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CONJUNCTURES AND CONJECTURES: KERALA AND ROMAN TRADE

Although much has been written in the past on Roman trade with India, and especially trade with South India, the subject has come back into fashion in the last decade, partly as a result of new perspectives opened up by Indian and European scholars,¹ and partly as a result of new information, such as the recent archaeological discoveries at Pattanam in Kerala.² This, therefore, is a good time to summarize what we now know and perhaps to point a way forward to a better understanding of what was taking place.

The Roman story

The Roman story in broad outline is well known, so I shall be brief.³ Although the Romans were conscious of Indian trade in the second century BC, there was no “take-off” until the emperor Augustus defeated Egypt at the end of the first century BC. It was followed by the arrival of Indian delegations to the emperor (including, according to ancient sources, those from a Pandyan king), which, I have argued, led the Romans to claim that India was part of their empire. These events are reflected in the archaeological discoveries of Indian commerce passing through the Egyptian Red Sea ports of Myos Hormos (Quseir al-Qadim) and Berenike, in the large numbers of silver coins of Augustus and Tiberius found in South India and in the early Roman *terra sigillata* pottery and amphorae found at Arikamedu on the Coromandel coast and elsewhere. By the

* The editor regrets the passing of Dick Whittaker on November 28th, 2008.

1 Thapar, “Black gold”, Champakalakshmi, *Trade, ideology and urbanization*, De Romanis and Tchernia, *Crossings*, Gurukkal and Whittaker, “Muziris”.

2 The work is ongoing, but first reports are listed below in note 10.

3 Details and references in Whittaker, *Rome and its frontiers*, chapter 8.

middle of the first century AD Greco-Roman texts were being written based upon the experience of traders in India, such as the *Periplus Maris Erythraei* [PME in the notes] and the work of Pliny the Elder, both of which made specific references to ports in Kerala and the Malabar coast.

The intensity of this trade continued into the second century AD, as is proved by a lucrative Egyptian trading contract specifically naming Muziris and by the appearance of new names of ports in Kerala in the writings of Ptolemy of Alexandria. There was also a continuing stream of Roman gold coins that have been found in hoards all over South India, plus Roman pottery that has turned up in other Tamil ports, such as Alagankulam in the far south (where a graffito of a deep sea ship has also been found). Contrary to what is often stated, however, and despite a hiccup at the time of the so-called “crisis” of the Roman frontiers in the later third century, maritime contacts were not severed. In the fourth century the Egyptian port of Berenike again shows evidence of a vigorous trade, which has its counterpart in late literary references to Sri Lankan commerce, and in the hundreds of later Roman copper coins found at south Indian centres, such as Madurai and Karur, as well as those that arrived prolifically in Sri Lanka. When Alaric, the invader of Rome in AD 408, was paid off by 3,000 pounds of pepper, the produce almost certainly came from South India.

So much for the basic facts. And, while there is nothing much new in all this, four points need emphasizing. First, Muziris and the Malabar coast emerge as central to Roman interests in India, especially for pepper, which has been found on archaeological sites all over the Roman world, including sites in Germany and Britain. The key factor was not the “discovery” of the monsoon, as is often claimed, but the knowledge that by sailing the 12⁰ latitude east from the horn of Africa the next landfall was exactly in north Kerala.⁴ The Romans were well aware of latitude parallels. Strabo, geographer in the early first century AD, recorded a similar example of Sri Lanka which, he says, “lay on the same parallel” as the cinnamon producing country of East Africa.⁵

Secondly, the dating and analysis of this trade is no longer dominated by the considerable Roman coin hoards of Tamilakam. Coins are never reliable indicators of trade,⁶ and there are far too many losses in the hoards to

4 Tchernia, “Winds and coins”; cf. PME 57.

5 Strabo II.1.14; cf. II.5.14.

6 See, for example, in relation to Sri Lanka, Weerakkody “Roman coins” and Burnett, “Roman coins”.

furnish reliable, terminal dates.⁷ Single coins from stratified sites are more informative about dates and quality of trade. If proof is needed, compare the Rome trade with China, which was just as intense as that going to India (according to Pliny), yet where not a single Roman coin has been found.

Thirdly, the “take-off” of Roman-Indian trade was not by chance but *structural* to the Roman political economy. That is to say, the conquests of Augustus not only gave Rome control of Egypt’s ports, but also injected massive liquidity into the Roman economy. Fortunes were made, and the rich were in search of investment. All this fulfilled the conditions required for Indian trade perfectly. For, although highly profitable, it was also a high risk enterprise that required unusually large sums for maritime loans, affordable only by the very rich. These were conditions which persisted with increasing intensity as the Roman empire grew and as the wealth of the empire accumulated in the treasuries of the rich.

Lastly, we must beware of overestimating the quantity (as opposed to the value) of Rome’s trade with South India. One large ship (say, of 500 tons) full of pepper would have provided more than a pound for every family in Rome; twenty ships was enough for the pepper requirements of the empire. Pepper was not, of course, the only export of India, but all were high value and low bulk commodities – a variety of spices, pearls, fine cloth, etc. – that required few ships.

Kerala and conjunctions

If that is the Roman story, we need to ask what was the state of affairs in Kerala at the other end of the trade. Understanding the structural changes taking place in the political economy of Kerala between the Megalithic (Iron Age) and Early Historic Period is a delicate and controversial matter of judgement, even after publication of the magisterial study of Gurukkal and Varier.⁸ There is a fundamental problem inherent in the Indian sources that force us into conjectures and plausibility based on circumstantial or comparative events. Hence the title of this paper. Quite apart from the dif-

7 Apart from the notorious, complete disappearance in the last century of the massive hoard of approximately 75 pounds of coins found at Kottayam near Kunnur (Malabar District), in the more recent hoard discovered at Valluvaly (Ernakulam District), not far from Muziris, only 252 coins remain out of the original number of more than 1000.

8 Gurukkal and Varier, *Cultural history of Kerala*.

difficulties of the coin hoards, noted earlier, there are many who argue that the function of coins in South India in this period was confined to its accumulation as stored bullion, which is, therefore, no index of market exchange. The literary sources are no easier. Considerable information is contained in the medieval collections of Tamil Sangam poetry, which contain or derive from pieces by earlier poets that are hard to date with any precision between about 300 BC and AD 300, and whose interpretation is highly subjective.⁹ As a source for political economy the value of the Sangam corpus is limited, since much of it derives from courtly circles who presented a literary image of polities as palaces of heroic chiefdoms not as secular, territorial centres of economies. Iron Age archaeology, meanwhile, has been largely confined to funerary monuments that are difficult to date, and evidence of settlements is virtually non-existent.¹⁰

I say “virtually non-existent”, because we now have the startling new discoveries at Pattanam, south of the modern mouth of the Periyar River, where, for the first time in Kerala, Roman pottery has been found.¹¹ There is a strong possibility that Pattanam is in fact Muziris. It is not, however, the sherds of Roman amphorae of the first century AD that are of prime importance by themselves, since they only confirm what we already knew. But what we have now is the first and only evidence of an Iron Age settlement – as opposed to a burial – anywhere on the Malabar coast, which comes with the added bonus that it contains stratified, datable foreign trade objects and, importantly, some local Cera copper coins. For the first time, therefore, we can use archaeological evidence relating to a period somewhere between the Megalithic and the Early Historic Period to prove that the transition was taking place *at the same time* as the beginning of Roman trade. It allows us, in other words, to start to assess the condition of the society that received the Roman ships.

9 There is a large bibliography on the so-called Sangam poets, but the standard work is Zvelebil, *Tamil literature*. Champakalakshmi, *Trade, ideology and urbanization*, contains many sensible remarks on the historical problems involved in the use of this medieval source, which in many ways resemble those associated with Homer as a source for early Greek history.

10 McIntosh, “Dating the South Indian megaliths,” dates the megaliths by artefacts from non-megalithic sites, and places most of those found in Kerala between 600 and 100 BC. Rajan, *Archaeology of Tamilnadu*, extends the dates in the Kongu region to between 1000 BC and AD100.

11 Selvakumar et al., “Trial excavations at Pattanam”; Tomber, “Amphorae from Pattanam”.

With this new discovery can be taken the increasing archaeological evidence of the presence of southern Indians in the West. At Myos Hormos and Berenike in Egypt Tamil-Brahmi inscriptions appear on pots, dating perhaps as early as the first or second centuries AD. Remains of teak timber, cotton sails of Indian weave and Indian pottery suggest Indian ships in the ports. In Greco-Roman literature of the second century there are stories of rich Indian merchant princes visiting Alexandria.¹² At Soqotra the presence of Indians on the island is coupled by the *Periplus* with “those sailing out of Limrike [Malabar]” to Soqotra with rice, cloth, slaves, etc.¹³ The island, we should remember, lies on the important 12° latitude that I noted earlier, and it sounds as if those “sailing out” (not sailing home, we should note) were from Kerala.

So, just as I stressed when discussing the Roman political economy, I now turn to ask what was structural in the political economy of early Kerala to stimulate this trade boom. Fernand Braudel, in his classic work on Mediterranean history, argued that historical events often became dynamic because of what he called the “conjuncture” of different forces.¹⁴ In the context of South India we should inquire, therefore, whether it was perhaps not just Roman supply that was stimulated in the early years of the millennium, but whether at the same time South Indian demand also increased. A clear example of such a demand, even if in this case it is related to contemporary Sri Lanka, comes from a commentary on the *Mahavamsa*, which says that King Bhatikabhaya in the mid-first century AD went seeking coral in “romanukhavattha”.¹⁵ Since Pliny, who was alive at this time, also stresses Indian “love of coral”, which was, he says, as great as the Roman passion for Indian pearls, we have some direct evidence of a growing and active eastern demand for Roman goods at exactly the same time as Roman maritime trade was expanding.¹⁶ And, if there was such a demand, it is legitimate to ask what, in theory at least, was creating it.

12 The bibliography for Berenike is cited in Whittaker, *Rome and its frontiers*, but see also Tomber, “Indo-Roman trade.” For Quseir al-Qadim, see Peacock and Blue, *Myos Hormos/Quseir al-Qadim*.

13 *PME* 30–31. I have received unconfirmed reports of Indian inscriptions on the island.

14 Braudel, *The Mediterranean*.

15 Gunasekara, “The Roman coin-hoard exhibited in the Peradeniya University”. Although the reference comes from a medieval commentary, the term *romanukharattha* is so unusual that De Romanis, “Romanukharattha”, regards it as authentic folk memory and dates it accordingly.

16 Pliny, *Natural History* XXXIII. 21–23.

I want, therefore, to pose two questions, despite the difficulty of Tamil sources. First, does the Tamilakam political economy show any sign of a rising demand at the moment when Roman trade arrived? And, secondly, did this trade itself then encourage a development of the political economy? But I must stress again that the answers can only be educated conjectures.

Kerala when the Romans arrived

Even if it is true that the Tamil people were living on the margins of Indian historical events, nevertheless, they had contacts with North India, Sri Lanka and ultimately the West which showed they were not immune to the winds of change. I refer to such well rehearsed matters as burial practices, ceramics, metal work, written script and coinage.¹⁷ This means that, in order to arrive at a sense of the conditions of the Tamil South at the turn of the millennium BC/AD – that is, at the time when the Romans arrived – information about the country coming from North India, Sri Lanka and the Roman West cannot be ignored, however distorted it may be by foreign perspectives both past and present.¹⁸ Archaeology in lands other than South India also imposes a much needed chronological framework onto contemporary events in Tamilakam. One method of control, however, is to match what we learn from outsiders with evidence that comes from within Tamilakam. In doing so I shall accept as axiomatic that Sangam literature is concerned with a single society in the Tamil South, since it is impossible to separate one core area from another in terms of development.¹⁹ This means that evidence from one Tamil polity is valid for another.²⁰ And the question I am posing is whether the political economy of Tamil countries, including Kerala, was advanced enough to create a market demand for Roman (and other) commerce.

17 Gurukkal and Varier, *Cultural history of Kerala*, pp. 122–124. The proposal that the script came from Sri Lanka is made by Coningham et al., “Passage to India?”

18 Note the severe remarks concerning the “prison house of the colonial mode of comprehension” by Gurukkal and Varier, *Cultural history of Kerala*, p. 21.

19 See Gurukkal, “Towards a new discovery”. Subramanian, *Sangam polity*, pp. 21–25, insists that Sangam historical data “relate to a compact and well-defined period.”

20 For example, Gurukkal and Varier, *Cultural history of Kerala*, p. 104, accept evidence from ports and sites in Tamil Nadu as admissible for Kerala.

If we look at political developments first, major centres of power among Pandyas and Cholas (less so among the “Keralaputras”) were already recorded on Asokan inscriptions. The Pandyas seem to be the earliest to reach prominence, judging by references to a Pandyan “queen” by Megasthenes in the third century BC or by the Elephant cave inscription at Kalinga (Orissa) of the mid-first century BC; the latter records a confederacy of Tamil countries and booty of pearls from “the Pandyan realm in the south”.²¹ A delegation is recorded from a Pandyan “king” to the Roman emperor Augustus during the last decades of the first century BC.²² Pandyan power in Sri Lanka is attested by religious texts, coinage, trade goods and cultural influences as early as the second century BC and continuing to the end of the millennium.²³ By the mid-first century AD both Pliny and the *Periplus* believed there were similar “kings” of the Cholas and Ceras, who directly controlled various ports of south-western Tamilakam, a view shared in the next century by Ptolemy.²⁴ Such descriptions of super-chiefs, rajas or kings – whatever name we use – can easily be matched by the references in the Sangam poems to *muventars*, the dominant clan leaders among the Pandyas, Ceras and Cholas, who controlled core areas around centres where political power had become sufficiently differentiated to create dependencies, whatever their precise relationship with the subordinate *velirs* and *kilaras*, chiefs and village heads.

These larger polities seem not so different from the evolution that has been proposed for *mahajanpadas* out of the original tribal *janpadas* in North India. The difference is that in the north such units can be identified by Buddhist or Jaina lists and confirmed by archaeology, both of which sources of evidence are almost entirely lacking in the south, particularly in Kerala. Circumstantially, however, the multiplicity of names and ancient descriptions of Tamil centres, such as Muziris, Becare, Nelykunda, Modura (Madurai), Karur, Uraiyur, and so on, suggest a devel-

21 Asokan inscriptions – Thapar, *Early India*, p. 176; Megasthenes – despite the reserves of Subramanian, *Sangam polity*, p. 19; Kalinga – *Epigraphia Indica* 20, cited from the translation in Thapar, *Early India*, pp. 212–213.

22 Strabo XV.1.4.

23 Sitrapalam, “The form ‘velu’ of Sri Lanka”. Stratified Pandyan coins, dated accurately at Anuradhapura to the second century BC, are believed to reflect Pandyan domination until c. 28 BC, Bopearachchi, “Archaeological evidence,” pp. 156–157.

24 Tyndis and Muziris were “villages” in the Cera “kingdom”, *PME* 54; the “land” up to Kolchoi was “under the [Pandyan] king” according to *PME* 54 and 59. Full references to Roman authors in Gurukkal and Whittaker, “Muziris.”

opment of territoriality beyond simple royal centres or ports of trade, which were not simply controlled by predatory raids.

In this respect, the Tamil poems are unambiguous that the *ventars* from their core centres at Karur, Madurai and Uraiyur exercised some territorial control. They were, for example, able to control key ports along the coast from which they drew revenue, and which, in that sense, belonged to the king, just as Roman writers claimed. Control, however, went further. Megasthenes' statement, however unreliable, that a Pandyan queen drew revenue from 365 villages finds resonance in the many Sangam references to the king as ruler of 300, 500, etc. villages.²⁵ The instruments by which such territory was controlled, or how such revenue was drawn, is a major crux in the discussion of the early Tamil polity as described in the poems. But the emergence of the state is not my real concern here, except to say that there is perhaps a danger of underestimating the sophistication of the political economy by the time the Romans arrived. Royal power was already sustained by more than predatory raiding, and the concept of *nadu* as a territorial organization beyond the village seems to have emerged already by the first century BC, although this is impossible to prove.²⁶ Whether revenue is called tribute or tax is largely a matter of semantics in most early polities.²⁷ But we should have no difficulty in recognizing that, in the differentiated society of the period, each leader with his dependants, advisers, warriors and bards – all of this widely attested in the courtly poems – created constant rivalry, and with the rivalry there was a pressure to increase the display of wealth and patronage by increasing the revenue.²⁸ A demand for foreign goods and profits through commerce was one way of achieving this end.

25 *Purananuru* (= *PN*) 109–110, 105, etc. Subramanian, *Sangam polity*, p. 57, notes the grant of *Bramatayam* rights over 500 villages by the Cera king, but Brahmin references are impossible to date precisely.

26 A minimalist view is taken by Gurukkal, "Antecedents of the state formation". Seneviratne, "From kudi to nadu", discusses the emergence of *nadu/natu* and notes the appearance of the term on a Tamil-Brahmi inscription of the second to first century BC. References in the Sangam corpus and early epigraphy (e.g., *Parambu nadu*, *Najil nadu*, *Erumal nadu*) are enough to suggest something was changing, even if this is not proof that *nadus* were administrative units.

27 The Roman state land tax was always, even in the days of the high Empire, referred to as *tributum*.

28 Note the rivalries of other kings against the Pandyan king (*PN* 71) and the rewards to warriors (*PN* 297). Patronage and protection and many references to courtiers and council-

One of the forms of display was in funerary monuments, for which there is plenty of visible evidence in Kerala and elsewhere in Tamilakam, although difficult to relate to dates or personalities. In Sri Lanka the megaliths, which are interestingly believed to have come originally from South India, can, indeed, be related to the elite *parumaka*, the equivalent of *velirs*, and they are explicitly linked by inscriptions to growing economic exploitation and trade.²⁹ Another exhibition of prestige is in the construction of buildings, though here the archaeology is sparse. Foreign traders and observers, like Pliny and Ptolemy, took it for granted that southern Indian society had evolved sufficiently to build capital cities. The Cera “king of Muziris” lived inland at Karur, says Pliny, while ruling a kingdom extending up the coast. The Pandyan king controlled the coastal ports south of Kochi while living “far removed in the interior” at Modura (obviously Madurai), and so on.³⁰

We can be sceptical about whether these foreign writers knew what constituted a capital city in the Tamil context, but we should not disparage their words completely. Although Sri Lanka was far less known to the Romans than India, Pliny’s information about the existence of a royal city of Anuradhapura was essentially correct, even if he exaggerated the population. He recorded 200,000 people in the city, which we now know from archaeology to have covered an area of about 70 ha with an estimated population of only about 5,000 at the date when Pliny wrote.³¹ Nothing so dramatic has yet been found in the Tamil South, despite the many Sangam poems glorifying the royal centres. But if the excavated sectors of the port of Arikamedu, extending half a kilometer from north to south in the first centuries BC/AD, and if the early remains at Kaveripattinam are anything to go by, we must surely believe that the capital cities of the kingdoms were at least as extensive as their ports and more than mere villages. More importantly for my argument here, Arikamedu

lors, though difficult to date, are noted by Gurukkal and Varier, *Cultural history of Kerala*, pp. 203–204.

29 Seneviratne, “Pre-state chieftains and servants”.

30 Pliny, *Natural History* VI. 105; these sites are discussed in Gurukkal and Whittaker, “Muziris”.

31 Pliny, *Natural History* VI.86; for the size of Anuradhapura, see Coningham et al., “Passage to India?”. Ptolemy knew of the “royal city of Anurogrami” = Anuradhagama, a name for Anuradhapura.

was already a “dynamic” port before the arrival of Roman trade.³² Archaeologists have argued that urbanization was more or less contemporary all over South Asia, and it is difficult to see why Kerala should have been an exception.³³ The fact that early cities in Tamilnadu, going back to before the arrival of Roman trade, were associated with commercial contacts from outside, is now nicely illustrated by the early brick structures that have been discovered at Pattinam; they, too, are associated with Roman commercial imports.³⁴ And – to return to the theme of this paper – buildings and monuments are forms of accumulated wealth and conspicuous expenditure that create a demand for revenue.

Turning finally to trade contacts, we have the record of Kautilya’s *Arthasastra* in the third century BC to pearl and cotton cloth trading by the Pandyas (probably from the same source as the Indian pearls noted by Megasthenes), as well as the celebrated reference in the *Arthasastra* to pearl trading in the Periyar region of Kerala.³⁵ Well before the arrival of the Romans, therefore, coins, which we must presume signified commerce, were reaching the South not only from the Mauryan kingdom but from Hellenistic traders in the third century BC.³⁶ Such trading contacts were subsequently central to the information of Pliny and the *Periplus* who enumerated various other goods, including pepper, available in Tamil ports. In Sri Lanka recent excavations at Anuradhapura show that Pandyan coins were reaching the island in the second century BC. This, it is thought, could indicate Pandyan control of the trade routes from southern India until the later first century BC, including their role as middle men between Sri

32 Begley, *The ancient port of Arikamedu*, pp. 5–8. I remain convinced that most Roman goods were reaching the Coromandel coast overland through the Palghat Gap, but this is unproven. A small stratified excavation plus extensive finds of pottery and coins at Karur (Tiruchirapalli District) suggest a “large urban complex” going back at least to the megalithic period; Champakalakshmi, *Trade, ideology and urbanization*, p. 119. I am grateful to Dr. S. Suresh for showing me his unpublished paper on Karur.

33 Allchin, *The emergence of cities and states*.

34 Champakalakshmi, *Trade, ideology and urbanization*, p. 93. Surface finds at Pattanam cover over 1 sq. km (100 ha.) and densely on about half that area, Sevakumar et al., “Trial excavations at Pattanam,” p. 59.

35 *Arthasastra* 2.76, 2.11.

36 See the various studies by Krishnamurthy concerning “Hellenistic period coins”. I have only read a revue of Krishnamurthy, R. (1997), *Sangam age Tamil coins* (Madras: Garnet), in which he suggests Pandyan punch-marked coins imitated northern *karshapanas*.

Lanka and the Romans.³⁷ Moreover, we can add the archaeological evidence from Egypt and the testimony in the *Periplus* about Indian deep sea ships. To those who doubt the truth of Sangam references to mastery of the sea,³⁸ it is worth asking how else we imagine the Pandyan delegation came to Augustus in the West, if not in their own ships.

With this background, I find it hard to believe there was not some sort of market mechanism developed by the Tamil kings. Ports, as Roman shippers took for granted, were controlled by the kings, and that included duties levied on goods and agents, according to the Sangam poems.³⁹ Although it is impossible to date with any sort of precision the several references in the poetic literature to rich merchants and specialist traders, Roman sources in the first century AD never once suggested that the trade was other than in the hands of locals.⁴⁰ Indeed, the *Periplus* reports that the Malabar coast acted as an entrepôt for transshipments to the Coromandel coast.⁴¹

It would be unlikely that this was all done without a market interest or mechanism, although this is often asserted. The discovery of Tamil Brahmi script in Quseir al-Qadim and Berenike, dating perhaps as early as the first century AD, shows that by then, at least, commerce and market activity in the West required some accounting and literate competence from those who participated in that trade from Tamil India.⁴² Exchanges in kind by barter, including probably the use of gold as bullion, find frequent refer-

37 Bopeararchchi, "Archaeological evidence," pp. 156–157.

38 For example, *PN* 66 refers to an ancestor who "mastered the movement of the wind when his ship sailed on the dark and enormous ocean". *PN* 126 refers to a Ceran king who owned a navy that carried gold.

39 Champakalakshmi, *Trade, ideology and urbanization*, pp. 28, 31. Cf. *PME* 55 – "The kings themselves of both trading ports [Muziris and Nelykynda] live in the interior."

40 Champakalakshmi, *Trade, ideology and urbanization*, p. 194.

41 *PME* 60: referring to the ports on the Coromandel coast, says, "All the produce that comes to Limrike [= Malabar] goes on to these places, and to them pretty well all the year comes the money brought from Egypt and most of the categories of the goods brought from Limrike or supplied along the coast."

42 The Egyptian graffiti were dated by Mahadevan. Mahadevan has also argued that Brahmi-Prakrit script arrived in Arkamedu, Alagankulam, Kodumanal and Ramesvaram between the second century BC and the first century AD, probably through Sri Lanka; Mahadevan, "Old Sinhalese inscriptions." There are many different kinds of literacy, which should not be confused when judging overall levels of literacy; cf. Gurukkal and Varier, *Cultural history of Kerala*, pp. 187–188.

ences in the Sangam corpus.⁴³ But this does not necessarily mean there was no market value put on the commodities. To argue otherwise one would have to deny the presence of markets in the Roman empire simply because there was still a significant non-monetized sector and constant distortion of a free market price.⁴⁴ Gold, as economic historians have observed, always takes on an unofficial monetary function, and I can find no case of the use of copper coins which is not related to local trade.⁴⁵ Certainly by the end of the Sangam period, and plausibly by the first century AD, rice, salt and pepper were used as media for exchange, which denotes that they had a market value.⁴⁶ One of the important discoveries from recent excavations, such as those at Pattanam, is that we now have proof that Tamil coins were in circulation before the arrival of the Romans. The fact that they include low denomination copper must signify market transactions.⁴⁷ Coins, therefore, were used both as bullion and as currency before and after Roman coins had arrived.⁴⁸ The Romans were responding to a local demand, fuelled mainly by the expanding need for revenue by rival *ventars*, as suggested earlier. Given the centrality of feasting in the ideology of conquest, one obvious demand by the various chiefs was for exotic commodities, such as the “cool and fragrant wine” that the texts note, which was supplied in the amphorae of the Yavanas.⁴⁹

Kerala at the end of the Roman period of trade

If this was the condition of the political economy of the Tamil South, which must surely have included Kerala, at the turn of the millennium BC/AD, it seems there really was a conjuncture between Roman supply and South Indian demand. Let me, therefore, turn to the second question I asked, which was whether it is possible to conjecture the effect of such

43 Gurukkal and Varier, *Cultural history of Kerala*, p. 176.

44 Whittaker, “Late Roman trade”.

45 Plattner, *Economic anthropology*.

46 Subramanian, *Sangam polity*, pp. 231–232, collects references.

47 Pandyan coins were probably tariffed against *karshapanas* as early as the 2nd century BC; Mitchner, “Ancient Pandyan coins”. See above for the references to Sri Lanka and Pattanam.

48 Suresh, *Symbols of trade*.

49 PN 56; cf. Gurukkal and Varier, *Cultural history of Kerala*, pp. 209, 219.

trade and a corresponding growth of wealth by the time close Roman contacts ceased sometime after the fourth century AD. For this period, of course, we are now entitled to draw heavily on the corpus of Sangam literature, most of which, experts agree, refer to conditions that pertained sometime during the approximately 600 years that ended in the third (or in some case the fourth) centuries AD.⁵⁰ Whatever we may think about the earlier Iron Age, it would have been strange indeed if throughout this span of history the political economy in Tamilakam had remained static.

But to assert that is one thing. To describe the political development is another, since there is little direct evidence to show any radical evolution of the Iron Age chiefdoms. The subject is contentious and one has to be wary.⁵¹ Nevertheless, I would argue that it was a society that had moved on from the brute, predatory warriors of the heroic, bardic tradition to one that understood something about the exercise of state craft. Examples of this are seen in what Gurukkal and Varier call “the gradual making of an ideology of power”, which implies some acknowledgement of corporate values in politics.⁵² This implies rulers who were capable of recognizing the benefits of state craft; for example, that a heavy tax/tribute burden destroys stable agriculture, or that the construction of public works, such as irrigation tanks and water supply benefit production, and so on, as is noted in the sources.⁵³ Regardless of whether or not these were first steps in state formation, they mark a shift from personal to public power, which is the beginning of the concept of *res publica*.

Similarly, while there is no obvious reference in the Tamil sources to a bureaucracy, this may be laying too much stress on formal titles in a courtly society that was typically composed of functionaries attached through personal service to the king. I refer to positions such as that of the ambassadors recorded earlier, or to the officials selected to collect port dues, who seem to be no different in principle from the frequently referred to court poets, physicians, astrologers, mercenaries or subordi-

50 Gurukkal and Varier, *Cultural history of Kerala*, pp. xxx–xxxii; Champakalakshmi, *Trade, ideology and urbanization*, pp. 175–176.

51 The case against my argument is most clearly articulated by Gurukkal, “Antecedents of the state formation”.

52 The quotation is from Gurukkal and Varier, *Cultural history of Kerala*, p. 209.

53 Tax burden – Subramanian, *Sangam polity*, p. 198, although he cites the later poem, *Kalittokai* 26; but see *PN* 35 on justice for a suffering people; irrigation – *PN* 18 etc., a step recognized in Sri Lankan history as important in the evolution of the state.

nate chiefs.⁵⁴ One of the problems of Tamil history is the relative dearth of inscriptions, which contrasts sharply with Sri Lanka between the first century BC and the first century AD (that is, starting in the period of close Tamil connections). There we find inscriptions around the royal capital that refer to a whole range of bureaucratic titles, such as treasurer, store-keeper, irrigation officer.⁵⁵ Could there have been such a difference between two relatively near neighbours?

Socially there are numerous references in the Tamil literature to developments of the land and land relations with consequent effects on tribal structures. Most authorities agree that clan ties were eroded over the period that we are examining, in particular by the incorporation of the family into the larger *nadu* unit.⁵⁶ So much so that Champakalakshmi speaks of “the change from a tribal to a peasant society.”⁵⁷ The production of surplus food by the exploitation of wetlands or the organized collection of upland products such as pepper, the “black gold” of Kerala, had the effect of strengthening the capacity of chiefs to maintain non-productive mouths and to increase their mobile wealth. To this there are many references.⁵⁸ The stratification of society appears to have increased the differentiation between high and low born (who were not *varna* caste or class, but more like what Weber called “orders”). Within them grew corporate bodies of specialists, such as traders and craftsmen, a situation that would have required new labour relations and new organizations for manufacture and commerce.⁵⁹ And with that came the acceleration of urbanization. The complex description in the *Pattuppattu* of Madurai as a bustling

54 Subramanian, *Sangam polity*, p. 212; the levy of *ulgu porul* dues on pepper, etc. must have required supervision.

55 Recent research dates the inscriptions between the first century BC and the first century AD: Gunawardana, “Social function and political power”. See also Seneviratne, “Peripheral region and marginal communities”, especially at p. 311, for his description of “intrusive techno-cultural elements from South India” associated with the growth of institutions.

56 Gurukkal, *Cultural history of Kerala*, p. 48. See above for the debate on whether this had already begun to happen by the first century AD.

57 Champakalakshmi, *Trade, ideology and urbanization*, p. 96. Cf. Seneviratne, “From kudi to nadu,” for a similar linkage between resources and social complexity in Sri Lanka.

58 Apart from the famous reference in *PN* 343 to sacks of pepper exported for the king at Muziris, *PN* 202 speaks of the exchange of forest produce for gold; Gurukkal and Varier, *Cultural history of Kerala*, p. 175.

59 Gurukkal and Varier, *Cultural history of Kerala*, especially pp. 183–184, 214.

city, however, exaggerated and as yet unconfirmed by archaeology, leaves no doubt of the effect of trade upon the city.⁶⁰

This paper began with the economy and that is where the stress should lie. In other words, it was perhaps the erosion of the social and political stability caused by accumulation of wealth that proved fatal for the society of the Tamil anthologies, as has been suggested by others.⁶¹ At least part of the cause for such concentrated wealth was in the increase of both internal and external exchange, accompanied by the growth of markets and trade. The concept of “setting a fair price” and the many references to wealthy merchants provide supporting evidence for such market developments.⁶² Roman gold coins, which arrived in quantity in the first and second centuries AD, were not simply withdrawn from the market by hoarding, but were also used as circulating currency. That is proved by the many imitations of Roman specie struck in South India and (probably) by the countermarks on the coins that seem to indicate exchanges of ownership.⁶³ Both Pandyas and Ceras copied Roman motifs onto their own coins, which shows a recognition of their circulating guarantee. Late Roman copper coins, indeed, continued to pass as currency in the bazaars of South India until at least the last century. But this is not to say that Roman trade was the only or even the most important economic transaction taking place in Tamilakam. The pivotal position of the Tamil south in commercial exchanges between East and West must have had at least as much impact on the political economy.

Current scholarly debate about the general concept of a political economy attempts to trace how the flow of goods through a society is “channelled to create wealth and to finance institutions of rule” from prehistoric chiefdoms onwards.⁶⁴ The argument is that the very structure of centralized hierarchies creates competition and controls that lead to the evolution of institutions, in which the mobilization of surpluses is a crucial and essential development. In Kerala and Tamilnadu, I have argued,

60 Champakalakshmi, *Trade, ideology and urbanization*, p. 122.

61 Gurukkal and Varier, *Cultural history of Kerala*, p. 235, Champakalakshmi, *Trade, ideology and urbanization*, p. 37.

62 Fair price – *Pattinappalai*, pp. 196–213; merchants – references in Champakalakshmi, *Trade, ideology and urbanization*, pp. 194–196, although most seem late.

63 Krishnamurthy, “Imitation Roman gold coins.” The debate is summarized by Suresh *Symbols of trade*.

64 Earle, *Bronze age economics*.

Roman trade was both responding to, but also helping to stimulate, this dynamic evolution. So that, whereas the interruption of western trade with India in the third century is often claimed as a cause of the “Great Transformation” in Kerala’s history,⁶⁵ this is to exaggerate the importance of Roman commerce. Better perhaps to consider the event as the last “conjunction” of western and southern Indian history.

Let me spell this out. One internal effect of growing trade and wealth was to erode the traditional political economy by creating more competition among peers, less kinship loyalty and less hoarding of wealth. So, while the chaotic invasions on the Roman frontiers in the later third century certainly did interrupt trade from the West, it happened *in conjunction with* the weakening of the Tamilakam kings, hastened on perhaps by the Kalabhra invasions, of which we know so little. It may well be this that accounts for the interruption in the flow of Roman coins after those of the emperors Septimius Severus and Caracalla (AD 193–217). In fact, as I began by showing, Roman trade with Southern India did not end there. The recovery of the Roman empire and trade in the fourth century is now well enough documented.⁶⁶ Former trade with India was in large part diverted to Sri Lanka, which accounts for the sudden plethora of Roman coin finds on that island. Why that happened we must look to the history of Sri Lanka, perhaps from the same perspectives of economic conjunctures.

Post- script. Iron Age Britain and Kerala compared

Meanwhile 7,000 km away there was another Iron Age society in Britain.⁶⁷ The picture I have presented of the political economy of Kerala, emerging from a late Iron Age regime of petty chieftains into proto-kingdoms, might perhaps benefit by comparison with another Iron Age

65 Gurukkal and Varier, *Cultural history of Kerala*, pp. 241–242. Gurukkal rightly stresses that it is not easy to discern any direct causal linkage between Roman trade and ‘the Great Transformation’. But it is obvious that we disagree when he adds that the relationship between Rome and Kerala “was not trade, but only a form of exchange of goods for goods. Roman coins did not act as money but as a valuable good. That kind of transaction could not have led to fundamental changes in society like differentiation and stratification” (Gurukkal: personal communication).

66 See Chapters 9–10 by C.R.Whittaker and P.D.A. Garnsey in Cameron and Garnsey, *The Cambridge Ancient History*.

67 Millett, *The Romanization of Britain*, whose account I have followed closely here.

transition, which was taking place on the other side of the world at almost the same time at the turn of the millennium BC/AD. While the Romans were making contact with Britain through Julius Caesar's brief attack on the island, Roman and western pottery was also beginning to make its appearance in South India.⁶⁸ The comparison will not, of course, prove anything, but it can suggest a framework for thinking about Iron Age societies.

When Rome first made contact with Britain, British archaeology reveals the following features, which provide interesting parallels with those described for Megalithic Kerala. Politically, for instance, Britain was a regime of ephemeral, petty kings, a warrior society based on kinship ties and clients, that was just beginning to evolve into larger units established under successful war leaders. Socially, it was a land of princes and followers, of bards and feasting, gifts and redistribution, a heroic society often characterized as "Homeric" by modern writers. Settlements were mainly in small hill forts and scattered houses with sporadic agriculture in "pockets" between forests and mountains, which compare interestingly with the *tinai* recorded in Sangam literature. Gold was a key element related to power and increasing social stratification, often displayed as bullion. But at the same time the development of cheap copper potin coinage was undoubtedly stimulated before the Roman arrival by the need for small change in trading.⁶⁹

Although Julius Caesar rapidly withdrew from Britain, parallels with Kerala do not cease there. Under the emperor Augustus at the turn of the millennium BC/AD, Rome claimed the island as part of her empire, despite the fact that there was no physical annexation. Just as Pandyan chiefs went westwards, so too British chiefs went to Rome on diplomatic missions, and Roman traders came to Britain by establishing a port of trade at Hengistbury Head. Amphorae of wine and gold coin were traded for grain and slaves. This was happening at more or less the same date as the appearance of Roman amphorae at Pattanam, and the first Roman coins in southern India.

68 Arikamedu remains the earliest dateable Roman trade link, since Roman pottery at Pattanam so far can be dated only from the first century AD. A useful summary of ceramic evidence is in Tomber, "Trade relations in the eastern Mediterranean".

69 Creighton, "Coins and power;" Cunliffe, "Money and society".

Then, nearly a hundred years after Caesar, occurred the Roman invasion and occupation of Britain by the emperor Claudius in AD 43. The event conveniently provides us with a new snap shot of the evolution of the political economy over the previous century, showing how much had changed in the period since Julius Caesar's first contact with Britain. It suggests what could have happened in Kerala. Greater numbers of tribal leaders and endemic competition in Britain had created fewer but larger, consolidated "kingdoms" and the growth of proto-urban centres, such as those at St. Albans and Colchester. Social differentiation had increased, encouraged by technology (such as the use of the potter's wheel and agricultural techniques) and production. The result was the break up of kinship groups and the leaking away of ethnic loyalties.

As in the case of Kerala's relation with Rome, there may be a danger of exaggerating the size and effect of the trade in the century following the arrival of the first Roman goods. The quantity of pottery found in pre-Roman Britain, for example, has been estimated to equal that carried by one single Roman ship per year. Kerala's trade seems to have been greater than that. But it resembles Britain in that for the most part the imports were prestige goods for kings, for display and feasting, and especially wine and gold. Such prestige and power gave the kings control over labour and resources.

But it is a good conclusion to this comparison to stress the point made by a leading archaeologist and historian of Roman Britain, whose analysis I have relied on heavily. The political economy of Iron Age Britain developed, he says, "within the social context of native society."⁷⁰ Trade, that is to say, may have encouraged but it did not actually cause or totally control events. There was, however, a conjuncture of events between supply and demand, and that is what I have suggested happened also in Kerala.

70 Millett, *The Romanization of Britain*, p. 34.