‘Measuring by the bushel’: reweighing the Indian Ocean pepper trade*

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Abstract

Of all the oriental spices, black pepper was the most important until the eighteenth century. The historiography of the pepper trade is characterized by a strong focus on Europe in terms of both its economic significance in the ancient and medieval periods and the struggle for its control in the early modern period. This article, by contrast, seeks to situate the pepper trade firmly in its Asian contexts. It examines the Indian Ocean pepper trade from three perspectives. First, it places the trade in its supply-side context by focusing on the Malabar coast as the primary source of pepper. Second, it examines the relative importance of the different branches of Malabar’s pepper trade and highlights the central role played by Muslim mercantile networks. Third, it considers the reconfiguration of these pepper networks in the sixteenth century in the face of aggressive competition from the Portuguese. In their sum, these arguments advocate the need for rethought balances of trade and a reweighted scholarly focus on the pepper trade in its global dimensions.

Spices have long been a staple of historical enquiry. Social historians have studied their uses and cultural significance, especially how spices entered the imagination and practices of European societies. Europeans were singularly fascinated by spices – their exotic provenance, olfactory properties, medicinal promises, sacred connotations, and above all the profits attainable from their trade. As a result, in a reflection of Europe’s general enthrallment with the Orient, European sources are richly seasoned with references to spices. This historic interest in spices is matched by their concrete economic and political ramifications in European history: ‘spices came to transform Europe and the world itself, from medieval to modern times’. Consequently, economic historians have also taken a sustained interest in spices and in particular the trade in pepper, which was critical in such diverse processes as Rome’s bullion drain, the rise of Venice and the Iberian maritime explorations.

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The most vigorously examined aspect of the pepper trade has been the evolution of European pepper prices in the fifteenth century, in what Michael Pearson has characterized as the ‘somewhat sterile debate over prices’.\(^4\) This concern with fifteenth-century pepper prices is motivated and shaped by one of the discipline’s foremost traditions of enquiry, the history of European overseas expansion, in which the pepper trade was of central importance. The first chapter in Europe’s *Sturm und Drang* for access to and control over Asia’s trade created a ‘pepper empire’, a political projection without antecedent in its scale that marked the beginning of a decisive shift in global balances of trade and ultimately power. The Portuguese discovery of the Cape route into the trading world of the Indian Ocean was motivated, in the words of the chronicler of Vasco da Gama’s first voyage to India, by their ‘search for Christians and spices’, although the historian Ronald Findlay suggests that in terms of priorities, this order was reversed.\(^5\) The desire to control the trade in pepper in particular not only propelled the Portuguese voyages of discovery but was a key driving force behind the subsequent competition over sources, ports and trade routes. Europe’s craving for pepper and other spices drove its colonial enterprises and thereby became ‘a force that remade the demography, politics, culture, economy, and ecology of the entire globe’.\(^6\)

For these reasons, the pepper trade has loomed large in the history of Europe, so much so that the medievalist Carlo Cipolla was prompted to entitle his parody on mono-causal interpretations of history *Le poivre, moteur de l’histoire*.\(^7\) Persiflage aside, as a consequence of this particularly directed scholarly focus, Europe in turn predominates in the historiography of the pepper trade; its discussions are primarily based on European data and shaped by the concerns of European history. Yet, pepper was an oriental good not only in the imagination of Europeans but also in practice: it was grown in Asia, primarily traded within Asia, and mostly consumed in Asia. From the earliest records of long-range sea trade across the Indian Ocean, pepper was a much commented upon and, by this evidence, widely traded commodity. Across monsoon Asia, pepper not only outranked all other spices as a trade good, but also as a product in everyday use.\(^8\) Robert Hartwell classifies it as one of the staples of the Indian Ocean trade, which functioned to sustain communication and commerce across


\(^6\) Freedman, p. 3.


the ages. Its high price relative to the cost of transport and inelastic demand meant that exporters could always expect to sell pepper at more or less predictable prices. The pepper trade served to make the long-distance trade of other, bulkier goods economically viable and thus underpinned the Indian Ocean economy.

The Malabar coast in South-western India held a near-monopoly in the cultivation of pepper until the fifteenth century, and it remained the spice’s principal producer until at least the mid sixteenth century. Its trade was almost exclusively controlled by expatriate traders and merchant groups who visited or settled there. From at least the thirteenth century, this trade between Malabar and ports flung around the ocean’s rim was dominated by Muslims. As this article shows, these Muslims traded pepper both eastwards towards China and westwards to the Persian Gulf and Red Sea, from whence only a portion reached European markets. The Malabar coast thus recommends itself as a vantage point from which to trace the pepper trade in all its directions, rather than focus exclusively on the single branch that led to the European apothecary and espicière.

This article re-contextualizes the pepper trade by examining more closely its structures in the period before the opening of the Cape route. It posits three alternative perspectives. First, the pepper trade is considered in terms of production and initial distribution through a focus on the Malabar coast as the original and, until at least the mid sixteenth century, largest source of black pepper. Such a supply-side perspective is essential to establish the first link in a commodity chain that connected markets across Eurasia. Second, this article situates European demand for black pepper, irrespective of the route by which it was met, within the broader structures of Asian trade. It argues that Europe’s markets formed only one constituent in the overall trade, and by no means the decisive one. This perspective highlights the key role of Aden as the main western entrepôt of the pepper trade, the importance of China as its principal market, and the often neglected significance of overland trade. In so doing, it stresses the crucial part played by Muslim merchant communities from the Malabar coast in this trade, thereby re-introducing agency to the ‘sterile debates’ about trends and prices. Third, this history of Muslim spice networks is advocated as a crucial context for the re-organization of the pepper trade in the sixteenth century in reaction to the Portuguese irruption into the Indian Ocean trading world.

Black pepper, or \textit{piper nigrum} in its Linnaean classification, is indigenous to the historic Malabar coast, which largely corresponds to the present-day Indian state of Kerala. To medieval travellers, the natural profusion of pepper in Malabar stood in striking contrast to its high value in their own lands. When Odoric of Pordenone visited western India around 1322, he noted that in Malabar ‘pepper is as abundant as grain in our land’. Some two decades later, the Moroccan wanderer Ibn Battūtah echoed this simile by calling Malabar ‘the land of pepper’ (bīlād al-fīlīf), where ‘pepper grains are poured out for measuring by the bushel, like millet in our country’. Both these


10 White and green pepper are varieties of the same fruit at different stages of drying or processing.


travellers came from the Mediterranean world, where pepper was generally available but still considered a rarity, with a price to match. The bulk of the consumption of pepper took place around the Indian Ocean and its commerce was naturally centred on the source of supply, the land of pepper.

As a climber, the pepper vine requires support. In Malabar’s coastal lowlands, pepper was grown incidentally in gardens with umbrageous trees as live standards. The ability to grow pepper alongside other crops (especially coconuts and bananas) made it ideally suited for orchards and smallholdings. However, the bulk of Malabar’s pepper was grown in the interior uplands in regular plantations: Marco Polo emphasized that pepper was not wild but ‘cultivated, being regularly planted and watered’. In contrast to small-scale production, plantations incurred sunk costs as fast-growing trees (mostly Erythrina indica, Lam.) first had to be planted as trellises. Alternatively, coconut plantations offered natural complementarity for dual use. After propagation through cuttings, the pepper vine required attention from the cultivator for three years to produce its first crop about another year later. Subsequently, the vine required little labour and yielded an average of seven kilograms of pepper over its life cycle. Depending on altitude, pepper was harvested and dried between December and March. The processes of harvesting and drying the pepper are noted in some detail in a number of medieval travelogues, not least because the authors sought to dispel some of the persistent myths about the origins of the spice.

The obduracy with which caste separation was practised in medieval Kerala was reflected in the region’s patterns of land ownership. As in most pre-modern economies, the control of land was a primary source of wealth and power. Private ownership of land in Kerala has been traced back to the Sangam era, and its consolidation by distinct landholding classes appears to date to the period between the ninth and thirteenth centuries. Although the so-called ‘feudatory approach’ to describing the political structures of medieval South India, and in particular the relationship of local chiefs to their suzerains, has been justly criticized for its lack of conceptual rigour, its critics have nonetheless conceded that in the case of Kerala, ‘these crude formulations appear to stand the scrutiny of the evidence’. Medieval Kerala deviated in important ways from the general South Indian model. One reason for this is ecological: rural settlements in Kerala are typically dispersed over a wide area, which contrasts with the nucleated settlement units elsewhere in the region. In his study of early medieval South India, Kesavan Veluthat goes as far as to posit that ‘there is no “village” in Kerala in the strict sense of the term’. A further reason lies in the unparalleled degree of political influence exercised by the Brahmans, which resulted in their emergence as the chief landowning class: the ‘integral nature’ of the Brahman community in entire Kerala with its zealous guarding of the class interests as property owners had its impact on the local chieftains and the king himself on a scale larger

18 Veluthat, p. 207.
than in the rest of South India’. Temple inscriptions suggest that the accumulation of land by the Nambutiri Brahmans accelerated from the eleventh century onwards.

There is no agreement among historians as to the nature of taxes on land in the region. While some scholars claim that *de jure*, private landowners paid levies of about twenty per cent of their produce, others argue that this was rarely enforced. However, the suggestion that landowners who donated their lands to temples were able to reduce their levies while retaining full occupancy rights is a plausible explanation for the concentration of landed wealth by temples in the form of *brahmadeyas* and *devadanams*. This process intensified during the Chola–Chera wars (988–1089), when more land was transferred to temples in the hope that it would be spared devastation by the combatants.

Another class of landowners were political potentates, whose presence was particularly felt in the form of demesne landholdings. Less is known about landownership by the Nair caste, who specialized in military roles for which they received stipends from the kings. While they may not have been a major landowning class, they often functioned as landholders, for instance by collecting dues. Writing in the early fifteenth century, Duarte Barbosa noted that the Nairs lived not in towns but in their own settlements, where ‘they have their palm-groves’, suggesting their control of at least limited agricultural lands. Elsewhere, Barbosa spoke of Hindu merchants gathering ‘all the pepper and ginger from the Nayres and husbandmen’, which confirms the impression that Nairs were involved in pepper production.

The acute scarcity of sources makes it difficult to ascertain the concrete conditions and property relations of Malabar’s pepper production. The same problem presents itself in tracing the commercial exchanges of pepper before it reached the coastal entrepôts and entered trans-oceanic Muslim trade networks. None of the Arabic sources describes the actual conditions of production or initial exchanges of the spice, which suggests that Muslims were confined – be it by choice, circumstance or regulation – to the coastal commercial enclaves. There is no evidence for any significant Muslim settlements in the interior of Malabar before the sixteenth century, when some groups of native Muslims, known as the Mappilas, were displaced by Portuguese oppression and moved inland in search of alternative economic opportunities. Correspondingly, there is no evidence to suggest that Muslim merchants were able to invest their profits in land on the Malabar coast, aside from very limited plots in the vicinity of coastal towns.

How then did pepper reach the coast? Ma Huan, who visited Malabar in the first half of the fifteenth century as a chronicler of the Ming voyages, left salient descriptions for the kingdoms of Cochin and Calicut:

The land [of the kingdom of Cochin] has no other product, [but] produces only pepper. The people mostly establish gardens to cultivate pepper for a living. Every year when the pepper is ripe, of course, big pepper-collectors of the locality make their purchases and establish

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19 Veluthat, p. 209.
20 Pillai, pp. 325–9, 343–50.
25 *Book of Duarte Barbosa*, ii. 56.
warehouses to store it; [then] they wait until the foreign merchants from various places come to buy it.  

As to the pepper: the inhabitants of the mountainous countryside [in the kingdom of Calicut] have established gardens, and it is extensively cultivated. When the period of the tenth moon arrives, the pepper ripens; [and] it is collected, dried in the sun, and sold. Of course, big pepper-collectors come and collect it, and take it up to the official storehouse to be stored . . .  

Ma Huan described a system in which ‘big pepper-collectors’ tour the countryside to purchase the spice and gather it into storehouses. The foreign merchants resident in Malabar’s port cities mostly purchased the pepper from these middlemen. This system endured into the sixteenth century, despite Portuguese efforts to establish direct trade relations with the cultivators. Moreover, the pepper was not taken straight to the ports but assembled in storehouses further inland. The purpose of this intermediate storage was clearly recognized by Tomé Pires, who wrote that while the Portuguese factories were located close to the main pepper-producing areas, the pepper merchants ‘take it to wherever they make the most profit, however difficult the journey’.  

Additional information on the merchants who controlled this first stage of the pepper trade can be gleaned from Duarte Barbosa, whose prolonged residence on the Malabar coast, direct involvement in the pepper trade and command of Malayalam made him a more qualified observer than most:  

In this kingdom of Malabar there is also another caste of people whom they call Biaberes, Indian merchants, natives of the land. They were there ere foreign nations had sailed to India. They deal in goods of every kind both in the seaports and inland, wheresoever their trade is of most profit. They gather to themselves all the pepper and ginger from the Nayres and husbandmen, and oftentimes they buy the new crops beforehand in exchange for cotton clothes and other goods which they keep at the seaports. Afterwards they sell them again and gain much money thereby . . . They are very wealthy, and have much property in land inherited from of old.  

Barbosa’s account makes it clear that these traders were Malayalis (‘natives of the land’, ‘were there ere foreign nations had sailed to India’) as opposed to any of the other Hindu trading communities active in Malabar’s port cities. This point is significant in that it clarifies the misapplication of the term Chetty, which properly refers to Tamil trading castes, to these traders in some of the other sources. The Malayali traders

27 Ying-yai Sheng-lan, p. 143  
28 ‘Dom Francisco de Almeida ordered the officials in January 1508 to announce to the cultivators at the sounds of the trumpet they would be immediately paid in cash and copper for the pepper they brought directly to the factory . . . All the same, the attempts to make direct purchase from the cultivators did not succeed and the purchase through the intermediaries continued to be the rule’ (K. S. Mathew, Portuguese Trade with India in the 16th Century (New Delhi, 1983), p. 105).  
30 Book of Duarte Barbosa, ii. 56. The Portuguese text has Biabares, which Ramusio corrected to Biaberes. It refers to the Malayalam Vyabari (from Sanskrit Byāpāri, ‘trader’), the name of a mercantile caste. The translator suggests that Barbosa included Nair mercantile classes, such as the Muttans and Taragans, in this group (Book of Duarte Barbosa, ii. 56, n.1). See also E. Thurston, Castes and Tribes of Southern India (7 vols., Madras, 1909), v. 131.  
31 For instance, Ma Huan, in what may be an expression of his more general fallacy of classifying the natives of Malabar as ‘men of the So-li [Chola] race’, uses the term Chetty to refer to the local ‘moneyed property-owners’ who invest their capital in large plantations. His misapplication is made clear by his distinction between Chetti and Kling (Ko-ling) trading groups, the latter of which refers more specifically to Tamils (see Ying-yai Sheng-lan, pp. 130, 133, 138, 143).
appear to have emerged as significant landowners from the fourteenth century onwards, and on account of their wealth were able to circumvent some caste restrictions. In fact, Barbosa’s account shows that their social customs were largely similar to those of the Nairs, an impression substantiated by his statement that they were ‘of such established lineage that the Nayres may touch them’.32

The practice of purchasing pepper before its harvest by advancing payments is an expression of these merchants’ ready recourse to capital. It may have also been a way of tying landlords and cultivators to them. The creation of such ties from harvest to harvest may have been designed to forestall competition with other merchants over the same crops. In this way, the market did not passively anticipate the arrival of commodities but actively connected to the productive hinterlands. Two seasons for advance purchases are known: June to September, when the south-west monsoon disorges its heavy rains and precludes most agricultural activities, which for farmers often translated into immediate need; and October to November, when the forthcoming crop could be estimated with some certainty.33 That the maritime commerçants in the ports, on the other hand, did not typically advance money against commodities not yet available can be surmised from the default on such a covenant. In the eleven-thirties, the Jewish trader Abraham Ben Yiju¯ advanced four gold mithqāl to a Hindu trader at Mangalore for two bahār of cardamom, another key export of the Malabar coast, that were never delivered.34 Because Ben Yiju¯ had invested on behalf of his business partners at Aden, correspondence ensued over a number of years to apportion this loss. In the end, the investor’s argument that ‘as do others, your servant [meaning the author of this letter] sends you consignments, relying on you to buy merchandise that needs no bartering or advance, but an available commodity, which, if its purchase is convenient, fine, and if not, it should be abandoned’, seems to have prevailed.35 Here, the investor clearly chides Ben Yiju¯ for having advanced payment contrary to their customary business practice.

These considerations show that Muslim trading groups, who dominated the sea trade of pepper, were neither involved in its production through the direct ownership of land nor did they purchase the spice directly from its cultivators. Moreover, the pepper was not taken straight to the markets of the coastal ports, but assembled at trading locations further inland along roads, rivers or backwaters and only later transported to those markets that promised the best prices.36 It was this system that initially confounded the Portuguese: their records attest that in a number of years, they had difficulty attracting sufficient pepper to their factories. This was evidently a consequence of their insistence on paying stipulated, sub-market prices, which caused pepper from the hinterlands of their establishments at Cochin and Cannanore to be diverted to other ports.37 The implication is that of a network between two domains of trade, the marketing centres in the pepper-producing areas and the coastal ports of

32 Book of Duarte Barbosa, ii. 56–7.
34 India Traders of the Middle Ages: Documents from the Cairo Geniza (‘India Book’), ed. and trans. S. D. Goitein and M. Friedman (Leiden, 2008), pp. 556, 590, 617.
35 Goitein and Friedman, p. 617.
36 See, e.g., Book of Duarte Barbosa, ii. 88. The principal pepper-growing areas were located along the seven-river system (of the Periyar, Chalakudy, Muvattupuzha, Meenachil, Manimala, Pampa and Achenkoil rivers), which highlights the role of waterways in connecting the spice-producing hinterlands to the coastal zone (see P. Malekandathil, ‘The Portuguese and the Ghat-route trade: 1500–1663’, Pondicherry Univ. Jour. Soc. Sc. and Hum., i (2000), 129–54, at pp. 129–30).
37 See Tomé Pires, i. 83.
trade. This intermediary sphere was sustained by the physical and social barriers that separated the land and society of Malabar’s interior from the centres of international demand on its coast. A detailed study of the Malayali trading groups that controlled this intermediate sphere is yet to be written. In the terms of this discussion, they formed the first link in the chain of the pepper trade, while the next stage was firmly in the hands of Malabar’s Muslim trading communities.

This section considers the relative importance of the different markets for pepper and highlights the critical role of Muslim networks centred on the Malabar coast in its trade. The absence of quantitative sources precludes any reliable estimate of the volume of Malabar’s pepper production in the pre-Portuguese period. For this reason, data from the early Portuguese period must serve as an indication of its scale. Duarte Barbosa suggested that before the Portuguese arrival, during every sailing season ten to fifteen ships, each of 1,000 to 1,200 bahār burden, sailed from Malabari ports towards the Red Sea. This rough estimate would suggest annual exports on that route of between 2,350 and 4,230 metric tonnes, of which, as Barbosa stressed, pepper was the principal commodity; the wide range of these figures underlines that they can serve as an approximation only, while perhaps also pointing towards the fact that exports varied significantly from year to year. Taking the arithmetic mean of 3,290 tonnes as a basis, this compares to average annual imports of pepper into Venice of around 680 tonnes in the fourteen-nineties (although in 1496 imports reportedly reached 1,800 tonnes). This shows that in a typical year, European markets received only a fraction of Malabar’s westbound exports. By comparison, after the consolidation of the royal monopoly on the pepper trade in 1515, the Portuguese are believed to have imported about 1,360 tonnes per year into Lisbon via the Cape route. Writing later in the sixteenth century, Francisco da Costa, the recorder (escrivão) of Portugal’s trading post

38 This model accords to Kenneth Hall’s vision of the nagaram organization in medieval Tamil Nadu (see K. R. Hall, Trade and Statecraft in the Age of the Colas (New Delhi, 1980)).
39 Even these, as Anthony Disney notes in his study of Portuguese trade in south-west India, are ‘disappointingly meagre’ (A. R. Disney, Twilight of the Pepper Empire: Portuguese Trade in Southwest India in the Early 17th Century (Cambridge, Mass., 1978), p. 30).
40 ‘In the days of their prosperity in trade and navigation they built in the city [Calicut] keeled ships of a thousand and a thousand and two hundred bahāres burden . . . Here they took on board goods for every place, and every monsoon ten or fifteen of these ships sailed for the Red Sea, Aden and Mecca, where they sold their goods at a profit, some to the Merchants of Juda, who took them on thence in small vessels to Toro, and from Toro they would go to Cairo, and from Cairo to Alexandria, and thence to Venice, whence it came to our regions’ (Book of Duarte Barbosa, ii. 76–7).
41 Book of Duarte Barbosa, ii. 77. The bahār (Malayal. bāhāram, from Sanskrit bhāra, lit. ‘a load’) is an ancient Indian unit of weight that was widely used across the Indian Ocean trading world. Its specific weight differed between localities as well as for different articles. Duarte Barbosa (ii. 227) specifies that the bahār of pepper at Calicut weighed four (old) Portuguese quintaux, which is equivalent to 235 kg. (see F. Cardarelli and M. J. Shields, Encyclopaedia of Scientific Units, Weights, and Measures: their S.I. Equivalences and Origins, trans. M. J. Shields (3rd edn., 2003), p. 93). Barbosa’s conversion rate is in general agreement with the details given by Wang Dayuan (R. Ptak, ‘Wang Dayuan on Kerala’, in Explorations in the History of South Asia: Essays in Honour of Dietmar Rothermund, ed. G. Berkemer and others (New Delhi, 2001), pp. 39–52, at p. 49), who says that the bahār of pepper at Calicut is equal in weight to 375 Chinese catties, from which the bahār can be calculated at about 227 kg. Ma Huan (Yīng-yáí Shèng-lán, p. 135) equates the bahār (po-ho, pinyin bohe) to 400 Chinese chīn or 238.72 kg. These variations of respectively 3.4% and 1.6% between the conversion rates seem acceptable for the kind of data used here, and all calculations are therefore based on the conversion rate of 235 kg. per bahār.
42 Ashtor, ‘Volume of mediaeval spice trade’.
at Cochin between 1582 and 1612, suggested that a mere ten per cent of Malabar’s pepper production was purchased by the Portuguese.

How do these figures compare to Malabar’s total pepper production? A number of historians have used the Portuguese records to reach very different conclusions about Malabar’s total pepper production in the sixteenth century. The fundamental problem of these estimates lies with the sources on which they are based. The Portuguese notices were themselves only estimates, characterized by a lack of first-hand knowledge about the interior regions from which most pepper came to the coast, limited information about the trade at Calicut, and little awareness of the overland trade. Tomé Pires, who in 1511 was appointed as the Portuguese feitor das drogarias (factor of the spices) at Cannanore and took an apothecary’s interest in spices, estimated that Malabar produced some 4,700 tonnes (20,000 bahār) of pepper per year. Pires’s estimate for the early sixteenth century can be compared to that of da Costa some seventy years later, who used his extensive experience of trading pepper in Malabar to assess the region’s total production at around 15,000 tonnes, more than three times Pires’s figure. Even allowing for the expansion of pepper production in Kanara during the sixteenth century, the difference in these estimates points to their haphazardness.

Nonetheless, these figures do suggest the immense scale of Malabar’s pepper production and call into question the notion of a sudden demand-shock on pepper resulting from the opening of the Cape route. Moreover, they are indicative of the continued magnitude of the Muslim pepper trade on other sea and land routes throughout the sixteenth century. These observations carry two implications. First, before and after the Portuguese reached India, only a fraction of Malabar’s pepper was traded towards the west. Second, much of this pepper did not reach Europe but was consumed elsewhere. This article will now examine the western branch of the pepper trade before considering the destiny of the lion’s share of Malabar’s spice exports.

The first point to be made in discussing the western arm of Malabar’s pepper trade is that the spice was in as much, if not higher, demand in the Middle East as it was in Europe. The varied uses to which the spice was put are described in Arabic cookbooks.

44 J. Kieniewicz, ‘Le commerce en Asie et l’expansion portugaise vers l’Océan Indian au XVIe siècle’, Acta Poloniae Historica, xviii (1968), 180–93, at pp. 191–3; Kieniewicz, ‘Pepper gardens’, pp. 3–10.; V. M. Godinho, Os Descobrimentos e a Economia Mundial (2nd edn., 4 vols., Lisbon, 1981), pp. 183–91; Mathew, Portuguese Trade, pp. 212–14. A fundamental problem is the different conversion rates employed, even among historians who work with the same Portuguese sources. Mathew (Portuguese Trade, pp. 236–9), for instance, suggests that the bahār weighed 166.3 kg. at Cochin and 208.15 kg. at Calicut, thus arriving at quite different figures. Geneviève Bouchon, on the other hand, employs the same rate of conversion from bahār to quintal as proposed here (see G. Bouchon, Naves et Cargaisons Retour de l’Inde en 1518 (Paris, 1977)).
45 Tomé Pires, 1. 82.
46 Pois se sabe por estimação dos malavares que de Onor atte Travancor nunca ha hum anno por outro menos de cem mil bares de pimento que são 258 mil quintaes, e destes se levão para Portugal de vinte atte trinta mil, e a mais consume nestas boiadas, e em naos de Meca, e outra muita que com castigo executado se pudera remediar’ (Da Costa, iii. 350–1).
47 Mathew’s suggestion that Malabar’s pepper production increased between 200% and 275% in the period from 1515 to 1607 is a function of his low production estimate for the early period (see Mathew, Portuguese Trade, p. 213 and the critique in Kieniewicz, ‘Pepper gardens’, pp. 3–10). The assumption that both Pires’s and da Orta’s estimates are correct would mean a compound annual growth rate of Malabar’s pepper production of almost 1.7%; as Kieniewicz (‘Pepper gardens’, p. 6) points out, such a growth rate over such a prolonged period of time is ‘impossible to imagine’. By comparison, Godinho’s estimates of total Asian pepper production in 1500 and 1600 translate into an annual growth rate of just over 0.6% (see V. M. Godinho, Mito e mercadoria, utopia e prática de navegar: séculos XIII–XVIII (Lisbon, 1990), p. 331).
and *materia medica*.\(^{48}\) The discrepancy between Malabar’s estimated exports towards Aden and Venetian imports must thus be accounted for in terms of intermediary consumption in Yemen, East Africa, the Hijaz, the Levant, Egypt, the Maghreb, the Ottoman empire, and so on. An indication of the Ottomans’ taste for the spice, for instance, is contained in a never concluded treaty with the Portuguese of 1540, in which the sultan offered to limit his pepper imports to Basra to *only* 400 tonnes per annum in return for certain concessions.\(^{49}\) Conciliations made by the Portuguese to other rulers, such as the king of Hormuz or the shah of Iran, also included their right to import large amounts of pepper.\(^{50}\) Because its trade was indirect and competed with that to other markets, pepper imports and prices at Venice, therefore, were subject to a wide variety of factors, in what Peter Musgrave has described as ‘an eternal speculation in a fog of uncertainty’.\(^{51}\)

Consequently, the development of European pepper imports in the sixteenth century is not in itself a reliable indicator of the Portuguese impact on the Indian Ocean pepper trade. Jean Aubin, for example, has suggested that the lack of pepper at Cairo in the early years of the sixteenth century was not due to Portuguese suppression of Muslim shipping or their intermittent blockade of the Red Sea, but rather to the political situation in Yemen and the Hijaz, in particular the fratricidal wars of Meccan clans.\(^{52}\) In this view, the temporary paralysis of the Islamic spice trade at the beginning of the sixteenth century was more to do with the internal troubles of the Mamluk regime than with the Portuguese interlopers.

The importance of Aden as the western terminus of Malabar’s spice trade is well documented. From Aden, pepper was transhipped for its onward journey either via the Red Sea, the caravan routes into the Hijaz, or the Nile. While a number of sources afford insights into the pepper trade at Aden, the Geniza documents yield the richest detail on its economics. For the purposes of this article, two conclusions can be drawn from their study. First, the trade was very profitable.\(^{53}\) Second, the price of pepper at


\(49\) One of his demands was that these imports be carried on Muslim ships (see G. L. Casale, ‘The Ottoman age of exploration: spices, maps and conquest in the 16th-century Indian Ocean’ (unpublished Harvard University Ph.D. thesis, 2004), p. 174).


\(53\) A sample calculation suggests a return of 30% on the initial investment. This calculation uses average figures based on a number of Geniza fragments for the 1130s and 1140s (see Goitein and Friedman, pp. 320, 329, 438, 616, 349, n. 4, 650–2, 665–7, 672–4, 675–8). Conversions of currency (*mithqāl* to Maliki dinars) and weights (*‘small’ to ‘larger’ bahār*) have followed the editors’ suggestions, although it must be noted that the exchange rate based on gold content varied over time. Expenses that have been deducted from gross profits are transport, insurance, commission, customs, baskets and porterage.

Aden was subject to considerable fluctuations. To take an extreme example, in 1134 pepper sold at Aden for thirty-eight dinars per bahār, while in the next year 'there was no demand for even a dirhem’s worth of pepper' until the day of sailing, when the price was fixed at twenty-three dinars per bahār, almost forty per cent below the previous year’s price.44 The reason for this fluctuation is clearly stated in the merchants’ correspondence: whereas in 1134 many traders had arrived from Egypt, in the following year ‘news from Egypt was mediocre’, implying that poor market conditions in Cairo and Alexandria depressed pepper prices at Aden.45 Correspondingly, pepper prices at Alexandria show even more extreme fluctuations.46

The central role of the pepper trade to Aden’s economy, and the part played in it by Muslim merchant groups from the Malabar coast, can be gleaned from the records of Yemen’s Rasulid dynasty (1229–1454). The chronicles of the Rasulid ruler al-Muzaffar (r. 1250–95) make it clear that all goods arriving from the Indian Ocean had to be transhipped at Aden for their onward journey on the Red Sea. This was partly because the nautical conditions on the Red Sea, with its prevailing northerly winds and treacherous reefs, favoured small ships.47 However, Indian Ocean dhows were able to sail as far as Jiddah, which suggests additional motives for this policy. These are not difficult to surmise: the Rasulids imposed taxes on both the import and export of pepper as well as other charges, providing a clear incentive to route commodities through Aden’s customs house.48 Moreover, the Rasulid state also maintained its own fleet of ships (marākib al-dīwān) to convey goods to Egypt, again to the benefit of its treasury.49 As Aden was also the southern terminus of the caravan routes linking Yemen to the Hijaz and Levant, the Rasulids controlled a key chokepoint in Malabar’s westbound pepper trade, comparable only to Hormuz at the entrance of the Persian Gulf. The prominent role of the Kārimī merchant group, which between the twelfth and fifteenth century dominated the Red Sea spice trade, in the economies of Yemen and Egypt is further testament to the economic significance of pepper within this trade circuit.60

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44 Goitein and Friedman, pp. 407–8, 342–3.
45 Goitein and Friedman, pp. 342, 457.
50 The origins and organization of the Kārimī merchants (tujjār al-Kārim) remain ambiguous. The term was initially used to describe the convoy of merchant ships coming from Egypt to Aden for the purpose of trading in spices (the Kārimī merchants were called ‘the merchants of pepper and spices’), and appears to have been used in this loose sense throughout the period. However, in the later sources the term was also used to denote a specific, closely-organized merchant corporation (or Genossenschaft); biographical data for leading Kārimī merchants suggest a dynamic structure to their organization. Although much about them remains unknown, there is no doubt about their great wealth accumulated through their control of the Aden-Egypt spice trade, which only dissolved in the 15th century when the Mamluk sultans imposed a state monopoly on the spice trade (see G. Wiet, ‘Les marchands d’épices sous les sultans Mamlouks’, Cahiers d’Histoire Egyptienne, vii (1955), 81–147; E. Ashtor, ‘The Karimi merchants’, Jour. Royal Asiatic Soc., 3rd ser., lxvi (1956), 45–56; Fischel, pp. 157–74; S. D. Goitein, ‘New light on the beginning of the Kārim merchants’, Jour. Econ. and Soc. Hist. of the Orient, i (1958), 175–84; S. Y. Libib, Handelsgeschichte Ägyptens im Spätmittelalter, 1171–1517 (Wiesbaden, 1965), passim).
Thus, given the volume of the pepper trade—with Venetian imports alone averaging 313 tonnes per year in the late fourteenth century (the earliest period for which records of statistical value are extant), a figure all the more astonishing given the severe economic depression Europe was experiencing at the time—it is not surprising that the Rasulid sultans afforded great attention to their relations with Muslim merchants from Malabar. Rasulid records attest to this by describing practices such as their investment of Malabari merchants with robes of honour, grants of tax exemptions, patronage of Muslim preachers on the Malabar coast, and the protection of merchant convoys sailing between Aden and India’s west coast. What this overview highlights is the magnitude of Malabar’s pepper trade in the Arabian Sea, the important place it occupied in the economies which partook in it, and the key role Muslim merchants from the Malabar coast played in it.

The eastern arm of Malabar’s pepper trade was defined by China. It has generally been assumed that most of the pepper imported by China originated in South-east Asia. In fact, Malabar was the main source of pepper in Chinese markets until at least the mid fifteenth century. The misunderstanding has arisen because of the transhipment of Malabari pepper in South-east Asian ports, false assumptions about the origins of pepper production in South-east Asia, and the confusion of different types and qualities of pepper.

China’s unrivalled economic clout in the Indian Ocean world was based on its role as the largest producer as well as consumer of long-distance trade goods. Chinese sources first mention the importation of pepper from India in the second century. The first character of the Chinese word for pepper (hujiao) shows that it was originally identified with the non-Han peoples of the north, which suggests that pepper first reached China via overland routes rather than by sea, making South-east Asia an unlikely source. By the fourth century, however, pepper was listed as a product of Persia traded by sea. By the seventh century, it was described as originating in the countries of the ‘western barbarians’ and increasingly reached China through the commercial activities of South Indian traders. The administrative unification and cultural-economic expansion of China under the Tang dynasty led to greater wealth and increased consumer demand, which was increasingly met by maritime traders. In 789, for instance, the priest Jiangzhou noted the presence of Indian as well as Persian ships at Guangzhou; substantial Muslim trade at this port is also attested by Arabic sources. In addition, these sources evince the presence of Chinese ships at Malabari ports by the mid ninth century.

The expansion of the Indo-Buddhist sphere to coastal South-east Asia was accompanied and facilitated by the activities of South Indian merchant groups. The

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64 The author is grateful to Luke Clossey for confirming this point.

65 Yung-Ho, pp. 222–3.

66 Yung-Ho, p. 223.


economic role of merchant guilds such as the *Manigramaṇa* and *Ayyāvole* is evident from inscriptions in both Malabar and South-east Asia. Their activities were underpinned by the patronage and demand provided by powerful and expansionist political empires in both South India (the Cholas) and insular South-east Asia (Srivijaya). At the same time, both regions became increasingly integrated into Muslim trade networks, with the Malabar coast acting as a natural stopover for vessels travelling from the Arabian Sea towards East Asian waters, a position bolstered by its supply of pepper.

China’s economic efflorescence under the Song dynasty (960–1127; Southern Song to 1279) was characterized by a massive expansion of its agricultural and industrial surplus that enabled higher consumption as well as unprecedented demographic and urban growth. It was during this period that the pattern of Indian Ocean trade changed from single, long-distance voyages to the more economically efficient segmentation into three distinct circuits, respectively centred on the Arabian Sea, the Bay of Bengal and the South China Sea. As a result, the Malabar coast, situated at the intersection of two circuits, developed into a major transhipment point and the farthest western destination to which Chinese ships would regularly venture. Marco Polo and Ibn Battutah both described the immense Chinese junks in Malabar’s harbours. Marco Polo indicated their size by estimating how many baskets of pepper these ships could carry, and famously asserted that for every shipload of pepper exported to Aden and Alexandria, ten or more were destined for Quanzhou. (Elsewhere in the text, he inflated this ratio to more than 100.) On the authority of Quanzhou’s customs supervisor, Marco Polo also claimed that the daily consumption of pepper in that city was in excess of four tonnes. Through a comparison of medicinal prescriptions from the Tang and Song periods, Robert Hartwell has shown that Indian spices became much more widely available in China from the tenth century onwards.

The period from the tenth to thirteenth centuries has been characterized as one of an ‘Asian sea trade boom’. This view offers a crucial context to the subsequent shift in the relations of China with India and South-east Asia, marked by a transition from the private trade networks of the Song period to the government-led maritime networks of the Yuan and early Ming dynasties that would ultimately re-shape the Indian Ocean pepper trade. The Chinese traveller Wang Dayuan, a contemporary of Ibn Battūtah, described Calicut as the principal port of the ‘Western Ocean’, an appraisal reflected in the large number of missions the Yuan emperors sent to Malabar (four alone between 1280 and 1283), which affirm the great interest the dynasty took in the pepper trade. Political developments within South India had little effect on

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72 Marco Polo, ii. 235, 390.


Malabar’s pepper trade with China. The end of Chola rule in the thirteenth century does not appear to have interrupted the trade links between Malabar on the one hand and South-east Asia and China on the other. By that time, Malabar’s long-distance trade was firmly in the hands of Muslim merchant groups, who were much less dependent on political patronage. Similarly, the rise of Vijayanagara in the fourteenth century did not result in a reconfiguration of South India’s maritime trade; rather, the empire relied on existing commercial networks for its strategically crucial supply of horses, which Muslim traders with their access to South Arabian markets were ideally situated to meet.\footnote{See K. N. Chitnis, \textit{Socio-Economic History of Medieval India} (New Delhi, 2002), pp. 317–46; B. Stein, \textit{The New Cambridge History of India}, i, pt. 2: \textit{Vijayanagara} (Cambridge, 1989).}

The continued and expanding role of pepper in China’s economy is evident in the practice, first recorded in 1379, of rewarding loyal subjects with gifts of pepper. In 1391/2, more than 25,000 Chinese soldiers and sailors were rewarded with small amounts of pepper. Pepper became so essential as a culinary and medicinal product in China that in 1403 the emperor Yongle granted, in spite of objections from his ministers, traders from South India exemption from the customary taxes for selling pepper in the Chinese market.\footnote{W. Gungwu, \textit{Community and Nation: Essays on Southeast Asia and the Chinese} (Singapore, 1981), pp. 82–9.} Just as in Rasulid Aden, the economic clout of the pepper trade allowed its agents to negotiate favourable terms with powerful states. It appears that in the same year, the Chinese court first learned of the existence of Melaka from one of these South Indian pepper merchants, a Muslim believed to be from Malabar.\footnote{Sen, ‘Formation of Chinese maritime networks’, pp. 437–8.}

By the early fifteenth century, Malabar was still the primary supplier of pepper to the Chinese market. The great state-sponsored Chinese treasure voyages under Zheng He between 1405 and 1433 repeatedly visited Calicut and Cochin. According to Ming sources, the rulers of Calicut in turn sent multiple missions to the Chinese court for the purposes of tribute trade.\footnote{T. Ju-kang, ‘Chêng Ho’s voyages and the distribution of pepper in China’, \textit{Jour. Royal Asiatic Soc.}, ii (1981), 186–97, at p. 187.} These exchanges caused an unprecedented inflow of pepper into China, changing its status ‘from being a precious commodity to one in common use’.\footnote{This system allowed the Chinese state to impose its own price on pepper, which it tended to set above prevailing market rates (Ju-kang, pp. 188–94). Another empire, no less distant from the source of pepper than China, had also used it as a currency: when the Visigoths besieged Rome in 408, the senate was able to draw from its treasury a ransom that included well over a tonne of pepper (see G. Parker, \textit{The Making of Roman India} (Cambridge, 2008), p. 153).} During this period, the Chinese state began using pepper to pay its soldiers their clothing allowance, in effect using the spice as a substitute currency.\footnote{O’Rourke and Williamson, pp. 11–14.} Kevin O’Rourke and Jeffrey Williamson show that this demand-shock caused by the expansion of China’s state-orchestrated overseas trade was felt as far as Europe, with the sudden spike in European pepper prices in the early fifteenth century coinciding with Zheng He’s voyages.\footnote{This underlines the point that discussions of European spice prices need to take fuller account of the supply-side context.}

The abrupt cessation of Chinese voyages to the Malabar coast in the fourteen-thirties has been described as ‘an enigma in the history of Asia’s maritime
trade'. A clue to this puzzle may possibly be found in a report Joseph of Cranganore made to the Portuguese in the early sixteenth century:

These people from Cataio [Cathay] . . . had a factory in Calichut, and because the king of that place committed outrages against them they rebelled, and having gathered a very large armada, they came to the city of Calichut, which they destroyed. From that time up until the present, they have not come to trade in the aforesaid place . . .

It is not clear whether the abeyance of Chinese trade on the Malabar coast was due to such conflict, or rather a symptom of the discontinuation of the Ming treasure voyages and China’s general retreat from the Indian Ocean after 1433. Notwithstanding, this question points to an important but rarely problematized issue in the historiography of the pepper trade: the history of South-east Asia’s pepper production. Hitherto, this argument has assumed that Malabar possessed a near-monopoly on pepper production in the Indian Ocean world. There is certainly no indication that pepper arriving at Aden had any other source, while there is considerable evidence to show that it came from Malabar. However, the picture is more complex for the East Asian pepper trade. By the time the Portuguese reached South–east Asia, there was significant pepper cultivation on Java and Sumatra. According to Pires’s estimates, Malabar accounted for only half of all Asian pepper production by 1515. However, Pires was much more knowledgeable about conditions in South–east Asia; as seen above, da Costa’s familiarity with Malabar led him to give a much higher estimate of its production. It is argued here that the trans-oceanic structures of pepper production and trade had already undergone a significant change in the fifteenth century, before the arrival of the Europeans.

The first issue that has obfuscated the history of Malabar’s pepper trade with China is a function of nomenclature. In the Chinese sources, products are commonly attributed to the place from which they were imported rather than the place from which they originated. As a result of the transhipment of goods in South–east Asian ports, many commodities were assigned to South–east Asia that in fact came from elsewhere. This is most evident from the thirteenth–century gazetteer by Chau Ju-Kua (Zhao Rugua), the customs inspector at Quanzhou, which in his time had become the main entrepôt of the Southern Song dynasty. The entry for pepper in his section on trade goods contains this observation: “Some say that most of the pepper comes from the country of Wu-li-pa [Malabar] . . . and that produce bought by the foreign traders at Shö-p’o [Java] comes from Wu-li-pa.” This confirms the practice of transhipping and re-exporting Malabari pepper through South–east Asian ports, which gave rise to the mistaken impression that most of China’s pepper imports originated from this region. By the early sixteenth

86 ‘All articles found in a country, irrespective of their origin, are described by Chinese writers as products of that country’ (Ying-yai Sheng-lan, p. xiii).
88 An analogous dynamic can be observed in South-east Asian spices, such as cloves, that reached Arabia and Europe via South Indian ports along the same trade routes and were believed to originate from that region (see R. A. Donkin, Between East and West: the Moluccas and the Traffic in Spices up to the Arrival of the Europeans (Philadelphia, Pa., 2003), esp. pp. 111–16).
century, despite Portuguese restrictions on Malabari shipping, Duarte Barbosa was still speaking of Malabari pepper reaching the Chinese market via Melaka.89

The second issue is the question of when black pepper began to be cultivated on Java and Sumatra. Black pepper was not known as a product of Srivijaya, and neither Marco Polo nor Ibn Battūtah mentioned its cultivation on Sumatra.90 The Chinese chronicler Fei Xin, who visited Java with the Ming voyages, only listed long pepper (pi-po) as among the country’s products.91 Long pepper (Piper longum, L. and Piper retrofractum, Vahl), although of the same genus as black pepper, is a distinct plant and fruit. Before the fifteenth century, sources describing the cultivation of pepper in South-east Asia refer to long pepper rather than to black pepper, a distinction that has eluded many commentators.92 Ludovico de Varthema made this difference clear in his comparison of Sumatran and Malabari pepper:

In the country of Pedir [Pasai] grow large amounts of a type of pepper that is of elongated form and called molaga. This type of pepper is thicker than that which reaches us, and also noticeably lighter in colour; inside it is hollow and it is just as hot as our pepper. It weighs very little and is sold by volume, like wheat in our land . . . The tree that propagates the long pepper has a thicker stem and broader, softer leaves than the one which grows at Calicut.93

Similarly, the anonymous chronicler of Cabral’s voyage specified that black pepper came from the Malabar coast, while long pepper originated in Sumatra.94 Medieval notices of South–east Asian pepper must thus be treated with some circumspection. A few historians of South–east Asia have posited that in both Java and Sumatra, the cultivation of black pepper only began in the fifteenth century. Anthony Reid even makes the intriguing suggestion that it was introduced there by the Chinese as an alternative supply strategy after the violent incident at Calicut reported by Joseph of Cranganore.95 This would suggest that total Asian pepper production had expanded already fifty years before da Gama reached the Indian Ocean, and that the additional demand created by the Cape route could therefore have been met without significant effects on Asian pepper prices.

In addition to the potential misunderstandings about falsely attributed origins and the different types of pepper (black versus long), a further complication usually ignored by historians is that of the different qualities of black pepper. Today, the region of the historical Malabar coast only supplies a small share of world pepper production, but its varieties continue to be sold at a premium. A number of sixteenth–century Portuguese sources also noted the superiority of Malabar’s pepper over that grown in South–east

89 Book of Duarte Barbosa, ii. 215.
91 Fei Hsin, Hsing-ch’a sheng-lan (The Overall Survey of the Star Raft), ed. R. Ptak, trans. J.V. G. Mills (Wiesbaden, 1996), p. 47. His account of the pepper vines on Sumatra – ‘their flowers open to show yellow and white; the pepper nodes hang down in bunches like coir-palm seeds’ – also describes long pepper (Hsing-ch’a sheng-lan, p. 57).
92 Long pepper was also grown in parts of northern India from Nepal to Bengal. Roman imports of long pepper most likely originated in India rather than the more distant South–east Asia (see Miller, pp. 80–3).
94 Greenlee, p. 93. See also F. M. de Melo Conde de Ficalho, Memorias sobre a influencia dos descobrimentos Portuguezes no conhecimento das plantas, i: Memoria sobre a malagueta (Lisbon, 1878), pp. 16–17.
Asia. Black pepper grown in South-east Asia was commonly regarded as coarser, which was reflected in its lower price. Medieval merchants and travellers even noted the differences in quality of pepper produced in different areas within Malabar, with most agreeing that the finest product came from northern Malabar, especially the region around Cannanore. The different qualities are the most likely explanation for the variation in pepper prices at different Malabari ports. Ma Huan’s chronicle shows that in 1409, pepper at Calicut was significantly more expensive than at Cochin. However, the pepper in any particular market did not necessarily consist of the produce of its own hinterland since, as has been noted, the Malayali middlemen diverted the spice to the most opportune marketplaces. This also accounts for the frequent complaints by the Portuguese, who would buy only at stipulated prices, that they were being sold inferior pepper, even at Cannanore.

The inference is that on account of its superior quality, Malabari pepper continued to be sent at least in limited amounts through the Muslim trade networks to South-east Asia, especially to the sultanate of Atjeh, from whence it reached its Chinese market. This supposition seems supported by the Tuhfat al-mujahidin, an Arabic text written in the fifteen-eighties by a Muslim from the Malabar coast. It decried the fate of Malabar’s Muslim merchants, who suffered great losses by not being able to access their biggest markets on account of the Portuguese. Four regions were singled out: the Arabian coast, Melaka, Atjeh (Ashi) and ‘Danasarai’, which probably refers to Java. That Zayn al-Din, writing in the late sixteenth century, still included three places in South–East Asia among the four most important markets for Malabar’s trade suggests that there was continued demand for Malabari pepper in the Chinese markets these entrepôts served, despite the availability of pepper from the islands below the winds. To summarize, these considerations show that in most of the historiography, the role of South–East Asian pepper has been inflated and that of Malabar’s trade with China underestimated.


Mills (Ying-yai Sheng-lan, pp. 118, n. 3, 135, n. 3) argues that in the mid fifteenth century, the lowest price recorded in Malabar was still 25% higher than the price at Sumatra.

In the 17th century, pepper prices in Kanara were frequently higher than those of either Malabar or Melaka. The reason was not, however, its superior quality, but competing sources of demand for the region’s limited supply of the spice (see A. Ahmad, Indo-Portuguese Trade in the 17th Century (1600–63) (New Delhi, 1991), pp. 82–3).

Ma Huan’s account shows that the bahur (po-ho) was of the same weight (400 chin or 238.72 kg.) at both Cochin and Calicut. At Cochin, the price for one bahur of pepper is stated as between 90 and 100 of the local gold coins (fanams). The Cochin gold coin is described as weighing one fen and one li (0.407 g.) and of 90% purity, giving each coin a gold content of 0.3663 g. This means that one bahur of pepper was sold at between 32.97 and 36.63 grams of gold. At Calicut, the bahur of pepper sold for 200 fanams of one fen weight and 60% purity, that is 44.4 grams of gold. Taking the arithmetic mean of the Cochin price shows a difference of circa 27.6% to the Calicut price (Ying-yai Sheng-lan, pp. 135–6, 141, 143).

See M. N. Pearson, Coastal Western India: Studies from the Portuguese Records (New Delhi, 1981), pp. 28–30. Here Pearson argues that despite Portuguese protests that this was due to Muslim sabotage, their own poor financial management was mostly to blame. Because the crown was unable to send capital in advance, instead of leisurely buying the best pepper throughout the year whenever prices were low, they only had the three-month window between the arrival and departure of the Portuguese fleet to ‘frantically buy whatever pepper was available’.

Brit. Libr., MS. IO Islamic 2807e fo. 142b, Zayn al-Din al-Ma’abari, Tuhfat al-mujahidin fi ba’d akhbar al-murtukalin. The identification of Danasarai with a place in Java is tentative; the name is not found among the Arabic place names listed in G. R. Tibbetts, A Study of the Arabic Texts Containing Material on South-east Asia (Leiden, 1979).
The final aspect of Malabar’s pepper trade concerns the trade within India itself. Pepper was, of course, widely used throughout India and it has been suggested that, historically, the major share of Malabar’s production was consumed within the subcontinent. Merchants from Gujarat and Coromandel residing in Malabari ports routinely included pepper in their coastal trade. From the coastal hubs of North India, the spice also reached centres of consumption in the interior such as Delhi and even Central Asian cities such as Samarkand and Bukhara. Before the thirteenth century, when South Indian merchant guilds, with their strong links to the Chola state, still played a central role in the eastern arm of the pepper trade, Malabari pepper was also commonly traded overland through passes in the Ghat mountain range towards Madurai and the Coromandel coast. A number of passes in the western Ghats traversable by pack animals made this route viable, with the Palakkad (or Palghat) Gap and the Munnar and Kumily passes being the most notable. This overland route experienced something of a revival in the sixteenth century in reaction to the Portuguese attempts at suppressing Muslim shipping off the Malabar coast; this period of Malabar’s pepper trade will be considered below.

This article will now examine three aspects of the restructuring of the Muslim pepper trade in response to the Portuguese irruption into their commercial world. It first considers official co-operation, as well as illicit collaboration, between Muslim merchants and Portuguese interests. Second, it examines the dislocation of the pepper trade caused by Portuguese policies on the Malabar coast. Finally, it argues for the resilience of Muslim spice networks across the Indian Ocean.

It has been seen that while Muslims did not control the cultivation or collection of pepper, they dominated its trade in Malabar’s ports. For this reason, after 1498 they found themselves in direct competition with the Portuguese. This was exaggerated by the Europeans’ extra-economic impulsion to, in the language of King Manuel’s instructions to Cabral, ‘make war upon [the Moors] and do them as much damage as possible as a people with whom we have so great and so ancient an enmity’. This spirit, rooted in the Reconquista and the House of Avis’s North African campaigns, was certainly instrumental in the sporadic savageries committed against Muslims in Malabar and elsewhere. Nonetheless, Portuguese officials and especially traders were often pragmatic in their actions. While an ideological underpinning was highly convenient in justifying the capture of Muslim ships on the open sea, in ports the Portuguese were often dependent on their co-operation. Muslims too, in spite of the injunction to jihād propagated in texts such as Zayn al-Dīn’s jeremiad Tuhfat al-mujāhidīn, often preferred the rewards of commercial interaction to the perils of confrontation.

Given their key role in the pepper trade, it is thus not surprising to find Muslims as among the chief trading partners of the Portuguese in Malabar’s port cities. This was especially true of native Muslims, described by the Portuguese as ‘the Moors of the land’ and known locally as the Mappilas. Some of these Mappilas, such as Cherina Marcar and Mamale Marcar in the fifteen-tens, even received stipends and other privileges for their procurement of pepper and regularly met with the Portuguese.

103 See J. K. Chawla, India’s Overland Trade with Central Asia and Persia during the 13th and 14th Centuries (New Delhi, 2006), pp. 53–4
Some Mappila traders were able to benefit from the Portuguese struggle against ‘the Moors of Mecca’ by usurping elements of the trade previously controlled by expatriate Arab and Persian Muslims. Of particular interest to the Portuguese were Muslim merchants who could link them into existing trade networks. Thus Muslims transhipped goods on behalf of the Portuguese between different centres of Muslim commerce such as Surat, the Bay of Bengal and Melaka. Just as critical to the notoriously underfunded Portuguese was the provision of credit, which was rewarded (albeit not always repaid) by granting concessions to Muslim merchants, including the right to trade on the officially embargoed Red Sea route. A prominent example of this is Khwaja Shams-ud-din Giloni, a merchant of Persian origin residing in Cannanore, who over a number of years provided Portuguese officials with enormous credit lines, totalling in excess of 800,000 cruzados. Moreover, these complex relationships were not defined by complaisance on the side of Muslims alone: European traders, freelancers and renegades provided various services to wealthy Muslim merchants, including the provision of shipping, armaments and military assistance. The interactions between European private interests – what some historians have termed Portugal’s ‘shadow empire’ – and Muslim merchants were even more intense. Although the Portuguese ‘country trade’, that is, their participation in intra-Asian commerce, has been repeatedly reassessed over the last decades, data for the economic interaction of indigenous mercantile communities and Portuguese private traders, especially the casados moradores (married settlers), remains limited. Not in doubt is that the intra-Asian trade was highly lucrative, eagerly absorbed the additional shipping capacity the Portuguese could offer, and helped to sustain Portugal’s overseas venture.

To highlight instances of commercial co-operation is not to detract from the overall picture of commercial rivalry and military confrontation. The Portuguese presence and policies on the Malabar coast posed a vital threat to the long-distance commerce on which its Muslim merchants had thrived. On the Malabar coast itself, this had a number of consequences. First of all, it hampered trade at Calicut, which formed the centre of militant resistance against the Portuguese. Inextricably linked to this resistance movement is the name Kunjali Marakkar, which came to epitomize its military opposition to the Portuguese. Kunjali Marakkar and his brother Ahmad had been leading merchants at Cochin, until the Portuguese oppression of their trade in pepper prompted them in 1524 to migrate to Calicut, where they became instrumental

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106 See Mathew, Portuguese Trade, p. 101.
107 Mathew, Portuguese Trade, p. 103.
108 The great wealth of some of these merchants, that enabled them to provide capital to the Portuguese, was remarked upon by the Florentine merchant Piero Strozzi, who wrote in 1510: ‘We believe ourselves to be the most astute men that one can encounter, and the people here surpass us in everything. And there are Muslim merchants worth 400,000 to 500,000 ducats’ (cited in Subrahmanyan, Political Economy, p. 7).
in the kingdom’s naval campaigns. In commercial terms, such relocations not only represented the transfer of individual traders but also that of their associated networks. By using smaller country craft, Muslim traders were able to circumvent the intermittent Portuguese blockades and carry pepper northwards as well as around Cape Comorin. This is evident from the expansion of Mappila networks in Ceylon and the Coromandel coast during this period. Duarte Barbosa related in some detail how Malabari ships carried pepper to the east coast, from where Muslim traders exported it to Bengal, Melaka and China. Barbosa’s account makes it quite clear that rather than stifling the Muslim pepper trade, the Portuguese had merely dislocated it.

By forcing out merchants such as the Marakkars, the Portuguese did not further their aim of weakening the Muslim spice trade; rather, they undermined their own supply of the pepper at Cochin and inadvertently strengthened Calicut by putting it even more firmly at the centre of anti-Portuguese networks. Also, in spite of efforts by Portugal’s puppet raja at Cochin to establish him as a feudatory, in 1549 the so-called ‘pepper king’ of Vatakkenkur – a key pepper-producing area to the south-east of Cochin – sided with Calicut against the Portuguese. This again points to the complexity of the political situation in Malabar and the continued clout of Calicut’s rulers. Naturally, such alliances also safeguarded Calicut’s pepper supply, which continued to be shipped to Gujarat, Coromandel and the Red Sea.

Another way in which Muslim merchant groups reacted to the Portuguese attempts at suppressing their trade in pepper was to make greater use of overland trade. A number of Mappila merchants in particular, who were less likely to relocate to ports outside the sphere of Portuguese control, moved further into the interior in search of alternative commercial outlets. Of particular consequence to this trade seems to have been the overland route from Calicut to the east coast port of Nagapattinam. Da Costa believed that in the later sixteenth century, a substantial share of Malabar’s pepper was exported through the Ghat passes: he mentioned the diversion of pepper to the port of Masulipatnam in particular and to the Bay of Bengal in general.

From such east coast ports, pepper then entered the Muslim trade networks operating in Ceylon and the Bay of Bengal, as well as South-east Asia. This impression accords well with the general picture of the emergence of ‘a network of ports of distinctly anti-Portuguese character’ in the Bay of Bengal during the later sixteenth century. Another significant caravan route was towards the north to meet the demand of the Deccani sultanates and Vijayanagara empire. In reference to the latter, Duarte Barbosa wrote that ‘much pepper is used here [in the capital] and everywhere throughout the kingdom, which they bring hither from Malabar on asses and pack-cattle.’ In the

114 See Pearson, The Portuguese in India, p. 47.
115 Book of Duarte Barbosa, ii. 125.
116 Portuguese ‘Rei da Pimienta’ (see Menon, History of Kerala, i. 502–4). Even Zayn al-Dīn was aware that the Portuguese referred to this ruler as the pepper king (sāhib al-filfil) (Zayn al-Dīn, Tuhfat al-mujaḥīdīn, fo. 142a).
117 Da Costa, p. 315. See also the classic study by J. Deloche, La circulation en Inde avant la révolution des transports (2 vols., Paris, 1980), i. passim.
120 Book of Duarte Barbosa, i. 203.
first decade of the fifteenth century, Ludovico de Varthema completed such a journey from Cannanore to Vijayanagara in fifteen days. Garcia da Orta, in his *Colloquies on the Simples and Drugs of India* of 1563, also wrote that much of Malabar’s pepper was traded to the north ‘on oxen’.

A further consequence of the Portuguese presence in Malabar, which was concentrated in the ports of Cochin and Cannanore, was the increasing significance of Kanara, the region to the immediate north of the Malabar coast. The main port in this region was Bhatkal, a key entrepôt for the supply of horses to the Vijayanagara empire, which exercised a loose form of political suzerainty over it. Bhatkal had also traditionally been an important source of Malabar’s rice imports. In the first half of the sixteenth century, numerous Portuguese sources refer to its pepper trade with Arabia and Persia, presumably in exchange for horses. Barbosa mentioned that the ‘Malabares’ brought pepper to this port, with much of it then traded on the ships of the foreign Muslims (‘the Moors of Meca’) towards the Red Sea. This trade is also testified to in the *Tarikh al-shihrī*, an Arabic chronicle from Yemen: covering the first decades of the sixteenth century, it contains frequent mentions of ships from Bhatkal (Bā Daqal), including the report of a naval confrontation between a Portuguese grab and an Indian merchantman from that port. This situation explains the ‘unmistakably hostile’ relations between the Portuguese and the port of Bhatkal during this period.

While this shows that some of Malabar’s pepper production was diverted to other ports in order to circumvent Portuguese restrictions, there is also evidence that pepper began to be cultivated in South Kanara. The period when this production commenced has been subject to some debate. In his monumental, albeit problematic, economic history of Portugal’s overseas venture, Vitorina Magalhães Godinho claimed that pepper production in this region began in the fifteen-sixties in response to the increased demand created by the Cape route. This view has been repeatedly challenged by Sanjay Subrahmanyam, who marshals a number of Portuguese references to argue that pepper production in this region had begun earlier, perhaps even before the Portuguese arrived in India. In either view, it is clear that Kanara became a pepper-producing region in its own right and its port an additional outlet for Calicut’s Muslim traders. This situation continued in the face of Portuguese desire to ‘ruin the port of Bhatkal’ in order to undermine the new trade routes that had emerged in response to their intermittent stranglehold on Calicut and other Malabari ports.

These adjustments in the pattern of the pepper trade within the Malabar coast and the neighbouring regions correspond to broader changes in the pepper trade across the

121 Book of Duarte Barbosa, ii. 80; Reichert, p. 139.
123 Barbosa adds that this occurred ‘notwithstanding that by the rules and orders of our people, they are forbidden to do so’ and that this trade was carried on the ‘zambucos of Malabar’ (*Book of Duarte Barbosa*, i. 188–9).
125 Subrahmanyam, *Political Economy*, pp. 120–35.
126 ‘[N]o decurso do século XVI os vergéis de Piper nigrum estenderam-se para o norte, e desde cerca de 1565 a pimento canára entra em cena no comércio oceânic’ (Godinho, ii. 186).
Indian Ocean during the sixteenth century. These can only be partly attributed to the Portuguese hostility towards the Muslim spice trade and their control of key choke points such as Melaka (conquered 1511) and Hormuz (1515). It is argued here that the increasing involvement of other powers – especially the Ottoman empire and the sultanate of Atjeh – in the Indian Ocean pepper trade also played a vital role. The presence of Portuguese fleets in the Indian Ocean, of course, most immediately threatened the Red Sea spice trade, initially still controlled by the Mamluks. As early as 1502, a Venetian ambassador was dispatched to Cairo to warn the sultan of the dangers the Portuguese posed to their common interests. In response to Portuguese forays into the Red Sea in 1503 and the potential stranglehold they acquired on the Bab al-Mandab through their conquest of Soqotra in 1507, Qânsawh al-Ghawri assembled a fleet that in 1508 was able to surprise the Portuguese off Cochin but was decisively routed in the next year. This defeat not only strengthened the Portuguese hold on the Malabar coast but also ‘laid the groundwork for the fall of the Mamluks, since now the Islamic world, including the Mamluk sultans themselves, realized that the only power capable of carrying on the crucial struggle was the Ottoman state’. The Ottoman presence in the Indian Ocean has been the subject of recent reassessments. Giancarlo Casale’s study shows that from the fifteen-forties onwards, the Ottoman state assumed a direct involvement in the spice trade, culminating in the establishment of imperial factories in a number of Indian Ocean ports, possibly including Calicut. Arguably, it was this commercial defiance of Portugal’s pretensions to an ocean-wide pepper monopoly that was instrumental in the revival of the Red Sea spice trade in the mid sixteenth century, rather than the occasional naval challenges in which the Portuguese tended to prevail. Diplomatic exchanges of the Ottomans and the sultan of Atjeh from the period 1560–80 are evidence for their ambitions not only to oppose the Portuguese militarily, but also to extend pepper plantations on Sumatra to secure supplies for the Red Sea trade.

How did Malabar’s pepper trade, and its Muslim merchants, figure in this development of a parallel spice network outside the Portuguese-controlled emporia? This question can be answered on two levels: commercial interaction and political exchanges. On the first level, the development of the commercial relationship between Malabar and Gujarat is of key interest. Gujarati merchants had long been active in Malabari ports but traditionally only had a limited stake in its spice trade. With the Portuguese attacks on Muslim shipping, and particularly all vessels from Calicut, merchants increasingly relied on smaller vessels that could more easily evade the Portuguese caravels. The *Tuhfat al-mujāhidīn* reports that being prevented from trading directly with ports in Arabia and South-east Asia, the sea traffic of Malabar’s Muslims was confined to Gujarat, Konkan, Coromandel, and around Qail [?]. A chronicle that can be attributed to Calicut’s ruling dynasty described this period in similar terms, stating that the Muslims ‘began to embark ginger, pepper, and other articles of trade for Guzzaret, and other countries, [and] they now sailed without either flag or

130 It must be noted that this level of Mamluk introspection is attributed to them by a historian of the Ottoman empire. However, it is at least partially substantiated by their subsequent requests for Ottoman support in assembling a new fleet at Suez (see H. İnalcık, *An Economic and Social History of the Ottoman Empire*, i: 1300–1600 (Cambridge, 1997), p. 320).
passport’. Zayn al-Dīn wrote that when the Portuguese burnt ships at Adilabad harbour, they found some belonging to the people of Cannanore, Dharmadam and other Malabari ports who were trading with Portuguese passes.

This accords with the perspective from the Gujarati side:

Gujarat’s merchants . . . were happy to sit in their ports and let the Malabaris bring them pepper, if they could evade the Portuguese. There is no record of Gujarati ships going to Malabar to get pepper, but Gujarati ships, and others, did collect pepper in the Bay of Bengal and Indonesia, and from there take it direct to the Red Sea. Much of this pepper came overland from Malabar . . .

Gujarat was closely linked into the Ottoman ambitions of controlling the Indian Ocean spice trade. Casale suggests that Ottoman commercial interests in Gujarat played a role in Selīm’s desire to conquer Egypt and control its spice trade. The Gujarati port most often mentioned in the sources in connection with transhipping Malabari pepper was Diu, known to the Portuguese as ‘the port of the Turks’. In a missive from 1523, the Portuguese king was told that Diu must be conquered because it had become the greatest centre of the ‘illegal’ trade in pepper. Other Gujarati ports, such as Cambay and Surat, also developed into hubs for the trans-oceanic pepper trade, not least on account of their merchants’ deftness at playing the cartaz system to their own advantage. The increasing role of Gujarat’s Muslim merchants in the trans-oceanic spice trade is evident, for example, from their leadership in opposing the Portuguese at Malaka in 1510–11. However, as Tomé Pires’s account makes abundantly clear, the ‘Malabarese’ remained central to the trade in pepper, taking it to Gujarat, the Coromandel coast and from there to Melaka and other South-east Asian ports.

On a diplomatic level, the reconfiguration of the Muslim spice trade was underpinned by the emergence of new, trans-oceanic alliances. These were often predicated on joint efforts at military resistance, much of which was organized and underwritten by Malabari Muslims in collusion with Calicut’s rulers (known as the Zamorins). Calicut also maintained diplomatic relations with the sultanate of Atjeh. A key element of this was clearly military assistance: when Alburquerque took Melaka in 1511, he found ‘one very large gun which the King of Calicut had sent to the King of Malaca’. This co-operation may also suggest that the near-simultaneous attacks on

136 Casale, pp. 51–8.
137 Pearson, Merchants and Rulers, p. 103.
141 Tomé Pires, ii. 268–73.
Portuguese fortresses at Kollam and Pasai in 1520–1 were in fact co-ordinated. At that time, the Zamorin’s agents also entered into diplomatic exchanges with the Ottomans, assuring them of Calicut’s assistance should they send a fleet to rout the Portuguese from India’s south-west coast. Moreover, the Malabari sources also hint at a political alliance between Calicut and the sultanate of Gujarat. According to Zayn al-Din:

In the year 937 or 938 [1530–2] the subjects of the Zamorin and others from outside together made a trade trip in about thirty ships to various ports of Gujarat [Jazrāt]. The group included ‘Alī İbrahim Marakkār, his nephew Kutti İbrahim Marakkār and other notable persons. Most of these ships went to the ports of Jūjārī [?Janjira] and Sūrāt and a few others at Barūj [Bharuch].

The individuals mentioned by name were in fact charged by the Zamorin with conducting his naval warfare; to the Portuguese, they were infamous pirates. The motive for their accompanying this trading voyage is difficult to discern: did they join the convoy to protect it from attacks, or were they on a diplomatic mission on behalf of the Zamorin? The frequent mention of the trading interests of the Gujarati sultans in Zayn al-Din’s Tuhfat al-mujahidīn hints at a tentative political alliance, based on mutual economic interest in the pepper trade. It would constitute another connection in the web of commercial, political and religious ties that underpinned the successful reshaping of the Muslim pepper trade in the Indian Ocean in the second half of the sixteenth century. It was this reconfiguration that ensured the continued, albeit diminished, role of Malabar’s Muslim communities in the commerce of their most characteristic trade good.

The assertion that ‘the spice trade had a very genuine importance for many economies in medieval and early modern Europe’ is supported by a rich tradition of scholarship. The arguments presented in this article are a call for an equally wide-ranging enquiry into its significance within its heartland, the Indian Ocean world. Pepper was the principal ingredient of the spice trade not only in Europe but also across Asia. The supply-side perspective explored in this discussion has highlighted that the pepper trade was formative in the constitution and persistency of maritime trade circuits. Its economic significance prompted political rulers at both ends of the ocean to take an active stance in it, be it through patronage or direct participation. In the medieval Indian Ocean – whether conceived as an interconnected trading world or a putative world-system – pepper played a role similar to that of silver in the creation of the Pacific world, or that of sugar in the Atlantic: it made viable and underpinned a much wider spectrum of exchange relations than would otherwise have been economical. A research agenda aimed at rethinking the balances of the pepper trade from a range of Asian perspectives would serve to situate the European taste for the spice in its proper global contexts and, by all indications, reveal literatures no less peppered with traces of the spice.

143 That year also saw sieges of Portuguese fortresses at Colombo, Hormuz and the Maldives, which strengthens the impression of a widely co-ordinated campaign.
144 İnalcık, p. 329. However, despite these assurances, Diu remained the focus of Ottoman naval campaigns on the Indian coast.
145 Zayn al-Din, Tuhfat al-mujahidīn, fo. 141b.
146 Munro, p. 407.