





Nuno Vila-Santa, Knowledge Exchanges between Portugal and Europe: Maritime Diplomacy, Espionage, and Nautical Science in the Early Modern World (15th-17th Centuries)

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There have been many calls in recent years for deeper studies of the circulation and exchange of knowledge. In a much-cited paper entitled 'Knowledge in transit' in *Isis* (2004), for instance, James Secord set out some key questions that such investigations should address: how and why knowledge circulates; how it passes from an individual or group to more people or larger groups. In *Knowledge Exchanges between Portugal and Europe*, Nuno Vila-Santa contributes to this growing field with a work that examines what one might mischievously call a study of the circulation of knowledge about circulation. As the title states, his book concerns the exchange of maritime knowledge, which he takes to encompass information held by individuals including pilots, sailors, cartographers and cosmographers; set down in nautical documents such as rutters (mariners' handbooks of sailing directions and other navigational information), charts and other manuscript and printed treatises; and passed covertly through espionage. Given the expansion of European maritime activity in the early modern period, such knowledge and its holders were well understood to be strategically important. Who knew what and where they went really mattered.

The narrative focuses on the ways in which Portugal's rivals – Spain, France, England and the Dutch Republic – sought to obtain the knowledge it had been accumulating as the first major European maritime power of the early modern period, and how Portuguese authorities sought in turn both to prevent this happening and to gain information from those same rivals. Strategies relied on open channels – the movement, free or otherwise, of people and texts – and covert ones, notably spying. Each chapter is a case study of encounter and exchange: Spanish–Portuguese interchanges in the fifteenth and sixteenth centuries; the importance of Portuguese knowledge for English voyages to West Africa in the 1550s; the diplomatic and espionage efforts of French ambassadors to Portugal in the late 1550s; Portuguese attempts to limit French and English maritime ambitions through the control of maritime knowledge in the 1560s; and the work of Jan Huygen van Linschoten, whose publication of nautical, cartographic, ethnographic, political, mercantile and social information about Portuguese territories in Asia fuelled Dutch colonial ambitions into the early seventeenth century.

Portugal and its rivals – who might sometimes be political allies in a period of shifting allegiances – deployed various means to control the movement of maritime experts and limit exchanges of information, while making concerted efforts to uncover the knowledge

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others held. Material with inscribed knowledge, such as charts and rutters, might be confiscated and held in secret or thrown overboard to thwart capture by an enemy. Pilots might be prevented from entering foreign service without permission, under threat of imprisonment or even execution. Those who did find employment elsewhere might be offered inducements to return or might find themselves under threat of kidnapping or murder. Ambassadors and other diplomatic staff were key players, working to control by formal and informal means their own nation's experts and information, courting experts from elsewhere, or obtaining strategic knowledge in more covert ways. States might even deploy the lure of new intelligence to enable spying, as when a fake Portuguese pilot offered his services to French king Francis I in the late 1530s in order to learn of France's overseas plans.

Vila-Santa makes clear that maritime knowledge, like other forms of knowledge, could not be controlled. It flowed freely in all directions. As a Florentine merchant in Lisbon wryly observed after the Portuguese king ordered the seizure (on penalty of death) of charts and rutters from Vasco da Gama's first foray into the Indian Ocean, 'everything will become known all the same' (p. 326).

The account has many strengths. By focusing on state and diplomatic activities, Vila-Santa shows very well the extent to which maritime knowledge was bound up with the politics and practices of overseas expansion. By doing so, he crafts a narrative that encompasses elements often missing from histories of navigational and cartographic technique. Likewise, the treatment of five competing European states allows a richer narrative than is offered by works confined to one nation. In this, he answers Secord's challenge to produce histories that retain the virtues of the local while going beyond the bounds of a single country. From the sources cited, Vila-Santa is well abreast of current work in the history of knowledge and its circulation, as well as maritime history, the history of science and political/diplomatic history, and draws these threads together to create a rich narrative, albeit one that is at times densely packed with detail. If I had one request, it would be for more and better illustrations than the small group tucked away near the back, for instance to show more clearly the different ways in which maritime knowledge was codified and inscribed in order to preserve it and pass it on.

Overall, Vila-Santa sets out very well the ways in which Portuguese nautical knowledge underpinned the expansion of maritime activities by Portugual's European rivals, with efforts to control and contain that knowledge proving almost wholly unsuccessful. He notes in the introduction that the account also has something to say about the foundations of science in the early modern period. However, this question is not extensively addressed. It would be an interesting subject to explore further, although one would need to think carefully about how the highly contingent and geographically specific qualities of maritime knowledge might relate to ambitions to uncover more universal laws about the world. Nevertheless, the generation of maritime knowledge is worth exploring in its own right and Vila-Santa tellingly reminds us of the importance of pilots as a select group with valuable, detailed knowledge and experience of sea areas that were becoming the target of European colonial expansion.