

Spanish Colonial Architecture

Forts & Presidios



EUROPE

Mediterranean sea

EGYPT

ARABIA

PERSIA

INDIA

CHINA

SOMALIA

Indian Ocean

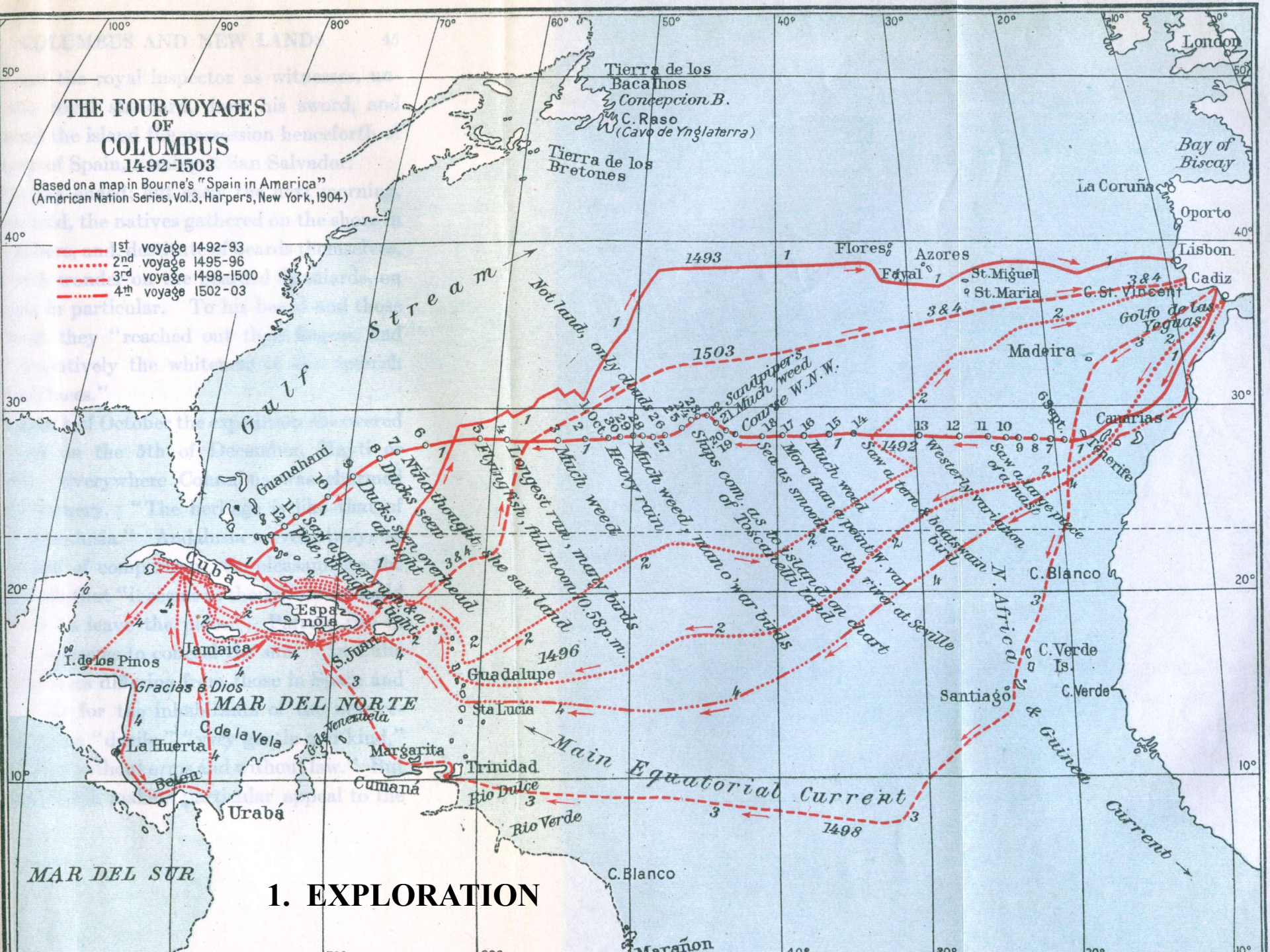
JAVA

Fall of Constantinople, 1453, ends Byzantine Empire and contact between Europe and the East

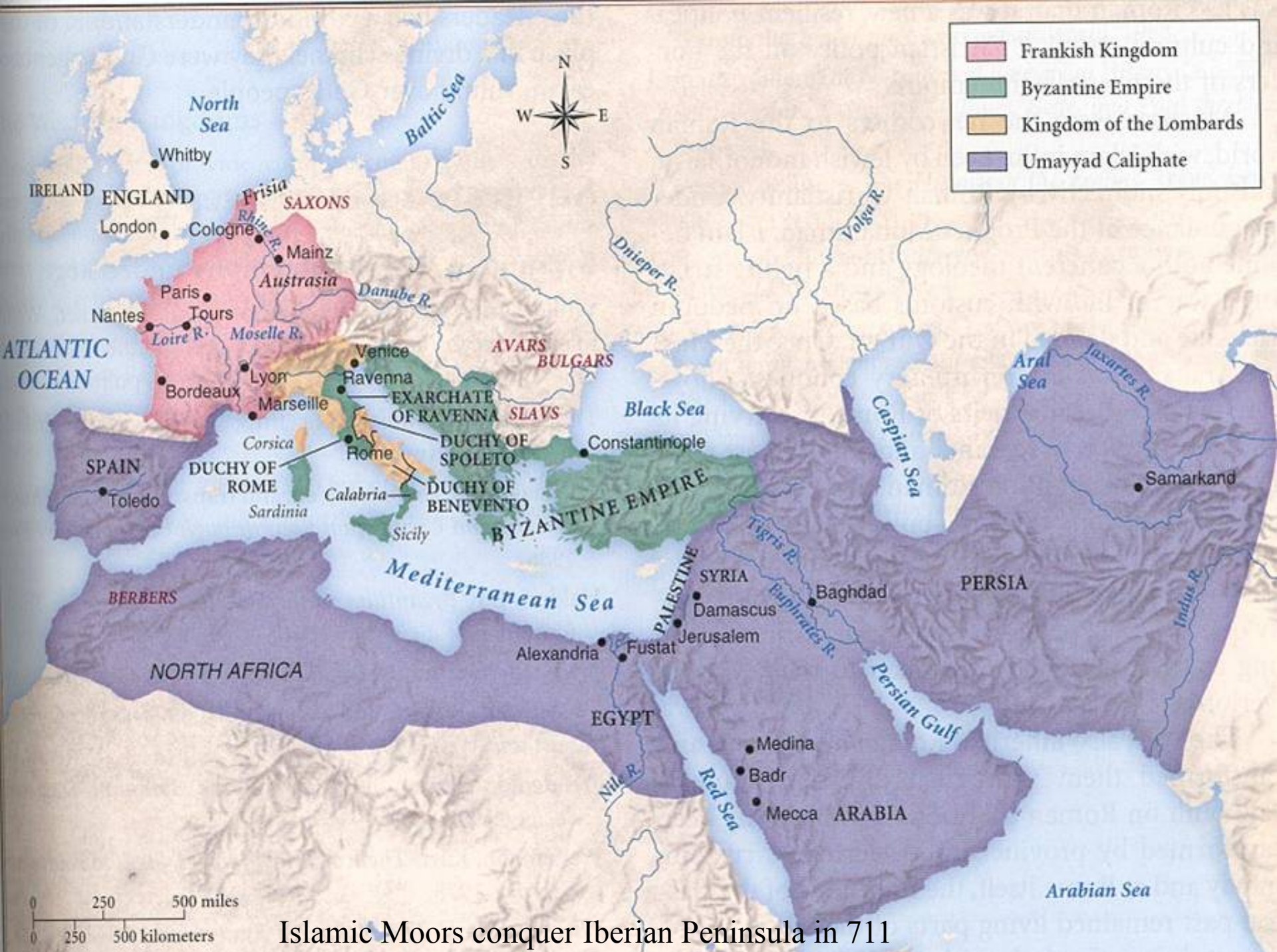
THE FOUR VOYAGES OF COLUMBUS 1492-1503

Based on a map in Bourne's "Spain in America" (American Nation Series, Vol.3, Harpers, New York, 1904-)

- 1st voyage 1492-93
- ⋯ 2nd voyage 1495-96
- - - 3rd voyage 1498-1500
- ⋯ 4th voyage 1502-03



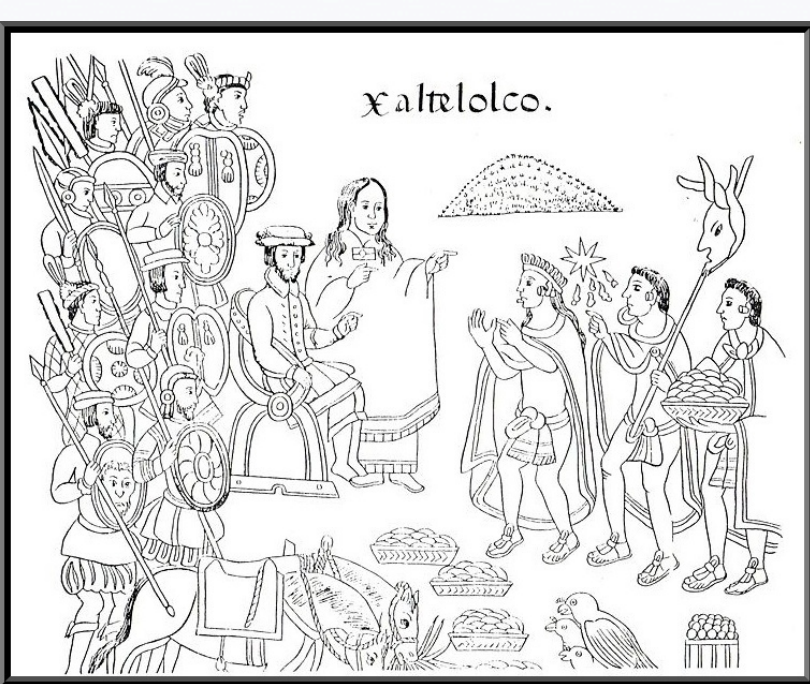
1. EXPLORATION



- Frankish Kingdom
- Byzantine Empire
- Kingdom of the Lombards
- Umayyad Caliphate

Islamic Moors conquer Iberian Peninsula in 711





2. CONQUEST

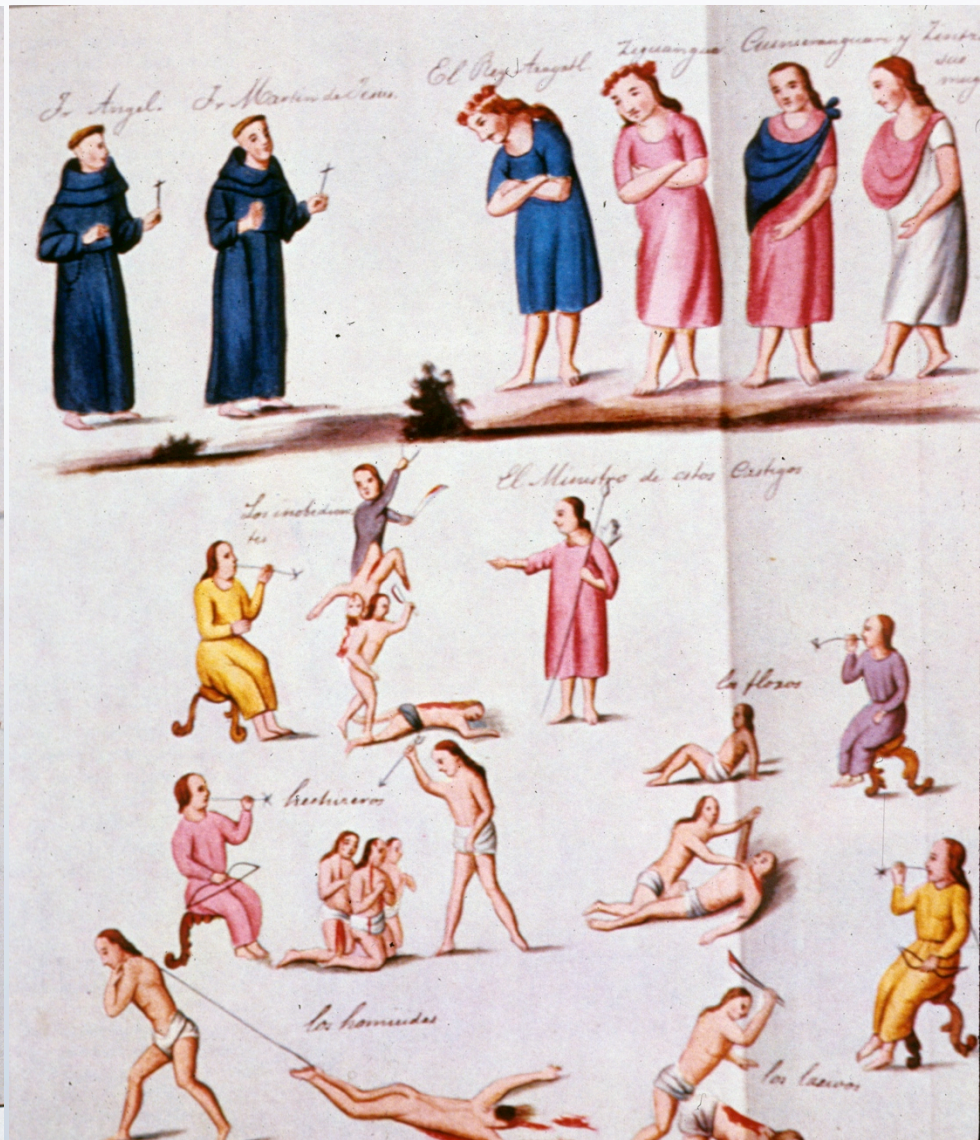
Fall of Tenochtitlan (present-day Mexico City)





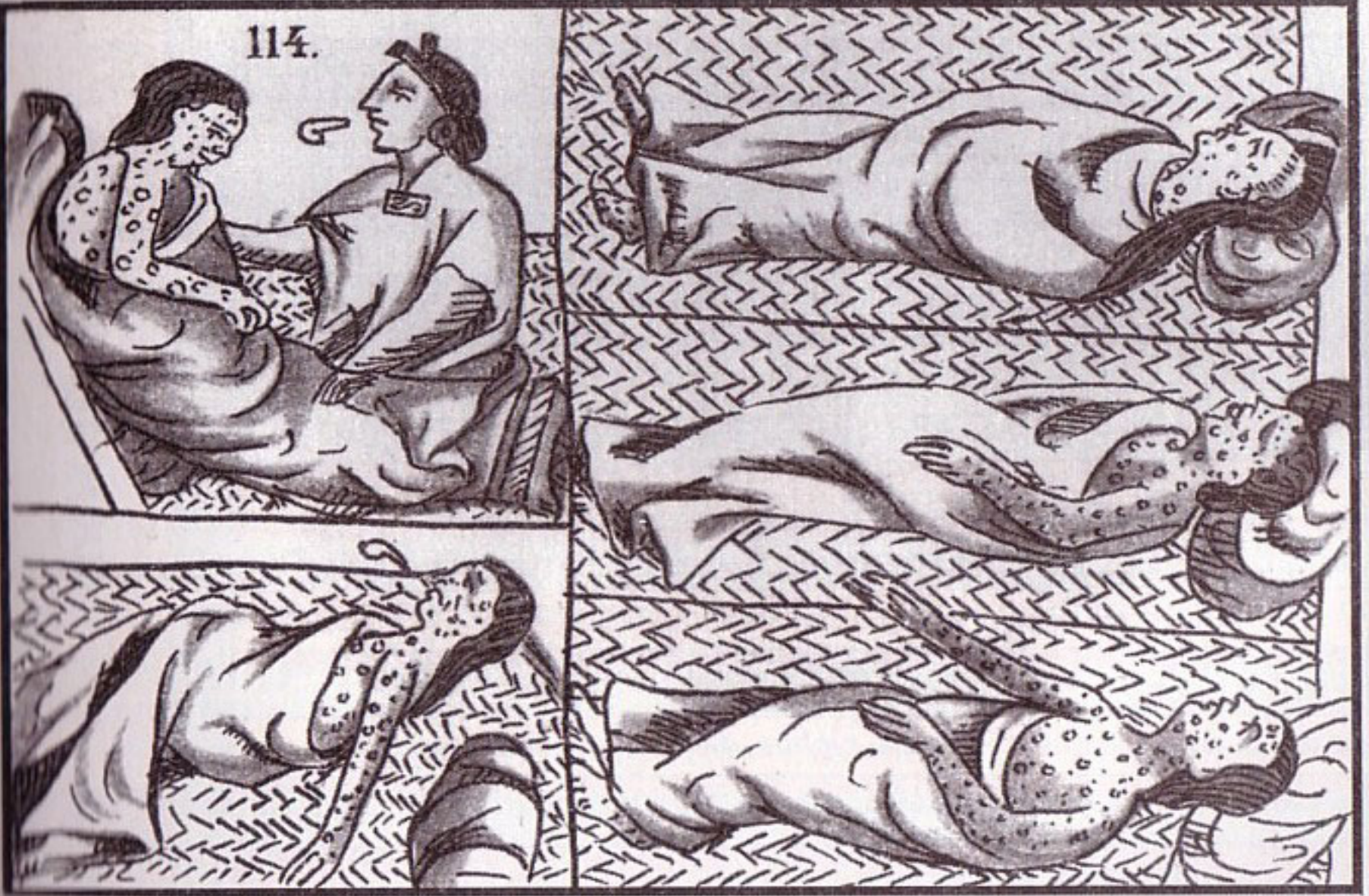
The attentive audience (top) hears the word of God from a priest. At lower left, docile Indians, surely aware by now of the temptations offered by lurking devils with bat wings, lashing tails, and cloven hoofs, follow a Spanish official.

At the lower right the eager and chastised converts, their faith, education, and conversion completed, are baptised into the faith at last. Friar Beaumont made his observations as a surgeon and teacher at Mexico City's royal hospital.

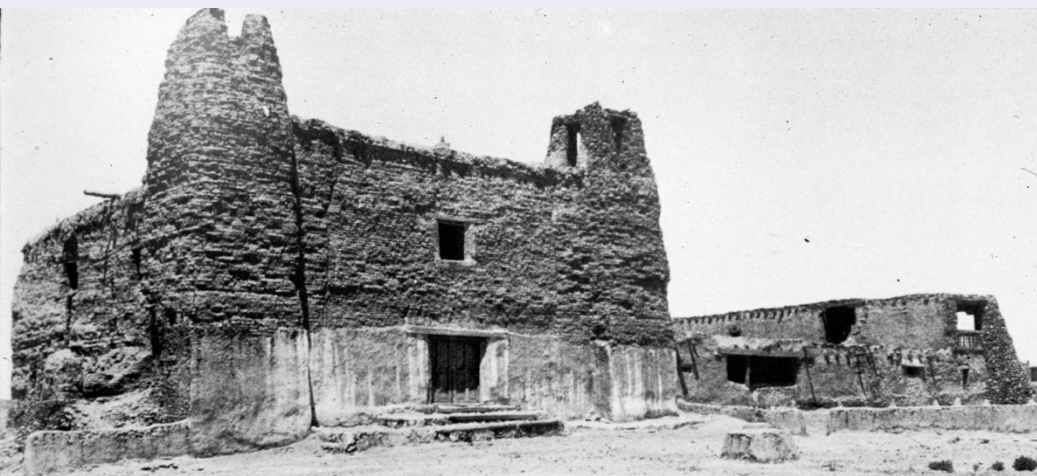


3. PLANTING: Conversion of Natives

114.



3. PLANTING: Diseases like smallpox weakened physical and emotional resistance of Natives



PLANTING: The architecture of Spanish conquest and colonization

1. Fort
2. Presidio
3. Mission

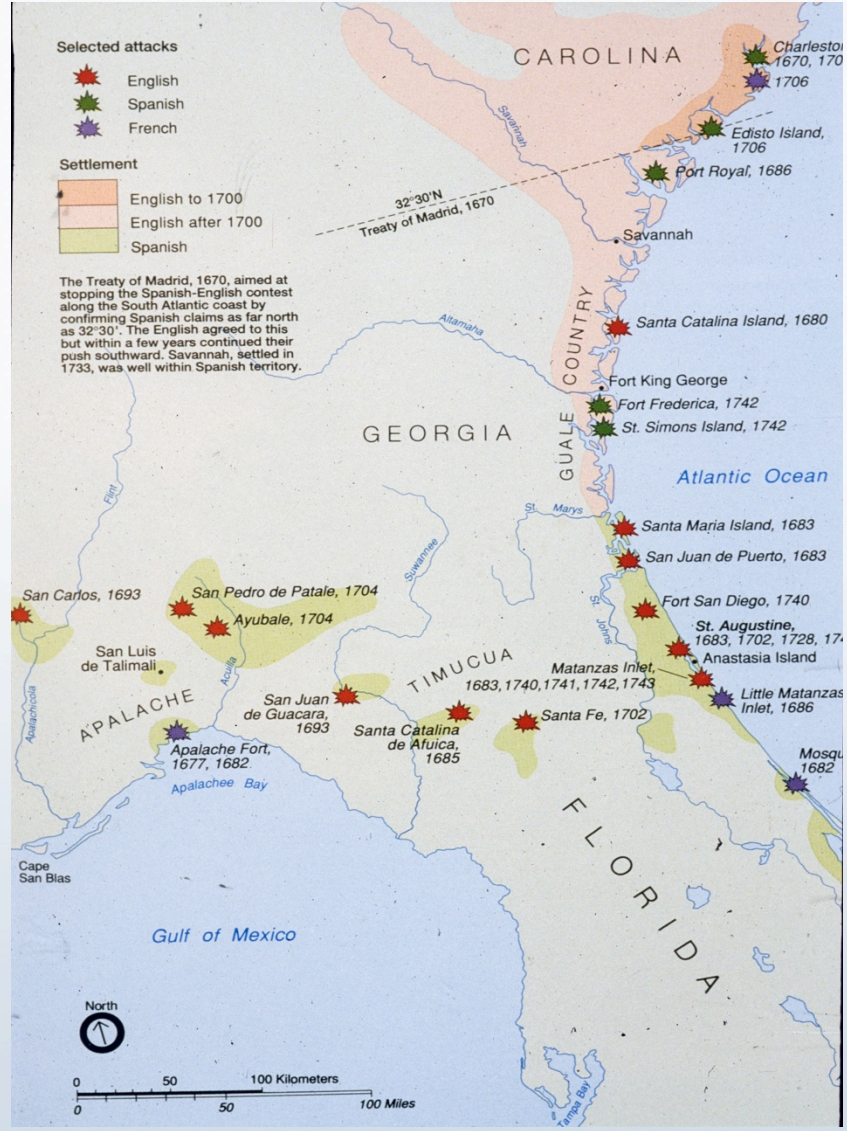


Castillo San Marcos

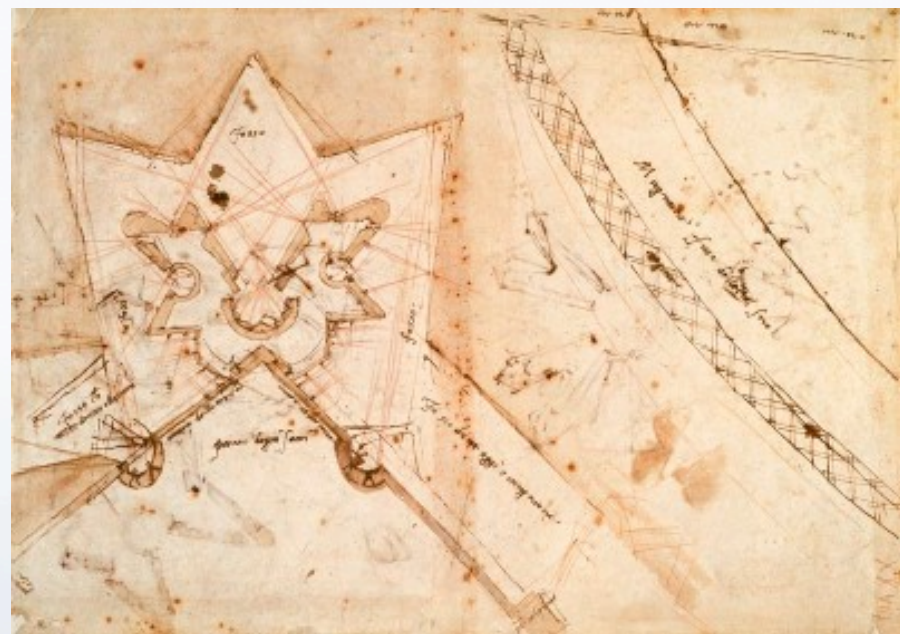
St. Augustine, FL

1672 – 1738

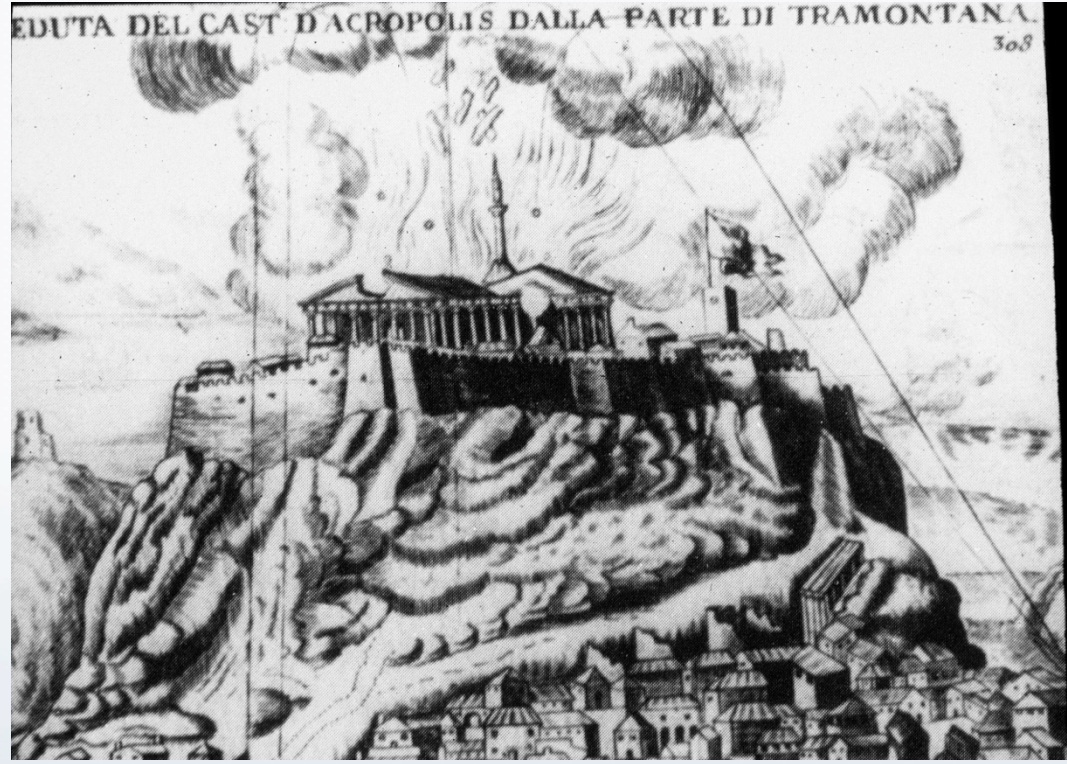
Spanish, after Vauban's designs for European fortifications



Fort Caroline
1562
Parris Island, SC

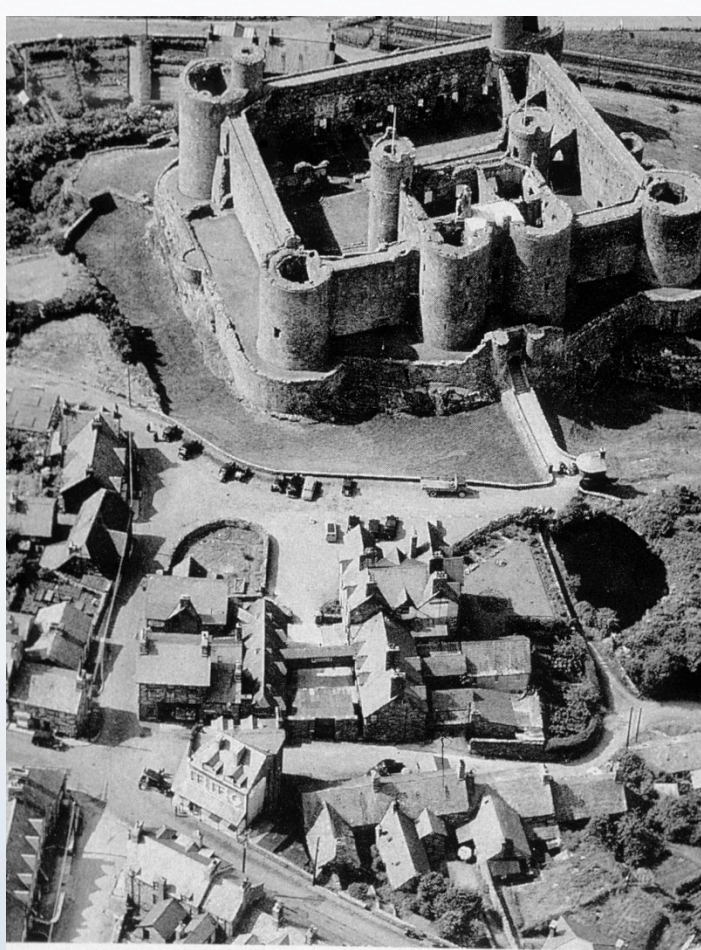


16th-Century design of fortifications



Europeans refine gunpowder formula in the 1490s

Destruction of the Parthenon, 1687

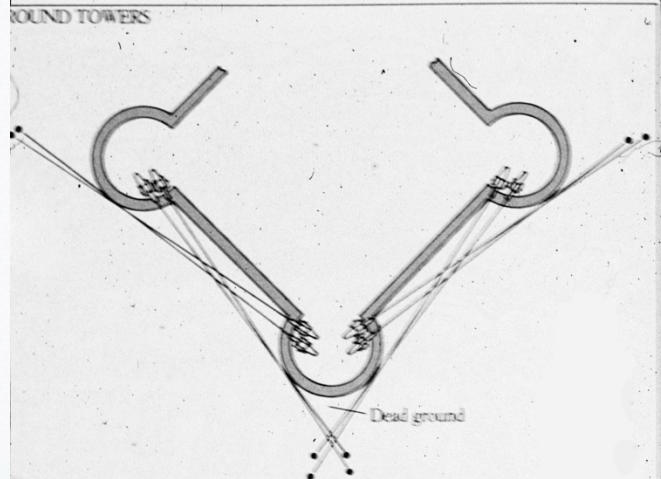
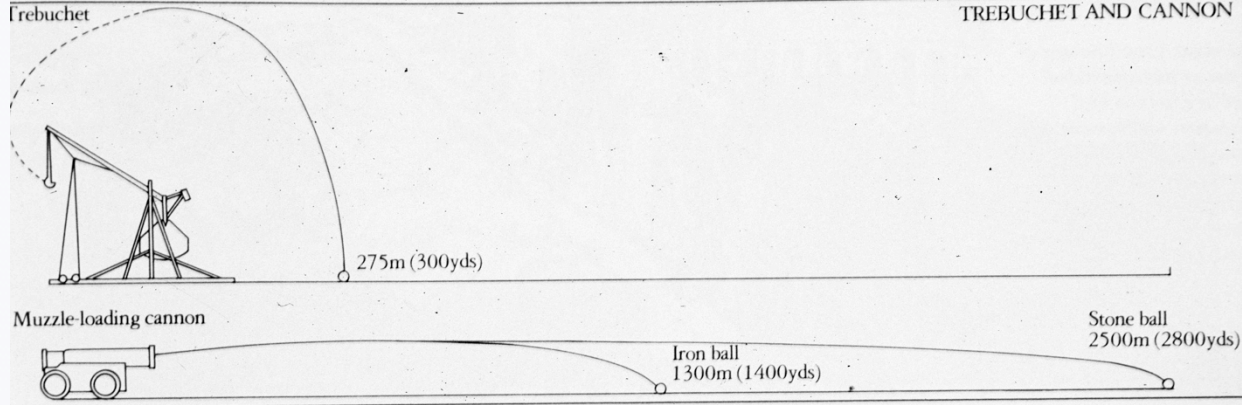


5 Air view, Harlech Castle. England. 1286-90

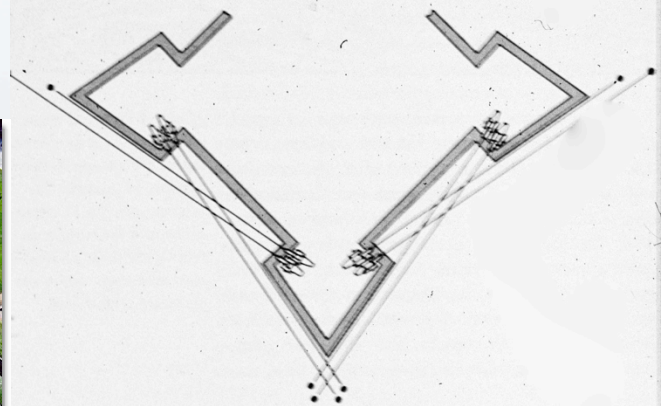


Trebuchet

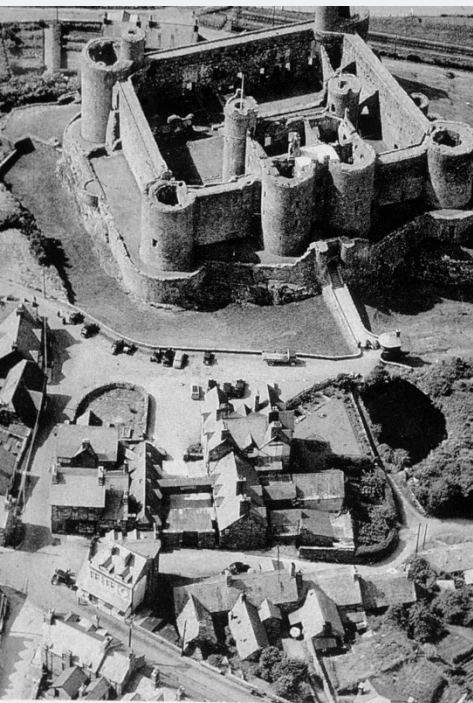
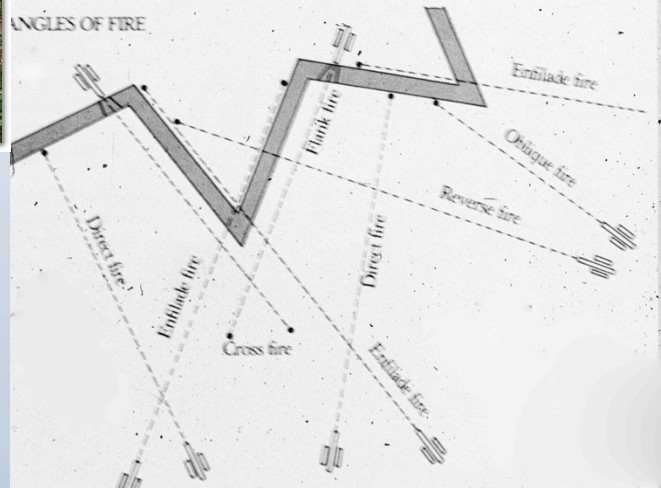
TREBUCHET AND CANNON



9 ARROWHEAD BASTIONS

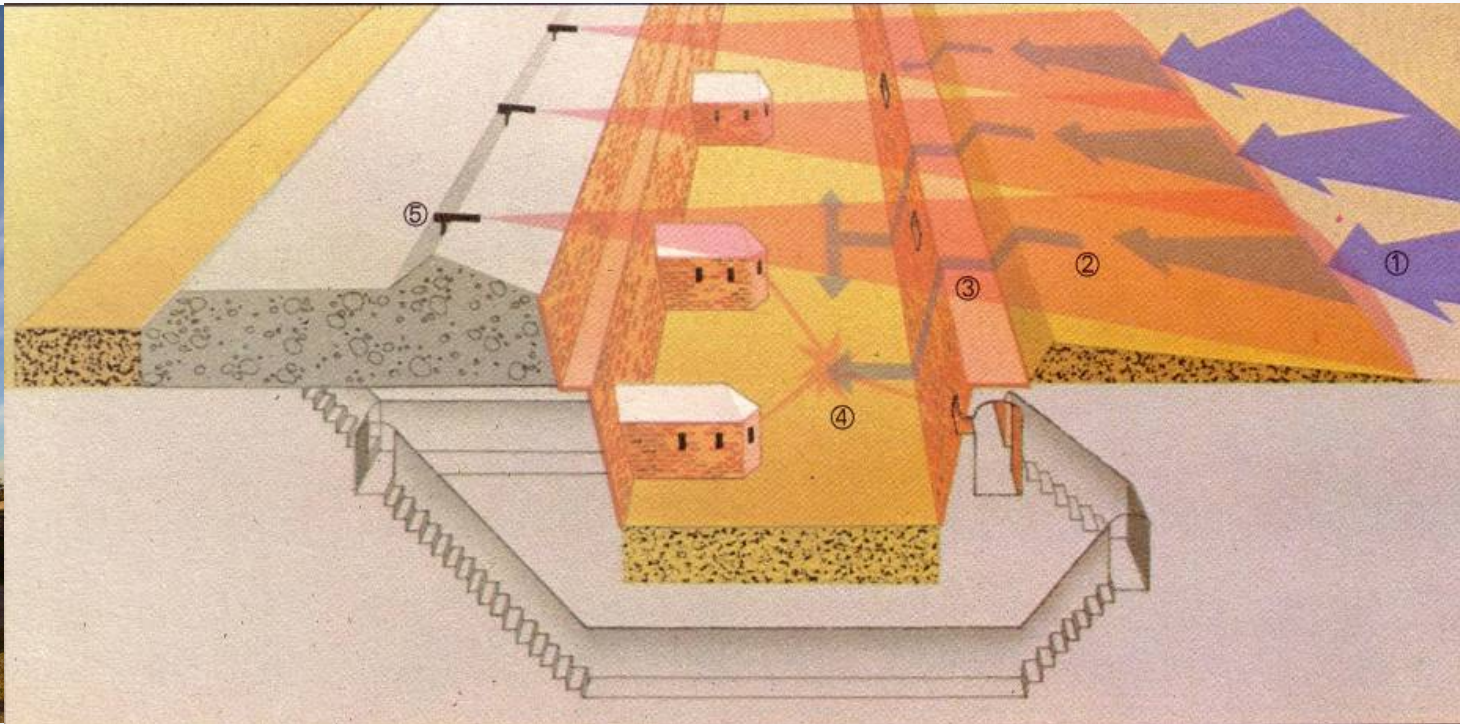


ANGLES OF FIRE



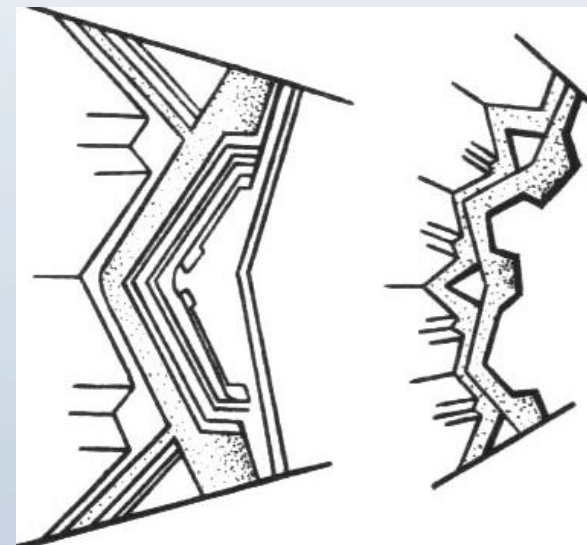
Aerial view, Harlech Castle. England. 1286-90



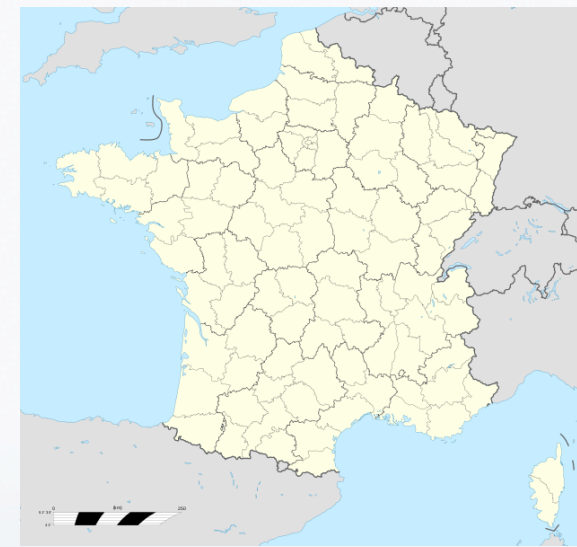


Renaissance developments in fortification:

1. Glacis – low, ramped earthen works
2. Revetments – or ‘firing steps’ platforms behind the glacis
3. Dry moat with firing stations
4. Low battered walls of main fort
5. Arrowhead bastions



Above: Arrowhead Bastions



Neuf-Brisach
Border of Germany
1697
Marquis de Vauban



Palmanova
Border of Slovenia
1593
Vicenzo Scamozzi



Castillo de San Marcos

Castillo de San Marcos National Monument
Florida

National Park Service
U.S. Department of the Interior



Use this exploded 'bird's-eye' view to help find your way as you explore more than 300 years of Florida history. The layout that the Spanish engineer Ignacio Diaz created for the Castillo de San Marcos is simple and straightforward. This fortress is a hollow square with diamond-shaped bastions at each corner, with only one way in or out. In the bombardier storerooms that surround the central *Plaza de armas* you

will find museums highlighting various chapters of the fort's long history. A good place to start is the corner rooms next to the well. Restrooms are located under the arched stairway leading to the gundeck. After you finish exploring the rooms below, make your way up the stairs and gaze out upon the waters of Matanzas Bay. From this commanding position, a garrison of Spanish troops safeguarded St. Augustine during the turbulent colonial era. Later English and then American troops also saw service here. All stood watch faithfully over the land Juan Ponce de León named "La Florida."

For Your Safety
As you explore these ancient rooms, please watch your step. Be careful of irregular steps and loose, uneven surfaces.

For the Fort's Safety
Although the Castillo is more than 300 years old, most of the damage to it has resulted not from past battles or sieges but from thousands of people each year. The fort is constructed of a unique sedimentary rock called *Coquina*, which, despite its obnoxious strength, is very fragile and susceptible to wear. Please do not climb on the walls or sit on the stone surfaces. Also do not climb or sit on the cannon.

Shot Furnace
The U.S. Army filled in the east side of the moat in 1842-44 and mounted sea coast artillery pieces along the seawall. The shot furnace heated cannonballs until red hot. This "hot shot" was then fired at an enemy's wooden ships to set them afire.

Powder Magazine, 1675-1687
This was the only vaulted chamber completed when the Castillo was built (the rest were added during "modernization"). Its thick coquina walls were buried in the earth, full of San Carlos Bastion to protect the fort's gunpowder from fire or enemy shot. Lack of ventilation, however, created such a high level of dampness inside the small room that it proved unsuitable for storing the powder. When larger, better vaults were built, the powder was moved and this room was used for other things.

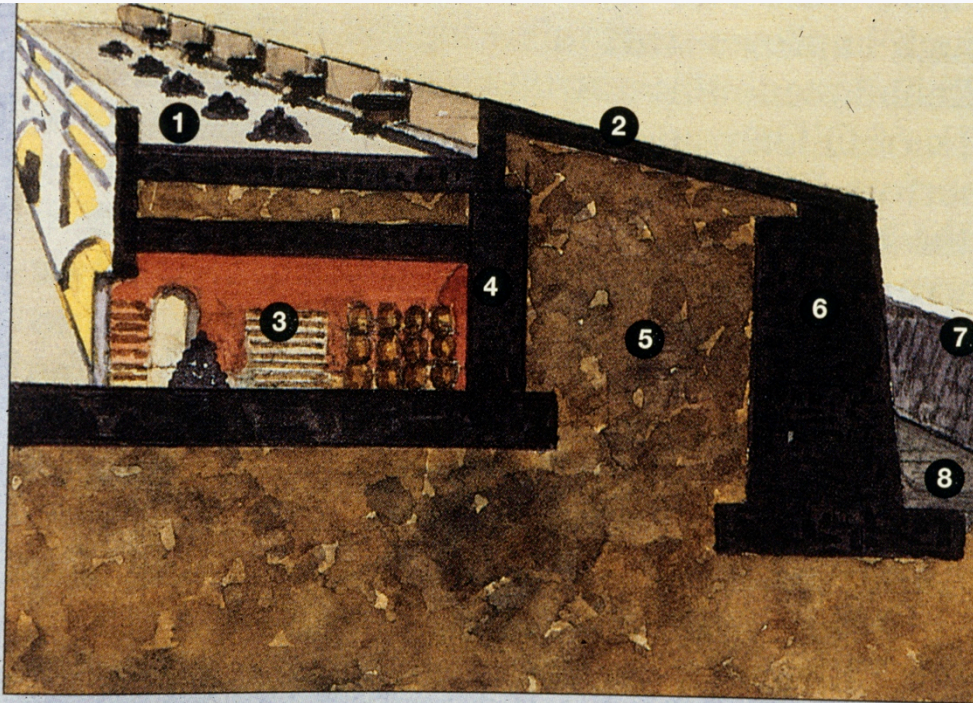
British Room, 1763-84
British troops moved to St. Augustine after Spain ceded Florida to Great Britain in exchange for the fortified harbor and city of La Habana, Cuba, in 1763. Wooden second floors, such as the one reconstructed in this easement, were built in the high Spanish vaults to provide more space for quarters and supplies in case of need. British rule lasted for 21 years. Florida was returned to Spanish rule at the close of the American Revolution in 1783.

Guard Rooms
St. Augustine was a garrison town or *presidio* and no one lived inside the Castillo. The soldiers lived in town with their families and came to the fort to stand a rotating guard duty (usually 24 hours). At such times, they slept and prepared their meals in these rooms. The large fireplaces offered warmth on chilly days and provided an area for cooking. The platforms attached to the walls served as beds for the soldiers.

Ravelin
This triangular outer work shielded the fort's only entrance from enemy fire. It was never occupied.

Moat/Glaciis/Covered Way
The moat originally surrounded the fort and the ravelin entirely. Rising tides flooded the moat with tidal water to a depth of a foot. The water level could be controlled by gates on the north-east and southeast sides of the seawall. Around the outside of the fort is a man-made slope called a *glaciis*. This embankment shielded and protected the lower fort walls from enemy cannon fire. The area between the *glaciis* and the moat is called the covered (covert) way. This allowed soldiers to leave the fort and still be covered or protected by this wall.

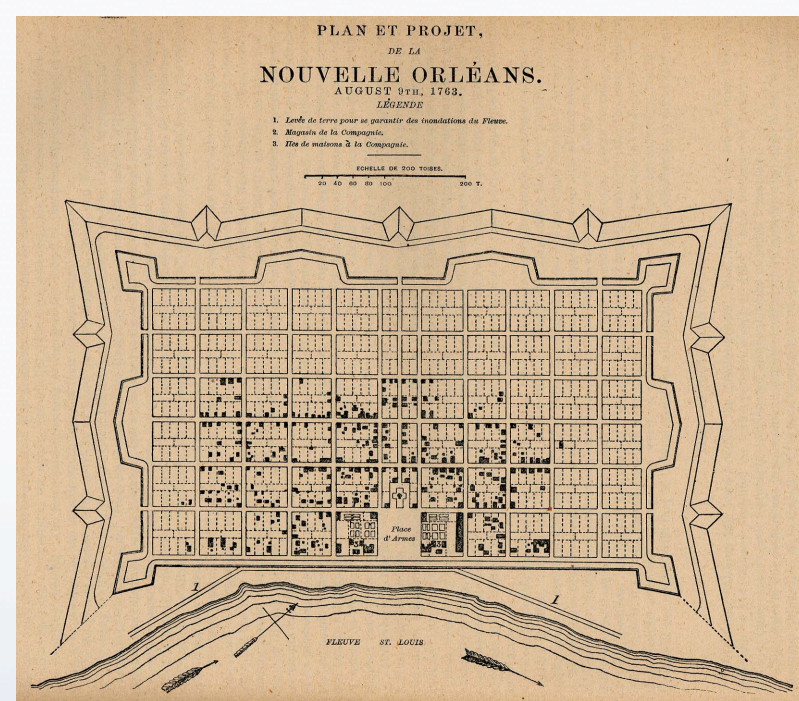
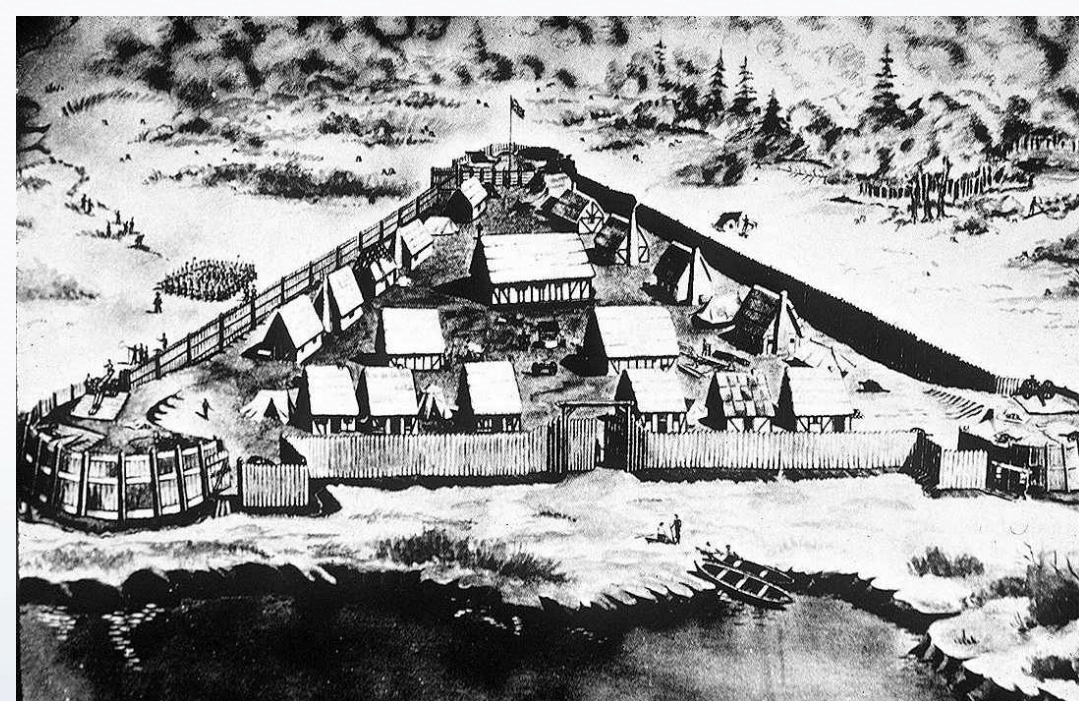
Glaciis
Cabo and Rosario Lines
Cabo and Rosario Lines
After the British burned St. Augustine during the siege of 1702, the Spanish constructed a wall of earth and palm logs with a wide shallow moat around the town. The only entrance was



- 1 Terreplein
- 2 Parapet
- 3 Storage or quarters
- 4 Inner wall (masonry)

- 5 *Mampostería* (fill)
- 6 Outer wall (masonry)
- 7 Counterscarp
- 8 Moat

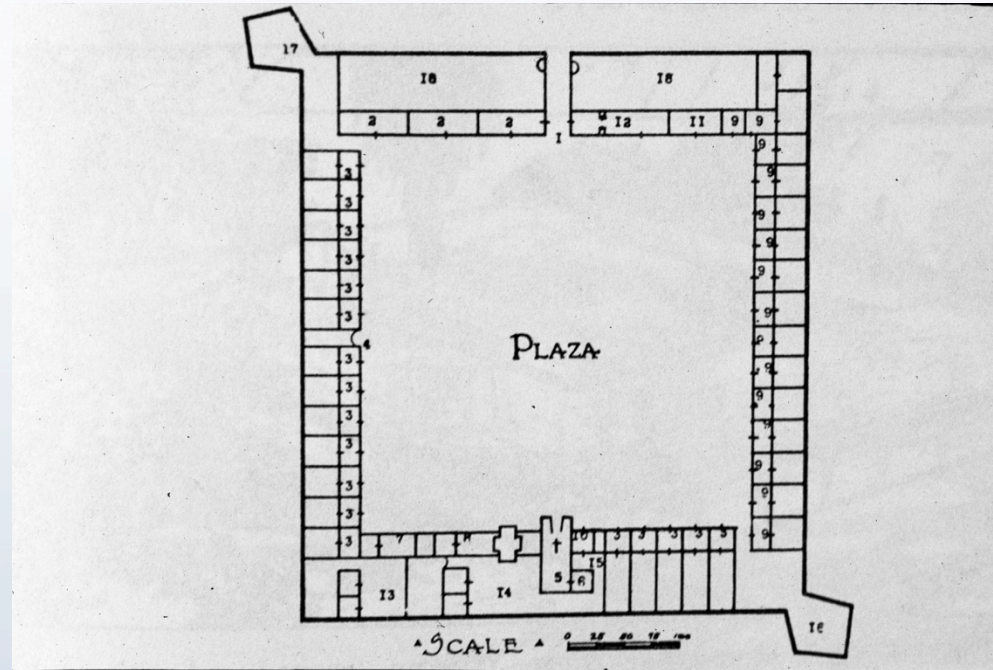
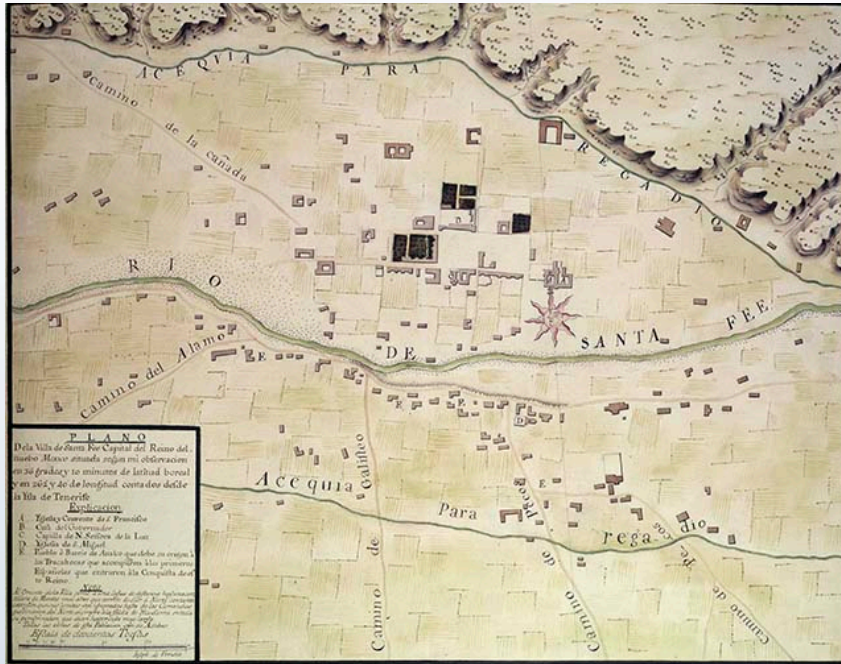




+ Fort nieuw Amsterdam op de Manhatans



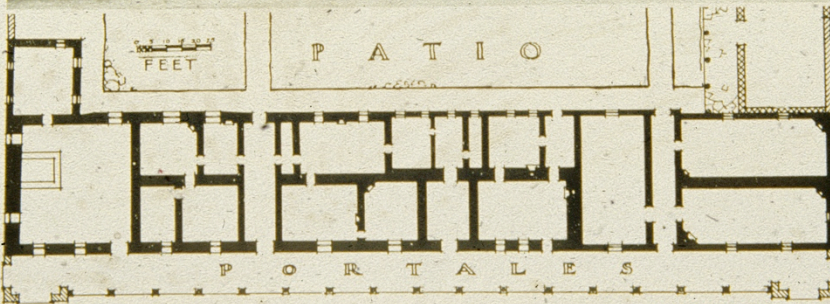
Spanish Colonial Town Planning: The Presidio



Law of the Indies:

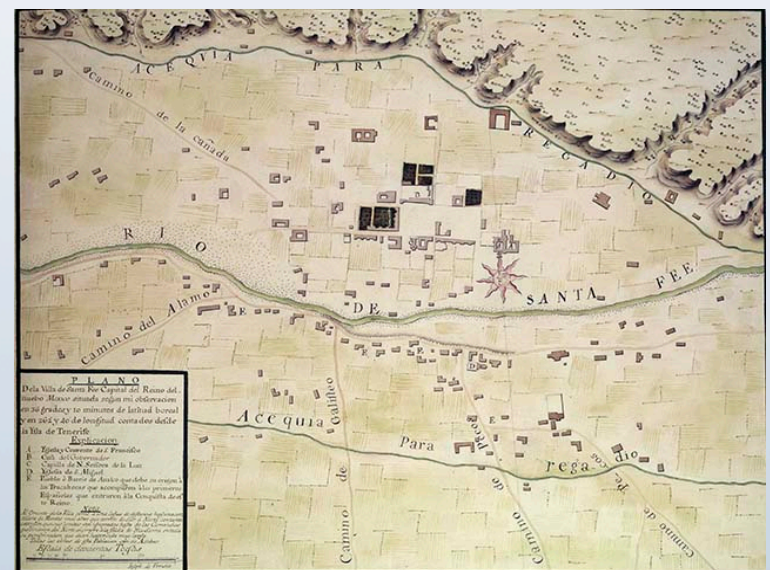
First laws written in 1512 and 1542

Re-organized under Charles II in 1680

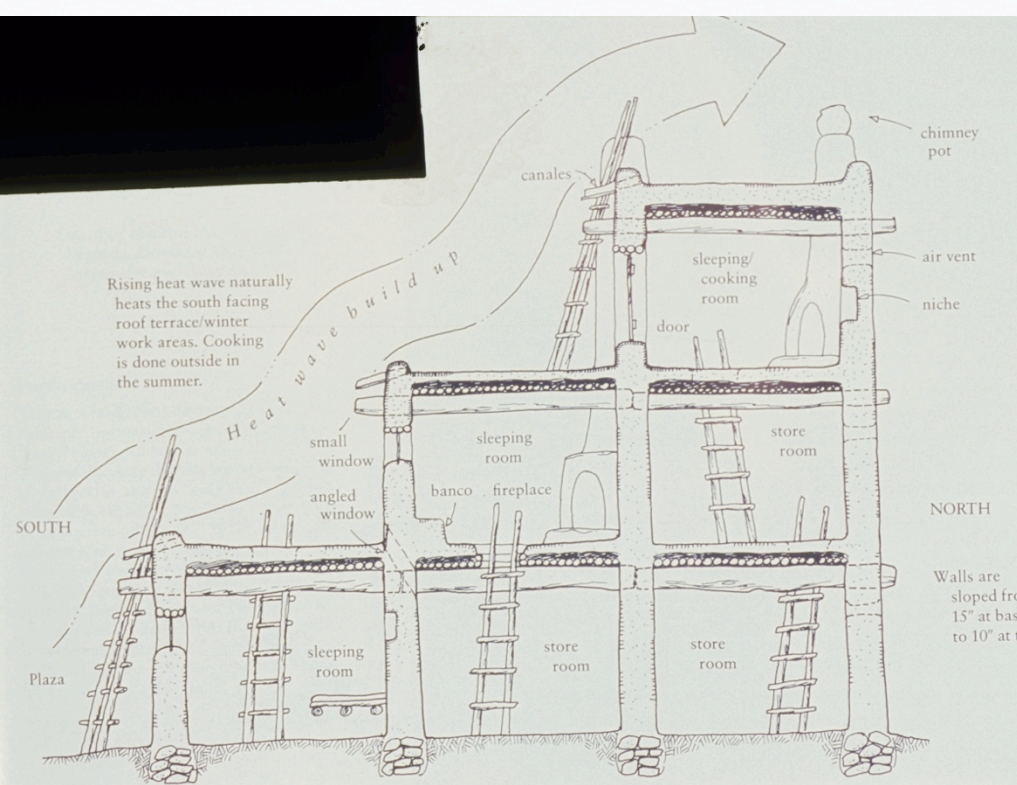


UNIVERSITY PRINTS, BOSTON PHOTO, EWING GALLOWAY
PLAN COURTESY REXFORD NEWCOMB

VIEW AND PLAN, GOVERNOR'S PALACE, - SANTA FE, NEW MEXICO



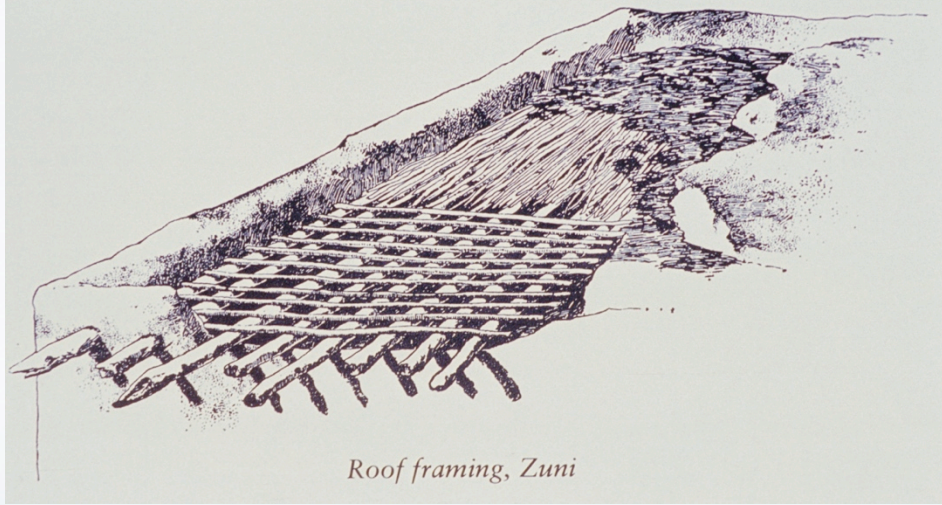
Palace of the Governors
Santa Fe, NM
1610



Adobe construction







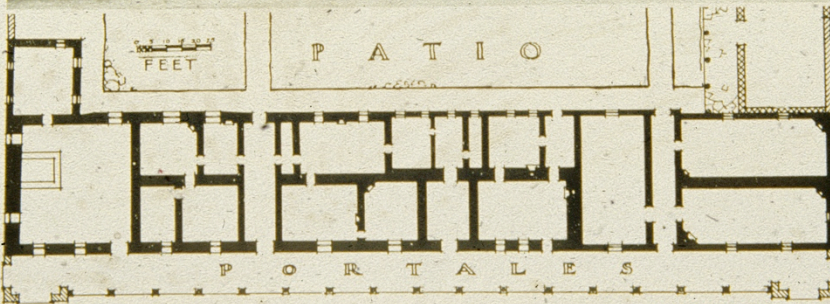
Roof framing, Zuni



Canale (roof drain), Hopi

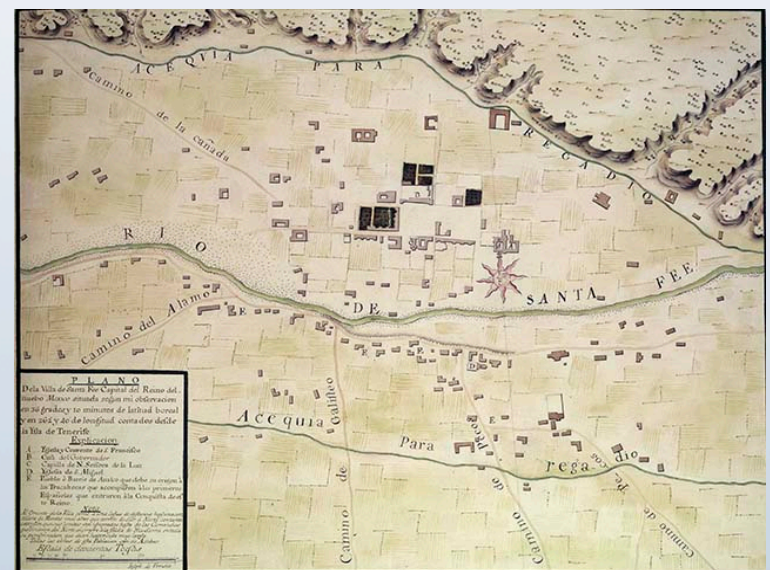






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