, 15–17, 141–142
- artificial selection, 26–28
- asexual reproduction, 23
- atomic bomb, 228–229
- auxiliary hypotheses. *See* background assumptions
- background assumptions (auxiliary hypotheses), 18–19, 124
- childbed fever cause and, 17–19
- evidence and, 43–44
- female inferiority, 17
- objectivity and, 101
- in scientific reasoning, 13–19, 41
- sex/gender differences and, 17, 52
- “bad science,” 37, 100, 182, 226
- Barash, David, 61–63
- Barkow, J. H., *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*, 200–202, 206–209
- Bartisch, Georg, 139–140

- Bateman, Angus John, 53–54, 71, 89–90
 “the battle of the sexes,” 56
- Behan, Peter, 176–181
- Behavioral Endocrinology, 172, 179–180
- Benbow, Camilla, 179
- BGS (Biology and Gender Study Group), 130–132
- biological/genetic determinism, 24, 30–31, 52–53, 63–67
 feminism and, 65–66
 human behavior and, 63–64
 sex/gender and, 63–64
- biology. *See also* feminism and biology
 environmental factors and, 63–64
 “equity issues” in, 3
 female, 135–136
 male, 135–136
 sex/gender differences and, historically, 138–142
- Biology and Gender Study Group. *See* BGS
- biomedical research, 159, 161–165
 hormonal cycles and female representation in, 162–163
 on pregnant women, 163
 priorities of, 164
 women’s inclusion in, 162–165
- birth control pill, 161
- birth rate, socioeconomic class and, 152
- Bleier, Ruth, 123–124, 189
- “Body, Bias, and Behavior: A Comparative Analysis of Reasoning in Two Areas of Biological Science” (Longino and Doell), 42–44
- Bonobo: The Forgotten Ape* (de Waal), 94–96
- bonobos, 93–96
- BOR. *See* Brain Organization Research
- Boston Women’s Health Book Collective, 159–160
- Brahe, Tycho, 13–16
- brain development, 181–182
- brain hemisphere lateralization, 176–180
 in laboratory animals, 178
 “sex” hormones and, 180
 sex/gender differences and, 182
- Brain Organization Research (BOR), 171
 “quasi” experiments in, 193–194
 sex/gender differences and, 194–195
- brain organizer hypotheses, 171
 causal mechanisms, 180–181
 feminist critiques of, 175
 hierarchical, 174–175, 180–181
 linear, 174–175, 180–181
 philosophical issues, 174–175
 proximate causes, 176
 sex/gender differences and, 176–193
 ultimate causes, 176
 underdetermination theses and, 175
- Bronson, F.H., 186
- Buss, David, 209–210, 212, 215
Evolutionary Psychology: The New Science of the Mind, 224
- CAH. *See* Congenital Adrenal Hyperplasia
- Carpenter, Clarence Ray, 75–76
- Chargaff, Erwin, 230–231
- cheater-detection mechanism, 206–208, 210–211
- childbed fever, 17–19
- childbirth, 145–147
 medicalization of, 155
 midwifery and, 146
 potential complications of, 146–147, 152
 in twentieth and twenty-first centuries, 160
- chimpanzees, 79–82, 94–95
 male dominance and aggression in, 82
 social behavior, 81–82
- Clarke, Edward H., 151–152
- clitoris, removal of, 147–148
- cognitive mechanisms, in *Evolutionary Psychology*, 211–212
- “cognitive modules,” 202
- cognitive traits, 200–201
- cognitive values, 10
- Coleman, R.R., 151–152
- comparative method, 204–205
- “conceptual integration,” 200
- Congenital Adrenal Hyperplasia (CAH), 187–188, 190
 sexuality and, 190–193
- Congressional Caucus on Women’s Issues, 168–169
- Consortium for Socially Relevant Philosophy of/in Science and Engineering (SRPoiSE), 238–239

- context of discovery versus context of justification distinction, 6
- “contextual empiricism,” 46
- Contextualism, 4, 24, 39–40, 173
 alternatives to, 39–41
 Darwin and, 37–46
 empirical evidence supporting, 38
 evidence and, 37–38
 feminism and, 41
 feminist versions of, 42–46
 medicine and, 137
 philosophy of science and, 41–42
 underdetermination, 38
- contraceptives, 145–146, 152
 birth control pill, 161
 MSOCs, 166–167
- Copernican hypothesis, 13–15
- Copernicus, Nicolaus, 14
- corsets, 153
- Cosmides, Leda, 209–210
The Adapted Mind: Evolutionary Psychology and the Generation of Culture, 200–202, 206–209
 on cheater-detection mechanism, 206–208, 210–211
- coy females, 126
- culture, human, 76
- Darwin, Charles, 4, 23–24
 contemporaries of, 34–36, 38–39
 Contextualism and, 37–46
 “conversion of original function,” 203
The Descent of Man, 28–33, 75–76
 on female choice, 35
 feminism and, 34, 36
 feminists on, 32–33
 gender stereotypes informing, 24
 on male superiority, 30–31, 38
 on natural selection, 25–26
On the Origin of Species, 25–37
 on sex/gender differences, 24–38, 64
 on sexual selection, 25–38
- Dawkins, Richard, 57–58
The Selfish Gene, 59
- de Waal, Frans, 94–96
- Dennett, Daniel, 63–64, 207–208, 210, 213–215, 217–218
- The Descent of Man, and Selection in Relation to Sex* (Darwin), 28–33, 75–76
- Desjardins, C., 186
- developmental biology, 108–111
 androcentrism and, 115–116
 developmental biologists, 112, 127–129
 feminism and, 127–134
 as feminist science, 132
 gender as organizing principle in, 111, 122–127
 gender dynamics in, 127–131
 gender stereotypes in, 111
 language, 129–130
 sex and sex/gender differences in, 129
 sex determination and, 109–111
- Developmental Biology* (Gilbert), 108–109, 121
- DeVore, Irven, 80
- “distance” between data and hypotheses, 175, 190
- divisions of labor by sex/gender, 195–196
- Dobzhansky, Theodosius, 124–125
- Doell, Ruth, 43–46, 83–84
 “Body, Bias, and Behavior: A Comparative Analysis of Reasoning in Two Areas of Biological Science,” 42–44
- domestic violence, 212, 217–219
- Douglas, Heather, 217–218, 237–239
- Douglas-Wood, Ann, 147–148
- Duhem, Pierre, 12–13, 46–47, 114
- Dukelow, W. Robert, 79
- “An Ecological Model of Female-Bonded Primate Groups” (Wranghman), 104–105
- education, women’s health and, 151–152
- Ehrenreich, Barbara, 147–148, 153
For Her Own Good: Two Centuries of the Expert’s Advice to Women, 159–160
- Ehrhardt, Anke, 187–188, 190–193
- Eicher, Eva, 130–131
- Eliot, George, 35–36
- embryonic development, 108, 112–113
 sex determination and, 116–117
- empirical adequacy, 86–87, 106, 111, 115, 182–183, 184–185
- empirical psychology, 182
- “empirical slack,” 38, 114

- empirical statements, 221–222
- empiricism, contextual, 46
- employment, women's health and, 151–152
- “The Energetic Egg” (Schatten, G., and Schatten, H.), 118–120
- English, Diedre, 147–148, 153
 - For Her Own Good: Two Centuries of the Expert's Advice to Women*, 159–160
- environment
 - biology and, 63–64
 - sexual selection and, 71–72
- epistemic standards, of evidence, 219–220
- epistemic values, 10
- epistemological commitments, 39–40
- epistemology, social, 7
- estradiol, 190
- estrogen, 185–186
 - replacement, 170
- estrogen deficiency, 159, 170
- ethics and science, 226–233
 - Evolutionary Psychology and, 218–220
 - of neuroscience, 197–198
 - of recombinant DNA techniques, 229–231
 - scientific “integrity,” 37
 - sex/gender differences and, hypotheses about, 231–233
- ethnocentrism, 45
- evaluatively thick concepts, 68–69, 194, 218–219
 - gender stereotypes as, 224
- Evers, K., 190–191
- evidence, 43–44
 - background assumptions and, 43–44
 - Contextualism and, 37–38
 - empirical, 114
 - “empirical slack” and, 12–13, 38
 - epistemic standards of, 219–220
 - Evolutionary Psychology, 218–220
 - Human Sociobiology and, 219–220
 - prima facie*, 196
 - for sex/gender differences, 33–34, 196
- evolutionary biology, 4
 - feminism and, 69–73
 - Parental Investment Theory and, 69–73
- evolutionary mechanism
 - natural selection as, 25
 - sexual selection as, 25
- Evolutionary Medicine, 135–136, 159, 165–168
 - on fevers, 165–166
 - on menstruation, 166–167
- Evolutionary Psychology, 199–202. *See also* gender stereotypes
 - Adaptationism and, 212–214
 - adaptive function and, 206–209
 - basic commitments of, 202–204
 - cheater-detection mechanism and, 206–208
 - cognitive mechanisms in, 211–212
 - ethics and, 218–220
 - evaluatively thick concepts in, 224–225
 - evidence and, 218–220
 - feminist critiques of, 216–218
 - gendered metaphors in, 224–225
 - Human Sociobiology and, 63, 203–204
 - methods used in, 204–211
 - natural selection and, 199
 - Naturalistic Fallacy and, 221–225
 - Parental Investment Theory and, 211–212, 216–217
 - Pleistocene and, 208–209
 - politics and, 218–220
 - predispositions in, 211–212
 - reverse engineering and, 201, 208–209, 214–216
 - sex/gender differences in, 211–212, 225
 - sexual selection and, 211–212
- Evolutionary Psychology: The New Science of the Mind* (Buss), 224
- Evolutionary theory, 4, 23
 - adaptations and, 202–203
 - female, male brains and, 173
 - gender in, 124–125
 - natural selection, and (Darwin on), 25–26
 - sex/gender brain differences and, 194–196
 - sexual selection and, 125
- explanatory power, 111, 114–115
- facts, 43–44, 221–222, 224–225
- fact/value distinction, 231–233
- faith, 11–12
- Fausto-Sterling, Anne, 116–117
- Fedigan, Linda Marie, 77–78, 84, 87, 96–98
 - on non-representative sampling, 93–94
 - on primatology, 103, 106–107, 133–134

- “The Paradox of Feminist Primatology: The Goddess Discipline?,” 103
- female brains, 171–174
- evolution and, 194–196
- Evolutionary theory and, 173
- hemisphere lateralization in, 176–180
- mathematical abilities and, 176–185
- sex/gender differences and, 196–197
- “female castration,” 147–148
- female choice, in sexual selection, 35
- female dominance hierarchies, 86–87
- female inferiority, 17, 65–67
- Female Primates: Studies by Women*
- Primatologists* (Small), 92–93
- female-bonded primate groups, 104–105
- “femininity,” 9, 111, 121–122
- feminism and biology, 10, 21–22
- biological determinism, 65–66
- brain organizer hypotheses, 175
- Darwin and, 32–34, 36
- developmental biology, 127–134
- evolutionary biology, 69–73
- Evolutionary Psychology, 216–218
- gender’s role in biology, 123–124
- Human Sociobiology, 61–63
- “Man, the Hunter” theory, 45
- mathematical abilities in sex/gender differences, 180–185
- medicine, 138, 149–154, 168–170
- Parental Investment Theory, 55–58
- primatology, 73, 84–93, 133–134
- sex determination, 116–118
- sex/gender differences in behavior and temperament, 188–190
- sex/gender differences in heterosexuality, 192–193
- sexual selection, 55–58
- feminism and science, 105–107, 133
- Contextualism and, 41–46
- ethics and sex/gender differences, 231–233
- good science versus bad science, 7
- objectivity, 101
- “feminist consciousness,” 70
- feminist science scholarship (feminist science studies), 1–2, 4, 133
- androcentrism in, 2–3
- biological science, 10
- gender and science in, 8
- “gender stereotypes” and, 3
- “restudying” and, 10
- Schiebinger’s tools for gender analysis, 84
- on sex and sex/gender differences, 65–66
- “feminist-inspired hypotheses,” 70
- fertilization, 110–111
- androcentrism and, 121–122
- egg’s role in, 129–130
- gender stereotypes and, 3, 121–122
- gendered metaphors and, 121–122
- language, 129–130
- Parental Investment Theory and, 55–56
- “Sleeping Beauty” and, 118–122
- fetal development, 108, 113
- hemisphere lateralization and, 179
- sex determination and, 117–118
- “sex” hormones and, 172, 179, 187–188
- For Her Own Good: Two Centuries of the Expert’s Advice to Women* (Ehrenreich, English), 159–160
- formal and informal barriers to women in science, 3, 21
- foundationalism, 41
- Galen, 135, 139–141
- gametic dimorphism, 61, 71
- Gaulin, Steven, 222
- gender. *See* sex/gender
- gender as “organizing principle,” 111, 122–127
- gender assumptions, 84
- gender determinism, 62–63
- gender dynamics in scientific disciplines
- in developmental biology, 111, 127–131
- in primatology, 96–99, 102
- gender equity issues
- androcentrism and, 9
- in biology, 3
- gender essentialism, 92
- gender politics, 123–124
- gender stereotypes, 3, 9, 68–69. *See also*
- “femininity”; “masculinity”
- aggression and, 189
- Darwin informed by, 24
- in developmental biology, 111
- as evaluatively thick, 224

- gender stereotypes (cont.)
 in Evolutionary Psychology, 224–225
 fertilization and, 121–122
 Human Sociobiology and, 61–62
 reproduction and, 61
 sex/gender differences and, 194
 sociopolitical views and, 32–33
 survival of women and, 32
- gendered behavior, primatology and, 81–83, 85
- gendered metaphors, 3, 53, 68–69, 89–90
 in developmental biology (See fertilization)
 as evaluatively thick, 68–69, 89–90
 in Evolutionary Psychology, 224–225
 fertilization and, 121–122
 in Parental Investment Theory, 52–53, 68–69, 89–90
- genetic adaptations, 58
- genetic determinism. *See* biological/genetic determinism
- genetics
 anthropological, 59
 human behavior and, 60
 of primates and humans, 76
 social behavior and, 60, 63
- Geschwind, Norman, 176–181
- Gilbert, Scott F., 117–118
 on developmental biology, 127–133
Developmental Biology, 108–109, 121
 on feminism and changes in
 developmental biology (with Rader),
 127–131 (See also BGS)G
 on fertilization, 121
 “Revisiting Women, Gender, and
 Feminism in Developmental Biology,”
 127–131
- Gilman, Charlotte Perkins, 153–154
- Glashow, Sheldon, 11–12, 39–40
- Goldberg, Steven, 186
- Goldman, Emma, 150–151
- Gombe Reserve, Tanzania, 81–82
- “good science,” 98–100, 226
- Goodall, Jane, 79–80
- Gould, Stephen Jay, 207–208, 214
- Gowaty, Patricia Adair, 69–73
- Hanson, N.R., 47–49
 on the theory-ladenness of observation,
 47–49
- hanuman langurs, 89–91
- Haraway, Donna, 40–41, 81–82, 88–89
Primate Visions, 106–107
- Harding, Sandra, 99
- Hardman, Phillippa, 36
- “Have Only Men Evolved?” (Hubbard), 32
- Heape, Walter, 144–145
- Hempel, Carl, 14–16, 18–19, 41, 101
- heterosexuality, sex/gender differences in,
 190–193
- Hippocrates, 135, 141–142
- Hormonal Replacement Therapy (HRT), 159,
 170
- Hrdy, Sarah Blaffer, 89–91, 99–100, 126
- HRT. *See* Hormonal Replacement Therapy
- Hubbard, Ruth, 32
- Hubbell, Stephen P., 71–72
- human behavior. *See also* sexual behavior;
 social behavior
 adaptive, 213
 anthropomorphism and, 77–78
 genetic determinism and, 63–64
 genetics and, 60
 learned, 74
 “sex” hormones and, 185–186
 sex/gender and, 172–173
 sex/gender differences in, 172–173, 185–190
 universals in, 77
- human nature, 4
 primatology and, 75–76, 86
 universal, 201
- Human Sociobiology, 52, 91–92, 200
 biological determinism and, 52–53
 critics of, 61–63
 evidence and, 219–220
 Evolutionary Psychology and, 63,
 203–204
 feminists on, 61–63
 gender stereotypes and, 61–62
 “reverse engineering” and, 201
 sex/gender differences and, 66
 social behavior and, 58–60

- Hume, David, 221–222
 hysterectomies, 147–148
 hysteria, 141–142, 148–149
- “The Importance of Feminist Critique for Contemporary Cell Biology” (BGS), 127–128
- individualistic versus social accounts of scientific reasoning, 6–7
- Intersubjectivity of scientists versus scientists as situated, 97–102
- “invalidism,” 148–149, 153–154
- Jacklin, Carol, 186
- Johnson, Leslie K., 71–72
- Jordan-Young, Rebecca, 193–197
- Keller, Evelyn Fox, 132–133
- Kinsbourne, Marcel, 182
- Kitcher, Philip, 61–62, 66
Vaulting Ambition, 219–220
- knowers as “situated,” 97–100
- Kuhn, Thomas A., 50
- learned behaviors, 74
- libido, 190–191
- linear and hierarchical causal models, 174–175
- Lloyd, Elizabeth A., 5, 216–217
- Longino, Helen E., 83–84
 androcentrism, 45–46
 “Body, Bias, and Behavior: A Comparative Analysis of Reasoning in Two Areas of Biological Science,” 42–44
 on male aggression, 186
 on objectivity, 101–102
Science as Social Knowledge: Values and Objectivity in Scientific Inquiry, 46
 on scientific facts, 43–44
- maladaptive traits, 202–203, 223–224
- male aggression, 126, 186
 language describing, 189
 male dominance and, 186–187
 in ordinary chimpanzees, 82
 “sex” hormones and, 185–186, 189
- male brains, 171–174
 evolution and, 194–196
 evolutionary theory and, 173
 hemisphere lateralization in, 176–180
 mathematical abilities and, 176–185
 sex/gender differences and, 196–197
- male dominance
 “alpha males,” 90
 in chimpanzees, 82
 male aggression and, 186–187
 in primates, 85–86
 savannah baboons and, 80
- male superiority, 65
 Darwin on, 30–31, 38
 sex and sex/gender differences and, 25
- Malthus, (Thomas) Robert, 26–27
- “Man, the Hunter” theory, 44–46, 61
- manipulation hypothesis, 91
- Martin, Emily, 120–121, 140–141, 155–159
- “masculinity,” 9, 111, 121–122
- Masters, Judith, 56–57
- mathematical abilities, sex/gender differences in, 176–185
 feminist critiques and contributions to, 180–185
 mental spatial rotation and, 184
 standardized tests and, 182–184
- Mayr, Ernst, 92
- McBurney, Donald, 222
- McGuinness, Carol, 82–83
- medicine, 135–137. *See also* women’s health
 biomedical research and, 161–165
 childbirth and, 145–147
 Contextualism and, 137
 Evolutionary Medicine, 135–136, 159
 feminism and, 138, 149–154, 168–170
 feminist critiques and contributions to, 149–154
 “invalidism,” 148–149
 menopause, 149
 menstruation, 144–145
 pregnancy and, 145–147
 puberty, 144–145
 representative sampling and biomedical research, 138

- medicine (cont.)
 research priorities in, 138
 sex/gender and, historically, 138–143
 sex/gender and, in twentieth and twenty-first centuries, 154–168
 sexism in, 135–136
 treatment for “diseased” ovaries and uteruses, 147–148
 Western, 136–137
 Women’s Health Movement, 159–161
- menopause
 language used to describe, 157–159
 in nineteenth century medicine, 149
 in twentieth and twenty-first century medicine, 157–159
- menstrual-suppressing oral contraceptives (MSOCs), 166–167
- menstruation, 17, 144–145
 Evolutionary Medicine on, 166–167
 historical theories of, 141
 language used to describe, 155–157
 Premenstrual Syndrome, 169–170
 in twentieth and twenty-first centuries, 155–157
- Merton, Robert, 80
- Meyer-Bahlburg, Heino, 187–188
- midwifery, 146
- Mill, John Stuart, 34, 66–67
 “The Subjection of Women,” 38–39
- Mitchell, S. Weir, 148–149
- Money, John, 8, 190–191
- Moore, G.E., 221
- MSOCs. *See* menstrual-suppressing oral contraceptives
- National Institutes of Health (NIH), 162
 Office of Research on Women’s Health, 164–165
- A Natural History of Rape: Biological Bases of Sexual Coercion* (Palmer, Thornhill), 222–223
- natural selection
 Darwin on, 25–26
 as evolutionary mechanism, 25
 Evolutionary Psychology and, 199
 fitness and, 33
 social behavior and, 59
- The Naturalistic Fallacy, 221–225
- Necker cube, 47–49
- Nelson, Lynn Hankinson, 213–215
- Nesse, Randolph, 165
- “neurasthenia,” 148–149
- Neurath, Otto, 41
- neurobiology, 171–198
- neuroendocrinology, 172
- neuroscience, ethics and, 197–198
- NIH. *See* National Institutes of Health
- normative conclusions, 221–222, 224–225
 maladaptive traits and, 223–224
- Objectivism, 4, 11–13
 arguments for, 40
 on science, 11
- objectivity, 5
 background assumptions and, 101
 feminists on, 101
 Longino on, 101–102
 situated scientists and, 100–102
- observations, 46–51
 Necker cube and, 47–49
 scientific, 46
 and theories, 47–51
- On Human Nature* (Wilson), 59–61
- On the Origin of Species* (Darwin), 25–37
- ontological (metaphysical) commitments, 137
- Oppenheimer, Robert, 228–229
- optical illusions, 47–49
- Our Bodies, Ourselves* (Boston Women’s Health Book Collective), 159–160
- ovaries, treatment for “diseased,” 147–148
- Palmer, Craig T., 216–217
A Natural History of Rape: Biological Bases of Sexual Coercion, 222–223
- “paradigms,” 50
- “The Paradox of Feminist Primatology: The Goddess Discipline?” (Fedigan), 103
- Parental Investment Theory, 52–55
 alternatives to, 71–72
 biological determinism and, 52–53
 Dawkins on, 57–58
 evolutionary biology and, 69–73

- Evolutionary Psychology and, 211–212, 216–217
 feminist critiques of, 55–58
 fertilization, reproduction and, 55–56
 normative conclusions from, 62–63
 origins of, 53–54
 in primates, 126
 sex/gender differences and, 57–58, 61, 64
 sexual behavior and, 70–71
 sexual selection and, 55
 Wilson on, 60–61
 paternity, sexual jealousy and, 212
 phenotypic traits, 204–205
 Pinker, Steven, 223
 politics
 Evolutionary Psychology and, 218–220
 gender, 123–124
 women's health and, 168–169
 population growth, 26–27
 postmodernism, 40–41
 predispositions, 200, 203
 in Evolutionary Psychology, 211–212
 pregnancy, 145–147
 biomedical research on, 163
 medicalization of, 155
 in nineteenth century medicine, 142–143, 145–147, 150–152
 potential complications of, 146–147, 152
 in twentieth and twenty-first centuries, 160
 Premenstrual Syndrome, 169–170
 Pribram, Karl, 82–83
prima facie evidence, 196
 “the primate pattern,” 79–83, 89–90
Primate Visions (Haraway), 106–107
 primatology, 4. *See also* chimpanzees;
 savannah baboons
 “alpha males,” 90
 androcentrism in, 85
 anthropomorphism in, 77–78
 bonobos, 93–96
 changes in, 103–105
 female, 86–89, 92
 female primates' perspectives, 87–88
 female-bonded groups, 104–105
 feminism and, 73, 84–93, 133–134
 as feminist science, 105–107
 gendered behavior and, 81–83, 85
 genetics and, 76
 hanuman langurs, 89–91
 human nature and, 75–76, 86
 humans and, 76, 87–88
 lemurs, 103
 male dominance in, 85–86
 mating systems and, 85–86
 mother-infant relationship in, 81–82, 88–89
 Parental Investment Theory in, 126
 post–World War II, 78–83
 “the primate pattern,” 79–83, 89–90
 primatologists, 74–78
 prosimian, 103
 representative sampling, 93–97
 research priorities, 85–93
 rhesus monkeys, 104
 sex/gender in, 103
 sexual behavior in, feminist accounts, 86–91
 social structure and behavior, 74–75, 104–105
 species studies, 93–94
 Profit, Marjorie, 167
 prosimian primates, 103
 proximate versus ultimate cause, 92
 psychological dispositions, 200–201
 psychological mechanisms, 203–204
 Ptolemy, 13–14
 puberty, 144–145
 “quasi” versus “true” experiments, 175–176, 193–194
Quiddities: An Intermittently Philosophical Dictionary (Quine), 49–50
 Quine, W.V., 12–13, 38, 42, 114
 Quiddities: An Intermittently Philosophical Dictionary, 49–50
 QWERTY keyboard, 207–208
 race, 32–33
 Rader, Karen A., 117–118, 127–133
 “Revisiting Women, Gender, and Feminism in Developmental Biology,” 127–131

- rape, 60, 62–63, 216–217, 222–223
- recombinant DNA techniques, 229–231
- reductionism, 63–64
- “Reflections on a Century of Primatology” (Dukelow), 79
- Relativism, 7, 102, 218
- representative sampling, 85
 “ad lib sampling,” 96–97
 in medicine, 138
 primatology, 93–97
- reproduction, 61, 71
 Aristotle on, 16–17
 asexual, 23
 gender stereotypes and, 61
 Parental Investment Theory and, 55–56
 sexual, 23
- reproductive biology
 female, 142–143
 historically, 138–140, 142–143
 treatment for “diseased” ovaries and
 uteruses, 147–148
- Reproductive Endocrinology, 172
- research priorities, 84
 of biomedicine, 164
 male dominance in, 86
 in medicine, 138
 in primatology, 85–93
- “rest cure,” 148–149, 153–154
- reverse engineering, 205–206
 Adaptationism and, 214–216
 Evolutionary Psychology and, 201
 208–209, 214–216
- “Revisiting Women, Gender, and Feminism
 in Developmental Biology” (Gilbert and
 Rader), 127–131
- rhesus monkeys, 104
- Richardson, Robert, 204–205, 213–214
- Roe v. Wade*, 160–161
- Rosenberg, Charles E, 140–141
- Ruse, Michael, 125–126
- Sade, Donald, 104
- savannah baboons, 79–81, 88–89
 adaptations and, 80
 female-male relationship in, 89
 gendered behavior and, 81
- male dominance and, 80
 mother-infant relationship in, 88–89
 social structure of, 80
- Schatten, Gerald, 129–130
- Schatten, Heidi, 129–130
 “The Energetic Egg,” 118–120
- Schiebinger, Londa, 83
 on feminism and medicine, 168–169
 on gender’s organizing role in biology,
 122–123
 “Tools of gender analysis,” 83–85
 on women’s exclusion from biomedical
 research, 162, 164
- Science as Social Knowledge: Values and
 Objectivity in Scientific Inquiry* (Longino),
 46
- “the scientific method or methods,” 11
- scientific reasoning, 6, 206–208, 221
 background assumptions in, 13–19
- secondary sex characteristics, 30, 32, 52–53
 development of, 113
- The Selfish Gene* (Dawkins), 59
- Semmelweis, Ignaz, 17–19
- Serengeti National Park, 79
- sex. *See* sex/gender
- sex determination, 109–122
 androcentrism and, 115–116
 default trajectory, 113, 116, 130
 embryonic development and, 116–117
 feminism and, 116–118
 fetal development and, 117–118
 primary, 127–131
 secondary, 127–131
 “sex” hormones and, 116–117
 “theoretical virtues” and, 111, 114–116
 X chromosome and, 117
 Y chromosome and, 114–115, 117
- “sex” hormones, 3
 behavior and temperament, 185–186
 brain hemisphere lateralization and, 180
 fetal development and, 172, 179, 187–188
 hemisphere lateralization and, 178
 hormonal cycles, 162–163
 in laboratory animals, 172–173
 male aggression and, 185–186, 189
 sex determination and, 116–117

- sex/gender differences and, 67
- sexuality and, 190–191
- sex/gender
 - biological/genetic determinism and, 63–64
 - developmental biologists and, 112
 - in evolutionary theory, 124–125
 - human behavior and, 172–173
 - medicine and, 138–143, 154–168
 - as organizing principle, 111, 122–127
 - in primatology, 103
- sex/gender differences, 4, 8–9, 21, 23–24
 - Aristotle on, 16–17
 - assumptions of, 33
 - background assumptions and, 17, 52
 - in behavior, 172–173, 185–190
 - biological determinism and, 30–31, 63–64
 - BOR and, 194–195
 - brain hemisphere lateralization and, 182
 - brain organizer hypotheses and, 176–193
 - Darwin on, 24–38, 64
 - in developmental biology, 129
 - division of labor and, 195–196
 - “Double Standard,” 60
 - ethics and hypotheses about, 231–233
 - evidence for, 33–34
 - evolution and, 194–196
 - Evolutionary Psychology and, 211–212, 225
 - in female and male brains, 196–197
 - feminism and, 8, 66–67
 - feminist science scholarship on, 65–66
 - gender stereotypes and, 194
 - in heterosexuality, 190–193
 - Human Sociobiology and, 66
 - interest in, 67
 - male superiority and, 25
 - in mathematical abilities, 176–185
 - Parental Investment Theory and, 57–58, 61, 64
 - in Pleistocene, 60–61
 - prima facie* evidence for, 196
 - “secondary characteristics” and, 32
 - “sex” hormones and, 67
 - sociological explanations for, 34
 - sociopolitical views of, 32–33
 - in temperament, 185–190
 - Victorian view of, 31, 33
- sexism. *See* androcentrism
- Sexism Satirized* (Women’s Caucus of the Society for Developmental Biology), 129–130
- sexual behavior
 - adaptationist explanations of, 60–61
 - feminist critiques of primatological accounts, 89–91
 - Parental Investment Theory and, 70–71
 - in primates, 85–86, 90
- sexual jealousy, 212
- sexual selection, 4, 23–51, 56–57
 - acceptance of, 52
 - Darwin on, 25–38
 - as evolutionary mechanism, 25
 - Evolutionary Psychology and, 211–212
 - evolutionary theory and, 125
 - female choice and, 35
 - feminist critiques of, 55–58
 - Parental Investment Theory and, 55
 - post-Darwin, 52
 - processes of, 29–30
 - random environmental variation and, 71–72
 - social behavior and, 59
 - trait selection and, 28
- sexuality
 - CAH and, 190–193
 - males and female, 191
 - “sex” hormones and, 190–191
- Sinsheimer, Robert, 231
- “situatedness,” 99–100, 102
- “Sleeping Beauty” (Brothers Grimm), 118–122
- Small, Meredith, 92–93, 121
- Smith-Rosenberg, Carroll, 144, 149
- Smuts, Barbara, 73, 87–88
- social behavior
 - bonobos, 93–96
 - chimpanzee (ordinary), 81–82
 - genetics and, 60, 63
 - human, 77
 - Human Sociobiology and, 58–60
 - natural, sexual selection of genes and, 59
 - Pleistocene and, 59–60, 92

- social behavior (cont.)
 primatology, 74–75, 104–105
 of savannah baboons, 80
 “social epistemology,” 7
 social factors in scientific reasoning, 6–7, 42, 98
The Social Life of Early Man (Washburn), 80–81
 socially relevant philosophy of science, 236–238
 SRPoiSE, 238–239
 socially responsible science, 197–198, 227, 234–236
 research, 234
 responsibilities, 235–236
Sociobiology: The New Synthesis (Wilson), 58–61
 socioeconomic class, 150–153
 sociological factors
 brain organizer hypotheses and, 176
 in mathematical ability, 184
 sociopolitical contexts
 gender stereotypes and, 32–33
 science and, 42
 Spencer, Hamish, 56–57
 Sperling, Susan, 66, 79–81, 91–92
 SRPoiSE. *See* Consortium for Socially Relevant Philosophy of/in Science and Engineering
 Standpoint Theory, 99
 Stanley, Julian, 179
 stellar parallax, 13–16
 Stevert, Leidy, 166–167
 “structural-functionalist model,” 80
 struggle for existence, 26–27
 “The Subjection of Women” (Mill), 38–39
 Sutherland, William J., 71
 Swedell, Larissa, 74–75
 Symons, Donald, 215
Synthese (journal), 236–238
 Taylor, Harriet, 34
 temperament
 “sex” hormones and, 185–186
 sex/gender differences in, 185–190
 testosterone, 185–186, 189
 Thalidomide, 163
 “theoretical virtues,” 111, 114–116
 Thornhill, Randy, 216–217
A Natural History of Rape: Biological Bases of Sexual Coercion, 222–223
 “tomboyism,” 188, 190
 Tooby, John, 209–210
The Adapted Mind: Evolutionary Psychology and the Generation of Culture, 200–202, 206–209
 on cheater-detection mechanism, 206–208, 210–211
 “tools of gender analysis” (Schiebinger), 83–85
 dangers of extrapolating research models from one group to another, 85
 gender dynamics in scientific disciplines, 84
 language use, 85
 remaking of theoretical understandings, 85
 representative sampling, 85
 research priorities, 84
 traits
 adaptations versus adaptive, 213
 biological determinism of, 30–31
 cognitive, 200–201
 explanations for, 213
 flamboyant, 29–30
 maladaptive, 202–203, 223–224
 phenotypic, 204–205
 selection, 27–28
 Treat, Mary, 36
 triggering circumstances, 203–204
 Trivers, Robert L., 54–57, 89–90
 Truth, Sojourner, “Ain’t I a Woman?,” 33–34
 Tuana, Nancy, 239
 The underdetermination thesis, 12–13, 42
 brain organizer hypotheses and, 175
 Contextualism and, 38
 “universality,” 11
 uterus, treatment for “diseased,” 147–148
 values and science, 6, 10, 42
 fact/value distinction, 231–233
 value-free science, 5, 100–101, 218–219
 Van den Berghe, Pierre, 66

- Vaulting Ambition* (Kitcher), 219–220
 Veblen, Thorstein, 153
- Wade, Nicolas, 230
 Wallace, Alfred Russel, 25, 34–35
 Washburn, Sheldon, 80
 The Social Life of Early Man, 80–81
 Watson, James, 230
 Williams, George C., 61, 165, 213
 Wilson, E.O., 58–61, 66, 89–90, 200
 On Human Nature, 59–61
 Wollstonecraft, Mary, 34
 Women’s Caucus of the Society for
 Developmental Biology, 129–130
 women’s health, 136–137. *See also*
 childbirth; “invalidism”; menopause;
 menstruation; pregnancy
 biomedical research and, 162–165
 corsets, 153
 education and, 151–152
 employment and, 151–152
 “female illnesses,” 150–151
 Office of Research on Women’s Health,
 NIH, 164–165
 politics and, 168–169
 socioeconomic class and, 150–151
 Women’s Health Movement, 155, 159–161,
 168
 Women’s Movement, 97–98
 Wranghman, Richard, 104–105
 “An Ecological Model of Female-Bonded
 Primate Groups,” 104–105
 Wylie, Alison, 10
- X chromosome, 117, 129–130
 Y chromosome, 114–115, 117, 129–130
 Yerkes, Robert, 75–76
 Zuk, Marlene, 168