

Index

-
- Ackley, D., 34
 - Acoustic signal in music, 218–219, 247–248
 - Acoustic signal in speech, 57–59, 66, 98, 100
 - Action, 7, 34, 67, 124, 195, 199–200, 212, 234–236, 239, 248, 259–260, 269–270, 281–282, 305, 307, 325
 - Affect (“feel” of experience), 290–292, 303–311, 313–315, 319, 322–323
 - Affect (musical expressiveness), 235, 236–239, 240, 244–245, 292
 - Akmajian, A., 57
 - Ambiguity, 279, 320
 - in language, 116–118
 - in music, 243–244
 - in vision, 115, 189–190
 - American Sign Language (ASL), 210–212, 264, 270, 291
 - Anderson, J. A., 33
 - Anderson, J. R., 47, 90, 112, 183–184, 267
 - Animal cognition and awareness, 30–32, 89–90, 135, 209, 325–327
 - Aphasia, 110, 211, 263
 - Arbib, M., 98, 115
 - Armstrong, S., 143, 147
 - Arnheim, R., 234
 - Attention, 6, 116, 280–283, 310, 312
 - Auditory feedback, 108
 - Balzano, G., 257, 271
 - Bartlett, F., 111
 - Barwise, J., 126, 132
 - Bat sonar, 3, 196, 326
 - Beethoven, L. v., 216, 224–225, 232
 - Behaviorism, 10, 14, 288
 - Bellugi, U., 211, 212, 264
 - Berkeley, G., 12
 - Berwick, R., 39, 110
 - Bharucha, J., 217
 - “Blindsight,” 315
 - Block, N., 18
 - Body awareness, body representation, 3–5, 195–196, 238–239, 248, 257, 267, 278, 299
 - Bolinger, D., 76
 - Bradley, D., 110
 - Brady, M., 178
 - Brain localization, 34–35, 208, 211, 261–263, 310–311
 - Brandt, R., 14
 - Bregman, A., 239
 - Bresnan, J., 39, 73
 - Brugman, C., 142
 - Bruner, J., 6, 27, 46, 99, 279
 - Carey, S., 127, 208
 - Carroll, L., 40, 321
 - Casals, P., 236
 - Castellano, M., 217
 - Categorization, 135–147, 156, 194, 198–200, 297, 316
 - Causality, 8–10, 25–26, 157–158, 276
 - “Central-level” theory, 286–287, 289–290, 293, 326
 - Cheney, D., 209
 - Chomsky, N., 38, 39, 41, 42, 44, 60, 65, 71–74, 77, 88, 96, 168, 183, 252, 270, 319
 - Churchland, P. M., 11
 - Churchland, P. S., 52
 - Clark, H., 202, 204
 - Clynes, M., 239
 - Coleman, L., 142
 - Collins, A., 138
 - Competence, theory of, 38, 168, 214
 - Complex NP Constraint, 106–107

- Computers, 15–17, 19, 29–31, 33–36, 50, 326
- Conceptual structure, 73–74, 102, 121–159, 186–189, 193–194, 198–208, 248, 250, 255, 286–287, 289–291, 300–301, 306, 312–317, 320–326
- Connectionist computers, 34, 148
- Cooper, L., 19, 179–183, 249
- Coordinate Structure Constraint, 42–44, 88, 99, 100, 106, 321
- Craik, F., 50, 98
- Creative use of categorization, 137–138, 146
- Creative use of language, 41, 84, 86
- Crook, J., 6
- Cutting, J., 151, 177
- Dawkins, R., 6
- Déjà vu experience, 306–307
- Deliege, I., 221, 239
- Dennett, D., 5, 6, 7, 9, 17, 183, 286–287, 297, 299, 310
- Descartes, R., 8, 12, 20
- Deutsch, D., 221, 239
- Distinctive features (phonology), 58–60, 64–65
- Dowling, W., 239
- Dreams, 4, 127, 130–131, 290
- Dualism. *See* Epiphenomenalism; Interactionist dualism; Parallelism
- Eccles, J., 8, 26, 46
- Echoic memory, 111–112
- Emotion, 5, 35, 209, 236–239, 299
- Epiphenomenalism, 8–10, 22, 24
- Episodic memory, 50
- Evolution of mind, 31–32, 87, 90, 130, 209, 256–258, 325–327
- "Executive" theory, 17, 46, 279, 281, 285–286, 289, 326
- Face recognition, 208–209, 267
- Farah, M., 188
- Feldman, J., 34, 148
- Figure-ground opposition, 48, 250, 251
- Finke, R., 184
- Fodor, J. A., 21, 29, 30, 58, 73, 90, 99–102, 119, 137, 140, 142, 146, 167, 245, 246, 251, 252, 260–271, 280, 296, 297, 319
- Forster, K., 102
- Frazier, L., 97, 243
- Freud, S., 14
- Frith, C., 17, 46
- Fromkin, V., 41, 57, 105
- Functionalism, 15, 20
- Gallistel, C., 31, 151
- "Garden path" sentences, 97, 117, 244–245
- Gardner, H., 267
- Garrett, M., 41, 58, 73, 105–106, 140, 146
- Gee, J., 76, 212, 330
- Gelman, R., 151
- Gestalt psychology, 13, 48, 144, 167, 189, 220, 251, 252–253, 331
- Gibson, J., 13, 167
- Gleitman, H., 14, 143, 147, 197
- Gleitman, L., 86, 127, 143, 147
- Globus, G., 32
- Goldsmith, J., 76
- Gregory, R., 164, 167
- Griffin, D., 5, 6, 26
- Grimshaw, J., 151
- Grouping structure (music), 219–221, 224, 229, 236, 239, 248, 251, 253, 256
- Gruber, J., 152, 154, 202
- Halle, M., 41, 47, 60, 65–67, 72, 74, 77
- Hallucinations, 4, 12, 127, 131, 306, 310–311
- Hankamer, J., 148
- Haptic (tactile) perception, 51–52, 194–195, 197, 248, 294, 298, 300
- Hayes, B., 77
- Headed hierarchies, 70, 176, 227, 230, 249–251, 254, 270
- Helmholtz, H., 167, 218
- Herskovits, A., 203
- Hierarchical information structures, 65, 69, 172, 174–176, 208, 219–232, 249–251, 253, 270
- Hochberg, J., 167
- Hoffman, D., 178, 335–336
- Hofstadter, D., 6, 18, 316
- Hubel, D., 168
- Hudson, S., 116
- Hume, D., 13, 297
- Hypothesis of Computational Sufficiency, 24–26, 276, 303
- Hypothesis of Levels, 49, 51, 277–278

- Hypothesis of the Nonefficacy of Consciousness, 25–26, 46, 276, 303, 311, 317, 323
- Iconic memory, 111–112
- Identification of objects, 163–164, 176–177, 194, 198–199
- Identity theory, 10–11, 22–24
- Illusions, 4, 13, 52. *See also* Muller-Lyer illusion; Necker cube; Vase-faces illusion
- Imagery. *See* Mental imagery
- Inference, 123–124, 139, 249, 261, 321–323
“visual inference,” 293–295
- Information-processing psychology, 37–38, 110–112, 125, 251
- Information theory, 96
- Innateness Hypothesis, 87–90, 138, 214, 215, 268–270, 321–323
- Integrative processors, 102, 108–110, 186–188, 241, 258, 260, 262–265, 268, 280
- Intentionality, 19–20, 128
- Interactionist dualism, 8, 22, 25, 46, 276, 306
- Intermediate-Level Theory, 285–301, 303, 309–310, 319, 325–327
- Interrogative sentences, 42–44, 71–72
- Intonation contour, 75–76, 81–83, 118, 250, 288, 329–330
- Introspection processors, 312–317, 327
- Jackendoff, R., 71, 126, 142, 144, 151, 152, 157, 202, 203, 252, 253
- Jakobson, R., 47, 60, 66
- James, W., 14, 17, 27, 279, 291, 299–300
- Jaynes, J., 6, 310–311
- Jenkins, J., 151
- Jerison, H., 6, 286
- Johansson, G., 178
- Johnson-Laird, P., 17, 46, 123, 202, 285, 286
- Julesz, B., 166, 188, 190
- Kahn, D., 75
- Katz, J., 73, 126, 143, 146
- Keiler, A., 240
- Kintsch, W., 39
- Kiparsky, P., 66
- Klima, E., 211, 212, 264
- Koffka, K., 167
- Köhler, W., 5, 13, 90, 151, 167
- Kosslyn, S., 47, 181–184, 189, 249, 296, 303
- Krumhansl, C., 217, 239, 240
- Kuhn, T., 133, 200
- Læbov, W., 140
- Lackner, J., 117–118, 195–196
- Landau, B., 127, 197
- Langacker, R., 202
- Language acquisition, 66, 84, 86–90, 126–127, 214, 268–269
- Lasher, M., 205
- Lashley, K., 45–46, 67, 97, 105, 277, 304, 319
- Lashley’s Observation, 46, 277, 304, 319
- Learning, 214–215, 252–253, 268–270, 281–282, 311. *See also* Language acquisition
- Lem, S., 279
- Lenneberg, E., 67, 88
- Lerdahl, F., 144, 214, 252, 253, 292
- Levels of representation/structure, 47–52, 63–64, 85, 182–185, 209–211, 247–258, 270, 326. *See also* Conceptual structure; Grouping structure (music); Metrical structure in language; Musical surface; Phonological structure; Primal sketch; Prolongational reduction; Syntactic structure; 3D model; Time-span reduction; 2½D sketch
- Lévi-Strauss, C., 60
- Lewis, D., 126, 129–132
- Lexicon, 83–85, 103–104, 124, 200–202, 321
- Liberman, A., 58, 66
- Liberman, M., 76, 77, 79
- Lightfoot, D., 57
- Linden, E., 90
- Logical Structure of Language Processing (LSLP), 91–95, 100–104, 106
- Logical Structure of Musical Processing (LSMP), 240–242
- Logical Structure of Visual Processing (LSVP), 186
- Long-term memory, 112–113, 198–202, 244, 265–267
- Lorenz, K., 88
- McCulloch, W., 33
- MacKay, D., 285
- Macnamara, I., 124, 193, 321

- Makeig, S., 236
- Mandler, G., 17, 281, 286
- Marcel, A., 116, 286, 296, 301, 315
- Marcus, M., 97, 168, 243
- Marin, O., 262
- Marr, D., 38, 39, 44, 47, 101, 167–178, 185, 188, 190, 193–195, 197–199, 206, 207, 234, 250, 252, 253, 294, 331, 334, 336–338
- Martin, J., 223
- Mental imagery, 4, 6, 12, 19, 26, 52, 127, 130–131, 305, 320
- in ASL, 291
- in language, 287–290, 310
- in music, 235
- in vision, 19, 177, 179–185, 187–189, 249, 263–264, 290, 296–298, 303–304, 324
- Mentalist Postulate, 121–122, 126–128, 138
- Mervis, C., 143
- Metrical structure in language, 77–79, 250, 253–256, 270
- Metrical structure in music, 221–224, 229, 236, 239, 248, 251, 253–256, 270
- Metzler, J., 179–181, 189
- Meyer, L., 240, 242, 243
- Michotte, A., 151
- Miller, G., 25, 73, 202
- Mind-body problem, 7–14, 20–21
- Mind-mind problem, 20–27, 52, 276
- Minsky, M., 17, 33, 35, 46, 148, 279
- Modality-specificity of consciousness, 51–52, 277, 290, 294, 300–301
- Modularity of mind, 100–102, 108–110, 173, 191, 245, 247–272
- Montague, R., 126, 137
- Moore, E., 31
- Morphology, 74–75, 83–85, 212
- Motor control, motor skills. *See* Action
- Moulton, W., 65
- Mozart, W. A., 216, 219–221, 224, 225, 228, 230–232, 244
- Muller-Lyer illusion, 99
- Musical performance, 214, 222–223, 227, 234–236, 260
- Musical surface, 217–219, 221–222, 234, 248, 292–293, 298, 310
- Nagel, T., 11, 27
- Narmour, E., 240, 243
- Necessary and sufficient conditions, 139–143, 146
- Necker cube, 115–117, 145, 164, 243
- Neisser, U., 98, 99, 111–113, 167, 198
- Neuroscience, 32–33, 35–36
- “New Look” psychology, 99, 272
- Newport, E., 212, 291
- Nishihara, H., 168, 174–175
- Nonsense syllables, 39–40, 42, 289, 292, 295, 317
- Olson, D., 204, 205, 311
- Onifer, W., 104
- Ontological categories, 148–152
- Osherson, D., 147
- Pain, 3, 5, 12, 18, 19, 299
- Papert, S., 33, 148
- Parallelism, 9–11, 22
- Perceptrons, 148
- Perky, C., 303
- Perry, J., 126, 132
- Peterson, P., 199
- Phoneme restoration effect, 99, 114
- Phonological structure, 57–67, 72, 73–85, 248, 250, 288–291, 298, 306, 310–317, 323–325
- Piaget, J., 151
- Pinker, S., 168, 184
- Piszczalski, M., 219
- Poetry, 66, 119, 234, 236, 254, 316
- Polanyi, M., 7, 321
- Popper, K., 8, 46
- Postal, P., 73, 183
- Povel, D.-J., 239
- Pragmatic anaphora, 148–149
- Pragmatics, 121
- Prague Circle, 47
- Preference rule system, 143–148, 220, 223, 229, 252–253, 270, 321, 324
- Primal sketch, 170–172, 186–189, 190, 248, 250, 293, 334
- Primary awareness, 4–7, 16
- Prince, A., 77, 79, 254
- Privileged Representations in short-term memory, 312–316, 320, 323
- Projection of experience, 23–27, 276
- Prolongational reduction, 224, 229–232, 248, 251, 257
- Propositional attitudes, 7, 128, 319n
- Prosodic trees, 79–81, 250, 254–256

- Prototypes, 142, 146, 147, 177, 297
 Psychological reality, 42, 64–66, 129, 219, 225
 Putnam, H., 16, 20, 126, 140, 142, 312
 Pylyshyn, Z., 119, 167, 182–184
 Qualia, 13–14, 18, 276, 277–278
 Reading of language, 209–211, 259–260, 264, 270
 Reading of music, 214, 234–236
 Reduction Hypothesis, 225
 Reflective awareness, 4–7, 16, 18, 315–317
 Registration of levels in short-term memory, 258–260, 280, 298, 306, 310
 in language processing, 113–115, 118
 in musical processing, 242–243
 in visual processing, 188–189
 Retinal array, 48, 163–165, 248
 Richards, W., 335–336
 Ristau, C., 90
 Rorty, R., 14
 Rosch, E., 143
 Ross, J., 43
 Rubin, E., 331
 Rumelhart, D., 34, 148
 Sasanuma, S., 211
 Schank, R., 39, 94
 Schenker, H., 225, 230
 Searle, J., 19–20, 29, 128, 143, 147
 Seidenberg, M., 90
 Selection function, 259–260, 278–280, 282, 298, 310, 312, 320
 in language processing, 115–120
 in musical processing, 243–245
 in visual processing, 189–190
 Self, 299–300
 Self-awareness, self-consciousness. *See* Reflective awareness
 Selkirk, E., 60, 75–77, 330
 Semantic networks, 138
 Semantic structure. *See* Conceptual structure
 Seyfarth, R., 209
 Shannon, C., 38, 96
 Shepard, R., 19, 167, 179–184, 188, 189, 205, 249
 Shiman, L., 331–334
 Short-term memory, 278–280, 282, 286–288, 290, 298, 307, 310, 312, 320
 for language, 110–120
 for music, 242–245
 for vision, 188–190
 Simmons, R., 138
 Singer, A., 222
 Situation semantics, 126, 132
 Sloboda, J., 214, 223, 236
 “Slow processes,” 266–270, 280
 Smell, 3, 51–52, 278, 326
 Smith, E., 138, 143, 146, 147
 Social cognition, 131, 157, 209, 267
 Spatial cognition, cross-modal, 194–197, 202–208, 239
 in language, 152–158
 in vision, 163–164
 Speech errors, 41–42, 104–106
 Speech perception, 57–59, 66, 92–104, 108–110, 288–289
 Speech production, 67–68, 92–95, 105–110, 288–289. *See also* Speech errors
 Spencer-Brown, G., 48
 Sperry, R., 8
 Spoonerisms. *See* Speech errors
 Stereopsis, 165–167, 168, 173
 Stereotypes. *See* Prototypes
 Sternberg, S., 236
 Stravinsky, I., 233
 Stress, musical, 223–224
 Stress, phonological, 77–81, 212, 288
 Sudnow, D., 234
 Supalla, T., 212
 Swinney, D., 104, 117, 243
 Syllable structure, 40, 59–61, 65, 74–75
 Syntactic structure, 42–44, 68–74, 212, 248, 255, 288, 290, 323, 329–330
 production of, 106–107
 Szigeti, J., 236
 Talmy, L., 157, 202–206
 Tanenhaus, M., 104, 116
 Tarski, A., 128, 132, 140
 Taste, 7, 51, 278
 3D model, 174–178, 184–190, 193–212, 248, 250, 255, 293–297, 300–301, 304, 313, 320
 Time-span reduction, 224–229, 248, 251, 254–256
 “Tip-of-the-tongue” experience, 290–291, 313–315
 Todd, N., 236
 Tonality (music), 216–217, 229, 257

- "Top-down" influences on processing, 271–272
in language, 96, 98–103, 109–110, 114–115, 258–260
in music, 241–242
in vision, 187–188, 191
- Touch. *See* Haptic (tactile) perception
- Translation processors (bottom-up and top-down), 102, 108–110, 186–188, 241, 258–260, 262–265, 268, 272, 280, 312–317
- Trubetzkoy, N., 47, 60
- Truth, truth-conditions, 128–133, 322–323
- Tulving, E., 50
- Turkle, S., 15
- 2½D sketch, 172–174, 177, 184–190, 248, 250, 293–298, 304, 310, 313, 320, 331–338
- Tyler, L., 94, 102
- Tzeng, O., 211
- Ullman, S., 173, 177
- Unconscious, 14, 16, 17, 26, 275, 319–323
- Underlying vs. surface phonological structure, 61–63
- syntactic structure, 71–74
- 2½D sketch, 333–338
- Vaina, L., 176, 199, 201
- Vase-faces illusion, 115–116, 164, 335–336
- Von Neumann, J., 33
- Vos, J., 219
- Waltz, D., 169, 184, 334, 336–337
- Wang, W., 211
- Wanner, E., 86, 97, 127, 243
- Warren, R., 99
- Wasow, P., 123–124
- Watson, J., 288
- Wertheimer, M., 144, 167, 220, 252, 253
- Wilks, Y., 286
- Will (volition), xiv, 5, 8–9, 17, 305–306
- Wimmer, H., 311
- Wittgenstein, L., 7, 142, 146, 296, 321
- Wolf, T., 214
- Woods, W., 98, 115, 243
- Word, possible, 40–41
- Wundt, W., 14
- Zadeh, L., 147