SPACE Workshop
Santa Barbara, California
12-23 July 2004
The CSI SS Mission recognizes the growing significance of space, spatiality, location, and place in social science research. It seeks to develop unrestricted access to tools and perspectives that will advance the spatial analytic capabilities of researchers throughout the social sciences. CSI SS is funded by the National Science Foundation under its program of support for infrastructure in the social and behavioral sciences.

CSI SS Workshop at ASA 2003 Annual Meeting

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<th>Core Programs</th>
<th>Learning Resources</th>
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<th>Spatial Tools</th>
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<tbody>
<tr>
<td>These six infrastructure programs form the core of the Center's activities.</td>
<td>CSI SS Classics</td>
<td>CSI SS has compiled e-journals, bibliographies, and other spatial resources for the social sciences.</td>
<td>Here's where you'll find information about software for the exploration and analysis of spatial data.</td>
</tr>
<tr>
<td>Search Engines</td>
<td>GIS Cookbook</td>
<td>ARGUS Activities &amp; Readings</td>
<td>Community Center</td>
</tr>
<tr>
<td>Try out one of our custom search engines to find spatial analysis resources on the Internet.</td>
<td>ARGUS Activities &amp; Readings</td>
<td>NCGIA Core Curriculum</td>
<td>Join the forums, or if your organization relates to our mission and goals, register as a CSI SS affiliate.</td>
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<td>Search Engines</td>
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<td>Workshop Video Clips</td>
<td>About CSI SS</td>
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<td>Presentations</td>
<td>CSI SS personnel, news, site map and FAQ. Our Strategic Plan and Annual Reports are also found here.</td>
</tr>
<tr>
<td></td>
<td>and specialist meetings.</td>
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Core Programs | Learning Resources | Spatial Resources | Spatial Tools | Search Engines | CSI SS Events | Community Center | About CSI SS
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SPACE
Spatial Perspectives on Analysis for Curriculum Enhancement

• NSF CCLI-National Dissemination Program / Initiated 1 October 2003
• Consortium: UCSB, Ohio State University, UCGIS
• PI: D Janelle / Co-PIs: M Goodchild and R Appelbaum
• Partner PIs: M-P Kwan (OSU) / A Getis (UCGIS)
Why *SPACE*?

- Spatial thinking should be one of the foundations for general undergraduate education (for informed citizenship and for information analysis and assessment)
- Spatial perspectives provide a means of integrating theory within and across disciplines, and for matching it with evidence
- Spatial analysis can serve as a foundation for interdisciplinary cooperation (e.g., the coupling of environmental and social processes)
SPACE Goals

• Facilitate undergraduate faculty development in spatial social science
• Expand curricula resources in spatial social science
• Provide follow-through professional development
• Achieve diversity in access to educational opportunities
• Establish and encourage support networks
• Foster technology integration
• Promote discipline integration
• National dissemination
The SPACE Program

• National Education Workshops
• Academic Conference Courses to Enhance Spatial Science (ACCESS), Years 2 and 3
• On-line Resources for Lab Exercises, Data Sets, Test Items, Syllabi, Assessment Tools, and Related Resources
## CSIISS Workshop Participants 2000 - 2003

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<td>3</td>
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SPACE Workshop Content Themes

- Geographic Information Systems
- Spatial Pattern Analysis
- Spatial Econometrics
- Map Making and Cartographic Visualization
- Spatial Interaction
- Agent-Based Modeling
- Place-Based Search
- Applications
CSISS Instructional Resources Ready for Use

• *Spatially Integrated Social Science*
• Syllabi collection by social science discipline
• *CSISS Classics*
• *GIS Cookbook*
• Software (download free):
  – *GeoDa*
  – *Flow Mapper*
• Workshop video clips

[www.csiss.org](http://www.csiss.org)
CSISS Best Practice Publications

See http://www.csiss.org/best-practices/siss/ for objectives, chapter abstracts, & related resources

Oxford University Press, January 2004

Publication to follow SISS:
L Anselin, S Rey and R Florax, eds. Advances in Spatial Econometrics Springer, Fall 2004
Background

Between 1886 and 1903 Charles Booth produced a remarkable series of maps of London carefully coded for social class with data gathered by visiting, literally, every street in London. Equally remarkable, Booth devised, funded a research team, and conducted the study in his spare time while running a successful international leather trade and steamship company. In the 1880s, the question of increasing poverty in an increasingly wealthy Industrial-age Britain was becoming more central to citizens, politicians and philanthropists. A series of riots and sensational journalism sparked fears of social unrest. Booth encountered the squalid conditions of London neighborhoods while campaigning for an unsuccessful
Charles Booth Online Archive at the British Library of Political and Economic Sciences

Publications


Booth, Charles. Labour and Life of the People (2 volumes, plus maps under
CSISS Classics - Spatial Thinking in Sociology

• Charles Booth, Mapping London’s Poverty, 1885-1903
• Patrick Doreian on Linear Models with Spatially Distributed Data
• Florence Kelly, Slums of the Great Cities Survey Maps, 1893
• Colin Loftin and Sally K. Ward, Application of Spatial Autocorrelation in Sociology
• Henry Mayhew, London Labour and the London Poor, 1861
• Robert Park and Ernest Burgess, Urban Ecology Studies, 1925
• Clifford R. Shaw and Henry D. McKay, Social Disorganization Theory
• Georg Simmel, The Sociology of Space
• Alma and Karl Taeuber, Residential Segregation in U.S. Cities
• Alfred Weber, Theory of the Location of Industries, 1909

Under development:

• William G. Skinner, Marketing and Social Structure in Rural China
• Shevky, Williams, and Bell, Social Area Analysis and Factorial Ecology
Video clips of CSI SSS summer workshops

Demographer John Weeks -- fertility in rural areas of Egypt
CSI SSS summer workshop 2002
<table>
<thead>
<tr>
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**GIS Cookbook: Introduction**

The GIS Cookbook is a collection of simple descriptions and illustrations of GIS methods written with minimal GIS jargon. Recipes cover two GIS software platforms, ArcView 3.x and ArcGIS 8.x. The target users are social scientists with an interest in introducing spatial thinking into their current research and also having some experience with computers but little to no exposure to GIS. The GIS Cookbook is in its beginning stages and will be expanded to better serve the needs of social scientists.

**GIS Cookbook Table of Contents**

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<tr>
<th>Section</th>
<th>ArcView 3.x</th>
<th>ArcGIS 8.x</th>
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</thead>
<tbody>
<tr>
<td>1. Getting Started</td>
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<td>How to open a new project, new view, or existing project</td>
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<td>2. Dealing with Data</td>
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<td>Making a choropleth map</td>
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<td>4. Projections</td>
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<td>Define projection for a shapefile or geodatabase</td>
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<td>8.x</td>
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<tr>
<td>Reprojecting data</td>
<td>3.x</td>
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</table>
CSISS Tools Clearinghouse

The **CSISS Tools Clearinghouse** is intended to grow into a robust collection of spatial analysis software, software links, and links to information about tools for spatial analysis. The development of these tools is a lively research area and the goal of this clearinghouse is to provide up-to-date information on available tools. The clearinghouse is comprised of:

- **Search Engine**
  Search a continuously updated, comprehensive index of the CISS Select Tools and Links to Portals.

- **Select Tools**
  Browse through tools particularly suited to the analysis of spatial phenomena.

- **Portal Links**
  A listing of useful collections of software tools for anyone interested in Spatial Analysis, or those looking for specific tools.

- **CSISS Tools (offsite)**
  The home of the software tools development efforts under CISS, carried out in the Spatial Analysis Laboratory of the Department of Agricultural and Consumer Economics at the University of Illinois, Urbana-Champaign.

**New** - GeoDa 0.9, beta release software for ESDA with dynamically linked windows.
**New** - R-Geo, a developing effort to promote spatial data analysis software in the R language.
Download GeoDa 0.9.5-i
• Tutorials
• Sample Data
• Openspace Mailing List

Luc Anselin
Tobler's FlowMapper
SPACE Discipline Resources

Categories

- Also see: GIS Syllabi

Links

- Asian Spatial Information and Analysis (ACAS) - A research institution specializing GIS databases for Asia. Includes historical and contemporary issues in Asia and the former Soviet Union.
- Baltic Sea GIS, Maps and Statistical Database - Provides GIS data and other information for the Baltic Sea drainage basin, including hydrography, population, and other data.
- Colorado Office of Emergency Management: Colorado Care - Contains a list of local government oriented GIS data.
- Digital Chart of the World - Download the world's first global high-resolution chart of different countries, in Arc/INFO export format.
- Freedat.ca - Dedicated to the issue of public access to government geospatial data across Canada. It is a place to discuss, issues, educate, coordinate and encourage change.
- GIS Data Depot - Provides free GIS data downloads and creates custom spatial data CD-ROMs.
- Hawaii Statewide GIS Program - Free downloadable GIS spatial data, metadata, and maps.
- Infoshare: Community Data on New York City - Profile and compare neighborhoods, and produce original tables.
- Louisiana Statewide GIS - Contains GIS and mapping data on the state of Louisiana.
Social Explorer is an organization that provides mapping products and services. By visually presenting data linked with geography, we help people visualize and understand data. Maps are an ideal tool for presentations, since maps provide a key tool in determining what the data means.

**Featuring Dynamic Maps**

These interactive maps allow you to explore the way New York City and Los Angeles changed over time...

**Social Research Office**
Sociology Dept. of Queens College
65-30 Kissena Blvd.
Flushing, NY 11367
Tel: (718) 997 - 2037
Fax: (718) 992 - 2020

**Our Sponsors**
This project has received major funding by:

- National Science Foundation
- The New York Times

Urban History / Sociology / Demography -- Andrew Beveridge
SPACE Teaching Materials

Links

» Field-tested Learning Assessment Guide (FLAG) - Offers broadly applicable, self-contained modular classroom assessment techniques (CATs) and discipline-specific tools for STEM instructors interested in new approaches to evaluating student learning, attitudes and performance.

» Learning Through Technology - Features information on using technology in the classroom, case studies, assessment tools, glossary, and links. Provided by the National Center for Science Education.

» Online Evaluation Resource Library - This library was developed for professionals seeking to design, conduct, document, or review project evaluations. OERL's resources include instruments, plans, and reports from evaluations that have proven to be sound and representative of current evaluation practices.

» Teaching Goals Inventory Online - A self-assessment of instructional goals. Its purpose is threefold: (1) to help college teachers become more aware of what they want to accomplish in individual courses; (2) to help faculty locate Classroom Assessment Techniques they can adapt and use to assess how well they are achieving their teaching and learning goals; and (3) to provide a starting point for discussion of teaching and learning goals among colleagues.
## Summer Workshops 2004

<table>
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### Site Help

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**Log in**

Username: [Enter]

Password: [Enter]

Log me on automatically each visit: [On/Off]

Log in
Webmaster's Page

Welcome to my page! I have gathered together some links throughout the SPACE site that I think will be useful to others. You can also visit my main site csiss.org. The description for this page is provided in your forum Profile.

Teaching Materials

- CSISS - Course Syllabi for Anthropology
- Internet Resources for a Geographic Education
- Concept Maps
- Demographic Data Viewer Home Page

Discipline Resources

- Using GIS as an Economic Development Tool
- Population Geography

GIS Cookbook

- Define Projection for a Shapefile or Geodatabase
- Background Information about Presentations and Finishing
- Reprojecting Data
- Making a Choropleth map
- How to Open a New Project, New View, or Existing Project, then Add Data
Challenges for SPACE Workshop Participants I

- **Establish, Articulate and Meet Personal Instructional Goals**
  - Develop operational background in spatial analytic concepts and tools
  - Make use of spatial concepts and tools in designing instructional plans (e.g., rubrics, syllabi, curricula)
  - Make use of CSI SSC and SPACE resources in workshop and in teaching
  - Become familiar with approaches to learning assessment and develop plans for implementation in undergraduate teaching
- **Develop a Workshop Project consistent with those goals and with the goals of the SPACE project**
  - Prepare a Project Presentation for the final day of the workshop
  - Participate in constructive critique of project presentations
Challenges for *SPACE* Workshop Participants II

- **SPACE Incentive Awards:**
  - Four $1500 expense awards to participate in spatial-oriented conference or to present a conference paper about their experience in teaching spatial thinking at the undergraduate level.
  - Eligibility: *SPACE* workshop participants
  - Based on implementation of course exercises and syllabi, development of educational development resources, or superb example of a student course project
  - Details forthcoming
Challenges for SPACE Workshop Participants III

- Academic Conference Courses to Enhance Spatial Science (ACCESS) Years 2 and 3
  - Half-day and full-day workshops at academic discipline conferences
    - exposure and profile for spatial analysis in undergraduate teaching
    - Follow-up support for prior workshop participants
    - Involve spatial researchers from different disciplines
  - Offers of assistance appreciated (organizing, instructing, examples of application) – SPACE will provide financial assistance
Workshop on Spatial Analysis in Anthropology

21 November, 1:00 pm - 4:00 pm

Emilio Moran (Indiana University) Introduction

Eduardo Brondizio (Indiana University) Enhancing Ethnographic Research through Spatial and Temporal Analysis

Luc Anselin (University of Illinois, Urbana-Champaign) Mapping and Analysis for Spatial Social Science

Donald Janelle (UC Santa Barbara) Resources for Spatial Thinking and Analysis

Susan Stonich (UC Santa Barbara) The Future of Spatial Approaches in Anthropology

Organized by Barbara Herr-Harthorn (UC Santa Barbara)
Challenges for *SPACE* Workshop Participants IV

- **Documenting of Results of *SPACE* Workshops:**
  - **Entry and Exit Surveys** (expectations and evaluations)
    Details on exit survey on Friday – completion requested within one week of workshop
  - **Follow-up Survey** (evidence of implementation and long-term influence) Spring 2005 for 2004 workshops

- **Recommending Web Links** to resources for spatial social science undergraduate education:
  - Course syllabi
  - Data and course exercises
  - Resources for curriculum, course, and project development, and evaluation
  - Instruments and resources for learning assessment
Challenges for *SPACE* Workshop Participants V

Enjoy the Workshop and the Santa Barbara Region!!!

**Social Events**

- Reception
- Hikes
- Beach barbecue
- Whale watching
- Santa Ynez Valley wine tasting tour
- Dinner at home of Mike and Fiona