

University of Groningen

Visual semantics

Schie, Hein Thomas van

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version

Publisher's PDF, also known as Version of record

Publication date:

2003

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Schie, H. T. V. (2003). *Visual semantics*. s.n.

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Bibliography

- Allport, D. A. (1985). Distributed memory, modular subsystems and dysphasia. In S. K. Newman & R. Epstein (Eds.), *Current perspectives in dysphasia* (pp. 32–60). Edinburgh: Churchill Livingstone.
- Anderson, J. R. (1976). *Language, memory, and thought*. Hillsdale N. J.: Erlbaum.
- Attneave, F., & Arnoult, M. D. (1956). The quantitative study of shape and pattern perception. *Psychological Bulletin*, 53(6), 452–471.
- Awh, E., Anlo-Vento, L., & Hillyard, S. A. (2000). The role of spatial selective attention in working memory for locations: Evidence from event-related potentials. *Journal of Cognitive Neuroscience*, 12(5), 840–847.
- Baddeley, A. D. (1986). *Working memory*. Oxford: Oxford University Press.
- Baizer, J. S., Ungerleider, L. G., & Desimone, R. (1991). Organization of visual inputs to the inferior temporal and posterior parietal cortex in macaques. *Journal of Neuroscience*, 11(1), 168–190.
- Bajo, M. T. (1988). Semantic facilitation with pictures and words. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 14, 579–589.
- Barrett, S. E., & Rugg, M. D. (1990). Event-related potentials and the semantic matching of pictures. *Brain and Cognition*, 14, 201–212.
- Belger, A., Puce, A., Krystal, J. H., Gore, J. C., Goldman-Rakic, P., & McCarthy, G. (1998). Dissociation of mnemonic and perceptual processes during spatial and nonspatial working memory using fMRI. *Human Brain Mapping*, 6, 14–32.
- Berger, A., & Henik, A. (2000). The endogenous modulation of IOR is nasal-temporal asymmetric. *Journal of Cognitive Neuroscience*, 12(3), 421–428.
- Berti, S., Geissler, H., Lachmann, T., & Mecklinger, A. (2000). Event-related brain potentials dissociate visual working memory processes under categorical and identical comparison conditions. *Cognitive Brain Research*, 9, 147–155.
- Boles, D. B. (1989). Word attributes and lateralization revisited: Implications for dual coding and discrete versus continuous processing. *Memory & Cognition*, 17(1), 106–114.
- Breedin, S. D., Saffran, E. M., & Coslett, H. B. (1994). Reversal of the concreteness effect in a patient with semantic dementia. *Cognitive Neuropsychology*, 11(6), 617–660.
- Brown, C. M., Hagoort, P., & Kutas, M. (2000). Postlexical integration processes in language comprehension: Evidence from brain-imaging research. In M. S. Gazzaniga (Ed.), *The new cognitive neurosciences* (pp. 881–895). Massachusetts Institute of Technology.
- Burnage, G. (1990). *Celex: A guide for users*. Center for Lexical Information, University of Nijmegen, The Netherlands.
- Caramazza, A., Hills, A. E., Rapp, B., & Romani, C. (1990). The multiple semantics hypothesis: Multiple confusions. *Cognitive Neuropsychology*, 7, 161–189.
- Caramazza, A., & Shelton, J. R. (1998). Domain-specific knowledge systems in the brain: The animate-inanimate distinction. *Journal of Cognitive Neuroscience*, 10, 1–34.
- Chang, T. M. (1986). Semantic memory: facts and models. *Psychological Bulletin*, 99(2), 199–220.
- Chao, L. L., & Martin, A. (2000). Representation of man-made objects in the dorsal stream. *NeuroImage*, 12, 478–484.

- Chastain, G., & Ersoff, J. (1997). Effect of cumulative directional attention shift on the comparison and integration of visual stimuli. *Journal of Experimental Psychology: Human Perception and Performance*, 3(4), 641–652.
- Chasteen, A. L., & Pratt, J. (1999). The effect of inhibition of return on lexical access. *Psychological Science*, 10(1), 41–46.
- Chiarello, C. (1988). Lateralisation of lexical processes in the normal brain: A review of visual half-field research. In H. A. Whitaker (Ed.), *Contemporary reviews in neuropsychology* (pp. 36–76). New-York: Springer-Verlag.
- Christman, S. D. (1993). Local-global processing in the upper versus lower visual fields. *Bulletin of the Psychonomic Society*, 31(4), 275–278.
- Collins, A. M., & Loftus, E. F. (1975). A spreading-activation theory of semantic processing. *Psychological Review*, 82, 407–428.
- Coltheart, M. (1987). *Attention and Performance, Vol. XII: The psychology of reading*. Hillsdale N. J.: Erlbaum.
- Coltheart, M., Inglis, L., Cupples, L., Michie, P., Bates, A., & Budd, B. (1998). A semantic system specific to the storage of information about the visual attributes of animate and inanimate objects. *Neurocase*, 4(4-5), 353–370.
- Corbetta, M., Miezin, F. M., Dobmeyer, S., Shulman, G. L., & Petersen, S. E. (1991). Selective and divided attention during visual discriminations of shape, color, and speed: Functional anatomy by positron emission tomography. *Journal of Neuroscience*, 11, 2383–2402.
- Courtney, S. M., Petit, L., Haxby, J. V., & Ungerleider, L. G. (1998). The role of prefrontal cortex in working memory: Examining the contents of consciousness. *Philosophical Transactions of the Royal Society of London*, 353, 1819–1828.
- Creem, S. H., & Proffitt, D. R. (2001). Defining the cortical visual systems: “What”, “Where”, and “How”. *Acta Psychologica*, 107, 43–68.
- Cycowicz, Y. M., Friedman, D., Rothstein, M., & Snodgrass, J. G. (1998). *Picture naming by young children: Norms for name agreement, familiarity and visual complexity*. Cognitive Electrophysiology Laboratory, New York State Psychiatric Institute.
- Damasio, H., Grabowski, T. J., Tranel, D., Hitchwa, R. D., & Damasio, A. R. (1996). A neural basis for lexical retrieval. *Nature*, 380, 499–505.
- Danckert, J., & Goodale, M. A. (2001). Superior performance for visually guided pointing in the lower visual field. *Experimental Brain Research*, 137, 303–308.
- Das-Smaal, E. A. (1990). Biases in categorization. In J. P. Caverni, J. M. Fabre, & M. Gonzalez (Eds.), *Cognitive biases* (pp. 349–386). Amsterdam: Elsevier Science Publishers.
- Deacon, D., Hewitt, S., Yang, C. M., & Nagata, M. (2000). Event-related potential indices of semantic priming using masked and unmasked words: evidence that the N400 does not reflect a post-lexical process. *Cognitive Brain Research*, 9, 137–146.
- Dejerine, J. (1892). Contribution à l'étude anatomopathologique et clinique des différentes variétés de cécité verbale. *Comptes Rendus Hebdomadaires des Séances et Mémoires de la Société de Biologie, Ninth series*, 4, 61–90.
- D'Eposito, M. D., Detre, J. A., Aguirre, G. K., Stallcup, M., Alsop, D. C., Tippet, L. J., & Farah, M. J. (1997). A functional MRI study of mental image generation. *Neuropsychologia*, 35(5), 725–730.
- D'Eposito, M. D., Postle, B. R., & Lease, J. (1999). Maintenance versus manipulation of information held in working memory: An event-related fMRI study. *Brain and Cognition*, 41, 66–86.
- Desimone, R. (1996). Neural mechanisms for visual memory and their role in attention. *Proceedings of the National Academy of Sciences USA*, 93, 13494–13499.
- Desimone, R., & Ungerleider, L. G. (1989). Neural mechanisms of visual processing in monkeys. In F. Boller & J. Grafman (Eds.), *Handbook of neuropsychology* (pp. 267–299). Amsterdam: Elsevier.
- DeYoe, E. A., Carman, G. J., Bandettini, P., Glickman, S., Wieser, J., Cox, R., Miller, D., & Neitz, J. (1996). Mapping striate and extrastriate visual areas in human cerebral cortex. *Proceedings of the National Academy of Sciences USA*, 93(6), 2382–2386.
- Doninger, G. M., Foxe, J. J., Murray, M. M., Higgins, B. A., Snodgrass, J. G., Schroeder, C. E., & Javitt, D. C. (2000). Activation time course of ventral visual stream object-recognition areas: high density electrical mapping of perceptual closure processes. *Journal of Cognitive Neuroscience*, 12(4), 615–621.

- Driver, J., & Frith, C. (2000). Shifting baselines in attention research. *Nature Reviews: Neuroscience*, 1, 147–148.
- Eimer, M. (1994). An erp study on visual spatial priming with peripheral onsets. *Psychophysiology*, 31, 154–163.
- Farah, M. J. (1990). *Visual agnosia: disorders of object vision and what they tell us about normal vision*. Cambridge, MA: MIT Press.
- Farah, M. J. (1995). Current issues in the neuropsychology of image generation. *Neuropsychologia*, 33(11), 1455–1471.
- Farah, M. J., Hammond, K. H., Mehta, Z., & Ratcliff, G. (1989b). Category-specificity and modality-specificity in semantic memory. *Neuropsychologia*, 27, 193–200.
- Farah, M. J., & McClelland, J. L. (1991). A computational model of semantic memory impairment: Modality specificity and emergent category specificity. *Psychological Review*, 120, 339–357.
- Farah, M. J., Peronnet, F., Weisberg, L. L., & Monheit, M. (1989). Brain activity underlying mental imagery: Event-related potentials during mental image generation. *Journal of Cognitive Neuroscience*, 1, 302–316.
- Faul, F., & Erdfelder, E. (1992). *GPOWER: A priori, post-hoc, and compromise power analyses for MS-DOS [Computer Program]*. Bonn, FRG: Bonn University, Dep. of Psychology.
- Federmeier, K. D., & Kutas, M. (2001). Meaning and modality: Influences of context, semantic memory organization, and perceptual predictability on picture processing. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 27(1), 202–224.
- Felleman, D. J., & Van Essen, D. C. (1991). Distributed hierarchical processing in the primate cerebral cortex. *Cerebral Cortex*, 1, 1–47.
- Forde, E. M. E., Francis, D., Riddoch, M. J., Rumiatti, R., & Humphreys, G. W. (1997). On the links between visual knowledge and naming: A single case study of a patient with a category-specific impairment for living things. *Cognitive Neuropsychology*, 14(3), 403–458.
- Fuentes, L. J., Vivas, A. B., & Humphreys, G. W. (1999a). Inhibitory tagging of stimulus properties in inhibition of return: Effects of semantic priming and flanker interference. *The Quarterly Journal of Experimental Psychology*, 52A(1), 149–164.
- Fuentes, L. J., Vivas, A. B., & Humphreys, G. W. (1999b). Inhibitory mechanisms of attentional networks: Spatial and semantic inhibitory processing. *Journal of Experimental Psychology: Human Perception and Performance*, 25(4), 1114–1126.
- Fuster, J. M. (1999). *Memory in the cerebral cortex: an empirical approach to neural networks in the human and nonhuman primate*. Cambridge, MA: MIT Press.
- Gainotti, G., Silveri, M. C., Daniele, A., & Giustolisi, L. (1995). Neuroanatomical correlates of category-specific semantic disorders: A critical survey. *Memory*, 3, 247–264.
- Galletti, C., Fattori, P., Gamberini, M., & Kutz, D. F. (1999). The cortical visual area V6: brain localization and visual topography. *European Journal of Neuroscience*, 11(11), 3922–3936.
- Ganis, G., Kutas, M., & Sereno, M. I. (1996). The search for ‘common sense’: An electrophysiological study of the comprehension of words and pictures in reading. *Journal of Cognitive Neuroscience*, 8(2), 89–106.
- Gauthier, I., Anderson, A. W., Tarr, M. J., Skudlarski, P., & Gore, J. C. (1997). Levels of categorization in visual recognition studied using functional magnetic resonance imaging. *Current Biology*, 7, 645–651.
- Geschwind, N. (1965). Disconnexion syndromes in animals and man. *Brain*, 88, 237–294.
- Gibson, B. S., & Egeth, H. (1994). Inhibition of return to object-based and environment-based locations. *Perception and Psychophysics*, 55, 323–339.
- Goldenberg, G., Podreka, I., Steiner, M., Wilmes, K., Suess, E., & Deecke, L. (1989). Regional cerebral blood flow patterns in visual imagery. *Neuropsychologia*, 27, 641–664.
- Goldstein, A., & Babkoff, H. (2001). A comparison of upper vs. lower and right vs. left visual fields using lexical decision. *Quarterly Journal of Experimental Psychology*, 54(4), 1239–1259.
- Goodale, M. A. (1996). One visual experience, many visual systems. In T. Inui & J. McClelland (Eds.), *Attention and performance, Vol. XVI: Information integration in perception and communication* (pp. 369–394). Cambridge, MA: MIT Press.

- Goodale, M. A., & Humphrey, G. K. (1988). The objects of action and perception. *Cognition*, 67(1-2), 181–207.
- Goodale, M. A., & Miller, A. D. (1992). Separate visual pathways for perception and action. *Trends in Neurosciences*, 15(1), 20–25.
- Gratton, G., Coles, M. G., & Donchin, E. (1983). A new method for off-line removal of ocular artifact. *Electroencephalography and Clinical Neurophysiology*, 55(4), 468–484.
- Gunter, T. C., Wijers, A. A., Jackson, J. L., & Mulder, G. (1994). Visual spatial attention to stimuli presented on the vertical and horizontal meridian: An ERP study. *Psychophysiology*, 31, 140–153.
- Hagenbeek, R. E., & Van Strien, J. W. (2002). Left-right and upper-lower visual field asymmetries for face matching, letter naming, and lexical decision. *Brain and Cognition*, 49(1), 34–44.
- Halgren, E., Raji, T., Marinkovic, K., Jousmäki, V., & Hari, R. (2000). Cognitive response profile of the human fusiform face area as determined by MEG. *Cerebral Cortex*, 10, 69–81.
- Harman, C., Posner, M. I., Rothbart, M. K., & Thomas-Trapp, L. (1994). Development of orienting to locations and objects in human infants. *Canadian Journal of Experimental Psychology*, 48(2), 301–318.
- Harter, M. R., Miller, S. L., Price, N. J., Lalonde, M. E., & Keyes, A. L. (1989). Neural processes involved in directing attention. *Journal of Cognitive Neuroscience*, 1, 223–237.
- Haxby, J. V., Grady, C. L., Horwitz, B., Ungerleider, L. G., Mishkin, M., Carson, R. E., Herscovitch, P., Shapiro, M. B., & Rapoport, S. I. (1991). Dissociation of object and spatial visual processing pathways in human extrastriate cortex. *Proceedings of the National Academy of Sciences USA*, 88, 1621–1625.
- Haxby, J. V., Horwitz, B., Ungerleider, L. G., Maisog, J. M., Pietrini, P., & Grady, C. L. (1994). The functional organization of human extrastriate cortex: A PET-rCBF study of selective attention to faces and locations. *Journal of Neuroscience*, 14, 6336–6353.
- Hayes-Roth, B., & Hayes-Roth, F. (1977). Concept learning and the recognition and classification of exemplars. *Journal of Verbal Learning and Verbal Behavior*, 16, 321–338.
- He, S., Cavanagh, P., & Intriligator, J. (1996). Attentional resolution and the locus of visual awareness. *Nature*, 383, 334–337.
- Heinze, H.-J., Mangun, G. R., Burchert, W., Hinrichs, H., Scholz, M., Münte, T. F., Gos, A., Scherg, M., Johannes, S., Hundeshagen, H., Gazzaniga, M. S., & Hillyard, S. A. (1994). Combined spatial and temporal imaging of brain activity during visual selective attention in humans. *Nature*, 372, 543–546.
- Hickok, G. (2000). Towards a functional neuroanatomy of speech perception. *Trends in Cognitive Sciences*, 4(4), 131–138.
- Hillis, A. E., Rapp, B. C., & Caramazza, A. (1993). Constraining claims about theories of semantic memory: more on unitary versus multiple semantics. *Cognitive Neuropsychology*, 12, 175–186.
- Hodges, J. R., Patterson, K., Oxbury, S., & Funnell, E. (1992). Semantic dementia: Progressive fluent aphasia with temporal lobe atrophy. *Brain*, 115, 1783–1806.
- Hodges, J. R., Spatt, J., & Patterson, K. (1999). “What” and “How”: evidence for the dissociation of object-knowledge and mechanical problem-solving skills in the human brain. *Proceedings of the National Academy of Sciences USA*, 96, 9444–9448.
- Holcomb, P. J. (1988). Automatic and attentional processing: An event-related brain potential analysis of semantic processing. *Brain and Language*, 35, 66–85.
- Holcomb, P. J., Kounios, J., Anderson, J. E., & West, W. C. (1999). Dual-coding, context-availability, and concreteness effects in sentence comprehension: An electrophysiological investigation. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 25(3), 721–742.
- Holcomb, P. J., & McPherson, W. B. (1994). Event-related potentials reflect semantic priming in an object decision task. *Brain and Cognition*, 24, 259–276.
- Hopfinger, J. B., Jha, A. P., Hopf, J.-M., Girelli, M., & Mangun, G. R. (2000). Electrophysiological and neuroimaging studies of voluntary and reflexive attention. In J. Driver & S. Monsell (Eds.), *Attention and performance*, Vol. XVIII (pp. 125–153). Oxford: Oxford University Press.
- Hopfinger, J. B., & Mangun, G. R. (1998). Reflexive attention modulates processing of visual stimuli

- in extrastriate cortex. *Psychological Science*, 9(6), 441–447.
- Howard, D., Patterson, K., Wise, R., Brown, D., Friston, K., Weiller, C., & Frackowiak, R. (1992). The cortical localization of the lexicons. *Brain*, 115, 1769–1782.
- Humphreys, G. W., & Forde, E. M. E. (2001). Hierarchies, similarity and interactivity in object recognition: 'category-specific' neuropsychological deficits. *Behavioral and Brain Sciences*, 24(3), 453–476.
- Humphreys, G. W., Riddoch, M. J., & Price, C. (1997). Top-down processes in object identification: Evidence from experimental psychology, neuropsychology and functional anatomy. *Proceedings for the Royal Society, Series B*, 352, 1275–1282.
- Ishai, A., Ungerleider, L. G., Martin, A., Schouten, J. L., & Haxby, J. V. (1999). Distributed representation of objects in the human ventral visual pathway. *Proceedings of the National Academy of Sciences USA*, 96, 9379–9384.
- Jeannerod, M. (1997). *The cognitive neuroscience of action*. Oxford: Blackwell Publishers.
- Jonides, J. (1981). Voluntary versus automatic control over the mind's eye's movement. In J. B. Long & A. D. Baddeley (Eds.), *Attention and performance, Vol. IX* (pp. 187–203). Hillsdale NJ: Erlbaum.
- Jordan, H., & Tipper, S. P. (1998). Object-based inhibition of return in static displays. *Psychonomic Bulletin and Review*, 5(3), 504–509.
- Jordan, H., & Tipper, S. P. (1999). Spread of inhibition across an object's surface. *British Journal of Psychology*, 90, 495–507.
- Just, M. A., & Carpenter, P. A. (1992). A capacity theory of comprehension: Individual differences in working memory. *Psychological Review*, 99, 122–149.
- Kanwisher, N., Chun, M. M., McDermott, J., & Ledden, P. J. (1996). Functional imaging of human visual recognition. *Cognitive Brain Research*, 5, 55–67.
- Kawashima, R., Hatano, G., Oizumi, K., Sugiura, M., Fukuda, H., Itoh, K., Kato, T., Nakamura, A., Hatano, K., & Kojima, S. (2000). Different neural systems for recognizing plants, animals, and artefacts. *Brain Research Bulletin*, 54(3), 313–317.
- Kellenbach, M. L., Brett, M., & Patterson, K. (2001). Large, colorful, or noisy? attribute- and modality-specific activations during retrieval of perceptual attribute knowledge. *Cognitive, Affective, & Behavioral Neuroscience*, 1(3), 207–221.
- Kess, J. F. (1991). *Psycholinguistics: psychology, linguistics, and the study of natural language*. Amsterdam: John Benjamins Publishing Co.
- Kieras, D. (1978). Beyond pictures and words: Alternative information-processing models for imagery effects in verbal memory. *Psychological Bulletin*, 85, 532–554.
- Klaver, P. (1999a). Representations in human visual short-term memory: An event-related potential study. *Neuroscience Letters*, 268, 65–68.
- Klimesch, W. (1999). EEG alpha and theta oscillations reflect cognitive and memory performance: a review and analysis. *Brain Research Reviews*, 29, 169–195.
- Koch, C., & Crick, F. (1994). Some further ideas regarding the neuronal basis of awareness. In C. Koch & J. L. Davis (Eds.), *Large-scale neuronal theories of the brain* (pp. 93–109). Cambridge, MA: MIT Press.
- Kosslyn, S. M. (1994a). *Image and brain: the resolution of the imagery debate*. Cambridge, MA: MIT Press.
- Kosslyn, S. M., Alpert, N. M., Thompson, W. L., Chabris, C. F., Rauch, S. L., & Anerson, A. K. (1994b). Identifying objects seen from different viewpoints. a PET investigation. *Brain*, 117, 1055–1071.
- Kosslyn, S. M., & Koenig, O. (1992). *Wet mind: The new cognitive neuroscience*. New York: Free Press.
- Kounios, J., & Holcomb, P. J. (1994). Concrete effects in semantic processing: ERP evidence supporting dual-coding theory. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 20(4), 804–823.
- Kourtzi, Z., & Kanwisher, N. (2000). Cortical regions involved in perceiving object shape. *The Journal of Neuroscience*, 20(9), 3310–3318.
- Kuriki, S., Takeuchi, F., & Hirata, Y. (1998). Neural processing of words in the human extrastriate visual cortex. *Cognitive Brain Research*, 6, 193–203.
- Kutas, M., & Hillyard, S. A. (1980). Reading senseless sentences: Brain potentials reflect semantic incongruity. *Science*, 207, 203–205.

- Kutas, M., & Hillyard, S. A. (1984). Brain potentials during reading reflect word expectancy and semantic association. *Nature*, *307*, 161–163.
- LaBerge, D. (2000). Networks of attention. In M. S. Gazzaniga (Ed.), *The new cognitive neurosciences* (pp. 711–724). Cambridge, MA: MIT Press.
- Laine, M., Rinne, J. O., Hiltunen, J., Kaasinen, V., & Sipilä, H. (2002). Different brain activation patterns during production of animals versus artifacts: a PET activation study on category-specific processing. *Cognitive Brain Research*, *13*, 95–99.
- Lambert, A. J., Beard, C. T., & Thompson, R. J. (1988). Selective attention, visual laterality, awareness, and perceiving the meaning of parafoveally presented words. *The Quarterly Journal of Experimental Psychology*, *40A*(4), 615–652.
- Locke, J. (1690). *An essay concerning human understanding*.
- Logie, R. H., & Baddeley, A. D. (1990). Imagery and working memory. In P. J. Hampson, D. F. Marks, & J. T. Richardson (Eds.), *Imagery: Current developments* (pp. 103–128). London: Routledge.
- Löw, A., Rockstroh, B., Hauk, O., Berg, P., & Maier, W. (1999). Determining working memory from ERP topography. *Brain Topography*, *12*(1), 39–47.
- Lupker, S. J. (1985). Relatedness effects in word and picture naming: parallels, differences, and structural implications. In A. W. Ellis (Ed.), *Progress in the psychology of language, vol. 1* (pp. 109–142). London: Lawrence Erlbaum.
- Mangun, G. R. (1994). Orienting attention in the visual fields: An electrophysiological analysis. In H. J. Heinze, T. F. Münte, & G. R. Mangun (Eds.), *Cognitive electrophysiology* (pp. 81–101). Boston: Birkhäuser.
- Mangun, G. R. (1995). Neural mechanisms of visual selective attention. *Psychophysiology*, *32*, 4–18.
- Mangun, G. R., & Hillyard, S. A. (1995). Mechanisms and models of selective attention. In M. D. Rugg & M. G. H. Coles (Eds.), *Electrophysiology* (pp. 40–85) (pp. 40–85). Oxford: Oxford University Press.
- Mangun, G. R., Hillyard, S. A., & Luck, S. A. (1993). Electrocortical substrates of visual selective attention. In D. E. Meyer & S. Kornblum (Eds.), *Attention and performance, Vol. XII. synergies in experimental psychology, artificial intelligence, and cognitive neuroscience* (pp. 219–243). Cambridge, MA: MIT Press.
- Mangun, G. R., Jha, A. P., Hopfinger, J. B., & Handy, T. C. (2000). The temporal dynamics and functional architecture of attentional processes in human extrastriate cortex. In M. S. Gazzaniga (Ed.), *The new cognitive neurosciences* (pp. 701–710). Cambridge, MA: MIT Press.
- Martain, R. (1995). Norms for name and concept agreement, familiarity, visual complexity and image agreement on a set of 216 pictures. *Psychologica Belgica*, *35*(4), 205–225.
- Martin, A. (1998). Organization of semantic knowledge and the origin of words in the brain. In N. G. Jablonski & L. C. Aiello (Eds.), *The origin and diversification of language* (pp. 69–88). Memoirs of the California Academy of Sciences, Number 24.
- Martin, A., & Chao, L. L. (2001). Semantic memory and the brain: structure and processes. *Current Opinion in Neurobiology*, *11*, 194–201.
- Martin, A., Wiggs, C. L., Altemus, M., Rubenstein, C., & Murphy, D. L. (1995). Working memory as assessed by subject-ordered tasks in patients with obsessive-compulsive disorder. *Journal of Clinical and Experimental Neuropsychology*, *17*(5), 786–792.
- Martin, A., Wiggs, C. L., Ungerleider, L. G., & Haxby, J. V. (1995). Discrete cortical regions associated with knowledge of color and knowledge of action. *Science*, *270*, 102–105.
- Martin, A., Wiggs, C. L., Ungerleider, L. G., & Haxby, J. V. (1996). Neural correlates of category-specific knowledge. *Nature*, *379*, 649–652.
- Maunsell, J. H. R., & Van Essen, D. C. (1987). Topographical organization of the middle temporal visual area in the macaque monkey: representational biases and the relationship to callosal connections and myeloarchitectonic boundaries. *Journal of Comparative Neurology*, *266*, 535–555.
- Maylor, E. A. (1985). Facilitatory and inhibitory components of orienting in visual space. In M. I. Posner & B. B. Marian (Eds.), *Attention and performance, Vol. XI* (pp. 189–207). Hillsdale NJ: Erlbaum.
- Maylor, E. A., & Hockey, R. (1985). Inhibitory component of externally controlled covert orienting in visual space. *Journal of Experimental Psychology: Human Perception and Performance*, *11*(6), 777–787.
- McCann, R. S., Folk, C. L., & Johnston, J. C. (1992). The role of spatial attention in visual word pro-

- cessing. *Journal of Experimental Psychology: Human Perception and Performance*, 18(4), 1015–1029.
- McDonald, J. J., Ward, L. M., & Kiehl, K. A. (1999). An event-related brain potential study of inhibition of return. *Perception and Psychophysics*, 61(7), 1411–1423.
- McPherson, W. B., & Holcomb, P. J. (1992). Semantic priming with pictures and the n400 component. *Psychophysiology*, 29, S51.
- McPherson, W. B., & Holcomb, P. J. (1999). An electrophysiological investigation of semantic priming with pictures of real objects. *Psychophysiology*, 36, 53–65.
- McRae, K., de Sa, V. R., & Seidenberg, M. S. (1997). On the nature and scope of featural representations for word meaning. *Journal of Experimental Psychology: General*, 126, 99–130.
- Mecklinger, A., & Müller, N. (1996). Dissociations in the processing of 'what' and 'where' information in working memory: An event-related potential analysis. *Journal of Cognitive Neuroscience*, 8(5), 453–473.
- Mecklinger, A., & Pfeifer, E. (1996). Event-related potentials reveal topographical and temporal distinct neuronal activation patterns for spatial and object working memory. *Cognitive Brain Research*, 4, 211–224.
- Menard, M., Kosslyn, S. M., Thompson, W. L., Alpert, N. A., & Rauch, S. L. (1996). Encoding words and pictures: A positron emission tomography study. *Neuropsychologia*, 34(3), 185–194.
- Miller, G. A. (1991). *The science of words*. New York: Scientific American Library.
- Mishkin, M., & Forgays, D. G. (1952). Word recognition as a function of retinal locus. *Journal of Experimental Psychology*, 43, 43–48.
- Moss, H. E., Tyler, L. K., Durrant-Peatfield, M., & Bunn, E. M. (1998). Two eyes of a see-through: Impaired and intact semantic knowledge in a case of a selective deficit for living things. *Neurocase*, 4, 291–310.
- Müller, H. J., & Rabbitt, P. M. A. (1989). Reflexive and voluntary orienting of visual attention: Time course of activation and resistance to interruption. *Journal of Experimental Psychology: Human Perception and Performance*, 15(2), 315–330.
- Müller, H. J., & Von Mühlhausen, A. (1996). Attentional tracking and inhibition of return in dynamic displays. *Perception and Psychophysics*, 58(2), 224–249.
- Mummery, C. J., Patterson, K., Hodges, J. R., & Price, C. J. (1998). Functional neuroanatomy of the semantic system: Divisible by what. *Journal of Cognitive Neuroscience*, 10(6), 766–777.
- Nakayama, K., & Mackeben, M. (1989). Sustained and transient components of focal visual attention. *Vision Research*, 29, 1631–1647.
- Nelson, D. L., Reed, V. S., & McEvoy, C. L. (1977). Learning to order pictures and words: A model of sensory and semantic encoding. *Journal of Experimental Psychology: Human Learning and Memory*, 3, 485–497.
- Nielsen-Bohlman, L., & Knight, R. T. (1999). Prefrontal cortical involvement in visual working memory. *Cognitive Brain Research*, 8, 299–310.
- Okita, T., Konishi, K., Takashi, M., & Tanaka, H. (1990). Effects of selective attention to upper and lower visual-field pattern stimuli on event-related brain potentials. *Japanese Journal of Physiological Psychology and Psychophysiology*, 8(2), 81–93.
- Okita, T., Wijers, A. A., Mulder, G., & Mulder, L. J. M. (1985). Memory search and visual spatial attention: An event-related brain potential analysis. *Acta Psychologica*, 60, 263–292.
- Owen, A. M., Milner, B., Petrides, M., & Evans, A. C. (1996). Memory for object features versus memory for object locations: A positron-emission tomography study of encoding and retrieval processes. *Proceedings of the National Academy of Sciences USA*, 93, 9212–9217.
- Paivio, A. (1971). *Imagery and verbal processes*. New York: Holt, Rinehart, & Winston.
- Paivio, A. (1991). Dual coding theory: Retrospect and current status. *Canadian Journal of Psychology*, 45, 255–287.
- Patterson, K., & Hodges, J. R. (1995). Disorders of semantic memory. In A. D. Baddeley, B. A. Wilson, & F. N. Watts (Eds.), *Handbook of memory disorders* (pp. 167–186). Chichester: John Wiley & Sons Ltd.
- Perani, D., Cappa, S. F., V. B., Bressi, S., Gorno-Tempini, M., Matarrese, M., & Fazio, F. (1995). Different neural systems for the recognition of animals and man-made tools. *Neuroreport*, 6, 1637–1641.

- Peronnet, F., & Farah, M. J. (1989). Mental rotation: An event-related potential study with a validated mental rotation task. *Brain and Cognition*, 9, 279–288.
- Petersen, S. E., Fox, P. T., Posner, M. I., Mintun, M., & Raichle, M. E. (1988). Positron emission tomographic studies of the cortical anatomy of single word processing. *Nature*, 331, 585–589.
- Petersen, S. E., Fox, P. T., Posner, M. I., Mintun, M., & Raichle, M. E. (1989). Positron emission tomographic studies of the processing of single words. *Journal of Cognitive Neuroscience*, 1, 153–170.
- Petersen, S. E., Fox, P. T., Snyder, A. Z., & Raichle, M. E. (1990). Activation of extrastriate and frontal cortical areas by visual words and word-like stimuli. *Science*, 249, 1041–1044.
- Pivik, R. T., Broughton, R. J., Coppola, R., Davidson, R. J., Fox, N., & Nuwer, M. R. (1993). Guidelines for the recording and quantitative analysis of electroencephalographic activity in research contexts. *Psychophysiology*, 30, 547–558.
- Posner, M. I., & Cohen, Y. (1984a). Attention and the control of eye-movements. In I. G. E. Stelmach & J. Requin (Eds.), *Tutorials in motor behaviour*. Amsterdam, North-Holland.
- Posner, M. I., & Cohen, Y. (1984b). Components of visual orienting. In H. Bouwma & B. Bouwhuis (Eds.), *Attention and Performance*, Vol. X (pp. 531–556). Hillsdale, NJ: Erlbaum.
- Posner, M. I., Rafal, R. D., Choate, L. S., & Vaughan, J. (1985). Inhibition of return: Neural basis and function. *Cognitive Neuropsychology*, 2, 211–228.
- Previc, P. H. (1990). Functional specialization in the lower and upper visual fields in humans: Its ecological origins and neurophysiological implications. *Behavioral and Brain Sciences*, 13, 519–575.
- Pugh, K. R., Mencl, W. E., Jenner, A. J., Katz, L., Lee, J. R., Shaywitz, S. E., & Shaywitz, B. A. (2000). Functional neuroimaging studies of reading and reading disability (developmental dyslexia). *Mental Retardation and Developmental Disabilities Review*, 6(3), 207–213.
- Pulvermüller, F. (1999a). Words in the brain's language. *Behavioral and Brain Sciences*, 22(2), 253–279.
- Pulvermüller, F. (2001). Brain reflections of words and their meaning. *Trends in Cognitive Sciences*, 5(12), 517–524.
- Pulvermüller, F., Lutzenberger, W., & Preissl, H. (1999b). Nouns and verbs in the intact brain: Evidence from event-related potentials and high-frequency cortical responses. *Cerebral Cortex*, 9, 497–506.
- Rafal, R. D., Calabresi, P. A., Brennan, C. W., & Scollio, T. K. (1989). Saccade preparation inhibits reorienting to recently attended locations. *Journal of Experimental Psychology: Human Perception and Performance*, 15(4), 673–685.
- Riddoch, M. J., Humphreys, G. W., Gannon, T., Blott, W., & Jones, V. (1999). Memories are made of this: The effects of time on stored visual knowledge in case of visual agnosia. *Brain*, 122, 537–559.
- Rizzolatti, G., Gentilucci, M., & Matelli, M. (1985). Selective spatial attention: One center, one circuit, or many circuits? In M. I. Posner & O. S. M. Marin (Eds.), *Attention and performance*, Vol. XI (pp. 251–265). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Ro, T., & Rafal, R. D. (1999). Components of reflexive visual orienting to moving objects. *Perception and Psychophysics*, 61(5), 826–836.
- Roesler, F., Heil, M., & Hennighausen, E. (1995). Exploring memory functions by means of brain electric topography: A review. *Brain Topography*, 7(4), 301–313.
- Rogers, T. T., & Plaut, D. C. (2002). Connectionist perspectives on category-specific deficits. In E. Forde & G. Humphreys (Eds.), *Category-specificity in brain and mind* (pp. 251–284). New York: Psychology Press.
- Rosch, E. (1978). Principles of categorization. In E. Rosch & B. Lloyd (Eds.), *Cognition and categorization* (pp. 27–48). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Rösler, F., Heil, M., Bajric, J., Pauls, A. C., & Hennighausen, E. (1995). Patterns of cerebral activation while images are rotated and changed in size. *Psychophysiology*, 32, 135–149.
- Rubin, N., Nakayama, K., & Shapley, R. (1996). Enhanced perception of illusory contours in the lower versus upper visual hemifields. *Science*, 271, 651–653.
- Ruchkin, D. S., Canoune, H. L., Johnson Jr., R., & Ritter, W. (1995). Working memory and preparation elicit different patterns of slow wave event-

- related brain potentials. *Psychophysiology*, 32, 399–410.
- Ruchkin, D. S., Grafman, J., Krauss, G. L., Johnson Jr, R., Canoune, H., & Ritters, W. (1994). Event-related brain potential evidence for a verbal working memory deficit in multiple sclerosis. *Brain*, 117, 289–305.
- Ruchkin, D. S., Johnson Jr, R., Grafman, J., Canoune, H., & Ritters, W. (1992). Distinctions and similarities among working memory processes: An event-related potential study. *Cognitive Brain Research*, 1, 53–66.
- Ruchkin, D. S., Johnson Jr, R., Grafman, J., Canoune, H., & Ritters, W. (1997). Multiple visuospatial working memory buffers: Evidence from spatiotemporal patterns of brain activity. *Neuropsychologia*, 35(2), 195–209.
- Rugg, M. D., & Coles, M. G. (1995). *Electrophysiology of mind, event-related brain potentials and cognition*. Oxford: Oxford university press.
- Saffran, E. M., & Schwartz, M. F. (1994). Of cabages and things: Semantic memory from a neuropsychological perspective - a tutorial review. In C. Umiltà & M. Moscovitch (Eds.), *Attention and performance*, Vol. XV (pp. 507–536). Cambridge, MA: MIT Press.
- Schendan, H. E. (2002). Neurophysiological evidence for two processing times for visual object identification. *Neuropsychologia*, 40, 931–945.
- Schwanenflugel, P., & Shoben, E. (1983). Differential context effects in comprehension of abstract and concrete verbal materials. *Journal of Experimental psychology: Learning, Memory, and Cognition*, 9, 82–102.
- Sereno, M. I., Dale, A. M., Reppas, J. B., Kwong, K. K., Belliveau, J. W., Brady, T. J., Rosen, B. R., & Tootell, R. B. H. (1995). Borders of multiple visual areas in human revealed by functional magnetic resonance imaging. *Science*, 268, 889–893.
- Shiffrin, R. M., & Schneider, W. (1977). Controlled and automatic human information processing: II. perceptual learning, automatic attending, and a general theory. *Psychological Review*, 84, 127–190.
- Silveri, M. C., Gianotti, G., Perani, D., Cappelletti, J. Y., Carbone, G., & Fazio, F. (1997). Naming deficit for nonliving items: Neuropsychological and PET study. *Neuropsychologia*, 35, 359–367.
- Silveri, M. G., & Gainotti, G. (1988). Interaction between vision and language in category-specific semantic impairment. *Cognitive Neuropsychology*, 5(6), 677–709.
- Skrandies, W. (1985). Human contrast sensitivity: regional retinal differences. *Human Neurobiology*, 4(2), 97–99.
- Smith, E. E. (2000). Neural bases of human working memory. *Current Directions in Psychological Science*, 9, 45–49.
- Smith, E. E., & Jonides, J. (1997). Working memory: A view from neuroimaging. *Cognitive Psychology*, 33, 5–42.
- Smith, E. E., Jonides, J., Koeppel, R. A., Awh, E., Schumacher, E. H., & Minoshima, S. (1995). Spatial versus object working memory. *Journal of Cognitive Neuroscience*, 7(3), 337–356.
- Snodgrass, J. G., & Vanderwart, M. (1980). A standardized set of 260 pictures: Norms for name agreement, image agreement, familiarity and visual complexity. *Journal of Experimental Psychology: Human Learning and Memory*, 6(2), 174–215.
- Tagamets, M. A., Novick, J. M., Chalmers, M. A., & Friedman, R. B. (2000). A parametric approach to orthographic processing in the brain: An fMRI study. *Journal of Cognitive Neuroscience*, 12(2), 281–297.
- Tipper, S. P. (1991). Object-centred inhibition of return of visual attention. *Quarterly Journal of Experimental Psychology*, 43(2), 289–298.
- Tipper, S. P., Rafal, R., Reuter-Lorentz, P. A., Starveldt, Y., Ro, T., Egly, R., Danzinger, S., & Weaver, B. (1997). Object-based facilitation and inhibition from visual orienting in the human split-brain. *Journal of Experimental Psychology: Human Perception and Performance*, 23, 1522–1532.
- Tranel, D., & Damasio, A. R. (1995). Neurobiological foundations of human memory. In A. D. Baddeley, B. A. Wilson, & F. N. Watts (Eds.), *Handbook of memory disorders* (pp. 27–50). West-Sussex: John Wiley & Sons Ltd.
- Tranel, D., Damasio, H., & Damasio, A. R. (1997). A neural basis for the retrieval of conceptual knowledge. *Neuropsychologia*, 35(10), 1319–1327.
- Treisman, A. (1988). Features and objects: the fourteenth Barlett memorial lecture. *Quarterly Journal of Experimental Psychology*, 40A, 201–237.
- Treisman, A., & Gelade, G. (1980). A feature integration theory of visual attention. *Cognitive Psychology*, 12, 97–136.

- Tulving, E. (1972). Episodic and semantic memory. In E. Tulving & W. Donaldson (Eds.), *Organization of memory*. New York: Academic Press.
- Tyler, L., & Moss, H. E. (1997). Imageability and category-specificity. *Cognitive Neuropsychology*, 14(2), 293–318.
- Uhl, F., Goldenberg, G., Lang, W., Lindinger, G., Steiner, M., & Deecke, L. (1990). Cerebral correlates of imagining colours, faces and a map - II. Negative cortical DC potentials. *Neuropsychologia*, 28(1), 81–93.
- Ungerleider, L. G., Courtney, S. M., & Haxby, J. V. (1998). A neural system for human visual working memory. *Proceedings of the National Academy of Sciences USA*, 95, 883–890.
- Ungerleider, L. G., & Mishkin, M. (1982). Two cortical visual systems. In J. Ingle, M. A. Goodale, & R. J. W. Mansfield (Eds.), *Current perspectives in dysphasia* (pp. 594–586). Edinburgh: Churchill Livingstone.
- Van Essen, D. C. (1985). Functional organization of primate visual cortex. In A. Peters & E. G. Jones (Eds.), *Cerebral cortex*, Vol. 3 (pp. 259–329). New York: Plenum.
- van Loon-Vervoorn, W. (1985). *Voorstelbaarheidswaarden van nederlandse woorden*. Lisse: Swets & Zeitlinger.
- van Schie, H. T., Wijers, A. A., Kellenbach, M. L., & Stowe, L. A. (in press). An event-related potential investigation of the relationship between semantic and perceptual levels of representation. *Brain and Language*.
- van Schie, H. T., Wijers, A. A., & Mulder, G. (1997). *Inhibition of return: An ERP-study*. Unpublished master's thesis, School of Behavioral Cognitive and Brain Sciences.
- Warrington, E. K. (1975). The selective impairment of semantic memory. *Quarterly Journal of Experimental Psychology*, 27, 635–657.
- Warrington, E. K., & McCarthy, R. A. (1983). Category-specific access dysphasia. *Brain*, 106, 859–878.
- Warrington, E. K., & McCarthy, R. A. (1987). Categories of knowledge: Further fractionation and an attempted integration. *Brain*, 110, 1273–1296.
- Warrington, E. K., & McCarthy, R. A. (1994). Multiple meaning systems in the brain: A case for visual semantics. *Neuropsychologia*, 32(12), 1465–1473.
- Warrington, E. K., & Shallice, T. (1984). Category-specific semantic impairment. *Brain*, 107, 829–854.
- Weiss, S., & Rappelsberger, P. (2000). Long-range EEG synchronization during word encoding correlates with successful memory performance. *Cognitive Brain Research*, 9(3), 299–312.
- West, W., & Holcomb, P. (2000). Imaginal, semantic and surface-level processing of concrete and abstract words: An electrophysiological investigation. *Cognitive Neuroscience*, 12, 1024–1037.
- Wiggs, C. L., Weisberg, J., & Martin, A. (1999). Neural correlates of semantic and episodic memory retrieval. *Neuropsychologia*, 37, 103–118.
- Wijers, A. A., Mulder, G., Gunter, T. C., & Smid, H. G. O. M. (1996). Brain potential analysis of selective attention. In O. Neumann & A. F. Sanders (Eds.), *Handbook of perception and action*, Vol. 3 (pp. 333–387). London: Academic Press Ltd.
- Wijers, A. A., Mulder, G., Okita, T., & Mulder, L. J. M. (1989a). Event-related potentials during memory search and selective attention to letter size and conjunctions of letter size and color. *Psychophysiology*, 26, 529–547.
- Wijers, A. A., Mulder, G., Okita, T., Mulder, L. J. M., & Scheffers, M. K. (1989b). Attention to color: An ERP analysis of selection, controlled search and motor activation. *Psychophysiology*, 26, 89–109.
- Wijers, A. A., Mulder, G., Otten, L., Feenstra, S., & Mulder, L. J. M. (1989b). Brain potentials during selective attention, memory search and mental rotation. *Psychophysiology*, 26, 89–109.