

## Forests, Naos and Galleons: Beyond the Iberian Bizcayan shipbuilding transition 1550-1650





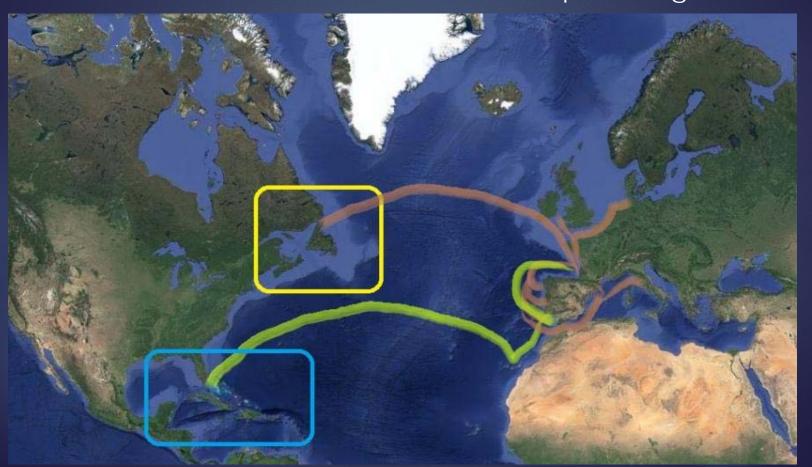


# In search of Iberian shipbuilding signatures through time and space

- Bizcayan ships through wood:
  - Proportions
  - Tonnage
  - Forestry practices
  - Tree species
- Sources:
  - Historical documents (Primary source)
  - Archaeology (Through secondary sources)
  - Experimental Archaeology (Primary source)
  - Dendrochronology (Through secondary sources)



1550-1650 The hypothesis: A division of interests in shipbuilding





#### Research questions:

- How is the Iberian Bizcayan tradition changed the by the transition?
  - What are the Iberian Bizcayan ships like in from 1550s,1560s (Red Bay) and what are the changes that occur during the 1570s, 1580s, 1590s (Ribadeo), 1600s, 1610s,1618 and 1650?

## Iberian ships, Naos and Galleons: The intrusion of the Monarchic interests

#### **1550-1560-1570**

- The direct intervention of the Monarchy in the local shipbuilding and forestry: Superintendence Cristobal de Barros
  - The networks to promote the Imperial interests develop
  - Predominance of Bizcayan ships to sail to Indias until 1579, 80%.
- ► The beginning of the rise of San Jean de Luz 1560-1570: Migration of shipbuilders to the French Basque area due to higher timber costs

### Iberian ships, Naos and Galleons

#### **►** 1580s

- Whaling and codfishing crisis, 1579
- Spanish Armada, 1588: 50% of the tonnage was Bizcayan or Northern Iberian. Military crisis in maritime warfare: Another paradigm
- Economic crisis: Flanders route (¿?), Levant and the Ottomans
- Royal shipyards: Guarnizo, Colindres
  - **Deforestation?** It is a **relative** interpretation.



### Iberian ships, Naos and Galleons

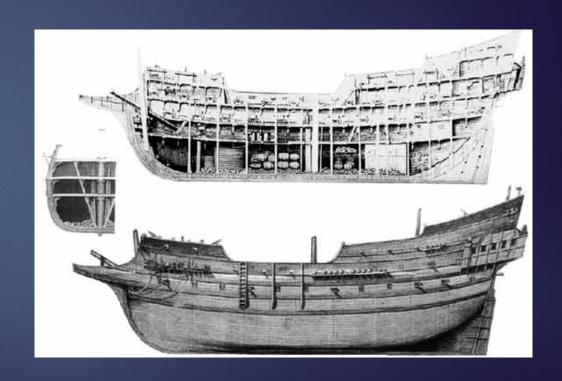
#### • <u>1590s</u>

- The Basque Economy did suffered a quantitative temporary decrease in the Spanish side: This forced Spain to find ships in other places to supply their permanent Armada.
  - Ships from *Napoli, Ragusa, Netherlands* (Since 1575)
- A process of militarization of the Armadas core, Naos, a search for the ideal vessel for the Atlantic, longer and shallower, better sailing



## Coexistence between Naos and Galleons

- ► 1600s-1618
- Dutch influences from Dunkirk
- The imposition of shipbuilding practices through Royal Ordenanzas
- Influences of northern shipbuilding in the Ordenanzas 1607, 1613 and 1618
- Resistance towards a first attempt to homogenize different Iberian shipbuilding areas



## Periphery and center

#### <u> 1618-1650</u>

- The fisheries are protected by the King and promoted since 1640
  - Shipbuilding and military crisis 1653: English Ship of the line



### Preliminary conclusions

- Constant change: Iberian Bizcayan shipbuilding is a dynamic culture in constant change. The is no particular homogenous tradition as such, but a constant flourishing and loss of a variety of expressions of culture instead
- The Iberian Bizcayan forestry system evolves to adapt to the construction of big naos and galleons based on a similar forestry system but different proportions
- Multiculturality
- Human agency: The influence of the observer in reality
- Interconnections or interdependence: The Iberian network, an extension of the Atlantic and Mediterranean trading and shipbuilding cultures

#### Future research:

- ARCHIVES: Basque Country, Simancas...
- Future research lines:
  - The French Basque side: The continuation of the Iberian Bizcayan shipbuilding
  - Comparison between Portuguese, Venetian, Basque and English shipbuilding and forestry practices

