

March 2008

CURRICULUM VITAE

Terry A. Slocum

Department of Geography
University of Kansas
Lawrence, Kansas 66045

Phone: 785-864-5146
E-mail: t-slocum@ku.edu

I. EDUCATION

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

II. Academic Employment

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

III. 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

IV. GRANTS AWARDED

New Faculty Research Grant, \$4500, June, 1982.
"Regionalization on Automated and Non-Automated Choropleth Maps."

National Science Foundation, \$50,000, August, 1987.
"Developing and Analyzing an Information System for Choropleth
Maps."

KU General Research Fund, \$8082, January, 1992.
 "Exploring Time-Based Data for Choropleth Maps."

National Science Foundation, \$90,700, June, 1993.
 "Enhancing Analytical and Physical Geography Curriculum at the University of Kansas" (with Kevin Price (PI/PD) and others).

KU Research Development Fund, \$40,577.82, January, 1999.
 Project to incorporate a water balance model with the Green Report (<http://www.kars.ukans.edu>) (with Johan Feddema (PI), David Bennett, Ed Martinko, and Kevin Price).

National Center for Geographic Information and Analysis, \$3000, 1999.
 "A Preliminary Evaluation of MapTime"

US Department of State Bureau of Educational and Cultural Affairs, \$142,138, 2000. "A Program of Partnership between the University of Kansas and the University of Zambia". (Senior Personnel with Garth Myers (PI) and other faculty at KU who are also Senior Personnel.)

National Science Foundation, \$1,060,747, September, 2001.
 "Extending Scientific Inquiry through Geographic Information Systems" (with Joseph Heppert (PI), Dennis Lane, Thomas Baker, and Steven Case).

V. PUBLICATIONS

Books

1999. Thematic Cartography and Visualization. Upper Saddle River, New Jersey: Prentice Hall.

2005. Thematic Cartography and Geographic Visualization. Second Edition. Upper Saddle River, New Jersey: Pearson Education (with Robert B. McMaster, Fritz C. Kessler, and Hugh H. Howard as junior authors).

2009. Thematic Cartography and Geovisualization. Third Edition. Upper Saddle River, New Jersey: Pearson Education (with Robert B. McMaster, Fritz C. Kessler, and Hugh H. Howard as junior authors).

Articles and Book Chapters (* refereed; + invited)

- * 1979. "Cartographic Analysis of Proportional Circle Maps Using Delaunay Triangles," The Canadian Cartographer, 16:2, pp. 133-144 (with Patricia P. Gilmartin as junior author).
- * 1981. "Analyzing the Communicative Efficiency of Two-sectored Pie Graphs," Cartographica, 18:3, pp. 53-65.
- * 1982. "Circle Size Judgment and Map Design: A Comment," in the Commentary Section of The American Cartographer, 9:2, pp. 179-181.
- * 1983, "Predicting Visual Clusters on Graduated Circle Maps," The American Cartographer, 10:1, pp. 59-72.
- * 1984. "The Design and Applications of a Cartographic Data Base for

- Redistricting," Geoprocessing, 2, pp. 151-176 (with Robert Hanisch and Derek Thompson as junior authors).
- * 1984. "A Cluster Analysis Model for Predicting Visual Clusters," The Cartographic Journal, 21:2, pp. 103-111.
 - * 1985. "Spatial Pattern Recall: An Analysis of the Aesthetic Use of Color," Cartographica, 22:3, pp. 70-87 (with Jeffrey C. Patton as senior author).
 - * 1986. "Alternative Designs for Dot Matrix Printer Maps," The American Cartographer, 13:2, pp. 121-133 (with Gregory A. Plumb as senior author).
 - * 1986. "Gray Tone Versus Line Plotter Choropleth Maps: A Matching Experiment," The American Cartographer, 13:2, pp. 151-164. (with Robert B. McMaster as junior author).
 - * 1990. "The Use of Quantitative Methods in Major Geographical Journals, 1956-1986," The Professional Geographer, 42:1, pp. 84-94.
 - * 1990. "Traditional Versus Sequenced Choropleth Maps/An Experimental Investigation," Cartographica, 27:1, pp. 67-88 (with Susan H. Robeson and Stephen L. Egbert as junior authors).
 - + 1991. "Cartographic Data Display," in Geographic Information Systems: The Microcomputer and Modern Cartography, ed. D.R. Fraser Taylor. Oxford: Pergamon Press, pp. 167-199 (with Stephen L. Egbert as junior author) .
 - * 1992. "EXPLOREMAP: An Exploration System for Choropleth Maps," Annals of the Association of American Geographers, 82:2, pp. 275-288 (with Stephen L. Egbert as senior author).
 - * 1993. "Knowledge Acquisition from Choropleth Maps," Cartography and Geographic Information Systems, 20:2, pp. 83-95 (with Stephen L. Egbert as junior author).
 - + 1994. "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.)
 - + 1995. "Introduction" to the 1995 U.S. National Report to the International Cartographic Association, Cartography and Geographic Information Systems , 22:2, pp. 109-114.
 - * 1996. "Using Visual Basic to Teach Programming for Geographers," Journal of Geography, Sept./Oct., pp. 32-37 (with Stephen C. Yoder as junior author).
 - + 1999. "Changes in Symbolization Research," Cartography and Geographic Information Science, 26:3, p. 219.
 - * 2000. "MapTime: Software for Exploring Spatiotemporal Data Associated with Point Locations," Cartographica, 37:1, pp. 15-31 (with Stephen C. Yoder, Fritz C. Kessler, and Robert S. Sluter as junior authors).
 - * 2001. "Cognitive and Usability Issues in Geovisualization," Cartography and Geographic Information Science, 28:1, pp. 61-75

(with Connie Blok, Bin Jiang, Alexandra Koussoulakou, Daniel R. Montello, Sven Fuhrmann, and Nicholas R. Hedley as junior authors).

- * 2002. "Design and Evaluation of a Decision Support System in a Water Balance Application," Computers and Graphics, 26:6, pp. 931 - 949 (with Daniel Cliburn, Johan Feddema, and James Miller).
- * 2003. "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. (with D.C. Cliburn, J.J. Feddema, and J.R. Miller as junior authors).
- + 2004. "Recent and Ongoing Developments in Cartography," ACSM Bulletin, No. 207, pp. 8-18 (with Hugh H. Howard, Fritz C. Kessler, and Robert B. McMaster as junior authors).
- * 2004. "A Qualitative Evaluation of MapTime, A Program For Exploring Spatiotemporal Point Data," Cartographica 39:3, pp. 43-68 (with Robert S. Sluter, Fritz C. Kessler, and Stephen C. Yoder as junior authors).
- * 2007. "Evaluating the Potential of the GeoWall for Geographic Education," Journal of Geography 106:3, pp. 91-102 (with Matthew D. Dunbar and Stephen L. Egbert as junior authors).

Conference Proceedings

1982. "A Geographic Information System for Political Redistricting in Maryland," Proceedings of Applied Geography Conferences, 5, pp. 73-87 (with Derek Thompson as senior author).

1988. "Developing an Information System for Choropleth Maps," Third International Symposium on Spatial Data Handling, Sydney, Australia, pp. 293-305 (with Stephen L. Egbert, Mary Catherine Prante, and Susan H. Robeson as junior authors).

1993. "Developing Software for Exploring Temporal Spatial Data," GIS/LIS '93 Proceedings, Vol. 2, Minneapolis, Minnesota, pp. 642-653 (with John C. Davis and Stephen L. Egbert as junior authors).

1995. "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.

2003. "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 (with J. R. Miller, D. C. Cliburn, and J. J. Feddema).

In-House Departmental Publications

1986. "Software for Dot Matrix Printer Mapping," with Gregory A. Plumb, Occasional Paper Series, No. 5, Department of Geography, University of Kansas.

Book Reviews

1982. "Computer-Assisted Cartography: Principles and Prospects" by Mark S. Monmonier, Journal of Geography, Vol. 81, p. 118.
1984. "Graphic Communication and Design in Contemporary Cartography", D.R.F. Taylor, editor, The Professional Geographer, Vol. 36, p. 137.
1984. "The Visual Display of Quantitative Information" by Edward R. Tufte, The American Cartographer, Vol. 11, pp. 175-176.
1985. "Principles of Thematic Map Design" by Borden D. Dent, The American Cartographer, Vol. 12, pp. 177-178.
1986. "Technological Transition in Cartography" by Mark S. Monmonier, Journal of Geography, Vol. 85, p. 38.
1990. "Analytical and Computer Cartography" by Keith C. Clarke, Cartography and Geographic Information Systems, Vol. 17, pp. 314-316.
1991. "Geographic Information Systems and Cartographic Modelling" by C. Dana Tomlin, The Professional Geographer, Vol. 43, p. 126.
1993. "Map Generalization: Making Rules for Knowledge Representation", editors Barbara P. Battenfield and Robert B. McMaster, Photogrammetric Engineering and Remote Sensing.

VI. PRESENTATIONS

Papers Presented

1979. "Recall of Graduated Circle Patterns on Maps," Association of American Geographers, Philadelphia, PA.
1980. "Predicting Visual Clusters on Graduated Circle Maps," Association of American Geographers, Louisville, KY.
1981. "A Comparison of Individual Scaling and Range-Grading in a Visual Clustering Experiment," Association of American Geographers, Los Angeles, CA.
1982. "An Evaluation of Color on Graduated Circle Pattern Recall," Association of American Geographers, San Antonio, TX (with Jeffrey C. Patton).
1984. "Perception of Line Plotter Versus Gray Tone Choropleth Maps," Association of American Geographers, Washington, D.C. (with Robert B. McMaster as junior author).
1987. "Developing an Information System for Choropleth Maps," National Council for Geographic Education, October, Springfield, MO.
1987. "Developing an Information System for Choropleth Maps," Department of Geography, University of Kentucky.
1988. "Developing an Information System for Choropleth Maps," Third International Symposium on Spatial Data Handling, Sydney, Australia (with Stephen L. Egbert, Mary Catherine Prante, and Susan H. Robeson as junior authors).

1988. "Developing an Information System for Choropleth Maps," Association of American Geographers, Phoenix, AZ.
1989. "A Comparison of Sequenced and NonSequenced Presentations for Choropleth Maps," Association of American Geographers, Baltimore, MD.
1991. "Software for a Choropleth Information System," Association of American Geographers, Miami, FL (with Stephen L. Egbert as junior author).
1991. "Some Design Considerations for Maps Created Using GIS," for Kansas City Area ArcInfo User's Group, University of Kansas.
1993. "Developing Software for Exploring Temporal Spatial Data," GIS/LIS '93, Minneapolis, MN (with John C. Davis and Stephen L. Egbert as junior authors).
1994. "Using Visual Basic to Teach Concepts of Visualizing Spatial Data," Department of Geography, University of South Carolina.
1995. "Using Visual Basic to Teach Concepts of Visualizing Spatial Data," Association of American Geographers, Chicago, IL, (with Stephen C. Yoder as junior author).
1996. "Software for Exploring Temporal Data Associated with Point Locations," Association of American Geographers, Charlotte, NC, (with Stephen C. Yoder as senior author).
1996. "Software for Exploring Temporal Data Associated with Point Locations," North American Cartographic Information Society, San Antonio, TX (with Stephen C. Yoder as senior author).
1999. "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.)
2000. "A Preliminary Evaluation of MapTime," Association of American Geographers, Pittsburgh, PA, (with Robert S. Sluter, Fritz C. Kessler, and Stephen C. Yoder as junior authors).
2000. "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.)
2001. "Visualizing Uncertainty in Global Water Budget Simulations," North American Cartographic Information Society, Portland, Oregon (with Johannes Feddema, Daniel Cliburn, and James R. Miller as junior authors)
2005. "The GeoWall and its Potential for Geographic Education," Association of American Geographers, Denver, CO, (with Matthew Dunbar and Stephen Egbert as junior authors).
2006. "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.

Poster Presentations

1985. "Improving the Visual Quality of Dot Matrix Printer Maps," Association of American Geographers, Detroit, MI (with Gregory A. Plumb as senior author).

1995. "Summary of the 1995 U.S. National Report to the ICA," 17th International Cartographic Conference, Barcelona, Spain.

Invited Discussant

1987. 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 in geography)

517 - Data Handling and Map Symbolization
(focuses on the quantitative and perceptual aspects of map symbolization)

Graduate Courses

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

VIII. RESEARCH SUPERVISED

Dissertation Committees Chaired

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."

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

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

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

Masters Thesis Committees Chaired

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

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

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

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

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

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

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

Masters Non-thesis Committees Chaired

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

IX. PROFESSIONAL SERVICE

Editorial Work

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

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

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

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.

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

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

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

Organizational Officer

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

Workshops and Short Courses Taught

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

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

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

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

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

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

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

Miscellaneous

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

X. DEPARTMENTAL SERVICE

Staff Committee, 1981-1985
Cartographic Services Projects Committee, 1982
Ad Hoc Cartographic Services Committee, 1983
Revised the Departmental Brochure, 1984
Computer Committee, 1985-1986
Student Affairs Committee, 1985-1986
Chair, Student Affairs Committee, 1986-1988
Co-Chair, Student Affairs Committee, 1988-1989
Search Committee for Remote Sensing/GIS, 1987
Chair, Committee to award Jenks' scholarship, 1987
Search Committee for GIS/Physical, 1987-1988
Search Committee for GIS, 1988-1989
Chair, Student Affairs Committee, 1989-90
Chair, Staff Committee (1990-1991)
Chair, Search Committee for Computer Technician, 1991
Chair, Student Affairs Out-of-House Committee, 1992-1993, 1995-1998
Member, Committee to evaluate in-house GRF proposals, 1994

Graduate Director, 1993-2002.
Chair, 2003-present.

XI. UNIVERSITY SERVICE

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

XII. AWARDS

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

XIII. References

Pete Shortridge
Department of Geography
University of Kansas
Lawrence, KS 66045

Johannes Feddema
Department of Geography
University of Kansas
Lawrence, KS 66045

Stephan Egbert
Department of Geography
University of Kansas
Lawrence, KS 66045

Keith Clarke
Department of Geography
University of California
Santa Barbara, California 93106-4060