

Spain

Means of transport on water





**Ships have been the best
means of transporting
large weights with little
effort**

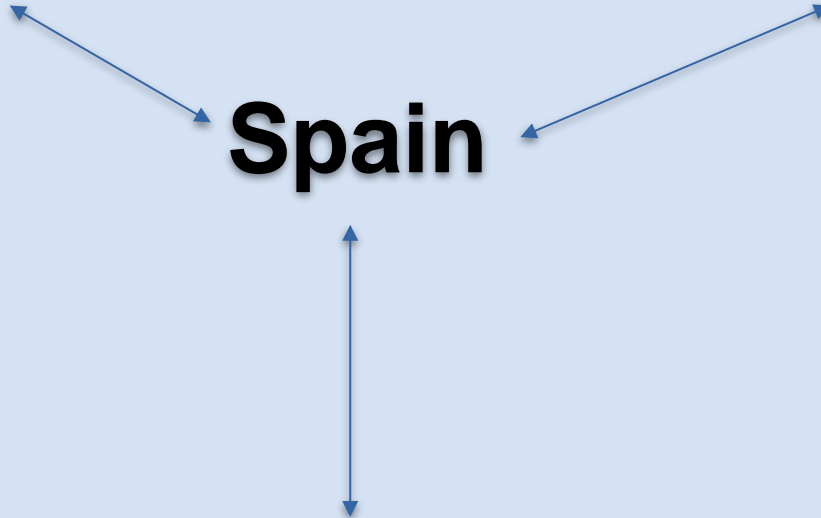
**A crossing
point by sea**
From 1.200 BC

America

Europe

Spain

Africa





Ships through History

Phoenicians and Carthaginians

By ship

Commerce:

Olive oil
Wine
Cereals
Tuna
Copper

Military:

Troop transport.
The Carthaginians even
transported elephants as a
weapon of war.

Two types of main ships

Gaul - Gaulo

This word comes from Phoenician «gaulos», then Greek «γαυλος» (gaulos) and Latin «gaulus»

The Phoenicians, and also the Carthaginians, used two types of transport ships. One of them was what the Greeks called Gauls, a boat with a curved hull and wide draft, propelled by two rows of oars and which, at first, was devoid of a mast and sail



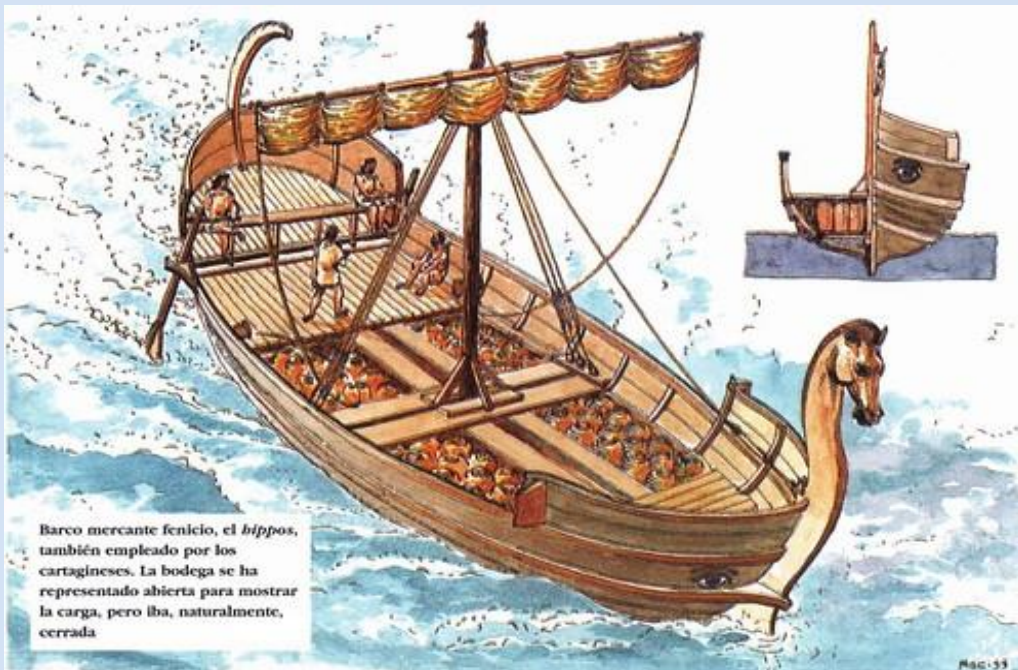
Hippos

Used for the transport of goods, it was actually a multipurpose ship that the Greeks called hippos for the horse-head-shaped figurehead that they used to wear at the bow.



It is, in fact, the Phoenician version of a type of boat very common in the Mediterranean since the end of the second millennium

This was one of the first ships built from prefabricated and numbered parts



Barco mercante fenicio, el *hippos*, también empleado por los cartagineses. La bodega se ha representado abierta para mostrar la carga, pero iba, naturalmente, cerrada

Romans

200 BC – 400 AD

By ship

Commerce:

Olive oil
Wine
Cereals
Tuna
Garum
Jamon



Military:

Once Carthage was defeated and the western Mediterranean was pacified, the main use of ships was commercial

WarShips

Bireme

Trireme

Quinquereme

Boats propelled by different numbers of oar's rows, and with square sails.



Birreme romana

Bireme

Boat powered by two rows of oars and with a mast in the center of its length.

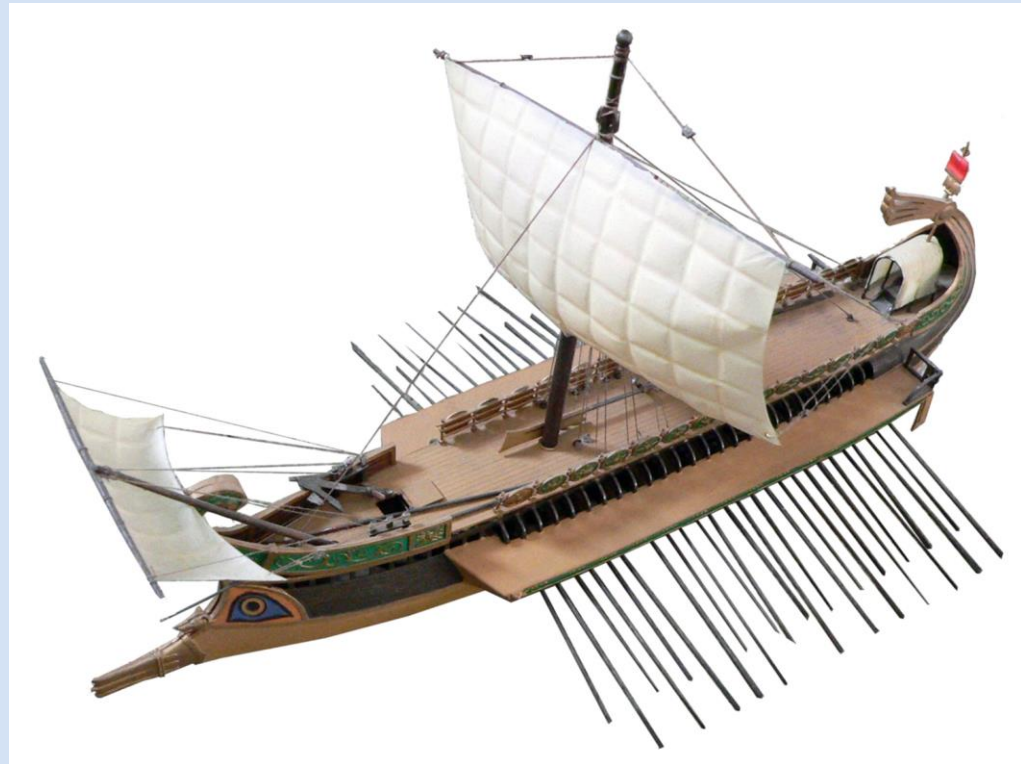
They were

fast and maneuverable

of little draft

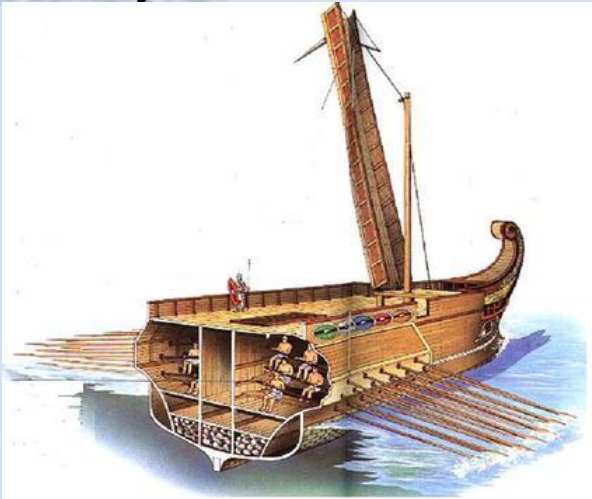
narrow combat gangway

a powerful horn-shaped spur



Quinquereme

It was used by the Greeks, Carthaginians and Romans, from the 4th century BC. until the 1st century AD.

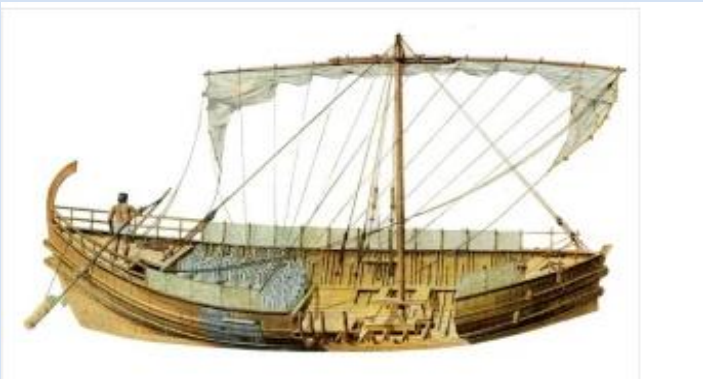


Five oars



It was adopted by the Romans after the first Punic War, when the Senate decided to strengthen its fleet. It carried a total of 420 crew members (300 were rowers) and consisted of 90 oars on each side, and 30 rows of rowers.

Onerariae



The speed of these ships, in favorable wind conditions, could reach six knots, traveling, according to written sources, 1000 nautical miles, the distance between Cádiz and the port of Ostia, in seven days.

The average load was 70 tons, reaching up to 150 tons



Al Andalus

VIII – XV

By ship

Commerce:

**Goods from the
Far East**

Military:

Troop transport

**Science
Classic culture**

Jabeque

By ship

Three-masted coastal boat, with lateen sails, which also used with rows.

Used for net fishing.



America

XVI – XIX

By ship

Commerce:

Gold
Silver
Sugar
Tobacco
Cacao

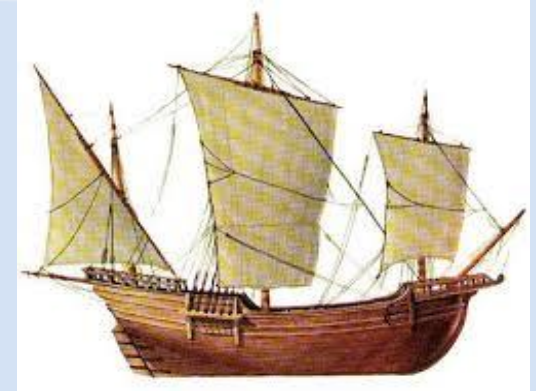
Military:

Troop transport
Convoy escort

**Potatoes, tomatoes and peppers arrived by ship to Europe.
Corn as well.**

CARAVEL

Long, narrow boat, very light and manageable, with a single deck, forward spur, three masts with lateen sails, which was used for fishing, the trade and on exploration expeditions.

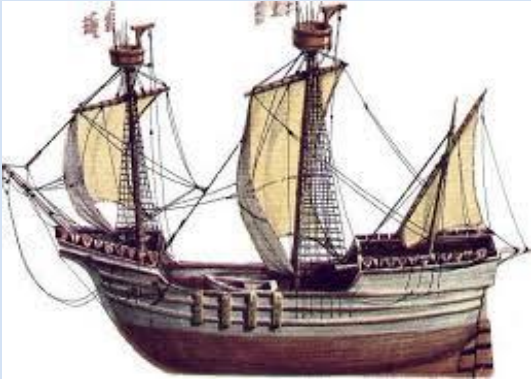


The caravel was replaced by the galleon at the end of the 16th century.



Three of these ships were the first ones to open a route to America

Carraca



The carracas were high-board round sail vessels specialized in the transport of large loads on long voyages. There were carracas from the 12th to the 16th century.

They were the largest European ships of their time.

Galera

Evolved version of the trireme powered by oars and sails.



Galleon



A galleon is a sailing vessel used since the early 16th century. Galleons were powerful and very slow ships of destruction that could be equally used for trade or war. They became the main trading ship of the European nations.

Frigate



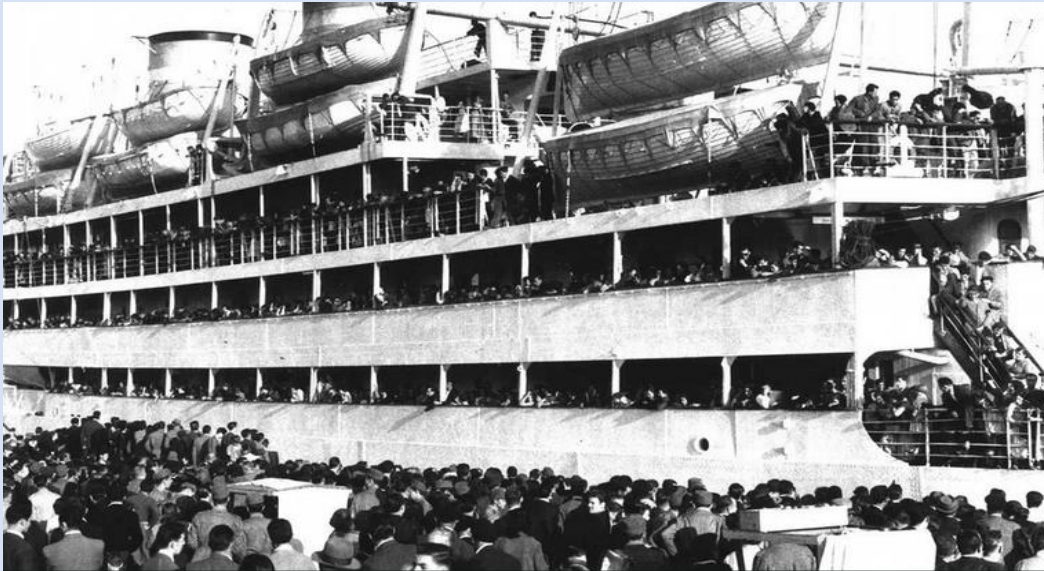
The frigates were three-masted ships. Its mission was to protect the merchant traffic and the fight against corsairs due to its speed and to attack the enemy's traffic in case of war.

The end of sailing ships



The age of the motor boat

Emigration boats XIX - XX



Large migrations from Europe to America



Maritime transport today

Containers

River port

Passengers

River Port



This port of Seville centralized all traffic with America

The only Spanish river port is in Seville, on the Guadalquivir river

International transport

Spain ranks 11th after the Asian giants, the United States, Germany and the Netherlands as a world port power. It is of considerable importance in the international maritime transport sector.

Among the 125 most important ports in the world, five Spanish ports are placed



Containers

More than 12 million containers moved last year through these five ports that we present below. This represents 86% of the total moved by the set of Spanish ports.



Ports

**Algeciras
Valencia
Barcelona
Bilbao
Castellon**

Ports

Bilbao

Barcelona

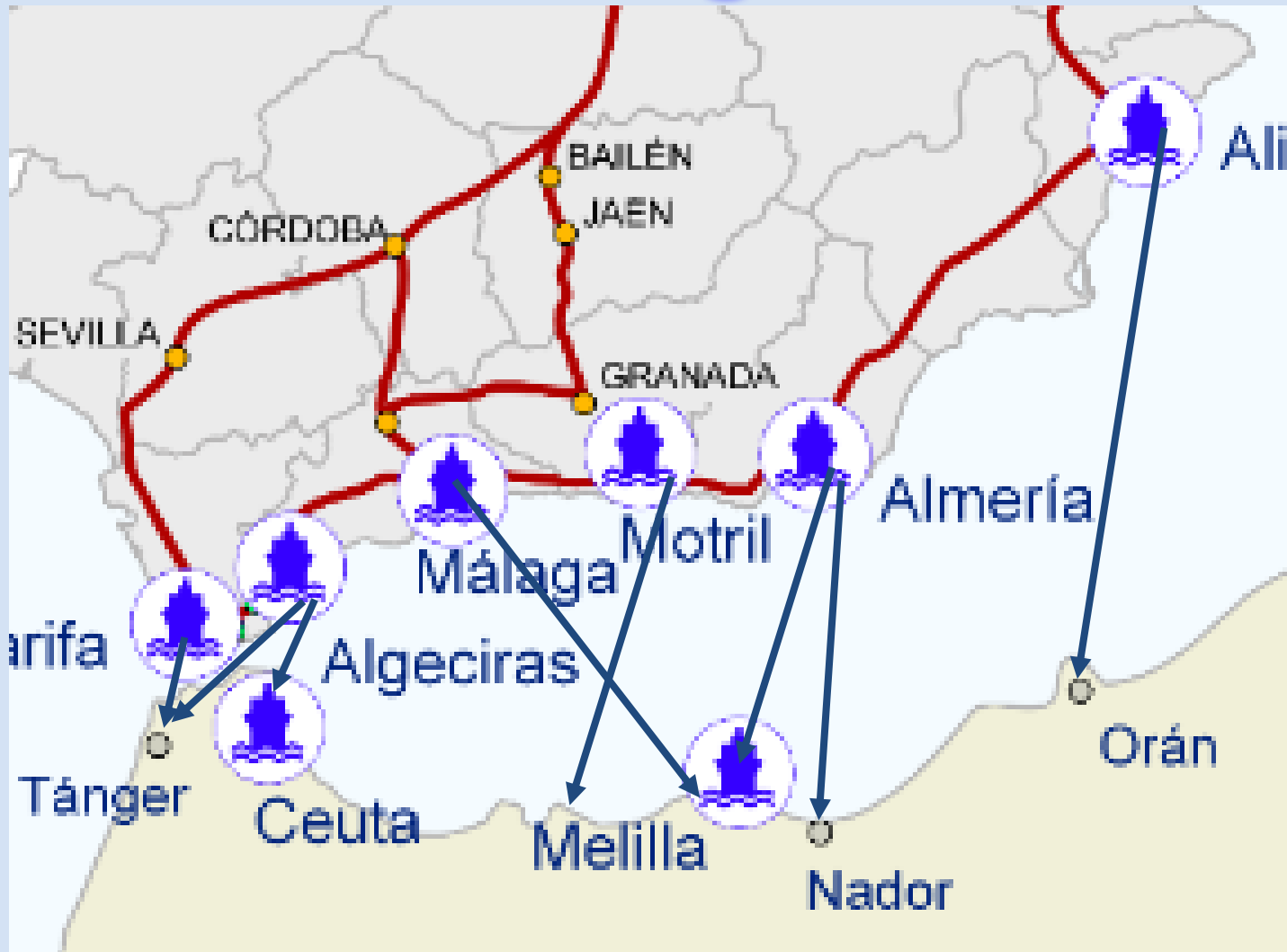
Castellon

Valencia

Algeciras



Passengers

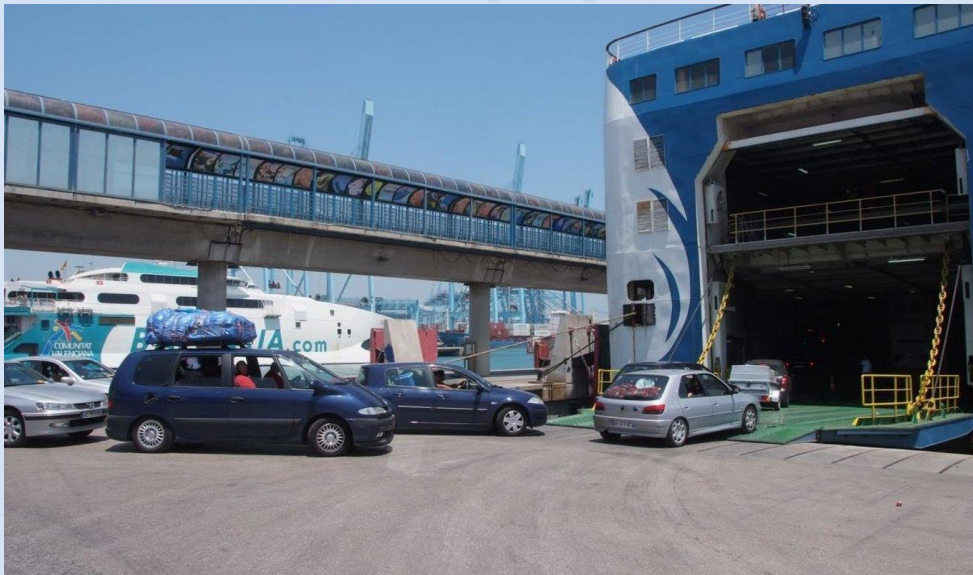


Passengers

**Every year, mainly in summer,
they cross from southern Spain
to northern Africa:**

750,000 vehicles

3.5 million people



Spanish Islands



**There is an important
commercial traffic between the
peninsula and the islands**

Baleares y Canary Islands

