

Maritime Historiography and 17th-Century Navigation: A Comprehensive Technical Analysis of Edward Coxere's Adventures by Sea

Published: August 23, 2026 | Index ID: #719

The historical record of 17th-century maritime life is often filtered through the lens of official naval logs or high-ranking admiralty reports. However, the publication of **Adventures by Sea of Edward Coxere**, edited by **E.H.W. Meyerstein** and published by the **Clarendon Press (Oxford University Press)** in 1945, provided a rare, granular perspective of the life of a common seaman who navigated the transition from the merchant service to the professionalizing navy of the mid-1600s. This document is not merely a travelogue; it is a vital primary source for understanding the **technical mechanics** of seafaring, the **socio-religious complexities** of the Quaker movement within the military, and the **geopolitical instability** of the era.

Historical Context and the Rediscovery of Edward Coxere's Narrative

Edward Coxere (1633–1694) lived during one of the most volatile periods in maritime history. His career spanned the English Civil Wars, the Anglo-Dutch Wars, and the expansion of the Levant trade. The manuscript, titled *A Relation of the Several Adventures by Sea with the Dangers, Difficulties and Hardships I Met for Several Years*, was preserved within his family until it was scholarly transcribed and edited in the 20th century. The significance of this work lies in its raw, first-person account of **naval warfare**, **piracy**, and **maritime logistics** during a time when the boundaries between trade and combat were perpetually blurred.

As noted by scholars like **H.J. Cadbury** in the *Bulletin of Friends' Historical Association*, the text serves as a crucial genealogical and historical bridge. The editing by Meyerstein introduced a level of academic rigor that transformed a personal journal into a scholarly artifact, complete with genealogy charts and critical footnotes that cross-reference Coxere's claims with known historical events such as the **Battle of the Sound** or the **Tunis Expedition**.

Core Concepts: The Theoretical Framework of 17th-Century Seafaring

To analyze Coxere's adventures, one must understand the three core frameworks that governed his existence: the **technical/nautical**, the **legal/mercantile**, and the **ethical/religious**.

1. The Technical Nautical Framework

In the mid-17th century, navigation was an emerging science. Seamen like Coxere relied on **dead reckoning**—a method of estimating a ship's current position by using a previously determined position (fix) and advancing that position based on known or estimated speeds over elapsed time. The tools of the trade included the **backstaff** (for measuring the altitude of the sun), the **lead line** (for measuring water depth and bottom composition), and the **compass**.

2. The Legal and Mercantile Framework

Merchant ships during this era were frequently required to carry armaments. The distinction between a **privateer** (a private ship authorized by a government to attack foreign shipping) and a **pirate** was often a matter of possessing a **Letter of Marque**. Coxere's experiences highlight the precarious nature of international maritime law, where shifts in alliances could suddenly turn a friendly port into a site of imprisonment.

3. The Ethical Framework: Quakerism at Sea

Perhaps the most compelling theoretical aspect of Coxere's journal is his conversion to **Quakerism**. This presented a profound **technical and operational challenge**: how does a skilled mariner fulfill his duties on a vessel intended for combat while adhering to the **Peace Testimony**? This conflict provides a case study in the intersection of religious conviction and occupational necessity.

Technical Analysis of 17th-Century Naval Mechanics

The "dangers and difficulties" mentioned in the JSON data refer to specific operational hazards that required advanced technical skills. Below is a breakdown of the core mechanics of 17th-century seamanship as experienced by Coxere.

Navigation and Cartography

During Coxere's time, the calculation of **longitude** remained the "great problem" of the age. Without accurate marine chronometers, mariners utilized **lunar distance** methods (though extremely difficult and often inaccurate) or relied purely on latitude and dead reckoning. The following mathematical model represents the simplified dead reckoning (DR) formula used to estimate position:

The inherent error in this formula—caused by **ocean currents (leeway)** and **magnetic declination**—meant that Coxere and his contemporaries often faced the "danger" of unexpected landfalls or shipwrecks.

Vessel Maintenance and The 'Careening' Process

Maintaining a wooden hull was a critical technical procedure. Ships would eventually suffer from **shipworm (Teredo navalis)** and **barnacle accumulation**, which significantly reduced speed and maneuverability. Coxere describes the process of **careening**—purposely beaching the ship at high tide to expose the hull for cleaning and caulking with pitch and oakum. This procedure was a moment of extreme vulnerability, as a beached ship could not defend itself against hostile natives or rival privateers.

Comparison & Evaluation: Primary Maritime Narratives

To understand the unique value of Coxere's *Adventures by Sea*, it is helpful to compare his account with other seminal works of the period.

Feature / Author	Edward Coxere	Edward Barlow (Barlow's Journal)	Samuel Pepys (Diary)
Perspective	Common Seaman / Quaker	Professional Mariner / Mate	High-Level Bureaucrat / Admiralty
Primary Focus	Personal struggle, religious conversion, Mediterranean trade.	Detailed technical descriptions of ships and foreign ports.	Naval administration, logistics, and high politics.
Tone	Introspective, humble, and adventurous.	Pragmatic, sometimes cynical.	Analytical, political, and social.
Technical Detail	High on operational survival and skirmishes.	High on ship construction and geography.	High on institutional policy and supply chain.
Historical Value	Unique insight into the non-conformist experience at sea.	The most detailed pictorial record of 17th-century ships.	The definitive record of the Restoration Navy.

Practical Implementation: A Field Guide for Historical Research

For modern historians or technical writers analyzing texts like *Adventures by Sea*, a structured methodology is required to extract accurate data from 17th-century prose. Below is a step-by-step procedure for interpreting primary maritime sources.

Step 1: Paleographic Transcription

Original manuscripts from the 1600s use **Secretary Hand** or early **Round Hand**, often with non-standardized spelling (e.g., "sea" as "see," or "vessel" as "vessell"). Researchers must first create a verbatim transcription before attempting a modernized version.

Step 2: Cross-Referencing Admiralty Logs

To verify the "adventures" claimed by Coxere, researchers should consult the **State Papers Domestic** or **Admiralty Records**(stored in the National Archives). By matching the dates of Coxere's voyages with known naval engagements, one can confirm the veracity of the narrative. For example, when Coxere mentions a storm in the Mediterranean, researchers look for corroborating logs from other ships in the same fleet.

Step 3: Geographic Mapping

Using **Historical GIS (Geographic Information Systems)**, researchers can plot the coordinates mentioned in the journal. This helps in understanding the **trade routes** of the era and the strategic importance of locations like **Tangier** or the **Balearic Islands**.

Case Studies in Maritime Failure Modes and Troubleshooting

Coxere's narrative is a catalog of what we would now call **operational failure modes**. Analyzing these provides insight into 17th-century risk management.

Case Study A: Combat with Barbary Corsairs

Scenario: Encountering a fast-moving xebec or galley off the coast of North Africa.**Failure Mode:** Being outmaneuvered in calm winds (where galleys used oars).**Solution:** Coxere describes the technical necessity of

maximizing **broadside fire** while attempting to maintain the **weather gage** (staying upwind of the enemy).

Troubleshooting a capture often involved complex **ransom negotiations** facilitated by the Levant Company or religious orders.

Case Study B: Storm Navigation and Rigging Failure

Scenario: A sudden gale in the Bay of Biscay causing the mainmast to crack. **Failure Mode:** Structural failure of the **standing rigging** due to rot or extreme tension. **Solution:** The crew would perform an emergency "fishing" of the mast—securing it with splints and ropes—or cutting it away to prevent the ship from capsizing. Coxere's account highlights the **physical engineering** required by sailors to perform these tasks under duress.

Operational Challenges and Solutions in 17th-Century Seafaring

- Challenge: Scurvy and Nutritional Deficiencies. Solution: While the citrus solution wasn't standardized until the 18th century, Coxere notes the importance of "refreshing" the crew with fresh greens and water at island stopovers like the Azores.
- Challenge: Communication Lag. Solution: Use of signal flags and lantern signals for fleet coordination, though these were often misinterpreted during night actions or heavy fog.
- Challenge: Currency and Trade. Solution: Carrying a mix of Spanish Dollars (Pieces of Eight) and local commodities for barter in ports where English coin was not recognized.

Summary and Broader Implications

The **Adventures by Sea of Edward Coxere** stands as a monument to the resilience and technical adaptability of the 17th-century mariner. Through the meticulous editing of E.H.W. Meyerstein, the text is elevated from a simple diary to a comprehensive study of a world in transition. It illustrates that the "dangers, difficulties and hardships" were not just physical threats, but technical problems requiring engineering solutions and moral dilemmas requiring deep personal conviction.

For the modern technical reader, Coxere's journal reinforces the importance of **redundancy** (both in supplies and skills), the necessity of **accurate data recording**, and the value of **primary source material** in reconstructing complex historical systems. The work remains a cornerstone for maritime historians, providing a human face to the cold statistics of 17th-century naval expansion. As we continue to digitize and analyze these records, the legacy of Edward Coxere offers a unique window into the foundational years of global maritime commerce and the enduring spirit of the adventurous seafarer.

Tags: [#Edward Coxere](#) [#17th Century Maritime](#) [#Naval History](#) [#E.H.W. Meyerstein](#) [#Quaker History](#) [#Maritime Navigation](#)

