

Please cite the Published Version

Nelson, Samantha and Fletcher, Catherine  (2022) Mercenaries, migrants and the crew of the Mary Rose. *History*, 107 (378). pp. 836-860. ISSN 0018-2648

DOI: <https://doi.org/10.1111/1468-229X.13328>

Publisher: Wiley

Version: Published Version

Downloaded from: <https://e-space.mmu.ac.uk/630307/>

Usage rights:



[Creative Commons: Attribution-Noncommercial-No Derivative Works 4.0](#)

Additional Information: This is an Open Access article which appears in *History*, published by Wiley

Enquiries:

If you have questions about this document, contact openresearch@mmu.ac.uk. Please include the URL of the record in e-space. If you believe that your, or a third party's rights have been compromised through this document please see our Take Down policy (available from <https://www.mmu.ac.uk/library/using-the-library/policies-and-guidelines>)

Mercenaries, Migration and the Crew of the *Mary Rose*

SAMANTHA NELSON  CATHERINE FLETCHER 
Manchester Metropolitan University, Manchester, United Kingdom

Abstract

This article reconsiders the presence of foreigners in the crew of Henry VIII's ship the *Mary Rose* in light of recent archaeological investigations of human remains from the wreck. Through an interdisciplinary analysis drawing on archaeological investigation, the artefacts found on board the *Mary Rose* and historical documents, this study investigates the context for the presence of foreigners on board the ship, considering how and why these men came to be on board an English warship during the mid-Tudor period. Although media coverage extrapolated from recent archaeological research an image of a multicultural England, this study argues that the challenge to the narrative of Henrician England as ethnically homogenous should also be considered alongside military contexts. In particular, by framing the source material within the context of both short-term military-based and longer-term patterns of migration, this study points to the importance of considering military factors, the wider picture of migration, and, in particular, the intersection between them. Furthermore, it demonstrates that Tudor England relied on foreign soldiers, trade, labour and skills. By placing the archaeological and scientific enquiries into their historical contexts, a more complete narrative of Henrician England can be formed – one that acknowledges the role of strangers and transnational relationships in the defence and maintenance of the English realm.

I

Describing his experience of Henry VIII's 1544 campaign for Boulogne, the Welsh soldier Elis Gruffydd noted that the English king's army included:

many depraved brutish foreign soldiers from all nations under the sun – Welsh, English, Cornish, Irish, Manx, Scots, Spaniards, Gascons, Portingals, Arbannoises, Greeks, Turks, Tartars, Almains, Germans, Burgundians, Flemings.¹

¹ This article began life as Samantha Nelson's undergraduate dissertation at Swansea University. Catherine Fletcher, as supervisor, suggested the research question and gave initial advice on sources and secondary literature. Nelson refined the question, carried out the research and analysis, and wrote up the dissertation; Fletcher contributed additional research, analysis and editing for the present article. We are grateful to Adam Mosley for his advice on the dissertation, to Nick Owen for introducing us to the archaeological researchers, to Jessica Scorrer and her colleagues for allowing us early sight of their findings, to Alexandra Hildred at the Mary Rose Museum for access to their

2 MERCENARIES, MIGRATION AND THE CREW OF THE *MARY ROSE*

Even allowing for some exaggeration, Gruffydd's testimony reflects the diverse nature of the English military force in the mid-sixteenth century. In doing so, it provides context for recent archaeological findings about the crew of the *Mary Rose*, which sank in the Solent estuary during active engagement with the French naval fleet in 1545. Isotopic research on eight skulls of crew members conducted by Jessica Scorrer et al., has established that one was likely to have been of Spanish descent, one Italian, one North African and one brought up in England but of North African ancestry.² Popular media coverage of these findings emphasised their potential to challenge the image of Henrician England as an ethnically homogenous nation: the *Guardian* reported that the bone analysis 'adds to evidence that Tudor England was a melting pot of ethnic diversity' and BBC News stated that the findings 'cast fresh light on the ethnic makeup of Tudor Britain'.³ The *Times* likewise used the term 'melting pot', its reporter claiming: 'The analysis challenges assumptions about the "whiteness" of 16th century England, indicating that the country was far more diverse than had been believed'.⁴ Here we argue that while the challenge to the image of Henrician England as ethnically homogenous is indeed significant, and the public interest in it understandable, it is only one part of the picture. As Gruffydd's account suggests, there is also an important military context to consider: Tudor England relied on foreign soldiers, trade, labour and skills. The new archaeology can best be contextualised by reference to both longer-term migration and more immediate military pressures, two phenomena rarely considered together but which, we argue here, intersected. The hiring of foreign mercenaries and the domestic mustering of foreign-born soldiers and crewmembers was certainly not unique to mid-sixteenth century England or exceptional in relation to the maritime and wartime economy of the early modern period. Nonetheless, the *Mary Rose* offers a unique case-study in terms of the survival of both human remains and artefacts, adding a vital material dimension to discussions of English-hired foreign mercenaries, soldiers and crewmembers based primarily on textual evidence.⁵

collections and to the anonymous readers for their very helpful comments. Elis Gruffydd, 'Boulogne and Calais from 1545 to 1550', *Bulletin of the Faculty of Arts, Fouad I University* (ed. and transl. by M. Bryn Davies) 12 (1950), 1–90 (pp. 14–5).

² Jessica Scorrer, 'The men of the Mary Rose: investigating the childhood diet and origins of the Mary Rose crew using multi-isotopic analysis' (unpublished master's thesis, Cardiff University, 2018), pp. 65–7, 70–3 and 82–4; Jessica Scorrer et al., 'Diversity aboard a Tudor warship: investigating the origins of the Mary Rose crew using multi-isotopic analysis', *Royal Society Open Science*, 8/5 (2021), 1–19 (pp. 10 and 12–4).

³ Nicola Davis, 'Mary Rose crew might have included sailors of African heritage', *The Guardian*, 14 March 2019, online at <https://www.theguardian.com/science/2019/mar/14/mary-rose-crew-might-have-included-sailors-african-heritage> [accessed 26 October 2021]; 'Mary Rose crew "was from Mediterranean and North Africa"', BBC News, 16 March 2019, online at <https://www.bbc.co.uk/news/uk-wales-47572089> [accessed 26 October 2021].

⁴ Matthew Moore, 'Tudor warship Mary Rose was awash with a mix of races', *The Times*, 14 March 2019, online at <https://www.thetimes.co.uk/article/tudor-warship-mary-rose-was-awash-with-a-mix-of-races-vkn92m8fx> [accessed 26 October 2021].

⁵ David Parrott, *The Business of War: Military Enterprise and Military Revolution in Early Modern Europe* (Cambridge, 2012); David Potter, 'The international mercenary market in the sixteenth

The 1982 recovery of the *Mary Rose* presented a unique archaeological opportunity to examine Tudor society through the range of well-preserved artefacts and skeletal remains. Much early research assumed, albeit implicitly, that the crew would have been English: Ann Stirland noted in 2000 that the alternatives ‘had not occurred to [her]’.⁶ Although Gilbert J. Millar had made a strong case in 1980 for the significance of mercenaries and auxiliaries in Henry’s army, references in historical scholarship to foreign soldiers on the *Mary Rose* tended to be made only in passing.⁷ A turning point came in 2009 with the publication of new archaeological analysis of human remains suggesting a significant presence of Spaniards on board; a 2016 project assessing the viability of 3D modelling for ancestry estimation further raised the possibility that one of the crew was African.⁸ Between the 2009 study, which sampled eighteen skeletons and proposed that between six and eleven of these men may have come from regions more southerly to England, and the 2021 study, which examined a further eight skeletons and concluded that three individuals may have derived from areas southerly to Britain and a fourth may have had African heritage, there is ample reason to hypothesize that ‘strangers’ played a substantial role on board ship, even before the evidence of texts and artefacts is taken into account.⁹

In parallel with this research on the *Mary Rose*, historians of early to mid-Tudor England have explored wider questions of transnational interconnectivity and diversity. Besides Millar, Cinzia Sicca, Catherine Fletcher, David Potter and Benjamin Redding have demonstrated in their respective studies that Henry VIII made advances to improve England militarily, economically and culturally with the help of transnational networks and foreign agents.¹⁰ Some histories of migration to Tudor England – including those of Liên Luu, Nigel Goose and Jacob Selwood – have focused on the extensive movement of religious migrants from the mid-sixteenth century, overlooking smaller-scale but still significant

century: Anglo-French competition in Germany, 1543–50’, *The English Historical Review*, 111/440 (1996), pp. 24–58.

⁶ Ann Stirland, *Raising the Dead: The Skeleton Crew of King Henry VIII’s Great Ship, the Mary Rose* (Chichester, 2000), p. 149.

⁷ Gilbert John Millar, *Tudor Mercenaries and Auxiliaries, 1485–1547* (Charlottesville, VA, 1988). Passing references are in Geoffrey Moorhouse, *Great Harry’s Navy: How Henry VIII Gave England Sea Power* (London, 2006); Julie Gardiner and Michael J. Allen (eds), *Before the Mast: Life and Death Aboard the Mary Rose*, 2 vols. (Portsmouth, 2005).

⁸ L. S. Bell, J. A. Lee Thorp and A. Elkerton, ‘The sinking of the *Mary Rose* warship: a medieval mystery solved?’, *Journal of Archaeological Science*, 36/1 (2009), 166–73 (pp. 166 and 172). The 2016 study is unpublished, but details of this research can be found in: The *Mary Rose* Trust (eds), *The Mary Faces of Tudor England Limited Edition Exhibition Guide* (Wellington, England, 2018).

⁹ Bell, Lee Thorp and Elkerton; Scorer et al. Due to the limited number of skeletons selected for isotopic analysis in both studies, further research on a larger sample will be required to confirm the hypothesis.

¹⁰ Catherine Fletcher, ‘War, diplomacy and social mobility: the Casali family in the service of Henry VIII’, *Journal of Early Modern History*, 14 (2010), 559–78; Potter, pp. 24–58; Cinzia M. Sicca, ‘Consumption and trade of art between Italy and England in the first half of the sixteenth century: the London house of the Bardi and Calvacanti company’, *Renaissance Studies*, 16/2 (2002), 162–201; Benjamin W. D. Redding, *The English and French Navies, 1500–1650* (Woodbridge, 2022).

4 MERCENARIES, MIGRATION AND THE CREW OF THE *MARY ROSE*

cases of migration before this period.¹¹ Recent scholarship by Onyeka Nubia and Miranda Kaufmann has sought to incorporate the early Tudor period into discussions of pre-modern migration, with a specific focus on documenting the presence of migrants in English society.¹² Several useful prosopographical studies on the medieval and early-mid Tudor periods by Mark Ormrod and Jessica Lutkin, amongst others, have also emerged from the development of the *England's Immigrants Database* project.¹³ Still, overall, there has been limited analysis of the role of foreigners in the defence and maintenance of the English realm. Scholarship that has considered the role of foreigners in English warfare has typically focused on the presence of mercenaries in English garrisons including Calais or Berwick, as well as their participation in military campaigns on the Continent and the Scottish borders.¹⁴ These works offer some useful examples of mercenaries serving in England, though they rarely discuss the connection between mercenaries and English naval service, the role of mercenaries in the 1545 defence of Portsmouth, nor the role of migrants levied via domestic mustering.¹⁵ David Parrott, too, has made an important contribution to discussions on private military organisations by demonstrating that mercenaries were a central component of all early modern armies.¹⁶

Here, we draw on the new archaeological research, the artefacts found on board the *Mary Rose* and textual sources including government and diplomatic correspondence, muster books, military surveys and customs

¹¹ Nigel Goose and Liên Bich Luu (eds), *Immigrants in Tudor and Early Stuart England* (Brighton and Portland, OR, 2005); Liên Bich Luu, *Immigrants and the Industries of London, 1500–1700* (London and New York, 2016); Jacob Selwood, *Diversity and Difference in Early Modern London* (Farnham, Surrey and Burlington, VT, 2010).

¹² Miranda Kaufmann, *Black Tudors: The Untold Story* (London, 2017); Onyeka Nubia, *England's Other Countrymen: Black Tudor Society* (London, 2019); Mark Ormrod, 'Enmity or amity? The status of French immigrants to England during an age of war, c.1290–c.1540', *The Journal of the Historical Association*, 105/364 (2020), pp. 28–59.

¹³ Maryanne Kowaleski, 'Breton immigration in medieval England', in Gwilym Dodd, Helen Lacey and Anthony Musson (eds), *People, Power and Identity in the Late Middle Ages: Essays in Honour of Mark M. Ormrod* (London and New York, 2021), pp. 115–34; Jessica Lutkin, 'Settled or fleeting?: London's medieval immigrant community revisited', in Martin Allen and Matthew Davies (eds), *Medieval Merchants and Money: Essays in Honour of James L. Bolton* (London, 2016), pp. 137–56; Jessica Lutkin, 'A survey of resident immigrants in Hampshire and Southampton 1330–1550', *Proceedings of the Hampshire Field Club Archaeological Society*, 70 (2015), 155–68; Ormrod, 'Enmity or amity?'.

¹⁴ Millar's main focus is on the French land war of 1544–46; see also Mark Charles Fissel, *English Warfare 1511–1642* (London and New York, 2001), pp. 7–8, 13, 18, 29 and 291; David Grummitt, *The Calais Garrison: War and Military Service in England, 1436–1558* (Woodbridge, 2008), pp. 55–61, 106 and 135; Steven Gunn, *The English People at War in the Age of Henry VIII* (Oxford, 2018), pp. 104–5 and 129; Paul E. J. Hammer, *Elizabeth's Wars: War, Government and Society in Tudor England, 1544–1604* (Basingstoke, 2003), pp. 9, 21 and 29–30; Alexander James Hodgkins, 'Rebellion and warfare in the Tudor state: military organisation, weaponry, and field tactics in mid-sixteenth century England' (unpublished PhD thesis, University of Leeds, 2013), pp. 63–5; Potter, pp. 26–7, 30 and 48; Frank Tallett, *War and Society in Early Modern Europe, 1495–1715* (London and New York, 1992), p. 89.

¹⁵ Both Fissel and Gunn make brief references to the use of foreign mariners in the Henrician army in their respective works, but do not develop this analysis further. See: Fissel, p. 8; Gunn, *The English People*, p. 85.

¹⁶ Parrott, pp. 2–4, 18–9 and 73–4.

accounts to investigate the context for the presence of ‘strangers’ on board the ship. We use the contemporary word ‘stranger’ to denote people who were not born in territories under the control of the English monarch.¹⁷ This could include foreign-born migrants who were residing in England temporarily, or even those who legally revoked their foreign status by seeking denization or naturalisation, which were respectively obtained through a private Act of Parliament or a grant obtained by the Crown.¹⁸ While acknowledging its difficulties, we use the term ‘mercenary’ in its common sense meaning a person engaged in foreign military service for financial reasons, distinguishing these individuals from men pressed into service.

With that in mind, it should be recognised that strangers were not the only soldiers with such a motivation.¹⁹ Following a brief introduction to the political context of the 1540s, we discuss the recruitment of foreign soldiers and mariners, the diplomatic networks that enabled this and complementary evidence for the importation of foreign armaments. The second part of the article explores the presence of strangers on board the *Mary Rose* beyond the short-term hiring and impressment of foreign troops, assessing routes and patterns of transnational immigration as well as the roles of migrant soldiers, artisans and professionals on the ship. Drawing on Keith Muckelroy’s theorisation of ships as closed social spaces and the seaborne extension of land-based economic and political forces, we argue that the case of the *Mary Rose* sheds important light on the role of foreigners in the defence and maintenance of the English realm, and has broader resonance for the study of migration in this period.²⁰

Following his break with Rome in the 1530s, Henry VIII’s position in Europe had been tenuous; having been named a heretic by Pope Paul III, the threat of invasion by the Catholic countries of Spain and France aided by exiled English Catholics was a very real possibility.²¹ By the early 1540s, however, the prospect of conflict between France and Spain led both countries to seek Henry’s support. After signing a military alliance with the Holy Roman, Emperor Charles V, in 1543, Henry was sufficiently confident to re-initiate overt offensive measures against England’s traditional enemy France, sanctioning the raiding of French ships by English mariners, declaring open war on Francis I and providing military aid to Charles on the Continent.²² Yet Henry’s ‘great enterprise’ against France began in earnest during 1544 with the English siege of Montreuil and the successful capture of Boulogne on 13 September the

¹⁷ Luu, p. 143.

¹⁸ Stephen Alford, *London’s Triumph: Merchant Adventurers and the Tudor City* (London, 2017), p. 117; Luu, pp. 144–6.

¹⁹ On the problems of the terminology see Parrott, pp. 29–30.

²⁰ Keith Muckelroy, *Maritime Archaeology* (Cambridge, 1978), p. 216.

²¹ Susan Brigden, ‘Henry VIII and the crusade against England’, in Suzannah Lipscomb and Thomas Betteridge (eds), *Henry VIII and the Court: Art, Politics and Performance* (Farnham, Surrey, 2013), pp. 215–34; Hammer, pp. 11–2.

²² Hammer, pp. 12–4.

same year. Provoked by these hostile actions and humiliated by the loss of Boulogne, the French retaliated by launching their own attempted invasion of southern England in July 1545. This was the context in which the crew of the *Mary Rose* found themselves serving.

In order to support his military campaigns, defend his realm and wage an effective assault against France, Henry needed to utilise his networks of military organisation on both a national and European level. By the early sixteenth century, Henry had inherited two disparate and co-existing methods of mobilising a domestic army: the first, a medieval 'quasi-feudal' system where private contingents were raised by wealthy landowners, and the second, a commission of array system where soldiers across England and Wales were assembled through community levies.²³ Whilst the process of mustering had shifted somewhat from the quasi-feudal method to the national commissions basis by the 1540s, Henry continued to utilise both systems of recruitment to form the principal part of his armed forces due to his lack of a standing army – an amalgamated recruitment method which, according to Paul Hammer, suited short, intense, seasonal campaigns and allowed for large numbers of domestic troops to be raised.²⁴ Indeed, the number of troops levied for Henry's 1513 and 1544 French campaigns – approximately 30,000 and 40,000 troops respectively – reflect the monarch's long-held desire to match the size and power of continental armies.²⁵ With the English crown assembling troops on an unprecedented scale for Henry's campaign in Boulogne, the mobilisation of soldiers on home soil further intensified during the early months of 1545 when news of a joint Franco-Scottish attack reached the Tudor court.²⁶

This short-term mobilisation may have been the source of some of the crew who later drowned on the *Mary Rose*. Amongst Henry's efforts to assemble 30,000 domestic troops, 185 soldiers and 200 mariners were specifically required to crew the *Mary Rose* for active battle, and isotopic research has suggested that two *Mary Rose* archers were of coastal British origin, possibly from Southwest England and from a poorer social background.²⁷ It is likely that a significant proportion of mariners, too, derived from port towns across southern England. David Loades has

²³ Fissel, p. 4; Jeremy Goring, 'Social change and military decline in mid-Tudor England', *History*, 60/199 (1975), 185–97; Grummitt, p. 72; Gunn, *The English People*, p. 14; Hammer, p. 28; Hodgkins, pp. 51–5 and 61–3.

²⁴ Gunn, *The English People*, pp. 14, 55 and 88–9; Hammer, p. 20.

²⁵ Parrott, pp. 13 and 74; Gunn, *The English People*, p. 17; Fissel, p. 16; Hodgkins, p. 63.

²⁶ J. S. Brewer, J. Gairdner and R. H. Brodie (eds), *Letters and Papers, Foreign and Domestic, of the Reign of Henry VIII*, 22 vols. (London, 1862–1932), XX/I 531 (hereafter *L&P*); *State Papers Published under the Authority of Her Majesty's Commission: King Henry the Eighth*, 11 vols. (London, 1832–50), V 516–17 (hereafter *St. P.*). Calendar entry numbers, rather than page numbers, in *L&P* are cited for ease of reference. Entries have been checked against digitised manuscripts where available; The National Archives, State Papers (hereafter TNA, SP) 1/200, f. 14 (*L&P* XX/I 541) and ff. 31–3 (*L&P* XX/I 555); SP 1/203, ff. 61–2 (*L&P* XX/I 1105).

²⁷ C. S. Knighton and David Loades (eds), 'The Mary Rose', in *The Anthony Roll of Henry VIII's Navy: Pepys Library 2991 and British Library Additional MS 22047 with Related Documents* (Aldershot, 2000), p. 43; *St. P.* V 516–7; Scorrer, pp. 77–8; Scorrer et al., p. 10.

argued that royal ships were typically crewed through commissions of array during the later years of Henry's reign, where royally appointed commissioners would frequently mobilise men from port towns including Southwold or Barnstable.²⁸

As we have seen, however, the archaeological evidence suggests that domestic forces and mariners cannot account for the entire *Mary Rose* crew. Examining the longer-term picture, this is not surprising. There is strong evidence of foreign mariners serving in Henry's earlier Anglo-French wars, confirming Redding's argument that maritime states depended on private shipping and mariners to strengthen their military resources.²⁹ For his 1512–14 French campaign, Henry hired eighteen ships from Antwerp for thirty-eight days to help transport his soldiers from England to the continent – so many Dutch ships were hired, in fact, that 'Joyes Duchemen' was paid solely to 'interpete and set the Duchemen forwards bycause of his language'.³⁰ A different set of ships from Antwerp and Flushing were also hired in the same campaign to transport both ordnance and victuals to Calais.³¹ The English Crown further relied upon three 'vyttelers Spanyardes' to provide and transport victuals to their army for a total of three weeks: the 'Sancta Anna' at 170 tons with twenty-nine mariners; the 'Maria de Bylbo' at 130 tons with twenty-three mariners; and the 'Mawdelyn of SeyntSebastion' owned by one 'Sebastien de la lakareta vermo de Sansabastion' with twenty-six mariners.³² Though this campaign was relatively short in its duration, hundreds of foreign mariners were hired to crew these ships and implicitly assist in the defence of the English realm. Some of these men, having previous experience with English service, may well have been utilised in Henry's subsequent wars with France including those in the 1540s. More significantly, it was during this campaign that Henry first hired Spanish ships and mariners specifically for use in active naval service. In total, there is evidence of five Spanish ships fighting in this war: the *Anteny Montego*, *Sancta Maria de la Cayton*, *Sancheo de Gara*, *Erasmus Sebastian* and *Gret Newe Spanyarde*.³³ Out of these ships, only one – the *Anteny Montego* – had a Spanish captain; the rest were temporarily captained by Englishmen, including the courtiers and diplomats Sir George Throckmorton and Sir John Wallop, who were placed in charge of the *Gret Newe Spanyarde* and the *Sancheo de Gara*, respectively. That said, a Spanish master responsible for the navigation of the ship was present on all five of these vessels and paid

²⁸ David Loades, 'The English maritime community, 1500–1650', in Cheryl A. Fury (ed.), *The Social History of English Seamen, 1485–1649* (Woodbridge, 2012), pp. 6–26 (pp. 8 and 20).

²⁹ Redding, pp. 151–2. For earlier context, see: Maryanne Kowaleski, "'Alien" encounters in the maritime world of medieval England', *Medieval Encounters*, 13 (2007), 96–121 (pp. 102–3, 108 and 121). Kowaleski notes that foreign mariners were commonly hired by the English crown during the later Middle Ages (c.1300–1509).

³⁰ TNA, E 101/56/16, ff. 5–7.

³¹ TNA, E 101/56/15, ff. 6 and 10; E 101/56/12, ff. 2–5; E 101/56/2, ff. 1–14.

³² TNA, E 101/56/15, f. 1–2.

³³ TNA, E 101/56/18, ff. 4–6.

8 MERCENARIES, MIGRATION AND THE CREW OF THE *MARY ROSE*

the respectable sum of thirty shillings. The ship manifests, moreover, reveal that every ship contained a mixture of 'maryners Spanyardes', 'maryners Englissh' and domestic 'Retynue'; the wages of the Spanish mariners valued at 7s 1d a man per month were higher than those of the English mariners and domestic soldiers who both received 5s on the same terms. Again, *The Anteny Montego* stands out as an anomaly, being the only ship to have more English mariners than Spanish (twenty-nine English compared to twenty-two Spanish). Conversely, on the *Sancta Maria de la Cayton*, the Spanish outnumbered the English mariners by eight to five; the *Sancheo de Gara* held over five times more Spanish than domestic sailors; while the *Erasimus Sebastian* and *Gret Newe Spanyarde* combined comprised eighty-eight Spanish and seventy English. There is even evidence of a 'Venetean' providing twenty soldiers, twenty-eight mariners and sixteen gunners on his ship, the *Newe Barke*, to support Henry's martial ambitions.³⁴ In the early-mid sixteenth century at least, private vessels hired for the war effort remained numerically superior to state-owned warships.³⁵ This evidence strengthens the proposition that prior to 1545, foreign mariners from across the continent were a common feature of English warfare and were not only accustomed to working under English captains, but also alongside English mariners and soldiers.

Personal items salvaged from the *Mary Rose* only add weight to the argument for the crew's diversity. For example, a book and leather balance case bearing the popular Protestant slogan 'Verbum: Domini: Manet: In: Eternum [sic]' [The Word of the Lord Endureth For Ever] (Peter I:25) were found alongside multiple objects featuring devotional Catholic imagery.³⁶ The discovery of twelve paternosters is of particular interest because in 1538, Henry had prohibited the mechanical recitation of the rosary 'over a number of beads, not understood nor minded on, or in such like superstition... as things tending to idolatry and superstition' amongst his subjects.³⁷ It is possible that at least some of these devotional beads belonged to Catholic men, possibly from a country that continued to practice Catholicism openly, like Spain.³⁸ In any case, the inclusion of both of these items on an English ship, at a time when religious divisions were rife in England and continental Europe, suggest that the *Mary Rose* contained a diverse crew who engaged in diverse devotional

³⁴ TNA, E 101/62/22.

³⁵ Redding, p. 151.

³⁶ For Catholic artefacts, see: Artefacts 81A1991 (pouch bearing the sacred trigram in the form 'IHS'); 81A2581 (book embossed with Vulgate Psalm 101, v.2); 81A4262 (lead token depicting the Virgin Mary), The Mary Rose Museum, Portsmouth (hereafter MRM). For Protestant artefacts, see: Artefacts 81A4123 (embossed book); 81A4107 (balance case), MRM.

³⁷ Henry Gee and William John Hardy (eds), 'The second royal injunctions of Henry VIII, A.D 1538', in *Documents Illustrative of English Church History: Compiled From Original Sources* (London, 1914), pp. 275–81 (p. 277).

³⁸ Artefacts 80A0993, 80A0995, 81A0323, 81A0998, 81A2094, 81A1409, 81A1414, 81A2267, 81A2529, 81A2985, 81A4184, 82A4477 (paternosters), MRM; Mark Redknap, 'Religious Items', in *Before the Mast*, I, pp. 117–27 (pp. 117, 120, 123 and 127).

practices.³⁹ The presence of foreign crewmembers on the *Mary Rose* is further reflected in contemporary reports written after the sinking of the vessel. For instance, it was a Flemish survivor who first reported to François Van der Delft, the imperial ambassador to Charles V, about the sinking of the ship.⁴⁰ Bell, Lee Thorp and Elkerton argued that their archaeological findings provided new context for a complaint made by Sir George Carew, Captain of the *Mary Rose*, that his crew were so ‘maligned and disdained one the other, that refusing to do that which they should do, were careless to do that which was most needful and necessary... the sort of knaves whom he could not rule’, which they read as referring to a ‘maelstrom of miscommunication’ among the crew – a possible factor in its sinking.⁴¹ The employment of strangers in English warfare, however, was common enough that a mixture of languages on board ship would not have been exceptional. If miscommunication was a factor, it seems more likely that provision for interpretation failed under pressure. If there were problems of communication on the *Mary Rose*, these should not be solely attributed to the fact of a mixed nationality crew: this would have been a familiar enough scenario.⁴²

Bell, Lee Thorp and Elkerton further hypothesised that the presence of foreigners on board might be linked to the impressment of a group of stranded Spaniards.⁴³ The background to this episode was rising diplomatic tension between Henry and Charles V. In 1543, responding to growing hostilities between England, France and Scotland, Henry had proclaimed that any ships believed to be carrying French or Scottish goods – regardless of the crew’s nationality – were to be arrested awaiting the king’s pleasure.⁴⁴ By early 1545, English merchants had capitalised on this proclamation by illegally arresting trading ships that ventured close to English shores, seizing their lucrative cargo and often leaving the crewmembers stranded.⁴⁵ This particularly affected Spanish ships and their crew who had to pass through the English channel to access Flemish trade markets. Charles had complained to his ambassadors in England, Eustace Chapuys and François Van der Delft, of Spanish ‘ships

³⁹ G. W. Bernard, ‘The Making of Religious Policy 1533–1546: Henry VIII and the Search for the Middle Way’, *The Historical Journal*, 41.2 (1998), 321–49 (pp. 321–2, 325–6, 332–3 and 346–7); Vincent V. Patarino Jr., ‘The religious shipboard culture of sixteenth and seventeenth-century English sailors’, in *The Social History of English Seamen*, pp. 141–92 (pp. 148–50 and 165).

⁴⁰ Martin A. S. Hume (ed.), *Calendar of State Papers, Spain*, 13 Vols. (London, 1904), VIII 101.

⁴¹ Bell, Lee Thorp and Elkerton, p. 172; John Maclean (ed.), *The Life and Times of Sir Peter Carew* (London, 1857), pp. 33–4. Another contemporary commentator, John Russell, Earl of Bedford, even claimed that the *Mary Rose* had been lost due to ‘suche racheness and great negligence’ of the crew, although it is unclear whether he believed this to be directly related to the presence of foreign crewmembers: TNA, SP 1/204, ff. 101–2 (L&P XX/I 1255).

⁴² Kowaleski, ‘“Alien” encounters’, pp. 99 and 105–8.

⁴³ Bell, Lee Thorp and Elkerton, p. 172.

⁴⁴ Paul L. Hughes and James F. Larkin (eds), ‘Prohibiting unlicensed imports from France’, in *Tudor Royal Proclamations*, 3 vols. (New Haven and London, 1964), I, pp. 323–4; L&P XX/I 104; TNA, SP 1/198 ff. 3–10 (translation from L&P XX/I 146).

⁴⁵ Gordon Connell-Smith, *Forerunners of Drake: A Study of English Trade with Spain in the Early Tudor Period*, reprint edn. (Westport, CT, 1975), pp. 133–4 and 154; Loades, p. 18.

10 MERCENARIES, MIGRATION AND THE CREW OF THE *MARY ROSE*

remaining there [in England], the herring being sold without the owners' consent and other property detained', while Mary of Hungary, Charles' sister and regent of the Netherlands, had lamented how 'vessels carrying Spanish infantry into Spain, on board which were also gentlemen of his household and Spanish merchants, with much property, are detained in England'.⁴⁶ Meanwhile, unbeknown to Henry, Charles had reneged on his alliance with the English by signing the Treaty of Cr  py with France on 14 September 1544; not only was England now left alone to face the French, but Charles also chose to recall all mercenary soldiers from his territories whom he had previously loaned to the English king.⁴⁷ In the circumstances it is not surprising to find that in early 1545, the English diplomat Sir Philip Hoby was allocated 1,000 marks to 'prest a certayne nombre of Spaniardes for His Grace's service in the warres'.⁴⁸ Further details about this impressment is evident from correspondence between the Privy Council, William Paget and Nicholas Wotton, in which it was documented that:

nine shippes, being in journey from those Low Countrees towardes Spayn, and having in them certen Spayniardes souldiars...wer forced, for lack of wynd, to enter and demoure in the Kinges Majestes port of Fawmouth...[in which] 600 of them...made humble sute to be admitted to His Majestes service of the warres.⁴⁹

These men may well have been pressed into service on the Scottish marches, although it is entirely plausible that, being mariners, they were impressed into naval service. Gunn has noted that as well as pressing foreign ships into English service during times of war, the English crown were also known to press foreign mariners into their naval forces.⁵⁰ The Zeeland mariner Jacob Jacobs and merchant Henri Jansse from Antwerp certainly complained how they were forced to help the English war effort during 1545 against their wishes.⁵¹ While Henry could not be seen to openly endorse hostile measures against the Spanish that could be construed as an act of war, the allure of financial rewards, the prospect of much-needed additional soldiers and the chance to strike back at Charles, meant that Henry often turned a blind eye to these illegal activities. It is entirely plausible that these Spanish men, being stranded in English ports, resolved to serve Henry in return for wages and victuals – much to the emperor's dissatisfaction.⁵² In addition, had they felt forced into this service, that might have prompted some of the tensions on board to which Carew alluded: this seems a more likely explanation than language difficulties.

⁴⁶ *L&P XX/I* 239 and 329.

⁴⁷ Hammer, pp. 18–9.

⁴⁸ TNA, SP 1/197, f. 189 (*L&P XX/I* 106).

⁴⁹ *St. P. X* 331.

⁵⁰ Gunn, *The English People*, p. 85.

⁵¹ TNA, SP 1/204 ff. 7–20 (translation from *L&P XX/I* 1202).

⁵² *L&P XX/I* 329 and 337.

Impressment of stranded Spaniards, moreover, need not be the only route by which strangers found themselves on board the *Mary Rose*. Like their European counterparts, English kings also relied upon paid mercenaries to supplement their domestic forces; Henry VII was known to have hired 100 Swiss and Landsknecht artillery troops in 1497, while Henry VIII employed 1,000 Netherlander and 6,000 Landsknecht cavalry in 1513.⁵³ Henry VIII was once again engaged in the European mercenary market around the time of the ship's sinking, and in 1544 the king hired around 6,000 foreign troops.⁵⁴ The following year the king notified his commanders that he had 'taken order for one band of 1,500 Spayniardes, 4,000 Almaynes, 400 or 500 hacquebutiers of horsback, and 5 or 600 launces' to transfer to the Borders.⁵⁵ This form of martial recruitment enabled an effective military force to be raised more swiftly, as the king of France had demonstrated several times throughout the 1520s and 1540s.⁵⁶ To fulfil his ambition to reclaim the French throne from Francis I, Henry needed to use similar tactics. Another factor, too, can explain the need to hire foreign mercenaries in during the 1540s. Several scholars including Jeremy Goring, Paul Hammer and David Grummitt have convincingly argued that the existing English method of mustering armies, a hybrid system of military organisation that was disorganised, disparate and inefficient, was not suited to a sustained war that required the levying of large numbers of troops on multiple fronts.⁵⁷ At various periods between 1543–46, for instance, English soldiers were not only needed to defend the Scottish borders in the north and key maritime communities in the south, but also to mount expeditions and defend English-held garrisons on the Continent.

From 1544, Spanish and Italian captains capitalised on Henry's need for troops, and explicitly offered their services to the English crown. This included a 'captain of Spain, named Antonio de Mora', who offered Henry 300 soldiers, and a 'captain of Italy named Angelo Marian', who was to present '300 Italians, with light horse or on foot'.⁵⁸ These propositions from mercenary commanders continued into 1545, and were supplemented by Henry's own efforts to forge military contracts.⁵⁹ Government documents confirm this pattern, suggesting that at least some of these foreign troops were transferred to England from English garrisons in mainland Europe in preparation for the coming Scottish

⁵³ Charles Carlton, *This Seat of Mars: War and the British Isles 1485–1746* (New Haven and London, 2011), p. 16; Fissel, p. 7; Steven Gunn, David Grummitt and Hans Cools, *War, State, and Society in England and the Netherlands, 1477–1559* (Oxford, 2007), p. 23; Parrott, pp. 1–19 and 73–5.

⁵⁴ Gunn, Grummitt and Cools, p. 23.

⁵⁵ *St. P.* V 433 (*L&P* XX/I 513). Further references to movements of foreign troops are in *L&P* XX/I 306, 332, 359 and 957; *St. P.* V 516–7 and 519.

⁵⁶ Potter, pp. 24–30.

⁵⁷ Goring, pp. 188–96; Grummitt, p. 88; Hammer, pp. 20 and 29.

⁵⁸ TNA, SP 1/195, ff. 184–5 (*L&P* XIX/II 715).

⁵⁹ *L&P* XX/I 59, 99 and 1071; TNA, SP 1/197, ff. 121–2 (*L&P* XX/I 75); SP 1/198, ff. 170–1 (*L&P* XX/I 292) SP 1/201, ff. 40–3 (translation from *L&P* XX/I 729) and ff. 120–1 (*L&P* XX/I 814); SP 1/202, ff. 66–7 (translation provided from *L&P* XX/I 948) and ff. 207–8 (*L&P* XX/I 1057).

campaign. For example, the Spanish captain Petrus de Gamboa, who served in Henry's forces during the siege of Boulogne, was documented in Newcastle during April 1545 with 1,300 Spanish soldiers.⁶⁰ Whilst Gruffydd's inclusion of 'Turks' – an interchangeable term that could refer to the Berber Arab people of North Africa, the inhabitants of Ottoman lands or converted Moriscos in Christian territories – may seem an unlikely proposition, there is evidence of Moriscos serving in the Spanish army, though primarily from hostile sources which may overstate their significance to suggest the Spanish are not properly Christian.⁶¹ A more positive account of an African soldier serving in a continental army is that of Giovanni the Ethiopian – nicknamed Zuan Bianco – who appears in Venetian sources from the 1490s. Described as 'a most valiant Saracen', Giovanni was killed in Venetian service in the 1490s, and his widow was awarded a house in Verona with a generous pension of seventy-two ducats a year.⁶² The esteemed Spanish captain Sir Pedro Negro, who served the English crown on the Scottish borders, may also have been of African descent.⁶³ With the Black population of Spain estimated to have been between 100,000 and 150,000 by the mid-sixteenth century, it is not unreasonable to suggest that people from these communities frequently engaged in European warfare.⁶⁴

The geo-political context of the late 1530s also illustrate routes through which North African soldiers and sailors may have come to serve the English king. During the course of the third Venetian-Ottoman War of 1537–40, the Papacy and Holy Roman Empire entered into a Holy League against the Ottomans.⁶⁵ Following Spanish attacks on North African ports and ships, such as the conquest of Tunis in 1543, it was not unknown for imprisoned sailors and soldiers to be forced or persuaded to switch sides by their captors.⁶⁶ It is entirely plausible that such men might have found themselves on Spanish ships or in Spanish companies. By the time of Henry's French campaign in the 1540s, most of Europe had concluded peace treaties with one another and the Ottoman Empire, which provided an incentive for professional mariners and soldiers to consider employment elsewhere by serving another prince. English service was one such possibility.

⁶⁰ Gruffydd, pp. 15–6; *St. P.* V 439 (L&P XX/I 596).

⁶¹ Nubia, p. 24; Idan Sherer, *Warriors for a Living: The Experience of the Spanish Infantry in the Italian Wars, 1494–1559* (Leiden and Boston, 2017), pp. 23–4.

⁶² Catherine Fletcher, *The Beauty and the Terror: An Alternative History of the Italian Renaissance* (London, 2020), p. 35.

⁶³ Miranda Kaufmann, 'Sir Pedro Negro: what color was his skin?', *Notes and Queries*, 55/2 (2008), 142–46 (pp. 142–5).

⁶⁴ Jeremy Lawrance, 'Black Africans in Renaissance Spanish literature', in T. F. Earle and K. J. P. Lowe (eds), *Black Africans in Renaissance Europe* (Cambridge, 2005), pp. 70–93 (p. 70).

⁶⁵ Kenneth M. Setton, *The Papacy and the Levant (1204–1571)*, Volume III: *The Sixteenth-Century to the Reign of Julius III* (Philadelphia, 1984), pp. 425–7.

⁶⁶ Sherer, pp. 18 and 24; Eloy Martín Corrales, *Muslims in Spain, 1492–1814: Living and Negotiating in the Land of the Infidel* (transl. by Consuelo López-Morillas) (Leiden and Boston, 2021), p. 77.

Official and non-official diplomatic networks, including ambassadors and agents who acted as high-level secret negotiators to establish transnational alliances, played a fundamental role in raising mercenary forces.⁶⁷ To discuss the hiring of Landsknecht soldiers from the Holy Roman Empire, for example, Henry VIII relied on Steven Vaughan – his official agent in the Low Countries – to negotiate discreetly with German princes. Overtures were specifically made to Peter Bastard von Geldern, an illegitimate son of Karl von Egmond, duke of Gelders, who promised the king 2,000 men of war and a thousand mariners, as well as Philip Landgrave of Hesse who, after initially agreeing to send ‘eight or ten thousand of footmen, good men of warr, and two thousand horsmen’, eventually sanctioned ‘twenty ensigns of footmen and 1,000 horsemen’ under the command of Frederic von Reiffenberg.⁶⁸ Italian mercenaries were also contracted through the efforts of unofficial overseas diplomats working on behalf of the English crown. Henry was known to regularly patronise overseas agents in return for their social and financial resources, forging essential and mutually beneficial networks that could assist in military negotiations.⁶⁹ Ludovico dall’Armi and Count Bernardo de Santo Bonifacio of Verona frequently appear in English and Papal court documents from 1545, with reference to them ‘making men’ and appealing to influential noblemen and captains on Henry’s behalf, including the Duke of Alberquerque, Count Antonio Bevilacqua of Verona and Cavalier Lunardo of Ravenna.⁷⁰ As well as negotiating the hire of new Italian and German mercenaries, Vaughan also encouraged the re-employment of mercenaries who had proved themselves loyal to Henry on previous occasions, including the Spanish captain Antonia de Mora and his band of men who had fought for the English at Montreuil, clear evidence for the perceived value of these troops among those advising the king.⁷¹

Beyond the specific circumstances relating to the politics of the mid-1540s and Henry’s desire to supplement domestic troops, a third explanation for the presence of strangers on the *Mary Rose* should be considered: their expertise with new gunpowder weaponry. In line with Roger Ascham’s theory that ‘strong weapons which both experience doth prove to be good’ should be utilised alongside traditional weapons such as the longbow, so ‘that the one should be always an aide and help for the other’, early-mid Tudor military technology did not specialise in one form

⁶⁷ Potter, p. 25.

⁶⁸ Bastard of Gelders: TNA, SP 1/200, ff. 75–80 (*L&P* XX/I 593); Philip of Hesse: SP 1/199, ff. 10–9 (translation from *L&P* XX/I 350); Reiffenberg: SP 1/202, unfoliated volume (translation from *L&P* XX/I 947); see also SP 1/199, ff. 26–7 (*L&P* XX/I 361) and ff. 114–5 (French translations from *L&P* XX/I 449); SP 1/201, f. 28 (translation from *L&P* XX/I 721).

⁶⁹ Fletcher, ‘War, diplomacy and social mobility’, pp. 560–2 and 570–1.

⁷⁰ TNA, SP 1/199, ff. 105–13 (*L&P* XX/I 447) and ff. 116–9 (*L&P* XX/I 450); SP 1/201, ff. 56–8 (*L&P* XX/I 751), ff. 59–60 (*L&P* XX/I 752) and ff. 62–3 (translation from *L&P* XX/I 754); *L&P* XX/I 417 and 660; *St. P.* X 289 and 414. On dall’Armi see Millar, pp. 127–8 and 183–5.

⁷¹ TNA, SP 1/196, f. 12 (*L&P* XIX/II 776) and ff. 15–6 (*L&P* XIX/II 781).

of weaponry, but combined the use of several weapons of war including handguns, longbows, pikes and bills.⁷² On the *Mary Rose* specifically, there is strong evidence that many of the soldiers were well practised in archery; not only were 172 longbows, 3,969 arrows and eighteen leather wrist guards salvaged from the wreck site, but many of the skeletal remains also indicated signs of *os acromiale* – a condition typical of that seen in archers caused by stress to the muscle bone, preventing the fusion of bones in the shoulder blade.⁷³ That said, there was a slow decline in the English use of longbows throughout the sixteenth century in favour of artillery weaponry, which were superior at penetrating even the best of armour and causing fatal injuries.⁷⁴ Henry understood this need to keep up with continental military technology and became both a patron of gunmakers and an importer of military guns from continental Europe.⁷⁵ The *Mary Rose* alone stored fifty handguns and 1,000 lead shot alongside 250 arrows and 400 sheaves of arrows, suggesting that both forms of weaponry were regarded as vital instruments of warfare.⁷⁶ A significant number of these firearms and propellants were imported from outsourced manufacturers, with official diplomats like Paget and stranger merchants like Giovanni di Lorenzo Cavalcanti acting as intermediaries.⁷⁷ These included 5,000 pieces of Italian arms and armour, including arquebuses, from Milanese merchant Christopher Carcano in 1544.⁷⁸ The remains of a match-lock arquebus from the *Mary Rose*, that is almost identical in style to a collection of arquebuses held by the Royal Armouries Museum, provide further evidence that imported firearms were an important element of English military preparedness.⁷⁹ The word ‘GARDO’ is marked on both arquebus barrels, alluding to the town of Gardone Val Trompia, near Brescia which was renowned for its production of handguns. The inclusion of this name on four identical guns, sourced from multiple sites across England – including an active warship – suggests that these weapons formed part of a large shipment purchased to arm English soldiers. Indeed, the Doge and Senate of Venice authorised the export

⁷² Roger Ascham, *Toxophilus* (London, 1545); Hodgkins, p. 19.

⁷³ Ann Stirland, ‘The men of the Mary Rose’, in *The Social History of English Seamen*, pp. 47–73 (pp. 68–9).

⁷⁴ Grummitt, pp. 122–5, 134–6; Steven Gunn, ‘Archery practice in early Tudor England’, *Past & Present*, 209/1 (2010), 53–81 (pp. 65–6 and 73–6); Gunn, *The English People*, pp. 98–102; Hammer, pp. 261–2; Hodgkins, pp. 67–8 and 82–7.

⁷⁵ Lois G. Schworer, *Gun Culture in Early Modern England* (Charlottesville, VA, 2016), pp. 12–17; Guy Wilson, ‘Handguns: scope and importance of the assemblage’, in Alexandra Hildred (ed.), *Weapons of Warre: The Armaments of the Mary Rose*, 2 vols. (Archaeology of the *Mary Rose* Vol. 3) (Portsmouth, 2011), II, pp. 537–43 (p. 537); Gunn, ‘Archery practice’, p. 75.

⁷⁶ ‘The Mary Rose’, in *The Anthony roll of Henry VIII's Navy*, p. 43.

⁷⁷ Fissel, p. 45; TNA, SP 1/199, ff. 60–1 (*L&P XX/I* 386), SP 1/200, ff. 101–3 (*L&P XX/I* 632) and ff. 155–6 (*L&P XX/I* 676); Parrott, p. 1; Sicca, p. 169.

⁷⁸ TNA, SP 1/200, ff. 101–3 (*L&P XX/I* 632). For further examples see *L&P XX/I* 1244; TNA, SP 1/184, f. 7.

⁷⁹ Artefact 81A2679, MRM; artefact RA X. 11 5313–5 D, Royal Armouries, Leeds.

of up to 1,500 arquebuses from Brescia, a Venetian subject city, to Henry in 1544.⁸⁰

With that in mind, the English increasingly used artillery weapons alongside more traditional weaponry by the mid-sixteenth century, and some of these continental technologies may well have been used to arm domestic troops, particularly those who formed part of the professional military establishment. This included experienced soldiers from border fortresses or garrisons and royal squadrons like the Yeomen of the Guard and the King's Spears.⁸¹ Yet it appears that Henry was interested in hiring mercenaries with more experience in these specialised skills, especially due to the general 'greate lacke of expert gonners' noted by those responsible for defending the border with Scotland.⁸² Two examples of the many foreign hires in these years are the 1,000 Italian arquebusiers described in 1544 as 'expert and good men of warr' and the 700 Spanish gunners sent to reinforce the border garrisons.⁸³ It is striking that the Venetian ambassador noted as late as 1557 that whilst the English could equip their men with armour and weapons, there were 'few among them who would know how to move under arms, and to handle the pike, harquebuse, or other sort of weapon, it not being custom in that kingdom for the inhabitants to perform any sort of exercise with similar arms'.⁸⁴ This sentiment was also shared by Steven Vaughan; in late 1544, he reported that 'if the King's Highness be minded to have wars, both th'Italiens and Spanyerdes be exceeding meet to serve, seeing our own folks are of none experience'.⁸⁵ This supports the idea that while professional English soldiers may have been trained in new weaponry – the like of which would have consisted of a few thousand men at best – the majority of Henry's mustered domestic army were typically equipped with longbows and bills.⁸⁶ From this, it appears that Henry understood the need to supplement his domestic mustered army with professional, usually foreign, soldiers with valuable experience in the skilled use of gunpowder weaponry.⁸⁷ As mercenaries also provided their own weapons, it may well be that some of the smaller firearms found on the *Mary Rose* belonged to these hired troops, who were recruited specifically for their skill in handling these weapons.

Though traditional methods of English warfare and mobilisation continued to be utilised during the reign of Henry VIII, changing priorities and structural developments to English warfare during the 1540s resulted in a growing reliance on foreign soldiers, overseas

⁸⁰ Rawdon Brown (ed.), *Calendar of State Papers Relating To English Affairs in the Archives of Venice, Volume 5, 1534–1554* (London, 1873), no. 306.

⁸¹ Gunn, *The English People*, p. 104.

⁸² TNA, SP 1/200, ff. 31–3 (*L&P* XX/I 555).

⁸³ Italians: TNA, SP 1/194, ff. 108–9 (*L&P* XIX/II 497); Spaniards: *L&P* XX/I 359.

⁸⁴ Gunn, *The English People*, pp. 152–3.

⁸⁵ TNA, SP 1/196, ff. 15–6 (*L&P* XIX/II 781).

⁸⁶ Hammer, p. 29.

⁸⁷ Hammer, p. 30; Hodgkins, p. 65.

diplomatic connections, and imported armaments. In his bid to retain power, prestige and sovereignty, Henry increasingly sought to forge foreign networks that would allow him to match the military power of his continental counterparts.

II

Alongside these foreign troops, migration offers another explanation for the presence of strangers on board the *Mary Rose*. Over the course of Henry's thirty-seven year reign, the population of London increased from 50,000 inhabitants in 1500 to 80,000 by 1550, with the stranger population also rising from 3,000 to 6,000 individuals by the mid-century.⁸⁸ In particular, eastern wards of London like Aldgate and Billingsgate held significant mixed stranger communities that constituted more than 10 per cent of the adult male population, whilst this number reached 20 per cent in east Smithfield.⁸⁹ Joint second to London in population size were the cities of Bristol and Norwich that each boasted ca. 10,000 inhabitants in the early sixteenth century: like London, these figures almost certainly contained settled strangers.⁹⁰

This longer-term migration provides the most likely explanation for the presence of the two individuals of African descent on the *Mary Rose*. Importantly, one had with him artefacts that provide clues to his route to England. Isotopic data from this young man suggests that he may have spent his formative childhood years in the North African interior more than fifty kilometres from the coast.⁹¹ Believed to be an archer royal, he was found on the main deck, with a longbow beside him and a leather wrist guard attached to his forearm depicting the badges of Henry and his first wife, Katherine of Aragon. The insignia on the wrist guard were typical of the type of emblems worn by Henry's household, as they included Henry's emblem of the Tudor rose and Beaufort portcullis, and motifs that specifically reflected Henry's claim to England and France.⁹² The inclusion of Katherine of Aragon's badges, which the archer was still sporting nine years after her death, suggests that as a young boy he may have been part of her household or patronised by a member of it (we discuss this context further below), although it is also possible that these older wrist guards were standard issue for royal guards engaging in practical, non-ceremonial activities. Whatever his reasons for wearing this piece, the wrist guard suggests that the archer held a respected position amongst the soldiers. Further evidence that Yeomen

⁸⁸ Nigel Goose, 'Introduction: immigrants in Tudor and early Stuart England', in *Immigrants in Tudor and Early Stuart England*, pp. 1–38 (pp. 13 and 15); Selwood, p. 26.

⁸⁹ Selwood, p. 33; Sylvia L. Thrupp, 'Aliens in and around London in the fifteenth century', in A. E. J. Hollaender and William Kellaway (eds), *Studies in London History Presented to Philip Edmund Jones* (London, 1969), pp. 251–72 (p. 260).

⁹⁰ Alford, p. 13.

⁹¹ Scorrer, p. 76; Scorrer et al., pp. 10–1 and 13.

⁹² Artefact 81A1460, MRM.

of the Guard were on board at the time of the ship's sinking is suggested in several salvaged artefacts, including fragments of a haft and collar from a poleax or halberd, and an English basket-hilted sword – both of which were carried by royal bodyguards.⁹³ Anita Hewerdine argues that in addition to protecting the king, members of the royal guard with their archery skills, military experience and known loyalty, were also deployed to naval and military duties, and formed the nucleus of Henry's army.⁹⁴ As a member of the Yeomen of the Guard, it is highly likely that the royal archer had lived in England for a number of years before gaining his prestigious post. In other words, he should be differentiated from those crew members who served overseas as shorter-term mercenaries, or who were impressed into English service.

The archer is not the only crew member whose remains point to longer histories of migration. DNA analysis of a second man, a mariner aged between fifteen and twenty, and recovered from the hold of the ship, determined that he too was potentially of African heritage, genetically similar to modern-day Moroccans, Mozabite Berbers of Algeria and individuals from the Near East. Yet Scorrer et al.'s study revealed that, notwithstanding his heritage, this individual was likely to have been born in the west of Britain.⁹⁵ We lack evidence from artefacts to contextualise this specific crewmember's heritage, but wider patterns of overseas trade, which facilitated migration, provide significant clues. England's commercial boom, which saw exports rise by 267 per cent between 1475 and 1515, resulted in the urbanisation of market economies and heightened demands for foreign imports in raw materials and luxury goods.⁹⁶ In terms of English ports, London and Southampton eclipsed all others in terms of the value of the commerce they exported and imported due to their trading relationships with all the major commercial ports in Portugal, Spain, Italy and the Low Countries, amongst other regions.⁹⁷ Other trading hubs across England also enjoyed trade with continental ports: eastern ports including Hull and Newcastle-Upon-Tyne traded with countries of the North and Baltic sea; the Channel and Kentish ports with the Low Countries and its main commercial hub Antwerp; and southwestern ports, located on one of Europe's busiest shipping lines, with

⁹³ Guy Wilson and Alexandra Hildred, 'Edged weapons: swords and daggers', in *Weapons of Warre*, II, pp. 740–64 (p. 745); Guy Wilson and Alexandra Hildred, 'Hand-to-hand fighting: staff weapons', in *Weapons of Warre*, II, pp. 713–40 (pp. 737–8); artefacts 80A1288 and 82A3589, MRM.

⁹⁴ Anita Hewerdine, *The Yeomen of the Guard and the Early Tudors* (London, 2012), pp. 70, 75, 89 and 94.

⁹⁵ Scorrer, p. 74; Scorrer et al., p. 14; *The Many Faces of Tudor England*, pp. 5, 8–9.

⁹⁶ William F. Hutchinson et al., 'The globalization of naval provisioning: ancient DNA and stable isotope analyses of stored cod from the wreck of the Mary Rose, AD 1545', *Royal Society Open Science*, 2/9 (2015), 1–13 (p. 2); John Oldland, 'The wealth of the trades in early Tudor England', *The London Journal*, 31/2 (2006), 127–55 (p. 127).

⁹⁷ Dorothy Burwash, *English Merchant Shipping 1460–1540* (Toronto, 1947), pp. 147–8; Geodata Institute, University of Southampton, *The Merchant Fleet of Late Medieval and Tudor England, 1400–1580 Database* (2018), <http://medievalandtudorships.org/> [accessed 01 October 2021]; Southampton, Southampton Archives, Southampton Municipal MSS., Local Port Book, 1512–13.

Iberian and French markets.⁹⁸ Yet English port towns and cities were more than centres of trade. They were also a main destination for international migrants. More than ever, the increase of foreign goods resulted in the greater movement of people, with long-term migrants travelling to, and permanently settling in regions of England with close geographical and/or economic ties to their native communities.⁹⁹ A large number of salvaged artefacts from the *Mary Rose* reflect this increased movement of goods and people between England and the continent; it is possible that large numbers of boxwood combs from the Low Countries, red micaceous pottery from Portugal and Spain, and hordes of Spanish coins and Nuremberg-produced jettons, while reflecting England's burgeoning trade with the continent, may also indicate the heritage of some its crewmembers.¹⁰⁰ Statistical data from the *England's Immigrants Database* further supports this argument. Figures suggest that migrants from the continent generally settled in the capital city of London or thriving coastal commercial counties such as Devon, Hampshire and Somerset – all regions with close, direct and frequent trade with Europe.¹⁰¹ This included the Spaniard Martyn Bastian who settled in Modbury, Devon in 1524 and the Flemish merchant brothers Cornelius and William Brandeling who gained their denization in 1543.¹⁰² English merchants similarly utilised these migration routes, and a significant number of English migrants living in sixteenth-century Seville came from Bristol and London, or port towns and cities with strong trade links to Andalusia.¹⁰³ Indeed, Mark Sheaves contends that those with shared trade routes were part of a fluid hemispheric community where people, products and familial

⁹⁸ Burwash, p. 151; Connell-Smith, pp. xviii and 8–9; Heather Dalton, *Merchants and Explorers: Roger Barlow, Sebastian Cabot, and Networks of Atlantic Exchange 1500–1560* (Oxford, 2016), p. 22; Maryanne Kowaleski, 'The assimilation of foreigners in late medieval Exeter', in Mark Ormrod, Nicola McDonald and Craig Taylor (eds), *Resident Aliens in Late Medieval Exeter* (Turnhout, 2017), pp. 163–79 (pp. 164–5 and 174); Luu, p. 28; Peter Marshall, 'The other black legend: the Henrician Reformation and the Spanish people', *The English Historical Review*, 116/465 (2011), 31–49 (p. 34); Jonathan Scott, *When the Waves Ruled Britannia: Geography and Political Identities, 1500–1800* (Cambridge, 2011), pp. 34–6; Susan Flavin and Evan T. Jones (eds), *Bristol's Trade with Ireland and the Continent 1503–1601: The evidence of the exchequer customs accounts* (Dublin, 2009). Further research in the Southampton archives, particularly on the customs records, may add valuable context, but was not feasible within the parameters of this study.

⁹⁹ Kowaleski, '“Alien” encounters', p. 115; Kowaleski, 'Breton immigration', pp. 117–9 and 127–8; Lutkin, 'A survey of the resident immigrants', p. 160.

¹⁰⁰ As an example, see: Artefacts 81A4516 (boxwood comb), 81A1144 (pottery), 80A1504 (jetton) and 81A4629 and 81A4394 (coins), MRM. For more examples of specific items of foreign origin, see: *Before the Mast*, I, pp. 1–496.

¹⁰¹ *England's Immigrants, 1330–1550: Resident Aliens in the Late Middle Ages* (2019), <https://www.englishimmigrants.com/> [accessed 01 October 2021] (hereafter *EIDB*).

¹⁰² *EIDB*, entry 63935 (Bastian), 21520 (Cornelius) and 21493 (William).

¹⁰³ Heather Dalton, 'Negotiating fortune: English merchants in early sixteenth-century Seville', in Caroline A. Williams (ed.), *Bridging the Warly Modern Atlantic World: People, Products and Practices on the Move* (Farnham, 2009), pp. 57–73 (pp. 60–1 and 72–3); Mark Sheaves, 'The Anglo-Iberian Atlantic as a hemispheric system?: English merchants navigating the Iberian Atlantic', in Jorge Cañizares-Esguerra (ed.), *Entangled Empires: The Anglo-Iberian Atlantic, 1500–1830* (Philadelphia, 2018), pp. 19–41 (p. 20).

and commercial networks transcended formal boundaries.¹⁰⁴ Connections were forged between regions and local spaces as opposed to nations.

With this in mind, how can we account for the presence of men with potential African heritage aboard the *Mary Rose*? A selection of archaeological objects recovered from the ship suggest connections with Africa and beyond. These include a cowrie shell, native to the Red Sea, Indian Ocean and Pacific Ocean and frequently used as a form of currency or personal decoration in sixteenth-century West Africa, which was located on the Orlop deck.¹⁰⁵ Stores of peppercorns from the African or Indian subcontinent were also found in several locations on the ship, including in the pomander found next to the Royal Archer of North African heritage.¹⁰⁶ As the peppercorns and cowrie shell predate direct English trade with Africa and India, it is a possibility – though it must be stressed not a given – that these items belonged to an crewmember of African heritage.¹⁰⁷ Of course, migrants of African heritage like their European counterparts also belonged to a maritime ‘hemispheric community’ and settled in English port towns and cities, many of them deriving from Iberia and Italy. That Black African and Morisco communities were a prominent feature of Iberian states was, in part, a consequence of a long-standing population movement between Africa and the kingdom of Al-Andalus, especially prior to the *Reconquista* of 1492, but was increasingly connected to Portuguese and Spanish colonialism in West and North Africa. By 1521, there were 156,000 Africans living in Spain, Portugal and the Atlantic Islands; this comprised both enslaved people captured during Iberian raids on the North African coast and sold at European slave markets, and freeborn citizens or manumitted slaves who were employed as craftsmen, merchants, soldiers and domestic servants in wealthy households.¹⁰⁸ If one contemporary observer is to be believed, sixteenth-century Seville held as many Black and ‘Moorish’ individuals as free citizens.¹⁰⁹ It is highly likely, therefore, that Africans who came to Henrician England arrived from Iberia or Italy. It is certainly possible that the *Mary Rose*’s royal archer came to the English court in the household of an important family from the continent

¹⁰⁴ Sheaves, pp. 22, 35 and 38–9.

¹⁰⁵ Edward Besley, ‘Cowrie shell’, in *Before the Mast*, I, p. 263; artefact 80A1848, MRM.

¹⁰⁶ Artefacts 80A1784, 80A1561 and 81A3065, MRM.

¹⁰⁷ Jerry Brotton, *The Renaissance Bazaar: From the Silk Road to Michelangelo* (Oxford and New York, 2002), p. 39; Herman Van der Wee, ‘Structural changes in European long-distance trade, and particularly in the re-export trade from south to north, 1350–1750’, in James D. Tracy (ed.), *The Rise of Merchant Empires: Long Distance Trade in the Early Modern World* (Cambridge, 1990), pp. 14–33 (p. 24).

¹⁰⁸ Debra Blumenthal, ‘La casa dels negres’: Black African solidarity in late medieval Valencia’, in *Black Africans in Renaissance Europe*, pp. 225–46 (p. 226); Aurelia Martín Casares, ‘Free and freed Black Africans in Granada in the time of the Spanish Renaissance’, in *Black Africans in Renaissance Europe*, pp. 247–60 (pp. 250 and 254); Didier Lahon, ‘Black African slaves and freedmen in Portugal during the Renaissance: creating a new pattern of reality’, in *Black Africans in Renaissance Europe*, pp. 261–79 (p. 261); Kate Lowe, ‘Visible lives: Black gondoliers and other Black Africans in Renaissance Venice’, *Renaissance Quarterly*, 66/2 (2013), 412–52 (pp. 413–6 and 420); Nubia, pp. 23–32.

¹⁰⁹ Dalton, *Merchants and Explorers*, p. 48.

– perhaps in the household of Katherine of Aragon herself – while the parents of the second-generation African from western Britain potentially settled in the port cities of Bristol or Plymouth from the Iberian Peninsula. Although records of Africans in Henrician England are rare, known individuals include the trumpeter John Blanke, and Catalina, a Moorish servant who arrived with Katherine of Aragon from Spain.¹¹⁰

Returning to the military context, in addition to natural-born English and Welsh soldiers and foreign mercenaries, Henry's domestic forces also included settled strangers living in England, many of whom may have migrated along these transnational routes. Like their English-born counterparts, resident strangers were required to fulfil military obligations. With 4,139 strangers receiving denization between 1540 and 1549, it is to be expected that at least some of these communities also contributed to Henry's domestic force in the 1540s.¹¹¹ Several muster books from this period detail a significant number of French and Dutch migrants who fought in Henry's wars and provided their own weaponry – nationalities which correlate with the *England's Immigrants Database* data discussed above. During the Anglo-French war of 1522, as an example, the military subsidy for Exeter listed a 'Mighell Pepyn, born in Normandy', and a 'Garett Grownynge, born in Friesland' as 'billmen able for the war'.¹¹² The number of French and Dutchmen were even more prominent in the Dorsetshire musters of 1539; this included forty-two 'Frenschemen' and seven 'Duchemen' like Henry Hermon, who was to provide his own bow and sheaf of arrows.¹¹³ Besides French and Dutch migrants, there is also evidence of an African 'Peter Blackmore, a moor born, a billman', serving in Henry's domestic forces during the 1522 French campaign.¹¹⁴ It is possible, though not certain, that 'Wyllyam Spayn, archer' listed in 1536 and 'Gefferay Spayne, bowman' listed in 1539, both from Essex, were of Spanish heritage.¹¹⁵ Given that muster books and military surveys were highly variable in the details they recorded, it is likely that an even larger percentage of foreign-born men participated in Henry's wars than the evidence suggests: their names may have been recorded, their nationality and place of origin may not have been.¹¹⁶

Strangers on the *Mary Rose*, however, were not exclusively soldiers or mariners. They were also skilled craftsmen who were equally as important in the defence and maintenance of the English realm, some of whom may well have settled in England as part of the broader maritime 'hemispheric'

¹¹⁰ Kaufmann, *Black Tudors*, pp. 7–31; Nubia, p. 169.

¹¹¹ *EIDB*; Selwood, p. 26.

¹¹² Margery M. Rowe (ed.), 'The military survey of 1522', in *Tudor Exeter: Tax Assessments 1489–1599* (Torquay, 1977), pp. 7–34 (pp. 7 and 13).

¹¹³ TNA, E 36/29 ff. 8, 11, 16, 19–20, 25, 43–8. Other contemporary examples can be found in: TNA, SP 1/146 (particularly the musters for Sussex).

¹¹⁴ 'The military survey of 1522', p. 18.

¹¹⁵ TNA, E 101/549/8, f. 148; E 101/59/8, rot. 16.

¹¹⁶ For a comprehensive list of English early modern muster books, see: Jeremy Gibson and Alan Dell (eds), *Tudor and Stuart Muster Rolls: A Directory of Holdings in the British Isles* (Birmingham, 1989).

community. Migrants settling in England during the early-mid Tudor period often did so for economic and/or career reasons, and who, in the process, brought new skills to England.¹¹⁷ Based on thirty of the most popular occupations held by strangers seeking denization between 1490 and 1550, over half of these were trades or crafts and included professions ranging from tailors, cordwainers and brewers to joiners, carpenters and surgeons.¹¹⁸ The demand for imported European skills and trades is reflected in Scorrer et al.'s analysis of a skull identified as the ship's carpenter. They concluded that the strontium and high oxygen levels stored within the carpenter's teeth indicate that he may have been of Spanish heritage.¹¹⁹ The individual's heritage is further suggested by the artefacts salvaged from the carpenter's cabin on the main deck. This included a cluster of Spanish silver coins issued in the names of Ferdinand and Isabella of Spain, and four hand-held 'stirrup' adzes of Spanish design that are the only known examples in England during this period.¹²⁰ The carpenter's chest also contained some of the most luxurious items recovered from the ship, such as a richly decorated book, an embroidered leather pouch and a manicure set carved from bone, implying that he was a man of standing at the apex of his professional career.¹²¹ As his remains were found in the stern anchor cable locker on the orlop deck surrounded by carpentry tools, it is likely that his primary role on 19 July 1545 was to repair any damages inflicted to the ship during battle – an important role that would require swiftness, knowledge and composure.

Further, it is possible that the ship's barber-surgeon was a settled stranger. The presence of a surgeon's coif amongst his possessions almost certainly indicates that he was a Master Surgeon of the Guild, who was a skilled craftsman in his own right and entitled to wear livery and to train his own apprentices. Though the skeletal remains of the barber-surgeon were not recovered, meaning that isotopic analysis cannot be conducted, most of his professional equipment and personal possessions can be traced to manufacturers in the Rhineland or surrounding regions, suggesting he may have been of Dutch, German or even Flemish heritage.¹²² Indeed, his surgical razors and folding knives do not correlate to the types used and produced in England during this period and are similar to surgical equipment depicted in Flemish paintings.¹²³ Moreover, a small tin-glazed jug produced in the Netherlands, probably at Antwerp, was found in the barber-surgeon's cabin alongside several Rhenish

¹¹⁷ Goose, p. 14; Luu, pp. 7 and 304–5; Selwood, p. 24.

¹¹⁸ *EIDB*.

¹¹⁹ Scorrer, pp. 78–9; Scorrer et al., p. 13.

¹²⁰ Colin McKewan, 'The ship's carpenters and their tools', in *Before the Mast*, I, pp. 293–319 (p. 307); artefacts 81A4394 and 81A3221, MRM.

¹²¹ Artefacts 81A4130, 81A5817 and 81A5818, MRM.

¹²² Jo Castle et al., 'The contents of the barber-surgeon's cabin', in *Before the Mast*, I, pp. 189–224 (p. 225).

¹²³ *Idem*, p. 217; artefact 80A1913, MRM.

stoneware vessels, all of which were regularly used as medicament containers in early modern Europe.¹²⁴

These easily obtainable objects should be viewed in context with other canisters from the barber-surgeon's cabin, whose presence on board an English ship are more unusual. For example, the surgeon's cabin contained several salvaged turned wooden canisters containing various medicaments, the like of which frequently appear in land-based archaeological contexts in the Rhineland, but rarely in English or maritime excavations.¹²⁵ Similar wooden canisters are documented in contemporary German sources, including woodcut illustrations of a barber-surgeon's shop from Michael Hero's *Schachtafelen der Gesuntheit* (1533), and Hartmann Schopper's *The Book of Trades* (1568).¹²⁶ In particular, Antwerp, Strasbourg, Cologne, Nuremberg and Augsburg were the first civic authorities to regulate pharmaceutical preparation, and apothecaries in these cities regularly produced ready-made compounds from imported medicinal simples, including poppy seed oil from the Near East via Portuguese merchants.¹²⁷ It is highly likely that these canisters were purchased overseas, and that the barber-surgeon had personal connections to continental apothecaries and manufacturers that were not part of a regular export trade to England.

Of course, surgical and medical paraphernalia on their own do not necessarily reflect the barber-surgeon's heritage: these items could have been obtained from continental manufacturers through English ports. More tangible evidence for the barber-surgeon's heritage, in contrast, is provided by his personal belongings. Like his surgical equipment, these items mainly derived from the Rhineland, including pewter plates of continental origin and a sword-fragment, the hilt of which was specific to German manufacturers between 1430 and 1590.¹²⁸ Contrary to popular perceptions assumptions of the barber-surgeon as an unskilled, unlearned and incompetent medical practitioner, there was a growing demand for educated shipboard barber-surgeons who, being responsible for the health of the entire crew, would have held a prestigious and respected post. Henry's grant of a royal charter to the Company of Barber Surgeons in 1540, resulting in the professionalisation of surgery and an increase in the pay of chief, most expert and ordinary surgeons, certainly attracted foreign professionals to settle in England.¹²⁹ It is possible that before becoming a Master Surgeon of the Guild, the *Mary Rose* barber-surgeon

¹²⁴ Duncan H. Brown and Robert Thomson, 'Pottery vessels', in *Before the Mast*, I, pp. 462–78 (p. 471); Castle et al., pp. 190 and 192; artefacts 80A1483 and 80A1537, MRM.

¹²⁵ Castle et al., pp. 196 and 198.

¹²⁶ Idem, p. 196; Hartmann Schopper, *Panoplia omnium illiberalium mechanicarum aut sedentariarum atrium* (Frankfurt, 1568).

¹²⁷ Castle et al., p. 224.

¹²⁸ Idem, pp. 200 and 216; artefacts 83A0048 and 80A1627, MRM.

¹²⁹ Danby Pickering (ed.), 'An act concerning barbers and surgeons to be of one company, 1540 (31 Hen 8, c. 42)', in *The Statutes at Large, from the Thirty-Second Year of King Henry VIII to the Seventh Year of King Edward VI Inclusive*, 24 vols. (Cambridge, 1763), V, pp. 58–62; Thrupp, p. 260.

came to England in the household of a wealthy stranger merchant who belonged to the burgeoning Dutch, German or Flemish communities in sixteenth-century England. Whilst the barber-surgeon's identity may never be revealed, it is interesting to speculate whether he is one of the documented barber-surgeons who sought denization in Henry's reign, such as the Dutch migrant John Huson, who gained denization in 1544 after living in England for two decades.¹³⁰

Royal demand for specialised trades also resulted in the migration of stranger craftsmen. In addition to the importation of foreign arms, Henry encouraged continental gun founders to settle in England and teach their expertise in metallurgy and bronze casting to English craftsmen.¹³¹ Henry VIII was not the first monarch to encourage this type of migration. After all, the English artillery 'industry' was first established during the reign of his father Henry VII with the help of recruited gun founders from the Low Countries.¹³² From the 1520s, stranger craftsmen were regularly employed in English foundries to keep up with the increased demand for heavy artillery. The need for warship cannons only intensified as Henry expanded his naval fleet from five to fifty-eight vessels; inventories for the English fleet record 310 cast-bronze, twenty-six cast-iron and 1,268 wrought-iron guns.¹³³ Many of the recovered *Mary Rose* guns still bear the names of the stranger gun founders who created them. For example, a bronze cannon – bearing the initials *PB* – has been attributed to the Frenchman Peter Baude, who received denization in 1542 and worked at the royal foundry in Houndsditch.¹³⁴ Several guns, including the ornate cannon royal, also bear the names of English brothers John and Robert Owen, who were trained and mentored by Baude.¹³⁵ Additionally, two brass cannons have been attributed to Francesco Arcano of Cesena who, along with other members of the Arcano family, worked at the Italian foundry in Salisbury Palace.¹³⁶ Stranger gun founders helped to adapt the process of bronze casting to the production of wrought-iron and cast-iron guns – a metal that was more economically viable than bronze. This was a crucial manufacturing development that allowed Henry to match the military power of his continental counterparts more cheaply. It is unlikely a coincidence that the first successful cast-iron cannon was produced in 1543, shortly before Henry's third Anglo-French war.¹³⁷ A receipt written in 1523 by Henry's Master of Ordnance, Sir William Skeffington, detailed

¹³⁰ London, Westminster Abbey Muniment Collection, 12261, m. 18.

¹³¹ Fissel, pp. 45 and 283; Alan Stimson, 'The navigation instruments', in *Before the Mast*, I, pp. 267–81 (p. 274).

¹³² Fissel, p. 44.

¹³³ London, British Library, Add. MS 22047.

¹³⁴ Artefact 81A3003, MRM.

¹³⁵ Artefact 79A1276, MRM.

¹³⁶ Artefacts 79A1279 and 80A0976, MRM. Francesco's son Arcano (Arcangelo) even sought, and was granted, denization in 1541: *L&P* XVI 1135.

¹³⁷ Fissel, p. 283; John Francis Guilmartin Jr., *Gunpowder and Galleys: Changing Technology and Mediterranean Warfare at Sea in the Sixteenth Century* (London, 1974), p. 175; Alexzandra Hildred, 'Brass guns', in *Weapons of Warre*, II, pp. 17–28 (p. 22).

how an 'Iron... with oon chamber', another 'with foure chambers' and twenty-seven 'Barrelles of saltpeter' were received into the Tower of London from 'John Martyn de Sancta Modya and Martyn de Caryaga Spanyardes', suggesting that this industry specifically attracted Spanish craftsmen and merchants to England.¹³⁸

Thus, the presence of strangers on board the *Mary Rose* may extend beyond the short-term hiring and impressment of foreign troops, and reflect broader land-based patterns of migration. By contributing to the war effort and bringing their labour, skills and expertise to England, international migrants actively contributed to the maintenance and defence of the English realm. The cases of Baude and Arcano, moreover, point to a link between military roles and long-term migration.

III

The presence of foreign mercenaries in early modern armies and the movement of migrants between realms was not exclusive to Tudor England. Rulers across the European continent and beyond relied upon foreign soldiers, trade, labour and skills. Nor does this particular war seem to have demanded significantly more foreign soldiers than previous conflicts; though Henry required a large army to fight his war on numerous fronts, we have shown that strangers were involved in English warfare prior to Henry's last French campaign and indeed in subsequent wars too. What the *Mary Rose* does provide, however, is an exceptional combination of archaeological, scientific and historical evidence on a scale not comparable with other contemporary events. Set in their wider context, then, the *Mary Rose* and its crew emerge as a microcosm for Tudor society at war. Through an interdisciplinary analysis drawing on both archaeological investigation and the study of historical documents, it becomes apparent that multiple mechanisms of migration are in play. First, short-term military contracting and impressment led to the temporary presence of strangers within the forces of the English crown. Without the transnational relationships that enabled the raising of such troops, Henry VIII would have been far weaker militarily. These foreign contingents not only supplemented Henry's domestic forces, but also allowed the English monarch to match the military power of his continental counterparts in his bid to retain power, prestige and sovereignty. Moreover, strangers played intrinsic roles in military preparedness, which could not have occurred without official and non-official diplomatic networks. Second, short-term contracting is only one part of the picture. The other is long-term migration. Henrician England contained significant numbers of long-term migrants of various ethnicities and nationalities, who often contributed to Henry's domestic forces and brought their labour, industries and expertise to England. Nor, as the gun founders illustrate, were these two phenomena necessarily

¹³⁸ TNA, E 101/58/4.

unrelated. Further research would be required to establish how many long-term migrants initially arrived in England with a military connection of one kind or another. Several archaeological studies including that of Scorrer et al. have successfully established that a percentage of the *Mary Rose* crew were strangers. Scorrer et al were keen to emphasise that isotopic evidence and other forms of scientific analysis cannot provide conclusive evidence regarding an individual's ethnicity or heritage. Yet by bringing their findings into dialogue with textual sources, it has been possible to explain *how* and *why* it is plausible that multiple strangers were on board an English warship on 19 July 1545. The wealth of surviving evidence from the *Mary Rose* permits more definitive conclusions concerning the role of foreign mercenaries, soldiers and tradesmen in Tudor warfare and society more generally. Narratives of Henrician England should acknowledge the importance of immigration and transnational connections to the defence and maintenance of the Tudor realm.

PEER REVIEW

The peer review history for this article is available at <https://publons.com/publon/10.1111/1468-229X.13328>