

# Eunuchs Galleons: Ottoman Ship Building in the Indian Ocean

## How Ottoman technology rivaled that of the Europeans in the Age of Exploration

Past scholarship about the Age of Exploration has revolved around the notion of the “Military Revolution of the 16<sup>th</sup> Century.” This held that the development of new naval technologies in the Western Atlantic (particularly tall-sided sailing ships) and new gunpowder technology in Europe created the conditions for expansion by the Spanish and Portuguese. This view held that Europe’s domination of the Age of Exploration was inevitable.

My faculty supervisor, Dr. Giancarlo Casale is reexamining this view in his research on the activity of the Ottoman Empire in the Indian Ocean. His research has found that Ottomans had tall-sided sailing ships in the early 16<sup>th</sup> century and that they were innovating with naval technology concurrently with the Portuguese.

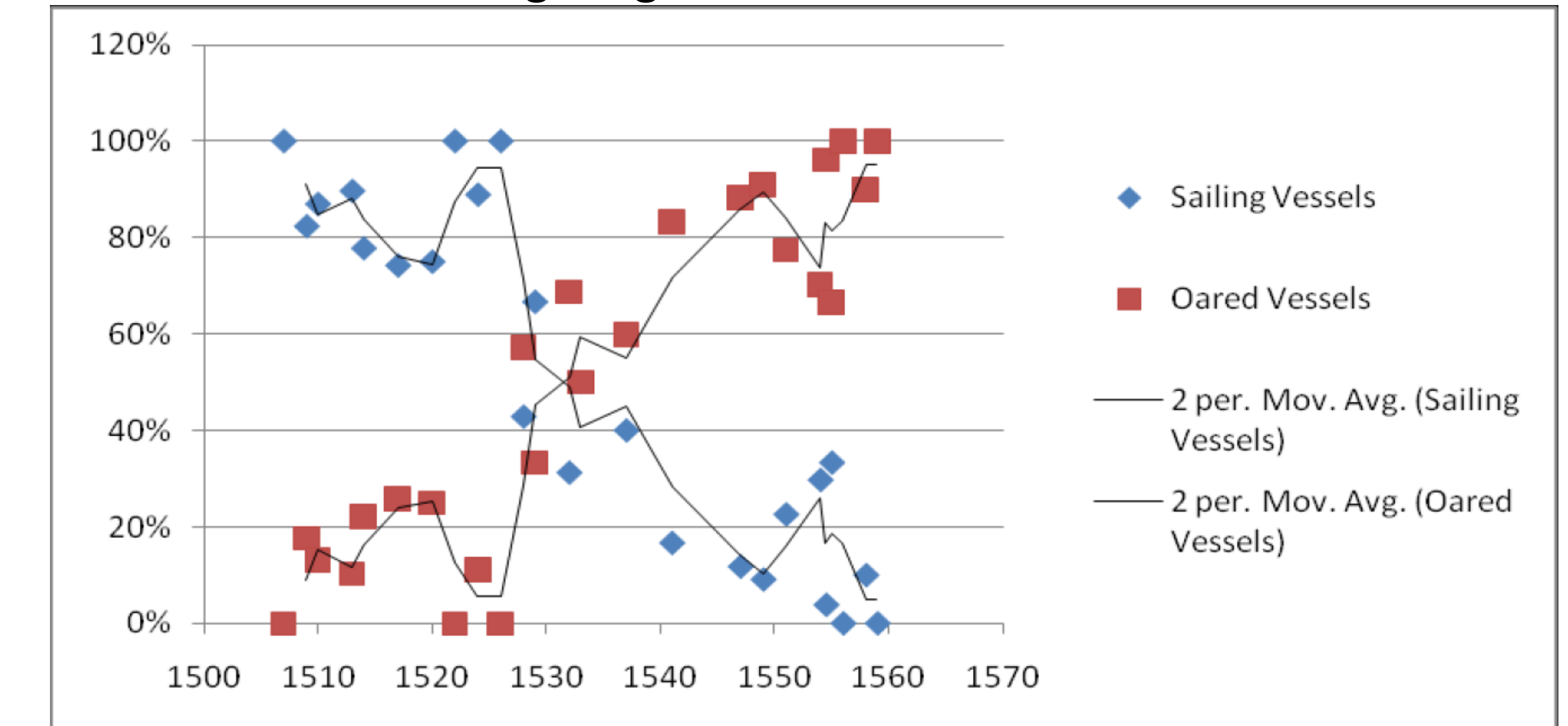
### Dr. Casale’s Research

Casale’s research has found written sources detailing the presence of tall-sided sailing ships in the Ottoman Indian Ocean fleet in 1538, much earlier than previous scholarship had thought.

However, he found that the number of tall-sided sailing ships steadily decreased until the fleet was entirely comprised of oared ships by the end of the 16<sup>th</sup> century.

Year	Sailing Vessels	Oared Vessels	Total	% Sail	% Oars	Destination	Commander
1531	20	60	80	25%	75%	Diu (Planned)	Hadim Suleiman
1538	16	69	85	19%	81%	Diu	Hadim Suleiman
1547	???	???	60 ??	??	??	Aden	Piri Reis
1552	2	25	27	7%		Hormuz	Piri Reis
1553	1	15	16	6%		Basra to Suez	Murad Reis
1554	0	15	15	0%	100%	Basra to Suez	Seydi Ali
1564	0	10	10	0%	100%	Mozambique (Planned)	Sefer Reis
1567	2	15	17	12%		Aceh (Planned)	Kurdoglu Hizir
1575	0	22	22	0%	100%	Bahreïn (Planned)	Unknown
1585	0	20	20	0%	100%	Arabian Sea (planned)	Mir Ali Beg

The Portuguese also started to switch from sailing ships to oared ships when they started to fight against the Ottomans in the Indian Ocean.



Sailing Ships vs. Oared Ships as % of the Total Vessels in Portuguese Fleets Sent Against Ottoman targets

### My Project

My task was to find images of Ottoman ships, signified with crescents, in Portuguese maps to back up the written sources Casale was using.

Here are some illustrations I found in the *Portugaliae Monumenta Cartographica* in the Special Collections and Rare Books archive. They were in maps made by the Portuguese mapmaker Lopo Homem-Reinés in 1519. These illustrations show that the Ottomans had tall-sided sailing ships at least as early as 1519, even earlier than the written sources Dr. Casale found about the fleet of 1538.



### Conclusions

The results of this research has several implications:

- It raises the question of how has this been overlooked by historians until now? Is it that it did not fit with the narrative of Ottoman stagnation?:
- It shows that the Ottomans and Portuguese were developing new technologies concurrently. The Ottomans were not technologically inferior. The Portuguese started switching to oared vessels in reaction to the Ottomans
- The switch towards oared ships challenges the assertion that sailing ships were the decisive factor in the Age of Exploration