**Recommended readings**

**Spatial Econometrics Workshop**

**University of Kentucky, May 17-19, 2011**

**Presenter: Paul Voss, University of North Carolina at Chapel Hill**

**Day 1. Introduction to Spatial Data Analysis:**

1. Anselin, Luc. 2010. “Thirty Years of Spatial Econometrics.” *Papers in Regional Science*

89(1):3‐25. *[A broad, sweeping overview of the development of the field over the past 3 decades by, unquestionably, the premier contributor to that development]*

2. Loftin, Colin, and Sally K. Ward. 1983. “A Spatial Autocorrelation Model of the Effects of

Population Density on Fertility.” *American Sociological Review*, 48(1):121‐128. *[Together*

*with the following reading, a classic motivational example]*

3. Galle, Omer R., Walter R. Gove, & J. Miller McPherson. 1972. “Population Density and

Pathology: What Are the Relations for Man?” *Science* (new series) 176:23‐30.

4. Anselin, Luc. 1989. “What Is Special about Spatial Data? Alternative Perspectives on Spatial Data Analysis.” *Conference Proceedings, Spatial Statistics: Past, Present, and Future.* Institute of Mathematical Geography, Syracuse University. *[Now somewhat dated, but a nice overview of why spatial data require special attention]*

**Day 1. Lab:**

1. Anselin, Luc. 2005. *Exploring Spatial Data with GeoDa: A Workbook*. *[Relevant chapters: 2, 3 and 7‐12]*

2. Venables, W. N. & D. M. Smith and the R Development Core Team. 2010. *An Introduction to R*. *[Perhaps the most widely cited introduction to R; there are many!]*

3. Anselin, Luc. 2005. *Spatial Regression Analysis in R: A Workbook*. *[Relevant chapters: 1 & 2]*

4. Messner, Steven F., Luc Anselin, Robert D. Baller, Darnell F. Hawkins, Glenn Deane, &

Stewart E. Tolnay. 1999. “The Spatial Patterning of County Homicide Rates: An

Application of Exploratory Spatial Data Analysis.” *Journal of Quantitative Criminology*

15(4):423‐450. *[A nice example of ESDA]*

**Day 2. Spatial Aurocorrelation:**

1. Anselin, Luc. 1996. “The Moran Scatterplot as an ESDA Tool to Assess Local Instability in

Spatial Association.” Pp. 111‐125 in Fischer, Manfred, Henk J. Scholten, and David Unwin

(eds.) *Spatial Analytical Perspectives on GIS: GISDATA 4* (London: Taylor & Francis).

*[Introduction to a key diagnostic tool in spatial data analysis]*

2. Tolnay, Stewart E., Glenn Deane, & E.M. Beck. 1996. “Vicarious Violence: Spatial

Effects on Southern Lynchings, 1890‐1919.” *American Journal of Sociology* 102(3):788‐

815. *[An interesting example of negative spatial autocorrelation arising in a social process]*

3. Getis, Arthur. 2007. “Reflections on Spatial Autocorrelation.” Regional Science and Urban Economics 37:491-496. *[A brief essay by a quantitative geographer who has contributed much to the spatial autocorrelation literature]*

4. Getis, Arthur. 2008. “A History of the Concept of Spatial Autocorrelation: A Geographer’s Perspective.” *Geographical Analysis* 40:297-309.

**Day 2. Lab:**

1. Anselin, Luc. 2005. *Exploring Spatial Data with GeoDa: A Workbook*. *[Relevant chapters: 15-18]*

2. Anselin, Luc. 2005. *Spatial Regression Analysis in R: A Workbook*. *[Relevant chapter: 3]*

**Day 3. Spatial Regression Models:**

1. Anselin, Luc, & Anil Bera. 1998. “Spatial Dependence in Linear Regression Models with

An Introduction to Spatial Econometrics.” Chapter 7 (pp. 237‐289) in Aman Ullah &

David Giles (eds.) *Handbook of Applied Economic Statistics* (New York: Marcel Dekker).

*[A strong, foundational reading]*

2. Anselin, Luc. 2002. “Under the Hood: Issues in the Specification and Interpretation of

Spatial Regression Models.” *Agricultural Economics* 27(3):247‐267. *[An overview of*

*spatial regression model specifications & interpretation]*

3. Baller, Robert D., & Kelly K. Richardson. 2002. “Social Integration, Imitation, and the

Geographic Patterning of Suicide.” *American Sociological Review* 67(6):873‐888. *[A*

*good example of theoretically grounded spatial data analysis]*

4. Sparks, Patrice Johnelle, & Corey S. Sparks. 2010. “An Application of Spatially Autoregressive Models to the Study of US County Mortality Rates.” *Population, Space and Place* 16:465-481. *[A nice example of putting it all together – and sticking with your theory despite diagnostics to the contrary]*

**Day 3. Lab:**

1. Anselin, Luc. 2005. *Exploring Spatial Data with GeoDa: A Workbook*. *[Relevant chapters: 22-25]*

2. Anselin, Luc. 2005. *Spatial Regression Analysis in R: A Workbook*. *[Relevant chapter: 6]*