



ICOMOS CIAV

International Committee
on Vernacular Architecture

International Council on
Monuments and Sites

CIAV NEWSLETTER

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Vernacular Villages In Yunlong, China © UHC
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Assistant Editors: GENG Qianzheng CAI Xi
XIONG Xiangying
E-mail: uhc_ciaav@163.com icomosciav.sg@gmail.com
Website: ciaiv.icomos.org

EDITORIAL

Hossam Mahdy

President of CIAV

hossammahdy1960@yahoo.co.uk



Dear colleagues and friends,

Warm greetings from CIAV Bureau and from myself.

The world is slowly and cautiously lifting restrictions on travel and public gatherings with the diligent rolling out of COVID-19 vaccinations. Sadly, and before the economy recovers from the impact of multiple waves of the spread of different variants of the virus, we were shocked with the Russian invasion of Ukraine. As we have been observing the terrible ongoing armed conflicts in Syria, Yemen, Iraq, Libya and Palestine, the impact of war on human lives and the environment are intolerable. Furthermore, as in other wars, the war in Ukraine is impacting the cultural heritage. As the ICOMOS International Scientific Committee on Vernacular Architecture, CIAV is ready to offer our support in every way possible to our colleagues who are struggling to protect their cultural heritage during the very difficult circumstances of war.

The International Day on Monuments and Sites was celebrated around the globe on April 18th with many activities by CIAV members. The theme for this year's celebration was the pertinent issue of Climate Justice. This year's celebration is special as the community of cultural and natural heritage professionals around the world are celebrating fifty years of the UNESCO World Heritage Convention. Please share with ICOMOS community information on celebrations in your country by uploading the relevant details on ICOMOS website.

Building on the awareness raised by April 18 celebrations and the highly positive outcome of the knowledge Café that CIAV organized for the ICOMOS International Scientific Conference in 2021, CIAV expert member Suheyly Kuc is leading an initiative to ensure that climate issues are in

heart of the work of CIAV.

CIAV has joined the cultural and natural heritage community in celebrating the International African World Heritage Day on May 5th. The CIAV Bureau endeavours to invite more African colleagues to join CIAV. We are working on a plan to organize the CIAV Annual Meeting and Scientific Conference of 2024 in Sub-Saharan Africa for the first time in the history of CIAV.

A few days ago, ICOMOS has launched the first cycle of the Culture-Nature Prize. The work of CIAV members is highly relevant to the culture-nature initiative because of the presence of both cultural and natural heritage aspects in the built vernacular heritage. I am honoured to have been appointed a jury member of this prize and I sincerely hope to see many nominations for built vernacular heritage projects.

I look forward to seeing you all in Valencia for our scientific conference Heritage2022, CIAV Annual Meeting and our joint meeting with the International Scientific Committee on Intangible Heritage (ICICH), which will be led by CIAV former president Gisle Jakhelln.

Yours,

Hossam Mahdy

CIAV President

EDITORIAL

Hossam Mahdy

Presidente CIAV

hossammahdy1960@yahoo.co.uk



Estimados colegas y amigos,

Saludos afectuosos del Buró CIAV y de mí mismo.

El mundo está levantando lenta y cautelosamente las restricciones a los viajes y las reuniones públicas con la implementación diligente de las vacunas contra el COVID-19. Lamentablemente, y antes de que la economía se recupere del impacto de múltiples oleadas de propagación de diferentes variantes del virus, quedamos impactados con la invasión rusa a Ucrania. Como hemos estado observando los terribles conflictos armados en curso en Siria, Yemen, Irak, Libia y Palestina, el impacto de la guerra en las vidas humanas y el medio ambiente es intolerable. Además, como en otras guerras, la guerra de Ucrania está afectando al patrimonio cultural. Como Comité Científico Internacional de Arquitectura Vernácula de ICOMOS, el CIAV está listo para ofrecer nuestro apoyo en todas las formas posibles a nuestros colegas que luchan por proteger su patrimonio cultural durante las difíciles circunstancias de la guerra.

El Día Internacional de los Monumentos y Sitios se celebró en todo el mundo el 18 de abril con muchas actividades de los miembros de la CIAV. El tema de la celebración de este año fue el tema pertinente de la Justicia Climática. La celebración de este año es especial ya que la comunidad de profesionales del patrimonio cultural y natural de todo el mundo celebra los cincuenta años de la Convención del Patrimonio Mundial de la UNESCO. Comparta con la comunidad de ICOMOS información sobre las celebraciones en su país cargando los detalles relevantes en el sitio web de ICOMOS.

Sobre la base de la conciencia generada por las celebraciones del 18 de abril y el resultado altamente positivo del Café de conocimiento que CIAV organizó para la Conferencia Científica

Internacional de ICOMOS en 2021, Suheyly Kuc, miembro experta de CIAV, está liderando una iniciativa para garantizar que los problemas climáticos estén en el centro del trabajo de CIAV.

CIAV se ha unido a la comunidad del patrimonio cultural y natural para celebrar el Día Internacional del Patrimonio Mundial Africano el 5 de mayo. La Oficina de la CIAV se esfuerza por invitar a más colegas africanos a unirse a la CIAV. Estamos trabajando en un plan para organizar la Reunión Anual y Conferencia Científica de la CIAV de 2024 en África Subsahariana por primera vez en la historia de la CIAV.

Hace unos días, ICOMOS ha lanzado el primer ciclo del Premio Cultura-Naturaleza. El trabajo de los miembros de la CIAV es muy relevante para la iniciativa cultura-naturaleza debido a la presencia de aspectos del patrimonio tanto cultural como natural en el patrimonio vernáculo construido. Me siento honrado de haber sido nombrado miembro del jurado de este premio y espero sinceramente ver muchas nominaciones para proyectos de patrimonio vernáculo construido.

Espero verlos a todos en Valencia para nuestra conferencia científica Heritage2022, la Reunión Anual de CIAV y nuestra reunión conjunta con el Comité Científico Internacional sobre Patrimonio Inmaterial (ICICH), que estará dirigida por el ex presidente de CIAV, Gisle Jakhelln.

Saludos cordiales

Hossam Mahdy

Presidente CIAV



SPECIAL REPORT

International Day for Monuments and Sites

Time: 18 April, 2022 Place: Different countries

International Day for Monuments and Sites spotlights climate change

UN News/Elizabeth Scaffidi

One in three natural sites and one in six cultural heritage sites are currently threatened by climate change, the UN cultural agency, UNESCO, warned on Monday, the International Day for Monuments and Sites.

In addition to providing interesting places to visit and learn about the past, these sites are also climate change observatories that gather and share info on climate practices.

As climate change is one of the defining issues of our time, and among the greatest threats facing cultural and natural UNESCO World Heritage monuments and sites, this year's theme is Heritage and Climate.

Disturbing trends

In recent months and years, the world has witnessed cultural and natural heritage sites threatened by wildfires, floods, storms and mass-bleaching events.

UNESCO's report, World Heritage forests: Carbon sinks under pressure, reveals that a staggering 60 per cent of World Heritage forests are threatened by climate change-related events.

Marine sites are equally under pressure, with two-thirds of these vital carbon stores – home to 15 per cent of global blue carbon assets – currently experiencing high risks of degradation, according to the UNESCO Marine World Heritage: Custodians of the globe's blue carbon assets study.

And if no action is taken, coral may disappear

at natural heritage sites by the end of this century.

Battling irrefutable effects

In response to these undeniable impacts on World Heritage monuments and sites, UNESCO is working to support countries in strengthening their capacities to prepare for and recover from climate-change related effects and disasters.

At the same time, it is also committed to harnessing the potential of culture for climate action, which still remains largely untapped.

"Our strengthened collaboration with partners and Member States to address the growing need for enhanced monitoring of the impact of climate change on UNESCO World Heritage through more accurate and relevant data has been critical, as well as our efforts to leverage global platforms, including the Urban Heritage Climate Observatory," the UN agency said.

Developing inclusive public policies for climate action through culture is another essential step to advance a shared global climate agenda, which will be strongly supported through the implementation of the updated Policy Document

on climate action for World Heritage.

Planning for tomorrow

As the world reflects on the 50th anniversary of the 1972 World Heritage Convention, building knowledge on World Heritage and climate change can inform a future roadmap for the next half century.

On this international day, UNESCO underscored its commitment to fully integrating World Heritage monuments and sites into climate action and strategies.

They are a shared global asset that needs to be safeguarded from the effects of climate change as well as a transversal tool for climate change mitigation and adaptation for current and future generations to come.

The international day was established 40 years ago, in 1982, by UNESCO's General Conference and is commemorated annually on 18 April.

This article is reproduced from: <https://news.un.org/en/story/2022/04/1116382>

Carved out by the Colorado River, the Grand Canyon





SPECIAL REPORT

Looking back on 18 April 2022 | Thank you!

Time: 18 April, 2022 Place: Different countries

On 18 April 2022, we celebrated the International Day for Monuments and Sites with the theme of "Heritage and Climate". ICOMOS National Committee, International Scientific Committees, Working Groups, partners and supporters around the globe participated through events, video and photographic submission. More than 50 events were organized!

Below is a selection of the many 18 April 2022 events.

ICOMOS Azerbaijan

For 18 April 2022, ICOMOS Azerbaijan organized discussion forum at the International Mugham Center with special guests ICOMOS Vice-President Zeynep Gul Unal and Assistant Professor of Yildiz Technical University Banu Celebioglu as panelists. They all talked about the climate change effects on cultural heritage, the restoration practices and the importance of ICOMOS National Committees.

ICOMOS China

On April 18th, 2022, the online forum on the theme of "Heritage and Climate" was held under the guidance of the Xi'an Municipal Bureau of Cultural Heritage, China, jointly organized by the ICOMOS International Conservation Center - Xi'an (IICC-X), and the Xi'an Qujiang Daming Palace Heritage Area Preservation and Reconstruction Office. After a warm address from Prof. Toshiyuki Kono, former President of ICOMOS, the speakers from international and Chinese conservation, management and research institutions discussed the conservation and management of the Silk Roads cultural heritages under climate change. Through the sharing of international documents, concepts and methods responding to the threats of cultural heritage conservation under climate change, case studies and experience

exchange, the online forum had enhanced the capacity building of Silk Roads heritage sites in dealing with issues such as climate change and its secondary disasters, and moreover enhanced the sustainable development and utilization potential of heritage site in the context of climate change.

ICOMOS Comoros

ICOMOS Comoros celebrated the International Day on Monuments and Sites by organising an event in collaboration with the CNDRS (The National Centre for Documentation and Scientific Research of Comoros) on the theme Heritage and Climate through open constructive and intergenerational dialogues. For this day, marking the first membership of ICOMOS Comoros as a National Committee, was programmed an open day at the National Museum, the Library and the National Archives followed by an exhibition on the historical Sultanates of the Comoros.

Our members in Egypt

This year's celebration was organized by "Abu Simbel 50 Campaign" and the "Architectural Heritage - Cultural Identity | Egypt" with ICE Group under the auspices of the Cultural Committee of the Department of Architecture at "MUST" (Misr University for Science and Technology), in cooperation with the Fayoum Art Center. More than 90 people participated in the event, ranging from students, specialists and non-specialists yet interested in heritage, and ICOMOS members. The day had been divided in two main events: a cultural trip to the pottery area in Al-Nazlah village with the visit to the Nazlah Revitalization Project - awarded with numerous international awards and nominated for the Aga Khan Award for the current cycle (2022) - and a panel discussion held at Tunis Village, at the Fayoum Art Center.

ICOMOS Estonia

ICOMOS Estonia in collaboration with the Estonian Academy of Arts celebrated the International Day of Monuments and Sites with a working day in an abandoned bastion passage. They were joined by the President of Estonia, Mr Alar Karis.

ICOMOS Georgia

In Tsibili, ICOMOS Georgia invited students, emerging professionals and craftsmen to participate in the workshop on 'Traditional masonry earth-based mortar and techniques'

within the annual series of workshops on Traditional Building materials! The two-day certified workshop raised awareness on ICOMOS activities in regard to climate change, and on the role of the cultural heritage in climate action, results of the studies on mortar, experience sharing on Tbilisi dwellings construction material - mortar characteristics, its preparation techniques and use.

ICOMOS Lebanon

ICOMOS Lebanon organized a cultural awareness workshop for the students of the Zahrat Al Ihsan school in Beirut to engage teens in interactive dialogues so they can discern what is considered heritage, what are the values and knowledge associated with each heritage object or concept, and why and how to protect it. Another objective is to point out how heritage practices differ from contemporary routines in terms of climatic performance, and how we should look into traditional know-how for sustainable practices to fight climate change.

ICOMOS Venezuela

ICOMOS Venezuela celebrated this year's theme of Heritage and Climate by taking the opportunity to highlight the impact that climate change has had on the Venezuelan case, with climates ranging from coastal, plain and even arid to temperate, cold and icy mountains.

You can find a brief historical review of the most important events related to the Venezuelan cases published on their blog. Some of these have affected properties inscribed on UNESCO's World Heritage List and others on the Tentative List. This is an opportunity to disseminate the awareness and urgency of adopting concrete measures by all nation states to mitigate the effects that in the medium and long term the change of natural climate cycles is having on natural and cultural assets.

18 April is not over yet, some events are taking place until the end of May, check our updated list of events to continue the celebration.

ICOMOS thanks the organizers and participants for making this day memorable and to advance thinking on heritage and climate change.

This article is reproduced from: <https://www.icomos.org/en/focus/18-april-international-day-for-monuments-and-sites>



RURAL ARCHITECTURE: THE MEMORY OF THE COUNTRY

International Conference Rural Architecture. The Memory Of The Country

Time: 21-22 May, 2022 **Place:** Online

Beatrice Messeri

Background

Starting from 2020, the Italian CIAV Scientific Committee reorganized itself and planned its activities such as the conference: Rural Architecture. The Memory of the Country. The conference was held online on 21 and 22 May 2022. The call for abstracts was opened at the beginning of January 2022 with the deadline for 1 March 2022. We received numerous abstracts from Italy and beyond at a great scientific level, so the Committee decided to double the days of the conference and, accordingly to the changes, it arranged a new organization. Our inspiration came from the very important exhibition Rural Italian Architecture by Giuseppe Pagano and Guarnerio Daniel presented in 1936 within the VI Milan Triennale and the idea was to open again the debate around documentation, conservation, survival risks and management of the vernacular architecture today in Italy and not only. As stated in the title, rural architecture represents our roots, so the memory and identity

of our country. This Conference recalled this timeless debate at the national and international level as it is still constituting an ever-current topic concerning a particularly various and fragile heritage in our countries. It is a matter of advancing the discussion around the protection and enhancement of the immense tangible and intangible vernacular heritage constantly at disappearing risks and the transmission to the future generations.

Often, political, socio-economic, climatic changes and territorial transformations have radically modified the delicate balance in the local communities with the abandonment of the vernacular architecture. The important goal is a smart dynamic reuse to satisfy the specific local needs with the respect of the local materials, techniques and traditions in combination with environmental awareness, sustainability, landscape and infrastructures, involvement of the area communities, evolution in the education process, advanced political and economic



Consiglio Internazionale
dei Monumenti e dei Siti
Comitato Nazionale Italiano



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choices, appropriate legislation procedures, respectful tourism approach and so on. Thus, the aim of this event was to collect contributions and to create a network to exchange opinions concerning the vernacular heritage investigated in all its aspects and peculiarities. The conference was also part of the initiatives concerning the Heritage and Climate. International Day for Monuments and Sites.

Paper and Speeches

The conference covered the following themes in 12 sessions:

Rural Buildings and Structures – Rural Architecture and Environments- Rural Architecture and the 20th century - Advances in Rural Architecture Research - Conservation and Restoration of Rural Architecture - Rural Landscapes and Cultural Routes - Education and Advocacy - Rural Heritage: Risk and Vulnerability

There were 50 contributions from many different countries, about 80 lecturers, more than 100 experts involved in the oral presentations and institutional greetings. All the accepted abstracts are published in the Book of Abstracts, a .pdf file with ISBN Code. The publication has a DRS ISBN deposit, which declares ownership of copyright with copyright for the digital world. All the abstracts of the volume were double peer-reviewed by the Scientific Committee. The final publication of the Proceedings with ISBN Code is expected in Spring 2023.

Organized by: ICOMOS Italian Scientific Committee of Vernacular Architecture

Coordinator: Beatrice Messeri

Scientific Committee: Beatrice Messeri - Alessandro Camiz - Marta Casanova - Valentina Cinieri - Giuseppe Amoruso - Rosa Fiorillo - Maria Vitiello - Claudio Caserta - Federica Pompejano - Simona Messina - Antonella Nappo - Alessandra Trivelli

Under the patronage of:

Intbau Italia (International Network for Traditional Building, Architecture & Urbanism)

Associazione Storia della Città (Centro internazionale di studi per la storia della città, fonti d'archivio e

patrimonio architettonico-ambientale)

Parco Regionale dell'Appia Antica

Università degli studi di Salerno, Dipartimento di Scienze del Patrimonio Culturale

Ordine degli Architetti, Pianificatori, Paesaggisti e Conservatori di Roma e Provincia

Ordine degli Architetti, Pianificatori, Paesaggisti e Conservatori della provincia di Firenze

Ordine degli Architetti Pianificatori Paesaggisti e Conservatori della Provincia di Avellino

Ordine degli Architetti, Pianificatori, Paesaggisti e Conservatori di Napoli e provincia

Key Dates :

March 1, 2022: Deadline for abstracts submission

March 15, 2022: Announcement of selection of oral presentations

May 21-22, 2022: Book of Abstracts publication "Rural Architecture. The Memory of the Country"

September 30, 2022: Deadline for full papers submission

December 2022: Announcement of full papers acceptance for publication

Spring 2023: Conference Proceedings publication "Rural Architecture. The Memory of the Country"

If you want to know more information, please go to the following website:

<https://www.icomositalia.com/copia-di-pagina5>

Contacts:

Email: arch.rurale@gmail.com



UPCOMING

International Conference on vernacular heritage: culture, people and sustainability.

Time: 15-17 Sept, 2022 Place: Valencia, Spain Fernando Vegas

Introduction

HERITAGE2022, International Conference on Vernacular Heritage: Culture, People and Sustainability, is organized in the framework of the project VERSUS+ Heritage for PEOPLE funded by the Creative Europe Program of the European Union.

The conference will be held on September 15th, 16th and 17th, 2022 at the School of Architecture of the Universitat Politècnica de Valencia, Spain.

In addition to the presentation of selected papers and posters, the program includes also keynote lectures delivered by international experts on the conference's topics.

The project"VerSus+ Heritage for PEOPLE" focuses on the transmission of all technical knowledge, namely the intangible heritage of knowledge and skills contained in vernacular heritage, to all branches of society and the general public.

PRELIMINARY PROGRAM FOR HERITAGE 2022

Thursday, September 15th

- Morning: Presentation of papers
- Afternoon: Presentation of papers
ICICH/CIAV Meeting

Friday, September 16th

- Morning: Presentation of papers
- Afternoon: Presentation of papers
Versus + Meeting
- Evening: Closing dinner

Saturday, September 17th

- Optional visit to Albufera Lagoon
- Optional visit to Ademuz area

Sunday, September 18th

- Optional visit to Utiel

For more information: <https://heritage.2022.blogs.upv.es/>

HERITAGE2022

International Conference on Vernacular Heritage: Culture, People and Sustainability
September 15th, 16th and 17th, 2022 Valencia, Spain



CONFERENCE TOPICS:

- Topic 1. Vernacular architecture: matter, culture and sustainability
- Topic 2. Heritage education
- Topic 3. Artisans and crafts of traditional construction
- Topic 4. Conservation, restoration and enhancement of vernacular architecture

TECHNICAL VISITS:

- Technical visit 1: Valencia lagoon. Saturday 17th September 9:00h-14:00h
- Technical visit 2: Ademuz. Saturday 17th September 9:00h-20:00h
- Technical visit 3: Utiel. Sunday 18th September 9:00h-17:00h

CONTACT

TEL: +34 963877971
E-MAIL: heritage2022conference@gmail.com:

FUNDING:

- Creative Europe – Creative Europe Programme of European Union
- UPV – Universitat Politècnica de València
- ESG – Escola Superior Gallaecia
- UNIFI – Università degli Studi di Firenze
- UNICA – Università degli Studi di Cagliari
- CRATERRE-ENSAG – École Nationale Supérieure d'Architecture de Grenoble

UNDER THE AEGIS OF:

- ICOMOS-CIAV – International Scientific Committee for Vernacular Architecture – International Council on Monuments and Sites
- ICICH – International Committee on Intangible Cultural Heritage

• info and inscription: <https://heritage2022.blogs.upv.es/>



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Call for Papers Global Climate Change and Built Heritage

Guest Editors

Dr Chris J. Whitman, Welsh School of Architecture, Cardiff University

Lui Tam, Welsh School of Architecture, Cardiff University

Prof Oriel Prizeman, Welsh School of Architecture, Cardiff University

Submission deadline for extended abstract: **29th July 2022**

Submission deadline for full papers: **30th June 2023**

Aims and Scope

Climate change is having a profound impact on our practical, technical, and philosophical approaches to building conservation. From mitigation to adaptation to managed loss, conservators are faced with increasingly challenging decisions for the future of our historic built environment. At the same time, it is recognised that many of these buildings offer important lessons from a pre-industrial age. This special issue aims to collate current research into the complex relationship between climate change and built heritage. Contributions are welcomed that consider the technical and philosophical challenges under the following sub-themes. Where a paper does not fit under a specified theme or spans more than one, please incorporate a note to that effect in a cover letter with the submission.

Papers may include the following topics, but not limited to:

- The impact of the continued use of built heritage on climate change

Traditional and historic buildings comprise a considerable part of the existing world building stock. In 2019 greenhouse gas emissions from buildings rose to their highest-ever levels, accounting for 38% of global emissions when including those arising from both construction and operation. The reduction in these emissions is therefore a key strategy in the mitigation

of climate change. For our historic built environment, we must balance the conservation of energy and heritage values whilst avoiding unintended consequences and unnecessary carbon emissions from short-sighted and inappropriate retrofits. Manuscripts under this sub-theme might address: re-use as design, minimising the risks of retrofit, decision making methodologies and frameworks, whole lifecycle carbon assessment, the impact of heritage tourism, embodied carbon, and related topics.

- The impact of climate change on built heritage

The escalation in the severity and frequency of extreme weather events, such as flooding, forest fires, snow-loads, coastal erosion, and prolonged growing seasons, requires the adaptation of our built heritage. This calls for increased proactive maintenance and conservation, alterations to built fabric and surrounding landscapes, and in extreme cases relocation and managed loss. Manuscripts under this theme might present technical case studies demonstrating mitigation and adaptation approaches or a more discursive exploration of the values and risks associated with action or inaction under these circumstances.

- Learning from the Past

As we aim towards a low carbon society, the pre-industrial past may offer solutions and clues as to how we might break our dependency on fossil fuels. Across the globe, there exist buildings and urban landscapes that were designed to work with minimum energy input and enabled living practices to be more attuned to the local environment. Whilst resisting the romanticisation of these examples and pre-carbon societies, there are undoubtedly many lessons to learn from them. Manuscripts under this section might seek to quantify the impacts of passive measures historically or to provide case studies of the resilience of approaches over time.

- Built heritage and environmental justice

The environmental aspect of sustainability is necessarily connected with other economic,

social, cultural, and geopolitical issues, which are especially prominent when it comes to heritage. Solutions for tackling the climate crisis or the mission to rescue heritage in such a context may not always guarantee equity or justice in various geopolitical contexts. In the moment of a crisis, these solutions deserve critical scrutiny. Manuscripts under this section are encouraged to establish critical accounts of the role of built heritage in tackling the climate crisis through the lens of environmental justice and ethics, or how the solutions to the climate crisis might impact built heritage and the society around it.

Proposed Timeline

Extended abstracts (500-800 words) due: **29th July 2022**

Decision on the abstracts: **28th October 2022**

Full paper drafts for workshop: **31st March 2023**

Workshop in Cardiff (or online): **April 2023 (TBC)**

Paper drafts for peer review due: **30th June 2023**

Comments from reviewers expected by: **29th September 2023**

Final full papers accepted by: **15th December 2023**

Publication of the special issue: **First quarter of 2024**

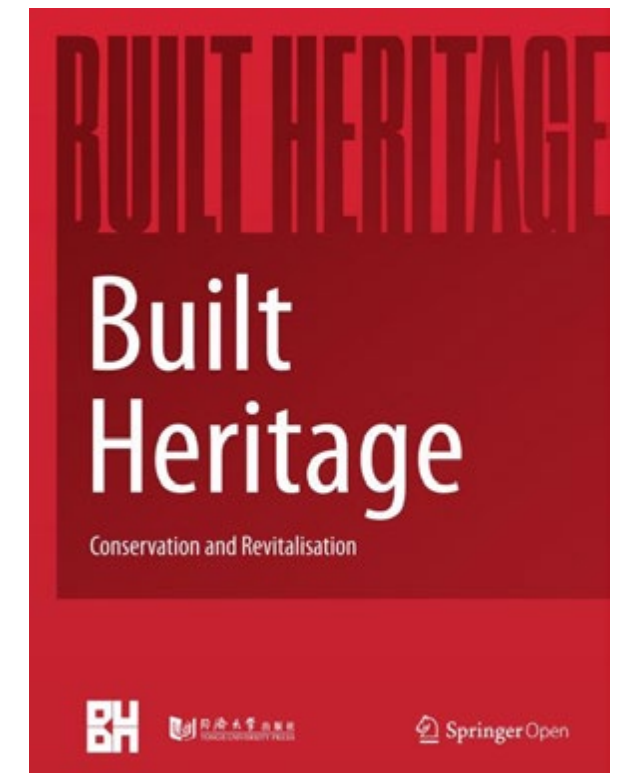
All submissions are subject to peer review. Accepted articles will be published online first. The issue is planned to be published in the first quarter of 2024.

We have plans to hold a hybrid format workshop with the authors that have abstracts accepted. The workshop will take place in Cardiff (UK) in April 2023. More information will be provided in the end of 2022.

Extended abstracts should contain the title of the paper, research question(s), methodology and the main (expected) findings and conclusions. Abstracts should be submitted to: built-heritage@tongji.edu.cn (include Special Issue on Climate Change and Built Heritage in the subject).

Further Information

Questions may be addressed by email to: built-heritage@tongji.edu.cn



Introduction

Built Heritage (CN 31-2123/G0, ISSN 2096-3041) is an international journal initiated in Shanghai in 2017, administrated by the Ministry of Education of China, sponsored by Tongji University, and published by Tongji University Press and Springer Nature.

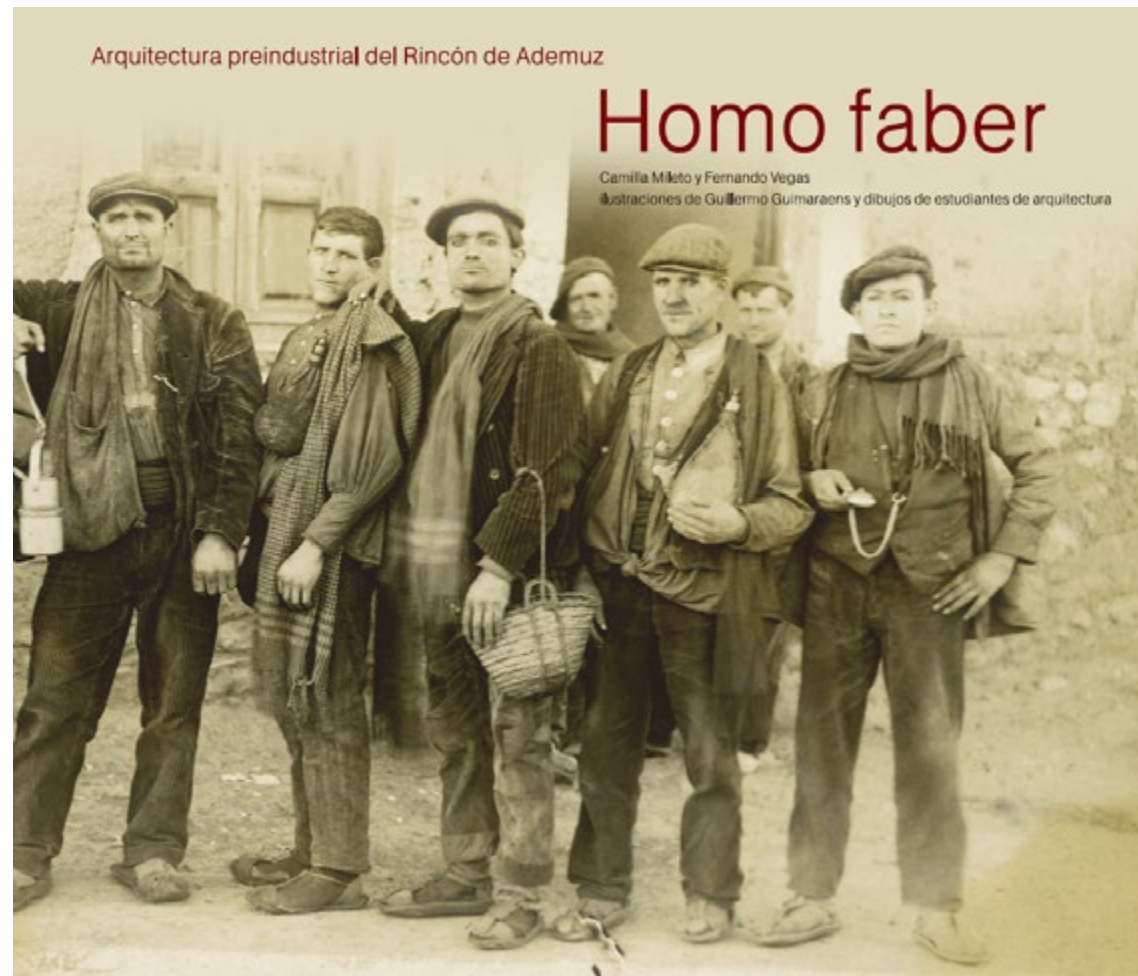
Indexed in CSCD, DOAJ, and Scopus, Built Heritage is also the first journal published in English language in China that integrates built heritage conservation in the multidisciplinary sphere of architecture, urban and rural planning, and landscape architecture, offering support to the debate on the field from a critical perspective, actively engaging with hot topics and the latest discussions. Built Heritage aims to enhance pluralism and criticism in debates on heritage conservation and revitalization with a globalized perspective. The conceptual basis of this refereed journal lies on the fundamental cultural differences concerning built heritage conservation, recognizing these differences as a source for creativity and a motivation for cutting-edge experimentation.

Please find more information about our publication and its content on the website: <https://built-heritage.springeropen.com/>

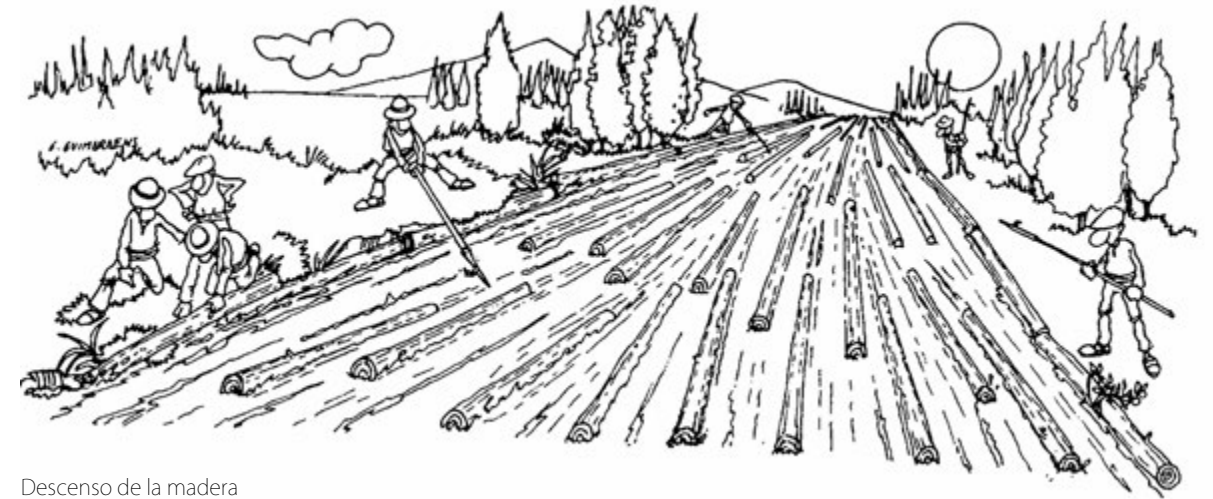
Recommended Book/Publication

Homo faber. Arquitectura preindustrial del Rincón de Ademuz

ilustraciones de Guillermo Guimaraens y dibujos de estudiantes de arquitectura



Language: Spanish
Author: Camilla Mileto y Fernando Vegas
Publisher: edUPV (www.lalibreria.upv.es)
Book Number: ISBN 978-84-7721-305-5 (versión electrónica)
Download: https://resarquitectura.blogs.upv.es/?page_id=7545&lang=en
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Descenso de la madera

Introduction

This book seeks to leave written and drawn memory of the activities and pre-industrial architecture of the Rincón de Ademuz. Its elaboration process began more than twelve years ago, when the first traditional architecture workshop was conceived in the region, which last year reached its twelfth edition, always under the direction of the two authors of this book. The drawings presented in these pages are the fruit of the collective work of the students who have participated in the majority of these architecture workshops of the past, repeatedly corrected, redrawn and homogenized in their graphic treatment.

The explanatory vignettes of the activities are the result of the invaluable collaboration of our colleague Guillermo Guimaraens Igual, who has not only graphically reflected the collected ethnological testimonies, but also actively participated in the interviews with local inhabitants.

The structure of the book consists of a general presentation of the history, evolution and philosophy of the traditional architecture workshops in Rincón de Ademuz, which gives way to an introduction to the pre-industrial architecture of the region and, immediately afterwards, to the texts, the explanatory vignettes and the architectural drawings related to the activities of the traditional vernacular industry of Rincón.

The parallel objective of this publication is to promote the conservation and enhancement of these buildings, places and humanized landscapes, if not for museum purposes, at least

as conversion into private homes or second homes. A transformation of the function of the building is preferable to the demolition or complete disappearance of activities that have continued to exist until very recently as a vestige of the lifestyle in the past.

Preparation of information and conclusion of this book, many groups and institutions have collaborated over the years, such as the Ministry of Social Welfare through the Ademuz nursing home, the town councils of the region, the ADIRA association, the Leader funds, the CEAGA cooperative, the management of the Higher Technical School of Architecture, the vice-rectorate for culture of the Polytechnic University of Valencia, the Los Centenares hostel, Casa Emilio, Casa Domingo, innumerable local inhabitants who, anonymously, have offered valuable information in the documentation phase and a list of people that is collected at the end.

The Tourism Dynamization Plan for the Rincón de Ademuz region has actively collaborated, financed in equal parts by the Ministry of Industry, Tourism and Commerce, the Ministry of Tourism and the Association of Municipalities of Rincón de Ademuz, in collaboration with the Association for the Integral Development of Rincón de Ademuz, ADIRA. Indeed, the dissemination of all this knowledge acquired about the region's pre-industrial architecture fits perfectly within its objectives of protecting and recovering indigenous values, caring for existing resources, raising awareness among the inhabitants of their cultural heritage and enhancement of the tourist resources of the area.



Reclaimed Vernacular Clay Building Techniques in Scania

Melin Karl-Magnus



Melin Karl-Magnus

University of Gothenburg,
Sweden

kalle@timmermanskonst.se

Carpenter, craft researcher and PhD student at the University of Gothenburg.

Project leader 2011–2018 for the restoration of Ingatorps medieval tithe barn that got the European Heritage Awards / Europa Nostra Awards in 2019.

1. Introduction

In the Swedish province Scania, the tradition of building with clay goes back to prehistory. In the Scanian law, from about 1200, clay pits and wattle and daub walls are mentioned. In historic times half-timbered houses have been common in the south parts of the region where trees for building are scarce. Albo härad is in the southeast part of Scania and the local history society, Albo härads hembygdsförening (Albo h.) owns several listed vernacular half-timbered buildings. I and my family company had been doing maintenance and restoration works for them during some years when we in 2008 held a course in clay techniques at Bondrumsgården. Henry Karlsson, Albo h., humbly asked why we did not use local clay and traditional clay techniques. He was aware that we since 2007 followed ICOMOS principles for the preservation of historic timber structures from 1999. when it came to wood working and thatching on their buildings.

2. The Clay Project Aim, Method and Sources

Henry highlighted the problem that modern clay techniques, used by the author and colleagues on vernacular listed buildings, did not give results corresponding to the original. The author once again got aware of how easy it is to be trapped in preconceptions of how to perform craft based

on how it was learned, and the norms and ideas transmitted by teachers and contemporary ideas of restoration. To make amends a knowledge project was formed by the author and Albo h.

The aim of the “Clay project” was to reclaim practical knowledge about traditional vernacular clay techniques from the region of Scania. These traditional techniques should then be used to maintain and restore listed buildings in the region. Another aim was to transfer gained knowledge through courses for professionals and the public, and to make a written report.

As vernacular clay techniques went obsolete in the first half of the 20th century the method was to search for written accounts, to do a survey of original vernacular buildings where clay was used, to go through museum collection in search of tools and finally to search for tradition bearers who practised vernacular clay techniques. The gathered information then would be tested as experiments on models but also on the actual listed buildings as maintenance and restoration.

Albo h. and the author in 2009 applied and got funding for the “Clay project” from the county government. It was a collaboration project where other self-financed actors were Nordiska museet, Kulturen in Lund, Folklivsarkivet in Lund and University of Gothenburg. The University of Gothenburg was co-organizer of seminars while the other institutions mainly helped us to search in their archives and acted as a reference group. The experiments/restoration work were mainly funded by the county government as well but had separate. The owners, the authorities and we as performers agreed it was no problem to make experiments on listed buildings as the traditional techniques hopefully would give a better result than previous repair work and furthermore were reversible.



Fig.1 In the background one of the houses in Bondrumsgården can be seen. In front a half-timber model used for courses in traditional clay techniques. © The author

2.1 Bondrumsgården

One of the main sources was Bondrumsgården, that got listed in 1963 (Fig1 & 2). It is one of Scanias most pristine examples of a farm with enclosed yard, built up in half-timbering and have about 350 weather exposed infills.

In this paper this farmstead and especially the infills built up of staves and daub will serve as an example, other surveyed buildings are presented in the project report. Other uses of clay on Bondrumsgården that cannot be described further in this paper are the threshing floor and several other floors. Adobe bricks to make an inner wall in the living room, the chimney and the oven. The farm burnt down in 1766 and the common belief used to be that most of the buildings were from the rebuilding after the fire. In 2008 the author made building archaeological investigations and conducted dendrochronological investigations in cooperation with Hans Linderson at the University of Lund. The results showed the cow stable is the oldest extant part of, built with oaks felled in 1801. Major rebuilding activities were performed during the 1820s when a new generation took over the farm. The youngest part of the complex was erected in the 1850s. The frame is made of oak while the roof trusses and wall plates are made of pine. All roofs are thatched with rye straw.

On Fig 3 a drawing of a gable gives an idea of the half-timbered walls of the farm, but there is variation, for example the cow stable has no sills as the other buildings. However, the survey made by the author showed almost all infills of the frame were originally built up in a similar way: In each infill the upper timber got holes made with an auger and on the bottom timber a lengthwise groove was made. In the holes and grooves roughly split staves were inserted with the purpose to carry the daub. From inside and outside daub were put on to become one massive layer surrounding the staves. Original cracks had been compressed before the clay went totally dry and even though the massive clay infills contained small stones the surfaces of the infills were made smooth with a wooden tool.

When the farm was made an outdoor museum in 1936 the antiquity of the buildings was emphasized and some walls with weather boarding got stripped to show the half-timbering. If any infills then were restored with clay is not documented. Major maintenance

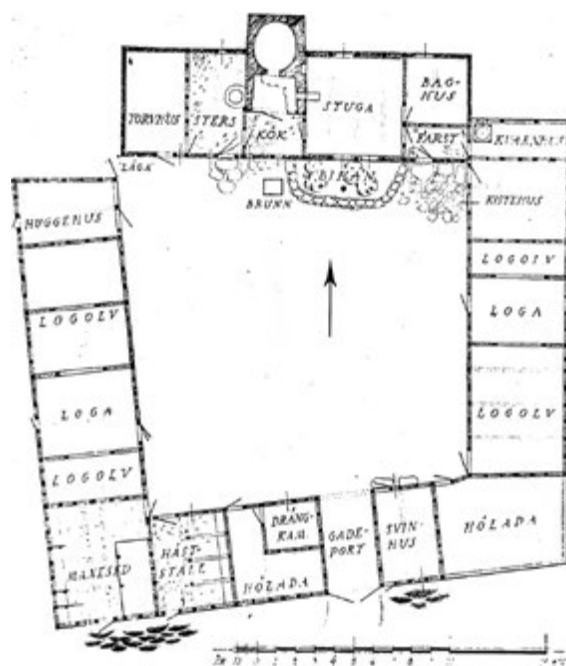


Fig.2 Bondrumsgården. In the southwest corner is the cow stable dated to 1801. On the north building the room "stuga" was the only heated living room.© Folkklivsarkivet

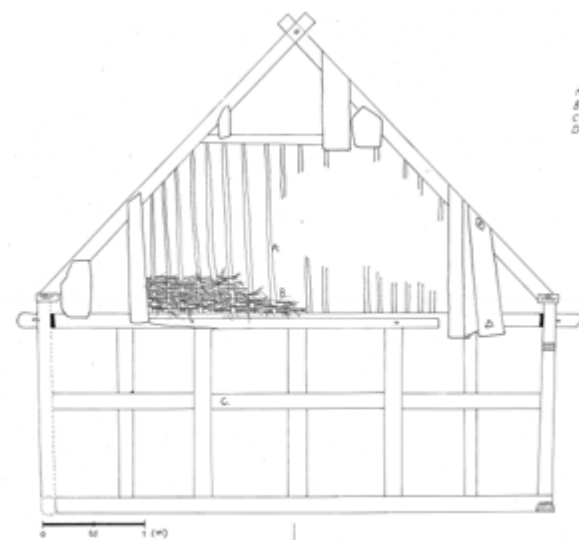


Fig.3 The section shows one of Bondrumsgårdens half-timbered walls and a gable built up with wattle and stakes.© The author

work was conducted on the buildings in the 1970s funded by and in agreement with involved authorities. Almost all the weather exposed infills got an external addition of chicken wire and cement (Fig 2). We have not been able to find any reports from these repair works but one probable reason for the change of material was to make the maintenance cycles longer as the cement is hard and do not need to be

maintained on a yearly basis. Other possible reasons were the disbelief in clay as a material and no available craft persons familiar with the techniques. In the 2000s the author got involved and made a damage survey of the buildings (Fig 4).

The cement on the infills were in most cases intact but it had kept the moisture and made the underlaying daub to dissolve and the staves to decompose. Before the clay project we replaced the cement with clay powder mixed with sand in the proportions 3/5. This mix did not get cracks but got a surface reminding of sandpaper. It worked technically but had little in common with the original infills. When we reused old daub, before the project, we had to add a lot of sand in order to avoid cracks.

2.2 Written sources

A survey of historical written accounts concerning vernacular clay techniques were performed. Scientific

literature from the 18th century often had detailed information about vernacular building techniques. One famous example is Carl von Linné who 1751 wrote in his *Scanian Journey* about vernacular clay and half-timbering techniques. Other 18th century descriptions of Scanian clay techniques and half-timbering were made as good examples of sustainable wood use in contrast to the log-timber techniques used in other parts of the country. Nordiska museet and Folklivsarkivets ethnological questionnaires, concerning vernacular building techniques were also important sources. The oldest questionnaires are from the late 1920s and the respondents were born from the 1860s and onwards. The questionnaires were written and responded with the purpose to preserve knowledge in risk of getting obsolete. Anyhow, the different sources quite uniformly describe how vernacular half-timbered houses were built in Scania. Usually, a single carpenter acted as a work leader and instructed farm workers how to make the frame. When the frame was raised the daube was prepared by male farm workers and then the infills were built by maids, (Fig 5). Professional bricklayers are only mentioned to build ovens and chimneys on vernacular buildings. In some cases, the working process, materials and tools are described in detail. The written sources were very helpful as a guide for the interpretation of the original constructions and in the reconstruction of the techniques.

2.3 Museum tool collections

In order to reconstruct vernacular clay-techniques we also needed to know more about traditional tools.

About 10 museum collections were surveyed and clay tools were documented. Then we made tools to be used in the experiments. The most important tools were "lerklubbor", clubs to be used preparing the adobe, and "lerslätör", a tool made of wood (Fig 6) used to compress the adobe surface when it had dried a bit, "felt like leather", and started to crack as it was described in the sources.

2.4 Tradition bearers

Albo h. tracked down one person that in his youth had been making adobe bricks. The second tradition bearer was my grandfather who as a boy helped his father to make a clay threshing floor. Although the tradition bearers had not made daub infills on half-timbered houses, they provided us with crucial information about where to find clay, drying procedures and even identified tools and how to use them. The interviews were recorded to be a source material available for future research.

2.5 Raw material

Written sources and the tradition bearers told local clay was used even if better quality might be found in other places. As sand was harder to find than clay, the best scenario was to find clay that naturally also consisted of sand or small stones. The villagers of Bondrum were involved in finding local clay for the experiments.

3.Reconstructed Techniques and Evaluation Over Time

The involved parts decided to restore only some of Bondrumsgårdens infills annually, according to a plan of maintenance stretching over a 12-year period. One reason to not do all infills at once is the buildings during maintenance work also get a yearly inspection and thence makes it possible to discover eventual new damage. Another benefit is the regularly use of the techniques (Fig 7), and the opportunity to show them for the public. In the project and over the years we have tried out different mixes. We have worked in a traditional way and made the mixes on feeling rather than exactly following recipes. As the raw material differs the historic sources also explain the mixes should have certain qualities rather than exact proportions. I also noticed the original infills had various mixes.



Fig.4 Chicken wire and cement made a false impression of a sound construction. Behind the surface the wood and daub were in poor condition. © The author



Fig.5 The farm workers serve the maids with daub for the infills in the half-timbered building. Source: Carl von Linnés Scanian journey, printed 1751

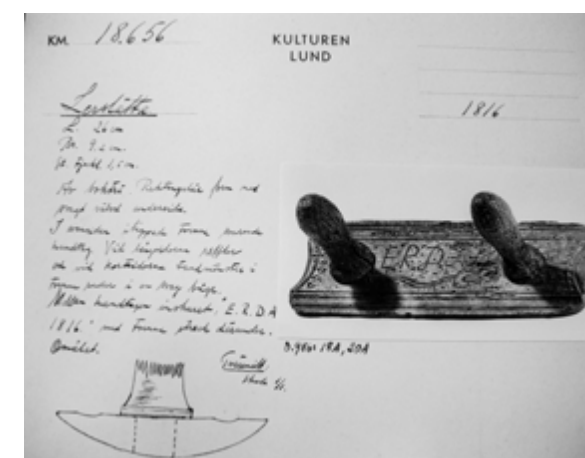


Fig.6 In the collections of Kulturen in Lund there are "lerslätör" a tool used to compress the daub when it had dried a bit and felt like leather. © The author



Fig.7 A seminar arranged in cooperation with the University of Gothenburg. © Nils Erik Andersson

After years of evaluation, it is clear the infills made with traditional techniques consisting of one thick layer decompressed during the drying process is much more persistent than infills built up in layers made of daube with a big proportion of sand.

The sources also described different techniques of protection of the external walls. On Bondrumsgården we have on some walls put up weather boarding again and rye straw (Fig 8). The reasons are to protect the walls but also to give a more authentic experience for visitors.

During the years the local history society members have grown confident in the techniques and now hold courses. Furthermore, they have increased their general knowledge about vernacular building techniques and reports any damage in an early stage. In 2011 they saved one of the buildings from a total collapse caused by heavy snowfall.

4. Conclusion

A member of the local history society humbly asked us in 2008 why we followed ICOMOS principles for the preservation of historic timber structures from 1999 when we did maintenance and restore work on the half-timbering but not when we repaired the daube infills. His remark

was the start of a project funded by the county government in 2009 to reclaim know how about traditional clay techniques to be used on listed buildings in the region. In the project I used the available sources to learn traditional clay techniques. In order to learn with an open mind, I had to deconstruct my modern craft knowledge about clay.

The historic sources were seen as more reliable than my modern knowledge. Learning from the sources as an apprentice, who does not question the master, eventually gave results very similar to the original. If I had instead followed my modern preconceptions of how to use clay I would most probably have failed.

At the start of the project, I “knew” it was important to mix in a lot of sand in the clay and that it was important to build up the infills in several layers to avoid cracks. Further that the plaster should have more fine-grained sand in the mix to get a smooth surface. The modern procedure I had learnt was very much a translation of how professional bricklayers work with lime mortar and plaster.

The historic sources told a different story. The infills should be built up in one massive layer containing smaller stones but still getting a

far smoother surface than I did using modern techniques. The clay was supposed to get cracks that were to be compressed during the drying process. Furthermore, vernacular clay techniques were mainly performed by laymen as maids and farmworkers and the used tools and techniques were different from the ones used by contemporary bricklayers.

Some of the massive infills made in the traditional way is literary touching the ground and have snow against them during the winter but still they prevail very good. It is mainly the chalk paint that falls off and need a yearly maintenance, as the sources describe. The infills, we restored with built up layers of plaster and more sand in the mixes have in some cases not lasted more than one winter.

The local participation has been unvaluable and a safeguard that maintenance of the buildings continues with traditional methods.

Approximately 60 persons were involved in the project. But afterwards the techniques have been introduced to, tried out and practiced by hundreds of people. The last tradition bearers could pass on their craft knowledge and some of the techniques now lives on in an unbroken chain of informal knowledge transfer as part of our intangible heritage.



Fig.8 Historic sources gave us information of one traditional way of making the maintenance intervals longer. It is called “byrning” and is made by putting rye straw on the walls only fastened with hazel rods nailed to the frame. © The author

Acknowledgements

I would especially like to thank the tradition bearers Gunnar Malmberg born 1917 and Erik Persson born 1922 since they gave us firsthand information about traditional clay building techniques. The former president of Albo h. Kenneth Olsson who made the project possible. The villagers of Bondrum who searched and found local clay. Tore Jönsson Albo h., who assisted on interviews. Nils Eric Andersson University of Gothenburg as he in several ways supported the project and documented the seminars.

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COVID-19 and Rediscovering Vernacular Architecture

Elo Lutsepp



Elo Lutsepp

Architectural historian

Member of ICOMOS CIAV and
ICOMOS Estoniasenior

elo.lutsepp@evm.ee

+372 53 444 769

2007-2020 she was a head and a creator of the Centre of Rural Architecture at the Estonian Open Air Museum. She is a member of ICOMOS CIAV and ICOMOS Estonia since 2010.

1. Introduction

The concept of Estonians as a nation was born only in the late 19th century. Before that, as most Estonians lived were just called country people. Due to momentous historical events, the number of people who moved from the countryside to towns gradually increased and today two-thirds of the population is urban. However, the majority of Estonians, including those who do not live in the countryside all year round, have maintained their connections with it through their grandparents' property or seasonal country retreats, the popularity of which was increasing steadily even before the pandemic.

2. The Growing Need To Advise House Owners

On 13 March 2020, a state of emergency was declared in Estonia due to the COVID-19 pandemic. Movement restrictions and opportunities for remote work motivated many Estonians to leave the urban environment for their country houses, which had mainly been used seasonally (Fig. 1).

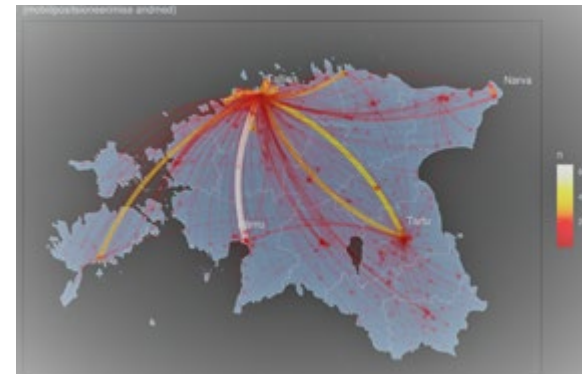


Fig.1 Seasonal changes in places of residence (mobile phone tracking data March 2020). The chart was modelled by A. Aasa. © The author

During the past few years, the Estonian Open Air Museum has assembled active master builders as cooperation partners. These people are actively working in the field of traditional building, either in non-governmental organisations or as entrepreneurs.

The museum acts as a mediator, bringing together house owners from different parts of Estonia and their closest regional consultant. The national network of consultants, which consists of experts and specialists from more than 20 organisations, was initiated by the Estonian Open Air Museum's Centre of Rural Architecture. The theoretical basis of all consulting is investigation, which is the responsibility of the open-air museum. The aim of the network is to offer the owners of vernacular (rural) buildings consulting services when they choose to renovate the building(s).

Counselling consists of giving initial evaluations of the technical condition of buildings and their cultural value. The master builder surveys the farm on the spot to establish the state of the buildings, giving advice about where to start and which materials to use. If necessary, recommendations are made for more precise measuring and examining. In addition, counsellors advise about the possible order and scope of work, as well as about suitable materials, considering the existing situation and the owner's resources. What follows depends on the scope of the intended work. In the case of larger jobs, we recommend involving in the counselling process the master builders who will do the work in the future. If necessary, the counsellors also present their appraisal reports in writing.

At the same time, the network provides a chance to train less experienced specialists. The network

of counsellors now covers almost all of Estonia. In 2020, the number of people who turned to us almost tripled.

No official study has been carried out, but I privately questioned the counsellors, most of whom are builders/restorers or engineers, and also read the existing counselling reports. Some of the respondents were architects, our valued partners. We also offer pre-purchase counselling. According to counsellors, real-estate agents have admitted that even houses that have been for sale for a decade, with very little interest shown in them, have now been sold. The money that could not be spent on travelling or entertainment during the pandemic has been invested in real estate.

Although our reports do not specify whether buildings are in seasonal or permanent use, counsellors have confirmed people's increased interest in extending the usage time of buildings, i.e. year-round usage of dwellings. Small-scale orders have considerably diminished in our heritage builders' work; if something is done, it is a major overhaul.

Usually people start commuting between their city homes and the countryside beginning in May, and they have accepted a more rustic way of life in their summer homes for decades. However, when they move to their country homes in early spring, the necessity to renovate becomes rather obvious: dilapidated heating systems, insufficient insulation, cold floors and certainly the absence of accustomed modern conveniences, such as water closets and bathrooms or showers.

Estonians traditionally lived in the polyfunctional barn-dwelling, which was built without a solid foundation, supported only by piles of stones, with the floor on a sandy base at best, yet often just packed earth under the flooring (Fig. 2). In the late 19th century separate dwellings started to be built, with a higher section of the foundations above the ground and therefore also floors ventilated from below, yet today floors of such buildings also need replacement. Most of the dwellings are log houses. The archaic barn-dwelling with its massive roof and relatively small windows is an ideal summer home as it is pleasantly cool even in the hottest summers. For year-round use, however, people used to modern conveniences certainly need large-scale renovation solutions.

Below I present a brief overview of the most



Fig.2 Estonian most traditional building type: barn-dwelling in Hiiumaa. © Heiki Mürk, 2021

frequently used solutions that our counsellors suggest, bearing in mind that our aim is, besides introducing modern conveniences, preserving the building’s valuable historical appearance, both in the interior and exterior.

2.1 Simplest Technical Solutions For Floors

A useful supplementary material for homeowners is a survey of interior climate, building physics and energy saving solutions for rural houses compiled by the Tallinn University of Technology in 2011, and a handbook for the restoration of old rural houses compiled by the Estonian Open Air Museum. [2] The doctoral thesis by our counsellor Üllar Alev, defended in 2017, also provides significant information. [3]

Foundations and floors. As a rule, old farmhouses in Estonia have very low foundations and the height of the section of the foundation above the ground does not exceed 50 cm. It is even lower in barn-dwellings (Fig. 3).

The floor beams are supported by the foundation and big boulders or a sand base, which also serves as thermal insulation. Sometimes there is clay filling under floors (Fig. 3). Detached buildings have an under-floor ventilation system, which barn-dwellings lack entirely. Very often floors have not been renovated for at least 60 years. The majority of earlier renovations were carried out in the 1960s or 1970s. Therefore, the first problem encountered when moving to the country home earlier than usual is very cold floors.

Historically, intermediate ceilings have been filled with sand. In the course of renovation, modern thermal insulation solutions, and increasingly blown-in insulation, have been used.

As the majority of preserved traditional dwellings have gable roofs, the attic can be used as living space. In seasonally used houses, the roof insulation is somewhat thin(Fig. 4).

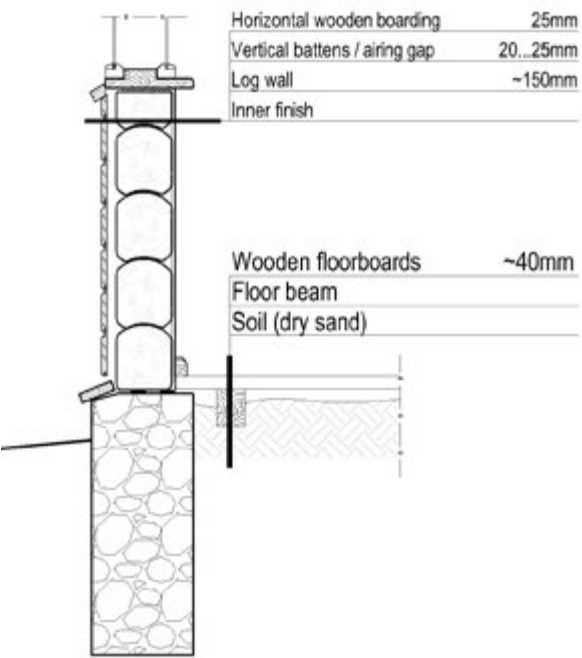


Fig.3 Traditional foundation and floor solution. Drawned by Üllar Alev. © The author

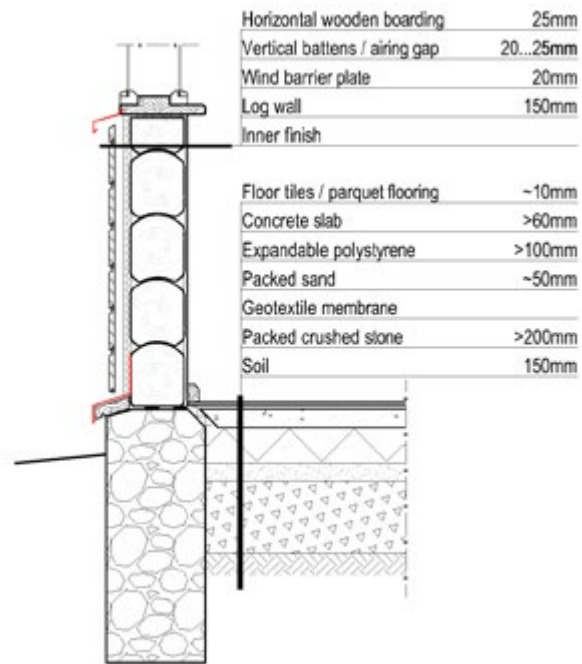


Fig.4 The simplest solution for insulation of floors. Drawn by Üllar Alev. © The author

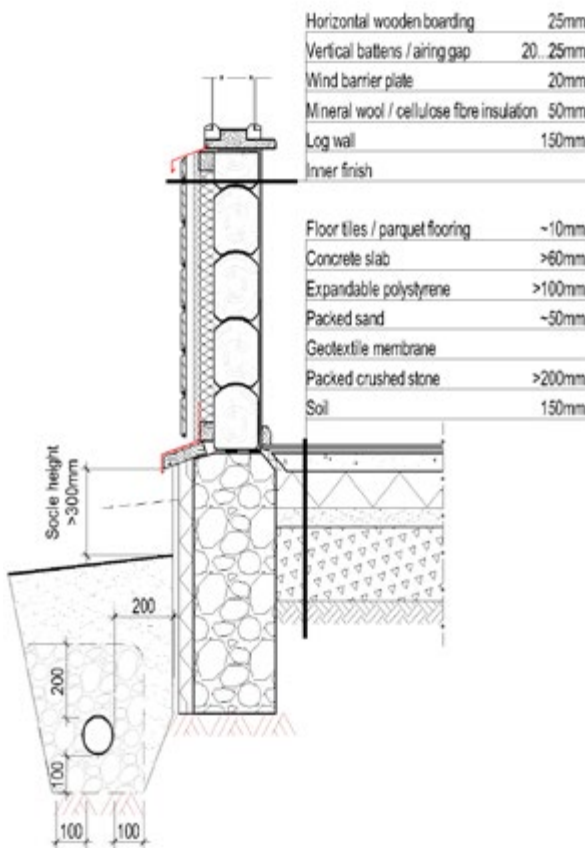
2.2 Insulation Of Exterior Walls

In Estonia, March and April are usually rather cold. There are large variations between day and night temperatures, and windy weather occurs frequently. Many older unrenovated farm buildings have log walls (round or rough-hewn), either without cladding or covered with boards without special thermal insulation (See Fig. 3). The spaces between the logs are filled with moss to make the building wind-resistant. Over time the moss works loose, or rodents and birds scatter it. So the rooms may have sufficient fresh air flow, yet such houses never stay warm.

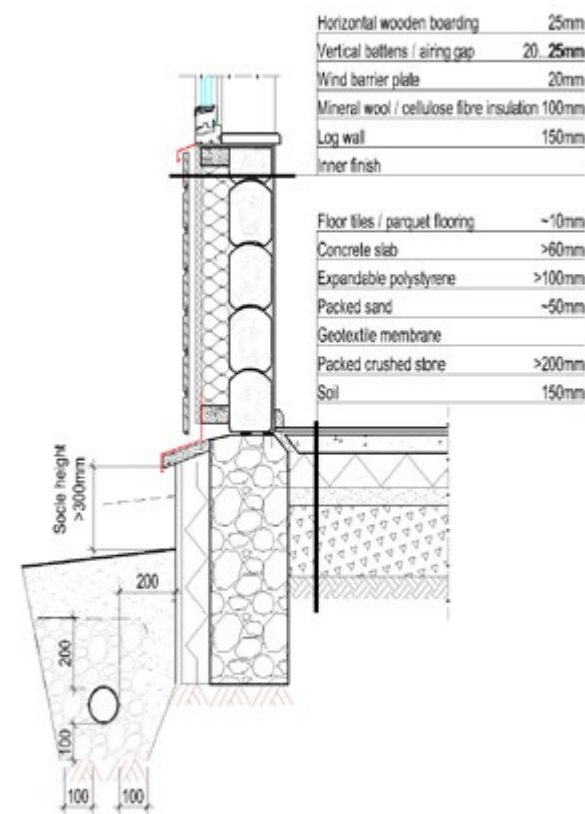
In addition, recently people seem to have developed a yearning for rough log walls, so the drywall and wallpaper covering the walls have been removed and the logs have been planed smooth.

As the current trend in interior architecture favours exposed log walls inside the building, the thermal insulation layer is installed on the exterior of walls.(Fig. 5)

A.



B.



C.

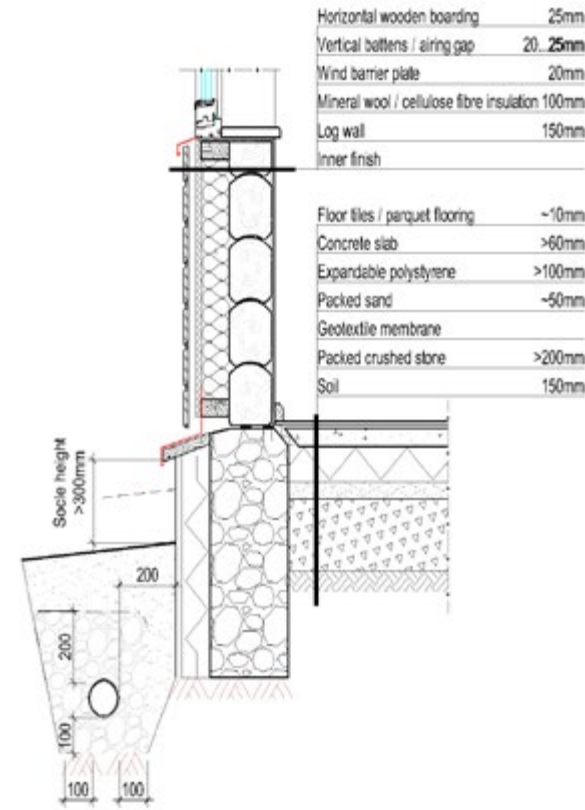


Fig.5 Three simplest wall insulation solutions for traditional log buildings. Drawn by Üllar Alev. © The author

Although technically exterior insulation is always preferred, it tends to distort the appearance of the building as due to the thickness of the walls windows are set too far inward. As a solution, windows can be moved more to the outside or can be insulated from the inside (rather than from the outside). Ordinary thermal insulation materials do not enhance the airtightness of walls, and therefore it is essential to seal the grooves between the logs of the old walls and cover the insulation layer on the outside carefully with an airtight windbreak layer.

2.3 The “Look At The Old Window!” Campaign

More and more attention is being paid to the restoration of in-fills or the replacement of unsuitable windows, including those with plastic frames. In connection with this, the Centre of Rural Architecture initiated a campaign under the heading “Look at the old window!” in 2019. However, in 2020, due to the pandemic, all of the practical restoration courses had to be replaced by an online course, which was preceded by regular advisory posts on social media or articles in the media.

There is increasing interest in double- or triple-paned windows, which are not traditional in Estonia but, following the example of Scandinavian countries, are increasingly in use today. The producers of wooden-framed windows, who also make new windows modelled on old ones, are adopting this technology more widely.

2.4 Sustainable Heating Systems And Rooms With New Functions

Most of the old detached houses are heated with wood stoves. Unfortunately, the majority of old wood stoves are outdated and are often operated improperly (Fig. 6).

In most cases people want to find a craftsman able to build a traditional tile stove; often, besides modernising barn stoves, they are also interested in having Russian-type stoves. The latter, which is common mainly in eastern Estonia, has a good heat storage capacity. In addition to the oven, it also has seats with flues and a hot wall (Fig. 7).

There is an increased interest in the installation of geothermal heating and air-source heat pumps, which can be controlled remotely. However, using them has to be considered during the installation of new floors.

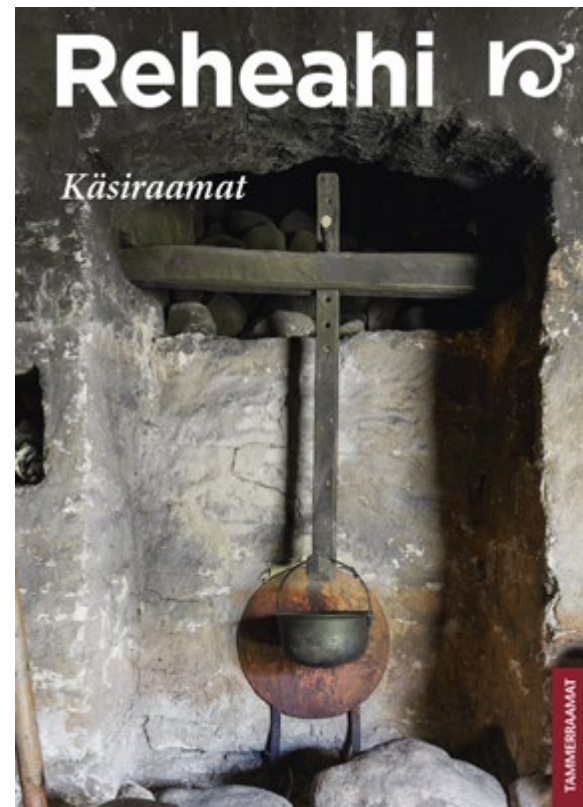


Fig.6 The cover of handbook “Reheahi”. Source: Kask, R. 2018. Reheahi. Käsiraamat. Tammerraamat: Tallinn



Fig.7 Russian-type stoves are still found in eastern Estonia. © The author, 2021

3. A Trend Towards Converting Historic Farmhouse From Seasonal Quarters To Permanent Places Of Adobe

The sauna occupies a significant place in the farm complex in Estonian architecture. As a rule, there was a pail or earth toilet situated separately from the dwelling house or in an outbuilding. As old farm buildings are upgraded for year-round use, the original space solutions undergo changes, and water closets and bathrooms are installed. The sauna, which has also played a ritual role in Estonians’ lives, is not sufficient today, as our washing habits have changed and

in the wintertime heating the sauna takes too much time and firewood.

Considering all of the above-mentioned issues, the renovation of rural buildings has become more and more complex and work usually starts with renewing electrical systems and installing plumbing. All of this means that, besides builders, homeowners have to hire building designers. In the big picture, homeowners increasingly regard the design process as essential. Restoration architects, when asked, replied unanimously that in the past year the number of orders has grown exponentially. People mainly want to adapt old buildings for year-round living or preserve old ones as authentically as possible and, in addition, build new residences for year-round use.

It is also worth mentioning that, in addition to renovating old buildings, traditional townspeople have continued gardening or farming, and in the autumn, to preserve the harvest, old cellars also have had to be renovated. So, counselling requests involve problems related to fieldstone cellars. The main issues are the restoration of damaged vaulting and making cellars moisture-resistant.

4. Conclusion

The pandemic has ravaged the Estonian economy and damaged people’s mental and physical health; yet the opportunities for remote work due to digital developments have widened, so increasing numbers of people are able to work far away from the main economic hubs. This has had an influence, although maybe only temporarily, on the “health” of our farm architecture. More extensive renovations have definitely been activated by the fact that in 2019 a support system for the restoration of farm architecture was initiated. Although it was originally intended to merely replace existing roofs with the original ones in residences, this provided an impetus to take up more extensive work, and even though only a maximum of 19 people are supported annually, those without support also have started major renovations. While large construction companies have found themselves in difficulties, small companies focusing specifically on renovation work are guaranteed plenty of work for a few years to come. As a result, the newly renovated farmsteads easily catch the eye when driving around in Estonia. Life has returned to the countryside and traditional farm architecture has become respectable again (Fig. 8).



Fig.8 Small rural livinghouse from 1908 renovated in 2020. © The author

Acknowledgements

I would like to acknowledge the members of the network of heritage construction consultants who, despite their considerably increased workload, still find time to advise the owners of rural buildings, and who kindly shared their experiences on last year’s most important cases. I am especially grateful to Üllar Alev, PhD, a construction engineer and a member of this network, who made the drawings of renovation solutions for the current report.

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The Chilean Adobe as a Eismic Vernacular Technology, the Study of the “Norte Chico” Area

Amanda Rivera Vidal



Amanda Rivera Vidal

Architect

Teacher at the School of Architecture of the University of Talca

amandariverav@gmail.com

Author of publication, expositions, documentaries and educational videos about Chilean vernacular and earthen heritage. She has been part of different researches about earthen architecture.

1. Introduction

1.1 Chilean Seismic Cultures

The Chilean territory exists because of the confrontation of two tectonics plate: The Nazca plate and the American plate. The permanent glide of one under the other generates subduction that gives origin to the principal characteristic of the territory: The Andes mountain range.

The ancestral cultures that inhabited this territory knew this well and adapted to it, creating seismic structures that could resist the high intensity earth movements. In the arid north they built with stone and earth, and earthquake resistant strategies based on the geometry of the buildings. In the center and south of the country wooden reinforcements are the most common seismic resistant solutions (Jorquera & Pereira 2015). About 40% of the official heritage declared sites are built on earthen techniques pre- dominating the raw earth masonry and the mixed techniques of wood and earth (Contreras & al. 2011).

1.2 The Territory of the “Norte Chico”

Limited to the north by the arid Atacama Desert and to the south by the Aconcagua river. Located between aridness and fertility. It is a territory with over 700 km of the Copiapó river (27° 19' 00' S 70° 56' 00' W) and the Aconcagua river 32° 54' 54' S 71° 30' 30' W).

This territory has been inhabited since 10,000BCE and around 2,000BCE the first sedentary people settled in this area. Until the arrival of the Spanish conquerors, and since around 95BCE, the territory was inhabited by people grouped into the Diaguita culture (name given by the Quechuas), who were dominated by the Inca empire.

During the Spanish conquest it was a transitional area, from the capital of the Peruvian Viceroyalty and the south. For this reason, the second city of Chile was founded here: the port of La Serena in 1544. The “Norte Chico” is composed by a diversity of small cities and villages, distributed between the two mountains range: The Andes and The Coast.

Around the second half of the 18th century, because of the improvement of mining and farming activities, the territory became more populated, with about 200 years of the Spanish presence in Chile and two centuries of earthquake activity.

2. Constructive Typologies

2.1 Building Typologies

The traditional architecture of the territory is characterized by its simple aesthetics with neither a clear style nor fine decorations. Its simple definition is supported in context with the environment and available resources (Ferrada & Segovia 2007).

Three principal types of building may be distinguished by its purpose: the agricultural, the religious and the dwelling, the latter two used predominantly nowadays.



Fig.1 Continuous façade at the urban area of Combarbalá after the 2015 earthquake. © Amanda Rivera, 2016



Fig.2 Quincha of the “Norte Chico” with medium size branches as structure. © Amanda Rivera, 2016

The religious buildings are located mostly in urban areas but with isolated construction typologies. While the houses are also located in urban as well as rural areas, the urban dwellings are composed of several units attached one to another, making one constructive unit (Fig.1). There are also different typologies in rural settlement. First the casonas patronales are the landowners houses that are isolated and built around an interior courtyard. It acts as an independent structural unit. There are also smaller houses much more compact and related to farming activities that also had their own independent structural unit.

2.2 Earthen Constructive Typologies

The territory features mixed wooden-earthen construction as well raw earth masonry.

The quincha or wattle-and-daub construction is a technique built with a main structure of medium- sized branches with thinner branches from local bushes which were filled in with a mix of mud and straw. It is the main native constructive typology, used by the diaguitas (Fig.2).

The colonial constructions, both in cities and in the countryside, have a raw earth masonry



Fig.3 Scheme of the “adobe en pandereta” system © Amanda Rivera, 2012

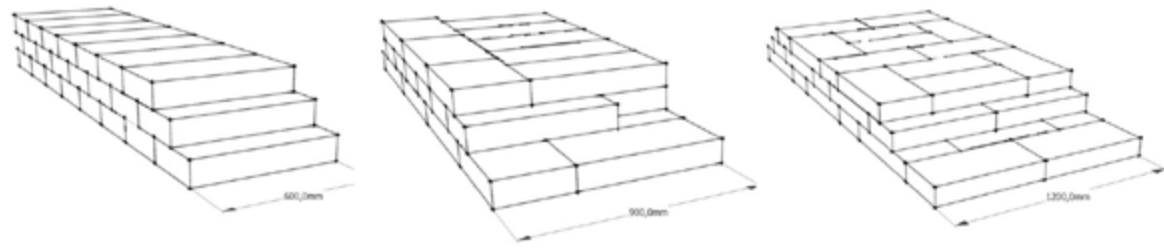


Fig.4 Different thickness of the walls with 60x30x10cm block size © The author

as main structure and a secondary structure of wood and earth called pandereta (Fig.3), where the earthen block is used edgewise. In this area it is possible to identify a culture of adobe constructions with an anti-seismic technology of horizontal timber embedded as horizontal ladders and with large wall thicknesses of at least 60 cm. Structures of two floors made of load-bearing earthen masonry are not uncommon.

3. The Raw Earth Masonry And The Seismic Strategies

3.1 The Mass

The mass strategy gives the main importance to the thickness of the walls, making it the center of the structural system together with the geometry of the building. It is the first basic strategy for seismic areas. The adobe construction found have a minimum slenderness ratio of 1:8, with the most used being 1:7. For this reason, to maintain this relationship and increase the height of the buildings there are thick walls, being 50cm the minimum found in traditional architecture, to reach the height of 3.5 meters. In spite of that, walls of more than 60cm of thickness are much more frequent, to reach thus at least four meters' height, where the most common earthen block size is 60 x 30 x 10cm. At greater heights, the walls increase to 90, 120 and up to 150 cm thick, measures that arise from the modulation of block (Fig.4). The adobes, in the traditional construction, are always disposed of blight, where the length of the block becomes the thickness of the wall (Muñoz & Rivera 2012). The continuity of the walls, reducing the door and window spans are of great importance for this strategy, as they decrease the wall volume. Also the structure has to guarantee a box-like behavior that can be achieved through firm connections in the corners between perpendicular walls (Dipasquale & al. 2014).

3.2 The Stability

The counterforts were the first elements of

reinforcements that can be observed in the traditional construction to counteract the effort of the earth- quakes, supporting the walls in the dynamic moments, and avoiding their overturning to the outside. These stability devices have been used in great length walls which lack interior support elements. This feature is found mainly in the central nave of churches (Fig.5).

The counterforts are the continuity of the wall to the exterior in their perpendicular direction. It must be united to the rest of the wall as in two perpendicular walls: in each one of its threads. It generally has, an angle that generates a push towards the wall. This lowers the center of gravity of the wall, reducing its fragility.

3.3 The Reinforcements

Reinforcement systems are built with complementary materials to earth, in traditional architecture are made of wood, because of its great elastic properties. Its characteristics of flexibility, lightness and deformability without reaching the breaking point, offers good resistance capacity against horizontal loads, and enables the dissipation of substantial amounts of energy (Dipasquale & Mecca 2015). This is the reason why most of the reinforcement strategies are based on wood as a seismic solution.

Roof system are always present but not always



Fig.5 One of the few buildings with counterforts in the area. San Antonio del Mar church of Barraza built in 1795 © Amanda Rivera 2016

thought of as part of the structural strategy of adobe construction. In the traditional architecture of the area they contribute to the horizontal stiffening, to the bracing and to the distribution of the loads.

Las trabas are specific wooden elements (Fig. 6) used to support the joining of other wooden elements of the construction, such as mezzanines and roof structures, with the outer adobe walls. Within the reinforcements are the most precarious devices and made with the smaller woods, which means less access to reinforcement resources. They can be found perpendicular to the wall, where the element crosses the wall and on the inside is attached to the structure of wood or mezzanine. Or when it is the same roofed wood or between the floor that crosses the wall and it is hooked with a piece of wood of a smaller section to avoid its displacement. These trabas have also been observed in diagonal positions, where an element independent of the wooden structure is arranged as a square and is hooked in the same way by a wood of smaller section in both outer points. This system is of great vulnerability, especially when the pieces of wood are exposed, they are in permanent exposure to water and xylophages, which generates their frequent rotting and finally, added to the absence of maintenance, its disappearance in the reinforcement system.

The punctual reinforcements in the join of the walls are frequently founded, either in T or in L. They are wooden elements of different dimensions that are inserted between the



Fig.6 Trabas: Wooden pieces to join perpendicular walls in the town of Cogotí 18 © Amanda Rivera, 2016

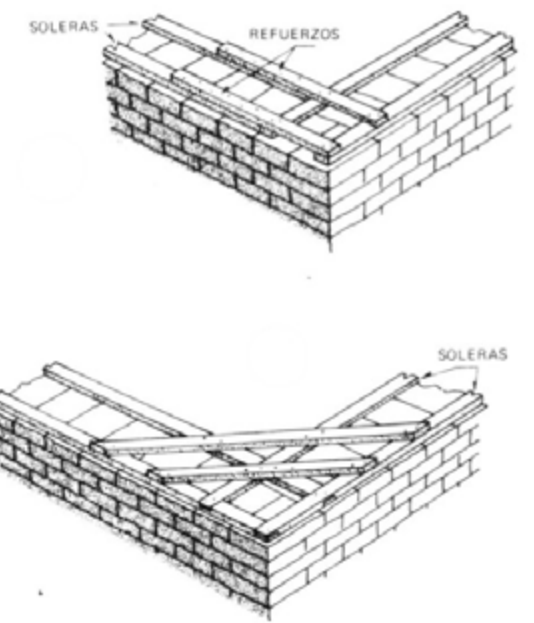


Fig.7 Wooden reinforcements in L with parallel and diagonal elements © Euclides Guzman

layers of adobe in the most critical points of the construction, due to their material they give flexibility to the system which works primarily by its weight. There is a great presence of these elements, mainly with woods of reduced section that are arranged in the outer and inner part of the wall, being united by perpendicular elements of wood like a horizontal ladder. They are sometimes reinforced with a diagonal element that ties two perpendicular walls going from outside of both wall and passing through the interior of the enclosure (Fig. 7).

The horizontal chains join elements of roof systems with raw masonry walls. They are not always present, and the importance has been verified, mainly by the contribution of the distribution of loads and the ceiling bracings, besides contributing to the unification of the system in the point of greater risk in vertical terms. The chains can be executed in different ways, the most recurrent being woods of smaller sections placed in parallel and joined by third elements in the form of a ladder laid on the top of the wall.

3.4 Horizontal Ladder Culture

The escalerillas are horizontal ladders that are composed of woods of different sections, which generally comprise two parallel woods of small section joined by thirds as a ladder, thus its name. These devices have also been found with woods of larger section that come to represent

the height of a block. They are introduced in the points where they can generate continuity in the construction, in mezza-nines, line of lintels, and in window supports. If the wood is of sufficient length it is used to replace the lintels of doors and windows. In masonry with horizontal inserts of wood, its massive and rigid character assumes a primary importance (mass and rigidity). However, the inserts give them a certain flexibility to the walls thanks to the elasticity of the wood and its resistance to the tensile forces (flexibility). In these structures the dissipation of a part of the seismic energy is due to the level of friction between the insertions and the units of masonry as well as between them, which contributes an increase to their capacity of deformation (ductility). The friction that allows the dissipation of seismic energy can be favored by the absence of mechanical links between the wood parts and freemasonry, thus allowing a displacement in the interface planes (Hofmann 2015).

This system represents the greatest technology present in the adobe construction of the area and even after many great earthquakes has verified its efficiency in the dynamic moment. It is hard to find earthen masonry in the area without the horizontal ladders, and even in modest dwellings these horizontal ladders are present. Even when many of the others seismic strategies are not present. The most common finding is the mass and the reinforcement strategies together, but the counterforts as a stability strategy, are only present in some larger structures such as churches. Most of them are based on the horizontal ladder strategy (Fig.8-9).

4. The "Norte Chico" Earthquake Of 2015

Since 1570 until the present there have been over 40 earthquakes of large magnitude, seven of which have surpassed 8Mw. The first were



Fig.8 Corazón de María church in Ovalle. Case with mass, counterforts and horizontal ladders. State after the earthquake of 2015 © Amanda Rivera, 2015



Fig.9 Rural two-floor construction in Monte Patria. Case with mass and horizontal ladders. State after the earthquake of 2015 © Amanda Rivera, 2016

recorded in 1604 and 1634 both in La Serena, of unknown magnitude but with terrible and devastating consequences. Papudo earthquakes that happened in 1703 had a magnitude of 8.7Mw, Valparaíso in 1822 of 8.5Mw, Vallenar in 1922 of 8.7Mw, and the last in Canela in 2015 of 8.4Mw.

The last big event occurred on 16th September 2015 at 22:54 UTC, which had a magnitude of 8.4Mw and a depth of 22.4km. Paradoxically it produced small damage, both to material and lives. Although the magnitude of the event is not synonymous of destructive power, it is a fact that the strength of the local construction culture is precisely one of the main factors to reduce seismic risk. The territory is expressed in its splendor and especially in the internal reinforcements that represent the horizontal wooden elements in the constructions.

The most common damages seen in the territory, during our visits ten days, one month and four months after the latest earthquake in 2015 were:

- Problems of humidity and water from the interior to the exterior of the buildings, generally in bathrooms and kitchens. This erodes the structure of the masonry walls of earth, even reaching to rot and to undo the structures of the wooden reinforcement inside the walls.
- Changes to the original configuration, great opening and in inadequate locations that weaken the structural system.
- Separation of perpendicular walls, caused by the inefficiency of the anchoring system and reinforcement of the corners, mainly due to the presence of xylophages and the rotting of



Fig.10 Rural abandoned church in Río Hurtado. Case with mass and horizontal ladders. State after the earthquake of 2015 © Amanda Rivera, 2016

wooden elements because of their Exposition.

- Absence of maintenance that provokes quickly deterioration process, the most typical the presence of excessive humidity (Fig. 10). Other damages frequently encountered were vertical cracks at the junction of the wooden frame and the earthen mortar fill; this represents just the discontinuity between both materials, but neither a structural nor life-threatening problem. (Jorquera & Baglioni 2011)

5. Conclusion

The earthquake had its epicenter on the shores of the Canela commune, Coquimbo Region. The locality of the same name was closest to the epicenter, which is why most of the post-earthquake activities have been carried out in this locality: volunteerism, seminars, earthen murals, children's workshops, the Adobe Festival, and other activities. All of these activities have helped to reinforce the culture around the construction, to relearn the constructive techniques and to promote new reinforcement methods.

The traditional constructions have survived at least four major earthquakes greater than 8Mw, but the lack of information and discontinuity of the constructive tradition have been the main threats to the preservation of the built heritage. Public policies reacting to catastrophe led to the demolition of structures by authorities without fully evaluating their state of damage, resulting in a number of families losing both their homes and their heritage.

In el "Norte Chico", due to the learning through experience of great earthquakes prior to 2015 in Chile (2005, 2007 and 2010) and to the strength of citizens' movements, protection and subsidy

strategies have been implemented to repair damage built heritage in the area. Including achieving the protection of the epicenter town, Canela, as a zona típica by the Chilean Monuments Law, in addition to processing the same protection for at least two more important cities in the area.

The earthen construction culture of the area may not presently appear threatened, but it is of main importance to reinforce the culture and preserve the information to ensure the permanence of the built heritage of the territory, which has so much to teach the world about anti-seismic strategies.

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Why Are You Not Using Computers? A Case for Drawing Vernacular Architecture by Hand

Jelena Pejkoć



Jelena Pejkoć

Architect

jelenapejkovicarchitecture@gmail.com

She is an architect based in Belgrade. Her first book, RRC VERNADOC 2018: Rogljevo Wine Cellars, was published by Cultural Heritage without Borders Albania in 2021. She is a registered architect in Serbia and a qualified conservation architect.

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It will be difficult to measure and draw the terracotta dragons that adorn a Pingyao rooftop above me (Fig.1).. What year is it? What century? The only giveaway is a muffled beep of the cell phone in my pocket: I sent out some photos of my hand-drawn section from this ancient Chinese town and a friend responds: "One question, why are you not using computers?"

I belong to the generation that was required to draw by hand in the first years of architecture studio, before being torpedoed towards the new and exciting digital tools. Computer generated models and drawings quickly became so pervasive and matter-of-fact that it took me over a decade after graduation to really reconsider the implications of this profound switch. Today I use both digital and analogue methods in my design and conservation work. However, only the latter bring up questions from my colleagues and laypeople alike.



Fig.1 Rooftop dragons, Lei Lv Tai Mansion, Pingyao, China © The author

I started questioning my own routine reliance on digital technology soon after I first engaged in conservation of architectural heritage. In 2013 I took part in a Regional Restoration Camp (RRC), organized by Cultural Heritage without Borders and the Institute for the Protection of Cultural Monuments of Serbia. Shortly after this training in traditional construction techniques I joined the Institute's team that sought to complete the documentation of three Serbian vernacular sites (Fig.2).

For weeks at a time, we used simple measuring instruments and drew scale plans, sections and elevations in pencil, on our plastic A3 boards. Hand drawings from these documentation campaigns mostly ended up being redrawn in digital form, to create a basis for conservation projects of individual buildings. To my dismay, these meticulous and lively field sketches were never destined to become anything more than a modest intermediate step in the larger conservation process. Though disappointed, I could understand the reasoning: the Institute had limited documentation equipment available, so drawing by hand in the field was not always a choice. However, once we returned from the field to the office, we needed to switch back to

digital tools in order to produce the commonly required graphic documentation.

And back to the computer screens we went. Having spent the time in the field, however, climbing the roofs with not much more than a measuring tape and a plumb bob meant that I could still easily visualize every bit of the buildings I had documented.

This was by no means some magic trick or a sign of extraordinary memorizing capacity. Simply put, to measure a building with basic tools one has to come close to it. This physical proximity to the documented structure allows for a profound understanding of scale, because spatial elements are understood in relation to one's own body. Also, to measure a beam section with a measuring tape, one typically needs to touch the said beam. This, too, provides tactile information which is memorized better and impossible to collect digitally at a distance. The resulting complex understanding of space, both tactile and intellectual, proved absolutely invaluable in planning the conservation works. Taking the time to physically approach the measured elements and then draw them by hand allowed for a palpable understanding of the recorded buildings – a quality impossible to attain from a digital scan.

I was certainly aware that within a few minutes, a laser scanner could have given me the exact position of every single speck of dust on any chosen wall surface. But this information, while exhaustive, would hardly be of any use in helping me understand the forest of a vernacular roof structure or any actual assembly.

In the light of these insights, it was clear to me that the process of hand measuring and drawing had unexpected value in conservation of



Fig.2 Documentation of a wine cellar near Štubik, Serbia © Kristina Krkobabic



Fig.3 East view of the Luang Amnach Nararaksha Mansion, Phuket, Thailand (Photo by J. Pejkojovic)© The author

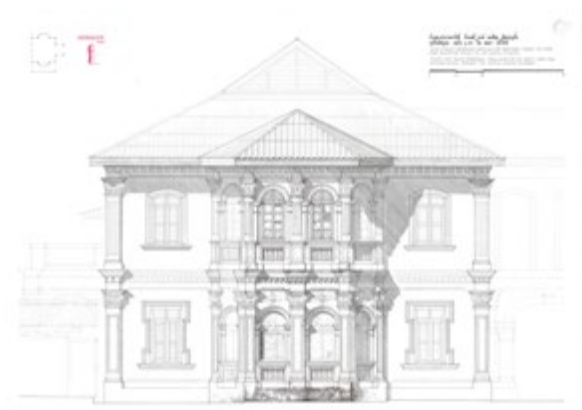


Fig.4 East elevation of the Luang Amnach Nararaksha Mansion, Phuket, Thailand. Original scale 1:30 (Drawing by J. Pejkojovic)©The author

vernacular buildings – but I resignedly accepted that the actual field drawings, while beautiful, could only be a stepping stone to the final digital drawing set.

Unsurprisingly, I was thrilled when after a few years I discovered VERNADOC, a field-based method that indisputably elevated hand drawings into an art. The acronym stands for “Vernacular Documentation”; it is a recording and presentation process which emphasizes data collection on site by using basic, low-tech tools to produce high quality, inked, hand-drawings (Sananwai 2013: 3).

VERNADOC origins are more than a hundred years old, reaching back to a tradition of documenting historic buildings established in the 1880s at the Helsinki University of Technology (today Aalto University). In the 1990s, Markku Mattila, a Finnish architect and brilliant pedagogue, distilled this drawing tradition down to a series of discrete steps that could be quickly taught. For several years he has taken his architecture students to sites in Russia and Finland where they meticulously recorded

traditional buildings. For one week they would take measurements and draw directly on just one piece of cardstock, “without any notes in-between” (Mattila 2011: 92). The second week of the camp would be dedicated to inking.

Mattila’s idea, and that of his predecessors, was not just to teach the students how to draw more effectively, but rather to show them how to take care of the rich vernacular heritage “by using their very basic professional skills and showing their respect” (Mattila 2013: 8). VERNADOC camps became increasingly international after 2005, and have since been organized all across the world, in large part thanks to the endless enthusiasm of dr Sudjit S. Sananwai from Thailand.

Evidently, I was immediately mesmerized by VERNADOC drawings, but it took another two years before I could take the time to actually learn the method.

The elevation drawing from my first VERNADOC camp truly tested my limits, both professional and personal. I already had a lot of skill in collecting data using only basic tools, and I was quite confident the measurement week would go without major issues. And it did. But the inking week humbled me (Fig.3-4).

This second part of the camp was the real trial, not just of my rapidograph handling skills but also of my patience, my motivation, my perfectionist tendencies, my ability to handle a task without the “undo” command. “I did not sign up for a school of life!” I often thought, as my fingers trembled at the perceived importance of every ink mark on the one precious sheet of paper I was given.

The method was simple enough, but the work was not easy! I realized very quickly that there really was no abracadabra in those exquisite



Fig.5 Inking in progress © Nicholas Ng



Fig.6 Inking studio, Phuket, Thailand ©Nicholas Ng

inked drawings that took my breath away back in 2015. The only “secret” to the process was to follow the steps, to carry on, to put one line down and then another, to forget “ctrl+z” and to resist taking oneself too seriously (Fig.5-6).

Participation in this VERNADOC camp in Phuket encouraged and invigorated my enthusiasm for hand drawing, especially in the field of vernacular architecture. At the time I was still working on restoring traditional buildings in eastern Serbia and struggling to communicate the meaning

of this work to the local community. VERNADOC struck me as a gentle but powerful way to share my passion for vernacular buildings with the local owners, who were often disillusioned with and resentful of their own heritage. With VERNADOC drawings, I thought, it is as if for a brief moment an architect could lend her eyes to a local: after seeing these meticulously detailed and painstakingly rendered presentations of their houses, the owners finally believe that they have something beautiful and valuable.

With every camp that followed, the kaleidoscope of possibilities I saw in drawing by hand only became more intricate and fascinating. In Pakistan, to give just one example, I saw how training in basic documentation techniques could turn into a powerful possibility for education and employment of women.

My own plans for drawing in Pakistan went somewhat amiss, though this is not necessarily obvious judging by the resulting drawing set. With a small team of enthusiasts, and the incredible support of architect Wajahat Ali from the Aga Khan Cultural Service in Pakistan, I set out to document the 300 year old traditional



Fig.7 House D3372 – Kucha Pir Shirazi, the Walled City of Lahore, Pakistan ©The author



Fig.8 House D3372 – Kucha Pir Shirazi, the Walled City of Lahore, Pakistan ©The author

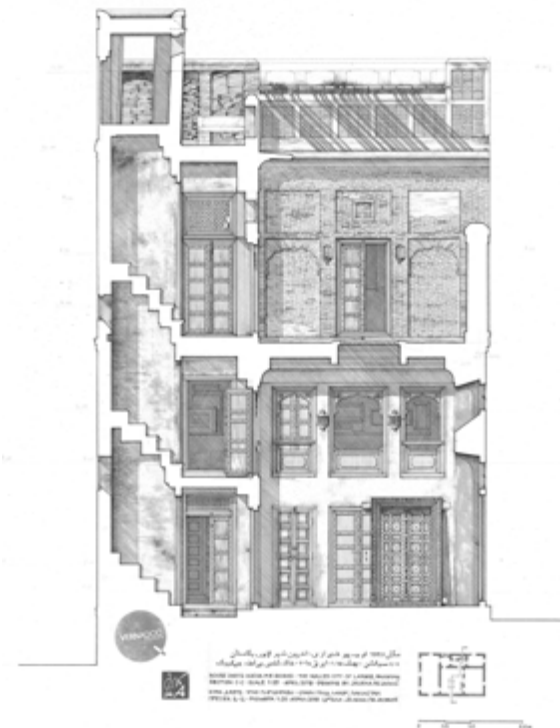


Fig.9 Section of House D3372 – Kucha Pir Shirazi, the Walled City of Lahore, Pakistan. Original scale 1:25 (Drawing by J. Pejkoć) ©The author

timber mosques in Ganish, Hunza. However, the project time frame unexpectedly turned out to be too short to secure all the necessary permits for that location, and eventually a new site was found in the Walled City of Lahore (Fig.7-9).

The unexpected highlight of the journey, however, was to finally make it to the striking north of this country, and to witness what incredible impact conservation projects can have on remote communities. A particularly impressive case in point is CIQAM, a Women Social Enterprise operating near the Altit Fort in the Hunza Valley. Today CIQAM employs over 90 women in a variety of trades, including carpentry and masonry works in addition to topographic and architectural surveys, design and drafting. But it all started when a small number of local women were trained in humble hand drawing during the survey of the Altit Fort back in the early 2000s. To this day, the hardworking women of CIQAM demonstrate how simple, low-tech documentation skills can empower communities who are the custodians of much of the world's cultural heritage.

And even when the stakes are not as high as improving livelihoods, teaching low-tech documentation and hand drawing remains



Fig.10 Rogljevo wine cellars, Serbia (Photo by J. Pejkoć) ©The author



Fig.11 South elevation of the wine cellar of Desanka Tancic 38/KP 2524, Rogljevo, Serbia. Original scale 1:25 (Drawing by J. Pejkoć) ©The author

a valuable tool. I trained participants in a number of Regional Restoration Camps, both architects and non-architects, and eventually I also organized the first VERNADOC camp in Serbia (Fig.10-11).

Each of these occasions reinforced my passion for drawing by hand as a powerful pedagogical method for explaining the basic building blocks of architecture. When asked to measure with simple tools and draw by hand, students are invited to patiently observe, analyze and represent the most fundamental, time-tested building materials and systems. In my experience, this process often gives them their first "A-ha!" moments: so this is how architecture actually works! The result is a deeper, more thorough appreciation of their future profession, and also of the inherited cultural context in which they will inevitably operate – as designers or conservationists.

For many architecture students, restoration training activities are the only place where they receive any instruction on how to draw by hand, since technical drawing, and especially technical

inking, is taught less and less in architecture schools. As a result, an actual craft is fading away: the profession of architecture moved on from ruling pens to technical pens to CTB files, and has not looked back.

This thorough shift to digital tools is commonly justified by the demands of the profession – after all, in most places in the world, time and liability constraints on graphic documentation practically dictate the use of digital technology in design and construction. But we need to keep in mind that representing architecture is also a thinking discipline that originates in a craft, and that both the thinking process and the craft are increasingly under threat of extinction. In this context, restoration training camps, such as RRCs and VERNADOC, provide an invaluable environment, a precious preservation laboratory for the vanishing craft of hand drawing.

Finally, there is something to be said about drawing by hand as a contemplative, reflective, transformative process for the individual who produces the image. You make the drawing to preserve data and to present the evidence of a historic building. In turn, you learn intricate detail about the object of your interest, both tangibly and intellectually. By the end of this journey, you are a different person than you were when you started – a person with more knowledge, more appreciation, and more respect for the world that surrounds you, via the microcosm of the building you were measuring and drawing. The building you draw with this much focused attention becomes etched in your memory, in your real, physical neural pathways. In other words, you make the drawing – but the drawing also makes you.

In the increasingly digitized profession of architecture, opportunities to draw by hand decline constantly. This is why I treasure the precious few that remain. I draw by hand to truly see and better understand the fragile traces of modest, nameless buildings from the past. They

brought us our today. I draw by hand to build my patience and to put my mistakes in perspective – they are an inevitable part of any bigger picture. I draw by hand because I enjoy the opportunity to lend my eyes to another: "Look! This is the beauty I see in your house!" I marvel at the possibility to empower the guardians of vernacular heritage by teaching them a basic architecture skill. I treasure the chance to give future architects an insight into the basics of their profession by teaching them how to measure and draw by hand. I wish to preserve drawing and inking as the incredible crafts that they are – not to contest digital technology, but, if anything, to give it more meaning through acknowledging its rich lineage. Finally, I measure and draw by hand because the process transforms me; it expands my view of the world.

Try it. You will be surprised.

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Honorary Member

Miles Lewis, from Australia



Name Miles Lewis

Sex Male

Nationality Australian

Occupation Professor emeritus

Major History of Technology, Vernacular Architecture, Prefabrication

Affiliation Faculty of Architecture, University of Melbourne

Address 34 Napier St, Fitzroy, Victoria, Australia

Email miles@mblewis.net

Website <http://www.mileslewis.net>

Languages English, French

Education Background

BA, BArch (Hons), PhD University of Melbourne

Awards & Ceremony

Fellow of the Australian Academy of Humanities (FAHA), Member of the Order of Australia (AM), Centennial Medal (CM)

Honorary life memberships: CIAV, National Trust of Australia (Victoria), Australia ICOMOS; Society of Architectural Historians Australia and New Zealand

Published Books

Don John of Balaclava, Victorian Primitive, 200 Years of Concrete in Australia, Suburban Backlash, Architectura, Architectural Drawings

Experience

Visiting Scholar, University of Sydney, 1990-12; Auckland University Foundation Fellow, 1996.

Participant in the Tianjin Urban Conservation Study, China, 1991-4

Public or invited lectures at: Al Ain (UAE); Cambridge (England), Copenhagen (Denmark); Glasgow (Scotland); Kyushu (Japan); Lyon (France); Nicosia (Cyprus); Riga (Latvia); Santiago (Chile); Tabriz (Iran), Zagreb (Croatia);

UNESCO World Heritage referee reports on: Ancient City of Damascus (Syria); Old Town of Galle (Sri Lanka); Gordipn (Turkey) Jaén Cathedral (Spain); Historic Centre of Macao (China); The Persian Caravanserai (Iran); Historic Centre of Prague (Czech Republic); Tomo Toraja (Indonesia); Historic City of Yazd (Iran)

Projects

The Portable Building in Australia

Lewis, assisted by colleagues, is advancing a proposal for the World Heritage listing, as a group, of over a hundred prefabricated (or 'portable') buildings imported to the Australian colonies during the nineteenth century. The proposal can be seen at

<https://www.historyvictoria.org.au/wp-content/uploads/2021/04/World-Heritage-proposal-n.pdf>.

More such buildings reached Australia than any other place in the world, and they are full of technical and cultural interest. The houses from Singapore, for example, seem to have been designed for the European market but built by Malay carpenters working for Chinese entrepreneurs. The components are labelled with Chinese characters. At the other end of the scale are massive plate iron buildings made in Glasgow, and in between there are redwood houses from California, Baltic pine houses from Hamburg, and numerous corrugated iron buildings from England.



A cottage imported from Singapore c 1853, as now reconstructed, 125 Easey St, Collingwood, Melbourne © Miles Lewis photo



Corrugated iron buildings sent from England to Australia. 'Hemmings Portable House Manufactory, Clift House Bristol. A view of the principal thoroughfare as it appeared the first week of August 1853 shewing the second church executed for the Diocese of Melbourne 1000 sittings' © State Library of Victoria H30511



Asbestos cement clad house: Wunderlich Limited, Realising Your Dream Home (Wunderlich, Sydney 1925), p 3 [edited]
© Miles Lewis collection

The Miles Lewis Library

Lewis has a considerable collection of publications on building and architectural history, mainly in English and French, and including some very rare trade literature. The catalogue can be seen at

<http://www.mileslewis.net/personal-library/>

About six hundred of these items, which were not previously available to the public, have now been digitised for the Building Technology Heritage Library (USA) and are now freely available at

<https://archive.org/details/buildingtechnologyheritagelibrary>

A report on the digitisation project is at

<https://aptaustralasia.files.wordpress.com/2020/05/apt-australasia-bthl-final-project-report-resized.pdf>

The Miles Lewis Fellowship and Oratorion

The Miles Lewis Fellowship was established at the University of Melbourne in 2018, with funding provided by the Vera Moore Foundation. Its purpose is to bring distinguished scholars in the history of architecture to the University annually or biennially, to deliver an oration and to engage in other research and/or teaching activities. It is fully funded with a professorial salary, travel and living costs &c. As a result of delays due to Covid, the first fellow, Professor Alex Bremner of Edinburgh arrived in May 2022 and delivered an oration entitled 'Back to the Future: Architecture and the Geopolitics of Communications Technology in the Edwardian Era.'

Members of the CIAV should consider putting their names forward for a fellowship - provided that they are sufficiently fluent in English to deliver an oration, and provided that their field of interest is architectural history or archaeology (not merely conservation). Follow this link for information:

<https://acahuch.msd.unimelb.edu.au/miles-lewis-fellowship>



The screenshot of web page © <https://acahuch.msd.unimelb.edu.au/miles-lewis-fellowship>

Asbestos cement in Australia

In January Lewis completed a report on Asbestos Cement in Australia for the Australian government. It entailed substantial research into the overseas background of the material, especially in Britain and the USA, and it should soon be available on line.



New Member

Amanda Rivera Vidal, from Chile



Name Amanda Rivera Vidal
Sex Female
Nationality Chilean
Date of Birth 05 April 1985
Occupation Architect
Major PhD candidate, Msc Cultural Heritage, DSAterre
Affiliation University of Santiago
Address Madrid 1624, Santiago, Chile
Email amandariverav@gmail.com
Languages Spanish, English, French, Italian

Education Background

Architect from the Bío-Bío University (Chile) with the research “Ancestral settlement, ancestral sustainability” and the project “To inhabit the earth in Vichuquén, Chile”.

Earthen Architecture Post-Graduate Diploma at the CRATerre laboratory ENSAG (France) with the thesis: “The Chilean seismic ADOBE, study case in the Norte Chico”.

Master in Cultural Heritage at the Catholic University of Chile with the thesis: “Combarbalá: the adobe landscape. Living in earthen architecture heritage today”.

PhD candidate at the University of Cagliari (Italy) with the proposal research “Seismic vernacular earthen techniques face climate and social change, the case of three compared chilean cultures: Arica, South Santiago and Valparaíso”.

Working Experience

Architect engaged in research, teaching and practical work on earthen, vernacular and historical architecture. 2009 RIBA Norman Foster Traveling Scholarship for the research “Ancestral cities ancestral sustainability”. Teacher at the School of Architecture of the University of Santiago. Lecturer at the Earthen Construction Diploma from the Catholic University and at the School of Architecture of the University of Talca.

Author of publication, expositions, documentaries and educational videos about Chilean vernacular and earthen heritage. She has been part of different researches about earthen architecture. In her professional activity she has participated in projects and intervention in historical constructions and earthen contemporary architecture in Chile, focusing in traditional constructive techniques, reconstruction after earthquakes and professional training. Member of the Iberoamerican network PROTERRA, ICOMOS-Chile, expert member of ICOMOS CIAV and Vice-president of ICOMOS ISCEAH.

Projects

2021, Responsible of the project “**Architecture, heritage and communitarian infrastructure Work with the neighbors of the Matta Sur quarter**”. Founded by Santiago University.

2019 – 2022, **Earthen Coating project, founded by the Chilean Ministry of Culture.**

2019 “The coatings in the conservation of earthen built heritage in the Limarí Valley”. 2021 “Coatings in the conservation of the earthen heritage from Santiago”.



2019, RTLimarí



2015, Norte Chico

2015 – 2019, Earthen vernacular heritage in the “Norte Chico” Area in Chile.



2010, EL ADOBE

2010 - 2012, Responsible for the project “**THE ADOBE** Educative video for a local culture” founded by the Chilean Ministry of Culture.



2009, RIBA

2009, RIBA Norman Foster Traveling Scholarship for the research “Ancestral cities ancestral sustainability”.



2021, Matta Sur