Evolution of Spanish Naval Vessels

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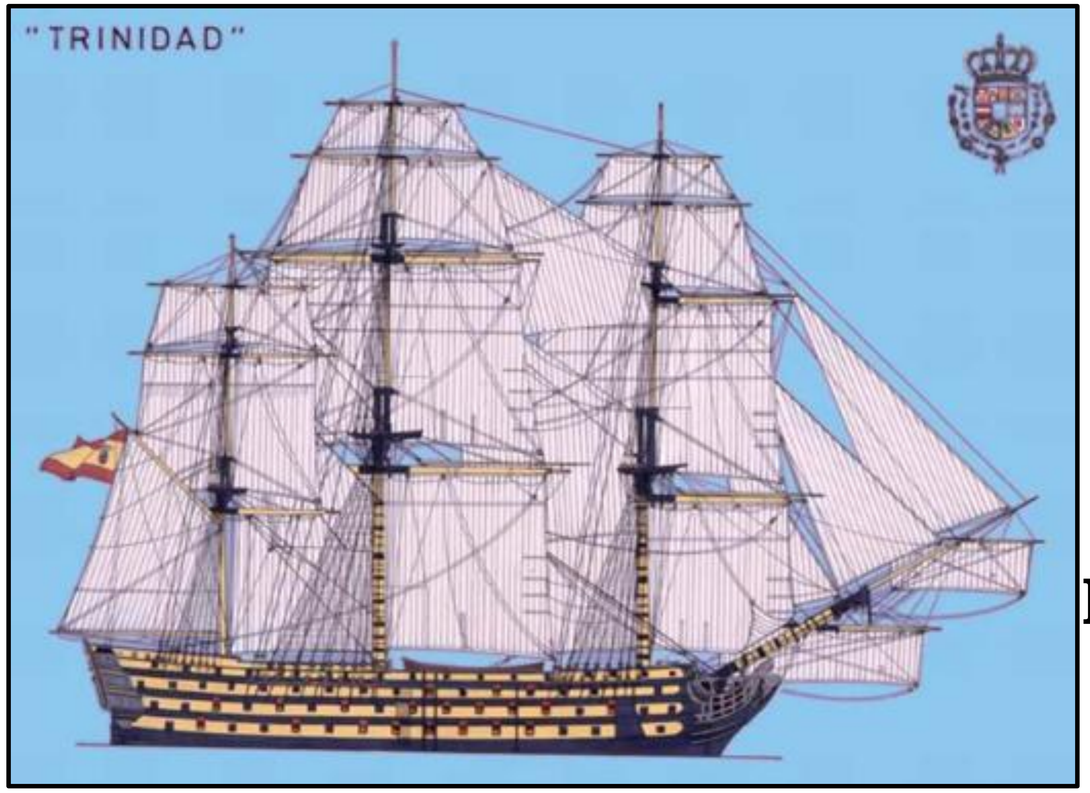
Abstract

"Evolution of Spanish Naval Vessels" explores key elements in the timeline of ship innovation through the interchange of shipbuilding techniques belonging to European countries like France and England. The need for innovation was driven by weaknesses in Havana's naval defense, prompting Spain to create larger ships to maintain control of a key colonial port.

Protecting Havana

A drive for the innovation of Spanish ships is understood through the importance of Havana. Seen in Alejandro De La Fuente's book, *Havana and the Atlantic in the Sixteenth Century*, "the need to protect its port grew along with the fame of Havana." Havana's wealth attracted corsairs, prompting the need for stronger naval protection. The text *Real Arsenal de La Habana* shows the value of Havana's prize shipyard, which produced great warships, one being the "Santisima Trinidad", a warship boasting 140 guns spread over 4 decks (See picture). Havana's role as a key colonial port and ship producer made it a factor behind the innovation of Spanish fleets.



Industrial Espionage

Seeking further naval modernization, In 1749 Spain sent naval military officer Jorge Gaspar Juan y Santacilia on an 18 month trip of industrial espionage in London. Jorge Juan's objective was to gain intelligence of English shipbuilding techniques and return with capable English naval architects. Jorge returned with 50 Englishmen, beginning improvements to the outdated Spanish ships and shipyards, including those in Cartagena, Cádiz, Ferrol, and Havana. Jorge Juan went to be promoted to take over all naval construction, establishing his own system of shipbuilding and more efficient divisions of labor. (La Armada En Tiempos De Carlos III).

References:

Fernandez, Marcelino Gonzales. *La Armada En Tiempos De Carlos III*. Accessed 7 Apr. 2025.

De la Fuente, Alejandro, et al. *Havana and the Atlantic in the Sixteenth Century*. The University of North Carolina Press : Made Available through Hoopla, 2011. Accessed 7 Apr. 2025.

Pereyra, Ovidio Ortega. *El Real Arsenal de La Habana*. Accessed 7 Apr. 2025.

French & English Styles

In 1765, Spanish shipbuilding methods changed due to French architect Francisco Gautier, who introduced a French system of ship construction, replacing the previous English style brought with Jorge Juan. Some considered French-style ships inferior, but they proved to be superior, exemplified by the San Juan Nepomuceno (1766), one of the final standing ships in the Battle of Trafalgar. Gautier became Director General of Naval Construction in 1769 and under him Spain further modernized its power by improving arsenals, establishing manufacturing centers, and enhancing materials.