Envisioning the ECAI
Atlas of Maritime Buddhism Project

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PNC Annual meeting
Bangkok
October 2011
Envisioning:
Imagine as a future possibility; visualize
New Cultural Atlas Project

Building new understandings of our past

- Building a global team
- Incorporating recent research results
- New data collection technologies
- Information integration technologies
- Building on successful projects
- Advanced data mapping and visualization
From Silk Road to Great Circle

- For more than a century we have seen the growth of interest in the so called “Silk Road” and the identification of these mercantile routes as the major element in the transmission of Buddhism to China.

- However, there is considerable available knowledge about Buddhist pilgrims, Buddhist kingdoms, and trade routes in Maritime South and Southeast Asia.

- And a growing awareness of the maritime contribution to the global network of trade and cultural diffusion.
Buddhism and Trade

- There is general acceptance of the idea that mercantile activity is closely tied to Buddhist development.
- Buddhism was in many ways a religion of merchants as it made its way up and over the Pamir Mountains into the Taklamakan basin.
- We now know that the merchants in Eurasia were not limited to caravans. There was an important group that operated sea trade.
- What was the role of these sea traders in cultural life?
Major Historical Trends

✧ Evidence of Buddhism in South and Southeast Asia

✧ Historical changes from Alexander the Great to the rise of Islam impacted trade and culture

✧ We do not have a complete picture of the diffusion process and the impact of Buddhism on maritime trade and kingdoms

✧ How does Maritime Buddhism fit into the overall timeline of world history?
Mapping Historical Routes

From global context to local trade:

- Historical records give us clues to the trade and cultural diffusion patterns

Route of Alexander the Great 334 – 324 bce
For some events, like travels of Alexander, we have a lot of documentation. However, mapping of the maritime component may not be emphasized.

“Alexander commissioned a fleet to explore the Persian Gulf shore under his admiral Nearchus”

However, mapping doesn’t show any travel by sea to Baghdad
Map derived from a historical manuscript and map describing Roman trade.
Shipping across the Indian Ocean is being researched in part through archaeology of ship wrecks.
Sea Links from East Asia to Africa

Monsoon winds and trade goods
Trade followed Red Sea to Mylos Hormos port to Koptos and the Nile.
A more adequate map will show a network of land and sea trade
Maritime Buddhism Atlas

✧ The Atlas of Maritime Buddhism can incorporate what we know
  ✧ Buddhist scholars traveled the great circle
  ✧ Archaeological sites contain Buddhist remains
  ✧ Shipwrecks give us information about materials shipped and traded

✧ and support discovery
  ✧ What is the pattern of migration, trade and diffusion?
  ✧ How was the Buddhism that came to China influenced by its journey through South & Southeast Asia
  ✧ What the impact of SE Asian ideas on the Buddhist Canon?
Primary Approaches

✧ Create dynamic maps using
  ✧ historical, contextual maps
  ✧ GIS of sites, harbor locations, ship wrecks

✧ Catalog locations and characteristics of Buddhist materials in historical sites and on ships

✧ Digitize artifacts and corpora of inscriptions

✧ Link to related art and texts
Integration & Complexity

✧ Collecting & integrating existing data
  ✧ contextual data – maps, reference works
  ✧ GIS and archaeological data
  ✧ Images & texts

✧ Collecting new archaeological data

✧ Developing a research environment
  ✧ Building methods of hosting and sharing information

✧ Creating complex visualizations & analysis
  ✧ Designing appropriate User interaction and visualization systems
ECAI Cultural Atlas Examples

ECAI Silk Road Project – Dynamic TimeMap of Routes
Founding of Mosques in China as of 1455

ECAI Religious Atlas of China and the Himalayas
Figure 1
Distribution of the Austronesian Language Family and Major Subgroupings. Adapted from the Research School of Pacific and Asian Studies, National Australian University. Structure of the Austronesian Language Family from Blust.

ECAI Austronesia
3D Data Capture

- Capturing inscriptions and in situ details that reveal the nature of Buddhist activities

- Kevin Cain, Insight Digital
  - Ten years of experience working with world cultural heritage
  - See: http://www.insightdigital.org
Data Capture Examples

- Scan camera
- Poetry on the walls
  - Angel Island, California
  - Ramesseum, Egypt

- Osiriform columnade in the Ramesseum Second Court (photograph and scan data)
Search & Visualization of Text

ECAI Blue Dots Project

- Developing an interface to display and search the whole Buddhist Canon

- Current Collaboration with the ALiVE center in Hong Kong
Project Partners

- University of California, Berkeley
- INSIGHT (the Institute for Study and Integration of Graphical Heritage Techniques)
- Academia Sinica
- University of Paris, Central Research Center
- French National Centre for Scientific Research, (C.N.R.S)
- École française d'Extrême-Orient (EFEO)
- Archaeological Survey of India
- National University of Singapore
- Institute of South East Asian Studies, Singapore
- The Nalanda-Sriwijaya Centre at the Institute of Southeast Asian Studies (Iseas)
- University of the West, Rosemead, California
Workshop Presentations

✧ **I-Chun Fan**, Academia Sinica, Taiwan
✧ *Review of recent projects at Academia Sinica and of the digital atlas interface used for the Religious Atlas of China and the Himalayas*

✧ **D. Dayalan**, Archaeological Survey of India
✧ *Archaeological sites and evidence of Maritime Buddhism in South India*

✧ **Lim Chen Sian**, National University of Singapore & Nalanda-Sriwijaya Centre, Inst of Southeast Asian Studies
✧ *Report on projects in Singapore and collaborations including: archaeological work and GIS mapping of sites*
Presentations Continued

✧ **Alexander Stolyarov**, Institute of Oriental Studies of the RAS & Russian Academy of Sciences, Moscow, Russia
✧ *Report on Buddhism and Trade Related Resources in India*

✧ **David Blundell**, National Chengchi University, Taiwan
✧ *Buddhist Voyaging in Monsoon Asia utilizing Austronesian Sea Craft*

✧ “*Diffusion of Mahayanist Images and Implantation of Port at River Mouths in Ancient Sri Lanka*”

✧ **Jeanette Zerneke**, ECAI, UC Berkeley
✧ *Update on ECAI Religious Atlas of China and development of a Tibetan Religious Atlas*
Working Group Meeting

✧ Saturday Sessions
  ✧ Project research plan discussion
  ✧ Hands on demos of current projects
  ✧ Discussion of issues involved in developing complex Cultural Atlases and Digital Humanities Systems. Short introductions to some of the issues and discussion.

✧ **Project Development Planning:** project planning, technical options, fundraising, and collaboratively develop prospectuses.
Always desire to learn something useful.
Sophocles

While reflecting on our current era of Globalization and it’s impact on humanity and our planet,

here we have the opportunity to increase our understanding of how human cultures have been connected for over two thousand years.

Thank you to Prof Lancaster and ECAI collaborators for input and resources for this presentation

And thank you for your attention

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