

# THE INDIAN OCEAN AND THE GLOBALISATION OF THE ANCIENT WORLD

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## Abstract

Evidence from the Indian Ocean and the Red Sea in the ancient period suggests that long-distance trade led to cultural standardisation and economic interdependence across vast distances. Such processes closely resemble those labelled 'globalisation' with regard to the contemporary world. Social scientists and historians have preferred to reserve this term for the modern period. While the ancient world was never global in a geographical sense, I argue that such processes, ancient or modern, are always studied within perceived rather than physical worlds, and that if the ancient world was not globalised, it certainly was 'oikoumenised'.

## Silk, Pepper, Scandinavians and Globalisation

When Alaric, king of the Goths, laid siege to Rome in AD 408, he demanded an enormous ransom to spare the city. Besides huge amounts of silver and gold, the price included four thousand silk robes and three thousand pounds of pepper (Zosimus *Nea Historia* 5. 41). Silk of course came to the Mediterranean from China, by way of the Sasanian empire or India. Pepper grew only in Tamil South India. The Goths were one of the many Germanic peoples who were on the move in Europe in late antiquity. According to the historian Jordanes (*Getica* 1. 4. 1), a Goth himself, they originally emigrated from southern Scandinavia many generations earlier. The attraction of silk hardly needs explanation, but how did these barbarians and ex-Scandinavians develop a taste for Indian pepper, and why did they consider it among the most precious treasures of Rome? In a modern setting, a fair bet is that this would have been explained as a result of 'globalisation', but how does this term fit in the ancient period?

Globalisation is among the 'buzz-words' of modern economic, political and academic discourse, and processes of globalisation have not failed to attract the interest of historians. Still, no agreement exists as to what globalisation is and when the process started. The verb 'globalise' appeared in the 1940s, as did the word 'globalism', while the term 'globalisation' seems to have entered the English language in the 1950s.<sup>1</sup> In everyday terms, it is commonly taken to refer to our own times, when telecommunications, inexpensive and fast transport, and an increas-

<sup>1</sup> Scholte 2005, 50-51.

ingly free world economy seems to foster cultural connectivity and economic interdependence to a larger extent than ever before. In this sense the word can hardly be applicable to any period before the Second World War or even the collapse of the Eastern Bloc. Based on the empirical world of the Indian Ocean in the first centuries AD, this article goes to the other extreme and argues that reserving the term to the modern period closes an important analytical window to the past. Processes which would have been called globalisation today did take place around the Indian Ocean in the ancient period, whether this is sufficient to speak about a globalised world is of course a different question altogether.

### What is Globalisation?

As Arturo Flynn and Dennis Giraldez note,<sup>2</sup> no commonly accepted definition of globalisation exists. One of the definitions they discuss is from James L. Watson's entry in the *Encyclopædia Britannica*, and his definition can serve as a point of departure here: '(Globalisation is) the process by which the experience of everyday life, marked by the diffusion of commodities and ideas, can foster a standardization of cultural expressions around the world.'<sup>3</sup> This definition has two distinct merits with regard to ancient history. The first is that its focus is largely cultural. This is important because no statistical material exists from the ancient period and no such material can be reconstructed. Long-distance trade was the prime carrier of cultural change in the Indian Ocean system, and in order to understand the impact of trade in the absence of statistical records we have to study how it influenced the lives of people. Watson's definition also has a second merit, which should appeal to historians of all periods: it steers clear of references to new technology such as the internet, the jet engine or, for that matter, the telegraph or steam power. In this way no period of history is excluded.

### Globalisation, the Old World, Systems Theory and the Oikoumene

The evident argument against using the term 'globalisation' with regard to the ancient period is that no network in this period included areas outside Asia, Africa and Europe. Flynn and Giraldez take this geographical approach to globalisation in interpreting the foundation of Manila as a Spanish colony administered from Peru in 1571 as the very starting point of globalisation. This event for the first time meant a regular connection between America and the Far East. Although Flynn and Giraldez acknowledge the existence and importance of long-distance connections throughout history and prehistory, they state that 'any definition of globalisation that excludes two-thirds of the globe – most of the Atlantic, the

<sup>2</sup> Flynn and Giraldez 2002, 1-2.

<sup>3</sup> On line version of the *Encyclopædia Britannica*: <http://search.eb.com/eb/article-9344667>.

Americas and most of the Pacific – is an oxymoron'.<sup>4</sup> In their view, 'globalisation occurred when all populated continents began sustained interaction in a manner that deeply linked them all through global trade'.<sup>5</sup> Global trade in turn emerged when '1) all heavily populated continents began to exchange products continuously – both with each other directly and indirectly, via other continents – and 2) the value of goods exchanged became sufficient to generate lasting impacts on all trading partners'.<sup>6</sup> Their arguments can, however, easily be turned against them. America was hardly heavily populated in 1571. Eighty years of contact with European powers had decimated and destroyed indigenous societies through warfare, illness and slavery, but the European grip on the two continents was still restricted to few and small colonies. Moreover, their demarcation leaves out the geographically significant and populated continent of Australia, which remained unknown to the rest of the world until the 17th century and with which regular contact was only established through British colonisation at the end of the 18th century. The inclusion of America and later Australia in the world trade of the early modern period could just as well be interpreted as an expansion of older Spanish, English and other European networks as the rise of a global network.

My point is not that the discovery of America in 1492, the start of regular trans-Pacific connections in 1571 or the founding of the first British colony in Australia in 1788 were not important hallmarks in the evolution of global networks, they certainly were, but that discussion of globalisation as a historical process should focus on networks and systems rather than on physical geography. America and Australia were never a part of the ancient world, and never a part of the Islamic or mediaeval world. The ancient scientific geographers in the Hellenistic tradition, such as Strabo and Ptolemy, were well aware that their knowledge of the world was imperfect. This is reflected in their descriptions of the world, where they preferred the Greek word *Oikoumene*, usually translated as 'the inhabited world',<sup>7</sup> to *Ge* or *Gaia*, which would include the whole world. The *Oikoumene* which included Asia, Africa and Europe was the known world and thus the significant world when dealing with the ancient period or indeed any period before 1492, even if other such *oikoumenai* existed independently and unperceived in America and Australia at the same time.

This notion is not original; David Wilkinson has used 'oikumenēs', 'civilisations' and 'world-economies' as analytical terms in his treatment of Old World international dynamics.<sup>8</sup> Other archaeologists have found World Systems Analysis, devel-

<sup>4</sup> Flynn and Giraldez 2002, 4.

<sup>5</sup> Flynn and Giraldez 2002, 4.

<sup>6</sup> Flynn and Giraldez 2002, 4.

<sup>7</sup> Romm 1992, 37.

<sup>8</sup> Wilkinson 1993.

oped by Immanuel Wallerstein in order to understand the dynamics of modern global capitalism, useful in the analysis of a range of historical and prehistorical societies.<sup>9</sup> In *The Modern World System*,<sup>10</sup> Wallerstein described the development of a modern world economy centred on Western Europe and later also North America from the 16th century onwards. Wallerstein described a global economy characterised by unbalanced core–periphery relations, where industrial and commercial core regions exploit the natural resources of peripheral regions. Over time, some peripheral regions developed into what Wallerstein calls semi-periphery, areas that are themselves exploited but also exploit other peripheries. Wallerstein’s analysis of the modern world has been highly controversial, not least because of his view of the modern world economy as basically unbalanced and unfair,<sup>11</sup> but disregarding the potential of his model for the modern world and without considering the balance or fairness of centre–periphery connections in the ancient period, Wallerstein’s approach to the past is highly promising to anyone working with pre-modern international trade, as he focuses on systems rather than on geography, such world-systems can be seen to overlap, coexist and interact and can easily be compared to the Greek *Oikoumene* – ‘the inhabited world’. My claim is that processes of globalisation could and indeed always are studied within such perceived worlds, systems or *oikoumenai* rather than with regard to the physical world. In the case of the ancient world I propose the term ‘oikoumenisation’, to avoid purely geographical discussions and to distinguish the process from modern globalisation.

Now, let us use the Indian Ocean to see how the *Oikoumene* – the known world of the Greeks and Romans fits with the general definition of ‘globalisation’ from the *Britannica* with its primarily cultural emphasis, *and* with the Flynn and Giráldez demands to economic interdependence between trading partners. This will clarify whether this world experienced processes similar to what we today would call globalisation as a result of international trade.

### The Indian Ocean System

Around the turn of our era, a trade based on the monsoon winds developed on the Indian Ocean. Ships from Roman Egypt, India, Arabia, Parthia and Africa plied the Red Sea, the Persian Gulf and the Indian Ocean, helped by the monsoon winds. These strong and stable winds, which blow from the south-west in the summer and from the north-east in the winter made it possible to cross from most coasts of the wider Indian Ocean region and back again within a year. The Indian Ocean was a nucleus of ancient world trade. Through India, the system connected

<sup>9</sup> Gills and Frank 1993; Woolf 1990.

<sup>10</sup> Wallerstein 1974–89.

<sup>11</sup> Shannon 1989, 137–69; Wallerstein 1993, 292.

eastwards to China and northwards to central Asia. Through the Red Sea it linked up with the Mediterranean system, and through African ports with the African hinterland. This makes the Indian Ocean particularly well suited as a case study of globalisation in the ancient period. The area indirectly linked the three great powers of the period, the Roman empire, Parthian, later Sasanian Persia and Han China, but was not under direct control of any of these. Rather, the Indian Ocean was bordered by a number of independent kingdoms. This makes it likely that cultural change around the Indian Ocean was to a large extent fostered by peaceful trade rather than the political, military and economic coercion, which probably contributed heavily in processes of cultural standardisation within these empires, such as the 'Romanisation' of the Mediterranean world and Western Europe.

The monsoon trade was not a new occurrence in the Roman period, but Rome certainly represented an actor of unprecedented economic weight and the patterns and volume of trade seem to have changed with the Romans taking control in Egypt.<sup>12</sup> Indian and Arabian networks continued along the same patterns up to modern times, but a significant shift in the network must have occurred when Islamic expansion cut off Mediterranean access to the Red Sea, decimated the size and economic power of the Byzantine empire and demolished the Sasanian empire in the 7th century.

The system consisted of interconnecting networks originating from Roman, Aksumite, Arabian, Persian and Indian ports. It included prestige/luxury goods like wine, silk, gems, pearls, aromatics and expensive slaves, but also subsistence goods like cereals, wood, base metals, tools and plain textiles. The general pattern seems to have been that ports sent out ships in order to bring back specific high value goods which were in demand at home, for instance Arabian aromatics to Rome and India, African ivory to Arabia, Indian gems and spices to Rome, Indian spices and hardwood to the Persian Gulf etc. In order to acquire these goods they paid with a mixture of prestige and subsistence goods which were in demand at their ports of call: a non-exhaustive list include Indian grain, rice and textiles to Arabian and African ports, Arabian tools, grain and wine to Africa, Roman glass, metal, textiles, wine and gold to Africa and India, dates, gold, pearls, slaves and textiles from Persian ports to India and Arabia and tortoise shell from modern Malaysia to Southern India.

This glimpse into the Indian Ocean system is derived from an anonymous Greek 1st-century work called the *Periplus of the Erythraean Sea*.<sup>13</sup> This remarkable document is a brief merchant's handbook to trade on the Indian Ocean, giving information on trade routes, ports of call, which products to bring, which gifts to

<sup>12</sup> Seland 2006.

<sup>13</sup> L. Casson (ed.), *The Periplus Maris Erythraei* (Princeton 1989).

provide for the local king, how to navigate foreign waters and how the local population is apt to react to foreign traders. It gives us the most complete picture of the Indian Ocean system we can hope to get, but is naturally biased, as the unknown author was a native of Roman Egypt and most interested in the Roman network. Nevertheless, valuable information on Arabian and Indian networks exists and indicates that there was no structural difference in their patterns of commerce. Together with other classical sources and archaeological remains, the *Periplus* also give us some examples of what could be interpreted as processes of globalisation or oikoumenisation around the Indian Ocean in the ancient period.

### Cultural Oikoumenisation? Language, Settlement and Religion

Among the most visible and audible effects of modern globalisation is the spread of English language at the expense of national languages across the world within business, entertainment and scholarship. Similar processes seem to have taken place around the Indian Ocean:

One of the ports described in the *Periplus* is Adulis, the commercial Red Sea outlet of the kingdom of Aksum in the modern Ethiopian and Eritrean highlands. Here we encounter the local king, Zoskalês, who we are told is 'a fine person and well versed in reading and writing Greek' (*Periplus* 5). While one Greek-speaking king is hardly significant, Greek language obviously carried a certain prestige on the coast of modern Eritrea in the 1st century. Greek influence in Aksum, however, continued throughout the ancient period: when the kings of Aksum started to issue their own coins, *ca.* AD 270, they initially chose Greek letters and legends rather than the native Aksumite language Ge'ez.<sup>14</sup> Although coins with legends in Ge'ez were also issued, mainly on silver and bronze coins,<sup>15</sup> Greek remained in use until the end of Aksumite coinage.<sup>16</sup>

Gold coins and kings using Greek language attest mainly elite familiarity with Mediterranean culture, and Aksumite farmers probably had as little knowledge of Greek as the landed population of modern Eritrea and Ethiopia has of English. But, just as in a modern globalised world, people who dealt with foreigners in the ancient period had to be bi- or multilingual. This is reflected in a passage of the *Periplus* describing Arabian trade with the coast of East Africa, modern Kenya and Tanzania, where we get to know that (the merchants of Muza [Yemen]) 'send out to it merchant craft that they staff mostly with Arab skippers and agents who, through continual intercourse and intermarriage, are familiar with the area and its language' (*Periplus* 16). When the Alexandrian trader Cosmas (*Christian Topography* 3. 65)

<sup>14</sup> Munro-Hay 1991, 184.

<sup>15</sup> Munro-Hay 1991, 189.

<sup>16</sup> Munro-Hay 1991, 194.

visited Adulis in the kingdom of Aksum *ca.* AD 525, he encountered Greek speaking inhabitants of the island of Socotra, directly east of Cape Guardafui in modern Somalia. According to the *Periplus* (30), Socotra was inhabited by 'a mixture of Arabs and Indians and even some Greeks, who sail out of there to trade'. These three passages attest the existence of foreign settlements around the Indian Ocean. Such settlements, or trading diasporas as they are often called,<sup>17</sup> seem to be a near universal aspect of pre-modern trade,<sup>18</sup> and must have played an important part in the processes of cultural standardisation involved in globalisation. Their institutional value is summarised in the passage about Arabian settlements in East Africa cited above: they 'are familiar with the area and its language', we might as well have added 'customs' or 'culture'. The cultural skills and knowledge needed for cross-cultural trade in antiquity were not that different from the skills modern corporate and government agents need to operate internationally.

Trading diasporas remained important around the Indian Ocean. The 4th- or 5th-century work *De Gentibus Indiae et Bragmanibus*,<sup>19</sup> commemorating the journey of an Egyptian lawyer to India, mentions an Indian colony at Aksum (*De Gentibus Indiae et Bragmanibus* 4),<sup>20</sup> 6th-century Cosmas reports a Persian church on Sri Lanka (*Christian Topography* 11. 13), and a Tamil poem of the 6th century refers to Western merchants settled on the Coromandel Coast of India (*Silappadikaram* 5. 11-15). While the Greeks are now long gone from the Indian Ocean, Arab merchants are still settled from East Africa in the west to Indonesia in the east, and a Jewish colony of uncertain age and origin thrived in Cochin on the Indian Malabar Coast until most of its members moved to Israel after 1947.

One of the very long-term cultural results of such commercial connections is the spread of religion. Islamic faith in the region today is a result of the Arabian networks still active in the region, but such developments also took place in the ancient period. Our friend Cosmas, who was interested in such matters, reported Christian churches not only on Sri Lanka, but also in southern India, on Socotra, in Yemen and in Eritrea/Ethiopia (*Christian Topography* 3. 65). This distribution of churches in the 6th century correlates quite well with the *Periplus'* description of Roman trade routes in the 1st century. While no trace remains of the Arabian churches, the churches of Eritrea/Ethiopia and southern India still thrive.

Such examples of cultural standardisation across space and time seem to fall within the definition of globalisation from the *Encyclopaedia Britannica*. Alaric the

<sup>17</sup> A term coined by Abner Cohen in Cohen 1971.

<sup>18</sup> Curtin 1996, 1-11.

<sup>19</sup> Traditionally ascribed to a certain Palladius of the 4th century AD. Both the date and the attribution are uncertain (Weerakkody 1997, 119), but the work certainly belongs to late antiquity.

<sup>20</sup> Number refers to Greek version as published in Weerakkody 1997, 212-13.

Goth's taste for pepper and silk could be described in a similar context, but what about Flynn and Giraldez's much stricter demands concerning the volume and effects of international trade in terms of globalisation?

### Economic Interdependence and the Red Sea

And, by the lowest reckoning India, China and the Arabian peninsula take from our empire 100 million *sesterces* every year – that is the sum which our luxuries and our women cost us; for what fraction of these imports, I ask you, now goes to the gods or to the powers of the lower world? (Pliny *NH* 12. 84).<sup>21</sup>

Trade was the most important instigator of cultural change around the Indian Ocean. Globalisation is often interpreted partly as a result of international trade while at the same time international trade is often seen as an important aspect of globalisation itself, as in Flynn and Giraldez's statement about when globalisation took place (above). They demanded not only that all continents exchanged goods continuously, but also that this had lasting impact on all the trading partners.<sup>22</sup> We have already seen that the Indian Ocean served as the commercial link between the three continents of the Old World for several hundred years, and that this had long-term cultural impact represented by language and religion. The Indian Ocean trade, however, also had political and economic consequences for the partaking societies. This brings us to Flynn and Giraldez's second point: what economic impact did this trade have on the trading partners and did it have political effects. Considering the absence of statistical material, such political and economic consequences of ancient trade are harder to establish than cultural standardisation and change.

To start on the Roman side, Pliny's complaint about the drain of currency from the Roman empire (above) has fostered considerable speculation about the volume of the Roman trade.<sup>23</sup> Elsewhere he estimates the negative balance on the trade with India alone to 50 million *sesterces*, which seems reasonable compared to the 100 million total for the Eastern trade (Pliny *NH* 6. 101). While we will never know the reliability of Pliny's figures, they are the only ones we have, and no doubt can demonstrate that he considered the problem to be real. Some simple calculations could give us a general idea of the amounts involved.

Four *sesterces* equalled one *denarius*, a Roman soldier at the time of Pliny received an annual pay of 225 *denarii*,<sup>24</sup> and deductions were made for food, weap-

<sup>21</sup> *Ca.* AD 70 on the Roman trade with the East.

<sup>22</sup> Flynn and Giraldez 2002, 4.

<sup>23</sup> See, for example, Warmington 1974, 272-318; De Romanis 1997, 121-28; Young 2001, 24-26.

<sup>24</sup> Jones 1953, 294.

ons and uniforms. 100 million *sesterces*, Pliny's estimate of the total price of Indian Ocean imports thus equals the annual pay of 111,111 Roman legionaries. At the time of Pliny, the standing army consisted of 29 legions,<sup>25</sup> each of *ca.* 5500 men.<sup>26</sup> 100 million *sesterces* would pay for more than 20 of these. The Roman army also consisted of a large number of auxiliaries, clerks, cooks, officers, cavalry, engineers, doctors, etc. Still, this shows that 100 million *sesterces* must have been a huge sum, even compared to the expenses of the Roman army.

While we only have few figures on the Roman side, we have none from the African, Indian and Arabian societies that delivered the expensive Eastern imports to the Roman empire, but that the trade had an impact on these societies seems very likely. This can be seen by comparing the development of the Roman Indian Ocean trade to the political development of African and Arabian states:

In the table below, different aspects of Roman, Aksumite and South Arabian commercial and political history are tabulated. Separately, most events can be explained by internal developments, but together, they seem to be linked in the following way:

(1) The Roman takeover of Egypt increases the importance of maritime trade at the expense of overland trade. (2) This gives rise to the state of Aksum in Ethiopia/Eritrea and gives states with access to maritime trade the upper hand in conflicts in southern Arabia. (3) The Roman empire is the most dynamic and influential power in the commercial system until the late 2nd century. (4) In the 3rd century the Aksumites take over as the dominant force in the Red Sea region and prosper greatly from their role as intermediaries between Arabia/India and the Roman world. (5) Similarly the Himyarites control the Arabian Indian Ocean trade and emerge victorious from South Arabian power struggles. (6) South Arabia falls victim to foreign invasions in the 6th century, but although initially successful, (7) Aksum (and through it Roman Egypt) is cut off from Indian Ocean commerce with the Persian invasion of Yemen *ca.* AD 570. (8) The end of the ancient Indian Ocean system is complete with the Islamic conquest of Egypt in AD 642.

This summary history of the western part of the Indian Ocean system shows how events in one part of the system influenced other parts. The opening of maritime routes from Egypt had political effects in Arabia. The crisis in the Roman empire from the 3rd century opened the way for the kings of Aksum. The eastward swing in the Indian Ocean commerce which must have resulted from the Persian conquest of Arabia took away the economic basis of Aksumite coinage and perhaps even urbanism. This shows that trade in the Indian Ocean system not only linked all continents of the ancient *Oikoumene*, it also had a significant volume, and it had

<sup>25</sup> Watson 1969, 23.

<sup>26</sup> Watson 1969, 13.

lasting impact on all trading partners. From the Indian Ocean evidence, the ancient world certainly seems to have been globalised, or should we perhaps say 'oikoumenised'? The question that remains, however, is that if the ancient period experienced processes resembling those we call globalisation today, how relevant is the term really for our interpretation of the changing dynamics of the contemporary world?

| Period/main developments                                                                                                                                                   | Rome/Egypt                                                                                                                                                                                                                                          | Ethiopia/Eritrea                                                                                                                                                            | Southern Arabia                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-30 BC<br>Mainly caravan trade with Mediterranean; Indian and Arabian networks on Indian Ocean; inland kingdoms dominate southern Arabia; no state in Ethiopia/Eritrea. | Ptolemaic kingdom, limited maritime trade on the Red Sea. <sup>27</sup>                                                                                                                                                                             | Proto-Aksumite phase, external contacts limited to southern Arabia and Nubia. <sup>28</sup>                                                                                 | Inland kingdoms of Saba and Qataban dominate. <sup>29</sup> Caravan trade with the Mediterranean through the Nabatean kingdom. <sup>30</sup>                                                                                                                                                                 |
| 30 BC- <i>ca.</i> AD 50<br>Roman network developing; coastal states take over in southern Arabia. Start of Aksumite kingdom.                                               | Roman takeover in Egypt leads to increased maritime trade from 30 BC. <sup>31</sup> Failed Arabian expedition of Aelius Gallus in 25/4 BC. <sup>32</sup> The <i>Periplus</i> describes fully developed Roman Indian Ocean network <i>ca.</i> AD 50. | <i>Periplus</i> gives first outside account of Aksum <i>ca.</i> AD 50: Aksum trades with India, Arabia and Rome and serves as link to the African hinterland. <sup>33</sup> | Hadramawt and alliance of Saba-Himyar dominate coast, <sup>34</sup> inland state of Qataban marginalised, <sup>35</sup> capital of Timna destroyed. <sup>36</sup> <i>Periplus</i> reports trade in aromatics mainly by sea. Hadramawt tightens control with frankincense production and trade. <sup>37</sup> |

<sup>27</sup> Strabo 2. 5. 13; 17. 1. 13.

<sup>28</sup> Fattovich 1997, 70.

<sup>29</sup> De Maigret 2002, 213.

<sup>30</sup> Pliny *NH* 12. 63.

<sup>31</sup> Strabo 2. 5. 13; 17. 1. 13.

<sup>32</sup> Strabo 16. 4. 22-23.

<sup>33</sup> *Periplus* 4-6.

<sup>34</sup> *Periplus* 20-33.

<sup>35</sup> De Maigret 2002, 220.

<sup>36</sup> Van Beek 1952, 10.

<sup>37</sup> Seland 2005.

| Period/main developments                                                                                           | Rome/Egypt                                                                                                                                                                                                                                                                                                                                                                                      | Ethiopia/Eritrea                                                                                                                                                                                                                                                                                                                                                                                                         | Southern Arabia                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>ca.</i> AD 50-200<br>Greatest extent of Roman network?                                                          | Pliny complains about drain of money, <i>ca.</i> AD 70. <sup>38</sup> Roman garrison at Farasan Islands, southern Red Sea, during reign of Antoninus Pius (AD 138-161). <sup>39</sup> Ptolemy, <i>ca.</i> AD 160, describes world eastwards to China, coast of Bay of Bengal, south-east Asia, voyage to China. <sup>40</sup> Roman visitors reported at Chinese court in AD 166. <sup>41</sup> | Ptolemy describes Aksumite kingdom <i>ca.</i> AD 160. <sup>42</sup> Archaeological record shows start of monumental architecture in city of Aksum and increase in imported material at the capital. <sup>43</sup>                                                                                                                                                                                                        | Struggle for supremacy between Saba, Himyar, Hadramawt and Qataban throughout period. <sup>44</sup> Himyar independent <i>ca.</i> AD 100, end of Qataban before <i>ca.</i> AD 200. <sup>45</sup> Hadramawt secures control of eastern Yemen by stopping eastward expansion of Himyar and conquering Qataban. <sup>46</sup> |
| AD 200-300<br>Collapse or near collapse of Roman Indian Ocean trade; Aksum seemingly takes over as intermediaries. | Civil wars and crisis in the Roman empire. Little activity at Red Sea port of Berenikê from late 2nd through mid-4th century AD, but Palmyrene presence. <sup>47</sup> Height of Palmyrene power (collapses in AD 272).                                                                                                                                                                         | Inscriptions attest large and aggressive Aksumite territorial state. <sup>48</sup> Aksumite expeditions to Me-roë and into southern Arabia. <sup>49</sup> Periodic Aksumite control of Red Sea straits? Monumental architecture at Aksum. <sup>50</sup> Indian coins from <i>ca.</i> AD 220 attested in Ethiopia. <sup>51</sup> Introduction of Aksumite gold coinage on Roman standard <i>ca.</i> AD 270. <sup>52</sup> | Aksumite influence on and partial occupation of western Yemen. Saba conquers Hadramawt (AD 225). Saba collapses <i>ca.</i> AD 280. Himyar controls southern Arabia alone, <sup>53</sup> except Red Sea coast, which remains under Aksumite control. <sup>54</sup>                                                          |

<sup>38</sup> Pliny *NH* 6. 101; 12. 84.

<sup>39</sup> Phillips *et al.* 2004.

<sup>40</sup> Ptolemy *Geographia* 7. 2-3; 1. 13-15.

<sup>41</sup> Hirth 1885, 40-43.

<sup>42</sup> Ptolemy *Geographia* 4.7.

<sup>43</sup> Fattovich 1997, 71.

<sup>44</sup> De Maigret 2002, 238-39.

<sup>45</sup> De Maigret 2002, 229.

<sup>46</sup> De Maigret 2002, 238.

<sup>47</sup> Sidebotham and Wendrich 1999, 455.

<sup>48</sup> Cosmas *Christian Topography* 2. 60-63; Munro-Hay 1991, 79-80.

<sup>49</sup> Fattovich 1997, 71.

<sup>50</sup> Fattovich 1997, 71.

<sup>51</sup> Munro-Hay 1991, 182.

<sup>52</sup> Munro-Hay 1991, 180.

<sup>53</sup> De Maigret 2002, 240-44.

<sup>54</sup> De Maigret 2002, 247.

| Period/main developments                                                                                                   | Rome/Egypt                                                                                                                                                                                | Ethiopia/Eritrea                                                                                                                                                                                                                                         | Southern Arabia                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AD 300-500<br>Roman Red Sea and Indian Ocean trade seemingly recovers with continued important roles for Aksum and Himyar. | Red Sea port of Berenikê recovers from <i>ca.</i> AD 350. <sup>55</sup>                                                                                                                   | Introduction of Christianity <i>ca.</i> AD 325. <sup>56</sup> The Theban Scholasticus goes to Malabar on an Aksumite ship and reports an Indian colony at Aksum late 4th century AD. <sup>57</sup> Continued monumental architecture at Aksum.           | Himyarites remain in control. Introduction of Christianity during reign of Roman emperor Constantine II (AD 337-361). <sup>58</sup> Introduction of Judaism. <sup>59</sup> Aden mentioned as the market for trade with Roman territories. <sup>60</sup> Himyar empire reaches greatest extent in 5th century AD. <sup>61</sup> |
| AD 500-650<br>Last phase of Roman Indian Ocean commerce.                                                                   | Berenikê abandoned by early 6th century AD. <sup>62</sup> Cosmas ( <i>ca.</i> AD 520) reports Christian communities all over Indian Ocean. <sup>63</sup> Egypt conquered by Arabs AD 642. | Peak of urban development. <sup>64</sup> Continued role as intermediaries for Roman trade with India. <sup>65</sup> Second invasion of Arabia ( <i>ca.</i> AD 525). <sup>66</sup> Gradual decline and end of coinage shortly after AD 600. <sup>67</sup> | Second Aksumite invasion, <i>ca.</i> AD 525, Persian conquest of southern Arabia <i>ca.</i> AD 570. (Red Sea trade disrupted?) Conversion to Islam AD 628. <sup>68</sup>                                                                                                                                                       |

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<sup>55</sup> Sidebotham and Wendrich 1999, 456.

<sup>56</sup> Munro-Hay 1991, 202-06.

<sup>57</sup> Palladius *De Gentibus Indiae et Bragmanibus*.

<sup>58</sup> Philostorgius *Historia Ecclesiastica* 3. 4.

<sup>59</sup> De Maigret 2002, 249.

<sup>60</sup> Philostorgius *Historia Ecclesiastica* 3. 4.

<sup>61</sup> De Maigret 2002, 250.

<sup>62</sup> Sidebotham and Wendrich 1999, 456.

<sup>63</sup> Cosmas *Christian Topography* 3. 65.

<sup>64</sup> Fattovich 1997, 69.

<sup>65</sup> Cosmas *Christian Topography* 11. 17.

<sup>66</sup> Munro-Hay 1991, 85-88; De Maigret 2002, 250-52.

<sup>67</sup> Munro-Hay 1991, 88-94, 194-95.

<sup>68</sup> De Maigret 2002, 250-52.

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