Name index

<table>
<thead>
<tr>
<th>Name</th>
<th>Page/Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aarsleff, Hans</td>
<td>11</td>
</tr>
<tr>
<td>Abutalebi, Jubin</td>
<td>223</td>
</tr>
<tr>
<td>Agnoli, Franca</td>
<td>223</td>
</tr>
<tr>
<td>Aitchison, Jean</td>
<td>112–13</td>
</tr>
<tr>
<td>Akmajian, Adrian</td>
<td>280</td>
</tr>
<tr>
<td>Alter, Stephen</td>
<td>157</td>
</tr>
<tr>
<td>Andresen, Julie Tetel</td>
<td>156</td>
</tr>
<tr>
<td>Arbib, Michael</td>
<td>146–47</td>
</tr>
<tr>
<td>Armstrong, David</td>
<td>146–47</td>
</tr>
<tr>
<td>Attwood, Anthony</td>
<td>178</td>
</tr>
<tr>
<td>Au, Terry Kit-fong</td>
<td>37</td>
</tr>
<tr>
<td>Augustine of Hippo</td>
<td>190–91</td>
</tr>
<tr>
<td>Austen, Jane</td>
<td>279</td>
</tr>
<tr>
<td>Austin, J. L.</td>
<td>43, 235</td>
</tr>
<tr>
<td>— How To Do Things With Words</td>
<td>25, 240–44, 263–64, 267–69, 278</td>
</tr>
<tr>
<td>Balter, Michael</td>
<td>73, 96</td>
</tr>
<tr>
<td>Bapteste, Eric</td>
<td>116, 139</td>
</tr>
<tr>
<td>Barkow, Jerome</td>
<td>127</td>
</tr>
<tr>
<td>Barrett, Louise</td>
<td>158–60</td>
</tr>
<tr>
<td>Beadle, George</td>
<td>83</td>
</tr>
<tr>
<td>Becker, Alton</td>
<td>32, 192</td>
</tr>
<tr>
<td>Benasich, April A.</td>
<td>34</td>
</tr>
<tr>
<td>Berlin, Brent</td>
<td>200, 209</td>
</tr>
<tr>
<td>— Basic Color Terms</td>
<td>209–10</td>
</tr>
<tr>
<td>Bertolani, Paco</td>
<td>166</td>
</tr>
<tr>
<td>Bialystok, Ellen</td>
<td>183, 223</td>
</tr>
<tr>
<td>Bickerton, Derek</td>
<td>104</td>
</tr>
<tr>
<td>Bloom, Paul</td>
<td>112–15, 122, 127, 190–91, 240, 244</td>
</tr>
<tr>
<td>— Language and Space</td>
<td>219–20</td>
</tr>
<tr>
<td>Bloomfield, Leonard</td>
<td>22, 23, 245–36, 256</td>
</tr>
<tr>
<td>— Language</td>
<td>7, 14, 74–75, 247–49, 251–52, 261</td>
</tr>
<tr>
<td>Bolinger, Dwight</td>
<td>83</td>
</tr>
<tr>
<td>Bopp, Franz</td>
<td>156–57</td>
</tr>
<tr>
<td>Boroditsky, Lera</td>
<td>216–17</td>
</tr>
<tr>
<td>Borsci, Diane</td>
<td>185</td>
</tr>
<tr>
<td>Bowerman, Melissa</td>
<td>190</td>
</tr>
<tr>
<td>Brace, C. Loring</td>
<td>163</td>
</tr>
<tr>
<td>Brannon, Elizabeth</td>
<td>166–67</td>
</tr>
<tr>
<td>Breal, Michel</td>
<td>11</td>
</tr>
<tr>
<td>Broca, Pierre Paul</td>
<td>74</td>
</tr>
<tr>
<td>Brosnan, Sarah</td>
<td>166</td>
</tr>
<tr>
<td>Brown, Penelope</td>
<td>199</td>
</tr>
<tr>
<td>— Politeness</td>
<td>266</td>
</tr>
<tr>
<td>Brown, Roger</td>
<td>183–84</td>
</tr>
<tr>
<td>— A First Language</td>
<td>233</td>
</tr>
<tr>
<td>Brown, Roger Langham</td>
<td>188</td>
</tr>
<tr>
<td>Bruner, Jerome</td>
<td>171, 183, 191, 273</td>
</tr>
<tr>
<td>— Child’s Talk</td>
<td>179–80</td>
</tr>
<tr>
<td>Buttelmann, David</td>
<td>171</td>
</tr>
<tr>
<td>Campbell, R. Sherlock</td>
<td>184</td>
</tr>
<tr>
<td>Cantlon, Jessica</td>
<td>166–67</td>
</tr>
<tr>
<td>Carroll, John B.</td>
<td>202</td>
</tr>
<tr>
<td>Cavalli-Sforza, Luigi</td>
<td>182</td>
</tr>
<tr>
<td>Chen, Keith</td>
<td>165–66</td>
</tr>
<tr>
<td>Choi, Soonja</td>
<td>190, 193–95</td>
</tr>
<tr>
<td>— Aspects of the Theory of Syntax</td>
<td>13</td>
</tr>
<tr>
<td>— Language and Problems of Knowledge</td>
<td>87–88, 106–07</td>
</tr>
<tr>
<td>— poverty of the stimulus</td>
<td>244–46</td>
</tr>
<tr>
<td>— Review of Verbal Behavior</td>
<td>229–32, 234, 235, 236–37, 244</td>
</tr>
<tr>
<td>— Syntactic Structures</td>
<td>246–47, 249–50, 251–52, see also competence</td>
</tr>
<tr>
<td>— The Case Against B.F. Skinner</td>
<td>238</td>
</tr>
<tr>
<td>Christiansen, Morten</td>
<td>132</td>
</tr>
<tr>
<td>Chung, Cindy</td>
<td>184</td>
</tr>
<tr>
<td>Cohen, Jon</td>
<td>117</td>
</tr>
<tr>
<td>Cohen, Ronald</td>
<td>185</td>
</tr>
<tr>
<td>Condon, William S.</td>
<td>38</td>
</tr>
<tr>
<td>Connolly, William</td>
<td>96</td>
</tr>
<tr>
<td>Corballis, Michael</td>
<td>146–47</td>
</tr>
<tr>
<td>Corbett, Greville</td>
<td>217</td>
</tr>
<tr>
<td>Cosmides, Leda</td>
<td>76, 127, 182</td>
</tr>
</tbody>
</table>
The Adapted Mind, 127
Courchesne, Eric, 177–78
Courtenary, Baudouin de, 26
Cowie, Fiona, 78–79, 80
Crick, Francis, 49, 81–82
Critchley, Macdonald, 104
Crompton, Robin, 166
Crow, Timothy, 109, 175–76
Damasio, Antonio, 270
Danziger, Shai, 279
Darwin, Charles, as inspiration for linguistic theory, 1
On the Origin of Species, 11, 118
second neo-Darwinian synthesis, 135
survival, 54
Davies, Ian, 217
de Brosses, Charles, 156
de Waal, Frans, 104, 166, 167, 170, 171–72, 276
Deacon, Terrence, 104, 155, 170, 211
Symbolic Species, 160–62
Dediu, Dan, 65–66, 276
Descartes, René, as inspiration for linguistic
theory, 1, 123–24
Deutsch, Diana, 200
Dick, Anthony, 35
Dickerson, Paul, 178
Dolan, R. L., 59
Donald, Merlin, Origins of the Modern Mind,
167–68
Doolittle, W. Ford, 116, 139
Dubner, Stephen, 165–66
Dugum Dani, 200
Dunbar, Robin, Human Evolutionary
Psychology, 158–60
Eckman, Paul, 58, 78
Elman, Jeffrey, 36
Elton, Sarah, 166
Evans, Nicholas, 69, 208
Everett, Dan, 111, 208
Falk, Dean, 157–58
Fedorenko, Evelina, 72
Fillmore, Charles
Grammatical Constructions and Linguistic
Generalizations, 253
Regularity and Idiomaticity in Grammatical
Constructions, 253
Fisher, R. A., 121
Fisher, Simon, 64, 65
Fishman, Joshua, 203–05, 214
Fitch, W. Tecumseh, 109, 111–12, 117, 134,
147, 158
Fleck, Ludwik, 93, 194

Genesis and Development of a Scientific
Fact, 7–8
Fodor, Jerry, 78, 188
Modularity of Mind, 76
Foucault, Michel, 234
Friederici, Angela, 73
Fromkin, Victoria, 107–08
An Introduction to Language, 262–63
Futuyma, Douglas, Evolutionary Biology, see Evolutionary Biology
Gabrieli, John, 175
Galdon, Francis, 41
Gardiner, Alan H., 233
Geertz, Clifford, 32–33
Gellatly, Angus, 210
Gibbons, Ann, 78
Gibson, Kathleen, 104
Givón, Talmy, 198, 199
Gleason, H. A., Introduction to Descriptive
Linguistics, 209
Goffman, Eving, 36
Goldberg, Adele, 4, 43, 66, 255
Constructions at Work, 252, 253–55,
256–59
Goldin-Meadow, Susan, 35, 66–67, 184–85
Hearing Gesture, 269–70
Goldstein, Michael, 38
González, Julio, 97
Gordon, Peter, 206, 207
Griffiths, Paul, 42, 56–64, 166
What Emotions Really Are, 182
Hakuta, K., 183
Harris, Roy, 18
Hauser, Mark, 109, 111–12, 117, 134, 158
Moral Minds, 280
Henthorn, Trevor, 200
Hespos, Susan, 190, 192, 193, 204
Hickok, Gregory, 147
Hill, Jane, 104, 133
Holle, Henning, 35
Humboldt, Wilhelm von, 13, 25–26, 187–88
Hunt, Earl, 223
Hurst, Jane, 64
Huxley, Sir Julian, Evolution, 118, 120
Iverson, Jana, 35
Jablonka, Eva, 52, 68
Evolution in Four Dimensions, 135, 136,
139, 144–45
Jackendoff, Ray, 41–42, 108, 109, 111, 112,
122, 128, 150–51, 155, 158, 168,
181–82, 253, 255
Foundations of Language, 229–30
Index

Name index

Jacob, François, 83
Jakobson, Roman, 18–19, 23, 26, 29, 266–67
James, William, 4, 20–22, 32, 85–86, 105, 137, 194, 216
Jespersen, Otto, 146, 155, 156, 157, 233, 271–72

Language

Its Nature, Development and Origin, 26

Kandel, Eric, 174–75, 256–57
Karmiloff, Kyra, 68
Karmiloff-Smith, Annette, 4, 68, 78
Pathways to Language, 159–60, 173

Karmiloff-Smith, Annette, 4, 68, 78
Pathways to Language, 159–60, 173

Kay, Paul, 200, 209, 210–11

Basic Color Terms, 209–10
Grammatical Constructions and Linguistic Generalizations, 253
Regularity and Idiomaticity in Grammatical Constructions, 253

Kempton, Willett, 210
King, Andrew, 38
Kirby, Simon, 132
Kohler, Evelynle, 109
Köhler, Wolfgang, 168
Krauss, Robert, 35
Kruszewski, Mikolaj, 26
Kuhn, Thomas, Structure of Scientific Revolutions, 7

Labov, William, 28, 29
Ladd, D. Robert, 65–66, 276
Lai, Cecilia, 64, 65
Lakoff, George
Where Mathematics Comes From, 207, 208, 222

Women, Fire, and Dangerous Things, 253
Lamarck, Jean-Baptiste, 53
Lamb, Marion, 52, 68
Evolution in Four Dimensions, 135, 136, 139, 144–45
Langacker, Ronald, Foundations of Cognitive Grammar, 252
Lavoisier, Antoine-Laurent, 126
Lenneberg, Eric, Biological Foundations of Language, 104
Levinson, Stephen C., 69, 184, 199, 208, 209, 211, 223–24, 267
Politeness, 266
Space in Language and Cognition, 3, 34, 220–23
Levitt, Steven, 165–66

Levontin, Richard, 3
Li, Charles, 198
Lieberman, Philip, 65, 70, 111, 163, 169
Lobaugh, Nancy J., 80–81
Locke, John, 186–87
An Essay Concerning Human Understanding, 16

London Philological Society, 11
Lotto, Beau, 129, 131
Lowth, Robert, 279
Luria, Alexander, 210
Lycett, John, Human Evolutionary Psychology, 158–60
Lyn, Heidi, 150

MacDonald, John, 34, 79
MacNeilage, Peter, 70–71, 109–10, 146, 147–48, 163, 170, 189–90
The Origin of Speech, 39
Maestripiere, Dario, 157
Maffi, Luisa, 210–11
Malthus, Thomas, Essay on Population, 118
Mandler, Jean, 190
Marr, David, Vision, 129
Martin, Laura, 200
Maturana, Humberto, 4, 6, 28, 32, 42, 52, 54, 86–87, 88, 196
Autopoiesis and Cognition, 89, 92
Origen de las Especies por medio de la Deriva natural o…, 135
Origin of Species by Means of Natural Drift or…, 135, 136, 143–45
“Scientific and Philosophical Theories”, 42–47
The Biology of Cognition, 155
The Tree of Knowledge, 139
Max Müller, Friedrich, 104, 109, 155, 156–57, 158, 163–65, 188
Mayr, Ernst, 115
McDonough, Laraine, 190
McGurk, Harry, 34, 79
McIntosh, Anthony R., 80–81
McMurray Bob, 183
McNeill, David, 35, 146–47, 185, 267
Gesture and Thought, 262, 270
Meltzoff, Andrew, 273–74
Mithun, Marianne, 111
Monaco, Anthony, 64
Morsella, Ezuel, 35
Mpodozis, Jorge, 6
Origen de las Especies por medio de la Deriva natural o…, 136
Origin of Species by means of Natural Drift or…, 135, 136, 143–45
Mufwene, Salikoko, 31
Name index

Mulcaster, Richard, 41
Nelson, Katherine, 37, 273
Young Minds in Social Worlds, 273
Newmeyer, Frederick, 128–29
Nunberg, Geoffrey, 33
Where Mathematics Comes From, 207, 208, 222
O’Connor, Mary Catherine, Regularity and Idiomaticity in Grammatical Constructions, 253
O’Higgins, Paul, 166
The Ontogeny of Information, 40–41
Pääbo, Svante, 117
Pennebaker, James, 184
Pettito, Laura, 149
Pica, Pierre, 205, 207
Planck, Max, 105
Pollick, Amy, 276
Port, Robert, 28, 82
Pruetz, Jill D., 166
Putnam, Harold, 293
Pulvermüller, Friedemann, 202
Quine, W. V., Mathematical Logic, 24
Ricoeur, Paul, 220
Rizzolatti, Giacomo, 146–47
Rodman, Robert, 107–08
An Introduction to Language, 262–63
Rorty, Richard, 238
Rowe, Meredith, 66–67
Sander, Louis W., 38
Sapir, Edward, 198–99, 201, 223, 225, 233
Language, 14, 30
Saussure, Ferdinand de, 12–13, 24, 25, 31, 73–74, 94, 243
Cours de linguistique générale, 16–17, 188–89, 262, see also langue
Savage-Rumbaugh, Susan, 15, 149
Schifflin, Deborah, 235, 252
Schlaggar, Bradley, 184
Scholz, Barbara, 251, 258
Schwartz, James, 174–75, 256–57
Searle, John, 44, 261
Mind, Language and Society, 44–45
Seidenberg, Mark, 149
Shiffrin, Robert, 150
Sheperd, Dana, 223
Sheets-Johnstone, Maxine, The Roots of Thinking, 156
Silverman, Laura, 178
Verbal Behavior, 7, 25, 105–06, 229–30
aesthetic feel, 230–31
autoclitic function of verbal behavior, 235
comparison with Austin, 240–44
ethical story, 235–39
evolutionary story, 239–40
inside/outside story, 232–33
metalinguistic story, 233–35
style, 231–32
terminology, 234
Slobin, Dan, 189, 224
Smith, Barbara Herrnstein, 93, 266–67
Smith, John Maynard, 277
Spelke, Elizabeth, 190, 192, 193, 204
Spencer, Herbert, 196, 197
Stephen, Klaus, 80–81
Stephens, Greg, 147
Strand, Elizabeth, 79–80
Sweetser, Eve, 219
Symons, Donald, 129–30
Tallal, Paula, 34
Tannerhaus, Michael, 80
Taylor, Talbot, 70
Terrance, Herbert, 149
Thierry, Guillaume, 211–12
Thomas, Margaret, 246
Tomasello, Michael, 35, 109, 111, 155, 163–64, 171, 177, 180, 185–86, 191, 194, 246, 251, 253, 254
Constructing a Language, 185
Cultural Origins of Human Cognition, 170–71, 208
Tooby, John, 76, 127, 182
The Adopted Mind, 127
Varela, Francisco, 4, 6, 28, 32, 52, 54, 86–87, 88, 89–97, 196
Autopoiesis and Cognition, 89, 92
302 Name index

Varela, Francisco (cont.)
  *The Tree of Knowledge*, 139
Vargha-Khadem, Faraneh, 64
Venezia, Jonathan, 147
Vološinov, V. N., 4, 27
  *Marxism and the Philosophy of Language*, 25, 26
Vygotsky, Lev, 4, 20, 194, 270
Ward, Robert, 279
West, Meredith, 38

Whitehead, Alfred North, 105, 233
Whitney, William Dwight, 11, 156–57
Whorf, Benjamin Lee, 201–02, 204, 212–16, 219, 220, see also Sapir-Whorf hypothesis
Wickelgren, Ingrid, 177–78
Wiley, E., 183
Winawer, Jonathan, 212
Wittgenstein, Ludwig, 190
Wright, Sewall, 121
Yuriko, Oshima-Takane, 37
Subject index

abstract objectivism, 25
actions of actions, 91–92
adaptation, in self-realizationist framework, 137–38
Adapted Mind (Jerome Barkow, Leda Cosmides and John Tooby), 127
adopted culture, 127
allogroietic unity, 97
amae, 62, 63
ambiguity, 231
American Philological Association, 11
amok, 60–61
analogy, 247–48
Aspects of the Theory of Syntax (Noam Chomsky), 13
ASPM gene, 65–66
assessment dimension, 264
attending, 224–25
autismo, 177–78
autopoiesis, 6, 52, 68, 89–97, 137
glossary, 97–99
Autopoiesis and Cognition (Maturana and Varela), 89, 92
autopoietic unity, 97
Aymara, 219
babbling, 169–70
Basic Color Terms (Brent Berlin and Paul Kay), 209–10
BCI (backgrounded constructions are islands), 43
behavior (autopoiesis), 97
behaviorism. See radical behaviorism
Skinner, B. F.
bilingualism, 223
Biological Foundations of Language (Eric Lenneberg), 104
Biology of Cognition (Humberto Maturana), 155
bipedal locomotion, 162–63
orangutans, 166
blind children, language development, 78, 173
bow-wow theory of speech, 156–57
brain development, co-expansion of neocortex and thalamus, 198
brain function
historiographic review, 73–82
location of language, 70–73
Broca’s area, 70, 71–72
monkey homologue, 109
canalization, 51, 53–54, 222–23
capuchin monkeys
sense of fairness, 166
use of money, 165–66
Cartesian-inspired linguistics, 1
cause/evoke distinction, 87–88
Central Dogma of Molecular Biology (Francis Crick), 49
child, as witness, 128
Child’s Talk (Jerome Bruner), 179–80
childhood vocabulary explosion, 183
chimpanzees
language abilities, 149–50
toolmaking, 166
Chinese, character for the word crisis, 199, 200
cheiro, 53, 221
civilized script, 132–33
code theorism, 16–17, 22
cognition (autopoiesis), 97
cognitive construction grammar (CCG), 252–59
cognitive science, 69–70
cognitive tunings, 92–93
cognitive turnings, 92–93
color
Dugum Dani bright/dull terms, 200
human perception despite language, 200
identified by single word, 204
Sapir-Whorf hypothesis, 209–12
comparative semantics, 267
competence, 12, 13–14, 15, 20, 94
complexity, 152–53
of languaging vs. improvement, 151–52
conative function, 19
Concerning Human Understanding (John Locke), 16
congruence (autopoiesis), 97
consensual coordination, 97
Constructing a Language (Michael Tomasello), 185
Constructions at Work (Adele Goldberg), 252, 253–55, 256–59
constructivism, 2–4
constructivist interactionism, 51
continuist script, 134–35
continuity theories, 104
continuity/discontinuity conceptual complex in evolutionary explanations, 116–17
conventional dualism, 50
corpora, use of, 249–52
counterfactual reasoning, 257–58
Cours de linguistique générale (Ferdinand de Saussure), 16–17, 188–89, 262
crossmodal communication, 78–81
Cultural Origins of Human Cognition (Michael Tomasello), 170–71, 208
deleterious alleles, 142
Descartes’s problem, 245
developmental dyslexia, 174–75
developmental explanation, 3
developmental systems theory, 5–6, 40–42, 58–56
reliability of systems, 172–73
ding-dong theory of speech, 156–57
continuity theories, 104
double vision, 85–86
drift (autopoiesis), 98. See also ontogenic drift, phylogenic co-drift; phylogenetic drift
dyslexia. See developmental dyslexia
ecological approach, 133
emotion, Paul Griffiths’ clarification of, 57–64
emotive function, 19
emulation/imitation, 171
environment, 51–52
epidemiological culture, 127
epiphenomena, 48
Eskimo, words for snow, 199, 200
Essay on Population (Thommas Malthus), 118
Eternal Form, 172–73
evaluation, criterion of, 43–44
evolution, 114
Evolution (Sir Julian Huxley), 118, 120
Evolution in Four Dimensions (Eva Jablonka and Marion Lamb), 135, 136, 139, 144–45
Evolutionary Biology (Douglas Futuyma), 120–21
evolutionary homology, 107
evolutionary scenarios
anthropology, 157–58
continuity vs. discontinuity dichotomy, 104–08, 112–16
defining, 116–17
emerging story, 132–35
neurobiological, 160–62
nineteenth-century linguistic heritage, 155–57
overview, 162
primate vocalization, 108–11
psychological, 158–60
standard story, 103–04
tree structures, 115–16, 124. See also self-realizationist script; self-reproductionist script
Extreme Minimalism, 112
fairness, capuchin monkeys, 166
fine motor skills, 171
First Language (Roger Brown), 233
first word, 146
fitness, 118–20
flow, 215–16
flower-petal model of speciation, 139
food preferences development, 68
form, 248–49
form–meaning pairings, 114
Foundations of Cognitive Grammar (Ronald Langacker), 252
Foundations of Language (Ray Jackendoff), 229–30
FOXP2 gene, 64–65
functionalists, 265
Genesis and Development of a Scientific Fact (Ludwik Fleck), 7–8
genetic assimilation, 53
genetic code, 16–17
genetic drift, 98
genetic imperialism, 50–51
gesture
autism and, 178
during speech, 35
protolanguage leading to speech, 146
Gesture and Thought (David McNeill), 262, 270
gesturing practices, as linguistic interactants, 66–67
got-X? construction, 258
Grammatical Constructions and Linguistic Generalizations (Fillmore and Kay), 253
grammatical constructions, as linguistic interactants, 66
Great Chain of Being, 124
Subject index

Grimm’s Law, 12

grooming at a distance, 160, 162

Growth Point, 270

Guinea baboons
post-costal grunting, 157

handedness, and emergence of language in the species, 174–75

harmony of illusions, 93

hearing development, 68

Hearing Gesture (Susan Goldin-Meadow), 269–70

heterogeneous construction, 61

higher cognitive motivational complexes, 57, 62–64

homologues, 107

homoplasy, 107

Hopi, 212–13

horizontal/vertical, 216–17

How To Do Things With Words (J. L. Austin), 25, 240–44, 263–64, 267–69, 278

human beings
closeness to chimpanzees, 117
defining characteristics, 167, 168
babbling, 169–70
imitation, 170–71

skin thinness, 171–72

special nature of, 6

speed of evolution, 121

human cerebral asymmetry. See torque
Human Evolutionary Psychology (Louise Barrett, Robin Dunbar and John Lycett), 158–60

human population, 277

human beings
languaging, 5, 28–31
as an orienting behavior, 31–39, 145, 153–54
autopoietic definition, 98
continuist script, 145–51
developmental problems, 172–73

evolving complexity vs. improvement, 151–52

instantiating events, 168–69

language (autopoiesis), 98

linguistic domains, 92

linguistic historiography, role in reimagining linguistics, 4–5

linguistic interactants, possible candidates, 64–67

linguistic relativity, 201–02

linguistics
banned discussions of origin of language, 11
interdisciplinary connections, 82
mechanistic universe and, 124–26

phenomena to be explained, 47–48

reimagining, 4–5

Linguistics (Adrian Akmajian et al.), 277

listener, importance of, 14–15

problems with, 260–62

purpose of issuing utterances, 268–69

irrelevant conditions, 231–32

island constructions, 42–43

Klinefelter’s syndrome, 175

knowledge (autopoiesis), 98

knowledge sharing, 93–94

la-la theory of speech, 157

language differences within, 190

purpose of, 16, 18

language (autopoiesis), 98

Language (Edward Sapir), 7, 14, 74–75, 247–49, 251–52, 261

Language (Otto Jespersen), 26

language acquisition, 178–86

length of developmental linguistic system in individual’s life, 183–86

Language and Problems of Knowledge (Noam Chomsky), 87–88, 106–07

Language and Space (Paul Bloom et al.), 219–20

Language Instinct (Steven Pinker), 107–08, 115, 253, 271

language learning impairment (LLI), 34

language, 5, 28–31

as an orienting behavior, 31–39, 145, 153–54

autopoietic definition, 98

continuist script, 145–51

developmental problems, 172–73

evolving complexity vs. improvement, 151–52

instantiating events, 168–69

language (autopoiesis), 98

linguistic domains, 92

linguistic historiography, role in reimagining linguistics, 4–5

linguistic interactants, possible candidates, 64–67

linguistic relativity, 201–02

linguistics
banned discussions of origin of language, 11
interdisciplinary connections, 82
mechanistic universe and, 124–26

phenomena to be explained, 47–48

reimagining, 4–5
living beings
adaption in self-realizationist framework, 137–38
manifested/manifesting (Hopi), 212–13
Marxism and the Philosophy of Language (V. N. Volosinov), 25, 26
materialistic theory, 74
Mathematical Logic (W. V. Quine), 24
meaning, and context, 264–65
metalingual function, 18
Microcephalin, 65–66
Mind, Language and Society (John Searle), 44–45
Minimalist Program, 112
modules, 58–59
money, 215–16
monomorphic traits, 58
month sequence images, 217–18
Moral Minds (Mark Hauser), 280
mosaic traits, 78–79
Mundurukú, 200, 205–06
counting, 200, 205–06, 207, 225
music, 168
myelination, 170
nature/nurture dichotomy, 5–6, 40, 41, 50
navigation, 222
neurobiology, 69
nucleocytoplasmic gap, 49, 51–52
number
human ability despite language, 200–01
Mundurukú counting, 200, 205–06, 207, 225
Pirahã one/two/many counting, 206, 225
Sapir-Whorf hypothesis, 206–09
observer
and domains, 136–37
child as witness, 128
how to observe myself as, 279
status of, 84–88
observer (autopoiesis), 98
ontogenetic drift, 86–87, 98, 138
Ontogeny of Information (Susan Oyama), 40–41
open-ended counting routine, 134
operational closure, 98
orangutans
bipedal locomotion, 166
organization (autopoiesis), 98
orientation, 34
Origen de las Especies por medio de la Deriva natural o… (Maturana and Mpodozis, trans. Magro and Andresen), 136
Origin of Species (Charles Darwin), 11, 118
Origin of Species by means of Natural Drift or… (Maturana and Mpodozis, trans. Magro and Andresen), 135
Origin of Species by Means of Natural Drift or… (Maturana and Mpodozis, trans. Magro and Andresen), 136, 143–45
Origin of Speech (Peter MacNeiilage), 39
Origins of the Modern Mind (Merlin Donald), 167–68
parade case, 245–46
parole, 13
partial constructivism, 3
Pathways to Language (Karmiloff and Karmiloff-Smith), 159–60, 173
pattern-finding, 185–86
perfect pitch, 200
performance, 13
perturbation (autopoiesis), 98
phatic function, 19, 29
phenomenological domain, 98
phenomenology (autopoiesis), 98
philagnost, 20, 22, 26–31, 38–39
philology, 20, 38–39, 276–77
phylogenic co-drift, 138–39
phylogenetic drift, 86–87, 138–39
Pirahã, 111, 134, 200, 208
one/two/many counting, 206, 225
Plato’s problem, 245
Plotinus, 124
poetic function, 19
Politeness (Brown and Levinson), 266
polyphonic traits, 58
pooh-pooh theory of speech, 155
poverty of the stimulus, 244–46
precedence, 247
preformationism, 3, 40
primates
vocalization, 109. See also capuchin monkeys; chimpanzees; Guinea baboons;
orangutans
evolutionary scenarios, 108–11
primatology, 276
priming, 256–57
prions, 49
pronoun use, 184
### Subject index

<table>
<thead>
<tr>
<th>Term</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>psychosis, 176–77</td>
<td>176–77</td>
</tr>
<tr>
<td>putting the baby down hypothesis, 157–58</td>
<td>157–58</td>
</tr>
<tr>
<td>racism, 182</td>
<td>182</td>
</tr>
<tr>
<td>radical behaviorism, 232–33, 238</td>
<td>232–33, 238</td>
</tr>
<tr>
<td>Rambo behavior syndrome, 60–61</td>
<td>60–61</td>
</tr>
<tr>
<td>rationalized evolutionary accounts of language, 126</td>
<td>126</td>
</tr>
<tr>
<td>reconstructed culture, 127</td>
<td>127</td>
</tr>
<tr>
<td>recursion, 48, 111–12, 133</td>
<td>48, 111–12, 133</td>
</tr>
<tr>
<td>referential function, 18, 19, 24</td>
<td>18, 19, 24</td>
</tr>
<tr>
<td>Regularity and Idiomaticity in Grammatical Constructions (Fillmore, Kay, and O’Connor), 253</td>
<td>253</td>
</tr>
<tr>
<td>reification, 22</td>
<td>22</td>
</tr>
<tr>
<td>representationalism, 85</td>
<td>85</td>
</tr>
<tr>
<td>reproduction (autoPoiesis), 98</td>
<td>98</td>
</tr>
<tr>
<td>rhizome structures, 277–78</td>
<td>277–78</td>
</tr>
<tr>
<td>right speech, 278–79</td>
<td>278–79</td>
</tr>
<tr>
<td>Roots of Thinking (Maxine Sheets-Johnstone), 156</td>
<td>156</td>
</tr>
<tr>
<td>Rubicon, 104, 165</td>
<td>104, 165</td>
</tr>
<tr>
<td>SAE (Standard Average European), 212, 215, 219</td>
<td>212, 215, 219</td>
</tr>
<tr>
<td>Sapir-Whorf hypothesis, 202</td>
<td>202</td>
</tr>
<tr>
<td>color, 209–12</td>
<td>209–12</td>
</tr>
<tr>
<td>levels of interpretation, 203–05</td>
<td>203–05</td>
</tr>
<tr>
<td>number, 206–09</td>
<td>206–09</td>
</tr>
<tr>
<td>space, 219–23</td>
<td>219–23</td>
</tr>
<tr>
<td>time, 212–19. See also linguistic relativity</td>
<td>212–19. See also linguistic relativity</td>
</tr>
<tr>
<td>Scheherazade Effect, 157, 159, 160</td>
<td>157, 159, 160</td>
</tr>
<tr>
<td>schizophrenia, 176, 177</td>
<td>176, 177</td>
</tr>
<tr>
<td>science, philosophy and, 44–47</td>
<td>44–47</td>
</tr>
<tr>
<td>second-language acquisition, critical-period, 183–84</td>
<td>183–84</td>
</tr>
<tr>
<td>self-realizationist script, 136–45</td>
<td>136–45</td>
</tr>
<tr>
<td>self-reproductionist script, 118–23</td>
<td>118–23</td>
</tr>
<tr>
<td>semantic congruity effect, 167</td>
<td>167</td>
</tr>
<tr>
<td>sexuality, as a systemic phenomenon, 141–42</td>
<td>141–42</td>
</tr>
<tr>
<td>Shannon-Weaver information theory, 16–17</td>
<td>16–17</td>
</tr>
<tr>
<td>silent scripts, 124–27</td>
<td>124–27</td>
</tr>
<tr>
<td>skin color, 78, 121</td>
<td>78, 121</td>
</tr>
<tr>
<td>skin thinness, 171–72</td>
<td>171–72</td>
</tr>
<tr>
<td>Social Contract hypothesis, 159, 160, 162</td>
<td>159, 160, 162</td>
</tr>
<tr>
<td>socialcouplings, 91–92</td>
<td>91–92</td>
</tr>
<tr>
<td>socially constructed emotions, 57, 59–62</td>
<td>57, 59–62</td>
</tr>
<tr>
<td>Société de Linguistique de Paris, 11</td>
<td>11</td>
</tr>
<tr>
<td>Space in Language and Cognition (Stephen Levinson), 3, 34, 220–23</td>
<td>3, 34, 220–23</td>
</tr>
<tr>
<td>space, Sapir-Whorf hypothesis, 219–23</td>
<td>219–23</td>
</tr>
<tr>
<td>spatial categories learning, 190–95</td>
<td>190–95</td>
</tr>
<tr>
<td>spatial frames of reference, 184–85</td>
<td>184–85</td>
</tr>
<tr>
<td>species metaphor, 181–82</td>
<td>181–82</td>
</tr>
<tr>
<td>Specific Language Impairment, 33–34</td>
<td>33–34</td>
</tr>
<tr>
<td>specify (autoPoiesis), 98–99</td>
<td>98–99</td>
</tr>
<tr>
<td>specify/trigger distinction. 88. See also trigger</td>
<td>88. See also trigger</td>
</tr>
<tr>
<td>speech, and language, 34</td>
<td>34</td>
</tr>
<tr>
<td>stimulus-free learning, 244. See also poverty of the stimulus</td>
<td>244. See also poverty of the stimulus</td>
</tr>
<tr>
<td>structural coupling, 52, 99</td>
<td>52, 99</td>
</tr>
<tr>
<td>structure (autoPoiesis), 99</td>
<td>99</td>
</tr>
<tr>
<td>Structure of Scientific Revolutions (Thomas Kuhn), 7</td>
<td>7</td>
</tr>
<tr>
<td>subtitizing, 207</td>
<td>207</td>
</tr>
<tr>
<td>Subject-Auxiliary Inversion (SAI), 258</td>
<td>258</td>
</tr>
<tr>
<td>superlunary, 57</td>
<td>57</td>
</tr>
<tr>
<td>Symbolic Species (Terrence Deacon), 160–62</td>
<td>160–62</td>
</tr>
<tr>
<td>Syntactic Argument Structure (SAS), distinction from cognitive construction grammar, 255</td>
<td>255</td>
</tr>
<tr>
<td>Syntactic Structures (Noam Chomsky), 246–47, 249–50, 251–52</td>
<td>246–47, 249–50, 251–52</td>
</tr>
<tr>
<td>tableau, 124</td>
<td>124</td>
</tr>
<tr>
<td>taste preferences development, 68</td>
<td>68</td>
</tr>
<tr>
<td>temporal ranges, 267</td>
<td>267</td>
</tr>
<tr>
<td>thinking for both gesturing and speaking, 189–90, 224</td>
<td>189–90, 224</td>
</tr>
<tr>
<td>thought as contemporaneous with language, 188–89</td>
<td>188–89</td>
</tr>
<tr>
<td>as preceding language, 186–87</td>
<td>186–87</td>
</tr>
<tr>
<td>as succeeding language, 187–88</td>
<td>187–88</td>
</tr>
<tr>
<td>language and, 186, 189–90, 195</td>
<td>186, 189–90, 195</td>
</tr>
<tr>
<td>tight fit/loose fit distinction, 190–95, 204</td>
<td>190–95, 204</td>
</tr>
<tr>
<td>time</td>
<td>time</td>
</tr>
<tr>
<td>Hopi conception of, 202</td>
<td>Hopi conception of, 202</td>
</tr>
<tr>
<td>Sapir-Whorf hypothesis, 212–19</td>
<td>Sapir-Whorf hypothesis, 212–19</td>
</tr>
<tr>
<td>toolmaking, chimpanzees, 166</td>
<td>166</td>
</tr>
<tr>
<td>torque, 175–76</td>
<td>175–76</td>
</tr>
<tr>
<td>transmitted culture, 127</td>
<td>127</td>
</tr>
<tr>
<td>Tree of Knowledge (Maturana and Varela), 139</td>
<td>Tree of Knowledge (Maturana and Varela), 139</td>
</tr>
<tr>
<td>trigger (autoPoiesis), 99</td>
<td>99</td>
</tr>
<tr>
<td>tunátya (Hopi), 213</td>
<td>213</td>
</tr>
<tr>
<td>Turner’s syndrome, 175</td>
<td>Turner’s syndrome, 175</td>
</tr>
<tr>
<td>two-tier evolution, 153</td>
<td>two-tier evolution, 153</td>
</tr>
<tr>
<td>unity (autoPoiesis), 99</td>
<td>99</td>
</tr>
<tr>
<td>uptake, 267–68</td>
<td>267–68</td>
</tr>
<tr>
<td>use of money, capuchin monkeys, 165–66</td>
<td>165–66</td>
</tr>
<tr>
<td>Verner’s Law, 12</td>
<td>12</td>
</tr>
<tr>
<td>virtuous circles, 196–99</td>
<td>196–99</td>
</tr>
<tr>
<td>vision, 129–31</td>
<td>129–31</td>
</tr>
<tr>
<td>in linguistic processing of speech, 34. See also visual domains</td>
<td>in linguistic processing of speech, 34. See also visual domains</td>
</tr>
<tr>
<td>Vision (David Marr), 129</td>
<td>Vision (David Marr), 129</td>
</tr>
</tbody>
</table>
308 Subject index

visual cortex, 96
visual domains, 95–96, 151–52
vocalization, in primates, 109
Wernicke’s area, 70, 71
What Emotions Really Are (Paul Griffiths), 182
Where Mathematics Comes From (George Lakoff and Rafael Núñez), 207, 208, 222
Williams syndrome, 33–34, 78, 173–74

Women, Fire, and Dangerous Things (George Lakoff), 253
Woodward, James, 78–79, 80
written, vs. spoken, 242–44
XXX syndrome, 175
year sequence images, 217–18
yo-he-ho theory of speech, 155–56
Young Minds in Social Worlds (Katherine Nelson), 273