

Terry A. Slocum
Curriculum Vitae, March 2010

Department of Geography
University of Kansas
Lawrence, Kansas 66045
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E-mail: t-slocum@ku.edu

I. EDUCATION

- Ph.D. (1980) University of Kansas
Major field of study: Cartography
Secondary field: Quantitative Methods
- M.A. (1976) State University of New York at Albany
Areas of Study: Cartography and Quantitative Methods
- B.A. (1974) State University of New York at Albany
Major: Geography Minor: Mathematics

II. ACADEMIC EMPLOYMENT

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|--|--------------|
| Chair, Department of Geography, University of Kansas | 2003-present |
| Associate Professor, University of Kansas | 1986-present |
| Assistant Professor, University of Kansas | 1981-1986 |
| Assistant Professor, University of Maryland | 1980-1981 |
| Consultant to Robert Aangeenbrug, Chair, 4th
International Conference on Computer-Assisted
Cartography (AUTO-CARTO IV) | 1978-1979 |
| Systems Analyst for GBFDIME project, Lawrence, Kansas | 1978 |
| Teaching Assistant, University of Kansas | 1977-1978 |
| Assistant for University of Kansas Cartographic Services | 1976-1977 |
| Teaching and Research Assistant in cartography,
State University of New York at Albany | 1974-1976 |

III. GRANTS

- National Science Foundation, \$1,060,747, 2001-2005.
"Extending Scientific Inquiry through Geographic Information
Systems" (with Joseph Heppert (PI), Dennis Lane, Thomas Baker,
and Steven Case).
- US Department of State Bureau of Educational and Cultural Affairs,
\$142,138, 2000-2004. "Partnership between the University of
Kansas and the University of Zambia: Enhancing Technological
Capabilities in Environmental Science Teaching and Research,"
(Senior Personnel with Garth Myers (PI) and other faculty at KU).
- National Center for Geographic Information and Analysis, \$3000, 1999.
"A Preliminary Evaluation of MapTime"
- KU Research Development Fund, \$40,577.82, 1999.
Project to incorporate a water balance model with the Green Report
(<http://maps.kansasgis.org/kars/>) (with Johan Feddema (PI), David
Bennett, Ed Martinko, and Kevin Price).

- National Science Foundation, \$90,700, 1993-1994.
 "Enhancing Analytical and Physical Geography Curriculum at the University of Kansas" (with Kevin Price (PI) and others).
- KU General Research Fund, \$8082, 1992.
 "Exploring Time-Based Data for Choropleth Maps."
- National Science Foundation, \$50,000, 1987-1990.
 "Developing and Analyzing an Information System for Choropleth Maps."
- New Faculty Research Grant, \$4500, 1982.
 "Regionalization on Automated and Non-Automated Choropleth Maps."

IV. PUBLICATIONS

Books

- 2009 **Terry A. Slocum**, Robert B. McMaster, Fritz C. Kessler, and Hugh H. Howard. *Thematic Cartography and Geovisualization*. Third Edition. Upper Saddle River, New Jersey: Pearson Education.
- 2005 **Terry A. Slocum**, Robert B. McMaster, Fritz C. Kessler, and Hugh H. Howard. *Thematic Cartography and Geographic Visualization*. Second Edition. Upper Saddle River, New Jersey: Pearson Education.
- 1999 **Terry A. Slocum**, *Thematic Cartography and Visualization*. Upper Saddle River, New Jersey: Prentice Hall.

Articles and Book Chapters Published (* refereed; + invited)

- * forthcoming Fritz C. Kessler, **Terry A. Slocum**. "Analysis of Thematic Maps Published in Two Geographical Journals in the Twentieth Century," *Annals of the Association of American Geographers*, 11,000-word Manuscript.
- + forthcoming **Terry A. Slocum**, Fritz C. Kessler. "Thematic Mapping," in *Cartography in the Twentieth Century*, ed. Mark Monmonier. Chicago: University of Chicago Press. (8000-word manuscript)
- * 2007 **Terry A. Slocum**, Matthew D. Dunbar and Stephen L. Egbert. "Evaluating the Potential of the GeoWall for Geographic Education," *Journal of Geography* 106:3, pp. 91-102.
- * 2004 **Terry A. Slocum**, Robert S. Sluter, Fritz C. Kessler, and Stephen C. Yoder. "A Qualitative Evaluation of MapTime, a Program for Exploring Spatiotemporal Point Data," *Cartographica* 39:3, pp. 43-68.
- + 2004 **Terry A. Slocum**, Hugh H. Howard, Fritz C. Kessler, and Robert B. McMaster. "Recent and Ongoing Developments in Cartography," *ACSM Bulletin*, No. 207, pp. 8-18.
- * 2003 **Terry A. Slocum**, D.C. Cliburn, J.J. Feddema, and J.R. Miller. "Evaluating the Usability of a Tool for Visualizing the Uncertainty of the Future Global Water Balance," *Cartography and Geographic Information Science*, 30:4, pp. 299-317.

- * 2002 Daniel Cliburn, Johan Feddema, James Miller, and **Terry A. Slocum**. "Design and Evaluation of a Decision Support System in a Water Balance Application," *Computers and Graphics*, 26:6, pp. 931 - 949.
- * 2001 **Terry A. Slocum**, Connie Blok, Bin Jiang, Alexandra Koussoulakou, Daniel R. Montello, Sven Fuhrmann, and Nicholas R. Hedley. "Cognitive and Usability Issues in Geovisualization," *Cartography and Geographic Information Science*, 28:1, pp. 61-75.
- * 2000 **Terry A. Slocum**, Stephen C. Yoder, Fritz C. Kessler, and Robert S. Sluter "MapTime: Software for Exploring Spatiotemporal Data Associated with Point Locations," *Cartographica*, 37:1, pp. 15-31.
- + 1999 **Terry A. Slocum**. "Changes in Symbolization Research," *Cartography and Geographic Information Science*, 26:3, p. 219.
- * 1996 **Terry A. Slocum** and Stephen C. Yoder. "Using Visual Basic to Teach Programming for Geographers," *Journal of Geography*, Sept./Oct., pp. 32-37.
- + 1995 **Terry A. Slocum**. "Introduction" to the 1995 U.S. National Report to the International Cartographic Association, *Cartography and Geographic Information Systems*, 22:2, pp. 109-114.
- + 1994 **Terry A. Slocum**. "Visualization Software Tools," in *Visualization in Modern Cartography*, eds. Alan M. MacEachren and D.R. Fraser Taylor. Oxford: Pergamon Press, pp. 91-122. (Numerous co-authors were involved, but I was the lead author and editor.)
- * 1993 **Terry A. Slocum** and Stephen L. Egbert. "Knowledge Acquisition from Choropleth Maps," *Cartography and Geographic Information Systems*, 20:2, pp. 83-95.
- * 1992 Stephen L. Egbert and **Terry A. Slocum**. "EXPLOREMAP: An Exploration System for Choropleth Maps," *Annals of the Association of American Geographers*, 82:2, pp. 275-288.
- + 1991 **Terry A. Slocum** and Stephen L. Egbert. "Cartographic Data Display," in *Geographic Information Systems: The Microcomputer and Modern Cartography*, ed. D.R. Fraser Taylor. Oxford: Pergamon Press, pp. 167-199.
- * 1990 **Terry A. Slocum**, Susan H. Robeson and Stephen L. Egbert. "Traditional Versus Sequenced Choropleth Maps/An Experimental Investigation," *Cartographica*, 27:1, pp. 67-88.
- * 1990 **Terry A. Slocum**. "The Use of Quantitative Methods in Major Geographical Journals, 1956-1986," *The Professional Geographer*, 42:1, pp. 84-94.
- * 1986 **Terry A. Slocum** and Robert B. McMaster. "Gray Tone Versus Line Plotter Choropleth Maps: A Matching Experiment," *The American Cartographer*, 13:2, pp. 151-164.
- * 1986 Gregory A. Plumb and **Terry A. Slocum**. "Alternative Designs for Dot Matrix Printer Maps," *The American Cartographer*, 13:2, pp. 121-133.
- * 1985 Jeffrey C. Patton and **Terry A. Slocum**. "Spatial Pattern Recall: An Analysis of the Aesthetic Use of Color," *Cartographica*, 22:3, pp. 70-87.

- * 1984 **Terry A. Slocum.** "A Cluster Analysis Model for Predicting Visual Clusters," *The Cartographic Journal*, 21:2, pp. 103-111.
- * 1984 **Terry A. Slocum**, Robert Hanisch and Derek Thompson. "The Design and Applications of a Cartographic Data Base for Redistricting," *Geoprocessing*, 2, pp. 151-176.
- * 1983 **Terry A. Slocum.** "Predicting Visual Clusters on Graduated Circle Maps," *The American Cartographer*, 10:1, pp. 59-72.
- * 1982 **Terry A. Slocum.** "Circle Size Judgment and Map Design: A Comment," in the Commentary Section of *The American Cartographer*, 9:2, pp. 179-181.
- * 1981 **Terry A. Slocum.** "Analyzing the Communicative Efficiency of Two-sectored Pie Graphs," *Cartographica*, 18:3, pp. 53-65.
- * 1979 **Terry A. Slocum** and Patricia P. Gilmartin. "Cartographic Analysis of Proportional Circle Maps Using Delaunay Triangles," *The Canadian Cartographer*, 16:2, pp. 133-144.

Conference Proceedings

- 2003 J. R. Miller, D. C. Cliburn, J. J. Feddema, and **Terry A. Slocum.** "Modeling and Visualizing Uncertainty in a Global Water Balance Model," *Proceedings 18th Annual ACM Symposium on Applied Computing (SAC 2003)*, March 9-12, 2003, Melbourne, Florida, pp. 972-978.
- 1995 **Terry A. Slocum.** "Summary of the 1995 U.S. National Report to the ICA," *Proceedings of the 17th International Cartographic Conference*, Volume 2, Barcelona, Spain, pp. 1959-1963.
- 1993 **Terry A. Slocum**, John C. Davis and Stephen L. Egbert. "Developing Software for Exploring Temporal Spatial Data," *GIS/LIS '93 Proceedings*, Vol. 2, Minneapolis, Minnesota, pp. 642-653.
- 1988 **Terry A. Slocum**, Stephen L. Egbert, Mary Catherine Prante, and Susan H. Robeson. "Developing an Information System for Choropleth Maps," *Third International Symposium on Spatial Data Handling*, Sydney, Australia, pp. 293-305.
- 1982 Derek Thompson and **Terry A. Slocum.** "A Geographic Information System for Political Redistricting in Maryland," *Proceedings of Applied Geography Conferences*, 5, pp. 73-87.

In-House Departmental Publications

- 1986 **Terry A. Slocum** and Gregory A. Plumb. "Software for Dot Matrix Printer Mapping," *Occasional Paper Series*, No. 5, Department of Geography, University of Kansas.

Book Reviews

- 1993 "Map Generalization: Making Rules for Knowledge Representation", editors Barbara P. Battenfield and Robert B. McMaster, *Photogrammetric Engineering and Remote Sensing*.

- 1991 "Geographic Information Systems and Cartographic Modelling" by C. Dana Tomlin, The Professional Geographer, Vol. 43, p. 126.
- 1990 "Analytical and Computer Cartography" by Keith C. Clarke, Cartography and Geographic Information Systems, Vol. 17, pp. 314-316.
- 1986 "Technological Transition in Cartography" by Mark S. Monmonier, Journal of Geography, Vol. 85, p. 38.
- 1985 "Principles of Thematic Map Design" by Borden D. Dent, The American Cartographer, Vol. 12, pp. 177-178.
- 1984 "The Visual Display of Quantitative Information" by Edward R. Tufte, The American Cartographer, Vol. 11, pp. 175-176.
- 1984 "Graphic Communication and Design in Contemporary Cartography", D.R.F. Taylor, editor, The Professional Geographer, Vol. 36, p. 137.
- 1982 "Computer-Assisted Cartography: Principles and Prospects" by Mark S. Monmonier, Journal of Geography, Vol. 81, p. 118.

V. PRESENTATIONS

Papers Presented

- 2009 Fritz C. Kessler and **Terry A. Slocum**. "History of Thematic Mapping in the 20th Century: Design and Construction Issues," Association of American Geographers, Las Vegas, NV.
- 2009 **Terry A. Slocum**. "History of Thematic Cartography, 1900-2000," Department of Geography Brownbag Series, University of Kansas, Lawrence, KS.
- 2006 **Terry A. Slocum**. "Overview of an Introductory Course in Quantitative Methods at the University of Kansas," part of the Special Panel Session: Teaching Quantitative Methods at the Dawn of the 21st Century, 69th Annual Meeting of the Pacific Coast Geographers, Eugene Oregon.
- 2005 **Terry A. Slocum**, Matthew Dunbar and Stephen Egbert. "The GeoWall and its Potential for Geographic Education," Association of American Geographers, Denver, CO.
- 2001 **Terry A. Slocum**, Johannes Feddema, Daniel Cliburn, and James R. Miller. "Visualizing Uncertainty in Global Water Budget Simulations," North American Cartographic Information Society, Portland, Oregon.
- 2000 **Terry A. Slocum**. "Cognitive and Usability Issue in Geovisualization," Commission on Visualization, International Cartographic Association, Melbourne, Australia, June 14-16 (This presentation involved a series of lectures and discussions over a two-day period.)
- 2000 **Terry A. Slocum**, Robert S. Sluter, Fritz C. Kessler, and Stephen C. Yoder. "A Preliminary Evaluation of MapTime," Association of American Geographers, Pittsburgh, PA.

- 1999 **Terry A. Slocum.** "Cognitive Issues in Visualization", Commission on Visualization, International Cartographic Association, Ottawa, Canada, August 22-23 (This presentation involved a series of lectures and discussions over a two-day period.)
- 1996 Stephen C. Yoder and **Terry A. Slocum.** "Software for Exploring Temporal Data Associated with Point Locations," Association of American Geographers, Charlotte, NC.
- 1996 Stephen C. Yoder and **Terry A. Slocum.** "Software for Exploring Temporal Data Associated with Point Locations," North American Cartographic Information Society, San Antonio, TX.
- 1995 **Terry A. Slocum** and Stephen C. Yoder. "Using Visual Basic to Teach Concepts of Visualizing Spatial Data," Association of American Geographers, Chicago, IL.
- 1994 **Terry A. Slocum.** "Using Visual Basic to Teach Concepts of Visualizing Spatial Data," Department of Geography, University of South Carolina.
- 1993 **Terry A. Slocum,** John C. Davis and Stephen L. Egbert. "Developing Software for Exploring Temporal Spatial Data," GIS/LIS '93, Minneapolis, MN.
- 1991 **Terry A. Slocum** and Stephen L. Egbert. "Software for a Choropleth Information System," Association of American Geographers, Miami, FL.
- 1991 **Terry A. Slocum.** "Some Design Considerations for Maps Created Using GIS," for Kansas City Area ArcInfo User's Group, University of Kansas.
- 1989 **Terry A. Slocum.** "A Comparison of Sequenced and NonSequenced Presentations for Choropleth Maps," Association of American Geographers, Baltimore, MD.
- 1988 **Terry A. Slocum,** Stephen L. Egbert, Mary Catherine Prante, and Susan H. Robeson "Developing an Information System for Choropleth Maps," Third International Symposium on Spatial Data Handling, Sydney, Australia.
- 1988 **Terry A. Slocum.** "Developing an Information System for Choropleth Maps," Association of American Geographers, Phoenix, AZ.
- 1987 **Terry A. Slocum.** "Developing an Information System for Choropleth Maps," National Council for Geographic Education, October, Springfield, MO.
- 1987 **Terry A. Slocum.** "Developing an Information System for Choropleth Maps," Department of Geography, University of Kentucky.
- 1984 **Terry A. Slocum** and Robert B. McMaster. "Perception of Line Plotter Versus Gray Tone Choropleth Maps," Association of American Geographers, Washington, D.C.
- 1982 Jeffrey C. Patton and **Terry A. Slocum.** "An Evaluation of Color on Graduated Circle Pattern Recall," Association of American Geographers, San Antonio, TX.

- 1981 **Terry A. Slocum.** "A Comparison of Individual Scaling and Range-Grading in a Visual Clustering Experiment," Association of American Geographers, Los Angeles, CA.
- 1980 **Terry A. Slocum.** "Predicting Visual Clusters on Graduated Circle Maps," Association of American Geographers, Louisville, KY.
- 1979 **Terry A. Slocum.** "Recall of Graduated Circle Patterns on Maps," Association of American Geographers, Philadelphia, PA.

Poster Presentations

- 1995 **Terry A. Slocum.** "Summary of the 1995 U.S. National Report to the ICA," 17th International Cartographic Conference, Barcelona, Spain.
- 1985 Gregory A. Plumb and **Terry A. Slocum.** "Improving the Visual Quality of Dot Matrix Printer Maps," Association of American Geographers, Detroit, MI.

Invited Discussant

- 1987 **Terry A. Slocum.** For the session "Recent Research on the Cartographic Use of Color," Association of American Geographers, Portland, OR.

VI. COURSES TAUGHT

Undergraduate

- 104 - Introductory Physical Geography

Upper-division Undergraduate and Graduate

- 316 - Introduction to Quantitative Methods in Geography
(basic use of statistics in geography through simple correlation and regression)
- 358 - Principles of Geographic Information Systems
(an introduction to the principles of GIS)
- 514 - Visualizing Spatial Data
(an analysis of techniques for visualizing spatial data and their implementation in a programming language)
- 516 - Applied Multivariate Analysis in Geography
(the use of multivariate data analysis methods geography)
- 517 - Data Handling and Map Symbolization
(focuses on the quantitative and perceptual aspects of map symbolization)

Graduate Courses

- 806 Basic Seminar
(largely MA thesis proposal development)

911 Seminar in Cartography (Visualization)
(research issues in geographic visualization)

VII. RESEARCH SUPERVISED

Dissertation Committees Chaired

John H. Kostelnick, 2006, "An Interactive Mapping System for Exploring the Geography of American Religion."

Hugh H. Howard, 2003, "Development of an Expert System for Cartographic Design Education."

Fritz Kessler, 1999, "The design and evaluation of the U-boat narrative: A tool for exploring the U-boat conflict of 1939-1945."

Karen Trifonoff, 1994, "Using thematic maps in the early elementary grades."

Stephen L. Egbert, 1994, "The design and evaluation of an interactive map exploration system."

Masters Thesis Committees Chaired

Spradlin, Kevin L. 2000. "An evaluation of user attitudes toward classed and unclassed choropleth maps."

Yoder, Stephen C, 1996, "The development of software for exploring temporal data associated with point locations."

Yadav-Pauletti, Sunita, 1996, "MIGMAP, A data exploration application for visualizing U.S. Census migration data."

Douglas Greenfield, 1994, "Animating point symbols for cartographic display."

Linus L. Smith, 1988, "Improving the cartographic quality of geomorphic lines displayed on low-resolution computer screens."

Stanley J. Gerber, 1987, "Assessing the value of shaded relief to road map users."

Steven R. Miller, 1986, "Local context effects on obtaining tabular information from choropleth maps."

Masters Non-thesis Committees Chaired

Hughes (1993), Ziegler (1991). Shapiro (1989), Jones (1988), Gillespie (1986).

VIII. PROFESSIONAL SERVICE

Editorial Work

Member, Editorial Board, *Cartography and Geographic Information Science*, 2006-present.

Editor, Cartography and Geographic Information Science, 1999-2002.

Associate Editor, Cartography and Geographic Information Systems, 1996-1999.

Edited the 1995 U.S. National Report to the International Cartographic Association, published as a special issue of Cartography and Geographic Information Systems, 1995, 22:2.

Software Review Editor, Cartography and Geographic Information Systems, 1991 - 1994.

Member, Editorial Board, The Professional Geographer January 1, 1985 - December 31, 1987.

Served on a committee to select the best article appearing in the publications of the American Congress on Surveying and Mapping (1982-1985).

Organizational Officer

Academic Director, Cartography Specialty Group, Association of American Geographers, 1991-1993.

Vice President, Cartography and Geographic Information Society, 2010.

Workshops and Short Courses Taught

"Modern Stereoscopic Displays for Geographic Education", with Matthew D. Dunbar and Stephen L. Egbert, Association of American Geographers, San Francisco, CA, 2007.

"Modern Stereoscopic Displays for Geographic Education", with Matthew D. Dunbar and Stephen L. Egbert, Association of American Geographers, Chicago, IL, 2006.

"Spatial Data Exploration and Mapping", with Stephen L. Egbert, Association of American Geographers, Atlanta, Georgia, 1993.

"Computer-assisted Cartography: Data Display", with Barbara Battenfield, International Geographical Congress, Washington, D.C., 1992.

"Map Display for GIS", with Stephen L. Egbert, for the GRAIL spring workshop series, University of Kansas, 1991.

"The Cartographic/GIS Interface", with Stephen L. Egbert, MidAmerica GIS Symposium, Kansas City, MO, 1990.

"Digital Cartography", Governor's Conference on Applied Remote Sensing, Geographic Data Analysis and Mapping in Kansas, University of Kansas, 1983.

Miscellaneous

Member, Steering Committee, National Center for Geographic Information and Analysis Varenus Workshop "Cognitive Models of Dynamic Phenomena", Pittsburgh, PA, 1998.

Member, Advisory Board for an NEH start-up grant "Visualizing the Past: Tools and Techniques for Understanding Historical Processes," 2008-2009.

IX. DEPARTMENTAL SERVICE

Chair, 2003-present.
Graduate Director, 1993-2002.
Member, Committee to evaluate in-house GRF proposals, 1994
Chair, Student Affairs Out-of-House Committee, 1992-1993, 1995-1998
Chair, Search Committee for Computer Technician, 1991
Chair, Staff Committee (1990-1991)
Chair, Student Affairs Committee, 1989-90
Search Committee for GIS, 1988-1989
Search Committee for GIS/Physical, 1987-1988
Search Committee for Remote Sensing/GIS, 1987
Co-Chair, Student Affairs Committee, 1988-1989
Chair, Student Affairs Committee, 1986-1988
Student Affairs Committee, 1985-1986
Computer Committee, 1985-1986
Staff Committee, 1981-1985
Ad Hoc Cartographic Services Committee, 1983
Cartographic Services Projects Committee, 1982

X. UNIVERSITY SERVICE

Planning Committee for the Center for Analysis of Data, 2007-2008.
College Academic Council, 2005-8.
College Enrollment Processes Subcommittee, 2003-2004.
DLAG (Digital Library Advisory Group), 2002-2008.
CGS (Committee on Graduate Studies), 2001-3, Chair 2002-2003.
Served as Stadium Marshall at commencement, 1994.
First-Level Review Committee, General Research Fund 1990-1991
CGS (Committee on Graduate Studies), 1988-1991; Chair 1989-1990
CUSA (Committee on Undergraduate Studies and Advising), 1985-1987
Graduate Council and the Standing Committee on
Graduate Faculty Appointments, 1982-1985
Advised for summer orientation, 1983-1984

XI. AWARDS

Teacher Appreciation Award, Center for Teaching Excellence (CTE), 2007.
Teacher Appreciation Award, Center for Teaching Excellence (CTE), 1998.

XIII. Membership in Professional Organizations

Association of American Geographers
Canadian Cartographic Association
Cartography and Geographic Information Society
North American Cartographic Information Society
The British Cartographic Society

XIII. References

Pete Shortridge
Department of Geography
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Stephan Egbert
Department of Geography
University of Kansas
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Keith Clarke
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University of California
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