Work on the Austronesian Atlas for Languages and Cultures in Monsoon Asia
Introduction

This work stems from the Pacific Neighborhood Consortium (PNC) established in the early 1990s. It is based on digital museum projects concerning linguistics, prehistory, and ethnology, as an Oceania cultural “virtual museum.” Over the past few years, groups from the University of California, Berkeley (UCB), and others are setting up teams of the Electronic Cultural Atlas Initiative (ECAI), to connect areas of the world through digital geographical information systems (GIS). From these shared projects, scholars have unified a technical information network with parameters to chart global spatial temporal data. The initiative is to link geographical sectors of the world as modular areas of research.
This Atlas

The digital cultural atlas for Austronesian speakers is a vast region. Spatial layers of information are marked in time from prehistory and up. One layer is based on information of the *Language atlas of the Pacific Area* (Wurm and Hattori 1981 and 1983). to the present as continuous work from mutual research serving as an academic bulletin board on the Internet for scholarly exchange from Southeast Asia across Oceania. Currently I am working at Academia Sinica, Institute of Linguistics, and a similar university institutes in Taiwan in terms of conducting linguistic field studies and research on Austronesian languages. Regions of Monsoon Asia are undergoing mapping. Hainan is being looked at for linguistic verification on the present state of Austronesian languages.
The earliest evidence of the Austronesian linguistic family points to Taiwan and the surrounding islands. These people have different cultures proving them with specialized means of co-existing with the natural environment. Übersichtskarte produced in Germany (1858).
A Japanese map (1901) shows a line in red as boundary between dividing Han people (left) from the indigenous communities.
The projects that I will present here dwell on current thoughts on heritage as a resource for development and the tools of maintaining heritage for communicating information for public awareness and research utility. Such projects include the professional management of regional heritage sites and a regional component language atlas of Austronesia based on geo-referenced data for spatio-temporal information storage and retrieval from maps.

The Batanes Islands
These islands are between the Philippines and Taiwan in the Bashi Channel where the Malayo-Polynesian Batanic languages are spoken. Yami is spoken in the region of Taiwan on a separate isle.
Taiwan in Relation to the Batanes Islands of the Philippines 1900
Taiwan in Relation to the Batanes Islands of the Philippines
Publications

The book *Austronesian Taiwan: Linguistics, History, Ethnology, Prehistory* (2000) published by the Phoebe A. Hearst Museum of Anthropology, UC Berkeley, and the Shung Ye Museum of Formosan Aborigines is now entering its second edition. This resource will serve as the basis for an e-formatted publication co-edited with Jeanette Zerneke to serialize the edition with linguistics coming first. The Formosan Language time enabled maps accomplished by Paul Li and Eric Yen at Academia Sinica will serve as the basis for this part with links from the data, such as dictionaries and linguistic articles referenced to spatial/temporal designation.
A map (2000) produced by Paul Li giving historic linguistic boundaries in the publication *Austronesian Taiwan: Linguistics, History, Ethnology, Prehistory*. 
Featured Projects

Many online projects currently take advantage of the ECAI and TimeMap infrastructure. Below are some examples:

- Southeast Asia Digital Cultural Atlas On-Line Demonstration
- TimeMap Korea
- ECAI Silk Road Atlas
- A Sasanian Seal Collection in Context - ECAI Publication
- Austronesian Linguistic Mapping
- Historic Sydney Museum Kiosk Screen Shots
- South Asian Animation

In addition to the projects that have been developed using TimeMap, many ECAI collaborators have completed projects that have extensive resources along with complex spatial and temporal records. These projects are among those which show the potential of digital scholarship in the humanities.
Diaspora

Diaspora of the Austronesian Language Family has created a linguistic arena of geography that extends from Taiwan to the Chilean territory of Easter Island, from Borneo to Madagascar. This is by far the largest linguistic determining factor throughout Southeast Asia yet primarily of the archipelagos from Myanmar to Cambodia, Vietnam, Hainan, the Philippines, Indonesia out to Melanesia (New Guinea), Malaysia. The coastal areas where the “sea nomads” reside from the Andaman Sea to the Celebes have traditionally maintained Austronesian languages. Malay is a gloss or lingua franca as a trade language from the Thai border to the reaches of Indonesia with millions of speakers. Javanese is said to have 70 to 80 million speakers. Yet most Austronesian languages have only a few thousand speakers at most.
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.

Thanks to the people in Australia, especially Prof Crissman, the support from Academia Sinica at the Computing Center and Institute of Linguistics (Preparatory Office), ECAI Central and its community of scholarly exchange, the following maps were done to give a clear and working picture of the Austronesian Diaspora in Southeast Asia is being completed.
Spatial data partially based on Wurm and Hattori, eds. 1981 and 1983
Language spatial information for Western Malay-Polynesian in Sumatra and the Malay Peninsula based on Wurm and Hattori, eds.
Language spatial information for Western Malay-Polynesian from Java to Timor based on Wurm and Hattori, eds.
Philippines spatial information based on Wurm and Hattori, eds. 1981 with data attributes in digital format prepared by Academia Sinica
Language information for the Philippines as a test prepared by the School of Information Management & Systems and ECAI Central at Cal.
The Cebuano Language Atlas - Java TimeMap

Please be patient while map loads.
See below for map instructions.
Other source projects in Taiwan working on Formosan languages:

Institute of Linguistic (Preparatory Office), Academia Sinica

Acadia Sinica Institution Project of National Digital Archives Project, Digital Archives of Formosan Aborigines, Languages

Council of Indigenous Peoples, Executive Yuan, ROC

Shung Ye Museum of Formosan Aborigines, Taipei

To name a few with new institutions being established in local schools, cultural centers, and universities, such the Program for Austronesian Languages at the recently established Institute of Linguistics, National Taitung University in Southeast Taiwan.
Bellwood, Peter

Berkeley Image Database Project.
1991 Information Systems and Technology, Advanced Technology Planning, University of California, Berkeley.
Blundell, David


Blust, Robert

Chen, Chung-yu and Chang Min-li

Hu, Chia-yu and Yi-lan Tsui, eds.
1998 Studies on Ino’s Collection at Department of Anthropology of National Taiwan University. Collected Materials of Department of Anthropology, NTU, 1. Taipei: National Taiwan University Press (Chinese).
Johnson, Ian

Li, Paul Jen-kuai


Lien, Chao-mei  

Liu, Yi-ch’ang  

Mabuchi, Toichi  
Matsuzawa, Kazuko

Moriguchi, Tsunekazu

Nakamura, Takashi
Nobayashi, Atsushi

*Pacific Neighborhood Project.*
1990  Proposal of the University of California at Berkeley, University of California, San Diego; University of California, Office of the President; and University of Hawai‘i, Manoa.

Tsang, Cheng-hwa
Tsuchida, Shigeru

Wasley, David

Wu, Micha
1999 “The Ino Archives of the National Taiwan University and Its Content,” *Ino Kanori and Taiwan Studies: A Special Exhibition of Ino Collections*. Taipei: National Taiwan University Library. Pp. 46-61 (Chinese).
Wurm, Stephen A., and Shiro Hattori
The Australian Academy of the Humanities in Collaboration with the
Japan Academy. Canberra: The Australian National University.