



UvA-DARE (Digital Academic Repository)

Affect and action : contrasting conscious and nonconscious processes

Rotteveel, M.

Publication date
2003

[Link to publication](#)

Citation for published version (APA):

Rotteveel, M. (2003). *Affect and action : contrasting conscious and nonconscious processes*. EPOS, experimenteel-psychologische onderzoekschool.

General rights

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), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

REFERENCES

- Allport, A. (1989). Visual Attention. In M.I. Posner (Ed.), *Foundations of cognitive Science* (pp. 631-682). Cambridge, MA: MIT Press.
- Baars, B.J., & McGovern, K. (1993). Does philosophy help or hinder scientific work on consciousness? *Consciousness and Cognition*, 2, 18-27.
- Banse, R. (2001). Affective priming with liked and disliked persons: Prime visibility determines congruency and incongruency effects. *Cognition and Emotion*, 15, 501-520.
- Bargh, J.A. (1994). The four horsemen of automaticity: Awareness, intention, efficiency, and control in social cognition. In R.S. Wyer and T.K. Srull (eds.), *Handbook of social Cognition* (2nd ed., Vol. 1, pp. 1-40). Hillsdale, NJ: Erlbaum.
- Bargh, J.A. (1997). The automaticity of everyday life. In R.S. Wyer (ed.), *Advances in social cognition* (Vol. 10, pp. 1-62). Mahwah, NJ: Erlbaum.
- Bargh, J.A., Chaiken, S., Govender, R., & Pratto, F. (1992). The generality of the attitude activation effect. *Journal of Personality and Social Psychology*, 62, 893-912.
- Bargh, J.A., Chaiken, S., Raymond, P., & Hymes, C. (1996). The automatic evaluation effect: Unconditional automatic attitude activation with a pronunciation task. *Journal of Experimental Social Psychology*, 32, 104-128.
- Bargh, J.A., & Chartrand, T.L. (1999). The unbearable automaticity of being. *American Psychologist*, 54, 462-479.
- Baudouin, J.-Y., Gilibert, D., Sansone, S., & Tiberghien, G. (2000). When the smile is a cue to familiarity. *Memory*, 8, 285-292.
- Bernstein, I.H., & Welch, K.R. (1991). Awareness, false recognition, and the Jacoby-Whitehouse effect. *Journal of Experimental Psychology: General*, 120, 324-328.
- Berridge, K.C., Winkielman, P. What is an unconscious emotion? *Cognition and Emotion*. In press.
- Bonarius, H. (2002). *Emotion, Illusory Movements, and Action Readiness*. Unpublished Master's thesis. University of Amsterdam, the Netherlands.

Bonnano, G.A., & Stillings, N.A. (1986). Preference, familiarity, and recognition after repeated brief exposures to random geometric shapes. *American Journal of Psychology*, 99, 403-415.

Bornstein, R.F. (1989). Exposure and affect: Overview and meta-analysis of research, 1968-1987. *Psychological Bulletin*, 106, 265-289.

Bornstein, R.F., & d'Agostino, P.R. (1992). Stimulus recognition and the mere exposure effect. *Journal of Personality and Social Psychology*, 63, 545-552.

Brainard, R.W., Irby, F.S., Fitts, P.M., & Alluisi, E.A. (1962). Some variables influencing the rate of gain of information. *Journal of Experimental Psychology*, 63, 105-110.

Brendl, C.M., Markman, A.B., Messner, C. (2001). How do indirect measures of evaluation work? Evaluating the inference of prejudice in the implicit association test. *Journal of Personality and Social Psychology*, 81, 760-773.

Bridgeman, B. (1998). Durations of stimuli displayed on video display terminals: $(n-1)/f + \text{persistence}$. *Psychological Science*, 9, 232-233.

Burnage, G. (1990). *CELEX: A guide for users*. Nijmegen, the Netherlands: SSN.

Cacioppo, C.T., & Berntson, G.G. (1994). Relationship between attitudes and evaluative space, A critical review, with emphasis on the separability of positive and negative substrates. *Psychological Bulletin*, 115, 401-423.

Cacioppo, J.T., Bush, L.K., & Tassinari, L.G. (1992). Microexpressive facial actions as a function of affective stimuli: Replication and extension. *Personality and Social Psychology Bulletin*, 18, 515-526.

Cacioppo, J.T., & Gardner, W.L. (1999). Emotion. *Annual Review of Psychology*, 50, 191-214.

Cacioppo, J.T., Petty, R.E., Losch, M.E., & Sook Kim, H. (1986). Electromyographic activity over facial muscle regions can differentiate the valence and intensity of affective reactions. *Journal of Personality and Social Psychology*, 50, 260-268.

Cacioppo, J.T., Priester, J.R., & Berntson, G.G. (1993). Rudimentary determinants of attitudes. II: Arm flexion and extension have differential effects on attitudes. *Journal of Personality and Social Psychology*, 65, 5-17.

Carver, C.S., & White, T.L. (1994), Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales. *Journal of Personality and Social Psychology* 67, 319-333.

Capalbo, M., Den Dulk, P., & Phaf, R.H., P. (2000). A dual-pathway model for affective priming. *Journal of Cognitive Neuroscience*, 9 (supplement), 54.

Chartrand, T.L., & Bargh, J.A. (1999). The Chameleon effect: The perception-behavior link and social interaction. *Journal of Personality and Social Psychology*, 76, 893-910.

Cheesman, J., & Merikle, P.M. (1984). Priming with and without awareness. *Perception and Psychophysics*, 36, 387-395.

Chen, M., & Bargh, J.A. (1999). Consequences of automatic evaluation: Immediate behavioral predispositions to approach or avoid the stimulus. *Personality and Social Psychology Bulletin*, 25, 215-224.

Clore, G.L., & Colcombe, S. (2001). The parallel worlds of affective concepts and feelings. To appear in: J., Musch, & K.C., Klauer, (Eds.), *The psychology of evaluation: Affective Processes in Cognition and Emotion*. Mahwah NJ: Lawrence Erlbaum.

Clore, G.L., & Ortony, A. Cognition in emotion : Always, sometimes, or never ? In : *Cognitive Neuroscience of Emotion*. R.D., Lane, & L. Nadel (Eds.). Oxford University Press, NY : 2000.

Cornelius, R.R. (1996). *The Science of Emotion*. New Jersey: Simon & Schuster.

Craik, F.I.M., Govoni, R., Naveh-Benjamin, M., Anderson, N.D. (1996). The effects of divided attention on encoding and retrieval processes in human memory. *Journal of Experimental Psychology: General*, 125, 159-180.

Critchley, H., Daly, E., Philips, M., Brammer, M., Bullmore, E., Williams, S., Van Amelsvoort, T., Robertson, D., David, A., & Murphy, D. (2000). Explicit and implicit neural mechanisms for processing of social information from facial expressions: A functional magnetic resonance imaging study. *Human Brain Mapping*, 9, 93-105.

Damasio, A.R. (1994). *Descartes Error: Emotion, Reason, and the human brain*. New York, US: Avon Books.

Darwin, C. (1872/1998). P. Ekman (Ed). *The expression of the emotions in man and animals* (3rd ed). New York, US: Oxford University Press.

Davidson, R.J., Ekman, P., Saron, C.D., Senulis, J.A., & Friesen, W.V. (1990). Approach-withdrawal and cerebral asymmetry: I. Emotional expression and brain physiology. *Journal of Personality and Social Psychology*, 58, 330-341.

Deelman, B.G. (1990). Neuropsychologische diagnostiek [Neuropsychological diagnostics]. In F. Luteyn, B.G. Deelman, & P.M.G. Emmelkamp (Eds.). *Diagnostiek in de klinische psychologie*. Houten, The Netherlands: Bohn, Stafleu en van Loghum.

De Fockert, J.W., Rees, G., Frith, C.D., & Lavie, N. (2001). The role of working memory in visual selective attention. *Science*, 291, 1803-1806.

Den Dulk, P., Capalbo, M. & Phaf, R.H. (2003). A connectionist dual-route model for affective priming. *Cognitive Processing*, 4, In press.

Den Dulk, P., Heerebout, B.T., & Phaf, R.H. (2003). A computational study into the evolution of dual-route dynamics for affective processing. *Journal of Cognitive Neuroscience*, 15, 194-208.

Dimberg, U. (1988). Facial electromyography and the experience of emotion. *Psychophysiology*, 2, 277-282.

Dimberg, U. (1990). Facial reactions to auditory stimuli: Sex differences. *Scandinavian Journal of Psychology*, 31, 228-233.

Dimberg, U., Thunberg, M., & Elmehed, K. (2000). Unconscious facial reactions to emotional facial expressions. *Psychological Science*, 11, 86-89.

Draine, S.C., & Greenwald, A.G. (1998). Replicable unconscious semantic priming. *Journal of Experimental Psychology: General*, 127, 286-303.

Duckworth, K.L., Bargh, J.A., Garcia, M., & Chaiken, S. (2002). The automatic evaluation of novel stimuli. *Psychological Science*, 13, 513-519.

Ekman, P., & Friesen, W.V. (1971). Constants across culture in the face and emotion. *Journal of Personality and Social Psychology*, 17, 124-129.

Ekman, P. & Friesen, W. V. (1976). *Pictures of facial affect*. Palo Alto: Consulting Psychologists.

Evans, D. (2001). *Emotion*. New York: Oxford university Press.

Fazio, R.H., Jackson, J.R., Dunton, B.C., & Williams, C.J. (1995). Variability in automatic activation as an obtrusive measure of racial

attitudes: A bona fide pipeline? *Journal of Personality and Social Psychology*, 69, 1013-1027.

Fazio, R.H., Sanbonmatsu, D.M., Powell, M.C., & Kardes, F.R. (1986). On the Automatic Activation of Attitudes. *Journal of Personality and Social Psychology*, 50, 229-238.

Fehr, B., & Russell, J.A. (1984). Concept of emotion viewed from a prototype perspective. *Journal of experimental psychology: General*, 113, 464-486.

Fitts, P.M. (1954). The information capacity of the human motor system in controlling the amplitude of movements. *Journal of Experimental Psychology*, 47, 381-391.

Fitts, P.M., & Peterson, J.R. (1964). Information capacity of discrete motor responses. *Journal of Experimental Psychology*, 67, 103-112.

Fox, E. (1993). Selective processing of threatening words in anxiety: The role of awareness. *Cognition and Emotion*, 10, 449-480.

Förster, J., & Strack, F. (1996). Influence of overt head movements on memory for valenced words: A case of conceptual-motor compatibility. *Journal of Personality and Social Psychology*, 71, 421-430.

Frijda, N.H. (1986). *The emotions*. Cambridge, UK: Cambridge university Press.

Frijda, N.H. (1991). *Emotion*. Unpublished manuscript.

Frijda, N.H. (1993). The Place of Appraisal in Emotion. *Cognition & Emotion*, 7, 357-387.

Frijda, N.H., Kuipers, P., & Terschure, E. (1989). Relations among emotion, appraisal, and emotional action readiness. *Journal of Personality and Social Psychology*, 57, 212-228.

Frijda, N.H., & Tcherkassof, A. (1997). Facial expressions as modes of action readiness. In J.A. Russell & J.M. Fernandez-Dols (Eds.), *The psychology of facial expression* (pp. 78-102). Cambridge: Cambridge University Press.

Fulcher, E.P., Hammerl, M. (2001). When all is revealed: A dissociation between evaluative learning and contingency awareness. *Consciousness and Cognition*, 10, 524-549.

Graf, P., & Mandler, G. (1984). Activation makes words more accessible, but not necessarily more retrievable. *Journal of Verbal Learning and Verbal Behavior*, 23, 553-568.

- Gray, J.A. (1970). The psychophysiological basis of introversion-extraversion. *Behavioural Research and Therapy*, 8, 249-266.
- Gray, J.A. (1982). *The neuropsychology of anxiety: An enquiry into the functions of the septo-hippocampal system*. Oxford, England: Oxford University Press.
- Gray, J.A. (1987). *The psychology of fear and stress* (2nd edition). Cambridge UK: Cambridge University Press.
- Greenwald, A.G. (1992). New look 3: Unconscious cognition reclaimed. *American Psychologist*, 47, 766-779.
- Greenwald, M.K., Cook, E.W., & Lang, P.J. (1989). Affective judgement and psychophysiological response: Dimensional covariation in the evaluation of pictorial stimuli. *Journal of Psychophysiology*, 3, 51-64.
- Greenwald, A.G., Klinger, M.R. & Liu, T.J. (1989). Unconscious processing of dichoptically masked words. *Memory and Cognition*, 17, 35-47.
- Greenwald, A.G., McGhee, D.E., & Schwartz, J.L.K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, 74, 1464-1480.
- Groeger, J.A. (1984). Evidence of unconscious semantic processing from a forced-error situation. *British Journal of Psychology*, 75, 305-314.
- Groeger, J.A. (1988). Qualitatively different effects of undetected and unidentified auditory primes. *Quarterly Journal of Experimental Psychology*, 40A, 323-339.
- Hall, J.A. (1984). *Nonverbal sex differences*. Baltimore MA: Johns Hopkins University Press.
- Hatfield, E., Cacioppo, J.T., & Rapson, R.L. (1994) *Emotional contagion*. New York, USA: Cambridge University Press.
- Harmon-Jones, E., & Allen, J.J. (1997). Behavioral activation sensitivity and resting frontal EEG asymmetry: Covariation of putative indicators related to risk for mood disorders. *Journal of Abnormal Psychology*, 106, 159-163.
- Henson, R.N.A., Rugg, M.D., Shallice, T., Josephs, O., & Dolan, R.J. (1999). Recollection and familiarity in recognition memory: An event-related functional magnetic resonance imaging study. *The Journal of Neuroscience*, 19, 3962-3972.

Hermans, D., De Houwer, J., & Eelen, P. (1994). The affective priming effect: Automatic activation of evaluative information in memory. *Cognition and Emotion*, 8, 515-533.

Hess, U., Banse, R., & Kappas, A. (1995). The intensity of facial expression is determined by underlying affective state and social situation. *Journal of Personality and Social Psychology*, 69, 280-288.

Hess, U., Philippot, P., & Blairy, S. (1998). Facial reactions to emotional facial expressions: Affect or cognition? *Cognition and Emotion*, 12, 509-531.

Hill, W.F. (1978). Effects of mere exposure on preferences in nonhuman animals. *Psychonomic Bulletin*, 85, 1177-1198.

Holender, D. (1986). Semantic activation without conscious identification in dichotic listening, parafoveal vision, and visual masking: A survey and appraisal. *The Behavioral and Brain Sciences*, 9, 1-66.

Jacobs, W.J., & Nadel, L. (1985). Stress-induced recovery of fears and phobias. *Psychological Review*, 92, 512-531.

Jacoby, L.L., & Whitehouse, K. (1989). An illusion of memory: False recognition influenced by unconscious perception. *Journal of Experimental Psychology: General*, 118, 126-135.

James, W. (1884). What is an emotion? *Mind*, 9, 188-205.

Janssen, E., Everaerd, W., Spiering, M., & Janssen, J. (2000). Automatic processes and the appraisal of sexual stimuli: Towards an information processing model of sexual arousal. *Journal of Sex Research*, 37, 8-23.

Joordens, S., & Merikle, P.M. (1992). False recognition and perception without awareness. *Memory and Cognition*, 20, 151-159.

Karpinski, A., & Hilton, J.L. (2001). Attitudes and the implicit association test. *Journal of Personality and Social Psychology*, 81, 774-788.

Kemps, E.B.F., Erauw, K., & Vandierendonck, E. (1996). The affective primacy hypothesis: affective or cognitive processing of optimally and suboptimally presented primes. *Psychologica Belgica*, 36, 209-219.

Kemp-Wheeler, S.M., & Hill, A.B. (1992). Semantic and emotional priming below objective detection threshold. *Cognition and Emotion*, 6, 113-128.

Kihlstrom, J.F. (1987). The cognitive unconscious. *Science*, 237, 1445-1452.

Kihlstrom, J.F., Mulvanet, S., Tobias, B.A., & Tobis, I.P. (2000). The emotional unconscious. In E. Eich, J.F. Kihlstrom, G.H. Bower, J.P. Forgas, & P.M. Niedenthal (Eds.), *Cognition and emotion* (pp.30-87). New York: Oxford University Press.

Klauer, K.C., & Musch, J. (In press). Does sunshine prime loyal? Affective priming in the naming task. *The Quarterly Journal of Experimental Psychology*.

Klinger, M.R. (2001). The roles of attention and awareness in the false recognition effect. *American Journal of Psychology*, 114, 93-114.

Klinger, M.R., Burton, P.C., & Pitts, G.S. (2000). Mechanisms of unconscious priming: I. Response competition, not spreading activation. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 26, 441-455.

Kunst-Wilson, W.R., & Zajonc, R.B. (1980). Affective discrimination of stimuli that cannot be recognized. *Science*, 207, 557-558.

Lang, P.J. (1995). The emotion probe. *American Psychologist*, 50, 372-385.

Lang, P.J., Bradley, M.M., Cuthbert, B.N. (1990). Emotion, attention, and the startle reflex. *Psychological Review*, 97, 377-395.

Lang, P.J., Bradley, M.M., Cuthbert, B.N. (1995). *International affective pictures system (IAPS): Technical manual and affective ratings*. Gainesville, FL. The center for research in psychophysiology, University of Florida.

Lang, P.J., Bradley, M.M., & Cuthbert, B.N. (1998). Emotion, Motivation, and Anxiety: Brain Mechanisms and Psychophysiology. *Biological Psychiatry*, 44, 1248-1263.

Lang, P.J., Greenwald, M.K., Bradley, M.M., & Hamm, A.O. (1993). Looking at pictures: Affective, facial, visceral, and behavioral reactions. *Psychophysiology*, 30, 261-273.

Lang, P. J., Öhman, A., & Vaitl, D. (1988). *The International Affective Picture System* [Photographic slides]. Gainesville: Center for Research in Psychophysiology, University of Florida.

Lazarus, R.S. (1982). Thoughts on the relations between emotion and cognition. *American Psychologist*, 46, 352-367.

Lazarus, R.S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist*, 46, 819-834.

LeDoux, J.E. (1986). Sensory systems and emotion: A model of affective processing. *Integrative Psychiatry, 4*, 237-243.

LeDoux, J.E.(1996). *The emotional Brain*. New York: Simon and Schuster.

Lubke, G.H., Kerssens, C., Phaf, R.H., & Sebel, P.S. (1999). Dependence of explicit and implicit memory on hypnotic state in trauma patients. *Anesthesiology, 90*, 670-680.

Lundqvist, L. & Dimberg, U. (1995). Facial expressions are contagious. *Journal of Psychophysiology, 9*, 203-211.

Lundqvist, D., Flykt, A., & Öhman, A. (1998). *The Karolinska Directed Emotional Faces*. Karolinska Institute, Stockholm, Sweden.

MacLeod, C. & Hagan, R. (1992). Individual differences in the selective processing of threatening information, and emotional responses to a stressful life event. *Behaviour Research and Therapy, 30*, 151-161.

MacLeod, C., & Rutherford, E.M. (1992). Anxiety and the selective processing of emotional information: Mediating roles of awareness, trait and state variables, and personal relevance of stimulus materials. *Behaviour Research and Therapy, 30*, 479-491.

Mandler, G. (1980). Recognizing: The judgement of previous occurrence. *Psychological Review, 87*, 252-271.

Mandler, G. (1985). *Cognitive psychology: An Essay in Cognitive Science*. Hillsdale, NJ: Lawrence Erlbaum.

Martinez, A.M., & Benavente, R. (1998). The AR face database. CVC Technical Report # 24.

Matsumoto, D., & Ekman, P. (1988). *Japanese and caucasian facial expressions of emotion (JACFEE)* [slides]. San Francisco: Human Interaction laboratory, University of California, San Francisco.

Maxfield, L. (1997). Attention and semantic priming: A review of prime task effects. *Consciousness and Cognition, 6*, 204-218.

Merikle, P.M. (1992). Perception without awareness. *American Psychologist, 47*, 792-795.

Merikle, P.M., & Joordens, S. (1997). Parallels between perception without attention and perception without awareness. *Consciousness and Cognition, 6*, 219-236.

Morgan, M.J. (1994). When it pays not to see. *Nature, 371*, 473.

Morris, J.S., Öhman, A., & Dolan, R.J. (1998). Conscious and unconscious emotional learning in the human amygdala. *Nature*, 393, 467-470.

Morris, J.S., Öhman, A., & Dolan, R.J. (1999). A subcortical pathway to the right amygdala mediating "unseen" fear. *Proceedings of the National Academy of Sciences, USA*, 96, 1680-1685.

Mulligan, N.W., & Stone, M. (1999). Attention and conceptual priming: Limits on the effects of divided attention in the category-exemplar production task. *Journal of Memory and Language*, 41, 253-280.

Murphy, S.T. & Zajonc, R.B. (1993). Affect, cognition and awareness: Affective priming with optimal and suboptimal stimulus exposures. *Journal of Personality and Social Psychology*, 64, 723-739.

Murphy, S.T., Monahan, J.L., & Zajonc, R.B. (1995). Additivity of nonconscious affect: Combined effects of priming and exposure. *Journal of Personality and Social Psychology*, 69, 589-602.

Neely, J.H. (1977). Semantic priming and retrieval from lexical memory: Roles of inhibitionless spreading activation and limited-capacity attention. *Journal of Experimental Psychology: General*, 106, 226-254.

Neumann, R., & Strack, F. (2000a). Approach and avoidance: The influence of proprioceptive and exteroceptive cues on encoding of affective information. *Journal of Personality and Social Psychology*, 79, 39-48.

Neumann, R., & Strack, F. (2000b). Experiential and Nonexperiential Routes of Motor Influence on Affect and Evaluation. In : H. Bless, & J.P. Forgas (Eds), *The Message Within*. Philadelphia, Psychology Press.

Neumann, R., Förster, J., & Strack, F. (In press). Motor compatibility: The bi-directional link between behavior and evaluation. To appear in: J., Musch, & K.C., Klauer, (Eds.), *The psychology of evaluation: Affective Processes in Cognition and Emotion*. Mahwah NJ: Lawrence Erlbaum.

Oatley, K., & Jenkins, J.M. (1996). *Understanding emotions*. Cambridge, MA: Blackwell Publishers.

Oatley, K., & Johnson-Laird, P.N. (1996). The communicative theory of emotions: Empirical tests, mental models, and implications for social interaction. In L.L. Martin & A. Tesser (Eds.), *Striving and feeling*:

Interactions among goals, affect, and self-regulation (pp.363-380). Mahwah, NJ: Erlbaum.

Öhman, A. (1986). Face the beast and fear the face: Animal and social fears as prototypes for evolutionary analyses of emotion. *Psychophysiology*, 23, 123-145.

Öhman, A., & Mineka, S. (2001). Fears, Phobias, and preparedness: Toward an Evolved Module of Fear and Fear Learning. *Psychological Review*, 108, 483-522.

Ortony, A., & Turner, T.J. (1990). What's Basic About Basic Emotions? *Psychological Review*, 97, 315-331.

Panksepp, J. (1998). *Affective Neuroscience: The Foundations of Human and Animal Emotions*. New York: Oxford University Press.

Parkinson, B., & Manstead, A.S.R. (1992). Appraisal as a cause of emotion. In: M.S. Clark (Ed.), *Emotion, Review of personality and social psychology*, 13, Pp. 122-149. London: Sage Publications.

Pessoa, L., McKenna, M., Gutierrez, E., & Ungerleider, L.G. (2002). Neural processing of emotional faces requires attention. *Proceedings of the National Academy of Sciences, USA*, 99, 11458-11463.

Phaf, R.H. (1995). Emoties zonder bewustzijn? *Nederlands Tijdschrift voor de Psychologie*, 50, 191-201.

Phaf, R.H., den Dulk, P., Tijsseling, A., Lebert, E. (2001). Novelty-dependent learning and topological mapping. *Connection Science*, 13, 293-321.

Phaf, R.H., van der Heijden, A.H.C., & Hudson, P.T.W. (1990). SLAM: A connectionist model for attention in visual selection tasks. *Cognitive Psychology*, 22, 273-341.

Phaf, R. H. & Wolters, G. (1997). A constructivist and connectionist view on conscious and nonconscious processes. *Philosophical-Psychology*, 10, 287-307.

Pratto, F., & John, O.P. (1991). Automatic vigilance: The attention-grabbing power of negative social information. *Journal of Personality and Social Psychology*, 61, 380-391.

Reber, R., Winkielman, P., & Schwarz, N. (1998). Effects of perceptual fluency on affective judgments. *Psychological Science*, 9, 45-48.

Raccuglia, R. A. & Phaf, R.H. (1997). Asymmetric affective evaluation of words and faces. *British Journal of Psychology*, 88, 1, 93-116.

- Reber, R., Winkielman, P., & Schwarz, N. (1998). Effects of perceptual fluency on affective judgments. *Psychological Science, 9*, 45-48.
- Richards, A., French, C.C., Johnson, W., Naparstek, J., & Williams, J. (1992). Effects of mood manipulation and anxiety on performance of an emotional Stroop task. *British Journal of Psychology, 83*, 479-491.
- Rinn, W.E. (1984). The neuropsychology of facial expression: A review of the neurological and psychological mechanisms for producing facial expressions. *Psychological Bulletin, 1*, 52-77.
- Rolls, E.T. (1999). *The Brain and Emotion*. Oxford: Oxford University Press.
- Seamon, J.G., Brody, N., & Kauff, D.M. (1983). Affective discrimination of stimuli that are not recognized: Effects of shadowing, masking, and cerebral laterality. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 9*, 544-555.
- Seamon, J.G., Marsh, R.L., & Brody, N. (1984). Critical importance of exposure duration for affective discrimination of stimuli that are not recognized. *Journal of Experimental Psychology. Learning, Memory, and Cognition, 10*, 465-469.
- Seamon, J.G., McKenna, P.A., & Binder, N. (1998). The mere exposure effect is differentially sensitive to different judgment tasks. *Consciousness and Cognition, 7*, 85-102.
- Shanks, D.R., & St. John, M.F. (1994). Characteristics of dissociable human learning systems. *Behavioral and Brain Sciences, 17*, 367-447.
- 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.
- Snodgrass, J.G., & Corwin, J. (1988). Pragmatics of measuring recognition memory: Applications to dementia and amnesia. *Journal of Experimental Psychology: General, 117*, 34-50.
- Strack, F., & Neumann, R. (2000). Furrowing the brow may undermine perceived fame: The role of facial feedback in judgments of celebrity. *Personality and Social Psychology Bulletin, 26*, 762-768.
- Solarz, A.K. (1960). Latency of instrumental responses as a function of compatibility with the meaning of eliciting verbal signs. *Journal of Experimental Psychology, 59*, 239-245.

- Stapel, D.A., Koomen, W., & Ruys, K.I. (2002). The effects of diffuse and distinct affect. *Journal of Personality and Social Psychology*, 83, 60-74.
- Sternberg, S. (1966). High-speed scanning in human memory. *Science*, 153, 652-654.
- Stone, M., Ladd, S.L., & Gabrieli, J.D.E. (2000). The role of selective attention in perceptual and affective priming. *American Journal of Psychology*, 113, 341-358.
- Strongman, K.T. (1996). *The Psychology of Emotion*. (4th edn). Wiley, New York.
- Sutton, S.K., & Davidson, R.J. (1997). Prefrontal brain asymmetry: A biological substrate of the behavioral approach and inhibition systems. *Psychological Science*, 8, 204-210.
- Taylor, S.E. (1991). Asymmetrical effects of positive and negative events: The mobilization-minimization hypothesis. *Psychological Bulletin*, 110, 67-85.
- Tcherkassof, A. (1999). Action readiness cues and the recognition of facial expressions of emotion. *European Review of Applied Psychology*, 49, 99-105.
- Ter Laak, J. (1992). *Emonet: A comparison of experimental measurements of emotions with simulations by a network model*. Unpublished Master's thesis. Leiden University, The Netherlands.
- Thunberg, M., & Dimberg, U. (2000). Gender differences in facial reactions to fear-relevant stimuli. *Journal of Nonverbal Behavior*, 24, 45-51.
- Tovée, M.J. (1996). *An introduction to the visual system*. Cambridge: Cambridge University Press.
- Tulving, E. & Kroll, N. (1995). Novelty assessment in the brain and long-term memory encoding. *Psychonomic Bulletin & Review*, 2, 387-390.
- Welford, A.T. (1968). *Fundamentals of skill*. London: Methuen.
- Wentura, D., Rothermund, K., & Bak, P. (2000). Automatic vigilance: The attention-grabbing power of approach- and avoidance related social information. *Journal of Personality and Social Psychology*, 78, 1024-1037.
- Whalen, P. J., Rauch, S.L., Etcoff, N.L., McInerney, S.C., Lee, M.B., & Jenike, M. A. (1998). Masked Presentations of Emotional Facial Expressions Modulate Amygdala Activity without Explicit Knowledge. *The Journal of Neuroscience*, 18, 411-418

Whittlesea, B.W.A., & Price, J.R. (2001). Implicit/explicit memory versus analytic/nonanalytic processing: Rethinking the mere exposure effect. *Memory & Cognition*, 29, 234-246.

Whittlesea, B.W.A., & Williams, L.D. (2000). The source of feelings of familiarity: The discrepancy-attribution hypothesis. *Journal of Experimental Psychology: Learning, memory, and Cognition*, 26, 547-565.

Winkielman, P., & Cacioppo, J.T. (2001). Mind at ease put a smile on the face: Psychophysiological evidence that processing facilitation elicits positive affect. *Journal of Personality and Social Psychology*, 81, 989-1000.

Winkielman, P., Zajonc, R.B., & Schwarz, N. (1997). Subliminal affective priming resists attributional interventions. *Cognition and Emotion*, 11, 433-465.

Zajonc, R.B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology*, 9, 1-27.

Zajonc, R.B. (1980). Feeling and thinking. Preferences need no inferences. *American Psychologist*, 35, 151-175.

Zajonc, R.B. (2001). Mere Exposure: A Gateway to the Subliminal. *Current Directions in Psychological Science*, 10 (6), 224-228.