AHS London Lecture Thursday 10 November 2022

Emily Akkermans, Chronometry and Chronometers on British Voyages of Exploration, c.1815–1836

The history and development of the marine chronometer has been a topic of considerable research. Yet few studies have focused on their actual use at sea, particularly during the first half of the nineteenth century, when they came into widespread use.

In this talk, I will examine the practices that were adopted by Royal Navy officers on four scientific expeditions that took place between 1819 and 1836. These are William Edward Parry’s three attempts to find a North-West Passage, William Owen’s survey of the east coast of Africa, Henry Foster’s scientific expedition in the Atlantic and Robert Fitzroy’s survey of South America and circumnavigation.

Because of their complicated and delicate mechanisms, chronometers were inherently temperamental and unreliable devices and they responded in different ways to the unstable environment of the ship. Despite this, officers were required to use them to take and record reliable navigational and longitude measurements at sea. Part of their use thus involved the management of the instruments on board ship, the training of officers in the astronomical and mathematical concepts and procedures that underpinned their use, and instructions in how to record and manage the data that chronometers produced.

I will also pay attention to the social and institutional networks in which the users of these instruments operated, considering the role of the State, the Royal Society, and the Admiralty. As other scholars have shown, reforms within the Royal Navy during this period shaped the role of naval officers. They often turned to scientific pursuits to further their naval careers and had close associations with scientific societies. Within this context, we should not consider ‘longitude by chronometer’ as a single instrumental measurement easily achieved, but rather as a complex interaction of instruments and methods whose manipulation invoked questions of credibility and tolerance, in the instruments and in their users.

Dr Emily Akkermans studied horology at Schoonhoven, the Netherlands. In 2018 she was appointed Curator of Time at Royal Museums Greenwich (see AH June 2018 pp 183–4). Her PhD thesis is titled Chronometry and Chronometers on British Voyages of Exploration, c.1815–1872 (see AH March 2021, p. 20).

Attending London Lectures

We run our 2022 London Lecture Series as hybrid events, available live both online via Zoom and in-person at St Mary-at-Hill Church, Lovat Lane, London. Whether online or in-person, those wishing to attend lectures must register in advance at www.ahsoc.org/events/london-lectures. If you have questions or difficulties please email events@ahsoc.org.