HISTORY OF ARCHITECTURE 1. THE BEGINNINGS AND VERNACULAR ARCHITECTURE

Vernacular Architecture in America and Europe

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Political Correct name: **First Nations** (Canada) or **Native Americans** (USA)
INUIITS
Igloo, or snowhouse was a winter dwelling utilized by Inuit across the Arctic. Some Inuit spent most of winter in semisubterranean houses made of driftwood and whalebone and only used the igloo when travelling. Others relied on igloos for housing through the entire winter. The dome-shaped igloo was built spirally form within. The structure derived its strength from the key block, inserted at the apex of the roof. A series of these domes were constructed, connected by passageways, to house 15-20 people. Furniture consisted of cooking pots, oil lamps and low platforms. Temperatures inside the igloo were just below freezing or warmer.

Quinzhees are not usually meant as a form of permanent shelter, while igloos can be used for seasonal and year round habitation. The construction of a quinzhee is slightly easier than the construction of an igloo, although the overall result is somewhat less sturdy and more prone to collapsing in harsh weather conditions. Quinzhees are normally constructed in times of necessity, usually as an instrument of survival, so aesthetic and long-term dwelling considerations are normally exchanged for economy of time and materials.
QUINZHEE / LIGHT (DISPOSABLE) SHELTER MADE OF SNOW / INSTRUMENT OF SURVIVAL
INUIT HOUSES

walls: turf, stone / structure: whalebone, driftwood / covering: sealskin
POW-WOW / TRADITIONAL ANNUAL DANCE-SHOW / T'SU TSINNA NATIONS / ALBERTA / CANADA
Roseanne Supernault
actress / east prairie / Alberta / Canada

Tontantzin Carnelo
actress / kumeyaay tribe / south California / USA
TENT / TIPIS OR TIPEES

conical skin-and-frame dwelling used by nomadic Plain Indians
TIPEES / SIKSILA NATIONS / BLACKFOOT CROSSING / ALBERTA / CANADA
ROUND SHAPED HOUSE / WIGWAM

curved framework covered with reed mats or bark (similar than pigmy or masai hut)
ROUND SHAPED HOUSE / WICKIUP

Apachee and Tonkawa tribes
ROUND SHAPED HOUSE / EARTH HOUSE

real framework covered with logs and earth
Pit House / Mesa Verde / Colorado

Hogan / Navajo / Monument valley / Arizona
LONG HOUSE / NORTHEAST TYPE
Haudenosaunee = The nation of Long House / Iroq = rattlelesnake (Algonquin)

Iroquoian tribes (union of 5, later 6 tribes = Six Nations) / Southeast shore of lake Ontario / Iroquoians = covering with elmwood-bark / Hurons = covering with cedar-bark / longest building: 8 m wide, 94 m long (Moyer site, Ontario)
Village with long houses / Algonkin tribe
LONG HOUSE / LOG HOUSE

Winter Hogan / Navajo

Prairie-house / Cabin / used by the first white pioneers
SPECIAL HOUSES / FORTIFIED SETTLEMENTS / PUEBLOS

Pueblo Bonito / anasazi tribe / Chaco-canyon / New Mexico
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Built between 1020-1060 (by dendrochronology: 919-1130) / 650 rooms / population: 500-1000 / the limestone surrounded the settlement was too soft for building under the edge of the cliff (like in Mesa Verde) 4 periods / they cutted all trees in its environment / serious drought in its last few years → moved away
Pueblo Bonito, the largest and best known Great House in Chaco Culture National Historical Park, northern New Mexico, was built by ancestral Pueblo people and occupied between AD 828 and 1126.

Pueblo Bonito is divided into two sections by a precisely aligned wall, running north to south, through the central plaza. A Great kiva is placed on either side of the wall, creating a symmetrical pattern common to many of the Great Houses. In addition to the great kivas, over thirty other kivas or ceremonial structures have been found, many also associated with the large central courtyard. Interior living spaces were quite large by the standards of the Ancient Pueblo.

The site covers almost two acres (8,000 m²) and incorporates at least 650 rooms, with some estimates rising to 800. In parts of the village, the tiered structure was four and five stories high. During later construction, some lower level rooms were filled with debris to better support the weight of the upper levels. The builder’s use of core and veneer architecture and multi-story construction produced massive masonry walls as much as three feet (1 m) thick.
A kiva is a room used by modern Puebloans for religious rituals, many of them associated with the kachina belief system. Kiva architecture became more elaborate, with tower kivas and great kivas incorporating specialized floor features. For example, kivas found in Mesa Verde were generally keyhole shaped.
SPECIAL HOUSES / SETTLEMENT UNDER THE EDGE OF THE CLIFF

Rock-palace / Mesa Verde National Park / Colorado
Rock-palace / anasazi / Mesa Verde Nemzeti Park / Colorado

In 2600 m high / between 1190-1260 / moved away: around 1300 (24 year-long drought) / 150 room + 23 kiva = 400 residents
Mesa Verde is best known for a large number of well preserved cliff dwellings, houses built in shallow caves and under rock overhangs along the canyon walls. The structures contained within these alcoves were mostly blocks of hard sandstone, held together and plastered with adobe mortar. Specific constructions had many similarities, but were generally unique in form due to the individual topography of different alcoves along the canyon walls. In marked contrast to earlier constructions and villages on top of the mesas, the cliff dwellings of Mesa Verde reflected a region-wide trend towards the aggregation of growing regional populations into close, highly defensible quarters during the 1200s.

While much of the construction in these sites conforms to common Pueblo architectural forms, including Kivas, towers, and pit-houses, the space constrictions of these alcoves necessitated what seems to have been a far denser concentration of their populations. Mug House, a typical cliff dwelling of the period, was home to around 100 people who shared 94 small rooms and eight kivas built right up against each other and sharing many of their walls; builders in these areas maximized space in any way they could and no areas were considered off-limits to construction.

For most of the 12th and 13th centuries, known archaeologically as the Classic Period, the Ancient Puebloans Indians lived in the cliff dwellings.

**Cliff palace:** is the largest and best-known of the cliff dwellings in Mesa Verde. The site has 150 identified rooms and 23 kivas.

**Spruce Tree House:** Located on Chapin Mesa, this cliff dwelling is easily accessible and well preserved. The ruins include a kiva with a restored roof which visitors can enter.

**Square Tower House:** The tower that gives this site its name is the tallest structure in Mesa Verde. This cliff dwelling was occupied between AD 1200 and 1300.
VERNACULAR ARCHITECTURE IN EUROPE

The European vernacular architecture was determined by agriculture and animal husbandry (with stable).

The nomadic grazing animal keeping stopped 1,000 years ago. Fishing didn’t make an impression on architecture. The hunting, gathering and pastoral life was productive only of temporary buildings.

Lot of climate zones

Variety of topographical conditions

Lot of nations

Lot of languages

Same religion

Same culture
IZBA (ИЗБА) – EASTERN SLAVONIC REGION: UKRAINE, RUSSIA

SINGLE-ROOM LOG HOUSE

FARMHOUSE WITH COURTYARD (Voronezh, Russia)
There is a courtyard on the centre surrounded by stable, sty, barn and storages. There is a one-celled IZBA in the hearth of farmhouse.

THE DEVELOPMENT OF IZBA
1. WITH ENLARGING:
   Double-room-house: living area, pantry + porch
   Triple-room-house: there are two rooms in both side of communal entrance
2. WITH DIVIDING:
The main area is dividing into three spaces: kitchen, living roma and bedroom
DEVELOPMENT OF IZBA, WESTERN SLAVONIC REGION, POLAND

HOUSES FROM OPEN AIR MUSEUM IN SANOK, POLAND

Typical: triple-celled plan (living room, entrance, storage)

Common: The stable and the triple-celled house are built under same roof.

Living room: real IZBA with huge oven heated from the room. There is no chimney, the smoke is streaming through the windows or roof.

Living house with white-room. There are two rooms in both size of entrance. The IZBA on left, and the white-room on right. There is no oven in white-room, it is used for living only in summer.

Roof-covering: thatch, straw or board (with 2 or 3 layers)
RURAL HOUSES IN BALTIC STATES (ESTONIA AND LATVIA)

THE SMOKY-HOUSE IS REMAIND IN THE CENTRE OF HOUSE

A. Typical Estonian house

There is an INNER HOUSE in the centre of house with oven. It was built of logs or stone. The inner house is surrounded by other rooms: there are two living rooms on the right end, and on the left a huge barn. The living rooms are opened to the inner-house. This house shows the intention of isolation to very cold weather of winter.

B. Typical Latvian house

There is a BLACK KITCHEN in the centre of house made of stone. It is a big oven and heating system, which heats all rooms directly. The biggest room is IZBA.
A. Very old house (1668) from Southern-Norway
It looks like an IZBA (1), with entrance (2) and storage. The additional rooms are covered with floor. The roof is opened into The space of living room. There is a vent-hole on the roof.

B. The development of *norwegian Rural house*
1. Living room, 2. entrance, 3. bedroom, 4. long storage
The *open firepit moved into the corner* and it become into real fireplace. The old storage become into bedroom or kitchen. There is a white-room (1) in the opposite of IZBA without heating for summer living.
STORAGES IN NORWAY – STABBURS
It used to store food.
Below left: Stabbur in Numedal, right: Stabbur in Setesdal, 1890.
The BLACK-HOUSE is known in Western-Norway, Iceland, the Hebrides and it used to be common in Scottish Highland. It preserved the memory of germanic long house. It was generally built with double wall dry-stone walls packed with earth and wooden rafters covered with a turf roof, although reed thatch was occasionally used as roofing material. The floor was generally flagstones or packed earth and there was a central hearth for the fire. There was no chimney for the smoke to escape though. Instead the smoke made its way through the roof.

It was used to accommodate livestock as well as people. People lived at one end and the animals lived at the other with a partition between them. The old smoky houses were called black-house. The new houses were called WHITE-HOUSE in the Late 1800’s. These were designed to separate humans from their livestock and animals.

A. Typical Northern-Atlantic black-house from the Hebrides
B. Black-house with added stables
THE SCOTTISH BLACK-HOUSE ISLAND OF LEWIS, THE HEBRIDES (NW SCOTLAND)
The FACHHALLENHAUS (hall house structured into bays), also Hallenhaus, is a timber-framed farmhouse, which combines living quarters, byre/stable and a harvest storeroom under one roof. Until its decline in the 19th century, this rural, agricultural house style was widely distributed through the North German Plain, all the way from the Lower Rhine to Mecklenburg. Fachhallenhäuser still typify the appearance of many north German villages.

Above: Hall house from Vestfalia
1. barn, 2. stable for cattle, 3. stable for horses, 4. living area with fireplace, 5. room, 6. bedrooms

Below: Hall house from Baden
1. barn, 2. kitchen, 3. room, 4. storage, 5. stable, 6. attic for hay
FARM HOUSE, SWITZERLAND NORTHERN VERSION

La Recorne, Jura Canton

(the oldest parts of this house date back to the year 1617)

1. kitchen, 2. barn and stable, on the upper floor: attic for hay, 3. rooms

An arched doorway opens into a hallway that provides access to the living quarters and the stalls. The sous-grange serves simultaneously as a cart shed, storage area and workplace. In its interior, the farmhouse is an all-wood post-and-beam structure. A forest of beams supports the shingled roof. Access to the barn is via the ramp at the rear of the house. The large attic space contains two box-like rooms. A granary is used for keeping grain for flour, animal feed and seed. A small room provides accommodation for servants and harvest workers.

A long dark corridor leads into the living quarters. A large part of rural daily life took place in the kitchen. This one has a large wood chimney that is responsible for removing smoke from the hearth fireplace, the heating stove and the baking oven.
FARM HOUSE, SWITZERLAND SOUTHERN VERSION

The area of human living, animal husbandry and storages are separated from each other. These functions were satisfied in separated buildings.
A trullo (plural, trulli) is a traditional Apulian stone dwelling with a **conical roof**. They may be found in the towns of Alberobello, Locorotondo, Fasano, Cisternino, Martina Franca and Ceglie Messapica. Trulli were generally constructed as **dwellings or storehouses**. Traditionally they were built without any cement or mortar. This style of construction is also prevalent in the surrounding countryside where most of the fields are separated by dry-stone walls. The roofs are constructed in two layers: an inner layer of limestone boulders, capped by a keystone, and an outer layer of limestone slabs ensuring that the structure is watertight. Originally, the conical structure would have been built directly on the ground, but most of the surviving structures are based on perimeter walls.

1. terrace, 2. living room, 3. bedroom, 4. kitchen, 5. cultic room, 6. storage, 7. sty