



**Universitas
Sumatera Utara**

Department of Architecture
<https://arsitektur.usu.ac.id/>



INTERNATIONAL SUMMER COURSE USU 2023
**BUILDING SURVEY OF
VERNACULAR
ARCHITECTURE OF NIAS ISLAND**

Ulrike Herbig
TU Wien, Research Unit of Building History and
Building Archaeology
ICOMOS Austria

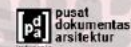
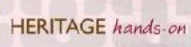
Transformation
Towards the Ultimate



**INTERNATIONAL
SUMMER COURSE
ARCHITECTURE**

01st – 10th August 2023

In Collaboration with:



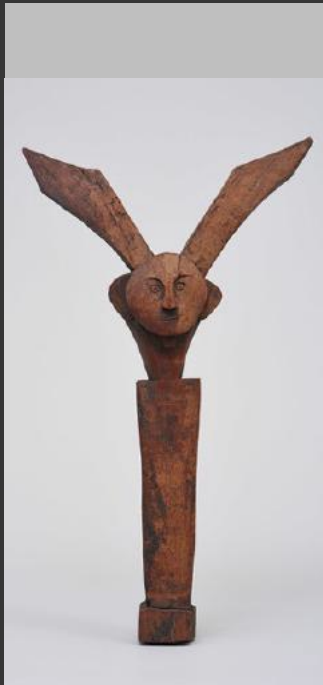
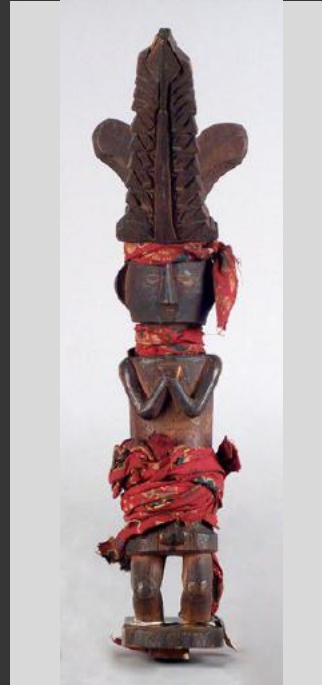


Joachim Freiherr von
Brenner-Felsach 1887



© Collection Weltmuseum Wien

Archduke Franz Ferdinand
of Austria-Este 1893



© Collection Weltmuseum Wien



© Ulrike Herbig



© Ulrike Herbig







Diverse Architectural Heritage of Indonesia

© Zamolyi, Doubrawa, Lehner, Herbig

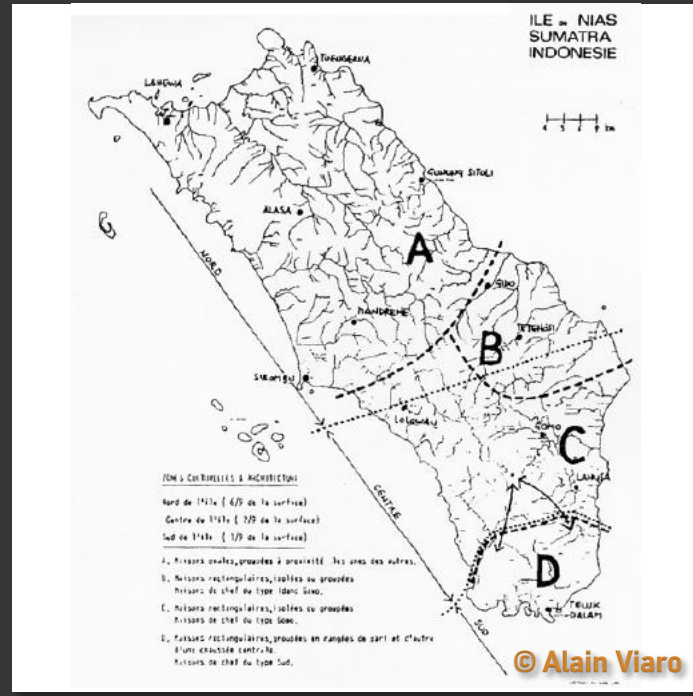
Research on Traditional Art and Architecture in Northern Sumatra and Nias 2003



© Herbig 2003



Nias Architecture Typologies





Adaptations and New Interpretation of Traditional Architecture



© Lehner, Herbig



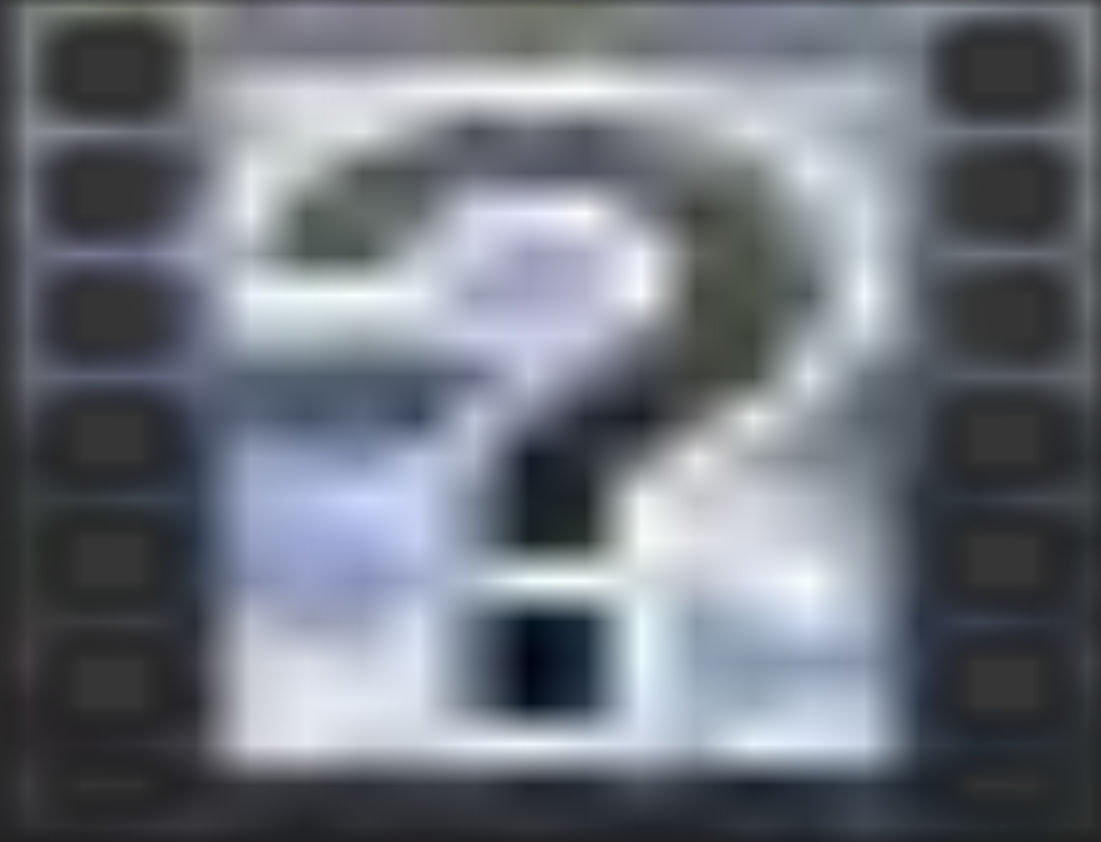
INSTITUT FÜR VERGLEICHENDE ARCHITEKTURFORSCHUNG
IVA

Ulrike Herbig

ARCHITEKTUR UND KULTUR IN NORDSUMATRA UND NIAS

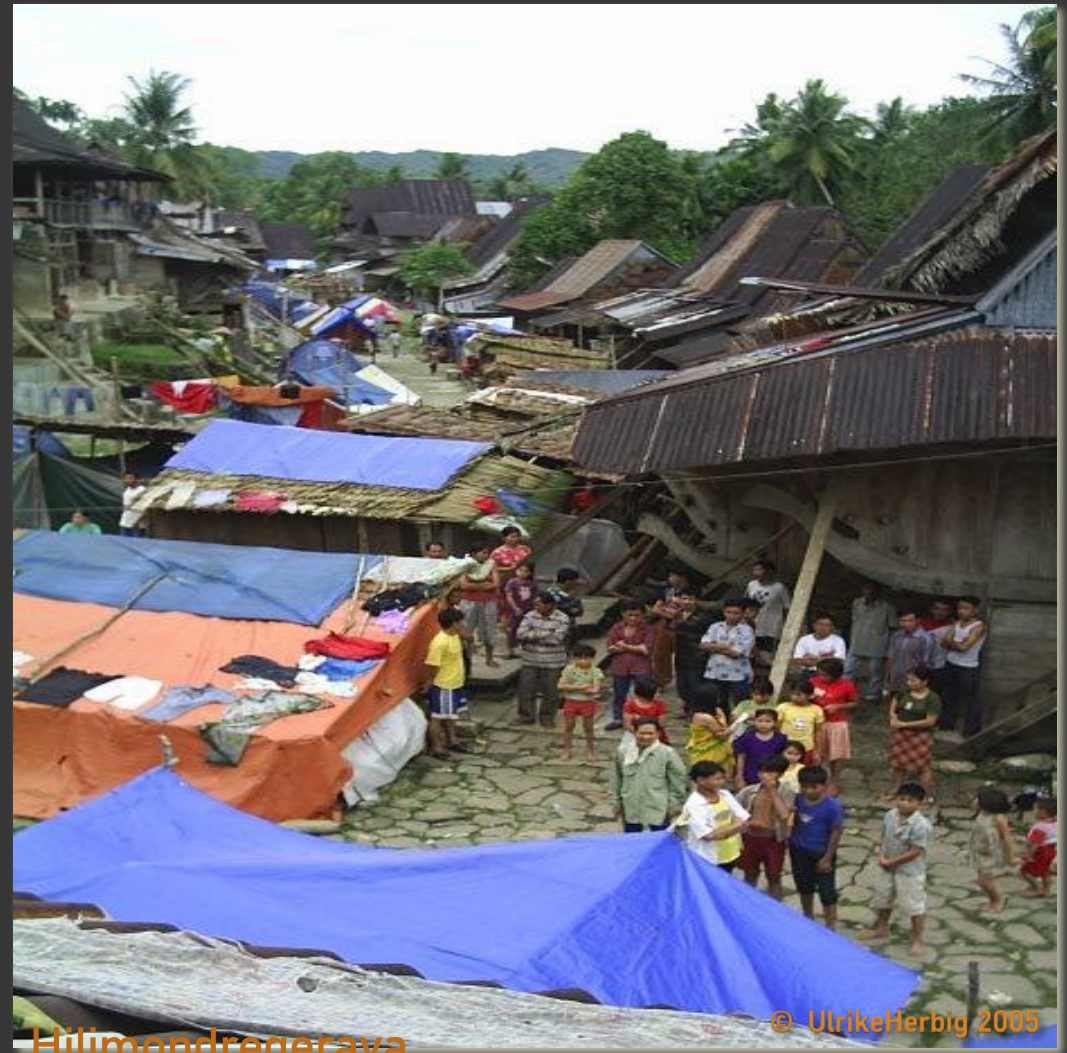


EINE DOKUMENTATION ENTSTANDEN IN ZUSAMMENARBEIT VON
INSTITUT FÜR VERGLEICHENDE ARCHITEKTURFORSCHUNG
TECHNISCHE UNIVERSITÄT WIEN UND BAYERN ALPHA ÖSTERREICH





Gunungsitoli after the Earthquake 2005



Hilimondregeraya

© UlrikeHerbig 2005

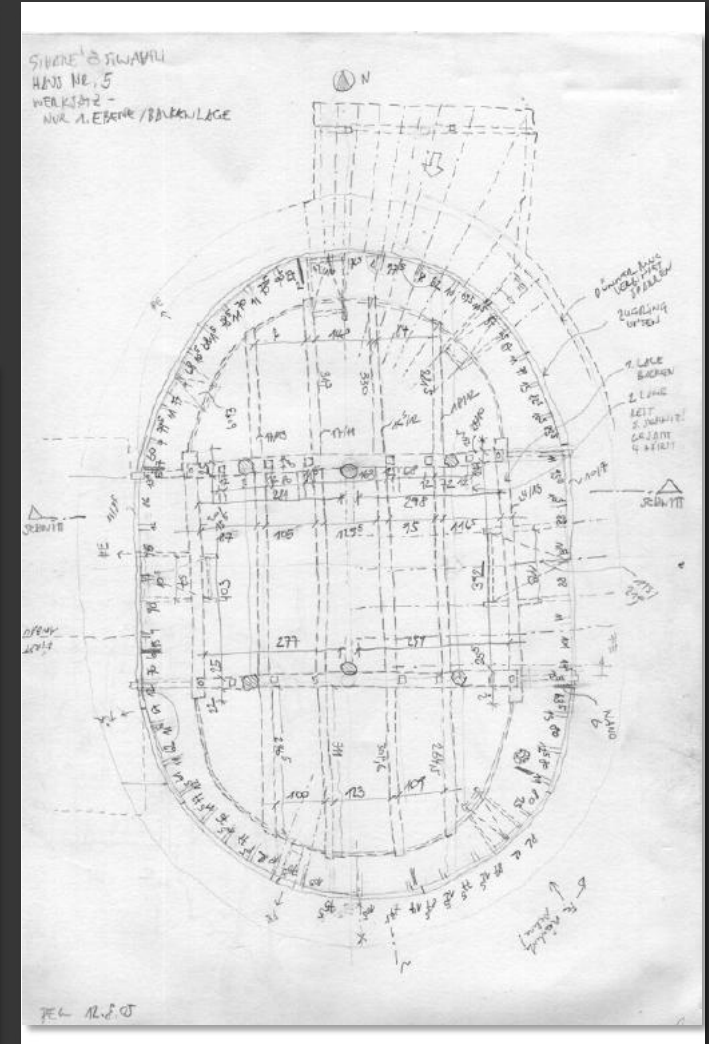
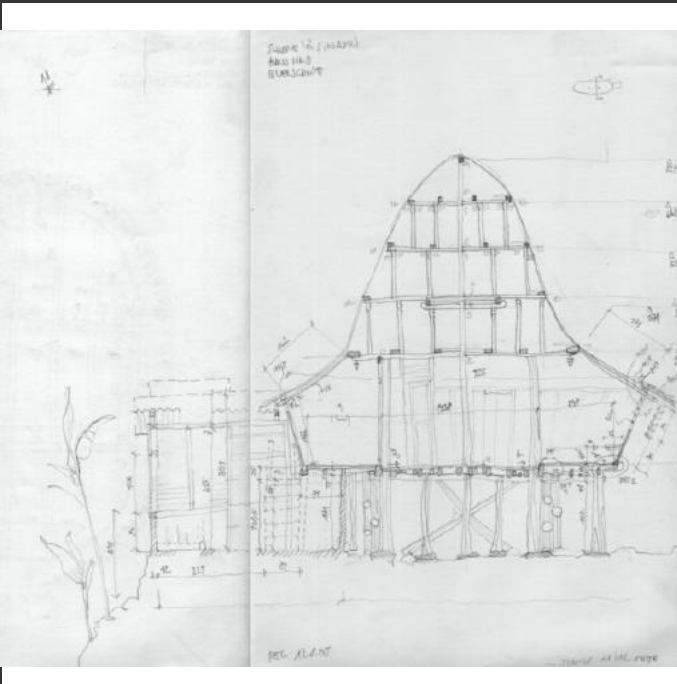
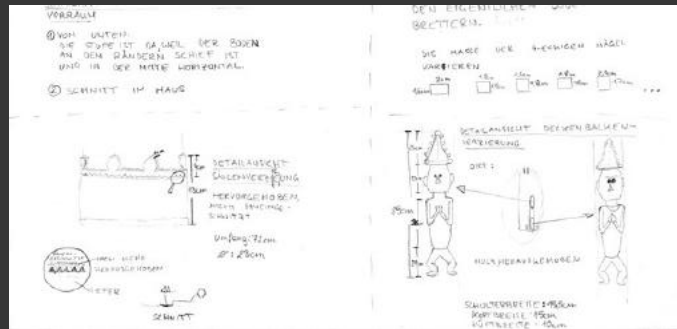
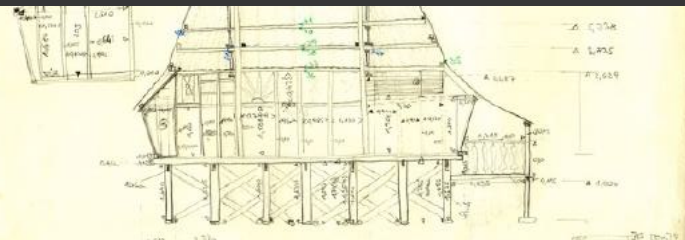


**Earthquake March 2005
Documenting the Impact
August 2005**



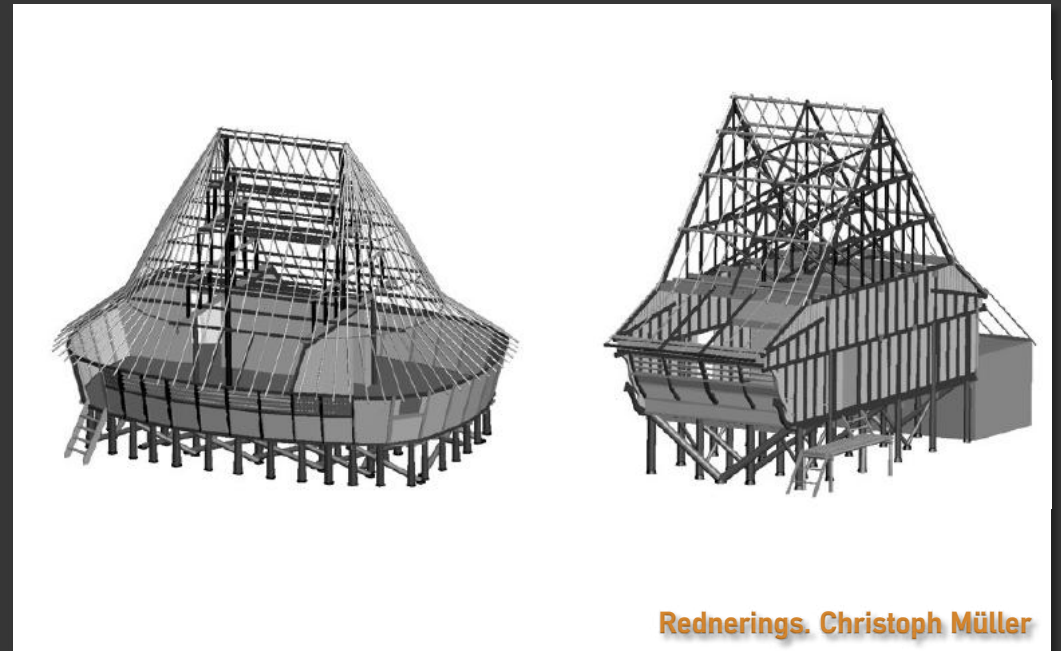
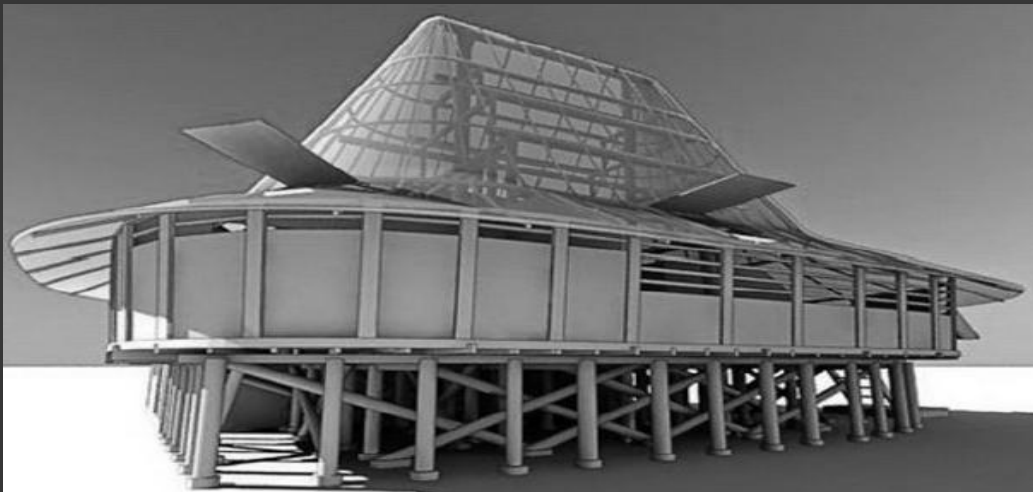
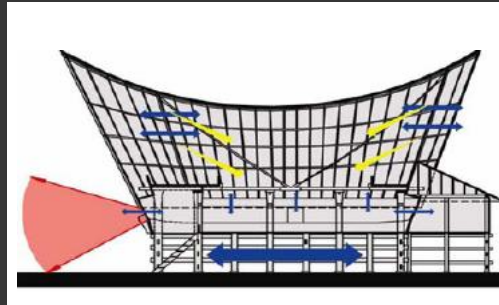
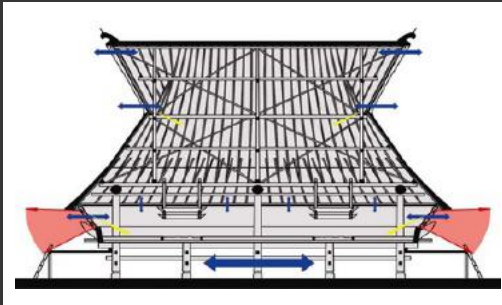
© Gruber, Herbig 2005

Building Survey

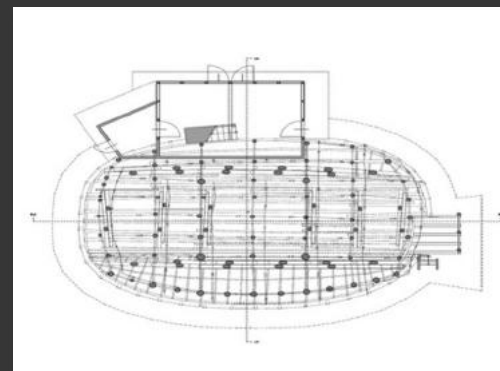


© Herbig 2003

Quality of Traditional Buildings



Rednerings. Christoph Müller



Rednerings. Zamolyi, Gruber



Prambanan



Sumbawa



Timor

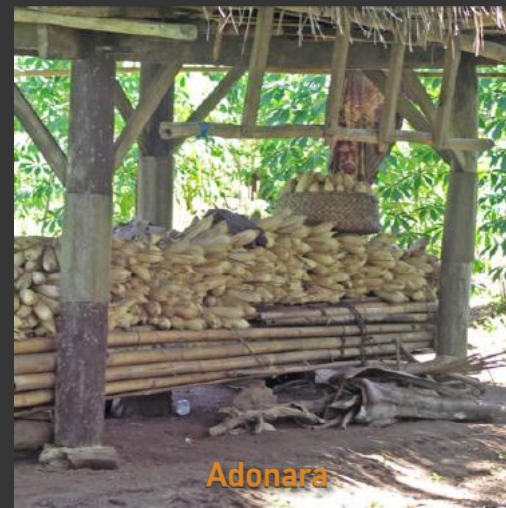


Gedeng, DIY



Alor

Diagonal struts as means for stabilisation of Buildings

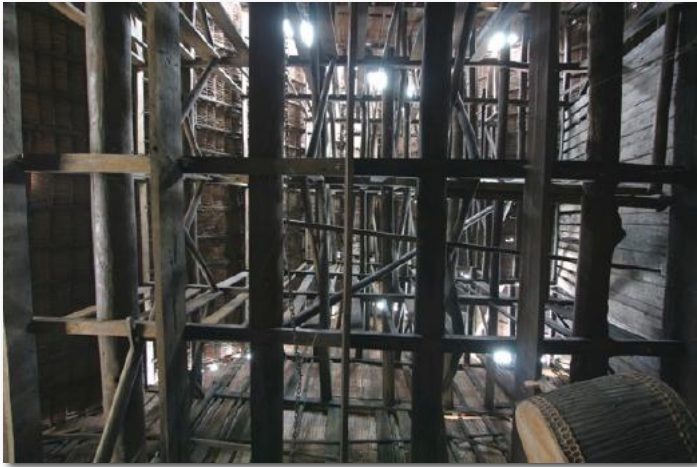


Adonara



Sulawesi, Togeang Islands

© Zamolyi Ferenc



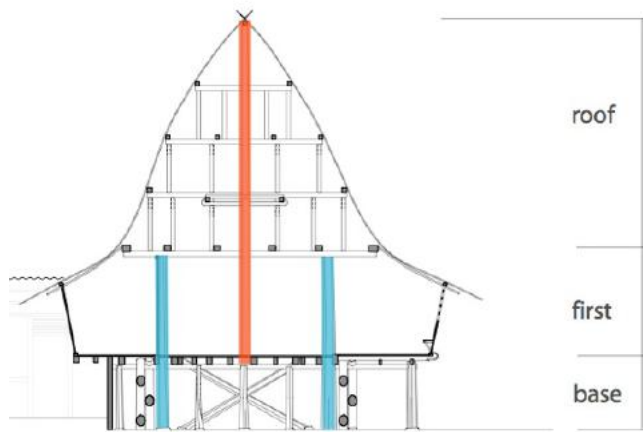
Roof Omo Sebua Onohondrö



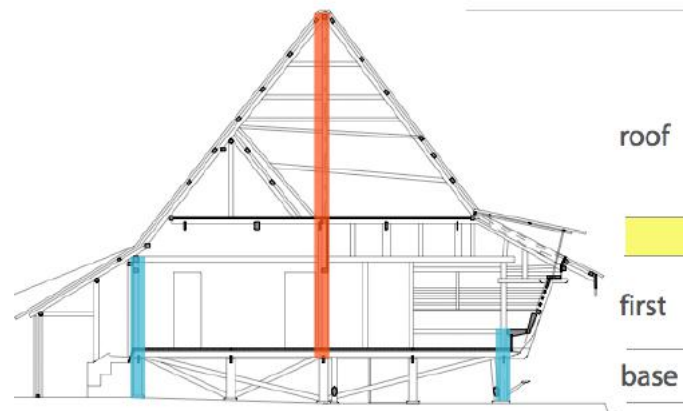
Living Floor, Bawömataluo



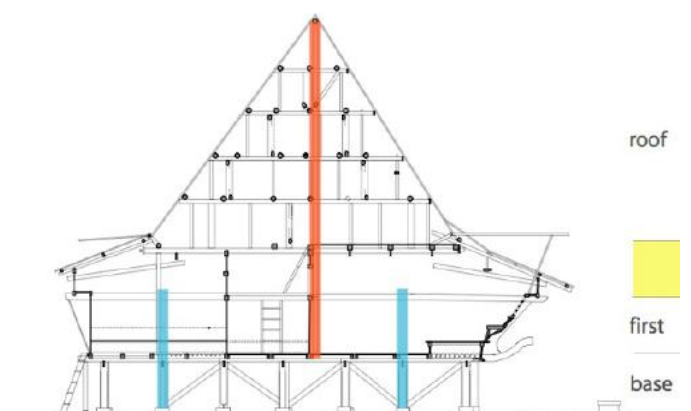
V-shaped Bracings



Section North Nias House

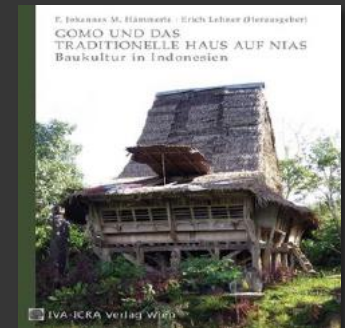
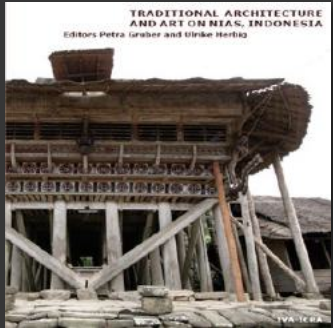


Section Middle Nias House



Section South Nias House

© Herbig, 2003, CAD Gruber 2006



TRADITIONAL ARCHITECTURE AND ART ON NIAS



Conference at the
Museum for Ethnology, Vienna
October 30th and 31th 2006
A-1010 Wien - Neue Burg

Ethnology and Society



Art and Architecture



Rebuilding and Recon- struction



Documentation and Recording



© Gruber, Herbig

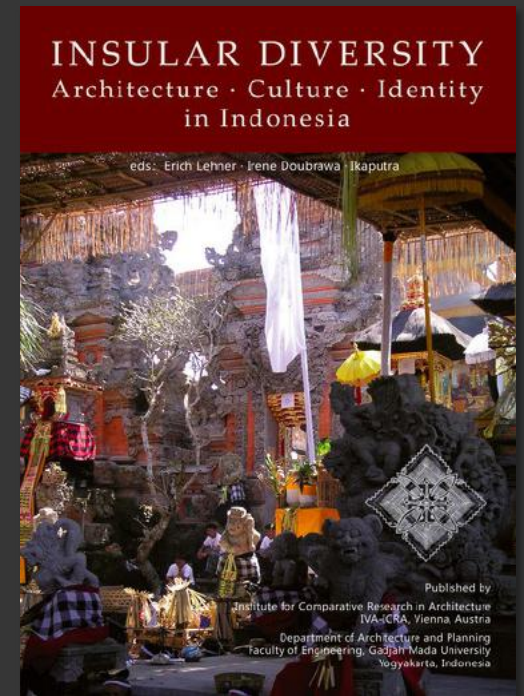
INDONESIA SYMPOSIUM



**INSULAR DIVERSITY:
ARCHITECTURE · CULTURE · IDENTITY IN INDONESIA**
International Symposium
May 18th - May 21st 2011
<http://indonesiasymposium.com>

Vienna University of Technology · Karlsplatz 13 · A-1040 Wien
Institute 251-1 · History of Architecture and Building Archaeology
in cooperation with the Institute for Comparative Research in Architecture,
the University of Vienna, the Museum of Ethnology in Vienna,
the Indonesian Embassy in Vienna, and the Austro-Indonesian Society

TECHNISCHE UNIVERSITÄT WIEN · FESTSAAL



INSULAR DIVERSITY
Architecture · Culture · Identity
in Indonesia

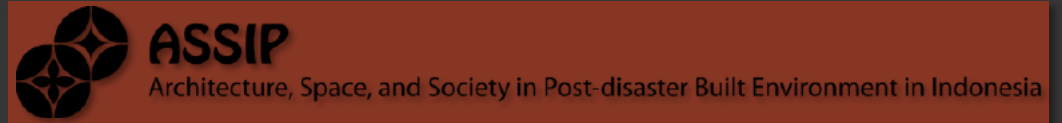
eds: Erich Lehner · Pene Doubrawa · Ikaputra

Published by
Institute for Comparative Research in Architecture
IVA-ICRA, Vienna, Austria
Department of Architecture and Planning
Faculty of Engineering, Gadjah Mada University
Yogyakarta, Indonesia

© Lehner, Herbig

Building Survey of Vernacular Architecture on Nias Island



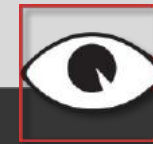


Disaster Risk Management in Indonesia – Learning from the Impact of Relief Processes



Image © 2008 DigitalGlobe

© Herbig, Google Earth



Host Institutions: Vienna University of Technology, Austria
University of Vienna, Austria

Cooperation Partners: Gadjah Mada University (UGM),
Yogyakarta, Indonesia
University of North Sumatra (USU),
Medan, Indonesia
Graduate Institute of International and
Development Studies, Geneva, Switzerland
Museum Pusaka Nias, Gunungsitoli, Indonesia

Associate Partner: International Labour Organization (ILO)



© Herbig 2003



© Gruber, Herbig 2005





Inst v Tropen Amsterdam, 1909



Alain Viaro 1979



Petra Gruber 2005



Schröder 1917



Alain Viaro 1979



Günter Zöhler 2003



Ulrike Herbig 2012



Ferenc Zamolyi 2012

**Traditional Houses -
Change
Traditional Elements -
Remain**



Gabriele Weichart 2012



Gabriele Weichart 2012

Function Analysis



Rumah 32
Singosaren RT 04
Pak Supadlan 46 years
Ibu Juminten 42 years

wuki 027 25.07.2012

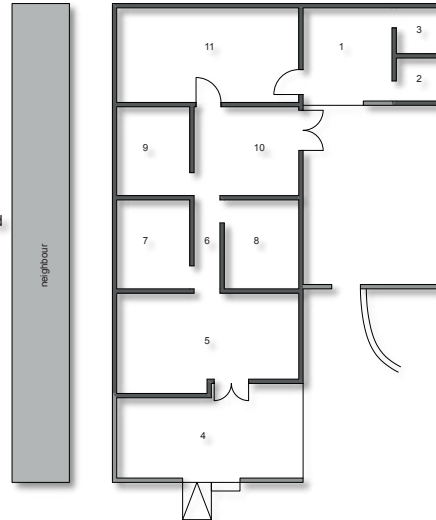


10. will get a dinning room



4. Front with terrace

- 1 outside kitchen to cook with wood
- 2 bath
- 3 stabling room
- 4 terrace
- 5 living room, with tv
- 6 corridor
- 7 sleeping room - father with first and third child
- 8 sleeping room - mother and second child
- 9 not ready yet - will get a sleeping room
- 10 not ready yet - will get a dinning room
- 11 kitchen and stabling zone



11. kitchen (gas) and stabling zone



1. outside kitchen (gas)



2. bath and 3. stabling room



5. living room with tv in one part



6. corridor



7. sleeping room



9. will get a sleeping room

Karl Valent / Jessica Rath



© Petra Gruber 2005

Hierarchy of Space





Meeting Places



© Ulrike Herbig 2005



Inst v Tropen Amsterdam, 1909



Alain Viaro 1979



Ulrike Herbig 2005



Schröder 1917



Alain Viaro 1979



Petra Gruber 2003



Schröder 1917



Alain Viaro 1979



Erich Lehner 2003



Sondregeasi – © G. Weichart 2011



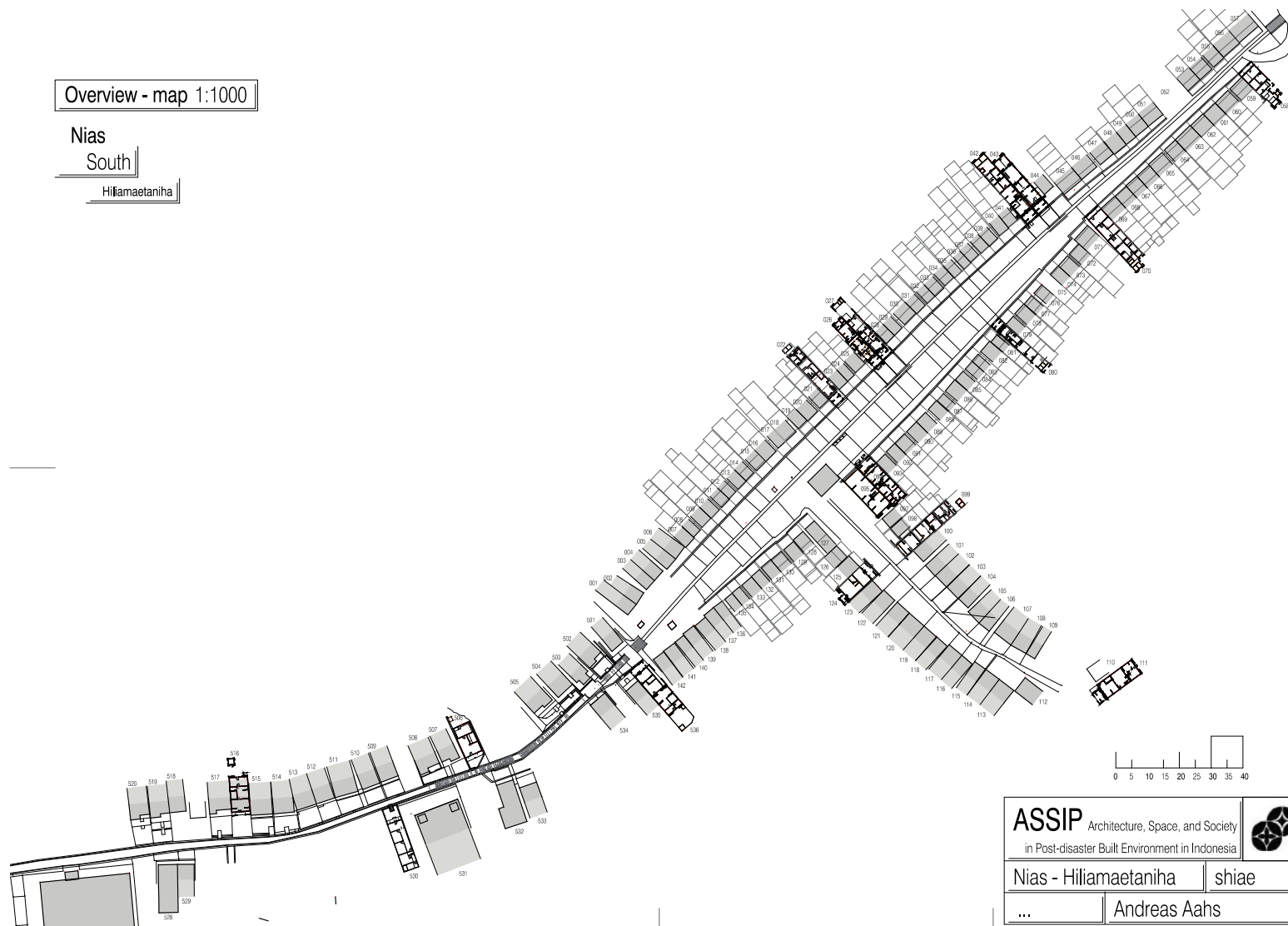
© Etoy Kursiini; Orthomap: Ferenc Zamolyi

Building Survey of Vernacular Architecture on Nias Island

Overview - map 1:1000

Nias
South

Hiliamaetaniha



Share Information via QGIS



GIS – N. Baudet von Gersdorff





Ulrike Herbig 2012



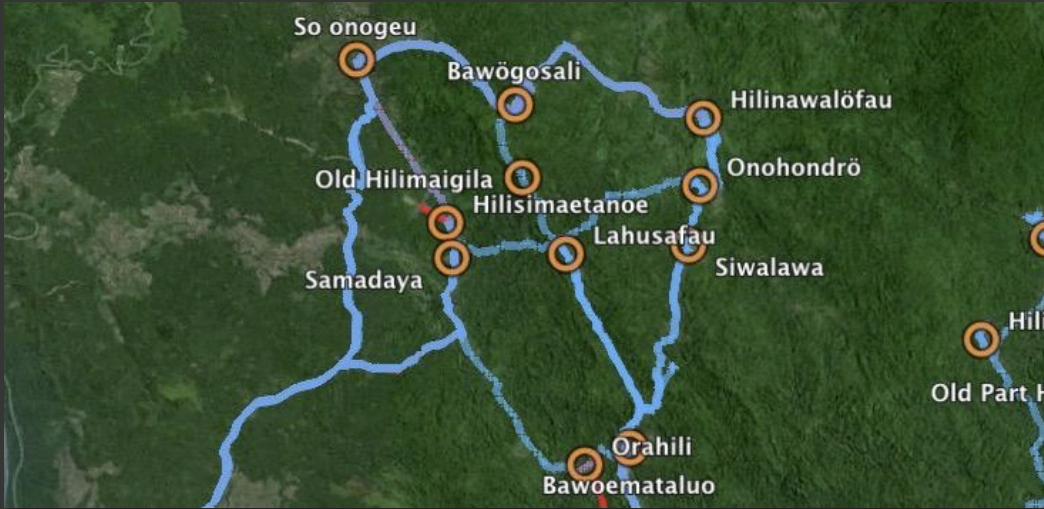
KoninstTropenamt album 437:104, neg 270:21



Alain Viaro 1979



Ulrike Herbig 2013




Alain Viaro 1982



Ulrike Herbig 2013

Image Landsat



**Thank You
Terima Kasih
Sauhagälö**