

## **CURRICULUM VITAE**

**James T. Todd**

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**Birth date:** 11/30/49

**Birthplace:** Baltimore, Maryland

**Education:** B. A. 1974, University of Connecticut, Graduated Summa Cum Laude  
in Psychology

Ph.D. 1977, University of Connecticut, General Experimental  
Psychology with Computer Science as a related area

**Experience:** 1977-81 Research Associate  
University of Connecticut

1981-86 Assistant Professor  
Brandeis University

1986-89 Associate Professor  
Brandeis University

1986-92 Senior Research Associate  
Boston University

1989-92 Professor  
Brandeis University

1992- Professor  
Ohio State University

### **Professional Activities:**

Editorial Board, Journal of Experimental Psychology: Human Perception and Performance, 1983-present.

Editorial Board, Journal of Intelligent Systems, 1987-present.

Editorial Board, Ecological Psychology, 1988-present.

Editorial Board, Neural Networks, 1988-present.

Editorial Board, Human Movement Science, 1988-1999.

Editorial Board, Perception & Psychophysics, 1993-2003.

Board of Directors, International Society for Ecological Psychology, 1988-1990.

Member of NSF Advisory Panel for Human Cognition and Perception, 1988-1991.

Member of NIMH Advisory Panel for Perception and Cognition, 1995-1999.

Member of NSF Advisory Panel for Integrative Graduate Education and Research Training, 2005.

### **Professional Societies:**

The Psychonomic Society

American Psychological Society

International Neural Network Society

International Society for Ecological Psychology

Vision Science Society

### **Research Support**

- CETA Employment Training Grant (Title II). "Computer Literacy in Health Related Fields," \$50,000: 1977-1979
- National Institute of Dental Research. "A Study of the Growth of Normal and Abnormal Faces," coinvestigator with Robert Shaw, \$211,000: 1979-1982.
- National Science Foundation. "The Computational Analysis of Three-Dimensional Form from Shading and Texture," \$126,200: 1985-1988.
- Air Force Office of Scientific Research. "The Cognitive Perceptual and Neural Basis of Skilled Performance," coinvestigator with consortium of Boston area researchers. \$1,074,000: 1986-1988.
- Air Force Office of Scientific Research. "Visual Perception of Structure from Motion". \$288,163: 1988-1991.
- National Science Foundation. "The Visual Perception and Cognition of Smoothly Curved Surfaces." \$206,000: 1989-1993.
- United States-Israel Binational Science Foundation. "Visual perception of 3D structure from motion and stereoscopy," coinvestigator with David Leiser. \$84,900: 1990-1993.
- Nato International Scientific Exchange Program. "The visual perception of 3-dimensional shape." coinvestigator with Jan Koenderink. \$10,160: 1992-1996.
- Air Force Office of Scientific Research. "The visual perception of 3-dimensional form from different types of optical deformation." \$448,000: 1993-1996.
- National Science Foundation. Effects of spatiotemporal pooling on perceived motion." \$260,000: 1996-1999.
- OSU Interdisciplinary seed grant program. "Motion based image segmentation." coinvestigator with Deliang Wang. \$100,000: 1997-1999.
- Nato International Scientific Exchange Program. "The perceptual analysis of 3D surface structure." \$6500: 1998-2000.
- National Eye Institute. "The perceptual representation of 3D surfaces." \$675,000: 1999-2005.
- National Science Foundation. "Detection and segmentation of image motion." \$211,000: 2000-2004.
- National Science Foundation. "The perception of 3D shape from texture." \$315,000: 2006-2009.

### **Publications**

- Todd, J. T. (1978). Attending to change: Implications for a coalitional theory of human information processing. (Doctoral dissertation, University of Connecticut, 1977). Dissertation Abstracts, 38, 3938. (University Microfilms No. DDK77-31230).
- Van Gelder, P., Todd, J. T., & Tsui, W. H. (1979). Data acquisition software for high data rate experiments. Behavior Research Methods and Instrumentation, 11, 192-198.
- Todd, J. T. & Van Gelder, P. (1979). Implications of a transient-sustained dichotomy for the measurement of human performance. Journal of Experimental Psychology: Human Perception and Performance, 5, 625-638.
- Todd, J. T., Mark, L. S., Shaw, R. E., & Pittenger, J. B. (1980). The perception of human growth. Scientific American, 242, 132-144.

- Mark, L. S., Pittenger, J. B., Hines, H., Carello, C., Shaw, R. E., & Todd, J. T. (1980). Wrinkling and head shape as coordinated sources of age level information. Perception and Psychophysics, 27, 117-124.
- Shaw, R. E., & Todd, J. T. (1980). Abstract machine theory and direct perception. The Behavioral and Brain Sciences, 3, 400-401.
- Todd, J. T., & Mark, L. S. (1981). Issues related to the prediction of craniofacial growth. American Journal of Orthodontics, 79, 63-80.
- Todd, J. T., & Mark, L. S. (1981). A reply to Dr. Bookstein. American Journal of Orthodontics, 79, 449-455.
- Mark, L. S., Todd, J. T., & Shaw, R. E. (1981). Perception of growth: A geometric analysis of how different styles of change are distinguished. Journal of Experimental Psychology: Human Perception and Performance, 7, 855-868.
- Mingolla, E., & Todd, J. T. (1981). The rotating square illusion. Perception and Psychophysics, 29, 487-492.
- Todd, J. T. (1981). Visual information about moving objects. Journal of Experimental Psychology: Human Perception and Performance, 7, 795-810.
- Todd, J. T. (1982). Visual information about rigid and nonrigid motion: A geometric analysis. Journal of Experimental Psychology: Human Perception and Performance, 8, 238-251.
- Mark, L. S., Shaw, R. E., Todd, J. T., Pittenger, J. B., Alley, T. R., & Jenkins, D. H. (1982). Comments on the new geometric approach to cephalometrics: A reply to Dr. Vig. American Journal of Orthodontics, 81, 338-340.
- Todd, J. T., & Warren, W. H. (1982). Visual perception of relative mass in dynamic events. Perception, 11, 325-335.
- Todd, J. T. (1983). The perception of gait. Journal of Experimental Psychology: Human Perception and Performance, 9, 31-42.
- Mark, L. E., & Todd, J. T. (1983). The perception of growth in three-dimensions. Perception and Psychophysics, 33, 193-196.
- Todd, J. T., & Mingolla, E. (1983). The perception of surface curvature and direction of illumination from patterns of shading. Journal of Experimental Psychology: Human Perception and Performance, 9, 583-595.
- Pittenger, J. B. & Todd, J. T. (1983). Perception of growth from changes in body proportions. Journal of Experimental Psychology: Human Perception and Performance, 9, 945-954.
- Todd, J. T., & Mingolla, E. (1984). The simulation of curved surfaces from patterns of optical texture. Journal of Experimental Psychology: Human Perception and Performance, 10, 734-739.
- Mingolla, E., & Todd, J. T. (1984). Computational techniques for the graphic simulation of quadric surfaces. Journal of Experimental Psychology: Human Perception and Performance, 10, 740-745.
- Todd, J. T. (1984). The perception of three-dimensional structure from rigid and nonrigid motion. Perception and Psychophysics, 36, 97-103.
- Todd, J. T. (1985). Formal theories of visual information. In W. H. Warren & R. E. Shaw (Eds.), Persistence and Change: Proceedings of the First International Conference on Event Perception (pp. 87-102). Hillsdale, New Jersey: Erlbaum.

- Todd, J. T. (1985). The analysis of three-dimensional structure from moving images. In D. Ingle, M. Jeannerod, & D. Lee (Eds.), Brain mechanisms and spatial vision (pp. 73-94). The Hague: Martinus Nijhoff.
- Mark, L. S. & Todd, J. T. (1985). Describing perceptual information about human growth in terms of geometric invariants. Perception and Psychophysics, 3, 249-256.
- Todd, J. T. (1985). Deus ex machina, Contemporary Psychology, 30, 620-622.
- Todd, J. T. (1985). The perception of structure from motion: Is projective correspondence of moving elements a necessary condition? Journal of Experimental Psychology: Human Perception and Performance, 11, 689-710.
- Mingolla, E. & Todd, J. T. (1986). Perception of solid shape from shading. Biological Cybernetics, 53, 137-151.
- Todd, J. T., & Akerstrom, R. A. (1987). The perception of three dimensional form from patterns of optical texture. Journal of Experimental Psychology: Human Perception and Performance, 2, 242-255.
- Fetters, L. E., & Todd, J. T. (1987). Quantitative assessment of infant reaching movements. Journal of Motor Behavior, 19, 147-166.
- Todd, J.T., Akerstrom, R.A., Reichel, F. D., & Hayes, W. (1988). Apparent rotation in 3-dimensional space: Effects of temporal, spatial and structural factors. Perception & Psychophysics, 43, 179-188.
- Akerstrom, R. A., & Todd, J.T. (1988). Perception of stereoscopic transparency. Perception & Psychophysics, 44, 421-432.
- Todd, J.T. (1989). Models of static form perception. In J.I. Elkind, S. K. Carol, J. Hochberg and B.M. Huey (Eds.), Human Performance Models for Computer-Aided Engineering (pp. 75-88). Washington, D.C.: National Academy Press.
- Todd, J.T., & Reichel, F. D. (1989). Ordinal structure in the visual perception and cognition of smoothly curved surfaces. Psychological Review, 96, 643-657.
- Mingolla, E., & Todd, J.T. (1989). Perception of solid shape from shading. In B.K.P. Horn & M.J. Brooks (Eds.), Shape from shading (pp. 402-442). Cambridge, MA: MIT Press.
- Braunstein, M., & Todd, J.T. (1990). On the perceptual distinction between artifacts and information. Journal of Experimental Psychology: Human Perception and Performance, 16, 211-216.
- Reichel, F. D., & Todd, J.T. (1990). Perceived depth inversion of smoothly curved surfaces due to image orientation. Journal of Experimental Psychology: Human Perception and Performance, 16, 653-664.
- Todd, J.T., & Reichel, F. D. (1990). The visual perception of smoothly curved surfaces from double projected contour patterns. Journal of Experimental Psychology: Human Perception and Performance, 16, 665-674.
- Todd, J.T., & Bressan, P. (1990). The perception of 3-dimensional affine structure from minimal apparent motion sequences. Perception & Psychophysics, 48, 419-430.
- Todd, J.T., & Norman, J.F. (1991). The visual perception of smoothly curved surfaces from minimal apparent motion sequences. Perception & Psychophysics, 50, 509-523.

- Norman, J.F., & Todd, J.T. (1992). The visual perception of 3-dimensional form. In G. A. Carpenter & S. Grossberg (Eds.), Neural networks for vision and image processing. Cambridge, MA: MIT press. pp. 93-110.
- Mingolla, E., Todd, J.T., & Norman, J.F. (1992). The perception of globally coherent motion. Vision Research, 32, 1015-1032
- Reichel, F. & Todd, J. T. (1992). Metric knowledge of three-dimensional surface structure. Society for Information Display Digest, 23, 845-848.
- Norman, J.F., & Todd, J.T. (1993) The perceptual analysis of structure from motion for rotating objects undergoing affine stretching transformations. Perception & Psychophysics, 53, 279-291.
- Todd, J.T. (1994) On the optic sphere theory and the nature of visual information. In G. Jansson, S. S. Bergstrom & W. Epstein (Eds.), Perceiving events and objects. Hillsdale, NJ: Erlbaum, pp 471-478.
- Norman, J. F. & Todd, J. T. (1994) The perception of rigid motion in depth from the optical deformations of shadows and occlusion boundaries. Journal of Experimental Psychology: Human Perception and Performance, 20, 343-356.
- Todd, J. T., Tittle, J. S., & Norman, J. F. (1995) Distortions of 3-dimensional space in the perceptual analysis of motion and stereo. Perception, 24, 75-87.
- Norman, J. F., Todd, J. T., & Phillips, F. (1995) The perception of surface orientation from multiple sources of optical information. Perception & Psychophysics, 57, 629-636.
- Norman, J. F., & Todd, J. T. (1995) Perception of 3-dimensional structure from contradictory optical patterns. Perception & Psychophysics, 57, 826-834.
- Tittle, J. S., Todd, J. T., Perotti, V. J., & Norman, J. F. (1995) The systematic distortion of perceived 3D structure from motion and binocular stereopsis. Journal of Experimental Psychology: Human Perception and Performance, 21, 663-678.
- Todd, J. T. (1995) The visual perception of three-dimensional structure from motion. In W. Epstein & S. J. Rogers (Eds.) Handbook of perception and cognition, Volume 5: Perception of space and motion. Orlando, FL: Academic Press. pp. 201-226.
- Tittle, J. S., & Todd, J. T. (1995) The perception of three-dimensional structure. In M. A. Arbib (Ed.) The handbook of brain theory and neural networks. Cambridge, MA: MIT Press. pp. 715-718.
- Todd, J. T. & Norman, J. F. (1995) The effects of spatio-temporal integration on maximum displacement thresholds in the detection of coherent motion, Vision Research, 35, 2287-2302.
- Reichel, F. D., Todd, J.T., Yilmaz, E., (1995) Visual discrimination of local surface depth and orientation. Perception & Psychophysics, 57, 1233-1240.
- Todd, J. T., & Norman, J. F. (1995) The visual discrimination of 3D angles. Perception, 24, 855-866.
- Lindsey, D. T. & Todd, J. T. (1996) The perception of transparency in moving plaids. Vision Research, 36, 207-222.
- Norman, J. F., Todd, J. T., Perotti, V. J. & Tittle, J. S. (1996) The visual perception of 3D length. Journal of Experimental Psychology: Human Perception and Performance, 22, 173-186.
- Todd, J. T., Koenderink, J. J., van Doorn, A. J., & Kappers, A. M. L. (1996) Effects of changing viewing conditions on the perceived structure of smoothly curved surfaces. Journal of Experimental Psychology: Human Perception and Performance, 22, 695-706.

- Perotti, V. J., Todd, J. T. & Norman, J. F. (1996) The visual perception of rigid motion from constant flow fields. Perception & Psychophysics, 58, 666-679.
- Todd, J. T. (1996) The visual perception of 3D shape. In A. M. L. Kappers, C. J. Overbeeke, G. F. F. Smets, and P. J. Stappers (Eds.) Studies in ecological psychology. Delft, The Netherlands: Delft University Press. pp. 89-102
- Norman, J. F. & Todd, J. T. (1996) The discriminability of local surface structure. Perception, 25, 381-398.
- Phillips, F., & Todd, J. T. (1996) The visual perception of local shape. Journal of Experimental Psychology: Human Perception and Performance, 22, 930-944.
- Koenderink, J. J., Kappers, A. M. L., Todd, J. T., Norman, J. F. & Phillips, F. (1996) Surface and attitude probing in stereoscopically presented dynamic scenes. Journal of Experimental Psychology: Human Perception and Performance, 22, 869-878.
- Norman, H. F., Norman, J. F., Todd, J. T., & Lindsey, D. T. (1997) Spatial interactions in perceived velocity. Perception, 26, 815-831.
- Koenderink, J. J., van Doorn, A. J., Kappers, A. M. L. & Todd, J. T. (1997) The visual contour in depth. Perception & Psychophysics, 59, 828-838.
- Phillips, F., Todd, J. T., Koenderink, J. J. & Kappers, A. M. L. (1997) Perceptual localization of surface position. Journal of Experimental Psychology: Human Perception and Performance, 23, 1481-1492.
- Todd, J. T., Norman, J. F., Koenderink, J. J. & Kappers, A. M. L. (1997) Effects of texture, illumination and surface reflectance on stereoscopic shape perception. Perception, 26, 806-822.
- Perotti, V. J., Todd, J. T., Lappin, J. S. & Phillips, F. (1998) The perception of surface curvature from optical motion. Perception & Psychophysics, 60, 377-388.
- Norman, J. F. & Todd, J. T. (1998) The discrimination of interval and ordinal depth relations on smoothly curved surfaces. Perception, 27, 257-272.
- Todd, J. T., Chen, L., Norman, J. F. (1998) On the relative salience of euclidean, affine and topological structure for 3D form discrimination. Perception, 27, 273-282.
- Lindsey, D. T. & Todd, J. T. (1998) Opponent interactions in the perception of transparent motion. Perception & Psychophysics, 60, 558-574.
- Todd, J. T. (1998) Theoretical and biological limitations on the visual perception of three-dimensional structure from motion. In T. Watanabe (Ed.) High-level motion processing- computational, neurophysiological and psychophysical perspectives. Cambridge MA: MIT Press, pp 359-380.
- Cesmeli, E., Wang, D. L., Lindsey, D. T. & Todd, J. T. (1998) Motion segmentation using temporal block matching and LEGION. In The 1998 IEEE International Joint Conference on Neural Networks: Proceedings. Piscataway NJ: IEEE, pp 2069-2074.
- Todd, J. T., Oomes, A. H. J., Koenderink, J. J. & Kappers, A. M. L. (1999) The intrinsic geometry of perceptual space: Its metrical, affine and projective properties. In P. R. Killeen & W. R. Uttal (Eds.) Fechner day 99: The end of 20<sup>th</sup> century psychophysics. Tempe, AZ: The International Society for Psychophysics, pp 169-175.
- Todd, J. T. & Perotti, V. J. (1999) The visual perception of surface orientation from optical motion. Perception & Psychophysics, 61, 1577-1589.

- Orban, G. A., Sunaert, S., Todd, J. T., Van Hecke, P. & Marchal, G. (1999) Human cortical regions involved in extracting depth-from-motion. Neuron, 24, 929-940.
- Koenderink, J. J., van Doorn, A. J., Kappers, A. M. L. & Todd, J. T. (2000) Directing the mental eye in pictorial perception. In B. E. Rogowitz & T. N. Pappas (Eds.) Human Vision and Electronic Imaging V. Bellingham, WA: The International Society for Optical Engineering, pp 2-15.
- Koenderink, J. J., van Doorn, A. J., Kappers, A. M. L. & Todd, J. T. (2001) Ambiguity and the “Mental Eye” in pictorial relief. Perception, 30, 431-448.
- Todd, J. T., Oomes, A. H. J., Koenderink, J. J. & Kappers, A. M. L. (2001) On the affine structure of perceptual space. Psychological Science, 12, 191-196.
- Mingolla, E., Todd, J. T. & Norman, J. F. (2001) Perception of lightness of glossy surfaces. In B. E. Rogowitz & T. N. Pappas (Eds.) Human Vision and Electronic Imaging VI. Bellingham, WA: The International Society for Optical Engineering, pp 302-311.
- Todd, J. T. & Oomes, A. H. J. (2002) Generic and Nongeneric conditions for the perception of surface shape from texture, Vision Research, 42, 837-850.
- Koenderink, J. J., van Doorn, A. J., Kappers, A. M. L. & Todd, J. T. (2002) Pappus in optical space. Perception & Psychophysics, 64, 380-391.
- Vanduffel, W., Fize, D., Peuskens, H., Denys, K., Sunaert, S., Todd, J. T. & Orban, G. A. (2002) Extracting the third dimension from motion: Differences in Human and monkey intraparietal cortex. Science, 298, 413-415.
- Todd, J. T. (2003) The visual perception of 3D structure. In M. A. Arbib (Ed.) The handbook of brain theory and neural networks, second edition. Cambridge, MA: MIT Press. pp. 868-871.
- Todd, J. T. & Norman, J. F. (2003) The perception of 3D shape from multiple cues: Are observers capable of perceiving metric structure? Perception & Psychophysics, 65, 31-47.
- Phillips, F., Todd, J. T., Koenderink, J. J. & Kappers, A. M. L. (2003) Perceptual representation of visible surfaces. Perception & Psychophysics, 65, 747-762.
- Orban, G. A., Fize, D., Peuskens, H., Denys, K., Nelissen, K., Sunaert, S., Todd, J. T. & Vanduffel, W., (2003) Similarities and differences in motion processing between the human and macaque brain: Evidence from fMRI. Neuropsychologia, 13, 1757-1768.
- Todd, J. T., Norman, J. F. & Mingolla, E. (2004) Lightness constancy in the presence of specular highlights. Psychological Science, 15, 33-39.
- Todd, J. T., Oomes, A. H. J., Koenderink, J. J. & Kappers, A. M. L. (2004) Perception of doubly curved surfaces from anisotropic textures. Psychological Science, 15, 40-46.
- Bingham, G. P., Crowell, J. A. & Todd, J. T. (2004) Distortions of distance and shape are not produced by a single continuous transformation of reach space. Perception & Psychophysics, 66, 152-169.
- Todd, J. T. (2004) The perception of 3D shape. Trends in Cognitive Science, 8, 115-121.
- Peuskens, H., Todd, J. T., Norman, J. F. Van Hecke, P. & Orban, G. A. (2004) Selective attention to shape, motion and texture in 3D structure from motion displays. Journal of Cognitive Neuroscience, 16, 665-682.
- Norman, J. F., Todd, J. T. & Orban, G. A. (2004) Perception of 3D shape from specular highlights, deformations of shading, and other types of visual information. Psychological Science, 15, 565-570.

- Koenderink, J. J., van Doorn, A. J., Kappers, A. M. L. & Todd, J. T. (2004) Pointing out of the picture. Perception, 33, 513-530.
- Liu, B. & Todd, J. T. (2004) Perceptual biases in the interpretation of 3D shape from shading. Vision Research, 44, 2135-2145.
- Todd, J. T. (2005) Stability and change. Visual Cognition, 12, 639-642
- Todd, J. T., Thaler, L. & Dijkstra, T. M. H. (2005) The effects of field of view on the perception of 3D slant from texture. Vision Research, 45, 1501-1517.
- Norman, J. F., Todd, J. T., Norman, H., Clayton, A. M. & McBride, T. R. (2006) Visual discrimination of local surface structure: Slant, tilt and curvedness. Vision Research, 46, 1057-1069.
- Orban, G. A., Claeys, K., Nelissen, K., Smans, R., Sunaert, S., Todd, J. T., Wardak, C., and Vanduffel, W. (2006) Mapping the parietal cortex of human and non-human primates. Neuropsychologia, 44, 2646-2667.
- Todd, J. T. (2007) On the internal consistency of perceptual organization. In M. A. Peterson, B. Gillam & H. A. Sedgwick (Eds.) In the Mind's Eye: Julian Hochberg on the Perception of Pictures, Film, and the World. Oxford: Oxford University Press, pp 531-538.
- Thaler, L., Todd, J. T. & Dijkstra, T. M. H. (2007) The effects of phase on the perception of 3D shape from texture: Psychophysics and modeling. Vision Research, 47, 411-427.
- Thaler, L., Todd, J. T., Spering, M. & Gegenfurtner, K. (2007) Illusory Bending of a Rigidly Moving Line Segment: Effects of Image Motion and Smooth Pursuit Eye Movements. Journal of Vision, 7(6)9, 1-13.
- Todd, J. T., Thaler, L., Dijkstra, T. M. H., Koenderink, J. J. & Kappers, A. M. L. (2007). The effects of viewing angle, camera angle and sign of surface curvature on the perception of 3D shape from texture. Journal of Vision, 7(12)9, 1-16.
- Durand, J. B., Nelissen, K., Joly, O., Wardak, C., Todd, J. T., Norman, J. F., Janssen, P., Vanduffel, W. & Orban, G. A. (2007) Anterior Regions of Monkey Parietal Cortex Process Visual 3D Shape. Neuron, 55, 493-505.
- Koenderink, J. J., Pont, S. C., van Doorn, A. J., Kappers, A. M. L. & Todd, J. T. (2007). The visual light field. Perception, 36, 1595-1610.
- Koenderink, J. J., van Doorn, A. J., Kappers, A. M. L., Doumen, M. J. & Todd, J. T. (2008) Exocentric pointing in depth. Vision Research, 48, 716-723.
- Koenderink, J. J., van Doorn, A. J. & Todd, J. T. (2008). Wide distribution of external local sign in the normal population. Psychological Research, 72, DOI: 10.1007/s00426-008-0145-7.
- Georgieva, S. G., Todd J. T., Peeters, R. and Guy A. Orban, G. A. (2008) The extraction of 3D shape from texture and shading in the human brain. Cerebral Cortex, 18, DOI:10.1093/cercor/bhn002.
- Wilbraham, D. A., Christensen, J., Martinez, A. M. & Todd (2007). Can low level image differences account for the ability of human observers to discriminate facial identity? Journal of Vision, in press.



### **Published Abstracts**

- Todd, J.T. (1979). Visual information about rigidity: A new look at the kinetic depth effect. Bulletin of the Psychonomic Society, 14, 243.
- Warren, W.H., & Todd, J.T. (1979). Sliding and colliding: Visual perception of friction and mass in dynamic events. Bulletin of the Psychonomic Society, 14, 260-261.
- Pittinger, J.B., Todd, J.T., & Shaw, R. E. (1980). Body proportions as information for perceived age. Bulletin of the Psychonomic Society, 16, 168.
- Todd, J.T. (1980). The perception of gait. Bulletin of the Psychonomic Society, 16, 174.
- Todd, J.T. (1981). The categorical perception of human gait. Bulletin of the Psychonomic Society, 18, 67.
- Todd, J.T., & Mingolla, E. (1982). Perception of curvature from texture and motion. Bulletin of the Psychonomic Society, 20, 142.
- Mingolla, E., & Todd, J.T. (1982). Perception of surface curvature from image shading and texture gradients. Bulletin of the Psychonomic Society, 20, 137.
- Todd, J.T., & Pittinger, J.B. (1983). Perceived structure from motion for scintillating surfaces. Bulletin of the Psychonomic Society, 21, 361.
- Mingolla, E., & Todd, J.T. (1984). Perception of three-dimensional form from shaded images. Bulletin of the Psychonomic Society, 22, 270.
- Todd, J.T., Reichel, F. & Mingolla, E. (1986). Perception of curved surfaces from shading and occluding contours. Bulletin of the Psychonomic Society, 24, 349.
- Todd, J.T. (1988). Perceived 3D structure from 2-frame apparent motion. Investigative Ophthalmology and Visual Science, 29, 265.
- Todd, J.T. (1988). Minimal conditions for the perception of structure from motion. Bulletin of the Psychonomic Society, 26, 476-488.
- Reichel, F. D., & Todd, J.T. (1989). Perceptual depth inversion of smoothly curved surfaces. Investigative Ophthalmology and Visual Science, 30, 252.
- Todd, J.T. (1989). The short-range limit increases for multiple length apparent motion sequences. Bulletin of the Psychonomic Society, 27, 508.
- Kramer, S.J., & Todd, J.T. (1990). Spatio-temporal integration in short-range apparent motion. Investigative Ophthalmology and Visual Science, 31, 519.
- Reichel, F. D., & Todd, J.T. (1990). Visual knowledge of three dimensional surface structure. Investigative Ophthalmology and Visual Science, 31, 526.
- Todd, J.T., & Mingolla, E. (1990). The visual perception of globally coherent motion. Bulletin of the Psychonomic Society, 28, 496.
- Mingolla, E., Todd, J.T., & Norman, J.F. (1991). The perception of globally coherent motion. Investigative Ophthalmology & Visual Science, 32, 957.
- Norman, J.F., & Todd, J.T. (1991). The perception of rigid motion from affine distortions in depth. Investigative Ophthalmology & Visual Science, 32, 958.
- Reichel, F. D., & Todd, J.T. (1991). Metric knowledge of three dimensional surface structure. Investigative Ophthalmology & Visual Science, 32, 1179.

- Todd, J.T., & Schnittman, P. (1991). The perceptual identification of image contours. Bulletin of the Psychonomic Society, 29, 529.
- Mingolla, E., Norman, J.F., & Todd, J.T. (1992). Contextual information for the perception of surface gloss on curved surfaces. Investigative Ophthalmology & Visual Science, 33, 957.
- Todd, J.T., Kramer, S. J. & Norman, J.F. (1992). Spatiotemporal integration in the detection of coherent motion. Investigative Ophthalmology & Visual Science, 33, 1050.
- Norman, J.F., Todd, J.T., & Fukuda, H. (1992). Perceived 3D structure from boundary and shadow information. Investigative Ophthalmology & Visual Science, 33, 706.
- Todd, J. T., Norman, J. F., Perotti, V. J., & Tittle, J. S. (1993) The discrimination of 3D length from motion and stereopsis. Investigative Ophthalmology & Visual Science, 34, 1131.
- Tittle, J. S., Perotti, V. J., Todd, J. T., & Norman, J. S. (1993). The perception of relative surface orientation from binocular disparity and motion. Investigative Ophthalmology & Visual Science, 34, 1132.
- Norman, J. F., & Todd, J. T. (1993) Directional anisotropies determine the perceived structure of contradictory motion and binocular disparity fields. Investigative Ophthalmology & Visual Science, 34, 1082.
- Ruda, H., & Todd, J. T., (1993) Effects of area and target separation on vernier acuity for stimuli defined by luminance, texture and motion. Investigative Ophthalmology & Visual Science, 34, 1029.
- Norman, J. F., Todd, J.T., & Phillips, F. (1993). The visual perception of surface orientation. Bulletin of the Psychonomic Society, 31, 358.
- Todd, J.T., Perotti, V. J. & Norman, J. F. (1993). Perceived rigid rotation in depth from constant flow fields. Bulletin of the Psychonomic Society, 31, 378-379.
- Norman, H. F., Todd, J. T., & Lindsey, D. T. (1994) Spatial interactions in perceived velocity. Investigative Ophthalmology & Visual Science, 35, 1271.
- Perotti, V. J. & Todd, J. T., Tittle, J. S., & Norman, J. F. (1994) Perception of 3D form from instantaneous flow components. Investigative Ophthalmology & Visual Science, 35, 1317.
- Todd, J. T. & Norman, J. F. (1994) The visual perception of 3D length in natural vision. Investigative Ophthalmology & Visual Science, 35, 1329.
- Lindsey, D. T. & Todd, J. T. (1994) Opponent motion interactions in transparent motion. Investigative Ophthalmology & Visual Science, 35, 1389.
- Kappers, A. M. L., Koenderink, J. J., Todd, J. T., & Norman, J. F. (1994) Depth and attitude probing in dynamic scenes. Investigative Ophthalmology & Visual Science, 35, 1626.
- Phillips, T. F., Todd, J. T. & Norman, J.F. (1994) The perception of local 3D shape. Investigative Ophthalmology & Visual Science, 35, 1627.
- Norman, J. F., Todd, J. T., Phillips, F. (1994) Perception of 3D structure from multiple sources of optical information. Investigative Ophthalmology & Visual Science, 35, 1742.
- Perotti, V. J. & Todd, J. T., Lappin, J. F. & Phillips, F. (1995) Perceived shape index and curvedness from constant flow fields. Investigative Ophthalmology & Visual Science, 36, 361.
- Phillips, F., Todd, J. T., Koenderink, J. J., & Kappers, A. M. L. (1995) What defines features on smoothly curved surfaces. Investigative Ophthalmology & Visual Science, 36, 847.

- Tittle, J. S., Perotti, V. J. & Phillips, F. (1995) The integration of surface shape and curvedness from motion and binocular stereopsis. Investigative Ophthalmology & Visual Science, 36, 847.
- Norman, J. F., & Todd, J. T. (1995) The discriminability of metrical and nonmetrical properties on smoothly curved surfaces. Investigative Ophthalmology & Visual Science, 36, 1068.
- Lindsey, D. T. & Todd, J. T. (1995) The detection of motion in transparent motion displays. Investigative Ophthalmology & Visual Science, 36, 1048.
- Van Doorn, A. J., Koenderink, J. J., Kappers, A. M. L. & Todd, J. T. (1996) The visual contour in depth. Perception, 25, (Supplement), 39.
- Todd, J. T., Norman, J. F., Koenderink, J. J., & Kappers, A. M. L. (1996) Effects of texture, illumination and surface reflectance on stereoscopic shape perception. Investigative Ophthalmology & Visual Science, 37, 1934.
- Norman, H. F., Norman, J. F., & Todd, J. T. (1996) Spatial interactions in perceived speed. Investigative Ophthalmology & Visual Science, 37, 744.
- Lindsey, D.T., & Todd, J.T. (1997) Direction repulsion in ring-filtered Julesz patterns. Investigative Ophthalmology & Visual Science, 38, 693.
- Norman, J. F., & Todd, J. T. (1997) The visual discrimination of surface slant and tilt. Investigative Ophthalmology & Visual Science, 38, 1001.
- Kappers, A. M. L., Koenderink, J.J., van Doorn, A.J., & Todd, J. T. (1997) Comparison of local and global methods in the measurement of pictorial relief. Investigative Ophthalmology & Visual Science, 38, 1010.
- Orban, G.A., Sunaert, S., Todd, J.T., Van Hecke, P. & Marchal, G. (1998) 3D Structure from motion displays activate human MT/V% and Parietal motion areas. Investigative Ophthalmology & Visual Science, 39, 905.
- Phillips, F., Todd, J. T., Koenderink, J. J., & Kappers, A. M. L. (1998) Geometric structure and its implication in the localization of features on smoothly curved surfaces. Investigative Ophthalmology & Visual Science, 39, 1114.
- Todd, J. T., Chen, L. & Norman, J. F. (1998) On the relative salience of euclidean, affine and topological structure for 3D form discrimination. Investigative Ophthalmology & Visual Science, 39, 1114.
- Orban, G. A., Sunaert, S., Todd, J. T. & Van Hecke, P. (1998) Extraction of 3D structure from motion in the human brain. Society for Neuroscience Abstracts, 24, 1745.
- Koenderink, J. J., Van Doorn, A. J., Kappers, A. M. L. & Todd, J. T. (1998) Measuring pictorial shape. Perception, 27, (Supplement), 118.
- Todd, J. T. & Perotti, V. J. (1999) The perceptual scaling of surface orientation from optical motion. Investigative Ophthalmology & Visual Science, 40, 1114.
- Koenderink, J. J., Van Doorn, A. J., Kappers, A. M. L. & Todd, J. T. (1999) Pappus in optical Space, Perception, 28, (Supplement), 13.
- Norman, J. F. & Todd, J. T. (1999) The visual perception of global 3D shape. Abstracts of the Psychonomic Society, 4, 54.
- Todd, J. T. & Norman, J. F. (1999) Perceiving directions of illumination. Abstracts of the Psychonomic Society, 4, 55.

- Oomes, S., Todd, J. T., Koenderink, J. J. & Kappers, A. M. L. (2000) Intrinsic affine geometry of visual space. Investigative Ophthalmology & Visual Science, 41, S724.
- Todd, J. T., Norman, J. F. & Oomes, S. (2000) Visual sensitivity and bias in the perception of illumination. Investigative Ophthalmology & Visual Science, 41, S227.
- Koenderink, J. J., Van Doorn, A. J., Kappers, A. M. L. & Todd, J. T. (2000) Ambiguity and the “mental eye” in pictorial relief. Investigative Ophthalmology & Visual Science, 41, S36.
- Crowell, J. A., Todd, J. T. & Bingham, G. P. (2000) Distinct visuomotor transformations for visually guided reaching. Abstracts of the Psychonomic Society, 5, 107-108.
- Oomes, A. H. J., Todd, J. T., Koenderink, J. J. & Kappers, A. M. L. (2000) Varignon in visual space. Perception, 29, (Supplement), 51.
- Sunaert, S., Fesl, G., Todd, J. T., Rosier, A., Van Hecke, P. & Orban, G. A. (2000) Human cortical regions involved in extracting 3D structure from motion depend on stimulus type and transparency. Society for Neuroscience Abstracts, 26, 1583.
- Vanduffel, W. J. M., Beatse, E., Nelissen, K., Tootell, R. B. H., Todd, J. T. & Orban, G. A. (2000) Areas involved in extracting structure from motion: An fMRI study in the awake fixating monkey. Society for Neuroscience Abstracts, 26, 1584.
- Crowell, J. A., Todd, J. T. & Bingham, G. P. (2001) Distinct perceptual representations for visually guided reaches. Journal of Vision, 1(3), 3.
- Todd, J. T. & Oomes, A. H. J. (2001) The perception of 3D shape from surface contours. Journal of Vision, 1(3), 40.
- Koenderink, J. J., Van Doorn, A. J., Kappers, A. M. L. & Todd, J. T. (2001) Physical and mental viewpoints in pictorial relief. Journal of Vision, 1(3), 39.
- Oomes, A. H. J. & Todd, J. T. (2001) Shape from texture: Seeing cylinders in line and blob patterns. Journal of Vision, 1(3), 395.
- Norman, J. F., Todd, J. T. & Orban, G. A. (2001) The perception and discrimination of global 3D shape from the deformations of texture, shading and specular highlights. Journal of Vision, 1(3), 392.
- Liu, B. & Todd, J. T. (2002) The perception of convex and concave surfaces under natural illumination. Journal of Vision, 2(7), 86.
- Todd, J. T., Oomes, A. H. J., Koenderink, J. J. & Kappers, A. M. L. (2002) The perception of 3D shape from anisotropic texture patterns. Journal of Vision, 2(7), 113.
- Vanduffel W., Fize, D., Peuskens, H., Denys, K., Sunaert, S., Todd, J. T. & Orban, G. A. (2002) Processing 3-dimensional structure from motion in humans and macaques. Journal of Vision, 2(7), 116.
- Peuskens, H., Todd, J. T., Norman, J. F., Van Hecke, P. & Orban, G. A. (2002) Neural correlates of judging 3D structure from motion. Journal of Vision, 2(7), 301.
- Peuskens, H., Sunaert, S., Norman, F., Todd, J. T., Raiguel, S. & Orban, G. A. (2002) Cue interactions in the human visual cortex. Society for Neuroscience Abstracts, 28, 219.
- Liu, B. & Todd, J. T. (2003) Effects of illumination direction on the perception of shape from shading for photometrically accurate images of randomly shaped surfaces. Journal of Vision, 3(9), 478.
- Norman, J. F., Norman, H. F., Todd, J. T., Clayton, A. M. & McBride, T. R. (2003) The perception and discrimination of local curvature on complex 3D surfaces. Journal of Vision, 3(9), 482.

- Georgieva, S. S., Todd, J. T., Peeters, R. & Orban, G. A. (2003) Cortical regions involved in extracting 3D shapes from shading. Journal of Vision, 3(9), 508.
- Phillips, F. & Todd, J. T. (2003) Local and global coherence in two and three dimensional textures. Journal of Vision, 3(9), 610.
- Todd, J. T., Thaler, L. & Dijkstra, T. (2003) The effects of visual angle on the perception of 3D curvature from texture. Journal of Vision, 3(9), 611.
- Todd, J. T. & Chen, B. (2003) A bias for global convexity in the perception of 3D shape from texture. Abstracts of the Psychonomic Society, 8, 22.
- Denys, K. A., Vanduffel, W., Todd, J. T. & Orban, G. A. (2003) Moving random lines are better stimuli for far extrastriate brain areas. Society for Neuroscience Abstracts, 29, 69.6.
- Georgieva, S. S., Todd, J. T., Nelissen, K., Vanduffel, W., Pieters, R. & Orban, G. A. (2003) Cortical regions involved in extracting 3D shapes from shading: A human and monkey fmri study. Society for Neuroscience Abstracts, 29, 819.19.
- Todd, J. T., Thaler, L. & Dijkstra, T., Koenderink, J. J. & Kappers (2004) The effects of camera and viewing angles on the perception of 3D shape from texture. Journal of Vision, 4(8), 75.
- Thaler, L., Dijkstra, T. & Todd J. T. (2004) On the role of phase information in the perception of 3D shape from texture. Journal of Vision, 4(8), 76.
- Christensen, J. & Todd J. T. (2004) The effects of texture changes on object recognition. Journal of Vision, 4(8), 96.
- Christensen, J. C. & Todd, J. T. (2005). The seductive effect of context on object recognition. Journal of Vision, 5(8), 859.
- Georgieva, S. S., Todd, J. T., Peeters, R. & Orban, G. A. (2005). Functional neuroanatomy for the processing of 3D shape from shading and texture in humans. Journal of Vision, 5, 775.
- Georgieva, S. S., Todd, J. T., Peeters, R. & Orban, G. A. (2005). Functional neuroanatomy for the processing of 3D shape from shading and texture in humans . Society for Neuroscience Abstracts, 768.6.
- Thaler, L., Todd , J. T. & Lindsey, D. T. (2005). Phase dependent local energy mediates effects of phase scrambling on shape perception from texture. Journal of Vision, 5(8), 994.
- Todd, J. T. & Thaler, L. (2005). A gradient based heuristic for the perception of 3D shape from texture. Journal of Vision, 5(8), 995.
- Durand, J., Nelissen, K., Vanduffel, W., Todd, J. T., Norman, J. F. & Orban, G. A. (2006). Primate IPS areas involved in visual 3D shape processing. Journal of Vision, 6(6), 254.
- Christensen, J. & Todd J. T. (2006). What image measures are best correlated with the discriminability of 3D objects? Journal of Vision, 6(6), 321.
- Thaler, L. & Todd, J. T. (2006). The rubber pencil illusion. Journal of Vision, 6(6), 634.
- Martinez, A. M, Wilbraham, D. A., Todd J. T. & Christensen, J. (2006). Can low level image differences account for face discrimination performance? Journal of Vision, 6(6), 1071.
- Wilbraham, D. A., Martinez, A. M & Todd J. T. (2006). The effects of illumination and expression on the recognition of human faces. Journal of Vision, 6(6), 1072.
- Todd, J. T. (2007) Are perceptual judgments of different surface attributes based on the same relative weighting of depth cues. Perception, 36, (Supplement), 121.

- Thaler, L. & Todd, J. T. (2007). Reaching to a point or reaching over a distance – What is the difference. Journal of Vision, 7(9), 166.
- Koenderink, J. J., van Doorn, A. J., Kappers, A. M. L., Doumen, M. J. & Todd, J. T. (2008) Exocentric pointing in depth. Journal of Vision, 7(9), 288.
- Wilbraham, D. A., Martinez, A. M, Christensen, J. & Todd J. T. (2007). Human face matching performance is robust to task-irrelevant image changes. Journal of Vision, 7(9), 890.
- Christensen, J. & Todd J. T. (2007). Labeling contours in natural scenes. Journal of Vision, 7(9), 969.
- Todd, J. T., Christensen, J. & Guckes, K. (2007). Nonlinear biases in the perception of 3D slant from texture. Journal of Vision, 8(6), 79.
- Christensen, J. & Todd J. T. (2007). The role of bias in human contour labelling. Journal of Vision, 8(6), 335.
- Thaler, L. & Todd, J. T. (2007). Evidence from visuo-motor adaption for two partially independent visuo-motor systems. Journal of Vision, 8(6), 376.
- Wilbraham, D. A., Christensen, J., Todd J. T. & Martinez, A. M. (2007). The effects of homoeomorphic image transformations on human face matching performance. Journal of Vision, 8(6), 964.