SPATIALIZING ENDANGERED INTANGIBLE KNOWLEDGE:

Towards systematic integration of "where" in a legacy documentation collection of Southeast Asia

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Recording of location is an underdeveloped aspect of language documentation. This is in spite of the fact that such records provide crucial contextualization to the documentation effort and the data. Frequently, the locations and knowledge about them are as intangible and endangered as the languages and cultures we strive to document. Legacy collections pose particular challenges in this regard, since spatial information tends to be difficult to reconstruct and embellish. In this interdisciplinary pilot study, we explore the potential of legacy archival collections in documenting linguistic and cultural heritage in spatiotemporal perspective.
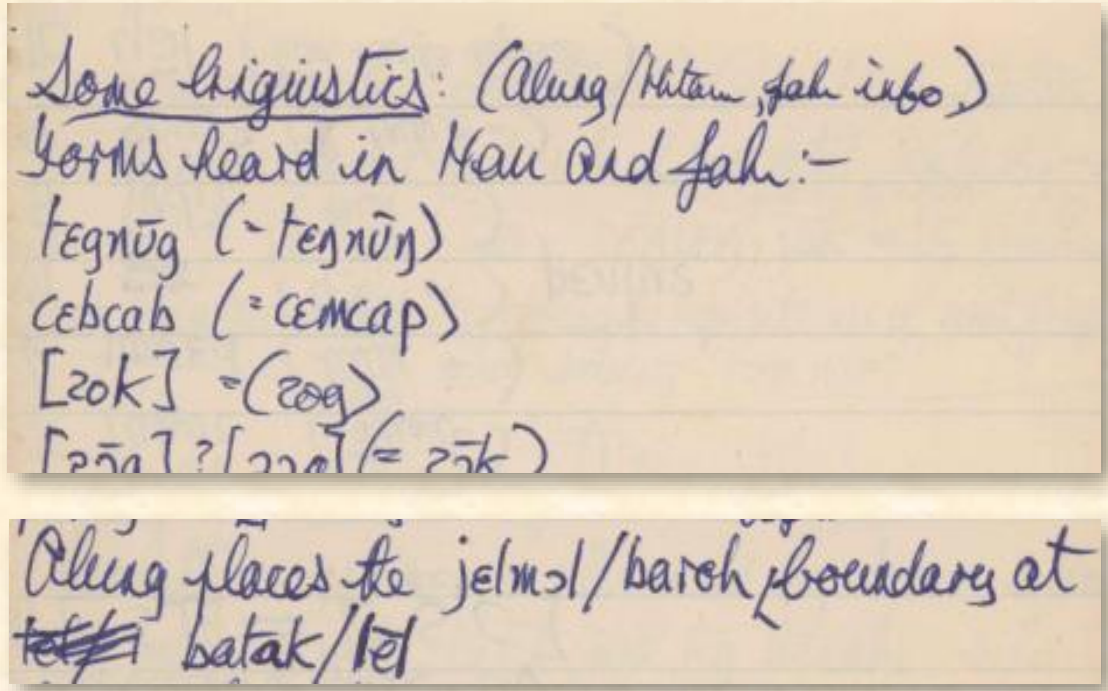
The pilot drew on a previously digitized collection of hand-written field notes, photographs, audio recordings, and annotated original maps from anthropologist Geoffrey Benjamin's first field trip to the Temiars (1964-65). Applying Handwritten Text Recognition (HTR) to field notes, more than 300 indigenous Temiar names of geographical features and settlements, some with analogue geodata, were harvested from them and the annotated maps. Through extensive cross-referencing of Benjamin's materials, visual inspection of satellite imagery, and literature review, the majority of locations were successfully geocoded to create a spatial dataset of Temiar places—some of which no longer exist. The locations were then linked to the hundreds of georeferenced notebook entries to integrate wordlists, kinship charts, meticulous hand-drawn maps of settlements, detailed route descriptions, notes and transcriptions of audio recordings of stories, music and soundscapes into a dynamic geographical database.

*Applying HTR to field notes*

This new analytical framework gives 'place' prominence as a means of accessing and exploring linguistic and ethnographic collections. Bringing analogue geodata into a digital geospatial environment facilitates fine-grained visualization, data exploration, and spatiotemporal analysis of resources of cross-disciplinary significance. It provides us with visual accounts of both the actual documentary process of the researcher and the historical context of the language community. For the language community it unlocks the geographical dimension intrinsic within the resources that document their intangible cultural, historical, and territorial heritage. Novel studies produce challenges — notably of interoperability and sustainability, and spatial uncertainty — that require us to seek new solutions for the preservation and reuse of resources documenting endangered intangible knowledge.

MALAYSIA

KELANTAN

10 km

NOTEBOOK ENTRY DATE
1964-03-17   1965-08-25

Benjamin's route from Seŋsak to Jabu (21/11/64 – 28/11/64)
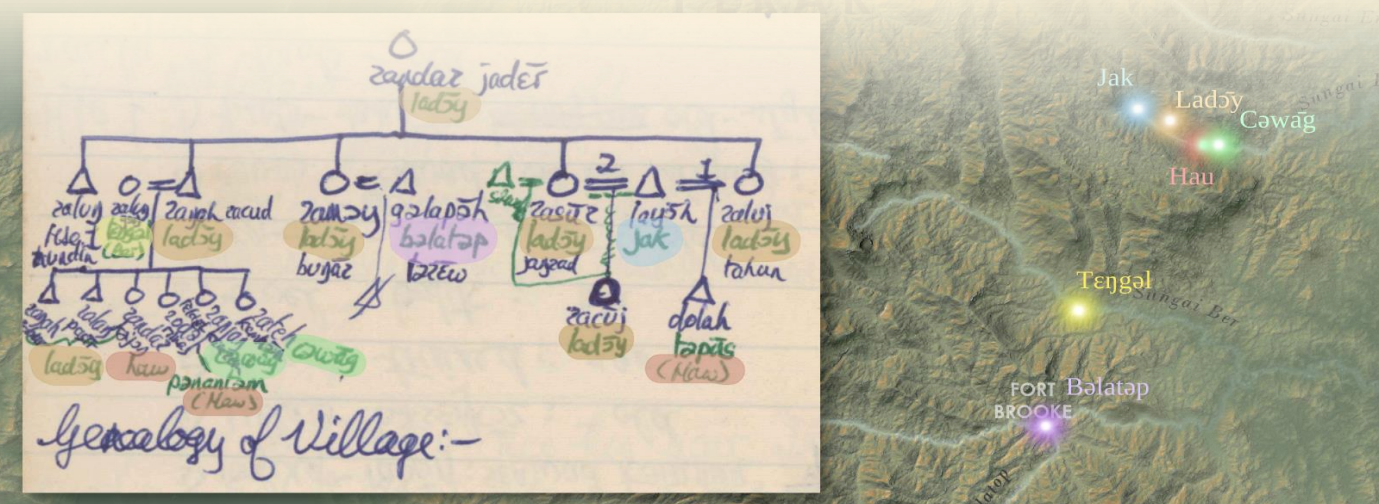
KAMPUNG KUALA BETIS

Linguistic Data

- Spatial visualization of linguistic data
- Unlocks the potential for advanced data exploration and spatial analysis
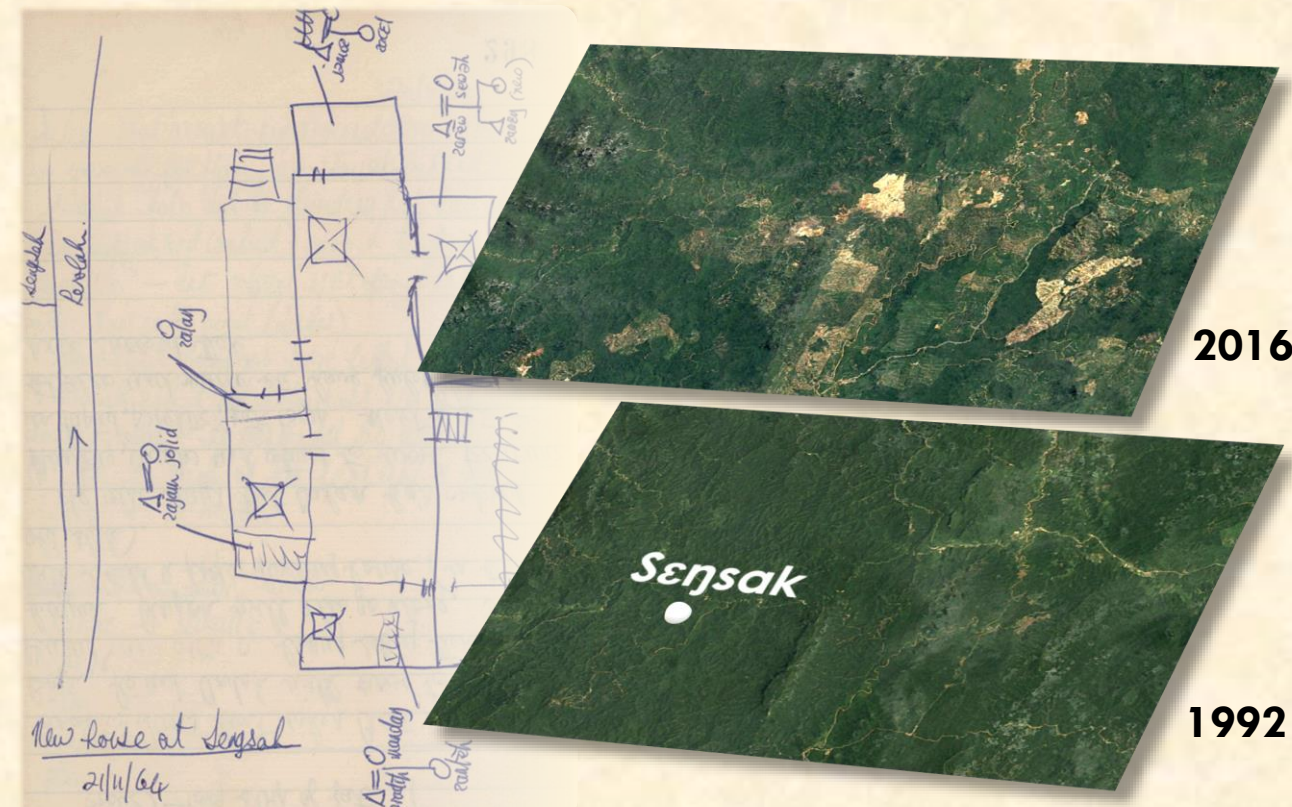
Social Relations
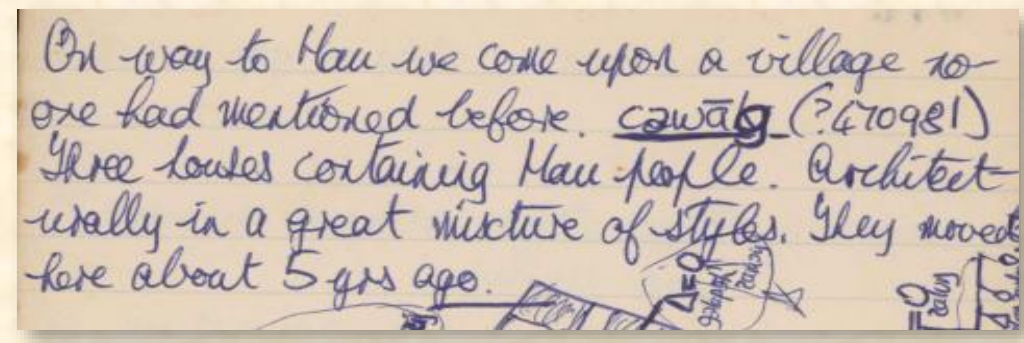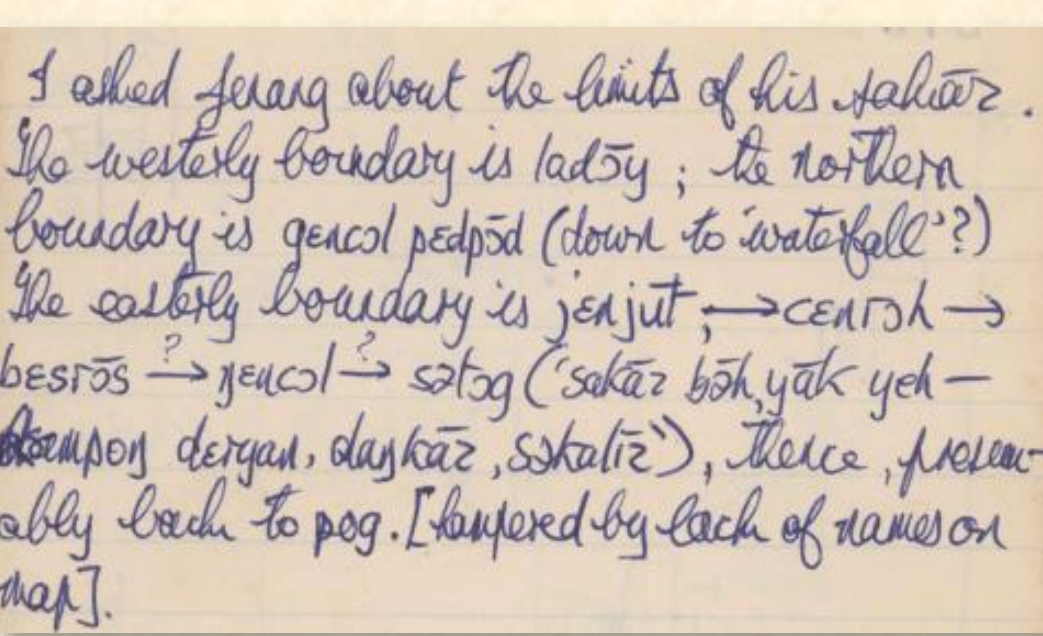
- Towards mapping and visualization of social networks

Landscape

- Reconstructing locations and landscape features in a rapidly changing environment
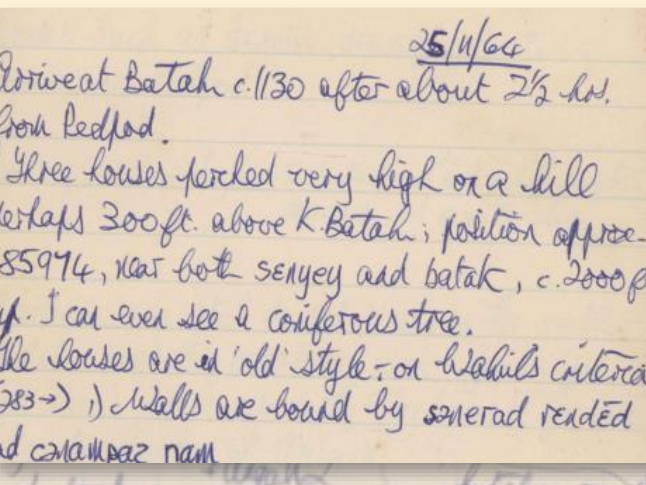
2016
Seŋsak
1992

Cultural Spaces

- Spatialization of transient phenomena
- Reconstruction of traditional land areas such as hereditary territories, aided by georeferenced original maps and geocoded locations
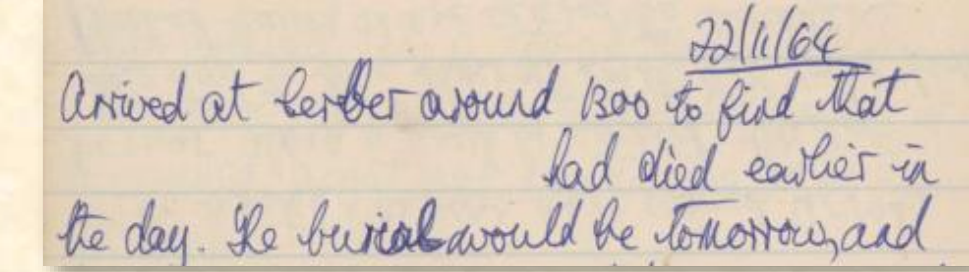
Settlements

- 80+ geocoded Temiar settlements
- Rarely found in other public map services

Movements

- Mapping the movements of the researcher and the Temiars
- Time lapse visualization

They plan to sleep at Cerber, Hau, Ber, Brooke. They can't use rafts up there; never before been this way; natural outlet is Blue Valley where they go once a year.

Brooke   Ber   Hau
Cerber

HUMID
Gunung Ayam
Sungai Perolak
Cerber   Seŋsak
Jabu
Hau   Cawãg
Batak
BLAU

Geoffrey Benjamin

Photo: Penghulu Hitam Tamboh, 1965

In 1964, anthropologist and linguist Geoffrey Benjamin was airlifted into the inaccessible mountain forests that were home to the Temiars (Austroasiatic: Aslian) of peninsular Malaysia. He documented their language, social relations, religion, and subsistence mode in rich detail. The Temiars' way of life has undergone dramatic changes over the years as roads were constructed, people resettled, traditional subsistence modes abandoned, and their forests logged.

Benjamin's Temiar research collection (1964-2009) is held at RWAAI (The Repository and Workspace for Austroasiatic Intangible Heritage), Lund University.