



The Use and Importance of Geospatial Data in Geographically-Integrated History

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NDIIPP: Framing a National Preservation and
Access Strategy for Geospatial Data,
Library of Congress, 12-13 November 2009

Geographically-Integrated History

As a research and teaching discipline, *Geographically-Integrated History* is founded on the idea that (1) the understanding of historical processes requires an integration of place, space, and time and (2) accomplishing this integration poses a challenge that can be met with modern information management and visualization techniques.

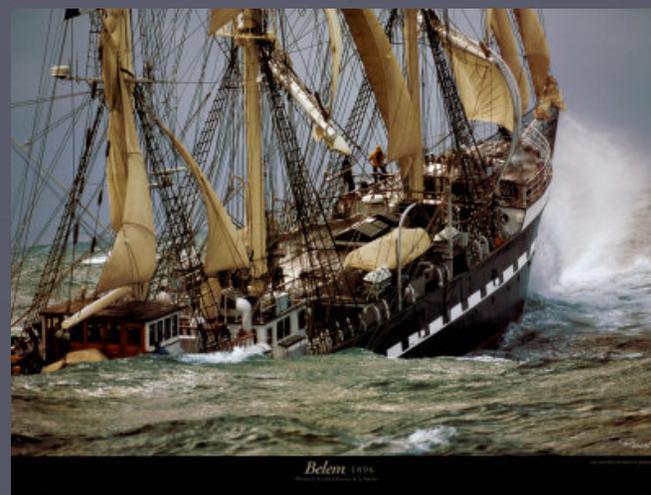


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Application

- ✓ History of any place is shaped by the way the place is connected to other places & the changes in these connections over time
- ✓ Historical periods are complex, dynamic, nonlinear systems, which are spatially large, & in more recent centuries, global in extension, and which sometimes become unstable, leading to phase transition, bifurcation, & organization of new systems
- ✓ Within such systems, people & places are connected by self-organizing networks, which are the sources of innovation & the emergence of new forms

“Dead reckoning”





DynCoopNet

Dynamic complexity of cooperation-based
self-organizing networks in the first global age

DynCoopNet: Dynamic Complexity of Cooperation-Based Self- Organizing Commercial Networks in the First Global Age [1400-1800]

EUROPEAN
SCIENCE
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EUROCORES Programme
European Collaborative Research

The Evolution of
Cooperation & Trading

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Understanding social networks within complex, nonlinear systems: geographically-integrated history and dynamics GIS [acronym: SOCNET]

National Science Foundation

Cyber-Enabled Discovery & Innovation

Office of Cyberinfrastructure

\$1.7 million; 2009-2013

With May Yuan, University of Oklahoma



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**The Evolution of
Cooperation & Trading**



A Virtual Research Organization

DynCoopNet

See article in TECT brochure:

<http://www.esf.org/activities/eurocores/programmes/tect.html>

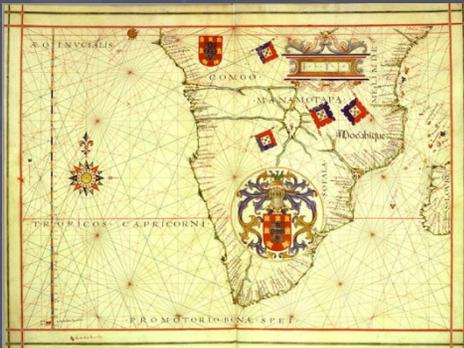
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Graduate Program in Geographically-Integrated History [Internships]

*M.A. in Historical Resources
Management*

*Ph.D. in Social and Environmental
Dynamics*

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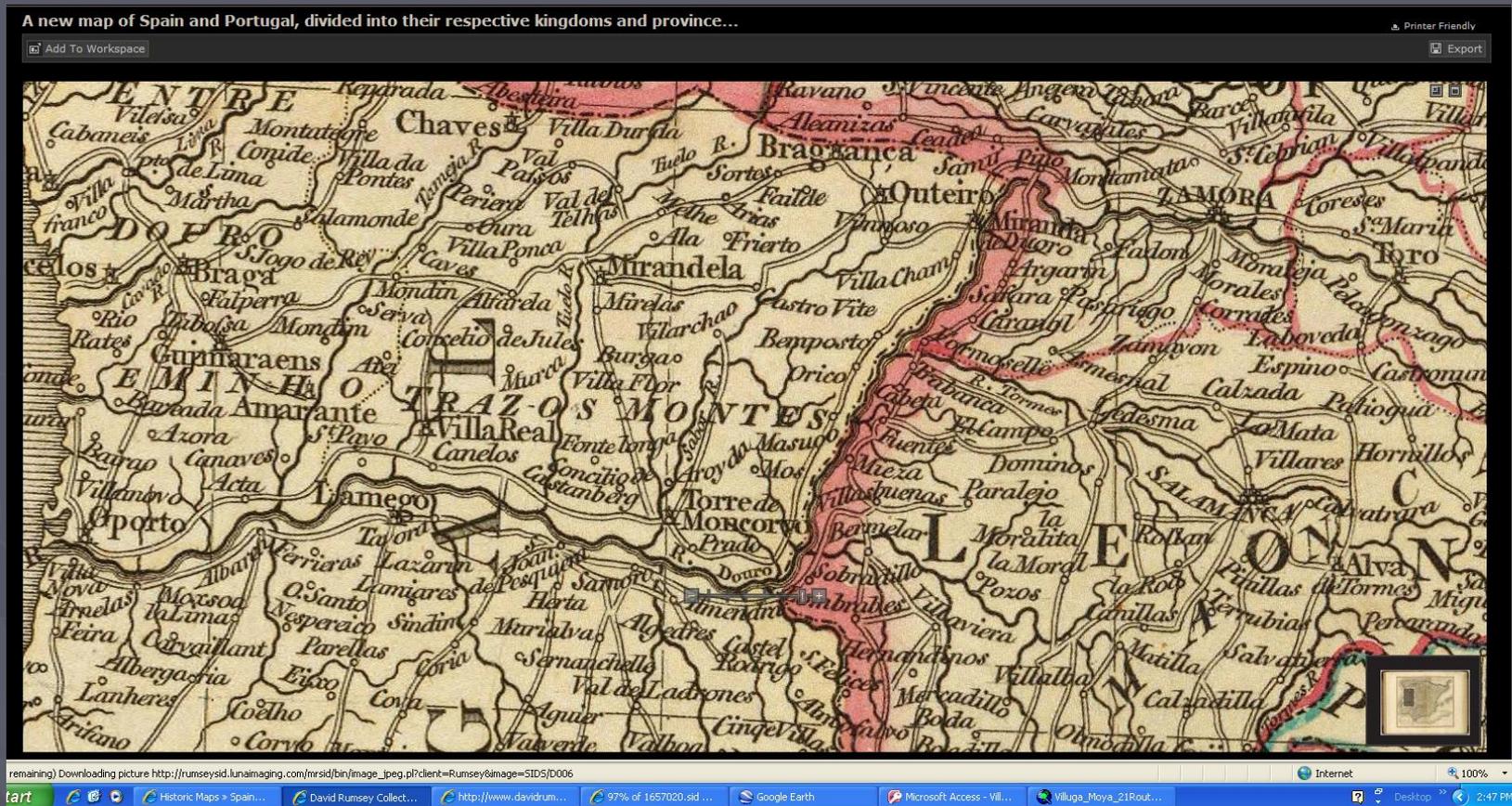
Ethics of Collaboration

<http://idahostate.academia.edu/JBJackOwens>

- ▶ Research infrastructure in History
- ▶ What is necessary to encourage collaboration in a discipline characterized by solitary research and publication?
- ▶ Shared, distributed data
- ▶ Joint publication of results
 - Who writes?
 - First author?
 - Author order?
 - Dissent?



Future Uses of Current Data Sources



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Thank you for listening

And thanks to:



EUROCORES Programme
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