



Polski Komitet Narodowy
Międzynarodowej Rady Ochrony Zabytków
ICOMOS



VILNIUS GEDIMINAS
TECHNICAL UNIVERSITY



Traditional, vernacular and historical architecture



Erasmus+

Traditional, vernacular and historical architecture.



Heritage and Society



Elective Courses



Erasmus+



SURE
SUSTAINABLE URBAN REHABILITATION IN EUROPE



UNIVERSIDAD
POLÍTÉCNICA DE MADRID

Traditional, vernacular and historical architecture.



Heritage and Society

1. Introduction to vernacular architecture.
2. Main climatic areas around the world and bioclimatic strategies. Low latitude climates.
3. Main climatic areas around the world and bioclimatic strategies. Medium latitude climates.



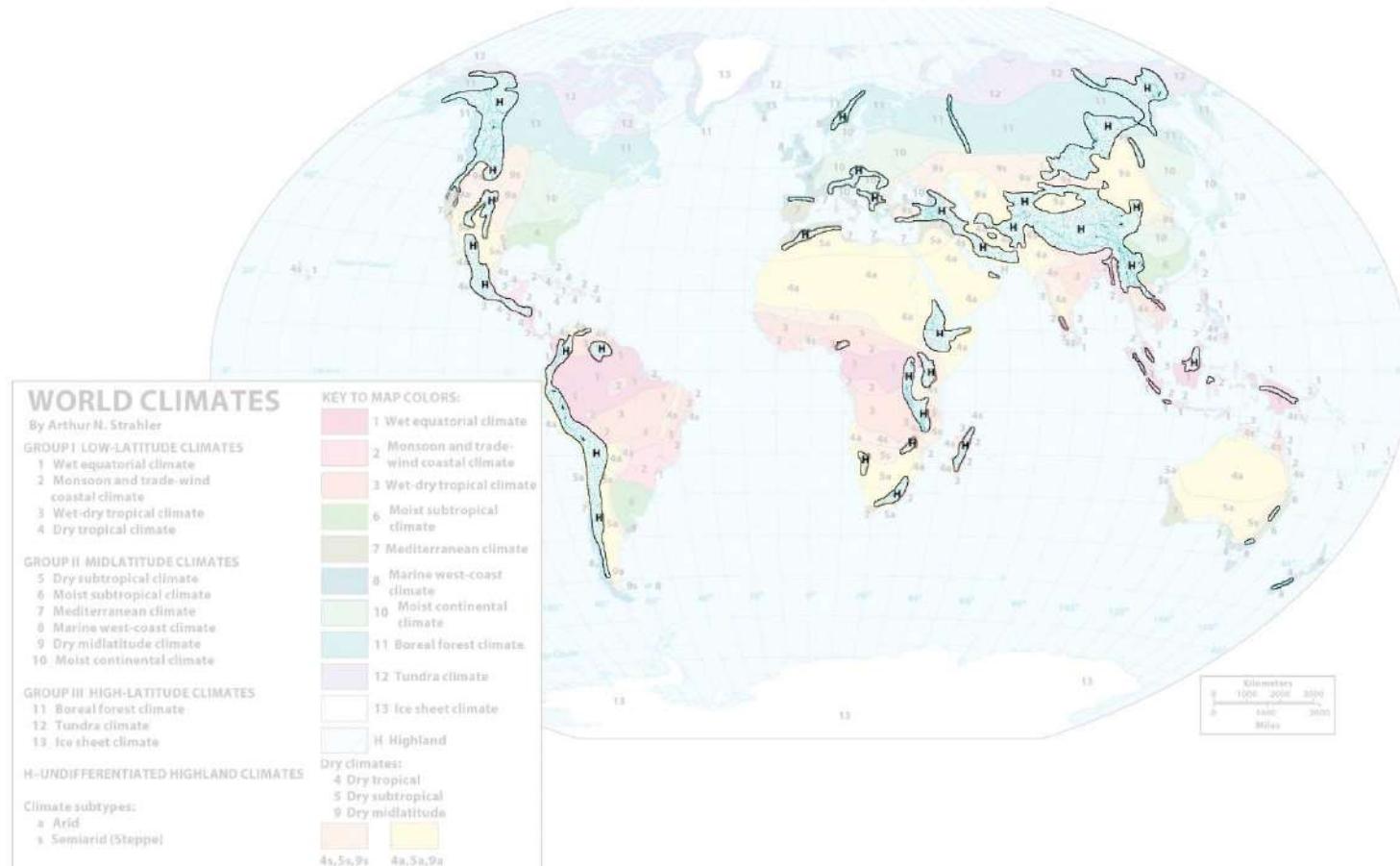
Elective Courses

4. Main climatic areas around the world and bioclimatic strategies. High latitude and undefined location climates.
5. Materials and constructive systems in vernacular architecture.
6. Vernacular architecture in Europe: Mediterranean coast.
7. Vernacular architecture in Europe: Atlantic coast.
8. Vernacular architecture in Europe: Central Europe.
9. Vernacular architecture in Europe: Nordic area.
- 10. Vernacular architecture in Europe: High mountain areas.**
11. Vernacular architecture: Singularities I: Caves.
12. Vernacular architecture: Singularities II: Architecture and production.
13. Vernacular architecture: Singularities III: External Influences.
14. Vernacular architecture and landscape.
15. Spanish traditional architecture.

Traditional, vernacular and historical architecture.

LESSON 10. Vernacular architecture in Europe: High Mountain

HIGHLAND CLIMATE



10. Vernacular architecture in Europe: High mountain.

HIGHLAND CLIMATE

As height increases, temperature, humidity and pressure decreases.

The slopes orientation conditions solar radiation and wind effects.

Depending on the shape of the mountain chains the characteristics of the weather variate.



BIOCLIMATIC STRATEGIES

In this latitude, the main strategies to achieve comfort are:

- Thermal insulation for energy preservation
- Thermal inertia
- Solar catchment

BIOCLIMATIC STRATEGIES

For the highlands climate, the characteristics are:

- Low shape factor
- Thick walls
- Use of wood
- Medium protected openings

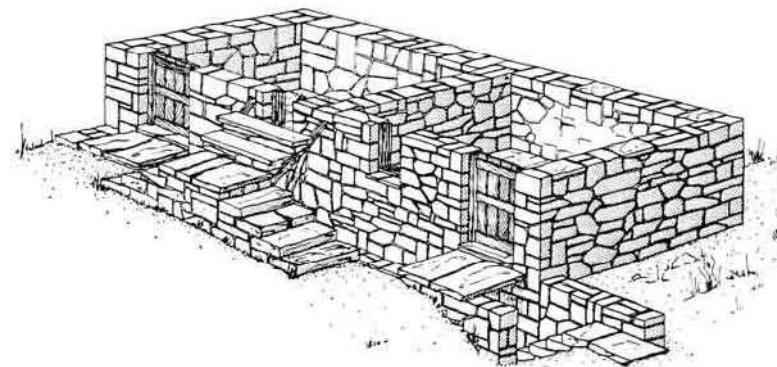
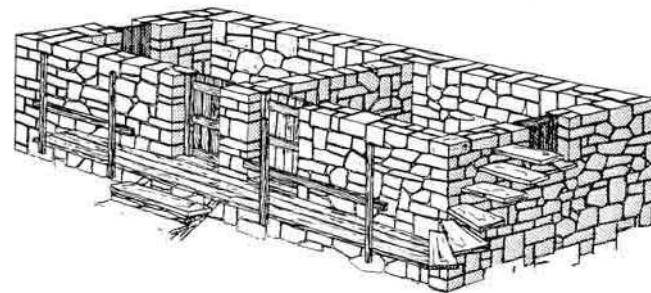
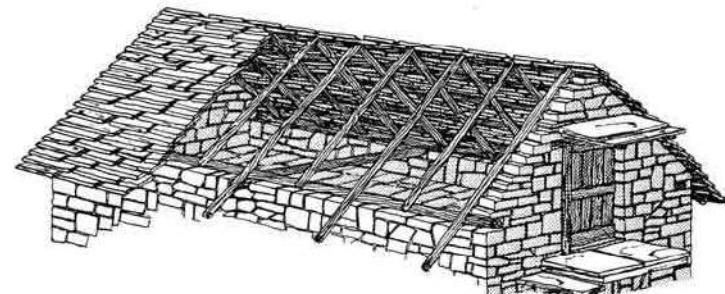
ARCHITECTURE'S CHARACTERISTICS ACCORDING TO THE CLIMATE

10. Vernacular architecture in Europe: High mountain.

Vernacular buildings in the high mountain regions are perhaps best typified by the "alpine style"

At the highest elevations, most of the buildings are rudimentary and occupied seasonally

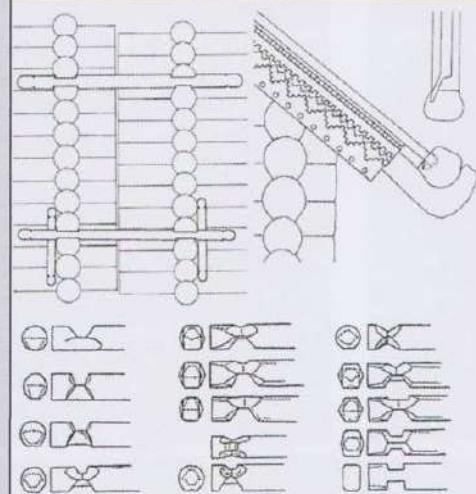
Timber and stone, as building materials, are both common



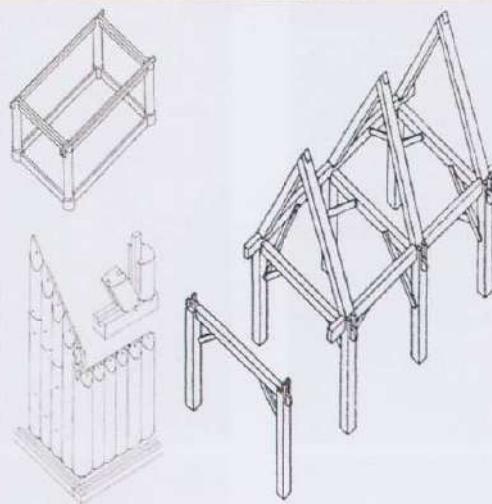
AVAILABLE MATERIALS

10. Vernacular architecture in Europe: High mountain.

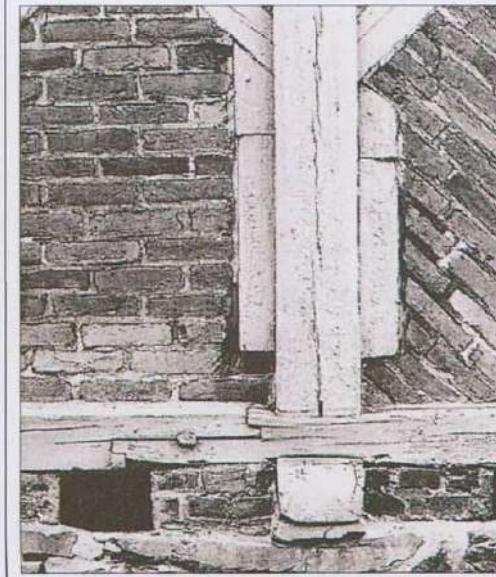
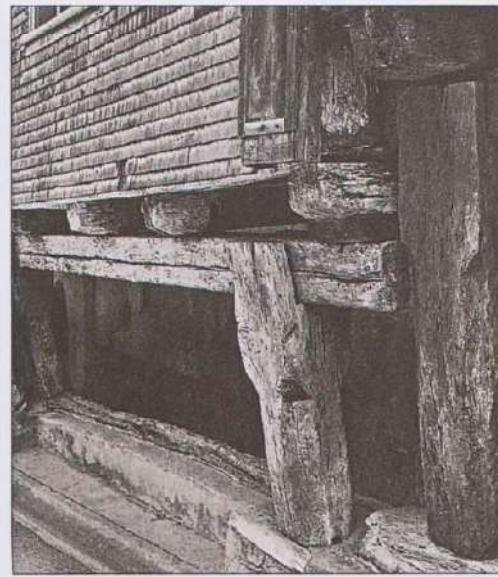
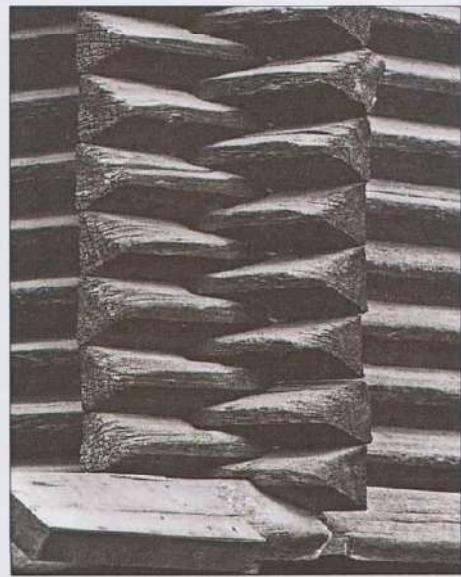
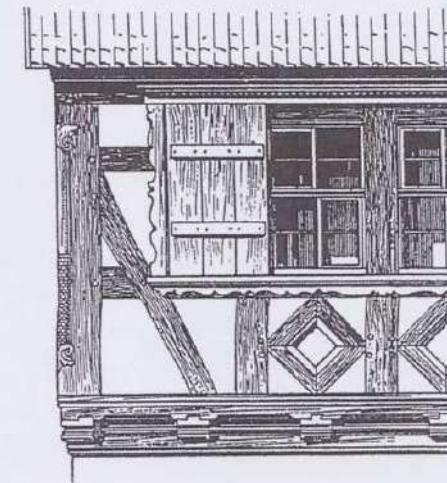
STRUTTURE ORIZZONTALI
Sistema a *blockbau*
Metodo a *laft*



STRUTTURE VERTICALI
Strutture a telaio
Metodo *stav* a pali portanti



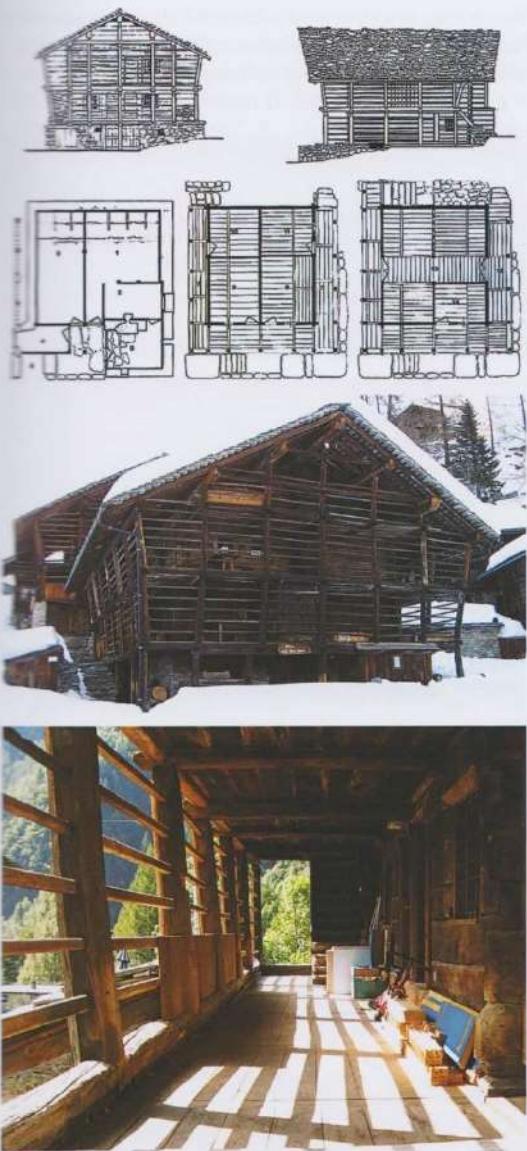
TECNICHE MISTE
Strutture portanti verticali in legno e
tamponamenti in muratura



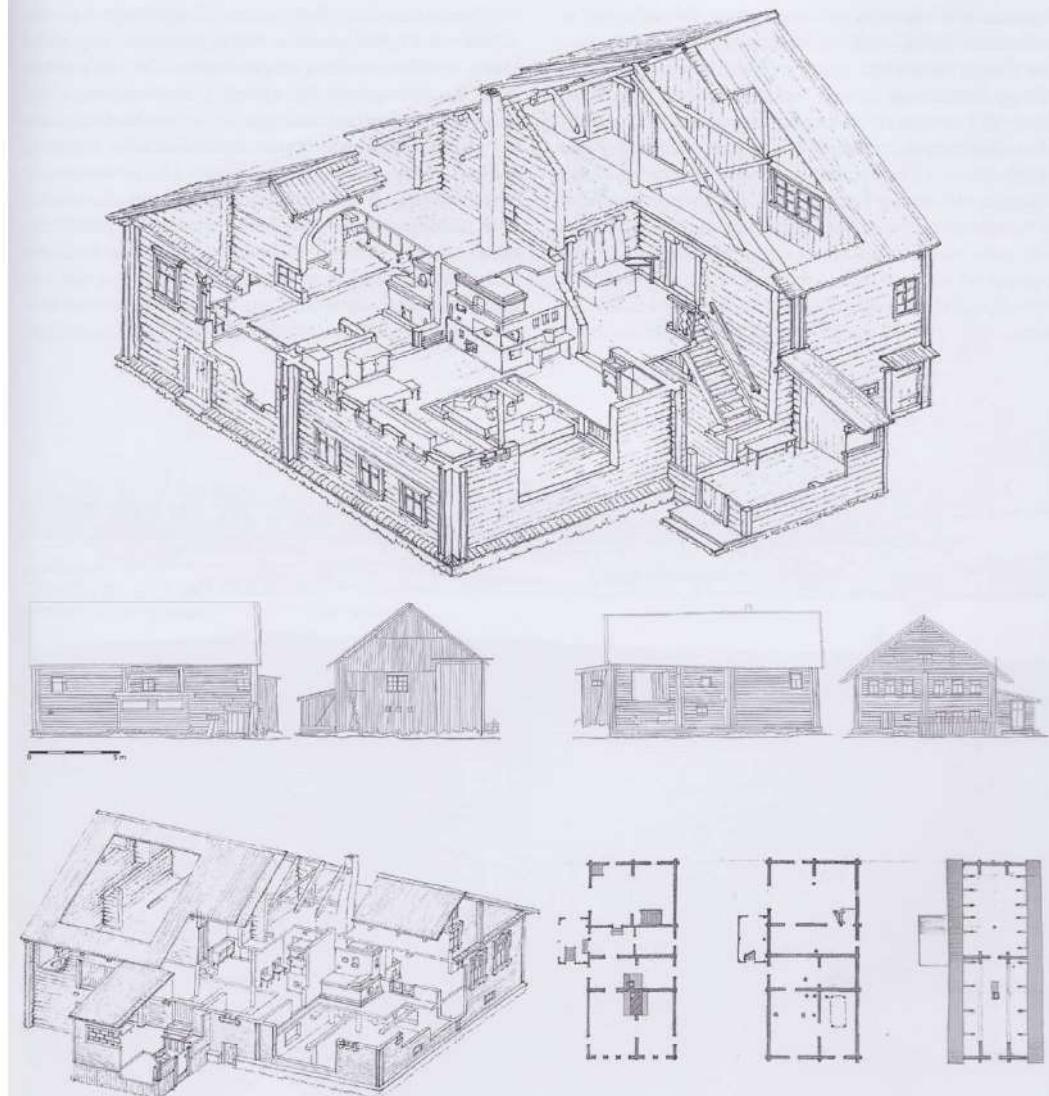
10. Vernacular architecture in Europe: High mountain.

STRUCTURAL AND CONSTRUCTIVE SYSTEM

10. Vernacular architecture in Europe: High mountain.

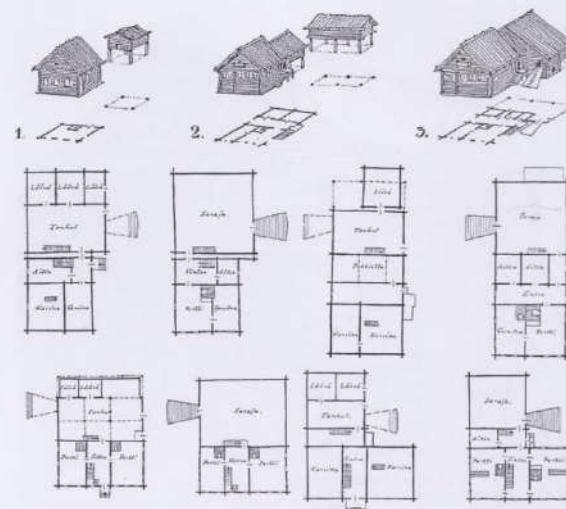
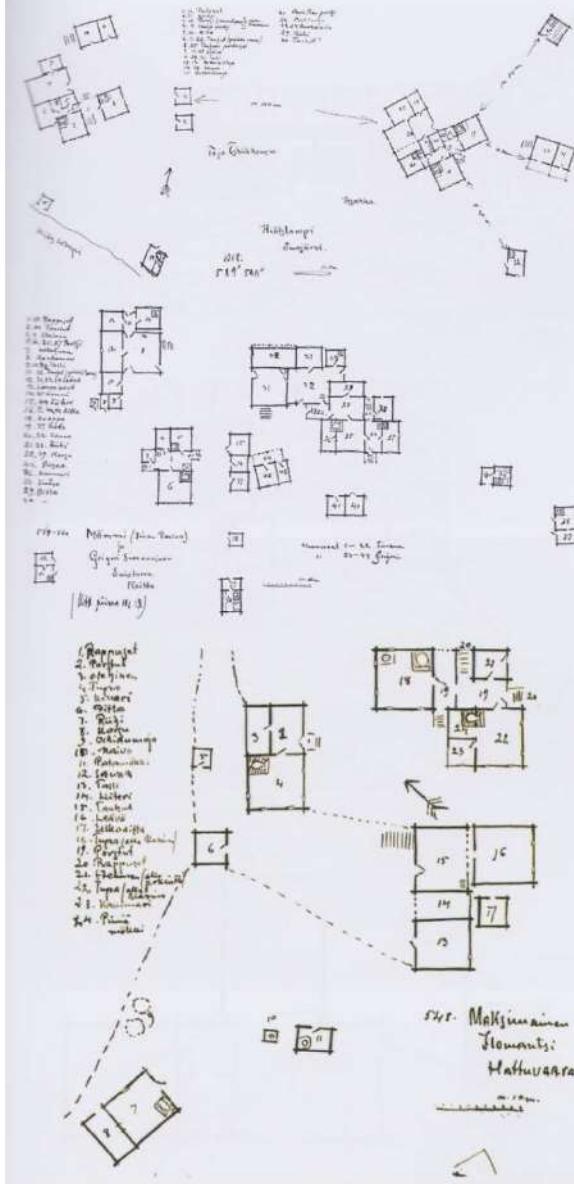


I caratteristici loggiati realizzati con montanti inclinati al piano superiore per aumentare ulteriormente l'area coperta, protetti da traverse orizzontali di legno.



Volendo scendere ancora più di scala, facendo l'esercizio mentale di studiare questi insediamenti dal generale al particolare, è interessante constatare che anche all'interno della cellula base dell'abitazione l'organizzazione degli spazi e delle funzioni è tutt'altro che casuale.

10. Vernacular architecture in Europe: High mountain.



Da C. Linberg, J. Hautala, Aunuksen Asunnoilla, Porvoo, Helsinki, Werner Soderstrom Osakeyhtiö, 1943, pp. 14-17. Sullo sviluppo della casa careliana, esempi di planimetrie delle principali abitazioni storiche del villaggio di Southjärvi.



79 Maisulan majatalo. Suistamo. (R. M. Puolajainen, 1970)



106 Lentijoen kylän talot. Äänekoski.

10. Vernacular architecture in Europe: High mountain.

EXAMPLES

10. Vernacular architecture in Europe: High mountain.

Boltigen, Bern (Switzerland)



[Source: Ludovic Péron - Own work, CC BY-SA 3.0.](#)

Valchava, Graubünden (Switzerland)



[Source](#)

10. Vernacular architecture in Europe: High mountain.



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