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What the Hands Reveal About the Brain.
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References

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- Albert, M. L. 1973. "A simple test of visual neglect." *Neurology* 23:658–664.
- Andersen, R. A. In press. "The anatomy and physiology of the posterior parietal lobe," in *Spatial Cognition: Brain Bases and Development*, J. Stiles-Davis, M. Kritchevsky, and U. Bellugi, eds. Hillsdale, N.J.: Erlbaum Associates.
- Arbib, M. A., D. Caplan, and J. C. Marshall, eds. 1982. *Neural Models of Language Processes*, New York: Academic Press.
- Battison, R. 1978. *Lexical Borrowing in American Sign Language*. Silver Spring, Md.: Linstock Press.
- Battison, R. 1979. "Linguistic aspects of aphasia in deaf signers." Psychology Department, Northeastern University. Unpublished.
- Battison, R., and C. Padden. 1974. "Sign language aphasia: A case study." Paper presented at the 49th Annual Meeting of the Linguistics Society of America, New York, December.
- Bellugi, U. 1980. "The structuring of language: Clues from the similarities between signed and spoken language," in *Signed and Spoken Language: Biological Constraints on Linguistic Form*, U. Bellugi and M. Studdert-Kennedy, eds. Weinheim and Deerfield Beach, Fla.: Verlag Chemie, 115–140.
- Bellugi, U. 1983. "Language structure and language breakdown in American Sign Language," in *Psychobiology of Language*, M. Studdert-Kennedy, ed. Cambridge, Mass.: MIT Press, 152–176.
- Bellugi, U. In press. "The acquisition of a spatial language," in *The Development of Language and Language Researchers: Essays in Honor of Roger Brown*, F. Kessel, ed. Hillsdale, N.J.: Erlbaum Associates.
- Bellugi, U., and E. S. Klima. 1982a. "The acquisition of three morphological systems in American Sign Language," in *Papers and Reports on Child Language Development*. 21:K1–35.
- Bellugi, U., and E. S. Klima. 1982b. "From gesture to sign: Deixis in a visual-gestural language," in *Speech, Place, and Action: Studies of Language in Context*, R. J. Jarvella and W. Klein, eds. New York: Wiley, 297–313.
- Bellugi, U., E. S. Klima, and P. Siple. 1975. "Remembering in signs." *Cognition* 3(2):93–125.
- Bellugi, U., and D. Newkirk. 1980. "Formal devices for creating new signs in American Sign Language," in *Proceedings of the National Symposium on Sign Language Research and Teaching*, W. C. Stokoe, ed. Silver Spring, Md.: National Association of the Deaf, 39–80.
- Bellugi, U., H. Poizner, and E. S. Klima. 1983. "Brain organization for language: Clues from sign aphasia." *Human Neurobiology* 2:155–170.
- Bellugi, U., H. Poizner, and E. Zurif. 1982. "Prospects for the study of aphasia in a

- visual-gestural language," in *Neural Models of Language Processes*, M. A. Arbib, D. Caplan, and J. C. Marshall, eds. New York: Academic Press, 271–292.
- Bellugi, U., and P. Siple. 1974. "Remembering with and without words," in *Current Problems in Psycholinguistics*, F. Bresson, ed. Paris: Centre National de la Recherche Scientifique, 215–236.
- Bellugi, U., and M. Studdert-Kennedy, eds. 1980. *Signed and Spoken Language: Biological Constraints on Linguistic Form*. Weinheim and Deerfield Beach, Fla.: Verlag Chemie.
- Benton, A. L. 1979. "Visuoperceptive, visuospatial, and visuoconstructive disorders," in *Clinical Neuropsychology*, K. Heilman and E. Valenstein, eds. New York: Oxford University Press.
- Benton, A. L. 1980. "The neuropsychology of facial recognition." *American Psychologist* 35:176–186.
- Benton, A. L., K. deS Hamsher, N. R. Varney, and O. Spreen. 1983. *Contributions to Neuropsychological Assessment*. New York: Oxford University Press.
- Benton, A. L., J. Hannay, and N. R. Varney. 1975. "Visual perception of line direction in patients with unilateral brain disease." *Neurology* 25:907–910.
- Benton, A. L., M. V. Van Allen, K. deS Hamsher, and H. S. Levine. 1978. "Test of facial recognition." Iowa City: Benton Laboratory of Neuropsychology, University of Iowa.
- Benton, A. L., N. R. Varney, and K. deS Hamsher. 1977. "Test of judgement of line orientation." Iowa City: Benton Laboratory of Neuropsychology, University of Iowa.
- Ben-Yishay, Y., L. Diller, I. Mendleberg, D. Gordon, and L. Gerstman. 1971. "Similarities and differences in block design performance between older normal and brain injured persons: A task analysis." *Journal of Abnormal Psychology* 78:17–25.
- Berman, R. A. 1978. *Modern Hebrew Structure*. Tel Aviv: University Publishing Projects.
- Bisiach, E., E. Capitani, L. Claudio, and D. Perani. 1981. "Brain and conscious representation of outside reality." *Neuropsychologia* 19:543–551.
- Bisiach, E., and C. Luzzatti. 1978. "Unilateral neglect of representational space." *Cortex* 14:129–133.
- Bisiach, E., C. Luzzatti, and D. Perani. 1979. "Unilateral neglect, representational schema and consciousness." *Brain* 102:609–618.
- Boyes-Braem, P. 1981. "Features of the handshake in American Sign Language." La Jolla, Calif.: The Salk Institute. Unpublished.
- Bradshaw, J. L., and N. C. Nettleton. 1981. "The nature of hemispheric specialization in man." *The Behavioral and Brain Sciences* 4:51–91.
- Brown, R., C. Fraser, and U. Bellugi. 1962. "Control of grammar in imitation, comprehension, and production." *Journal of Verbal Learning and Verbal Behavior* 2(2):121–135.
- Burr, C. W. 1905. "Loss of the sign language in a deaf mute from cerebral tumor and softening." *New York Medical Journal* 81:1106–1108.
- Caplan, D., ed. 1980. *Biological Studies of Mental Processes*. Cambridge, Mass.: MIT Press.
- Caplan, D., A. R. Lecours, and A. Smith, eds. 1984. *Biological Perspectives on Language*, Cambridge, Mass.: MIT Press.
- Caramazza, A., and E. B. Zurif, eds. 1978. *Language Acquisition and Language Breakdown*. Baltimore, Md.: Johns Hopkins University Press.
- Chiarello, C., R. Knight, and M. Mandel. 1982. "Aphasia in a prelingually deaf woman." *Brain* 105:29–51.

- Churchland, P. S. 1986. *Neurophilosophy*. Cambridge, Mass.: MIT Press. A Bradford Book.
- Corina, D. 1984. "Linguistic mapping strategies of deaf signers." La Jolla, Calif.: The Salk Institute. Unpublished.
- Critchley, M. D. 1938. "Aphasia in a partial deaf mute." *Brain* 61:163–169.
- Damasio, A. 1983a. "The frontal lobes," in *Clinical Neuropsychology*, K. M. Heilman and E. Valenstein, eds. New York: Oxford University Press, 360–412.
- Damasio, A. 1983b. "Language and the basal ganglia." *Trends in Neuroscience* 6:442–444.
- Damasio, A., U. Bellugi, H. Damasio, H. Poizner, and J. VanGilder. 1986. "Sign language aphasia during left hemisphere amytal injection." *Nature* 332:363–365.
- Damasio, A., and N. Geschwind. 1984. "The neural basis of language." *Annual Review of Neuroscience* 7:127–147.
- Damasio, H. 1981. "Cerebral localization of the aphasias," in *Acquired Aphasia*, M. T. Sarnow, ed. New York: Academic Press, 27–65.
- Delis, D. C., L. C. Robertson, and R. Efron. 1986. "Hemispheric specialization of memory for visual hierarchical stimuli." *Neuropsychologia* 24:205–214.
- DeRenzi, E. 1982. *Disorders of Space Exploration and Cognition*. New York: Wiley.
- Douglass, E., and J. C. Richardson. 1959. "Aphasia in a congenital deaf mute." *Brain* 82:68–80.
- Entus, A. K. 1977. "Hemispheric asymmetry in processing of dichotically presented speech and nonspeech stimuli by infants," in *Language Development and Neurological Theory*, S. J. Segalowitz and F. A. Gruber, eds. New York: Academic Press, 63–73.
- Feyereisen, P., and X. Seron. 1982. "Nonverbal communication and aphasia: A review, I, II. *Brain and Language* 16:191–212, 213–236.
- Fok, Y. Y. A., U. Bellugi, and D. Lillo-Martin. 1986. "Remembering in Chinese signs and characters," in *Linguistics, Psychology and the Chinese Language*, H. Kao and R. Hoosain, eds. Hong Kong: University of Hong Kong Press, 336–362.
- Fontenot, D., and A. Benton. 1972. "Perception of direction in the right and left visual fields." *Neuropsychologia* 10:447–452.
- Frishberg, N. C. 1975. "Arbitrariness and iconicity: Historical change in American Sign Language." *Language* 51:696–719.
- Fromkin, V. 1971. "The non-anomalous nature of anomalous utterances." *Language* 47:27–52.
- Fromkin, V. A. 1973. "Slips of the tongue." *Scientific American* 229:109–117.
- Gardner, H., H. H. Brownell, W. Wapner, and D. Michelow. 1983. "Missing the point: the role of right hemisphere in the processing of complex linguistic material," in *Cognitive Processing in the Right Hemisphere*, E. Perecman ed. New York: Academic Press, 169–191.
- Geschwind, N. 1965. "Disconnexion syndromes in animals and man I, II." *Brain* 88:237–294, 585–644.
- Geschwind, N. 1975. "The apraxias: Neural mechanisms of disorders of learned movement." *American Scientist* 63:188–195.
- Geschwind, N. 1979. "Specialization of the human brain." *Scientific American* 241:180–199.
- Geschwind, N., and A. M. Galaburda, eds. 1984. *Cerebral Dominance*. Cambridge, Mass.: Harvard University Press.
- Geschwind, N., and W. Levitsky. 1968. "Human brain: Left-right asymmetries in temporal speech region." *Science* 161:186–187.
- Goldstein, K. 1948. *Language and Language Disturbance*. New York: Grune and Stratton.

- Goodglass, H., and E. Kaplan. 1963. "Disturbance of gesture and pantomime in aphasia." *Brain* 86:703-720.
- Goodglass, H., and E. Kaplan. 1972. Revised edition, 1983. *The Assessment of Aphasia and Related Disorders*. Philadelphia: Lea and Febiger.
- Goodglass, H., and E. Kaplan. 1979. "Assessment of cognitive deficit in the brain-injured patient," in *Handbook of Behavioral Neurobiology*, M. Gazzaniga, ed. New York: Plenum Press, vol. 2, 3-22.
- Grasset, J. 1896. "Aphasie de la main droite chez un sourd muet." *Le Progres Medical*, ser. 3, 4:44, 281.
- Hannay, H. J., N. R. Varney, and A. L. Benton. 1976. "Visual localization in patients with unilateral brain disease." *Journal of Neurology, Neurosurgery, and Psychiatry* 39:307-313.
- Hanson, V. L. 1982. "When a word is not the sum of its letters: Fingerspelling and spelling," in *Teaching American Sign Language as a Second Language*, F. Caccamise, M. Garretson, and U. Bellugi, eds. Silver Spring, Md.: National Association of the Deaf, 176-185.
- Heilman, K. M. 1979a. "Apraxia," in *Clinical Neuropsychology*, K. M. Heilman and E. Valenstein, eds. New York: Oxford University Press, 159-185.
- Heilman, K. M. 1979b. "Neglect and related disorders," in *Clinical Neuropsychology*, K. M. Heilman and E. Valenstein, eds. New York: Oxford University Press, 268-307.
- Heilman, K. M., and E. Valenstein. 1979. *Clinical Neuropsychology*. New York: Oxford University Press.
- Hochanadel, G., and E. Kaplan. 1986. "Neuropsychology of normal aging," in *The Clinical Neurology of Aging*, M. Albert, ed. New York: Oxford University Press, 231-244.
- Hoemann, H. W., C. E. Andrews, V. A. Florian, S. A. Hoemann, and C. J. Jensema. 1976. "The spelling proficiency of deaf children." *American Annals of the Deaf* 121:489-493.
- Hoffmeister, R., and R. B. Wilbur. 1980. "Developmental: The acquisition of sign language," in *Recent Perspectives on American Sign Language*, H. Lane and F. Grosjean, eds. Hillsdale, N.J.: Erlbaum Associates, 61-78.
- Jarvella, R. J., and W. Klein. 1982. *Speech, Place and Action: Studies of Language in Context*. New York: Wiley.
- Jennings, P., and H. Poizner. 1986. "Computer graphic modeling and analysis II: Three-dimensional reconstruction and interactive analysis." La Jolla, Calif.: The Salk Institute. Unpublished.
- Johansson, G. 1973. "Visual perception of biological motion and a model for its analysis." *Perception and Psychophysics* 14:201-211.
- Kantor, R. 1982. "Communicative interaction in American Sign Language between deaf mothers and their deaf children: A psycholinguistic analysis." Ph.D. dissertation, School of Education, Boston University.
- Kaplan, E. 1980. "A qualitative approach to clinical neuropsychological assessment." Paper presented at American Psychological Association, Montreal.
- Kaplan, E. 1983. "Process and achievement revisited," in *Toward a Holistic Developmental Psychology*, S. Wapner and B. Kaplan, eds. Hillsdale, N.J.: Erlbaum Associates, 143-156.
- Kaplan, E., E. P. Palmer, C. Weinstein, and E. Baker. 1981. "Block design: A brain-behavior based analysis." Paper presented at the International Neuropsychological Society, Bergen, Norway, June.
- Kean, M. L. 1985. *Agrammatism*. Orlando, Fla.: Academic Press.

- Kelly, R. R., and C. Tomlinson-Keasey. 1977. "Hemispheric laterality of deaf children for processing words and pictures visually presented to the hemifields." *American Annals of the Deaf* 122:525-533.
- Kettrick, C., and N. Hatfield. 1986. "Bilingualism in a visuo-gestural mode," in *Processing in Bilinguals: Psycholinguistic and Neuropsychological Perspectives*, J. Vaid, ed. Hillsdale, N.J.: Erlbaum Associates, 253-274.
- Kimura, D. 1976. "The neural basis of language qua gesture," in *Studies in Neurolinguistics*, H. Whitaker and H. A. Whitaker, eds. New York: Academic Press, vol. 2, 145-156.
- Kimura, D. 1979. "Neuromotor mechanisms in the evolution of human communication," in *Studies in Neurolinguistics*, H. D. Steklis and M. J. Raleigh, eds. New York: Academic Press, vol. 2, 197-219.
- Kimura, D. 1981. "Neural mechanisms in manual signing." *Sign Language Studies* 33:291-312.
- Kimura, D. 1982. "Left-hemisphere control of oral and brachial movements and their relation to communication." *Philosophical Transactions of the Royal Society of London*, ser. B, 298:135-149.
- Kimura, D., and Y. Archibald. 1974. "Motor functions of the left hemisphere." *Brain* 97:337-350.
- Kimura, D., R. Battison, and B. Lubert. 1976. "Impairment of non-linguistic hand movements in a deaf aphasic." *Brain and Language* 3:566-571.
- Kimura, D., W. Davidson, and C. W. McCormick. 1982. "No impairment in sign language after right-hemisphere stroke." *Brain and Cognition* 17:359-362.
- Klima, E. S., and U. Bellugi. 1978. "Poetry without sound." *Human Nature* 1(10):74-83.
- Klima, E. S., and U. Bellugi. 1979. *The Signs of Language*. Cambridge, Mass.: Harvard University Press.
- Lane, H., P. Boyes-Braem, and U. Bellugi. 1976. "Preliminaries to a distinctive feature analysis of handshapes in American Sign Language." *Cognitive Psychology* 8:263-289.
- Launer, P. 1982. "Acquiring the distinction between related nouns and verbs in ASL." Ph.D. dissertation, Department of Speech and Hearing Sciences, City University of New York.
- Leischner, A. 1943. "Die "Aphasie" der Taubstummen." *Archiv für Psychiatrie und Nervenkrankheiten* 115:469-548.
- Levy, J. 1982. "Mental processes in the nonverbal hemisphere," in *Animal Mind—Human Mind*, D. R. Griffin, ed. New York: Springer-Verlag, 57-75.
- Lezak, M. D. 1976. *Neuropsychological Assessment*. New York: Oxford University Press.
- Liberman, A. M. 1982. "On finding that speech is special." *American Psychologist* 37(2):148-167.
- Liddell, S. 1984. "THINK and BELIEVE: Sequentiality in ASL." *Language* 60:372-399.
- Liddell, S., and R. Johnson. 1985. "American Sign Language: The phonological base." Washington, D.C.: Gallaudet College. Unpublished.
- Lillo-Martin, D. 1986. "Parameter setting: Evidence from use, acquisition, and breakdown in American Sign Language." Ph.D. dissertation, Linguistics Department, University of California at San Diego.
- Lillo-Martin, D., U. Bellugi, L. O'Grady, D. Schemenauer, and M. O'Grady. 1986. "What and where in language: The acquisition of spatial linguistic structures in ASL." La Jolla, Calif.: The Salk Institute. Unpublished.
- Lillo-Martin, D., U. Bellugi, D. Schemenauer, M. O'Grady, and H. Poizner. 1985. "Processing of spatial organized syntax in ASL." La Jolla, Calif.: The Salk Institute. Unpublished.

- Lillo-Martin, D., U. Bellugi, L. Struxness, and M. O'Grady. 1985. "The acquisition of spatially organized syntax." *Papers and Reports on Child Language Development* 24:70–78.
- Lillo-Martin, D., and E. S. Klima. 1986. "Pointing out differences: ASL pronouns in syntactic theory." Paper presented at conference on Theoretical Issues in Sign Language Research, Rochester, N.Y.
- Loew, R. C. 1982. "Roles and reference," in *Teaching American Sign Language as a Second Foreign Language*, F. Caccamise, M. Garretson, and U. Bellugi, eds. Silver Spring, Md.: National Association of the Deaf, 40–58.
- Loew, R. C. 1983. "Roles and reference in American Sign Language: A developmental perspective." Ph.D. dissertation, Psychology Department, University of Minnesota.
- Loomis, J., H. Poizner, U. Bellugi, A. Blakemore, and J. Hollerbach. 1983. "Computer graphic modeling of American Sign Language." *Computer Graphics* 17:105–114.
- Manning, A. A., W. Goble, R. Markman, and T. LaBreche. 1977. "Lateral cerebral differences in the deaf in response to linguistic and nonlinguistic stimuli." *Brain and Language* 4:309–321.
- Marshall, J. C. 1980. "Clues from neurological deficits," in *Signed and Spoken Language: Biological Constraints on Linguistic Form*, U. Bellugi and M. Studdert-Kennedy, eds. Weinheim and Deerfield Beach, Fla.: Verlag Chemie, 275–290.
- Marshall, J. C. 1982. "What is a symptom-complex?" in *Neural Models of Language Processes*, M. A. Arbib, D. Caplan, and J. C. Marshall, eds. New York: Academic Press, 389–409.
- Maxwell, M. 1980. "Language acquisition in a deaf child: The interaction of sign variations, speech, and print variations." Ph.D. dissertation, Linguistics Department, University of Arizona.
- McClelland, J. L., D. E. Rumelhart, and the PDP Research Group. 1986. *Parallel Distributed Processing*. Vol. 2. *Psychological and Biological Models*. Cambridge, Mass.: MIT Press. A Bradford Book.
- McKeever, W. F., H. W. Hoemann, V. A. Florian, and A. D. VanDeventer. 1976. "Evidence of minimal cerebral asymmetries for the processing of English words and American Sign Language stimuli in the congenitally deaf." *Neuropsychologia* 14:413–423.
- Meckler, R., J. Mack, and R. Bennett. 1979. "Sign language aphasia in a non-deaf mute." *Neurology* 29:1037–1040.
- Meier, R. 1981. "Icons and morphemes: Models of the acquisition of verb agreement in American Sign Language." *Papers and Reports on Child Language Development* 20:92–99.
- Meier, R. 1982. "Icons, analogues, and morphemes: The acquisition of verb agreement in American Sign Language." Ph.D. dissertation, Linguistics Department, University of California, San Diego.
- Merzenich, M. M., and J. H. Kaas. 1982. "Reorganization of mammalian somatosensory cortex following peripheral nerve injury." *Trends in Neuroscience* 5(12):434–436.
- Merzenich, M. M., J. H. Kaas, J. T. Wall, M. Sur, R. J. Nelson, and D. J. Felleman. 1983. "Progression of change following median nerve section in the cortical representation of the hand in Areas 3b and 1 in adult owl and squirrel monkeys." *Neuroscience* 10:639–665.
- Merzenich, M. M., R. J. Nelson, M. P. Stryker, M. S. Cynader, A. Schoppmann, and J. M. Zook. 1984. "Somatosensory cortical map changes following digit amputation in adult monkeys." *The Journal of Comparative Neurology* 224:591–605.
- Miyawaki, K., W. Strange, R. R. Verbrugge, A. M. Liberman, J. J. Jenkins, and O.

- Fujimura. 1975. "An effect of linguistic experience: The discrimination of /r/ and /l/ by native speakers of Japanese and English." *Perception & Psychophysics* 18:331-340.
- Molfese, D. L., R. B. Freeman, and D. S. Palermo. 1975. "The ontogeny of brain lateralization for speech and nonspeech stimuli." *Brain and Language* 2:365-368.
- Mooney, C. M. 1957. "Age in the development of closure ability in children." *Canadian Journal of Psychology* 11:219-226.
- Mountcastle, V. B., B. C. Motter, M. A. Steinmetz, and C. J. Duffy. 1984. "Looking and seeing: Visual functions of the parietal lobe," in *Dynamic Aspects of Neocortical Function*, G. Edelman, W. Gall, and W. Cowan, eds. New York: Wiley, 159-193.
- Neville, H. J. 1977. "Electroencephalographic testing of cerebral specialization in normal and congenitally deaf children: A preliminary report," in *Language Development and Neurological Theory*, S. J. Segalowitz and F. A. Gruber, eds. New York: Academic Press, 121-131.
- Neville, H. In press. "Brain organization for spatial attention," in *Spatial Cognition: Brain Bases and Development*, J. Stiles-Davis, M. Kritchewsky, and U. Bellugi, eds. Hillsdale, N.J.: Erlbaum Press.
- Neville, H. J., and U. Bellugi. 1978. "Patterns of cerebral specialization in congenitally deaf adults: A preliminary report," in *Understanding Language Through Sign Language Research*, P. Siple, ed. New York: Academic Press, 239-257.
- Neville, H. J., A. Schmidt, and M. Kutas. 1983. "Altered visual evoked potentials in congenitally deaf adults." *Brain Research* 266:127-132.
- Newcombe F., and W. R. Russell. 1969. "Dissociated visual perceptual and spatial deficits in focal lesions of the right hemisphere." *Journal of Neurology, Neurosurgery and Psychiatry* 32:73-80.
- Newkirk, D., E. S. Klima, C. C. Pedersen, and U. Bellugi. 1980. "Linguistic evidence from slips of the hand," in *Errors in Linguistic Performance*, V. A. Fromkin, ed. New York: Academic Press, 165-197.
- Newport, E. L., and E. F. Ashbrook. 1977. "The emergence of semantic relations in ASL." *Papers and Reports on Child Language Development* 13:16-21.
- Newport, E. L., and R. Meier. 1986. "Acquisition of American Sign Language," in *The Cross-Linguistic Study of Language Acquisition*, D. I. Slobin, ed. Hillsdale, N.J.: Erlbaum Associates.
- Newport, E. L., and T. Supalla. 1980. "The structuring of language: Clues from the acquisition of signed and spoken language," in *Signed and Spoken Language: Biological Constraints on Linguistic Form*, U. Bellugi and M. Studdert-Kennedy, eds. Weinheim and Deerfield Beach, Fla.: Verlag Chemie, 187-211.
- Obler, L. K., and L. Menn. 1982. *Exceptional Language and Linguistics*. New York: Academic Press.
- Osterreith, P. A. 1944. "Le test de copie d'une figure complexe." *Archives de Psychologie* 30:206-356.
- Padden, C. 1983. "Interaction of morphology and syntax in American Sign Language." Ph.D. dissertation, Linguistics Department, University of California, San Diego.
- Padden, C. In press. "Grammatical theory and signed languages," in *Linguistics: The Cambridge Survey*, F. Newmeyer, ed. Cambridge, England: Cambridge University Press.
- Patterson, A., and O. L. Zangwill. 1944. "Disorders of visual space perception associated with lesions of the right cerebral hemisphere." *Brain* 67:331-358.
- Petitto, L. A. 1983. "From gesture to symbol: The relationship between form and meaning in the acquisition of personal pronouns in American Sign Language." Ph.D. dissertation, Psychology Department, Harvard University.
- Petitto, L. A. In press. "Language in the pre-linguistic child," in *The Development of Language and Language Researchers*, F. Kessel, ed. Hillsdale, N.J.: Erlbaum Associates.

- Petitto, L. A., and U. Bellugi. In press. "Spatial cognition and brain organization: Clues from the acquisition of a language in space," in *Spatial Cognition: Brain Bases and Development*, J. Stiles-Davis, M. Kritchevsky, and U. Bellugi, eds. Hillsdale, N.J.: Erlbaum Associates.
- Phippard, D. 1977. "Hemifield differences in visual perception in deaf and hearing subjects." *Neuropsychologia* 15:555-561.
- Poizner, H. 1981. "Visual and 'phonetic' encoding of movement: Evidence from American Sign Language." *Science* 212:691-693.
- Poizner, H. 1983. "Perception of movement in American Sign Language: Effects of linguistic structure and linguistic experience." *Perception and Psychophysics* 33:215-231.
- Poizner, H. 1985. "Visual-gestural languages and the functional organization of the brain." Language and language processing, ten year outlook on research opportunities. Washington, D.C.: National Academy of Sciences.
- Poizner, H. In press. "Sign language processing," in *Gallaudet Encyclopedia of Deaf People and Deafness*, J. VanCleve, ed. New York: McGraw-Hill.
- Poizner, H., and R. Battison. 1980. "Cerebral asymmetry for sign language: Clinical and experimental evidence," in *Recent Perspectives on American Sign Language*, H. Lane and F. Grosjean, eds. Hillsdale, N.J.: Erlbaum Associates, 79-101.
- Poizner, H., R. Battison, and H. Lane. 1979. "Cerebral asymmetry for perception of American Sign Language: The effects of moving stimuli." *Brain and Language* 7:351-362.
- Poizner, H., and U. Bellugi. 1984. "Hemispheric specialization for a visual-gestural language." Paper presented at International Neuropsychology Society, Houston, Texas.
- Poizner, H., U. Bellugi, and V. Iragui. 1984. "Apraxia and aphasia in a visual-gestural language." *American Journal of Physiology* 246:R868-R883.
- Poizner, H., U. Bellugi, and V. Lutes-Driscoll. 1981. "Perception of American Sign Language in dynamic point-light displays." *Journal of Experimental Psychology: Human Perception and Performance* 7:430-440.
- Poizner, H., U. Bellugi, and R. Tweney. 1981. "Processing of formational, semantic, and iconic information in American Sign Language." *Journal of Experimental Psychology: Human Perception and Performance* 7:1146-1159.
- Poizner, H., E. Kaplan, U. Bellugi, and C. Padden. 1984. "Hemispheric specialization for nonlanguage visual-spatial processing in brain damaged deaf signers." *Brain and Cognition* 3:281-306.
- Poizner, H., and H. Lane. 1978. "Discrimination of location in American Sign Language," in *Understanding Language through Sign Language Research*, P. Siple, ed. New York: Academic Press, 271-287.
- Poizner, H., and H. Lane. 1979. "Cerebral asymmetry in the perception of American Sign Language." *Brain and Language* 7:210-222.
- Poizner, H., E. Wooten, and D. Salot. 1986. "Computergraphic modeling and analysis: A portable three-dimensional movement monitoring system." *Behavior Research Methods, Instruments and Computers*, special issue on computers and vision.
- Ratcliff, G. 1982. "Disturbances of spatial orientation associated with cerebral lesions," in *Spatial Abilities, Development and Physiological Foundations*, M. Potegal, ed. New York: Academic Press, 301-331.
- Ratcliff, G., and F. Newcombe. 1973. "Spatial orientation in man: Effects of left, right, and bilateral posterior cerebral lesions." *Journal of Neurology, Neurosurgery and Psychiatry* 36:448-454.
- Reider, N. 1941. "A note on the influence of early training on the development of aphasic manifestations." *Bulletin of the Menninger Clinic* 5:1-4.

- Rizzolati, G., C. Umiltà, and G. Berlucchi. 1971. "Opposite superiorities of the right and left cerebral hemispheres in discriminative reaction time to physiognomic and alphabetical material." *Brain* 94:431-442.
- Samar, V. J. 1983. "Evoked potential and visual half-field evidence for task-dependent cerebral asymmetries in congenitally deaf adults." *Brain and Cognition* 2:383-403.
- Sarno, J., L. Swisher, and M. Sarno. 1969. "Aphasia in a congenitally deaf man." *Cortex* 5:398-414.
- Sperry, R. W. 1974. "Lateral specialization in the surgically separated hemispheres," in *The Neurosciences: Third Study Program*, F. O. Schmitt and F. G. Worder, eds. Cambridge, Mass.: MIT Press, 5-19.
- Stiles-Davis, J., M. Kritchevsky, and U. Bellugi, eds. In press. *Spatial Cognition: Brain Bases and Development*. Hillsdale, N.J.: Erlbaum Press.
- Stokoe, W., D. Casterline, and C. Croneberg. 1965. *A Dictionary of American Sign Language*. Silver Spring, Md.: Linstok Press.
- Studdert-Kennedy, M., and H. Lane. 1980. "Clues from the differences between signed and spoken language," in *Signed and Spoken Language: Biological Constraints on Linguistic Form*, U. Bellugi and M. Studdert-Kennedy, eds. Weinham and Deerfield Beach, Fla.: Verlag Chemie, 29-39.
- Stungis, J. 1981. "Identification and discrimination of handshape in American Sign Language." *Perception & Psychophysics* 29(3):261-276.
- Supalla, T. 1982. "Structure and acquisition of verbs of motion and location in American Sign Language." Ph.D. dissertation, Psychology Department, University of California, San Diego.
- Supalla, T. 1985. "The classifier system in ASL," in *Noun Classification and Categorization*, C. Craig ed. Philadelphia, Penn.: Benjamin North America.
- Supalla, T., and E. Newport. 1978. "How many seats in a chair? The derivation of nouns and verbs in American Sign Language," in *Understanding Language through Sign Language Research*, P. Siple, ed. New York: Academic Press, 91-132.
- Tureen, L., E. Smolik, and J. Tritt. 1951. "Aphasia in a deaf mute." *Neurology* 1:237-244.
- Underwood, J., and C. Paulson. 1981. "Aphasia and congenital deafness: A case study." *Brain and Language* 12:285-291.
- Vaid, J., U. Bellugi, and H. Poizner. 1985. "Hand dominance in a visual-gestural language." La Jolla, Calif.: The Salk Institute. Unpublished.
- Varney, N., and A. L. Benton. 1978. *Pantomime Recognition Test*. Iowa City: Benton Laboratory of Neuropsychology, University of Iowa Hospitals.
- Virostek, S., and J. Cutting. 1979. "Asymmetries for Ameslan handshapes and other forms in signs and nonsigners." *Perception & Psychophysics* 26:505-508.
- Warrington, E., M. James, and M. Kinsbourne. 1966. "Drawing disability in relation to laterality of cerebral lesion." *Brain* 89:53-82.
- Wechsler, D. 1981. *Wechsler Adult Intelligence Scale—Revised*. New York: Psychological Corporation.
- Wilbur, R., E. S. Klima, and U. Bellugi. 1983. "Roots: The search for origins of signs in ASL," in *The Parasession on the Interplay of Phonology, Morphology and Syntax*, J. Richardson, M. Marks, and A. Chukerman, eds. Chicago: Chicago Linguistics Society, 314-336.
- Zaidel, E. 1977. "Lexical organization of the right hemisphere," in *Cerebral Correlates of Conscious Experience*, P. Buser and A. Rougeul-Busser, eds. Amsterdam: Elsevier, 177-197.
- Zurif, E. B. 1980. "Language mechanisms: A neuropsychological perspective." *American Scientist* 68:305-311.

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