

Books (7)

- 2003 *Spatial Autocorrelation and Spatial Filtering: Gaining Understanding through Theory and Scientific Visualization*, Berlin: Springer-Verlag.
- 1999 (with L. Layne) *A Casebook for Spatial Statistical Data Analysis: A Compilation of Analyses of Different Thematic Datasets*, NY: Oxford University Press.
- 1997 (with C. Amrhein) *Multivariate Statistical Analysis for Geographers*, Englewood Cliffs, NJ: Prentice Hall.
- 1993 *Spatial Regression Analysis on the PC: Spatial Statistics Using SAS*, Washington, DC: Association of American Geographers "Resource Publications in Geography Series."
- 1991 (with C. Amrhein) *Statistical Analysis for Geographers*, Englewood Cliffs, NJ: Prentice Hall.
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- 1987 *Spatial Autocorrelation: A Primer*, Washington, D. C.: Assn. of American Geographers Resource Publication [used as source for a new GRASS-GIS program to calculate autocorrelation statistics].

Edited Books (6)

- 1998 (with C. Amrhein and J.-M. Hurriot) *Advances in Spatial Modelling and Methodology: Essays in Honor of Jean Paelinck*, Dordrecht: Kluwer
- 1995 (with S. Arlinghaus) *Practical Handbook of Spatial Statistics*, Boca Raton, FL: CRC Press.
- 1990 *Spatial Statistics: Past, Present, and Future*, Ann Arbor, MI: Institute of Mathematical Geography.
- 1986 (with R. Haining) *Transformations Through Space and Time*, The Hague: Martinus-Nijhoff.
- 1983 (with A. Lea) *Evolving Geographical Structures*, The Hague: Martinus Nijhoff.
- 1981 (with R. MacKinnon) *Dynamic Spatial Models*, Alphen aan den Rijn: Sijthoff and Noordhoff.

Monographs (2)

- 1994 (with J. Newman) *Eliminating Hunger in Africa: Technical and Human Perspectives on Food Allocation*, Maxwell School of Citizenship and Public Affairs, Syracuse University—reproduction permission given to Copyright Clearing House in 2000.
- 1989 *Simulating K=3 Christaller Central Place Structures: An Algorithm Using a Constant Elasticity of Substitution Consumption Function*, Ann Arbor, MI: Institute of Mathematical Geography.

Publications in Major Refereed Journals (44 single authored; 43 joint authored)

- 2008 Spatial filtering-based contributions to a critique of geographically weighted regression (GWR), *Environment & Planning A*, forthcoming.
- 2008 Geographic sampling of urban soils for contaminant mapping: how many samples and from where, *Environmental Geochemistry and Health*, forthcoming
- 2008 (with M. Fischer) Modelling spatial autocorrelation in spatial interaction data: An application to patent data in the European Union, *J. of Regional Science*, forthcoming.
- 2008 (with B. Berry and M. Tiefelsdorf) From spatial analysis to geospatial science, *Geographical Analysis*, 40: 229-238.
- 2007 Spatial structure and spatial interaction: 25 years later, *The Review of Regional Studies*, 37, #1: 28-38.
- 2007 (with M. Millones, M. Vincent, D. Johnson, and A. Hunt) Impacts of positional error on spatial regression analysis: A case study of address locations in Syracuse, NY, *Transactions in GIS*, 11: 655-679.
- 2007 (with W. Thayer and G. Diamond) Geography of asbestos contamination near the World Trade Center site, *Stochastic Environmental Research & Risk Assessment*, 21: 461-471.
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- 2007 (with D. Wong) Modeling population density across major U.S. cities: a polycentric spatial

- regression approach, *J. of Geographical Systems*, 9: 53-75.
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- 2006 Hidden negative spatial autocorrelation, *J. of Geographical Systems*, 8: 335-355.
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- 2005 Effective geographic sample size in the presence of spatial autocorrelation, *Annals, Association of American Geographers*, 95: 740-760.
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- 2004 Faster maximum likelihood estimation of very large spatial autoregressive models: an extension of the Smirnov-Anselin result, *J. of Statistical Computation and Simulation*, 74: 855-866.
- 2004 Distributional properties of georeferenced random variables based on the eigenfunction spatial filter, *J. of Geographical Systems*, 6: 263-288.
- 2004 A spatial filtering specification for the auto-logistic model, *Environment & Planning A*, 36: 1791-1811.
- 2004 Extreme eigenfunctions of adjacency matrices for planar graphs employed in spatial analyses, *Linear Algebra & Its Applications*, 388: 201-219.
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- 1993 (with F. Csillag) Exploring relationships between semi-variogram and spatial autoregressive models, *Papers in Regional Science*, 72: 283-296.
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- 1982 Geometry and spatial interaction, *Annals, Association of American Geographers*, 72: 332-346.
- 1982 A generalized Huff model, *Geographical Analysis*, 14: 135-144.
- 1981 Modelling urban population in a multi-centered city, *J. of Urban Economics*, 9: 298-310.
- 1981 Evaluating the transformation from a monocentric to a polycentric city, *The Professional Geographer*, 33: 189-196.
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- 1979 Urban dominance, spatial structure and spatial dynamics: some theoretical conjectures and empirical implications, *Economic Geography*, 55: 95-113.
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- 1975 A note on spatial autocorrelation, *The Professional Geographer*, 27: 470-474.

Invited encyclopedia entries (7 single authored; 1 joint authored)

- 2008 "Methods: spatial autocorrelation," in R. Kitchin and N. Thrift (eds.), *International Encyclopedia of Human Geography*. NY: Elsevier, pp. .**forthcoming**
- 2008 "Methods: spatially autoregressive models," in R. Kitchin and N. Thrift (eds.), *International Encyclopedia of Human Geography*. NY: Elsevier, pp. .**forthcoming**
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- 2008 "Regionalized variables," in K. Kemp (ed.), *Encyclopedia of Geographic Information Science*. Thousand Oaks, CA: SAGE, pp. 363-365.
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- 2005 "Spatial autocorrelation," in K. Kempf-Leonard (ed.), *Encyclopedia of Social Measurement*, Vol. 3. San Diego, CA: Academic Press (Elsevier), pp. 581-590.
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- 2005 "Geographic Information Systems," in S. Kotz, C. Read, N. Balakrishnan, and B. Vidakovic (eds.), *Encyclopedia of Statistical Sciences*, 2nd ed., Vol. 4, pp. 2764-2771; an earlier version appeared in S. Kotz, C. Read, and D. Banks (eds.), updated volumes of *Encyclopedia of Statistical Sciences*, Vol. 3, NY: Wiley, 1999, pp. 268-269.

Contributions to and/or Chapters in Books (12 single authored; 3 joint authored)

- 2007 Quick but not so Dirty ML Estimation of Spatial Autoregressive Models, in M. Sonis and G. Hewings (ed.), *Toolbox*. Berlin: Springer-Verlag, forthcoming.
- 2000 "Seemingly invisible farms in southwestern Pennsylvania," in K. Patrick and J. Scarpaci (eds.), *A Geographic Perspective of Pittsburgh and the Alleghenies: From Precambrian to Post-industrial*, Association of American Geographers, pp. 175-181.
- 1998 (with C. Amrhein) "Introduction: Focus on Jean Paelinck," in D. Griffith, C. Amrhein and J-M. Huriot (eds.), *Advances in Spatial Modelling and Methodology: Essays in Honor of Jean Paelinck*, Dordrecht: Kluwer, pp. 1-6.
- 1998 (with J. Paelinck and R. van Gastel) "The Box-Cox transformation: computational and interpretation features of the parameters," in D. Griffith, C. Amrhein and J-M. Huriot (eds.), *Advances in Spatial Modelling and Methodology: Essays in Honor of Jean Paelinck*, Dordrecht: Kluwer, pp. 45-56.
- 1996 "Spatial statistical analysis and GIS: exploring computational simplifications for estimating the neighborhood spatial forecasting model," in P. Longley and M. Batty (eds.), *Spatial Analysis: Modelling in a GIS Environment*, Longman GeoInformation, pp. 255-268.
- 1996 "Introduction: the need for spatial statistics," in S. Arlinghaus and D. Griffith (eds.), *Practical Handbook of Spatial Statistics*, Boca Raton, FL: CRC Press, pp. 1-15.
- 1996 "Some guidelines for specifying the geographic weights matrix contained in spatial statistical models," in S. Arlinghaus and D. Griffith (eds.), *Practical Handbook of Spatial Statistics*, Boca Raton, FL: CRC Press, pp. 65-82.
- 1996 (with A. Can) "Spatial statistical/econometric versions of simple urban population density models," in S. Arlinghaus and D. Griffith (eds.), *Practical Handbook of Spatial Statistics*, Boca Raton, FL: CRC Press, pp. 231-249.
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Conference Proceedings (9 single authored; 12 joint authored)

- 2006 Statistical efficiency of model-informed geographic sampling designs, in C. Mário and M. Painho (eds.), *Proceedings of Accuracy 2006*, Proceedings of the 7th International Symposium on Spatial Accuracy Assessment in a Natural Resources and Environmental Sciences, Lisboa, Portugal: Instituto Geográfico Português, pp. 91-98.
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- 2007 (with G. Christakos) Medical geography as a science of interdisciplinary knowledge synthesis under conditions of uncertainty, *Stochastic Environmental Research & Risk Assessment*, 21: 459-460.
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- 2006 Beyond the bell-shaped curve: Poisson models in spatial data analysis, *Geographical Analysis*, 38: iii-iv.
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- 2001 (with A. Lea) "Opposites don't attract in spatial autocorrelation," *GEOWorld*, 14, #11 (November), 42-44 (www.geoplance.com/gw/).

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- 1997 "Final Report: Spatial Sampling for the 'Community Benchmark Project'" for project funded by the Alfred P. Sloan Foundation, W. Coplin and A. Merget PIs, Public Administration.
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