

# CSISS Classics



## Linked Index to e-Scholarship

The foundations of spatial analysis span many disciplines over many generations of researchers and practitioners. *CSISS Classics* provides summaries and illustrations of major contributions to spatial thinking in the social sciences. Primary emphasis is given to research before 1980, with an attempt to capture and acknowledge the repository of spatial thinking in the social sciences for the last few centuries. The summaries, along with key references, are intended as guides for those interested in exploring intellectual inheritance from previous generations.

Your help is requested in suggesting topics, key papers, and schools of thought that should be represented in this collection. If you wish to submit a manuscript for consideration, please contact the *CSISS Classics* editor, [Don Janelle](#).

The following selection of CSISS Classics (vignettes about innovative scholars, each linked to the e-Scholarship collection) were developed over the period 2001–2006 as illustrations of spatial thinking across the social sciences. Most of them were researched and written by students participating in the CSISS program at UC Santa Barbara. By downloading this content listing, users are able to link directly to individual selections located at [escholarship.org](#).

The model for Johannes Vermeer's painting of *The Geographer* (above) is believed by some scholars to be Bernhard Varen (Latinized to Varenius), author of the *Geographia Generalis* (1650).

### [Charles Booth](#)

**Title:** Mapping London's Poverty, 1885–1903

**Spatial Concept:** Mapping and social surveys, neighborhood effects

**Discipline:** Criminology, Demography, Geography, History, Law & Society, Political Science, Sociology, Urban & Regional Planning, Urban Studies

### [Walter Christaller](#)

**Title:** *Hierarchical Patterns of Urbanization*

**Spatial Concept:** Regions, hierarchy, distribution

**Discipline:** Area Studies, Economics, Geography, Regional Science, Urban & Regional Planning

### [Grady Clay](#)

**Title:** *The Reading of the American City, 1973.*

**Spatial Concept:** Spatial metaphors for interpreting landscape change

**Discipline:** Urban & Regional Planning, Urban Studies

### [Alice Coleman](#)

**Title:** *Design Disadvantagement, 1985*

**Spatial Concept:** Built-environment–behavior relationships

**Discipline:** Criminology, Urban & Regional Planning, Urban Studies

### [Patrick Doreian](#)

**Title:** *Modeling Sociological Processes Using Spatially Distributed Data*

**Spatial Concept:** spatial autocorrelation, regressive-autoregressive modeling

**Discipline:** Sociology, Statistics

### [Constantinos Doxiadis](#)

**Title:** *Ekistics, 1968*

**Spatial Concept:** Scale consideration in settlement systems design

**Discipline:** Urban & Regional Planning, Urban Studies, Other

### [Vernor C. Finch](#)

**Title:** *The "Fractional Code" for Land Use Mapping, 1933.*

**Spatial Concept:** Multi-variable mapping and land use classification

**Discipline:** Area Studies, Environmental Studies & Policy, Geography

### [Leonhard Ludwig Finke](#)

**Title:** *Leonhard Ludwig Finke: Medical Geography*

**Spatial Concept:** Global perspective

**Discipline:** Geography, Public Health

### [Robert W. Fogel](#)

**Title:** *The Argument for Wagons and Canals, 1964.*

**Spatial Concept:** Distance buffers, Spatial econometrics

**Discipline:** Economics, History, Regional Science

### [Joel Garreau](#)

**Title:** *Edge Cities and the Nine Nations of North America*

**Spatial Concept:** Regionalization and regional synthesis of change

**Discipline:** Area Studies, Demography, Geography, Regional Science, Sociology, Urban & Regional Planning, Urban Studies

### [Peter Gould and Waldo Tobler](#)

**Title:** *An Experiment in Geo-Coding*

**Spatial Concept:** Place-based search, geo-coding, geographical coordinates

**Discipline:** Communication Studies, Geography

### [Zvi Griliches](#)

**Title:** *The Diffusion of Hybrid Corn Technology, 1957*

**Spatial Concept:** Innovation diffusion, Spatial diffusion, Logistic growth processes

**Discipline:** Economics, Regional Science

### [Edward T. Hall](#)

**Title:** *Proxemic Theory, 1966*

**Spatial Concept:** Proxemic Theory, Social distance, Personal space, Spatial perception

**Discipline:** Anthropology & Archaeology, Communication Studies, Linguistics

### **Torsten Hägerstrand**

**Title:** *Time Geography*.

**Spatial Concept:** Spatio-temporal constraints on human activity patterns and individual space-time paths

**Discipline:** Geography, Regional Science, Urban & Regional Planning

### **Mark Jefferson**

**Title:** *"Civilizing Rails," 1928.*

**Spatial Concept:** Buffer zone, Catchment areas, Zones of impact

**Discipline:** Geography

### **Florence Kelley**

**Title:** *Slums of the Great Cities Survey Maps, 1893*

**Spatial Concept:** Pattern analysis mapping of social conditions, maps for social advocacy

**Discipline:** Demography, Public Health, Sociology, Urban Studies, Women's Studies

### **Valdimer Orlando Key**

**Title:** *Mapping Southern Politics, 1949*

**Spatial Concept:** Electoral geography, spatial redistricting, ecological inference

**Discipline:** Demography, History, Political Science

### **Hans Kurath**

**Title:** *Linguistic Atlas of the United States*

**Spatial Concept:** Geographical linguistics, Isogloss mapping, Speech areas and speech boundaries

**Discipline:** Anthropology & Archaeology, Area Studies, Linguistics

### **Colin Loftin and Sally K. Ward**

**Title:** *Application of Spatial Autocorrelation in Sociology*

**Spatial Concept:** Spatial autocorrelation, spatial processes, neighborhood effects, scale dependency, weighting methods, spatial interaction

**Discipline:** Demography, Public Health, Sociology, Statistics

### **Kevin Lynch**

**Title:** *City Elements Create Images in Our Mind, 1960*

**Spatial Concept:** Place legibility, spatial imageability, cognition of urban built environment, mental maps

**Discipline:** Geography, Regional Science, Urban & Regional Planning, Urban Studies, Other

### **Bronislaw Malinowski**

**Title:** *Identifying the Kula Ring of the Trobriand Islanders: The Role of Ethnographic Field Observation in Pattern Recognition*

**Spatial Concept:** Distance and social interaction, pattern recognition

**Discipline:** Anthropology & Archaeology, Area Studies

### **Henry Mayhew**

**Title:** *London Labour and the London Poor, 1861*

**Spatial Concept:** Choropleth mapping, Ecological relationship

**Discipline:** Criminology, Sociology, Other

### **Ian McHarg**

**Title:** *Overlay Maps and the Evaluation of Social and Environmental Costs of Land Use Change*

**Spatial Concept:** Overlay mapping, Multi-criteria route selection

**Discipline:** Environmental Studies & Policy, Urban & Regional Planning

### **Melinda S. Meade**

**Title:** *Medical Geography and Human Ecology, 1977*

**Spatial Concept:** Cultural ecology, Population movement, Spatial patterns of disease

**Discipline:** Environmental Studies & Policy, Geography, Public Health

### **Richard Meier**

**Title:** *Communications Theory of Urban Growth, 1961*

**Spatial Concept:** Spatial agglomeration, spatial interaction, urban centrality

**Discipline:** Communication Studies, Sociology, Urban Studies

### **Charles Joseph Minard**

**Title:** *Mapping Napoleon's March, 1861*

**Spatial Concept:** Flow map, thematic mapping

**Discipline:** History, Statistics

### **Robert Park and Ernest Burgess**

**Title:** *Urban Ecology Studies, 1925*

**Spatial Concept:** Urban Ecology, spatial differentiation, concentric zone theory

**Discipline:** Sociology, Urban & Regional Planning, Urban Studies

### **Pablo Picasso**

**Title:** *Cubism—A Revolution of Spatial Presentation in Artistic Expression (with parallels in cartography)*

**Spatial Concept:** Multiple Perspectives in Two-Dimensional Visualization

**Discipline:** History, Other

### **Claudius Ptolemaeus (Ptolemy)**

**Title:** *Representation, Understanding, and Mathematical Labeling of the Spherical Earth*

**Spatial Concept:** Equal Area Projection, Longitude and Latitude, Spherical Earth Representation

**Discipline:** Geography, History

### **Friedrich Ratzel, Clark Wissler, and Carl Sauer**

**Title:** *Culture Area Research and Mapping*

**Spatial Concept:** Culture Areas, culture hearth

**Discipline:** Anthropology & Archaeology, Area Studies, Ethnic Studies, Geography, History

### **Ernest George Ravenstein**

**Title:** *The Laws of Migration, 1885*

**Spatial Concept:** Distance decay, migration, spatial interaction, movement, spatial dispersion

**Discipline:** Demography, Economics, Geography, Statistics

### **Ellen Churchill Semple**

**Title:** *The Anglo-Saxons of the Kentucky Mountains, 1901*

**Spatial Concept:** Human-environment interactions, Place

**Discipline:** Area Studies, Environmental Studies & Policy, Geography

### **Clifford R. Shaw and Henry D. McKay**

**Title:** *The Social Disorganization Theory*

**Spatial Concept:** Spatial association and causation, urban area and neighborhood effects, urban social ecology, concentric zone theory

**Discipline:** Criminology, Demography, Ethnic Studies, Law & Society, Sociology, Urban & Regional Planning, Urban Studies

### **Georg Simmel**

**Title:** *The Sociology of Space*

**Spatial Concept:** Sociology of space; social distance

**Discipline:** Communication Studies, Sociology, Urban Studies

### **G. William Skinner**

**Title:** *Marketing in Rural China, 1964–1965*

**Spatial Concept:** Centrality, settlement hierarchy, range of a good, periodic markets

**Discipline:** Area Studies, Economics, Urban Studies

### **Lou Skoda and J.C. Robertson**

**Title:** *The Isodemographic Map of Canada, 1972.*

**Spatial Concept:** Spatial data visualization, cartogram, isodemography

**Discipline:** Demography, Geography

### **John Snow**

**Title:** *The London Cholera Epidemic of 1854*

**Spatial Concept:** Spatial pattern analysis, Inference of spatial process

**Discipline:** Demography, Public Health

### **Alma and Karl Taeuber**

**Title:** *Residential Segregation in U.S. Cities, 1965*

**Spatial Concept:** segregation indices, mapping racial composition and change

**Discipline:** Demography, Ethnic Studies, Sociology, Statistics, Urban Studies

### **Charles M. Tiebout**

**Title:** *A Pure Theory of Local Expenditures, 1956*

**Spatial Concept:** Residential sorting due to differences in local government services; spatial spillovers

**Discipline:** Economics, Regional Science, Urban & Regional Planning

### **Edward Tufte**

**Title:** *The Visual Display of Quantitative Information, 1983*

**Spatial Concept:** Informational graphics

**Discipline:** History, Statistics

### **Rupert B. Vance**

**Title:** *Space and the American South*

**Spatial Concept:** Region, spatial integration

**Discipline:** Demography, Geography, Sociology, Urban Studies

### **Johann-Heinrich von Thünen**

**Title:** *Balancing Land-Use Allocation with Transport Cost*

**Spatial Concept:** spatial gradients, spatial optimization

**Discipline:** Economics, Geography, Regional Science, Urban & Regional Planning

### **Sam Bass Warner**

**Title:** *Modeling the Streetcar Suburbs, 1962*

**Spatial Concept:** Urban accessibility and social class associations

**Discipline:** Demography, Economics, Geography, History, Urban & Regional Planning, Urban Studies

### [Alfred Weber](#)

**Title:** *Theory of the Location of Industries, 1909*

**Spatial Concept:** Industrial location, minimum-cost location, optimal location, agglomeration economies, Verignon frame

**Discipline:** Economics, Geography, Regional Science, Sociology

### [Gordon R. Willey](#)

**Title:** *Settlement Patterns in Archaeology*

**Spatial Concept:** Settlement patterns as clues to socio-political structures.

**Discipline:** Anthropology & Archaeology

### [John Kirtland Wright](#)

**Title:** *Early Quantitative Geography, 1937*

**Spatial Concept:** Measuring trends and inequalities in spatial distributions

**Discipline:** Geography, Sociology, Statistics

### [Lotfi Zadeh](#)

**Title:** *Fuzzy logic-Incorporating Real-World Vagueness*

**Spatial Concept:** Boundaries, regions

**Discipline:** Geography, Linguistics, Statistics, Other