

Bibliography

- Akers, R. F., Lovinger, D. M., Colley, P. A., Linden, D. J., and Routtenberg, A. (1986). Translocation of protein kinase C activity may mediate hippocampal long-term potentiation. *Science* 231: 587-589.
- Albert, M. L., Reches, A., and Silverberg, R. (1975). Associative visual agnosia without alexia. *Neurology* 25: 322-326.
- Algom, D., and Cohen-Raz, L. (1987). Sensory and cognitive factors in the processing of visual velocity. *Journal of Experimental Psychology: Human Perception and Performance* 13: 3-13.
- Alkon, D. L., Chen, C., and Galant, P. E. (1987). C-kinase activation mediates protease regulation of voltage-dependent K⁺ currents. Society for Neuroscience 17th Annual Meeting, New Orleans.
- Ambros, R. T., Schacher, S., and Rayport, S. G. (1985). Proteins rapidly transported to the synapses of a single identified neuron of *Aplysia Californica*. *Journal of Neuroscience* 5: 2866-2873.
- Andersen, R. A., Essick, G. K., and Siegel, R. M. (1985). Encoding of spatial location by posterior parietal neurons. *Science* 230: 456-458.
- Andersen, R. A., and Mountcastle, V. B. (1983). The influence of angle of gaze upon the excitability of the light-sensitive neurons of the posterior parietal cortex. *Journal of Neuroscience* 3: 532-548.
- Anderson, J. A., Silverstein, J. W., Ritz, S. A., and Jones, R. S. (1977). Distinctive features, categorical perception, and probability learning: Some applications of a neural model. *Psychological Review* 84: 413-451.
- Anderson, J. R., and Bower, G. H. (1973). *Human Associative Memory*. Washington, D.C.: Winston.
- Anderson, S. W., Damasio, H., Damasio, A. R., Bellugi, U., Tranel, A. F., Brandt, J. P., and O'Grady, L. (1989). Acquisition of sign language following left hemisphere damage and aphasia. Society for Neuroscience 19th Annual Meeting, Phoenix.
- Arbib, M. A., and Hanson, A. R., eds. (1987). *Vision, Brain, and Cooperative Computation*. Cambridge, Mass.: Bradford/MIT Press.
- Attneave, F. (1974). How do you know? *American Psychologist* 29: 493-499.
- Bank, B., LoTurco, J. J., and Alkon, D. L. (1987). Long-term translocation of protein kinase C by in vivo and in vitro conditioning. Society for Neuroscience 17th Annual Meeting, New Orleans.
- Banks, W. P., and Flora, J. (1977). Semantic and perceptual processes in symbolic comparisons. *Journal of Experimental Psychology: Human Perception and Performance* 3: 278-290.
- Barash, S., Anderson, R., Bracewell, M., Gnadt, J., and Fogassi, L. (1988). Saccade-related activity in area LIP. Society for Neuroscience 18th Annual Meeting, Toronto.

- Barlow, H. B. (1985). The Twelfth Bartlett Memorial Lecture: The role of single neurons in the psychology of perception. *Quarterly Journal of Experimental Psychology* 37A: 121-145.
- Barlow, H. B., Hill, R. M., and Levick, W. R. (1964). Retinal ganglion cells responding selectively to direction and speed of image motion in the rabbit. *Journal of Physiology* 173: 377-407.
- Baylis, G. C., Rolls, E. T., and Leonard, C. M. (1985). Selectivity between faces in the responses of a population of neurons in the cortex in the superior temporal sulcus of the monkey. *Brain Research* 342: 91-102.
- Becklen, R., Wallach, H., and Nitzberg, D. (1984). A limitation of position constancy. *Journal of Experimental Psychology: Human Perception and Performance* 10: 713-723.
- Ben-Shakhar, G., and Gati, I. (1987). Common and distinctive features of verbal and pictorial stimuli as determinants of psychophysiological responsivity. *Journal of Experimental Psychology: General* 116: 91-105.
- Bender, M. B., Feldman, M., and Sobin, A. J. (1968). Palinopsia. *Brain* 91: 321-338.
- Benevento, L. A., and Miller, J. (1981). Visual responses in the caudal lateral pulvinar of the macaque monkey. *Journal of Neuroscience* 1: 1268-1278.
- Benson, D. F. (1989). Disorders of visual gnosis. In *Neuropsychology of Visual Perception*, J. W. Brown, ed. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Biederman, I. (1987). Recognition by components: A theory of human image understanding. *Psychological Review* 94: 115-147.
- Biederman, I., Blicke, T. W., Teitelbaum, R. C., and Klatsky, G. J. (1988). Object search in nonscene displays. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 14: 456-467.
- Biederman, I., Glass, A. L., and Stacy, E. W. (1973). Searching for objects in real-world scenes. *Journal of Experimental Psychology* 97: 22-27.
- Biederman, I., and Ju, G. (1988). Surface versus edge-based determinants of visual recognition. *Cognitive Psychology* 20: 38-64.
- Biederman, I., Rabinowitz, J. C., Glass, A. L., and Stacy, E. W. (1974). On the information extracted from a glance at a scene. *Journal of Experimental Psychology* 103: 597-600.
- Bisiach, E., and Berti, A. (1989). Unilateral misrepresentation of distributed information: Paradoxes and puzzles. In *Neuropsychology of Visual Perception*, J. W. Brown, ed. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Bisiach, E., Capitani, E., and Porta, E. (1985). Two basic properties of space representation in the brain: Evidence from unilateral neglect. *Journal of Neurology, Neurosurgery, and Psychiatry* 48: 141-144.
- Bisiach, E., and Luzzatti, C. (1978). Unilateral neglect of representational space. *Cortex* 14: 129-133.
- Bisiach, E., Luzzatti, C., and Perani, D. (1979). Unilateral neglect, representational schema and consciousness. *Brain* 102: 609-618.
- Blasdel, G. G., Lund, J., and Fitzpatrick, D. (1985). Intrinsic connections of macaque striate cortex: Axonal projections of cells outside lamina 4C. *Journal of Neuroscience* 5: 3350-3369.
- Blinkov, S. M., and Glezer, I. I., eds. (1968). *The Human Brain in Figures and Tables*. New York: Basic Books.
- Bliss, T. V. P., and Gardner-Medwin, A. R. (1973). Long-lasting potentiation of synaptic transmission in the dentate area of the unanesthetized rabbit following stimulation of the preforant pathway. *Journal of Physiology* 232: 357-374.
- Bliss, T. V. P., and Lomo, T. (1973). Long-lasting potentiation of synaptic transmission in the dentate area of the anesthetized rabbit following stimulation of the preforant pathway. *Journal of Physiology* 232: 331-356.

- Bonhoeffer, T., Staiger, V., and Aertsen, A. M. H. J. (1989). Unexpected properties of "Hebb synapses" in rat hippocampal slice cultures. *Society for Neuroscience 19th Annual Meeting*, Phoenix.
- Boring, E. G. (1929). *A History of Experimental Psychology*. New York: Appleton-Century.
- Boring, E. G. (1940). Size constancy and Emmert's law. *American Journal of Psychology* 53: 293-295.
- Boring, E. G. (1943). The moon illusion. *American Journal of Physics* 11: 55-60.
- Boring, E. G. (1962). On the moon illusion. *Science* 137: 902-906.
- Brain, R. (1941). Visual disorientation with special reference to lesions of the right hemisphere. *Brain* 64: 244-272.
- Broadbent, D. (1985). A question of levels: Comment on McClelland and Rumelhart. *Journal of Experimental Psychology: General* 114: 189-192.
- Brooks, L. R. (1968). Spatial and verbal components of the act of recall. *Canadian Journal of Psychology* 22: 349-368.
- Brown, J. W., ed. (1989). *Neuropsychology of Visual Perception*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Brown, T. H., Chapman, P. F., Kairiss, E. W., and Kennan, C. L. (1988). Long-term synaptic potentiation. *Science* 242: 724-728.
- Browning, M., Dunwiddie, T., Bennett, W., Gispen, W., and Lynch, G. (1979). Synaptic phosphoproteins: Specific changes after repetitive stimulation of the hippocampal slice. *Science* 203: 60-62.
- Bundesen, C., and Larsen, A. (1975). Visual transformation of size. *Journal of Experimental Psychology: Human Perception and Performance* 1: 214-220.
- Burr, D., and Ross, J. (1986). Visual processing of motion. *Trends in Neurosciences* 9: 304-307.
- Buschke, H. (1974). Spontaneous remembering after recall failure. *Science* 184: 579-581.
- Caplan, D. (1981). On the cerebral localization of linguistic functions: Logical and empirical issues surrounding deficit analysis and functional localization. *Brain and Language* 14: 120-137.
- Carey, S., and Diamond, R. (1977). From piecemeal to configurational representation of faces. *Science* 195: 312-314.
- Carpenter, G. A., and Grossberg, S. (1990). Neural dynamics of category learning and recognition: Structural invariants, reinforcements, and evoked potentials. In *Computational and Clinical Approaches to Pattern Recognition and Concept Formation*, M. J. Commons, R. J. Herrnstein, S. M. Kosslyn, and D. B. Mumford, eds. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Casco, C., and Morgan, M. (1984). The relationship between space and time in the perception of stimuli moving behind a slit. *Perception* 13: 429-441.
- Cave, K. R., and Kosslyn, S. M. (1989). Varieties of size-specific visual selection. *Journal of Experimental Psychology: General* 118: 148-164.
- Chambers, D., and Reisberg, D. (1985). Can mental images be ambiguous? *Journal of Experimental Psychology: Human Perception and Performance* 11: 317-328.
- Churchland, P. M. (1984). *Matter and Consciousness*. Cambridge, Mass.: Bradford/MIT Press.
- Churchland, P. S. (1986). *Neurophilosophy*. Cambridge, Mass.: Bradford/MIT Press.
- Clifton, C., and Ferreira, F. (1987). Modularity in sentence comprehension. In *Modularity in Knowledge Representation and Natural-Language Understanding*, J. L. Garfield, ed. Cambridge, Mass.: Bradford/MIT Press.
- Cohen, N. J., and Squire, L. R. (1980). Preserved learning and pattern-analyzing skill in amnesia: Dissociation of knowing how and knowing that. *Science* 210: 207-210.
- Corballis, M. C. (1986). Is mental rotation controlled or automatic? *Memory and Cognition* 14: 124-128.

- Coren, S. (1986). An efferent component in the visual perception of direction and extent. *Psychological Review* 93: 391-410.
- Cotman, C. W., and McGaugh, J. L. (1980). *Behavioral Neuroscience*. New York: Academic Press.
- Damasio, A. R., and Tranel, D. (1989). Knowing that "Colorado" goes with "Denver" does not imply knowledge that "Denver" is in "Colorado." Society for Neuroscience 19th Annual Meeting, Phoenix.
- DeLoache, J. S. (1987). Rapid change in the symbolic functioning of very young children. *Science* 238: 1556-1557.
- Derthick, M., and Plaut, D. C. (1986). Is distributed connectionism compatible with the physical symbol system hypothesis? *Proceedings of the Eighth Annual Conference of the Cognitive Science Society, Amherst, Mass.*
- Desimone, R., Albright, T. D., Gross, C. G., and Bruce, C. (1984). Stimulus-selective properties of inferior temporal neurons in the macaque. *Journal of Neuroscience* 4: 2051-2062.
- Duncan, J. (1984). Selective attention and the organization of visual information. *Journal of Experimental Psychology: General* 113: 501-517.
- Estes, W. K. (1986). Memory storage and retrieval processes in category learning. *Journal of Experimental Psychology: General* 115: 155-174.
- Fahlman, S. E. (1979). *NETL: A System for Representing and Using Real-World Knowledge*. Cambridge, Mass.: MIT Press.
- Fahlman, S. E. (1981). Representing Implicit Knowledge. In *Parallel Models of Associative Memory*. G. E. Hinton and J. A. Anderson, eds. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Farah, M. J. (1988). Is visual imagery really visual? Overlooked evidence from neuropsychology. *Psychological Review* 95: 307-317.
- Farah, M. J. (1989). Neuropsychology of mental imagery. In *Neuropsychology of Visual Perception*, J. W. Brown, ed. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Farah, M. J., Peronnet, F., Gonon, M. A., and Giard, M. H. (1988). Electrophysiological evidence for a shared representational medium for visual images and visual percepts. *Journal of Experimental Psychology: General* 117: 248-257.
- Feldman, J. A. (1981). A connectionist model of visual memory. In *Parallel Models of Associative Memory*, G. E. Hinton and J. A. Anderson, eds. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Feldman, J. A. (1985). Four frames suffice: A provisional model of vision and space. *Behavioral and Brain Sciences* 8: 265-289.
- Feldman, J. A., and Ballard, D. H. (1982). Connectionist models and their properties. *Cognitive Science* 6: 205-254.
- Ferguson, E. S. (1977). The mind's eye: Nonverbal thought in technology. *Science* 197: 827-836.
- Finke, R. A., and Kosslyn, S. M. (1980). Mental imagery acuity in the peripheral visual field. *Journal of Experimental Psychology: Human Perception and Performance* 6: 126-139.
- Finke, R. A., and Pinker, S. (1983). Directional scanning of remembered visual patterns. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 9: 398-410.
- Finke, R. A., Pinker, S., and Farah, M. J. (1989). Reinterpreting visual patterns in mental imagery. *Cognitive Science* 13: 51-78.
- Fite, K. V., ed. (1976). *The Amphibian Visual System*. New York: Academic Press.
- Fodor, J. A. (1981). *Representations: Philosophical Essays on the Foundations of Cognitive Science*. Cambridge, Mass.: MIT Press.
- Fodor, J. A. (1984). *The Modularity of Mind*. Cambridge, Mass.: Bradford/MIT Press.
- Fodor, J. A., and Pylyshyn, Z. W. (1988). Connectionism and cognitive architecture:

- A critical analysis. In *Connections and Symbols*, S. Pinker and J. Mehler, eds. Cambridge, Mass.: Bradford/MIT Press.
- Frederickson, R. E., and Bartlett, J. C. (1987). Cognitive impenetrability of memory for orientation. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 13: 269-277.
- Funahashi, S., Bruce, C. J., and Goldman-Rakic, P. S. (1989). Visual and mnemonic coding in the primate prefrontal cortex during oculomotor delayed-response performance. Society for Neuroscience 19th Annual Meeting, Phoenix.
- Gainotti, G., D'Erme, P., and DeBonis, C. (1989). Visual attention disrupted in unilateral neglect. In *Neuropsychology of Visual Perception*, J. W. Brown, ed. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Georgeopolous, A. P., Lurito, J. T., Petrides, M., Schwartz, A. B., and Massey, J. T. (1989). Mental rotation of the neuronal population vector. *Science* 243: 234-236.
- Gerren, R. A., and Weinberger, N. M. (1983). Long-term potentiation in the magnocellular medial geniculate nucleus of the anesthetized cat. *Brain Research* 265: 138-142.
- Gersuni, G. V. (1971). *Sensory Processes at the Neuronal and Behavioral Levels*. New York: Academic Press.
- Geschwind, N. (1980). Neurological knowledge and complex behaviors. *Cognitive Science* 4: 185-193.
- Gilchrist, A. L. (1977). Perceived lightness depends on perceived spatial arrangement. *Science* 195: 185-187.
- Gnadt, J. W., and Mays, L. E. (1989). Posterior parietal cortex, the oculomotor near response and spatial coding in 3-D space. Society for Neuroscience 19th Annual Meeting, Phoenix.
- Gould, J. L. (1985). How bees remember flower shapes. *Science* 227: 1492-1494.
- Graham, C. H. (1951). Visual perception. In *Handbook of Experimental Psychology*, S. S. Stevens, ed. New York: Wiley.
- Gray, C. R., and Gummerman, K. (1975). The enigmatic eidetic image: A critical examination of methods, data, and theories. *Psychological Bulletin* 82: 383-407.
- Grossberg, S., ed. (1988). *Neural Networks and Natural Intelligence*. Cambridge, Mass.: Bradford/MIT Press.
- Guenther, R. K., and Klatsky, R. L. (1977). Semantic classification of pictures and words. *Journal of Experimental Psychology: Human Learning and Memory* 3: 498-514.
- Gustafsson, B., and Wigstrom, H. (1986). Hippocampal long-lasting potentiation produced by pairing single volleys and brief conditioning tetani evoked in separate afferents. *Journal of Neuroscience* 6: 1575-1582.
- Gustafsson, B., Wigstrom, H., Abraham, W. C., and Huang, Y.-Y. (1987). Long-term potentiation in the hippocampus using depolarizing current pulses as the conditioning stimulus to single volley synaptic potentials. *Journal of Neuroscience* 7: 774-780.
- Haith, M. M., Bergman, T., and Moore, M. J. (1977). Eye contact and face scanning in early infancy. *Science* 198: 853-855.
- Harnad, S., ed. (1987). *Categorical Perception*. Cambridge: Cambridge University Press.
- Heath, R. G. (1964). Pleasure response of human subjects to direct stimulation of the brain: Physiologic and psychodynamic considerations. In *The Role of Pleasure in Behavior*, R. G. Heath, ed. New York: Hoeber.
- Hebb, D. O. (1949). *The Organization of Behavior*. New York: Wiley.
- Helmholtz, H. (1867). *Handbook of Physiological Optics*. 3d ed. translation, 1962. New York: Dover.
- Henderson, J. M., Pollatsek, A., and Rayner, K. (1989). Covert visual attention and extrafoveal information use during object identification. *Perception and Psychophysics* 45: 196-208.

- Hillman, D. E., and Chen, S. (1979). Determination of postsynaptic membrane structure is intrinsic to the Purkinje cell. Society for Neuroscience 9th Annual Meeting, Atlanta.
- Hinton, G. E. (1981). Implementing semantic networks in parallel hardware. In *Parallel Models of Associative Memory*, G. E. Hinton and J. A. Anderson, eds. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Hinton, G. E., and Anderson, J. A., eds. (1981). *Parallel Models of Associative Memory*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Hoffman, D. D., and Richards, W. A. (1984). Parts of recognition. *Cognition* 18: 65–96.
- Holland, J. H., Holyoak, K. J., Nisbett, R. E., and Thagard, P. R., eds. (1986). *Induction: Processes of Inference, Learning, and Discovery*. Cambridge, Mass.: Bradford/MIT Press.
- Holway, A. H., and Boring, E. G. (1940). The apparent size of the moon as a function of the angle of regard: Further experiments. *American Journal of Psychology* 53: 537–553.
- Hopfield, J. J. (1982). Neural networks and physical systems with emergent collective computational abilities. *Proceedings of the National Academy of Sciences, USA* 79: 2554–2558.
- Hopfield, J. J. (1984). Neurons with graded response have collective computational properties like those of two-state neurons. *Proceedings of the National Academy of Sciences, USA* 81: 3088–3092.
- Hopfield, J. J., and Tank, D. W. (1986). Computing with neural circuits: A model. *Science* 233: 625–633.
- Horridge, G. A. (1968). *Interneurons*. London: Freeman.
- Hubel, D. H., and Wiesel, T. N. (1959). Receptive fields of single neurons in the cat's striate cortex. *Journal of Physiology* 148: 574–591.
- Hubel, D. H., and Wiesel, T. N. (1962). Receptive fields, binocular interaction and functional architecture in the cat's visual cortex. *Journal of Physiology* 160: 106–154.
- Hubel, D. H., and Wiesel, T. N. (1963). Shape and arrangement of columns in cat's striate cortex. *Journal of Physiology* 165: 559–568.
- Hysen, M. T., Julesz, B., and Fender, D. H. (1983). Eye movements and neural remapping during fusion of misaligned random-dot stereograms. *Journal of the Optical Society of America* 73: 1665–1673.
- Ingle, D. (1968). Visual releasers of prey-catching behavior in frogs and toads. *Brain, Behavior, and Evolution* 1: 500–518.
- Inhoff, A. W., and Rayner, K. (1980). Parafoveal word perception: A case against semantic preprocessing. *Perception and Psychophysics* 27: 457–464.
- Irwin, D. E., Brown, S. J., and Sun, J. (1988). Visual masking and visual integration across saccadic eye movements. *Journal of Experimental Psychology: General* 117: 276–287.
- Ito, M. (1983). Evidence for synaptic plasticity in the cerebellar cortex. *Acta Morphologica, Academy of Sciences, Hungary* 31: 213–218.
- Jackendoff, R. (1985). *Semantics and Cognition*. Cambridge, Mass.: Bradford/MIT Press.
- Jackendoff, R. (1987a). *Consciousness and the Computational Mind*. Cambridge, Mass.: Bradford/MIT Press.
- Jackendoff, R. (1987b). On beyond zebra: The relation of visual and linguistic information. *Cognition* 26: 89–114.
- Jacobs, L. (1989). Comments on some positive visual phenomena caused by diseases of the brain. In *Neuropsychology of Visual Perception*, J. W. Brown, ed. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Johnson-Laird, P. N. (1983). *Mental Models: Toward a Cognitive Science of Language, Inference and Consciousness*. Cambridge, Mass.: Harvard University Press.

- Johnson-Laird, P. N., Herrmann, D. J., and Chaffin, R. (1984). Only connections: A critique of semantic networks. *Psychological Bulletin* 96: 292-315.
- Jolicoeur, P. (1985). The time to name disoriented natural objects. *Memory and Cognition* 13: 289-303.
- Jolicoeur, P., Ullman, S., and MacKay, M. (1986). Curve tracing: A possible basic operation in the perception of spatial relations. *Memory and Cognition* 14: 129-140.
- Julesz, B. (1971). *Foundations of Cyclopean Perception*. Chicago: University of Chicago Press.
- Kaas, J. H. (1987). The organization of neocortex in mammals: Implications for theories of brain function. *Annual Review of Psychology* 38: 129-151.
- Kandel, E. R. (1976). *Cellular Basis of Behavior*. San Francisco: W. H. Freeman.
- Karluk, D., and Ebner, T. J. (1989). Spatial representation of movement distance and direction in the premotor cortex. Society for Neuroscience 19th Annual Meeting, Phoenix.
- Kase, M., Noda, H., Suzuki, D. A., and Miller, D. C. (1979). Target velocity signals of visual tracking in vermal Purkinje cells of the monkey. *Science* 205: 717-720.
- Kauer, J. A., Malenka, R. C., and Nicoll, R. A. (1988). A persistent postsynaptic modification mediates long-term potentiation in the hippocampus. *Neuron* 1: 911-917.
- Kaufman, L., and Richards, W. (1969). Spontaneous fixation tendencies for visual forms. *Perception and Psychophysics* 5: 85-88.
- Klopper, D. S. (1985). Constructing mental representations of objects from successive views. *Journal of Experimental Psychology: Human Perception and Performance* 11: 566-582.
- Knapp, A. G., and Anderson, J. A. (1984). Theory of categorization based on distributed memory storage. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 10: 616-637.
- Kohonen, T. (1977). *Associative Memory: A System Theoretical Approach*. New York: Springer-Verlag.
- Kolers, P. A., Duchnicky, R. L., and Sundstroem, G. (1985). Size in the visual processing of faces and words. *Journal of Experimental Psychology: Human Perception and Performance* 11: 726-751.
- Komatsu, Y., Toyama, K., Maeda, J., and Sakaguchi, H. (1981). Long-term potentiation investigated in a slice preparation of striate cortex of young kittens. *Neuroscience Letters* 26: 269-274.
- Koriat, A., and Norman, J. (1988). Frames and images: Sequential effects in mental rotation. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 14: 93-111.
- Kosslyn, S. M. (1975). Information representation in visual images. *Cognitive Psychology* 7: 341-370.
- Kosslyn, S. M. (1978). Measuring the visual angle of the mind's eye. *Cognitive Psychology* 10: 356-389.
- Kosslyn, S. M. (1980). *Image and Mind*. Cambridge, Mass.: Harvard University Press.
- Kosslyn, S. M. (1987). Seeing and imaging in the cerebral hemispheres: A computational approach. *Psychological Review* 94: 148-175.
- Kosslyn, S. M. (1988). Aspects of a cognitive neuroscience of mental imagery. *Science* 240: 1621-1626.
- Kosslyn, S. M., Ball, T. M., and Reiser, B. J. (1978). Visual images preserve metric spatial information: Evidence from studies of image scanning. *Journal of Experimental Psychology: Human Perception and Performance* 4: 47-60.
- Kosslyn, S. M., Flynn, R. A., Amsterdam, J. B., and Wang, G. (1990). Components of

- high-level vision: A cognitive neuroscience analysis and accounts of neurological syndromes. *Cognition* 34: 203-277.
- Kosslyn, S. M., Holtzman, J. D., Farah, M. J., and Gazzaniga, M. S. (1985). A computational analysis of mental image generation: Evidence from functional dissociations in split-brain patients. *Journal of Experimental Psychology: General* 114: 311-341.
- Kosslyn, S. M., Reiser, B. J., Farah, M. J., and Fliegel, S. L. (1983). Generating visual images: Units and relations. *Journal of Experimental Psychology: General* 112: 278-303.
- Kroll, J. F., and Corrigan, A. (1981). Strategies in sentence-picture verification: The effect of an unexpected picture. *Journal of Verbal Learning and Verbal Behavior* 20: 515-531.
- Kroll, J. F., and Potter, M. C. (1984). Recognizing words, pictures, and concepts: A comparison of lexical, object, and reality decisions. *Journal of Verbal Learning and Verbal Behavior* 23: 39-66.
- Kuffler, S. W. (1953). Discharge patterns and functional organization of mammalian retina. *Journal of Neurophysiology* 16: 37-68.
- Kuffler, S. W., Nicholls, J. D., and Martin, A. R. (1984). *From Neuron to Brain*. Sunderland, Mass.: Sinauer Associates.
- Lal, R., and Friedlander, M. J. (1989). Gating of retinal transmission by afferent eye position and movement signals. *Science* 243: 93-96.
- Landau, B., Gleitman, H., and Spelke, E. (1981). Spatial knowledge and geometric representation in a child blind from birth. *Science* 213: 1275-1277.
- Landauer, T. K. (1986). How much do people remember? Some estimates of the quantity of learned information in long-term memory. *Cognitive Science* 10: 477-493.
- Landis, T., Cummings, J. L., Benson, D. F., and Palmer, E. P. (1986). Loss of topographic familiarity: An environmental agnosia. *Archives of Neurology* 43: 132-136.
- Laroche, S., Jay, T. M., and Thierry, A. M. (1989). Long-term potentiation in the prefrontal cortex following stimulation of the hippocampal CA1/subicular region. Society for Neuroscience 19th Annual Meeting, Phoenix.
- Larsen, A., and Bundesen, C. (1978). Size scaling in visual pattern recognition. *Journal of Experimental Psychology: Human Perception and Performance* 4: 1-20.
- Larson, L., and Lynch, G. (1987). The NMDA antagonist AP5 blocks a component of the postsynaptic response to theta burst stimulation and prevents LTP induction. Society for Neuroscience 17th Annual Meeting, New Orleans.
- Lee, K. S. (1982). Sustained enhancement of evoked potentials following brief, high frequency stimulation of the cerebral cortex in vitro. *Brain Research* 239: 617-623.
- Leehey, S. C., Moskowitz-Cook, A., Brill, S., and Held, R. (1975). Orientational anisotropy in infant vision. *Science* 190: 900-901.
- Levick, W. R., Cleland, B. G., and Dubin, M. W. (1972). Lateral geniculate neurons of cat: Retinal inputs and physiology. *Investigative Ophthalmology* 11: 302-311.
- Levinson, J. Z., and Frome, F. S. (1979). Perception of size of one object among many. *Science* 206: 1425-1426.
- Levy, W. B., Anderson, J. A., and Lehmkuhle, S., eds. (1985). *Synaptic Modification, Neuron Selectivity, and Nervous System Organization*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Lewis, D. J. (1979). Psychobiology of active and inactive memory. *Psychological Bulletin* 86: 1054-1083.
- Linden, D. J., Sheu, F. S., and Routtenberg, A. (1987). DL-aminophosphonovalerate (APV) blockade of hippocampal long-term potentiation (LTP) prevents an LTP-associated increase in protein F1 phosphorylation. Society for Neuroscience 17th Annual Meeting, New Orleans.
- Livingstone, M., and Hubel, D. (1988). Segregation of form, color, movement, and depth: Anatomy, physiology, and perception. *Science* 240: 740-749.

- Loftus, G. R., Johnson, C. A., and Shimamura, A. P. (1985). How much is an icon worth? *Journal of Experimental Psychology: Human Perception and Performance* 11: 1-13.
- LoTurco, J. J., Coulter, D. A., Bank, B., and Alkon, D. L. (1987). Enhanced summation of synaptic potentials: A correlate of associative learning in rabbit hippocampal CA1 neurons mimicked by kinase-C activation. Society for Neuroscience 17th Annual Meeting, New Orleans.
- Lynch, G., and Baudry, M. (1984). The biochemistry of memory: A new and specific hypothesis. *Science* 224: 1057-1063.
- Lynch, G., McGaugh, J. L., and Weinberger, N. M., eds. (1984). *Neurobiology of Learning and Memory*. New York: Guilford Press.
- Lynch, J. C., Mountcastle, V. B., Talbot, W. H., and Yin, T. C. T. (1977). Parietal lobe mechanisms for directed visual attention. *Journal of Neurophysiology* 40: 362-389.
- McClelland, J. L., and Rumelhart, D. E. (1985). Distributed memory and the representation of general and specific information. *Journal of Experimental Psychology: General* 114: 159-188.
- McClelland, J. L., and Rumelhart, D. E., eds. (1986). *Parallel Distributed Processing*, vol. 2. Cambridge, Mass.: Bradford/MIT Press.
- McClelland, J. L., Rumelhart, D. E., and Hinton, G. E. (1986). The appeal of parallel distributed processing. In *Parallel Distributed Processing*, vol. 2. J. L. McClelland and D. E. Rumelhart, eds. Cambridge, Mass.: Bradford/MIT Press.
- McCloskey, M., and Watkins, J. W. (1978). The seeing-more-than-is-there phenomenon: Implications for the locus of iconic storage. *Journal of Experimental Psychology: Human Perception and Performance* 4: 553-564.
- McGeoch, J. A. (1942). *The Psychology of Human Learning*. New York: Longmans, Green.
- McNamara, T. P., Ratcliff, R., and McKoon, G. (1984). The mental representation of knowledge acquired from maps. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 10: 723-732.
- McNaughton, B. L., Barnes, C. A., Rao, G., Baldwin, J., and Rasmussen, M. (1986). Long-term enhancement of hippocampal synaptic transmission and the acquisition of spatial information. *Journal of Neuroscience* 6: 563-571.
- Maffei, L., and Campbell, F. W. (1970). Neurophysiological localization of the vertical and horizontal visual coordinates in man. *Science* 167: 386-387.
- Margolis, H. (1987). *Patterns, Thinking, and Cognition*. Chicago: University of Chicago Press.
- Mark, V. H., Ervin, F. R., and Sweet, W. H. (1972). Deep temporal lobe stimulation in man. In *The Neurobiology of the Amygdala*, B. E. Elephtheriou, ed. New York: Plenum Press.
- Marr, D. (1982). *Vision*. San Francisco: W. H. Freeman.
- Mays, L. E., and Sparks, D. L. (1980). Saccades are spatially, not retinocentrically, coded. *Science* 208: 1163-1165.
- Meyer, D. E. (1970). On the representation and retrieval of stored semantic information. *Cognitive Psychology* 1: 242-300.
- Michel, E. M., and Troost, B. T. (1980). Palinopsia: Cerebral localization with computed tomography. *Neurology* 30: 887-889.
- Miles, F. A., and Fuller, J. H. (1975). Visual tracking and the primate flocculus. *Science* 189: 1000-1002.
- Miller, G. A., Galanter, E., and Pribram, K. H. (1960). *Plans and the Structure of Behavior*. New York: Henry Holt and Company.
- Miller, G. A., and Johnson-Laird, P. N. (1976). *Language and Perception*. Cambridge, Mass.: Belknap/Harvard University Press.
- Minsky, M. L., and Papert, S. A. (1988). *Perceptrons*. Exp. ed. Cambridge, Mass.: MIT Press.

- Mishkin, M., Ungerleider, L. G., and Macko, K. A. (1983). Object vision and spatial vision: Two cortical pathways. *Trends in Neuroscience* 6: 414-417.
- Miyashita, Y., Rolls, E. T., Cahusac, P. M. B., Niki, H., and Feigenbaum, J. D. (1989). Activity of hippocampal formation neurons in the monkey related to a conditional spatial response task. *Journal of Neurophysiology* 61: 669-678.
- Møllgaard, K., Bennett, E. L., Rosenzweig, M. R., and Lindner, B. (1971). Quantitative synaptic changes with differential experience in rat brain. *International Journal of Neuroscience* 2: 113-127.
- Moran, J., and Desimone, R. (1985). Selective attention gates visual processing in the extrastriate cortex. *Science* 229: 782-784.
- Morrison, R. E., and Rayner, K. (1981). Saccade size in reading depends upon character spaces and not visual angle. *Perception and Psychophysics* 30: 395-396.
- Motter, B. C. (1989). Reactivation responses in striate and extrastriate visual cortex during a peripheral attention task. Society for Neuroscience 19th Annual Meeting, Phoenix.
- Motter, B. C., and Mountcastle, V. B. (1981). The functional properties of the light-sensitive neurons of the posterior parietal cortex studied in waking monkeys: Foveal sparing and opponent vector organization. *Journal of Neuroscience* 1: 3-26.
- Mueller-Lyer, F. C. (1889). Optische Urteilstauschungen. *Dubois-Reymonds Archive fur Anatomie und Physiologie*. Supplement volume: 263-270.
- Murakami, K., Whitely, M. K., and Routtenberg, A. (1987). Cooperative action of Zn (II) and Ca (II) in the regulation of protein kinase C activity from rat brain. Society for Neuroscience 17th Annual Meeting, New Orleans.
- Myers, N. A., Clifton, R. K., and Clarkson, M. G. (1987). When they were very young: Almost-threes remember two years ago. *Infant Behavior and Development* 10: 123-132.
- Necker, L. A. (1832). Observations of some remarkable phaenomena seen in Switzerland; and an optical phaenomenon which occurs on viewing of a crystal or geometrical solid. *Philosophical Magazine (Ser. 1)* 3: 329-337.
- Newell, A. (1973). You can't play 20 questions with nature and win. In *Visual Information Processing*, W. G. Chase, ed. New York: Academic Press.
- Newell, A. (1980). Physical symbol systems. *Cognitive Science* 4: 135-183.
- Nissen, H. W. (1951). Phylogenetic comparison. In *Handbook of Experimental Psychology*, S. S. Stevens, ed. New York: Wiley.
- Nosofsky, R. M. (1988). Exemplar-based accounts of relations between classification, recognition, and typicality. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 14: 700-708.
- Olds, J. (1958). Satiation effects in self-stimulation of the brain. *Journal of Comparative and Physiological Psychology* 51: 675-678.
- Olds, J. (1962). Hypothalamic substrates of reward. *Physiological Reviews* 42: 554-604.
- Oomura, Y. (1976). Significance of glucose, insulin, and free fatty acid on the hypothalamic feeding and satiety neurons. In *Hunger: Basic Mechanisms and Clinical Implications*, D. Novin, W. Wyrwicka, and G. Bray, eds. New York: Raven.
- Paivio, A. (1971). *Imagery and Verbal Processes*. New York: Holt, Rinehart, and Winston.
- Parks, T. (1965). Post-retinal visual storage. *American Journal of Psychology* 78: 145-147.
- Parks, T. (1970). A control for ocular tracking in the demonstration of post-retinal visual storage. *American Journal of Psychology* 83: 442-444.
- Parks, T. E. (1984). Illusory figures: A (mostly) atheoretical review. *Psychological Bulletin* 95: 282-300.
- Perris, E. E., Myers, N. A., and Clifton, R. K. (1988). Long-term memory for infant experience: Once is enough. International Conference on Infant Studies, Washington, D.C.

- Phillips, W. A. (1974). On the distinction between sensory storage and short-term visual memory. *Perception and Psychophysics* 16: 283-290.
- Pinker, S. (1980). Mental imagery and the third dimension. *Journal of Experimental Psychology: General* 109: 354-371.
- Pinker, S. (1984). Visual cognition: An introduction. *Cognition* 18: 1-63.
- Pinker, S., Choate, P. A., and Finke, R. A. (1984). Mental extrapolation in patterns constructed from memory. *Memory and Cognition* 12: 207-218.
- Pinker, S., and Finke, R. A. (1980). Emergent two-dimensional patterns in images rotated in depth. *Journal of Experimental Psychology: Human Perception and Performance* 6: 244-264.
- Pinker, S., and Kosslyn, S. M. (1983). Theories of mental imagery. In *Imagery: Current Theory, Research, and Application*, A. A. Sheikh, ed. New York: Wiley.
- Pinker, S., and Mehler, J., eds. (1988). *Connections and Symbols*. Cambridge, Mass.: Bradford/MIT Press.
- Pinker, S., and Prince, A. (1988). On language and connectionism: Analysis of a parallel distributed processing model of language acquisition. In *Connections and Symbols*, S. Pinker and J. Mehler, eds. Cambridge, Mass.: Bradford/MIT Press.
- Pitts, W., and McCulloch, W. S. (1947). How we know universals: The perception of auditory and visual forms. *Bulletin of Mathematical Biophysics* 9: 127-147.
- Podgorny, P., and Shepard, R. N. (1978). Functional representations common to visual perception and imagination. *Journal of Experimental Psychology: Human Perception and Performance* 4: 21-35.
- Podgorny, P., and Shepard, R. N. (1983). Distribution of visual attention over space. *Journal of Experimental Psychology: Human Perception and Performance* 9: 380-393.
- Pollatsek, A., Rayner, K., and Collins, W. E. (1984). Integrating pictorial information across eye movements. *Journal of Experimental Psychology: General* 113: 426-442.
- Pollatsek, A., Rayner, K., and Henderson, J. M. (1990). Role of spatial location in integration of pictorial information across saccades. *Journal of Experimental Psychology: Human Perception and Performance* 16: 199-210.
- Posner, M. I. (1980). Orienting of attention. *Quarterly Journal of Experimental Psychology* 32: 3-25.
- Posner, M. I. (1982). Cumulative development of attentional theory. *American Psychologist* 37: 168-179.
- Posner, M. I., Peterson, S. E., Fox, P. T., and Raichle, M. E. (1988). Localization of cognitive operations in the human brain. *Science* 240: 1627-1631.
- Posner, M. I., Snyder, C. R. R., and Davidson, B. J. (1980). Attention and the detection of signals. *Journal of Experimental Psychology: General* 109: 160-174.
- Potter, M. C. (1975). Meaning in visual search. *Science* 187: 965-966.
- Potter, M. C. (1983). Representational buffers: The eye-mind hypothesis in picture perception, reading, and visual search. In *Eye Movements in Reading, Perception, and Language Processes*, K. Rayner, ed. New York: Academic Press.
- Potter, M. C., and Faulconer, B. A. (1975). Time to understand pictures and words. *Nature* 253: 437-438.
- Potter, M. C., Kroll, J. F., and Harris, C. (1980). Comprehension and memory in rapid sequential reading. In *Attention and Performance VIII*, R. S. Nickerson, ed. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Potter, M. C., Kroll, J. F., Yachzel, B., Carpenter, E., and Sherman, J. (1986). Pictures in sentences: Understanding without words. *Journal of Experimental Psychology: General* 115: 281-294.
- Putnam, H. (1988). *Representation and Reality*. Cambridge, Mass.: Bradford/MIT Press.
- Pylyshyn, Z. W. (1973). What the mind's eye tells the mind's brain: A critique of mental imagery. *Psychological Bulletin* 80: 1-24.

- Pylyshyn, Z. W. (1986). *Computation and Cognition*. Cambridge, Mass.: Bradford/MIT Press.
- Quillian, M. R. (1968). Semantic memory. In *Semantic Information Processing*, M. Minisky, ed. Cambridge, Mass.: MIT Press.
- Quintana, J., Yajeya, J., and Fuster, J. M. (1988). Prefrontal representation of stimulus attributes during delay tasks. I. Unit activity in cross-temporal integration of sensory and sensory-motor information. *Brain Research* 474: 211–221.
- Racine, R. J., Milgram, N. W., and Hafner, S. (1983). Long-term potentiation phenomena in the rat limbic forebrain. *Brain Research* 260: 217–231.
- Racine, R. J., Wilson, D. A., Gingell, R., and Sunderland, D. (1986). Long-term potentiation in the interpositus and vestibular nuclei in the rat. *Experimental Brain Research* 63: 158–162.
- Ratcliff, R. (1990). Connectionist models of recognition memory: Constraints imposed by learning and forgetting functions. *Psychological Review* 97: 285–308.
- Ratcliff, F., and Riggs, L. A. (1950). Involuntary motions of the eye during monocular fixation. *Journal of Experimental Psychology* 40: 687–701.
- Rayner, K., and Bertera, J. H. (1979). Reading without a fovea. *Science* 206: 468–469.
- Rayner, K., McConkie, G. W., and Ehrlich, S. (1978). Eye movements and integrating information across fixations. *Journal of Experimental Psychology: Human Perception and Performance* 4: 529–544.
- Rayner, K., McConkie, G. W., and Zola, D. (1980). Integrating information across eye movements. *Cognitive Psychology* 12: 206–226.
- Reed, C. F. (1984). Terrestrial passage theory of the moon illusion. *Journal of Experimental Psychology: General* 113: 489–498.
- Reimann, E. (1902). Die scheinbare Vergrosserung der Sonne und des Mondes am Horizont. *Zeitschrift fur Psychologie* 30: 1–38, 161–195.
- Richards, W., and Kaufman, L. (1969). "Center-of-gravity" tendencies for fixations and flow patterns. *Perception and Psychophysics* 5: 81–84.
- Riddoch, M. J., and Humphreys, G. W. (1989). Finding the way around topographical impairments. In *Neuropsychology of Visual Perception*, J. W. Brown, ed. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Riggs, L. A., and Day, R. H. (1980). Visual aftereffects derived from inspection of orthogonally moving patterns. *Science* 208: 416–418.
- Riggs, L. A., Armington, E. C., and Ratliff, F. (1954). Motions of the retinal image during fixation. *Journal of the Optical Society of America* 44: 315–321.
- Roberts, L. (1989). Are neural nets like the human brain? *Science* 243: 481–482.
- Rock, I., and Ebenholtz, S. (1962). Stroboscopic movement based on change of phenomenal location rather than retinal location. *American Journal of Psychology* 75: 193–207.
- Rock, I., and Kaufman, L. (1962). The moon illusion, II. *Science* 136: 1023–1031.
- Rock, I., Halper, F., DiVita, J., and Wheeler, D. (1987). Eye movement as a cue to figure motion in anorthoscopic perception. *Journal of Experimental Psychology: Human Perception and Performance* 13: 344–352.
- Rolls, E. T. (1975). *The Brain and Reward*. Oxford: Pergamon Press.
- Rosch, E., and Mervis, C. (1975). Family resemblances: Studies in the internal structure of categories. *Cognitive Psychology* 7: 573–605.
- Rosenbaum, D. A. (1977). Selective adaptation of "command neurons" in the human motor system. *Neuropsychologia* 15: 81–91.
- Rosenbaum, D. A., Kenny, S., and Derr, M. A. (1983). Hierarchical control of rapid movement sequences. *Journal of Experimental Psychology: Human Perception and Performance* 9: 86–102.

- Rosenblatt, F. (1962). *Principles of Neurodynamics*. New York: Spartan.
- Routtenberg, A. (1984). Brain phosphoproteins kinase C and protein F1: Protagonists of plasticity in particular pathways. In *Neurobiology of Learning and Memory*, G. Lynch, J. L. McGaugh, and N. M. Weinberger, eds. New York: Guilford Press.
- Rumelhart, D. E., Hinton, G. E., and McClelland, J. L. (1986). A general framework for parallel distributed processing. In *Parallel Distributed Processing*, vol. 1, D. E. Rumelhart and J. L. McClelland, eds. Cambridge, Mass.: Bradford/MIT Press.
- Rumelhart, D. E., and McClelland, J. L. (1985). Levels indeed! A response to Broadbent. *Journal of Experimental Psychology: General* 114: 193-197.
- Rumelhart, D. E., and McClelland, J. L., eds. (1986). *Parallel Distributed Processing*, vol. 1. Cambridge, Mass.: Bradford/MIT Press.
- Sagi, D., and Julesz, B. (1985). "Where" and "what" in vision. *Science* 228: 1217-1219.
- Saito, H., Yukie, M., Tanaka, K., Hikosaka, K., Fukada, Y., and Iwai, E. (1986). Integration of direction signals of image motion in the temporal sulcus of the macaque monkey. *Journal of Neuroscience* 6: 145-157.
- Schur, E. (1925). Mondtauschung und Sehgrösskonstanz. *Psychologische Forschung* 7: 44-80.
- Segal, S. J., and Fusella, V. (1970). Influence of imaged pictures and sounds on detection of visual and auditory signals. *Journal of Experimental Psychology* 83: 458-464.
- Sheikh, A. A., ed. (1983). *Imagery: Current Theory, Research, and Application*. New York: Wiley.
- Shepard, R. N. (1978). Externalization of mental images and the act of creation. In *Visual Learning, Thinking, and Communication*, B. S. Randhawa and W. E. Coffman, eds. New York: Academic Press.
- Shepard, R. N., and Cooper, L. A. (1982). *Mental Images and Their Transformations*. Cambridge, Mass.: Bradford/MIT Press.
- Shepard, R. N., and Judd, S. A. (1976). Perceptual illusion of rotation of three-dimensional objects. *Science* 191: 952-954.
- Shepard, R. N., and Metzler, J. (1971). Mental rotation of three-dimensional objects. *Science* 171: 701-703.
- Shepard, R. N., and Zare, S. L. (1983). Path-guided apparent motion. *Science* 220: 632-634.
- Shepherd, G. M. (1979). *The Synaptic Organization of the Brain*. New York: Oxford University Press.
- Shepherd, G. M. (1983). *Neurobiology*. New York: Oxford University Press.
- Shimojo, S., and Richards, W. (1986). "Seeing" shapes that are almost totally occluded: A new look at Park's camel. *Perception and Psychophysics* 39: 418-426.
- Shulman, G. L., Remington, R. W., and McClean, J. P. (1979). Moving attention through visual space. *Journal of Experimental Psychology: Human Perception and Performance* 5: 522-526.
- Smith, R. (1738). *A Compleat System of Opticks*, vol. 1. Cambridge, England.
- Smolensky, P. (1988). On the proper treatment of connectionism. *Behavioral and Brain Sciences* 11: 1-74.
- Sparks, D. L., and Jay, M. (1987). The role of the primate superior colliculus in sensorimotor integration. In *Vision, Brain, and Cooperative Computation*, M. A. Arbib and A. R. Hanson, eds. Cambridge, Mass.: Bradford/MIT Press.
- Sparks, D. L., and Mays, L. E. (1983). The spatial localization of saccade targets. I. Compensation for stimulation-induced perturbations in eye position. *Journal of Neurophysiology* 49: 45-63.
- Sperling, G., and Melchner, M. J. (1978). The attention operating characteristic: Examples from visual search. *Science* 202: 315-318.

- Spinelli, D. N. (1987). A trace of memory: An evolutionary perspective on the visual system. In *Vision, Brain, and Cooperative Computation*, M. A. Arbib and A. R. Hanson, eds. Cambridge, Mass.: Bradford/MIT Press.
- Spitzer, H., Desimone, R., and Moran, J. (1988). Increased attention enhances both behavioral and neuronal performance. *Science* 240: 338-340.
- Squire, L. R., and Cohen, N. (1979). Memory and amnesia: Resistance to disruption develops for years after learning. *Behavioral and Neural Biology* 25: 115-125.
- Stein, B. E., Magalhaes-Castro, B., and Kruger, L. (1975). Superior colliculus: Visuotopic-somatotopic overlap. *Science* 189: 224-226.
- Stiles-Davis, J., Kritchevsky, M., and Bellugi, U., eds. (1988). *Spatial Cognition*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Stillings, N. A., Feinstein, M. H., Garfield, J. A., Rissland, E. L., Rosenbaum, D. A., Weisler, S. E., and Baker-Ward, L., eds. (1987). *Cognitive Science: An Introduction*. Cambridge, Mass.: Bradford/MIT Press.
- Thompson, J. A. (1983). Is continuous visual monitoring necessary in visually guided locomotion? *Journal of Experimental Psychology: Human Perception and Performance* 9: 427-443.
- Tieger, T., and Ganz, L. (1979). Recognition of faces in the presence of two-dimensional sinusoidal masks. *Perception and Psychophysics* 26: 163-167.
- Trehub, A. (1967). Learning Machines and Methods. Patent 3,331,054. Washington, D.C.: U.S. Patent Office.
- Trehub, A. (1969). A Markov model for modulation periods in brain output. *Biophysical Journal* 9: 965-969.
- Trehub, A. (1970). The synaptic matrix: Pattern processing in the brain. Technical Report TR-9A-70. Psychology Research Laboratory, VA Hospital, Northampton, Mass.
- Trehub, A. (1971a). The brain as a parallel coherent detector. *Science* 174: 722-723.
- Trehub, A. (1971b). Signal characteristics of visual cortex and lateral geniculate during contralateral and ipsilateral photic stimulation. *Electroencephalography and Clinical Neurophysiology* 30: 113-122.
- Trehub, A. (1973). Stimulus intensity and modulation of brain output. *Biophysical Journal* 13: 705-710.
- Trehub, A. (1975a). Adaptive pattern processing in the visual system. *International Journal of Man-Machine Studies* 7: 439-446.
- Trehub, A. (1975b). First-occupancy model for signal transfer in the brain. *Journal of Theoretical Biology* 50: 387-395.
- Trehub, A. (1977). Neuronal models for cognitive processes: Networks for learning, perception and imagination. *Journal of Theoretical Biology* 65: 141-169.
- Trehub, A. (1978). Neuronal model for stereoscopic vision. *Journal of Theoretical Biology* 71: 479-486.
- Trehub, A. (1979). Associative sequential recall in a synaptic matrix. *Journal of Theoretical Biology* 81: 569-576.
- Trehub, A. (1983). Neuronal model for episodic learning and temporal routing of memory. *Cognition and Brain Theory* 6: 483-497.
- Trehub, A. (1985). A pendulum illusion in anorthoscopic perception. Unpublished manuscript.
- Trehub, A. (1986). A model for parsing, learning, and recognizing objects in a complex environment. *Proceedings of the Eighth Annual Conference of the Cognitive Science Society, Amherst, Mass.*
- Trehub, A. (1987). Visual-cognitive neuronal networks. In *Vision, Brain, and Cooperative Computation*, M. A. Arbib and A. R. Hanson, eds. Cambridge, Mass.: Bradford/MIT Press.

- Trehub, A. (1990). A confusion matrix for hand-printed alphabetic characters: Testing a neuronal model. In *Computational and Clinical Approaches to Pattern Recognition and Concept Formation*, M. L. Commons, R. J. Herrnstein, S. M. Kosslyn, and D. B. Mumford, eds. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Trehub, A., and Pollatsek, A. (1986). Seeing-more-than-is-there: A probe of retinoid networks. *Proceedings of the Eighth Annual Conference of the Cognitive Science Society, Amherst, Mass.*
- Ts'o, D. Y., Gilbert, C. D., and Wiesel, T. N. (1986). Relationships between horizontal interactions and functional architecture in cat striate cortex as revealed by cross-correlation analysis. *Journal of Neuroscience* 6: 1160-1170.
- Tsal, Y. (1983). Movements of attention across the visual field. *Journal of Experimental Psychology: Human Perception and Performance* 4: 523-530.
- Tulving, E. (1972). Episodic and semantic memory. In *Organization of Memory*, E. Tulving and W. Donaldson, eds. New York: Academic Press.
- Tulving, E. (1989). Remembering and knowing the past. *American Scientist* 77: 361-367.
- Turing, A. M. (1950). Computing machinery and intelligence. *Mind* 59: 433-460.
- van der Loos, H., and Glaser, E. M. (1972). Autapses in neocortex cerebri: Synapses between a pyramidal cell's axon and its own dendrites. *Brain Research* 48: 355-360.
- Van Essen, D. C. (1985). Functional organization of primate visual cortex. In *Cerebral Cortex*, vol. 3, A. Peters and E. G. Jones, eds. New York and London: Plenum.
- Voronin, L. L. (1985). Synaptic plasticity at archicortical and neocortical levels. *Neirofiziologiya* 16: 651-665.
- Wallace, B. (1984). Apparent equivalence between perception and imagery in the production of various visual illusions. *Memory and Cognition* 12: 156-162.
- Wallach, H. (1962). On the moon illusion. *Science* 137: 900-902.
- Wallach, H. (1987). Perceiving a stable environment when one moves. *Annual Review of Psychology* 38: 1-27.
- Weber, R. J., and Malmstrom, F. V. (1979). Measuring the size of mental images. *Journal of Experimental Psychology: Human Perception and Performance* 5: 1-12.
- Weisstein, N., and Harris, C. S. (1974). Visual detection of line segments: An object-superiority effect. *Science* 186: 752-755.
- Weisstein, N., Maguire, W., and Williams, M. C. (1982). The effect of perceived depth on phantoms and the phantom motion aftereffect. In *Organization and Representation in Perception*, J. Beck, ed. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Wheeler, J. A. (1956). A septet of sibyls: Aids in the search for truth. *American Scientist* 44: 360-377.
- Wickelgren, W. A. (1974). Single-trace fragility theory of memory dynamics. *Memory and Cognition* 2: 775-780.
- Yajeya, J., Quintana, J., and Fuster, J. M. (1988). Prefrontal representation of stimulus attributes during delay tasks. II. The role of behavioral significance. *Brain Research* 474: 222-230.
- Yamamoto, N., Kurotani, T., and Toyama, K. (1989). Neural connections between the lateral geniculate nucleus and visual cortex in vitro. *Science* 245: 192-194.
- Yantis, S., and Johnston, J. C. (1990). On the locus of visual selection: Evidence from focused attention tasks. *Journal of Experimental Psychology: Human Perception and Performance* 16: 135-149.
- Yonas, A., Cleaves, W. T., and Pettersen, L. (1978). Development of sensitivity to pictorial depth. *Science* 200: 77-79.
- Zöllner, F. (1862). Über einer neue Art anorthoscopischer Zerrbilder. *Annalen der Physik und Chemie* 27: 477-484.