Guns for a Global Empire: Deployment of Artillery Technology in the Iberian Colonial Space (1580-1640)

Reporting

Project Information

GLOBALGUNS
Grant agreement ID: 845675

DOI
10.3030/845675

Closed project

Funded under
EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

Total cost
€ 259 398,72

EU contribution
€ 259 398,72

Coordinated by
UNIVERSIDAD PABLO DE OLAVIDE
Spain

Start date
1 September 2019

End date
21 December 2022

Periodic Reporting for period 1 - GLOBALGUNS (Guns for a Global Empire: Deployment of Artillery Technology in the Iberian Colonial Space (1580-1640))

Reporting period: 2019-09-01 to 2022-08-31
GlobalGuns investigates the relationship between the development of a key military technology, gunpowder artillery, and the development of European overseas empires. The research focuses on the Spanish and Portuguese empires during the period of the Iberian union (1580-1640), when these political entities were united under the same sovereign. In this period, the sustained development of maritime flows between Europe, America, Africa and Asia required the massive deployment of artillery technology on board of ships and in defense of sea-fortresses. The project aims to offer a better understanding of how the Iberian empires met the crucial challenge of multiplying cannon technology at a world scale. This topic which has often been studied through nationalistic lenses requires to be analyzed in a much more transnational perspective by paying attention to the multiple circulations of material and experts not only between Spain and Portugal but more broadly between the various regions of these empires, which included parts of Italy, the Low Countries, and all overseas colonial territories in Africa, America and Asia, whose contribution to the armament industry has long been ignored by nationalist narratives. Colonial history tends to be seen by our modern society as a moment of European absolute domination over the rest of the world, while this research aims to bring some nuance to this picture by shedding light on the role of colonial societies and non-European actors in the world-wide deployment of a weapon which has been considered a symbol of European conquest. It also proposes to reflect on the driving forces behind the development of military technology, and particularly on the role of the maritime private economy. Conclusions show that the Iberian empires managed to deploy cannons at a global scale through the involvement of private merchant ships and their huge pool of technical resources, including ships, cannons, and specialized technicians such as gunners. The transnational nature of the resources used by the Iberian empires highlight the necessity to study the phenomenon at a broader scale. Therefore, the research carried out for this project opens a wider scope of reflection on the relationship between the rise of the private merchant shipping in Western Europe and the capacity of some Western European state to achieve maritime projection world-wide.

At the heart of the GlobalGuns project lies an important work of historical investigation whose results are thoroughly discussed in a monograph: Les artilleurs et la Monarchie hispanique (1560-1610). Guerre, savoirs techniques, État. This publication is a major achievement of the project as it presents a transnational analyses of the system implemented by the Spanish Monarchy to provide its growing networks of fleets and fortresses with thousands of cannons and gunners experts in their use. The conclusions point out that world-wide projection of Spanish military power relied on a specific articulation between science and technology which happened in the schools of gunners. The main arguments have been summarized in an article entitled "La Monarchie hispanique et ses artilleurs : une articulation institutionnalisée entre armées, sciences et techniques au XVIe siècle". Besides, the article "Transformation of military technology in Portugal: the impact of the Iberian Union on artillery" tackles the issue of the circulation of military experts between the Iberian empires, when Portugal was under the domination of the Spanish Habsburg. In contrast with what has long been argued about the separation of Portuguese and Spanish military structures, the article highlights the technological porosity between both Iberian empires during the Union of Crowns (1580-1640).
Main conclusions have been presented in several supports for wider audience, including oral presentations, textual publication in Spanish magazine Desperta Ferro, and a video accessible on Youtube ("Sevilla y los artilleros de la carrera de Indias").

The project has not yet published all its outcomes. Archival evidence reveal many difficulties to sustain the production of artillery in colonial context, where the demand for artillery was often punctual and where European artisans were reluctant to transfer their skills to local craftsmen. The paper "Manufacturing cannons in seventeenth century Cuba: European experts, African slaves and the circulation of technical knowledge in colonial territories" presented at the ENIUGH conference studies these dynamics through the case of Cuba in the early 17th century.

Finally, my work sheds light on the important role of private merchant ships in providing key technological resources to the Spanish state: skilled technicians, naval artillery, and entire ships armed by private owners. Therefore, the project has organized an international workshop on "State Navies, Transnational Private Economic Networks and the Circulation of Technology (1500-1800)" in order to gain understanding on the multiple contributions of foreign private shipping to the technology used by state navies in the early modern period. Conclusions on this topic will be published under the title "Contractor states and the globalisation of the market for naval artillery technology (1500-1750)."

Progress beyond the state of the art and expected potential impact (including the socio-economic impact and the wider societal implications of the project so far)

This project of historical research offers to our society some new insights not only on several aspects of its own history but also on their broader consequences for the history of the world.

First, while the development of military technology has often been analyzed with nationalistic views, the project shows the relevance of studying military technology with a transnational perspective. Cannons, gunners, and the knowledge about gunnery all circulated beyond state boundaries, sometimes through transnational imperial structures (like in the case of the Iberian Union), sometimes through diplomatic relationships (between political allies), sometimes through economic networks (through private merchant ships especially).

Second, this research sheds light on the strong connection between science, technology and military history. Historians of science have considered the mathematical treatises published about artillery as disconnected from the technicians on the ground. This work proves that artillery treatises were daily instruments used in the training of gunners who learnt the theory of artillery in new schools created under royal patronage in order to meet the huge demand generated by the Iberian oceanic expansion.

Third, this research opens new lines of reflection on the articulation between military technology, states, economics and overseas expansion. Interstate competition has long been considered the main engine of military innovations but this research highlights the role of private shipping and transnational economic networks in providing states with key military technology, especially in relation to naval forces. Conclusions of this research point out that the technological leadership acquired by European ships in the most waters of the world after 1500 owes much to the spectacular boom in private merchant shipping which stimulated technological innovations including military technology that could benefit to state navies.
Last update: 4 July 2023

Permalink: https://cordis.europa.eu/project/id/845675/reporting

European Union, 2024