LAWRENCE E. MARKS

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Education	 A.B., Psychology, Hunter College, CUNY, 1962 Ph.D., Psychology, Harvard University, 1965 Post-doctoral Fellow, Center for Cognitive Studies, Harvard University, 1965-1966 		
Summary of Career		From	То
Scientific Harvard University Research Fellow and Lecturer Yale University		1965	1966
Research Staff Psychologist		1966	1969
Instructor in Epidemiology		1968	1970
Assistant Professor of Epidemiology		1970	1976
Research Associate in Psychology		1971	1976
Associate Professor of Epidemiology		1076	1004
and Psychology Professor of Epidemiology and Psychology		1976	1984
Professor of	Epidemiology and Psychology	1984	present
John B. Pierce Labo	ratory		
Assistant Fellow		1966	1969
Associate Fellow		1969	1984
Fellow		1984	present
Administrative			
	ratory		
John B. Pierce Laboratory Associate Director		1985	1988
Acting Director		1989	1989
Director		1999	2009
Emeritus Director		2009	present
			-

Hunter College Hall of Fame, 1985

Jacob K. Javits Neuroscience Investigator Award/Claude Pepper Award, National Institutes of Health, 1987-1994

President, Division 10, Psychology of the Arts, American Psychological Association, 1988-1989 *Philosophiae doctorem honoris causa*, Stockholm University, 1994
Honorary Main Researcher, Division of Perception and Psychophysics,

Department of Psychology, Stockholm University, 1995-

Fellow, Society of Experimental Psychologists, 2004-

Scientific Organizations

Acoustical Society of America American Association for the Advancement of Science (Fellow) American Psychological Association (Fellow) Association for Chemoreception Sciences Association for Psychological Science (Fellow) History of Science Society International Society for Psychophysics New York Academy of Sciences (Fellow) Psychonomic Society Society for Neuroscience

Other Professional Activities

Advisory Committees and Consultancies Institutional Review Board for the Protection of Human Subjects, Haskins Laboratories, 1978-1980 Advisor, Psychophysics and Sensory Prostheses, Division of Artificial Organs, Columbia-Presbyterian Hospital, New York, NY, 1980-1982 Advisor, Institute for Artificial Organs/Dobelle Institute, New York, NY, 1982-1988 Human Rights Committee, Benhaven School for Autistic Children, 1982-1990 Executive Committee, Division 10, Psychology of the Arts, American Psychological Association, 1986-1989 Chair, Fellows Committee, Division 10, Psychology of the Arts, American Psychological Association, 1991-1993 Advisor, Chemosensory Center, University of Cincinnati, 1987 Advisor, Development of Modular Units for Undergraduate Science Education, Columbia University, 1993-1994 Expert member to Appointment Board, Professorship in Perception and Psychophysics, Department of Psychology, School of Social Sciences, Stockholm University, 1993 Advisor, Institute for Sensory Research, Syracuse University, 1994 Advisor, Assessing the Potential of Virtual Reality in Science Education, University of Houston/ George Mason University, 1994-1995 Executive Committee, International Society for Psychophysics, 1995-1997 Advisor, Olfactory Clinical Research Center, SUNY Medical Center, Albany, 1998-1999

Scientific Advisory Committee, Children's Progress, Inc., 1999-2007

Human Effects Assessment Panels and Technology Effectiveness Assessment Panels, Pennsylvania State University/ Department of Defense, 2001- 2012 (ad hoc)

Board of Directors, American Synesthesia Association, 2005-

Expert member to Appointment Board, Professorship in Perception and

Psychophysics, Department of Psychology, School of Social Sciences, Stockholm University, 2009

Editorial Boards

Editor, Sensory Processes, 1976-1981
Consulting Editor, Journal of Experimental Psychology: Human Perception and Performance, 1986-1995
Consulting Editor, Perception & Psychophysics, 1991-1998
Consulting Editor, Chemical Senses, 1994-2000

Visiting Appointments

Laboratory of Applied Psychology, University of Stockholm, 1981, 1982 Department of Psychology, University of Stockholm, 1988

Grant Review Panels

Sensory Disorders and Language Study Section / Integrative Functional, and Cognitive Neuroscience Study Section, National Institutes of Health, 1995-1999

Ad Hoc Reviewer/Grant Proposals and Reports

Air Force Office of Scientific Research Commonwealth of Pennsylvania Department of Health Connaught Fund, University of Toronto Health Research Board in Ireland Killam Foundation of Canada Medical Research Council of Canada National Institutes of Health National Science Foundation Natural Sciences and Engineering Research Council of Canada Netherlands Organisation for Scientific Research Social Sciences and Humanities Research Council of Canada Veterans Administration Wellcome Trust

Ad Hoc Reviewer/Journals

Acta Psychologica American Journal of Psychology American Scientist Appetite Artificial Organs ASHRAE Transactions Attention, Perception, & Psychophysics Behavioral and Brain Sciences

British Journal of Psychology Canadian Journal of Experimental Psychology Canadian Journal of Psychology Cerebral Cortex **Chemical Senses Chemosensory Perception** Child Development Cognition **Cognition and Consciousness** Cognitive, Affective, and Behavioral Neuroscience **Cognitive Brain Research** Cortex Current Directions in Psychological Science **Developmental Psychology Environment International Experimental Brain Research** European Journal of Developmental Psychology Food Quality and Preference **IEEE** Transactions on Haptics Journal of the Acoustical Society of America Journal of Applied Physiology Journal of Autism and Developmental Disorders Journal of Experimental Child Psychology Journal of Experimental Psychology: Applied Journal of Experimental Psychology: Human Perception and Performance Journal of Gerontology Journal of Memory and Language Journal of the Optical Society of America Journal of Speech, Language, and Hearing Research Journal of Vision Leonardo Memory & Cognition **Music Perception** Perception Perception & Psychophysics Perceptual and Motor Skills Philosophical Psychology Physiology & Behavior Pragmatics and Cognition **Psychological Bulletin Psychological Review Psychological Science** Psychonomic Bulletin & Review Science Somatosensory Research Vision Research World Haptics 2011

Courses Taught (Yale University)

Past

History of Psychology (Yale College)
Sensory Processes (Yale College)
Psychology and the Arts (Yale College)
Sensation (Yale Graduate School)
Sensory Responses to Physical Factors in the Environment (Epidemiology and Public Health, Yale School of Medicine)
Physiology for Environmental Health Sciences (Epidemiology & Public Health, Yale School of Medicine)
Physical Factors in the Environment (Epidemiology & Public Health, Yale School of Medicine)
Physical Factors in the Environment (Epidemiology & Public Health, Yale School of Medicine)

Current

Sensory Information Processing (Yale College/Yale Graduate School)

Extramural Funding (PI/co-PI)

Past

National Institute on Deafness and Other Communication Disorders National Institute of Mental Health National Institute of Neurological Disorders and Stroke National Science Foundation United States-Israel Binational Science Foundation

Current

National Institutes of Health: R01 DC011823 Perception of Flavor Quality: Multisensory and Cognitive Processes 3/1/2012-2/28/2017 (Lawrence E. Marks, PI)

PUBLICATIONS

JOURNAL ARTICLES

- Marks, L.E., & Miller, G.A. (1964). The role of semantic and syntactic constraints in the memorization of English sentences. *Journal of Verbal Learning and Verbal Behavior*, 3, 1-5.
 - a. Reprinted in: (1966). D. H. Kausler (Ed.), *Verbal Learning: Contemporary Theory and Research* (pp. 346-350). New York: Wiley.
 - b. Reprinted in: (1969). L. Postman and G. Keppel (Eds.), *Verbal Learning and Memory* (pp. 254-262). New York: Penguin.
- 2. Stevens, J.C., & Marks, L.E. (1965). Cross-modality matching of brightness and loudness. *Proceedings of the National Academy of Sciences*, **54**, 407-411.
- 3. Marks, L.E., & Stevens, J.C. (1966). Individual brightness functions. *Perception & Psychophysics*, **1**, 17-24.
- 4. Marks, L.E. (1966). Brightness as a function of retinal locus. *Perception & Psychophysics*, **1**, 335-341.
- 5. Marks, L.E., & Slawson, A.W. (1966). Direct test of the power function for loudness. *Science*, **154**, 1036-1037.
- 6. Marks, L.E. (1967). Judgments of grammaticalness of some English sentences and semisentences. *American Journal of Psychology*, **80**, 196-204.
- 7. Marks, L.E. (1967). Some structural and sequential factors in the processing of sentences. *Journal of Verbal Learning and Verbal Behavior*, **6**, 707-713.
- 8. Stevens, J.C., & Marks, L.E. (1967). Apparent warmth as a function of thermal irradiation. *Perception & Psychophysics*, **2**, 613-619.
- 9. Marks, L.E. (1968). Brightness as a function of retinal locus in the light-adapted eye. *Vision Research*, **8**, 525-535.
- 10. Adair, E.R., Stevens, J.C., & Marks, L.E. (1968). Thermally induced pain, the dol scale, and the psychophysical power law. *American Journal of Psychology*, **81**, 147-164.
- 11. Marks, L.E. (1968). Scaling of grammaticalness of self-embedded English sentences. *Journal of Verbal Learning and Verbal Behavior*, **7**, 965-967.
- 12. Marks, L.E., & Stevens, J.C. (1968). Perceived warmth and skin temperature as functions of the duration and level of thermal irradiation. *Perception & Psychophysics*, **4**, 220-228.
- 13. Marks. L.E., & Stevens, J.C. (1968). The form of the psychophysical function near threshold. *Perception & Psychophysics*, **4**, 315-318.
- 14. Marks, L.E. (1968). Stimulus range, number of categories, and form of the category scale. *American Journal of Psychology*, **81**, 467-479.

Reprinted in: (1972) Cain, W.S., & Marks, L.E. (Eds.), *Stimulus and Sensation:* Readings in Sensory Psychology. Boston: Little, Brown.

- 15. Stevens, J.C., Marks, L.E., & Gagge, A.P. (1969). The quantitative assessment of thermal discomfort. *Environmental Research*, **2**, 149-165.
- 16. Bothe, G.G., & Marks, L.E. (1970). Absolute sensitivity to white noise under auxiliary visual stimulation. *Perception & Psychophysics*, **8**, 176-178.
- 17. Marks, L.E. (1970). Apparent depth of modulation as a function of frequency and amplitude of temporal modulations of luminance. *Journal of the Optical Society of America*, **60**, 970-977.
- 18. Marks, L.E. (1971). Brightness and retinal locus: Effects of target size and spectral composition. *Perception & Psychophysics*, **9**, 26-30.
- 19. Stevens, J.C., & Marks, L.E. (1971). Spatial summation and the dynamics of warmth sensation. *Perception & Psychophysics*, **9**, 391-398.
- 20. Marks, L.E. (1971). Spatial summation in relation to the dynamics of warmth sensation. *International Journal of Biometeorology*, **15**, 106-110
- 21. Marks, L.E., & Cain, W.S. (1972). Perception of intervals and magnitudes for three prothetic continua. *Journal of Experimental Psychology*, **94**, 6-17.
- 22. Stevens, J.C., & Marks, L.E. (1972). Brightness function: Role of the pupil. *Perception & Psychophysics*, **6**, 403-405.
- Marks, L.E. (1972). Visual brightness: Some applications of a model. *Vision Research*, 12, 1409-1423.
- 24. Marks, L.E., & Stevens, J.C. (1972). Perceived cold and skin temperature as functions of stimulation level and duration. *American Journal of Psychology*, **85**, 407-419.
- 25. Bornstein, M.H., & Marks, L.E. (1972). Photopic luminosity measured by the method of critical frequency. *Vision Research*, **12**, 2023-2033.
- 26. Marks, L.E. (1973). Brightness and equivalent intensity of intrinsic light. *Vision Research*, **13**, 372-382.
- 27. Marks, L.E., & Stevens, J.C. (1973). Spatial summation of warmth: Influence of duration and configuration of the stimulus. *American Journal of Psychology*, **86**, 251-267.
- 28. Marks, L.E., & Bornstein, M.H. (1973). Spectral sensitivity by constant CFF: Effect of chromatic adaptation. *Journal of the Optical Society of America*, **63**, 220-226.
- Bornstein, M.H., & Marks, L.E. (1973). Studies on spectral sensitivity as measured by a procedure of flicker threshold. *Journal of the American Academy of Optometry*, **50**, 376-382.
- 30. Stevens, J.C., Okulicz, W.C., & Marks, L.E. (1973). Temporal summation at the warmth threshold. *Perception & Psychophysics*, **14**, 307-312.
- 31. Marks, L.E., & Stevens, J.C. (1973). Temporal summation related to the nature of the proximal stimulus for the warmth sense. *Perception & Psychophysics*, **14**, 570-576.
- 32. Marks, L.E. (1974). On associations of light and sound: The mediation of brightness, pitch, and loudness. *American Journal of Psychology*, **87**, 173-188.

- 33. Marks, L.E., & Gonzalez, R.R. (1974). Skin temperature modifies the pleasantness of thermal stimuli. *Nature*, **247**, 473-475.
- 34. Marks, L.E., & Bornstein, M.H. (1974). Spectral sensitivity of the modulation-sensitive mechanism of vision. *Vision Research*, **14**, 665-669.
- 35. Stevens, J.C., Marks, L.E., & Simonson, D. (1974). Regional sensitivity and spatial summation in the warmth sense. *Physiology & Behavior*, **13**, 825-836.
- 36. Marks, L.E. (1974). On scales of sensation: Prolegomena to any future psychophysics that will be able to come forth as science. *Perception & Psychophysics*, **16**, 358-376.
- 37. Marks, L.E. (1974). Blue-sensitive cones can mediate brightness. *Vision Research*, **14**, 1493-1494.
- 38. Marks, L.E. (1975). On colored-hearing synesthesia: Cross-modal translations of sensory dimensions. *Psychological Bulletin*, **82**, 303-331.

Reprinted in: (1997). S. Baron-Cohen & J. E. Harrison (Eds.), *Synaesthesia: Classic and Contemporary Readings* (pp. 49-98). Oxford: Blackwell.

- 39. Taus, R.H., Stevens, J.C., & Marks, L.E. (1975). Spatial localization of warmth. *Perception & Psychophysics*, **19**, 194-196.
- 40. Marks, L.E., Stevens, J.C., & Tepper, S.J. (1976). Interaction of spatial and temporal summation in the warmth sense. *Sensory Processes*, **1**, 87-98.
- 41. Aylor, D.E., & Marks, L.E. (1976). Perception of noise transmitted through barriers. *Journal of the Acoustical Society of America*, **59**, 397-400.
- 42. Marks, L.E. (1977). Relative sensitivity and possible psychophysical laws. *Sensory Processes*, **1**, 301-315.
- 43. Marks, L.E. (1978). Binaural summation of the loudness of pure tones. *Journal of the Acoustical Society of America*, **64**, 107-113.
- 44. Marks, L.E. (1978). A critique of Dawson and Miller's "Inverse attribute functions and the proposed modifications of the power law." *Perception & Psychophysics*, **24**, 569-570.
- 45. Marks, L.E. (1979). Sensory and cognitive factors in judgments of loudness. *Journal of Experimental Psychology: Human Perception and Performance*, **5**, 426-443.
- 46. Marks, L.E. (1979). A theory of loudness and loudness judgments. *Psychological Review*, **86**, 256-285.
- Stevens, J.C., & Marks, L.E. (1979). Spatial summation of cold. *Physiology & Behavior*, 22, 541-547.
- 48. Marks, L.E., & Bartoshuk, L.M. (1979). Ratio scaling of taste intensity by a matching procedure. *Perception & Psychophysics*, **26**, 335-339.
- 49. Marks, L.E. (1979). Summation of vibrotactile intensity: An analog to auditory critical bands? *Sensory Processes*, **3**, 188-203.
- 50. Marks, L.E. (1980). Psychophysical judgment: Wundt's theory revisited. *Psychological Research*, **42**, 157-164.

- 51. Marks, L.E. (1980). Binaural summation of loudness: Noise and two-tone complexes. *Perception & Psychophysics*, **27**, 489-498.
- 52. Stevens, J.C., & Marks, L.E. (1980). Cross-modality matching functions generated by the method of magnitude estimation. *Perception & Psychophysics*, **27**, 379-389.
- 53. Marks, L.E. (1982). Synesthetic perception and poetic metaphor. *Journal of Experimental Psychology: Human Perception and Performance*, **8**, 15-23.
- 54. Marks, L.E. (1982). Bright sneezes and dark coughs, loud sunlight and soft moonlight. *Journal of Experimental Psychology: Human Perception and Performance*, **8**, 177-193.
- 55. Gray, L., Stevens, J.C., & Marks, L.E. (1982). Thermal stimulus thresholds: Sources of variability. *Physiology & Behavior*, **29**, 355-360.
- 56. Girvin, J.P., Marks, L.E., Antunes, J.L., Quest, D.O., O'Keefe, M.D., Ning, P., & Dobelle, W.H. (1982). Electrocutaneous stimulation. I. The effects of stimulus parameters on absolute threshold. *Perception & Psychophysics*, **32**, 524-528.
- 57. Marks, L.E., Girvin, J.P., Quest, D.O., Antunes, J.L., Ning, P., O'Keefe, M.D., & Dobelle, W.H. (1982). Electrocutaneous stimulation. II. The estimation of distance between two points. *Perception & Psychophysics*, **32**, 529-536.
- Marks, L.E., Girvin, J.P., O'Keefe, M.D., Ning, P., Quest, D.O., Antunes, J.L., & Dobelle, W.H. (1982). Electrocutaneous stimulation. III. The perception of temporal order. *Perception & Psychophysics*, **32**, 537-541.
- 59. Marks, L.E. (1983). Similarities and differences among the senses. *International Journal of Neuroscience*, **19**, 1-11.
- 60. Marks, L.E., Borg, G., & Ljunggren, G. (1983). Individual differences in perceived exertion assessed by two new methods. *Perception & Psychophysics*, **34**, 280-288.
- 61. Borg, G.A.V., & Marks, L.E. (1983). Twelve meanings of the measure constant in psychophysical power functions. *Bulletin of the Psychonomic Society*, **21**, 73-75.
- 62. Alexander, B., & Marks, L.E. (1983). Aesthetic preference and resemblance of personality to paintings. *Bulletin of the Psychonomic Society*, **21**, 384-386.
- 63. Algom, D., & Marks, L.E. (1984). Individual differences in loudness processing and loudness scales. *Journal of Experimental Psychology: General*, **113**, 571-593.
- 64. Jones, B.L., & Marks, L.E. (1985). Picture quality assessment: A comparison of ratio and ordinal scales. *Society of Motion Picture and Television Engineers Journal*, **94**, 1244-1248.
- 65. Kauschansky, A., Seyler, L.E. Jr., Marks, L.E., Cain, W.S., & Genel. M. (1986). Familial Kallmann's Syndrome with autosomal dominant inheritance, variable gonadotropin deficiency and subtle color vision defects. *International Journal of Adolescent Medicine and Health*, 2, 81-97.
- 66. Marks, L.E. (1986). Context and sensory processes: In search of basic laws. *Cahiers de Psychologie Cognitive*, **6**, 121-136.
- 67. Bartoshuk, L.M., Rifkin, B., Marks, L.E., & Bars, P. (1986). Taste and aging. *Journal of Gerontology*, **41**, 51-57.

- Marks, L.E., Szczesiul, R., & Ohlott, P. (1986). On the cross-modal perception of intensity. *Journal of Experimental Psychology: Human Perception and Performance*, 12, 517-534.
- Marks, L.E., Hammeal, R.J., & Bornstein, M.H. (1987). Perceiving similarity and comprehending metaphor. *Monographs of the Society for Research in Child Development*, 42 (1, Serial No. 215), 1-91.
- 70. Marks, L.E. (1987). Binaural versus monaural loudness: Supersummation of tone partially masked by noise. *Journal of the Acoustical Society of America*, **81**, 122-128.
- Marks, L.E. (1987). On cross-modal similarity: Perceiving temporal patterns by hearing, touch, and vision. *Perception & Psychophysics*, 42, 250-256.
- 72. Marks, L.E. (1987). On cross-modal similarity: Auditory-visual interactions in speeded discrimination. *Journal of Experimental Psychology: Human Perception and Performance*, **13**, 384-394.
- 73. Marks, L.E., Stevens J.C., Bartoshuk, L.M., Gent, J.F., Rifkin, B., & Stone, V.K. (1988). Magnitude-matching: The measurement of taste and smell. *Chemical Senses*, **13**, 63-87.
- Marks, L.E. (1988). Magnitude estimation and sensory matching. *Perception & Psychophysics*, 43, 511-525.
- Bartoshuk, L.M., Rifkin, B., Marks, L.E., & Hooper, J. (1988). Bitterness of KCl and benzoate: Related to genetic status for sensitivity to PTC/PROP. *Chemical Senses*, 13, 517-528. 1989.
- Algom, D., & Marks, L.E. (1989). Memory psychophysics for taste. Bulletin of the Psychonomic Society, 27, 257-259.
- 77. Marks, L.E. (1989). On cross-modal similarity: The perceptual structure of pitch, loudness, and brightness. *Journal of Experimental Psychology: Human Perception and Performance*, **15**, 586-602.
- Melara, R.D., & Marks, L.E. (1990). Perceptual primacy of dimensions: Support for a model of dimensional interaction. *Journal of Experimental Psychology: Human Perception and Performance*, 16, 398-414.
- Melara, R.D., & Marks, L.E. (1990). HARD and SOFT interacting dimensions: Differential effects of dual context on classification. *Perception & Psychophysics*, 47, 307-325.
- Melara, R.D., & Marks, L.E. (1990). Dimensional interaction in language processing: Investigating directions and levels of crosstalk. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 16, 539-554.
- Algom, D., & Marks, L.E. (1990). Range and regression, loudness processing and loudness scales: Toward a context-bound psychophysics. *Journal of Experimental Psychology: Human Perception and Performance*, 16, 706-727.
- Melara, R.D., & Marks, L.E. (1990). Processes underlying dimensional interactions: Correspondences between linguistic and nonlinguistic dimensions. *Memory & Cognition*, 18, 477-495.

- 83. Melara, R.D., & Marks, L.E. (1990). Interaction among auditory dimensions: Loudness, pitch, and timbre. *Perception & Psychophysics*, **48**, 169-178.
- 84. Marks, L.E. (1991). Reliability of magnitude matching. *Perception & Psychophysics*, **49**, 31-37.
- 85. Marks, L.E., Algom, D., & Benoit, J.-P. (1991). Dichotic summation of loudness of narrowly-spaced components. *Bulletin of the Psychonomic Society*, **29**, 62-64.
- 86. Algom, D., Marks, L.E., & Wiesenfeld, D. (1991). Tapping the social psychology of psychophysical experiments: Mode of responding does not alter statistical properties of magnitude estimates. *Bulletin of the Psychonomic Society*, 29, 226-228.
- 87. Marks, L.E., & Warner, E. (1991). Slippery context effect and critical bands. *Journal of Experimental Psychology: Human Perception and Performance*, **17**, 986-996.
- 88. Rankin, K.M., & Marks, L.E. (1991). Differential context effects in taste perception. *Chemical Senses*, 16, 617-629.
- 89. Marks, L.E. (1992). The slippery context effect in psychophysics: Intensive, extensive, and qualitative continua. *Perception & Psychophysics*, **51**, 187-198.
- 90. Melara, R.D., Marks, L.E., & Lesko, K.E. (1992). Optional processes in similarity judgments. *Perception & Psychophysics*, **51**, 123-133.
- 91. Marks, L.E. (1992). The contingency of perceptual processing: Context modifies equalloudness relations. *Psychological Science*, **3**, 285-291.
- Rankin, K.M., & Marks, L.E. (1992). Effects of context on sweet and bitter tastes: Unrelated to sensitivity to PROP (6-<u>n</u>-propylthiouracil). *Perception & Psychophysics*, 52, 479-486.
- 93. Marks, L.E., Borg, G., & Westerlund, J. (1992). Differences in taste perception assessed by magnitude matching and by category-ratio scaling. *Chemical Senses*, **17**, 493-506.
- 94. Marks, L.E. (1993). Contextual processing of multidimensional and unidimensional auditory stimuli. *Journal of Experimental Psychology: Human Perception and Performance*, **19**, 227-249.
- Melara, R.D., Potts, B.C., & Marks, L.E. (1993). Primacy of dimensions in color perception. *Journal of Experimental Psychology: Human Perception and Performance*, 19, 1082-1104.
- Melara, R.D., Potts, B.C., & Marks, L.E. (1993). Early-holistic processing or dimensional similarity? *Journal of Experimental Psychology: Human Perception and Performance*, 19, 1114-1120.
- 97. Algom, D., Marks, L.E., & Cain, W.S. (1993). Memory psychophysics for chemosensation. *Chemical Senses*, **18**, 151-160.
- 98. Marks, L.E. (1994). "Recalibrating" the auditory system: The perception of loudness. *Journal of Experimental Psychology: Human Perception and Performance*, **20**, 382-396.
- 99. Ben-Artzi, E., & Marks, L.E. (1995). Visual-auditory interaction in speeded classification: Role of stimulus difference. *Perception & Psychophysics*, **57**, 1151-1162.

- 100. Marks, L.E., Galanter, E., & Baird, J.C. (1995). Binaural summation after learning psychophysical functions for loudness. *Perception & Psychophysics*, **57**, 1209-1216.
- 101. Marks, L.E. (1996). On perceptual metaphors. *Metaphor and Symbolic Activity*, 11, 39-66.
- 102. Marks, L.E. (1996) Recalibrating the perception of loudness: Interaural transfer. *Journal of the Acoustical Society of America*, **100**, 473-480.
- 103. Armstrong, L., & Marks, L.E. (1997). Stimulus context, perceived length, and the horizontal-vertical illusion. *Perception & Psychophysics*, **59**, 1200-1213.
- Potts, B.C., Melara, R.D., & Marks, L.E. (1998). Circle size and diameter tilt: A new look at integrality and separability. *Perception & Psychophysics*, 60, 101-112. (PMID: 9503915)
- 105. Marks, L.E., & Wheeler, M.E. (1998). Attention and the detectability of weak taste stimuli. *Chemical Senses*, **23**, 19-29. (PMID: 9530966)
- Stevens, J.C., Cruz, L.A., Marks, L.E., & Lakatos, S. (1998). A multimodal assessment of sensory thresholds in aging. *Journal of Gerontology: Psychological Sciences*, 53B, P263-P272. (PMID: 9679518)
- 107. Lakatos, S., & Marks, L.E. (1998). Haptic underestimation of angular extent. *Perception*, **27**, 737-754. (PMID: 10197190)
- 108. Ben-Artzi, E., & Marks, L.E. (1999). Processing linguistic and perceptual dimensions of speech: Interactions in speeded classification. *Journal of Experimental Psychology: Human Perception and Performance*, **25**, 1-17. (PMID: 10385980)
- 109. Lakatos, S., & Marks, L.E. (1999). Haptic form perception: Relative salience of local and global features. *Perception & Psychophysics*, **61**, 895-908. (PMID: 10499002)
- 110. Armstrong, L., & Marks, L.E. (1999) Haptic perception of linear extent. *Perception & Psychophysics*, **61**, 1211-1226. (PMID: 10497438)
- Hettinger, T.P., Gent, J.F., Marks, L.E., & Frank, M. (1999). A confusion matrix for the study of taste perception. *Perception & Psychophysics*, 61, 1510-1521. (PMID: 10598466)
- Martino, G., & Marks, L.E. (1999). Perceptual and linguistic interactions in speeded classification: Tests of the semantic coding hypothesis. *Perception*, 28, 903-923. (PMID: 10664781)
- 113. Gent, J.F., Hettinger, T.P., Frank, M.E., & Marks, L.E. (1999). Taste confusions following gymnemic acid rinse. *Chemical Senses*, 24, 393-404. (PMID: 10480675)
- Martino, G., & Marks, L.E. (2000). Cross-modal interaction between vision and touch: The role of synesthetic correspondence. *Perception*, **29**, 745-754. (PMID: 11040956)
- Rankin, K.M., & Marks, L.E. (2000). Chemosensory context effects: Role of perceived similarity and neural commonality. *Chemical Senses*, 25, 747-759. (PMID: 11114153)

- 116. Martino, G., & Marks, L.E. (2001). Synesthesia: Strong and weak. *Current Directions in Psychological Science*, **10**, 61-65.
- Arieh, Y., & Marks, L.E. (2002). Context effects in visual length perception: Role of ocular, retinal, and spatial location. *Perception & Psychophysics*, 64, 478-492. (PMID: 12049287)
- 118. Jiang, Y., Chun, M.M., & Marks, L.E. (2002). Visual marking: Dissociating effects of new and old set size. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, **28**, 293-302. (PMID: 11911385)
- 119. Jiang, Y., Chun, M.M., & Marks, L.E. (2002). Visual marking: Selective attention to asynchronous temporal groups. *Journal of Experimental Psychology: Human Perception and Performance*, 28, 717-730. (PMID: 12075898)
- 120. Marks, L.E. (2003). The role of attention in chemosensation. *Food Quality and Preference*, **14**, 147-155.
- Odgaard, E., Arieh, Y. & Marks, L.E. (2003). Cross-modal enhancement of perceived brightness: Sensory interaction versus response bias. *Perception & Psychophysics*, 65, 123-132. (PMID: 12699315)
- 122. Arieh, Y., & Marks, L.E. (2003). Recalibrating the auditory system: A speedaccuracy analysis of intensity perception. *Journal of Experimental Psychology: Human Perception and Performance*, **29**, 523-536. (PMID: 12848324)
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