THE SOUTHEAST ASIAN CONNECTION IN THE FIRST EURASIAN WORLD ECONOMY 200 BC – AD 500

Sing C. Chew

Over the course of the world history, Southeast Asia's contribution to the global economy prior to the AD 1500s and especially in the early millennia of the current era (the first century AD), has been much neglected by historians. To recalibrate the interactions of Southeast Asia with other parts of the world economy beyond the historical studies / scholarship written to date (which are mostly of Eurocentric, Sinocentric or Indocentric nature), we need to locate these historical relations within the world history of an evolving world economy (economy of the world). From recent archaeological findings and historical literary accounts, it is obvious that the world system of trade was organized through a range of land and sea trading routes between the Mediterranean and South Asia and eastwards to Southeast Asia and China. The system was determined by the global trade exchanges via land and sea and movement of peoples.

The present paper has two objectives. First, it will map out the global system of trading connections that were in operation at least at the dawn (if not earlier) of the first century of the current era (i.e., the first century AD) and that extended across seven regions: Europe/Mediterranean, East Africa, Arabian Peninsula and the Gulf, South Asia, Southeast Asia, Central Asia and China/East Asia. Given this set of trade connections extending over seven regions of the world excluding the Americas, that were not connected at this point in time, this economic linkage can be viewed as the 'first Eurasian world economy'. Secondly, this exercise will highlight Southeast Asia's participation in this world trading system, the importance of its trading goods as commodities for consumption in the first global economy, and that Southeast Asia was a socioeconomic and politically developed area with established polities and not a region of just peripheral trade entrepôts as some have deemed it as such.

***Keywords**: globalization, accumulation, Eurasian World System, World System Evolution, Southeast Asia, Nanhai Trade, South Asia, Rome.*

> Southeast Asian populations during the Neolithic and early metal periods also contributed much to human achievements in agriculture, art, metallurgy, boat construction and ocean navigation.
>
> Glover and Bellwood (2004)

Introduction

Over the course of the world history, Southeast Asia's contribution to the global economy prior to the 1500s, and especially in the early millennia of the current era (the first century AD),[1] has been much neglected by historians. Sandwiched between India and

China, Southeast Asia has often been viewed as a region of just peripheral *entrepôts*, especially in the early centuries of the current era. However, recent archaeological evidence has shown of highly established and productive polities existing in Southeast Asia in the early parts of the current era and long before.

To recalibrate the interactions of Southeast Asia with other parts of the world economy beyond most of the historical studies/scholarship written to date (that are mostly *Eurocentric*, *Sinocentric* or *Indocentric* in nature), we need to locate these historical relations within the world history of an evolving world economy (economy of the world). This paper proposes to go back in time in order to understand the historical relations of Southeast Asia in the world economy by searching for trading connections of the world economy existing at the dawn of the current era, and if not earlier. From recent archaeological findings and historical literary accounts, it is obvious that the global system of trade links existed at the dawn of the current era (the first century AD) and even earlier by, perhaps, 200 BC. Such findings on trading goods being exchanged between the Mediterranean and South Asia and eastwards to Southeast Asia and China have revealed a set of trading connections between ports of these regions. Such a system connected Europe, the Mediterranean, the Arabian Peninsula, East Africa, the Persian Gulf, Central Asia, South Asia, Ceylon, Southeast Asia, and China through by a network of both land and sea trading routes. Trade exchanges via land and sea and movement of peoples defined this system. The Roman Empire was at one end with China at the other end and Central Eurasia, South Asia and Southeast Asia geographically somewhat in the middle of the system.

This paper has two objectives. First, it will map out the world system of trading connections that was in operation at least at the dawn (if not earlier) of the first century of the current era (*i.e.*, the first century AD) that extended across seven regions: Europe/Mediterranean, East Africa, Arabian Peninsula and the Gulf, South Asia, Southeast Asia, Central Asia and China/East Asia. Given this set of trade connections extending over seven regions of the world excluding the Americas that were not connected at this point in time; this economic linkage can be viewed as the 'first Eurasian world economy'. Secondly, this exercise will highlight Southeast Asia's participation in this world trading system, the importance of its trading goods as commodities for consumption in the first Eurasian world economy, and that Southeast Asia was a socioeconomic and politically developed area with established polities and not a region of just peripheral trade *entrepôts* as some have deemed it as such.

The *First Eurasian World* Economy

Initially, the identification of the world-economy as a structural unit with a set of dynamics and trends was put forth by Fernand Braudel (1981, 1982, 1984) and Immanuel Wallerstein (1974, 1980, 1989). This structure underlines the material basis of the reproduction of the socioeconomic and political aspects of an area in which the structural unit is encompassed geographically and temporally. For Braudel (1972, 2001) it was the Mediterranean region that was his initial focal point to explicate the trends and tendencies of the historical transformation of this region couched within the structural dynamics of the physical, socioeconomic, political and temporal character of this region. For Braudel, this structural whole has its dynamic histories of *la longue durée, conjonctures, et événements*. In Wallerstein's case, the Braudelian structural whole (with its trends and dynam-

ics) was employed as an analytical concept and a tool to explain the course of the world history *from 1500 onwards*, and how world transformation occurred within the dynamics of this world-system/economy that had its origins in Western Europe. With his choice of the temporal starting point (the sixteenth century AD) for the rise of the European world-economy, and that this system was capitalistic in nature, the assumption then was that this world- system existed only from the sixteenth century onwards and not before. This assumption fits well with most contemporary scholars then, especially when the system is supposed to be capitalist, and that capitalism as a 'mode of production' is not supposed to exist prior to this period when feudalism is supposed to hold sway in Western Europe.

This timing on the emergence of the world-economy had to be reconsidered with the mapping of an earlier world system of global trade connections stretching from Asia to Europe that was developing by the mid-thirteenth century (Abu-Lughod 1989). Such an articulation of a/the world economic structure existing three hundred years earlier prompted further questioning of the emergence, evolution and formation of the world system by a number of scholars (Frank and Gills 1993; Denemark *et al.* 2000). Besides the charges of Eurocentricity, questions such as, has there been only one world-system or were there several successive world-systems, or has there been only a single world system that has been evolving for the past five thousand years were put forth (Abu-Lughod 1993; Frank and Gills 1993; Beaujard 2005, 2010; Modelski and Thompson 1999; Chase-Dunn and Hall 1997; Wilkinson 2000). Over the last three decades, these latter questions and debates were addressed by various scholarly treatises that have been published on these issues concerning the formation and evolution of a/the world system/s (see, *e.g.,* Wallerstein 1974; Abu-Lughod 1989; Frank and Gills 1993; Modelski and Thompson 1999; Chase-Dunn and Hall 1997; Chew 2001, 2007; Beaujard 2005, 2010; Ekholm and Friedman 1982; Wilkinson 2000; Denemark *et al*. 2000; Arrighi 1994, 2007; Amin 1974).

The main issues in these debates were over two areas: the temporal dimension of the emergence of a world system/economy and a consequence of this, was the implicit biasness that came with the assumption of the timing and geospatial boundaries in which the world economy started. It is these two issues that Frank's (1991, 1993, 1998) critiques of Braudel and Wallerstein hinged on. Because Wallerstein's model and historical analyses of the development of the modern world-system started with Western Europe in the sixteenth century, it was deemed by Gills and Frank that such a geographic identification for the rise of the world-system privileged subsequent analyses of the trajectory of world development. Their arguments would focus on the nature of capitalism that Wallerstein (1991, 1992) had identified by countering with the fact that these features of capitalism had existed well before the sixteenth century. Furthermore, to prove their contentions that a world economy existed before this timing, Gills and Frank (1990, 1991), presented a historical-empirical analysis of the dynamics and structures of the world economy for the last five thousand years to counter the model of Wallerstein. Frank (1998) developed the Frank-Gills model further in terms of empirical verification by writing a history of world development with a focus on a core region (Asia) placed within the dynamics of a five thousand year world system. As a historical materialist, he insisted he has proven his case with his empirical analysis to counter the Eurocentric biasness that is implicit in Braudel's and Wallerstein's models and others who have followed them. The mistaken identification of Europe as the leading economy was replaced by Asia. In an unfinished book manuscript, Frank (2010) further reasserted that it was Asia, even

up to the nineteenth century AD, that seemed to be the dominant player in the world system then.[3] Others (such as Modelski and Thompson 1999; Chase-Dunn and Hall 1997; Chew 2001, 2007; Beaujard 2005; Wilkinson 2000) have also followed this genre of theoretical formulation, of course, with different emphases and theoretical twists.

In my case (Chew 2001, 2007, 2008), I added another dimension to this evolving historical-structure/world economy with its set of dynamics, by suggesting that world accumulation, *regardless of time and geographic space*, generated ecological degradation over five thousand years of world history. The ecologically degradative process was by no means continuously increasing as it was punctuated by long periods of socio-economic decline or crisis of the world economy (Dark Ages) that led to lesser ecological degradative practices (Chew 2007). What these studies have also shown is the linkage between regions whereby temporally as the world economy evolves to encompass more regions, the systemic ecological and economic crises are felt throughout the system in a systemic manner. Over world history, it is very clear that the encompassing process or incorporation of regions via trade and conquest structures the linkages of the world economy. Trade by no means is only an exchange of goods but comes with it an exchange of knowledge and belief systems (religion, for example) as well. In other words, in a broad sense as Habermas (1981, 1989) puts it, production occurs conjointly with communication. If this is the case, the different regions of the world that are connected by trade have exhibited a synchronized developmental pattern perhaps even cultural hybridization, therefore underlining the systemic nature of their relations. This means that we are witnessing the outlines of a world system with a structure and trends.

Looking for global trade connections as an indicator of the formation of a world economy can perhaps be the first indicator of world system formation. This by no means is the only criterion as evidence of the formation of a world system. It would be the minimal indicator that a system is in operation whereby global exchanges are taking place between and within regions of the world (see also Frank and Gills (2000). With the existence of trade relations, it also means that a (global) division of labor exists. My earlier studies (2001, 2007, 2008) along with others (see, *e.g.,* Frank and Gills 2000; Modelski and Thompson 1999; Kristiansen 1998; Kristiansen and Larsson 2005; Chase-Dunn and Hall 1997; Beaujard 2005) have shown this international division of labor existing as early as 3000 BC.

If we examine world history in terms of trade connections, we can trace the contours of a 'regional' world economy encompassing the Eurasian region of Mesopotamia, the Arabian Peninsula, Levant, Anatolia, Iran, the Indus Valley, and Egypt by 3000 BC (Chew 2001, 2007). Beaujard (2005, 2010) has identified three possible regional world systems from 1000 BC onwards. For him, there was the Western world system, the Eastern world system, and the Indian world system during the Iron Age with growing interactions between these systems from 350 BC onwards. Regardless of whether it is a single world system that started in the Fertile Crescent and over time encompassing other regions of the world as postulated by Frank and Gills (2000) or Beaujard's (2010) three regional world systems coalescing into one world system, what is clear is that by *the turn of the first century of the current era* we find a world system encompassing Europe, East Africa, Asia (South, Southeast and East) (Chew 2001, 2007; Beaujard 2010). In world history, we can conceive of it as the *first Eurasian* world economy as the only major region that has not been connected at this point in world history is the Americas. The restructuring and development of this global economy at this point in time was the result of the various trends and tendencies of the nature of the world sys-

tem. I have argued in earlier writings (see, *e.g.,* Chew 2000, 2001, 2007) along with others such as Thompson (2006), that climate, scarcity of natural environmental resources, ecological degradation, and diseases should be added to the usual socioeconomic and political causes for this restructuring. Recently, Beaujard (2010) has also identified climate as a major factor in system crisis, especially in the demise of regional world systems leading to the coalescing of a world system at the turn of the century of the current era.

We use the term world economy instead of world-economy as the latter has been utilized by world-systems specialists for a historical structure that has a certain set of socioeconomic and political attributes and trends 'capitalistic' in nature that do not necessarily cover a wide geographic space. To world-system specialists, this historical structure of a world-economy is a world in itself, hence the hyphenation between world and economy (Wallerstein 1991). In our case, a world economy is not distinguished necessarily by a mode of production but that it covers a *global geographic* space with multiple cores/regions linked at a minimum by a trading system. *It is an evolving global economy 'of the world'*. Depending on the temporal sequence, an economy of the world encompassing different chiefdoms, kingdoms, civilizations, empires, and states in a global division of labor, technology, and knowledge circumscribed by different cultural patterns.

Land and Maritime Trading Routes of the First Eurasian World Economy

The dawn of the first century of the current era witnessed a world economic exchange system that extended from China through Central Asia, Southeast Asia, South Asia, Arabian Peninsula and the Gulf Region, East Africa to the Mediterranean and Roman Europe (see Fig. 1). This world system of trading relations was via land and sea connections whereby goods and peoples were transported and exchanged. Viewed from this perspective, the trading world was quite globalized at this point in time, whereby economic exchange in terms of manufactured goods, bullion, animals, and slaves were traded in the various ports, markets and trading centers of these regions between kingdoms, empires and other polities.

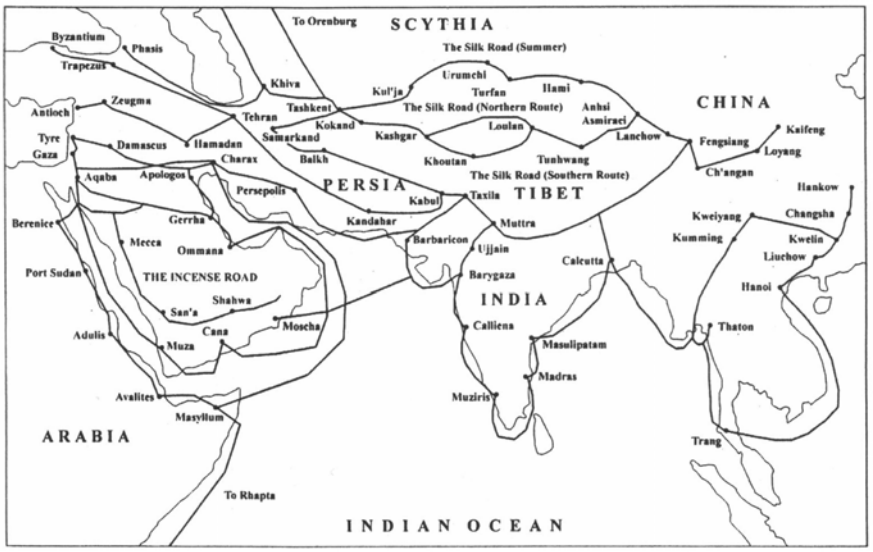

Fig. 1. Eurasian World System

Starting from the western part of this world economy with its terminus ending in the eastern portion of the Roman Empire, the trade routes geographically fanned out in three directions (see, *e.g.,* Warmington 1928; Tomber 2008; Charlesworth 1970; Young 2001; Begley and De Puma 1991). The northernmost circuit traversed the Black Sea through Byzantium and Central Asia to China. The central route went via Syria through Antioch and the Euphrates to the Persian Gulf, South Asia, Southeast Asia, and beyond. The southern circuit was through Alexandria, northern Africa, the Red Sea and the Nile, Arabia and through to South Asia and beyond. The complexity of these trade routes is distinguished further by trade circuits that radiated from these main routes at the local and regional levels. Each region has its own local complexities in terms of items traded, exchanged, and transported along them.

The central and southern routes mainly used the river systems of the Euphrates and the Nile as conduits that funnel through the Persian Gulf and the Arabian Peninsula and then onwards to South Asia. The Red Sea was also one of the branches of these trade routes with ports and *entrepôt* centers located throughout it. Initiated by the Ptolemies, this trading route with its start in Alexandria provided a center in which traders from the Mediterranean, North Africa, and Arabia could exchange goods from South Asia, Ceylon and beyond. Estimates of about 120 ships left for the East each year visiting Somalia and India from Egyptian *entrepôts* such as Alexandria (Warmington 1928). Barbaricon on the River Indus and Barygaza in Gujerat were one of the main ports of call for these ships. At Barbaricon, Indian, Tibetan, Persian, and Chinese goods could be exchanged. By no means was Barbaricon the only place of exchange. Further south, there were other marts under the control of local Indian kingdoms. These kingdoms had control of the trading centers on the eastern and western coasts of South India.

Beyond the sea routes, there were also land routes that connected the western part of the world economy to the central and eastern parts. Land routes for the western portion of the world system would radiate from the shores of the eastern Mediterranean. Starting perhaps from Antioch located in northern modern day Lebanon, traders would travel eastwards most often having to cross the rivers systems of the Euphrates and Tigris, and then moving south-eastwards towards Seleucia or eastwards to Echbatana. From Seleucia it was onwards to Ctesiphon, and beyond to the Iranian plateau comprising of modern day Iran, Afghanistan and Baluchistan. Eastwards from Ctesiphon, Roman traders would travel to Antiochia Margiane (Merv) via Jah Jirm. At Merv, the land route was divided into two branches that formed the famous silk roads to Central Asia. East of Merv, the silk routes had branches going south to India through Bactra where it connected with routes that converged from India in the valley of the River Oxus. Further eastwards along the silk route to Maracanda (east of Merv) were a set of routes where marts such as Kashgar, Khotan and Yarkand were located. These trading marts were places where the Indians, Kushans, Parthians, Romans, and Chinese traders met for the exchange of products from the west, east and central parts of the world economy. For those western traders who were interested in Indian products, the routes they would take would be southwards after Merv or Bactra. Indian goods destined for Russia and the Scythian lands would move northwards on the River Oxus and either cross or round the Caspian Sea to the Black Sea. The land routes ended at Loyang, China.

The maritime routes from South Asia to Southeast Asia and China were along the east coast of South Asia and Ceylon cross the Bay of Bengal to the Malay Peninsula. Initially in the first century AD, specific trade contacts were on the western and eastern

coasts of the Malayan peninsula (Hall 1985). There was also a land route from South Asia to the western edge of the Mekong Delta. Within Southeast Asia, the maritime trading routes connected southern Sumatra and western Java to the ongoing trade routes in the northern part of the Malayan peninsula. By the fifth century AD, the Straits of Malacca became the direct trade route which connected the northwestern Java Sea region with the major trade routes involved in the global trade exchanges between China, South Asia, Southeast Asia and the eastern Mediterranean (Wolters 1999 [1967]). This Java Sea region besides Java, consisted of the Sunda Islands, the Moluccas, Borneo, and Southern Sumatra. The trade routes even extended as far as Sulawesi and New Guinea in search of feathers and other products of the sea. From Southeast Asia there were also land routes to southern China and maritime routes linking the Malayan peninsula and the Java Sea region with the ports of southern China.

Western Zone of the First Eurasian World Economy

Trade Dynamics between Two Regions of the World System: Rome and India. The exchange of products between India, the Gulf region, and the eastern Mediterranean did not start with the Romans at the end of the first millennium BC. If one examines third millennium BC world history in terms of trading connections within a region and between regions of the world, there was an evolving economic exchange network within the Afro-Eurasian geographic context that included Egypt, Mesopotamia, the Arabian Peninsula, the Levant, Anatolia, Iran, and the Indus Valley (Chew 2001; Frank and Gills 2000; Possehl 2002). Such systemic connections via trade were an outcome of a world system division of labor whereby social systems especially those located in river valleys and watersheds sought natural resources for example, such as copper, precious stones, pearl, ivory, gypsum, marble and wood, for their production activities and the reproduction of their socioeconomic lifestyles from the peripheries. In turn, they exported to the peripheries manufactured items such as bronze wares, textiles, wheat, *etc*. Mostly such exchanges occurred because the immediate environments of these social systems were either devoid or depleted of these resources (such as wood) as a result of the intensification of extraction of these products that has occurred historically to satisfy the urbanization process, population growth, and hierarchical reproductive needs and surplus generation of these systems. For example, in the third millennium BC, there were trade connections between the civilizations of Egypt southern Mesopotamia and their geographic vicinities, and between Mesopotamia, the communities of the Arabian peninsula and the Persian Gulf, and as far as Harappan civilization of northwestern India and its peripheries either directly or through merchant middlemen (*e.g*., see Chew 2001; Asthana 1993; Possehl 1982; Oppenheim 1979; Tosi 1982; Ratnagar 1981, 1991, 1994; Kohl 1987; Allchin 1982; Lamberg-Karlovsky 1975; Moorey 1994; Edens 1992; Algaze 1993a, 1993b; Tibbetts 1956). In turn, there were multiple core centers that interacted with their immediate peripheries in terms of manufactured goods and agricultural products being exchanged for the natural resources of the peripheries.

Trading connections were disrupted starting around 2200 BC, whereby the demise of the economy of southern Mesopotamia and northwestern India, coupled with the socioeconomic and political upheavals in the Levant and their associated peripheries initiated a restructuring of the world system (Chew 2007). Ecological crisis, climate changes, natural disturbances also punctuated this period. The demise of the economies of the core centers (Egypt, southern Mesopotamia, and northwestern India) and deur-

banization, meant also the collapse of the Persian Gulf trade, and a major trade corridor of the world system then. With recovery occurring around *1700 BC*, the other parts of the world system such as the eastern Mediterranean littoral (centered around Crete and mainland Greece) along with central Europe and Anatolia increasingly began to take advantage of the vacuum generated by the collapse of the southern portion (the Gulf region) of the world system (Chew 2007). Thus, trade orientation that was directed to the East in the past (Indus valley, Magan, Meluhha) shifted to the west covering areas such as Syro-Palestine, Egypt, Cyprus, and the eastern Mediterranean littoral. Egypt, Syria-Levant (such as Ugarit, Mari, Byblos, Ras Shamra), Crete, Cyprus, and mainland Greece expanded their trading volumes utilizing the peripheral areas such as central and eastern Europe, Nubia, and in the later period, northern Europe, for their resource needs.

Long-distance trade through the travels of warriors, specialists, and merchants linked communities from Eurasia to the Aegean and Scandinavia, and from the Urals to Mesopotamia (Kristiansen and Larsson 2005). The Caucasus developed a metallurgical center, thus forming a Circum-Pontic province that included Anatolia, which received its metal ores from the Caucasian region. Anatolia became an important eastern node of the trading system especially with the demise of the southern Mesopotamian trade, thus shifting the loss northward (Larsen 1987; Chew 2001; Sheratt 1997). Such transformations revealed the increasing nature of the globalizing process of the system of trade exchanges as early as the second millennium BC. What flowed through this system were natural resources, manufactured products, and agricultural produce besides preciosities. The cores had production activities either controlled by the palace, temples and the merchants, and the peripheral areas supplied the natural resources, and also agricultural products. Colonization of distant lands in the eastern Mediterranean, Sicily and southern Italy for agricultural production and natural resource extraction were also undertaken by the core centers such as Crete and Greece during this time period (Vermeule 1960; Immerwahr 1960). Increasingly Europe was being incorporated into the trading orbit via the establishment of trading outposts just like what the southern Mesopotamians were undertaking towards the end of the third millennium in northern Mesopotamia and Iran (Algaze 1989; 1993a; 1993b).

System crisis returned in this part of the world system by 1200 BC whereby there were trade disruptions, socioeconomic and political collapses throughout the system with the exception of the northern Periphery (northern, central and eastern Europe) (Chew 2007). Unlike the crisis conditions that the Near East was experiencing; central, eastern, and northern Europe faced these conditions much later. With the collapse of the Near Eastern Mediterranean trade frameworks and the shortage of metals, metal production boomed in central and Eastern Europe. As a result of the Mediterranean collapse, the eastern and western European trade exchanges were strengthened. Such exchanges led to the development of a regional (Urnfield) trading and production system (Kristiansen 1998). Crisis appeared much later around 750 BC for this area.

Economic recovery returned around 700 BC for the Mediterranean region, and what followed was a series of expansion of trade networks under Greece and Phoenicia (Chew 2007).[4] Towards the end of the first millennium BC, the arrival of Rome witnessed further expansion of the system. The emergence of Rome as a major core center of the world system – there are others as well in the East such as China – by the end of the first millennium also led to the expansion of the trade connections between the East

and the West. It is at this point in world history that *we have the development of the 'first Eurasian world economy' connecting the West with the East.*

As part of a broader history of trade exchanges, the trade of the Roman Empire with India should be viewed within this world historical context of trade activity. By the early Roman period (the first century BC – the third century AD), this trading activity formed part of a larger system of trade exchanges across at least seven regions of the world economy, whereas during the earlier Bronze Age, the trading activity was more regional in orientation, and that the trading connections from the eastern Mediterranean across the regions (Red Sea, Persian Gulf, Indian Ocean) to Southeast Asia and East Asia were not that developed at all.

The peak of the Roman/Indian trade was from the first century BC to the third century AD (Tomber 2008). Vast quantities of goods including gold and silver were exchanged starting from the eastern part of the Roman Empire via the Arabian Peninsula, the Persian Gulf, eastern Africa (what is now Ethiopia and Somalia) with the Indian subcontinent and Ceylon. The trade was conducted via mostly the sea routes as we have identified in the previous pages. Land routes from the eastern part of the Roman Empire connecting with those in Central Eurasia and China, with routes veering south to the Indian subcontinent were also utilized; though in these latter routes the exchange was more restricted to products of China and Central Eurasia.

The trade between India and Rome covered different types of goods from preciosities to necessities. It was mostly focused not only on natural resources, but manufactured products as well. Coined money of gold, silver and copper of Roman origin was also part of the trading transactions (Tomber 2008; Warmington 1928; Deo 1991; Charlesworth 1970; Young 2001). Large quantities of merchandise were exchanged starting from the reign of Roman Emperor Augustus (27 BC – AD 14) onwards during a period of economic expansion of the world economy. The type of products imported by Roman and Greek merchants with some of them based in Alexandria, Egypt was wide ranging. In terms of animals and animal products, live animals such as lions, tigers, rhinos, elephants, parrots, draft animals, and Indian ivory were sought after by the traders. In certain cases, such as the wild animals, they might be trans-shipments with their points of origin from Aksum in eastern Africa (Ethiopia).

Other goods traded were not only luxuries but mostly necessities for use in manufacturing, cooking or for medicinal and religious purposes (Tomber 2008; Warmington 1928; Sidebotham 1986; McPherson 1995). They covered Indian plant products and aromatic spices. These included pepper, cinnamon, ginger, cardamom, ginger, myrrh, sugar, and raisin-barberry, indigo for coloring, cotton for clothing, ebony, and rice as cereal. Mineral products and precious stones were also exchanged such as diamonds, onyx, carnelian, amethyst, garnet, pearls, and conch shells. Indian manufactures such as cotton textiles and silk were also part of the imports exchanged by the Roman, Greek and Arab traders.

Indian and Asian Exports to Rome

Plant Products

Since the dawn of the first millennium of the current era, spices and aromatics have been the driving force of commerce between the West and the East. The voyages of discovery (commerce) by the Portuguese and the Spanish in the fifteenth century AD seeking a reliable route to the East for its spices is just a continuation of such a commercial

quest that started 1,500 years before then. In terms of plant products, geographic locations where they were sourced such as pepper and cinnamon were not from only the Indian subcontinent. In the case of cinnamon, it was not only from India but as well from Ceylon, Southeast Asia, and southern China. It seems that true cinnamon came from India and Ceylon, and the poorer grade *cassia* was from Southeast Asia and China (Tomber 2008, Dalby 2000, Cappers 2006). These different source origins underscore the trade connections that extend beyond Ceylon to Southeast Asia and southern China. Hence, another indicator of a global system of trade that spans from the Mediterranean, the Red Sea, the Persian Gulf, the Indian Ocean, through to the South China Sea.

Pepper can be considered one of the most sought after spice for its wide range of uses in the Roman lifestyle. Two species of pepper (*Piper nigrum* and *Piper longum)* were imported. Long pepper, black pepper and white pepper had different monetary values. The most expensive was long pepper which was almost three times the price of black pepper and half as much as white pepper. Pricing cost was due to long pepper having the quality of being the hottest, and also its use for medicinal purposes. For the latter, it is found as an ingredient in all kinds of Roman medicines and drugs. In terms of places where the pepper was sourced, black and white pepper came from India whereas long pepper came not only from India but from Ceylon and the Malayan peninsula (Tomber 2008; Warmington 1928). It has been recorded according to the *Periplus Maris Erythraei* that bags of pepper were traded for with gold bullion by Greek and Roman traders (Casson 1989). The spice according to Warmington (1928: 182) probably formed half the cargo of a Roman ship. Vast profits were received from such a spice trade that a ship's captain would load up with pepper and set sail even in bad weather. From inland trading houses these sacks of pepper would find their way back to the Roman Empire via the Red Sea, and even by camel from Coptos down the Nile to Alexandria with forward shipment across the Mediterranean to Puteoli and Rome.

Ginger (*Zingiber officinale*), another plant product of high demand, was also part of the spice trade. Its source of origin was from Southeast Asia and perhaps India, and it formed a part of the spice trade because India and Arabia were the transshipment points of it from the Southeast Asian trade in which India was part of the trading conduits. Its pricing was about that of white pepper at six denarii a pound. Cardamoms (*Ellettaria cardamomum*) were also another spice that was traded though it was priced almost ten times the price of ginger. Grown in Malabar and Travancore in India, it was used by the Romans in medicines and perfumes. Pliny has noted the shipment of it via both the sea and land routes (Warmington 1928).

Cinnamon (*Cinnamomum zeylanicum*), a plant product from India, China, Tibet, Burma, and Ceylon was one of the most prized imports of the Romans. Used as a perfume, incense, condiment and medicine, its wide range of application meant that it was a very important spice. For the very best, almost three hundred to fifteen hundred denarii were paid for it. As part of the aromatics of the Roman trade, the root of costus used for scenting shawls, perfumes, seasoning of food, and for sacrificial ceremonies was also a popular trading item. It was exported from Kashmir in India.

Frankincense (*Boswellin sacra*) and myrrh (*Commiphora myrra*) were valued gum resins that were traded. Considered as products from India, Arabia, and East Africa, these oils were part of the goods that were imported into the Roman Empire. Besides the resinous products, other Indian plants used for coloring and in foods and medicines formed the long list of imported plant products. Indigo (*Indigofera tinctoria*), a plant

that provides a coloring of black and blue was sought after by the Romans. Besides indigo, there was also raisin barberry (*Berberis sinensis* from China*, B. allichiana* and *B. siatica* from Nepal, *B. floribunda* from India) that produces a yellowish color dye (lyceum). This plant product had its origin in the Himalayas, China and Nepal.

From spices and aromatics, we have also cotton and muslin which were exported either in the form of textile or in raw condition. Most of these types of textile materials were shipped to Egypt for the manufacture of cotton cloth, stuffed mattresses and pillows for sale in the Roman Empire. Continuing a practice that had been going on for quite some time since the second millennium BC, the import of wood products from India to Mesopotamia and the eastern Mediterranean was extended into the first millennium AD. Two classes of wood products were traded: a) ornamental and timber wood, and b) fragrant wood for medicinal and religious practices and ceremonies. From the Indian port of Barygaza according to the *Periplus*, sandal-wood, teak-wood, black wood and ebony were exported mainly via Arabia to the Empire (Casson 1989). Wood imports to the Roman Empire also came from eastern Africa (where modern day Ethiopia is now located). The hard wood imports were utilized mainly for building construction and for shipbuilding. Sandalwood (*Santalum album*) which is a fragrant wood from south India, Ceylon, and Indonesia was also part of the trade (Fuller 2006). Whatever the origin, sandalwood is an item that is sought for as it was used for various decorative purposes. Other wood products such as camphor that came from Sumatra and Borneo were also part of the array of wood being exchanged.

Mineral Products

Beyond the necessities of plant products that formed part of the Roman trade, precious stones and other mineral products were also part of the exchange process. As luxuries, these mineral products were sought after by Roman elites. Diamonds and sapphires were exported from India for elite consumption throughout the trading system from the Indian Ocean to the Red Sea and the Mediterranean. Quartzes, opals, agate, carnelian, onyx were also of great demand. The port of Barygaza on the eastern Indian coast was the export point. Parthian and Arabian mineral products were transported via the land routes to Barygaza for shipment by sea to the Red Sea and beyond. Other sources of the precious stones *were from Ceylon and Burma, thus underlining the trading linkages southwards and eastwards from India*.

Amethyst and opal found in India and Ceylon were favorites among the elites. Along with quartz which was obtainable from Ceylon as well as the Urals, they complemented the various precious mineral products that formed the list of gems and stones that were involved in the mineral trade. Other precious stones that were included in the list are sapphire, emerald, beryl and aquamarine that are found in India. Lapis lazuli with its source in Persia, Tibet, China and Scythia was also part of this mineral product trade. Though not of Indian origin, lapis lazuli (from Afghanistan and the Iranian Plateau) was transshipped through the port of Barbaricon on the western Indian coast on the way to the eastern Mediterranean via the Red Sea. Rock crystal which is also used for ring stones and made also into drinking cups and large bowls were manufactured in India, and exported for elite consumption in the Roman Empire.

Roman Exports to India

The export of slaves from the West to India was an item for the Indian princes. These slaves primarily came from the eastern Mediterranean and from locations such as Syria.

In fact, slaves were also transshipped to as far as China. In addition to slaves, fine red coral from the Mediterranean was also sent to South Asia. The coral was exported to the Indian ports of Barbaricon and Barygaza via the Arabian port of Cane and it was in high demand according to the *Periplus* (Casson 1989). Red coral was highly prized by the Indians, and was used extensively in amulets.

Besides the above, flax clothing was also an export to India. This manufactured item was made mostly in Egypt and Syria. Flax clothing made in Egypt was also exported to China (Warmington 1928). The Chinese preferred Egyptian made flax clothing instead of those manufactured in Mesopotamia. In addition to textiles, wine was also one of the major Roman exports to India. The wine had the added function of being the ballast of the ship on its outward journey to India. It was shipped all over the trading network including the regions of Africa and Arabia, and then forwarded to India. The wine exported was mostly stored in Roman amphorae, and in various archaeological excavations in India these pottery sherds have been unearthed (Tomber 2007, 2008; Young 2001; Begley and De Puma 1991). It seems that the amphorae were not only from Rome but as well from Mesopotamia (Tomber 2007). Besides wine, the amphorae also contained oil and *garum* for Indian consumption. Storax (a sap from *Liquidambar orientalis*) used in medicines was exported also from Egypt to India via the Indian ports of Barbaricon and Barygaza.

Other pottery items exported to India were both coarse and fine table wares. The coarse table wares were of Egyptian origin. Besides pottery, papyrus from Egypt was also an export to India and according to ancient sources such as Pliny it was a great and profitable trade in the early part of the third century CE (Warmington 1928). Roman glass was also an export product to India. Tyre, Sidon, and Alexandria manufacturing centers of these glass items were the main source centers for these wares. Glass vases imitating metal vases were also exported from the Roman Orient to as far as China.

Precious metals such as gold and silver were imported by the Indians as bullion or as coins that were part of the transaction process in exchange for Indian imports. Lead and copper were also sent to India as base metals for local currency even though gold and silver coins were also used in local exchanges. Lead from Spain and Britain were shipped to the western port marts of India. Required for local currency, lead and copper were much sought after by the Indians. According to the *Periplus* and Pliny, these metallic ores were imported in large quantities (Casson 1989; Warmington 1928). Such import transactions have resulted to large archaeological finds of hoards of gold and silver coins which have been excavated in southern India, especially in the southwest (Meyer 2007; Raman 1991; Deo 1991). These coins were mostly dated at the start of the first century to the third century of the early Roman period (MacDowall 1998). The types of coins were mostly of the silver denarii, aurei and gold solidi (Turner 1989). In south India, besides Roman gold and silver coins, local silver punch-marked coins were also found with the Roman coin hoards that looked like fine imitations of Roman ones (Tomber 2008). The dating of most of these Roman coins belonging to the first three centuries of the early Roman period does suggest that the world economy must have been in a period of economic expansion. With very few Roman coins of later periods being unearthed in archaeological excavations in India other than in Sri Lanks suggest to us that the world economy must have receded in its expansionary phase (Parker 2002). This dovetails with the periodization of long term expansion and contraction of the world system that

has been noted in the literature of the pulsations of the world system (see, *e.g.,* Chew 2007; Frank and Gills 1992).

The volume of Roman trade has not been fully documented. According to Pliny, the amount of funds transferred to India to pay for the imports were about 50 million *sestertii* (Young 2001). The total amount to pay for the imports from India, China and Arabia according to Pliny was 100 million *sestertii*. In view of these estimates, the issue of an adverse balance of trade between Rome and India has been raised. This adverse balance is reflected in the size of shipping required for the Roman-Indian trade. Larger vessels were required to carry the voluminous goods to India in comparison to the smaller size ones for the transport of goods from India to the Roman Empire (Warmington 1928; Casson 1989). In this regard, in order to balance (pay) the exchange of voluminous products from India to the Roman Empire and the smaller volume from Rome to India, precious metals such as gold and silver made up the difference in the balance of trade.

Eastern Zone of the First Eurasian World Economy

Timing and Trade Connections

Turning further eastwards to another part of an evolving world economy, trade connections between the Far East and the West were noted as early as 138 BC though early indications of the establishments of trade contacts were between China and the West, and in an indirect fashion via Central Asia and India (Evans 1992). China secured its presence on the trade routes in Central Asia by its conquest of Ferghana and its vicinity in 101 BC (Lattimore 1940; Di Cosmo 2002). Frank (1992) has suggested an earlier date of 115 BC for the opening of the silk trade routes, and further asserted that these trade contacts were even much earlier, perhaps around 1500 BC. According to Kennedy (1898) and Tibbetts (1956), trading connections between Mesopotamia and China were known to exist as early as the seventh century BC. With these different timings, it would be safe to assume that the connection of East Asia with the evolving Afro-Indo-Eurasian world system can be noted as from the era of the Chin dynasty (around 221 BC) onwards.

Within Asia, localized exchange networks in Indonesia and the Malayan peninsula were in existent from the second millennium BC (Glover 1979, 1996; Chew 2001, 2007). Southeast Asian merchants and trading communities were already participating in the trading world by 1000 BC, and had substantial commercial contacts with India by the second part of the first millennium BC (Leong 1990: 20–21; Christie 1990; Hall 1985). Archaeological excavations have indicated that perhaps as early as 500 BC, the polities in the Malay Peninsula were already participating in regional trading networks.[5] Wang (1998: 13) however stated that Chinese trade with India started much later towards the end of the first millennium BC – the second half of the first century BC.

In East Asia, intra regional trade routes were established by the fifth century BC (Sarabia 2004; Higham 2002). Mostly they centered on products such as silk, and ceramic wares. Within East Asia, Chinese goods were exchanged by land to the Korean peninsula and via shipping to the Japanese islands. Imamura (1996) and Sarabia (2004) have traced the exchange between China and Japan in the archaeological bronze finds unearthed in Japan that had northern Chinese origins.

Given the above periodization, within the Asian region, trade occurred between China and the ports on the Indian Ocean by at least the second half of the first century BC when following unification of China in 221 BC, the Chinese pursued expansions to the south (Wang 1958: 21) (see Fig. 2). Wheatley (1959: 19) reported of Chinese envoys

being sent by the Han emperor Wu (141–87 BC) to explore the South Seas as far as the Bay of Bengal. The establishment of commaderies in the south helped to facilitate and establish trade exchanges (Wang 1998). Evidence of Chinese trade has been revealed in recent excavations in southern Thailand of the Malayan peninsula (Murillo-Barroso *et al.* 2010).

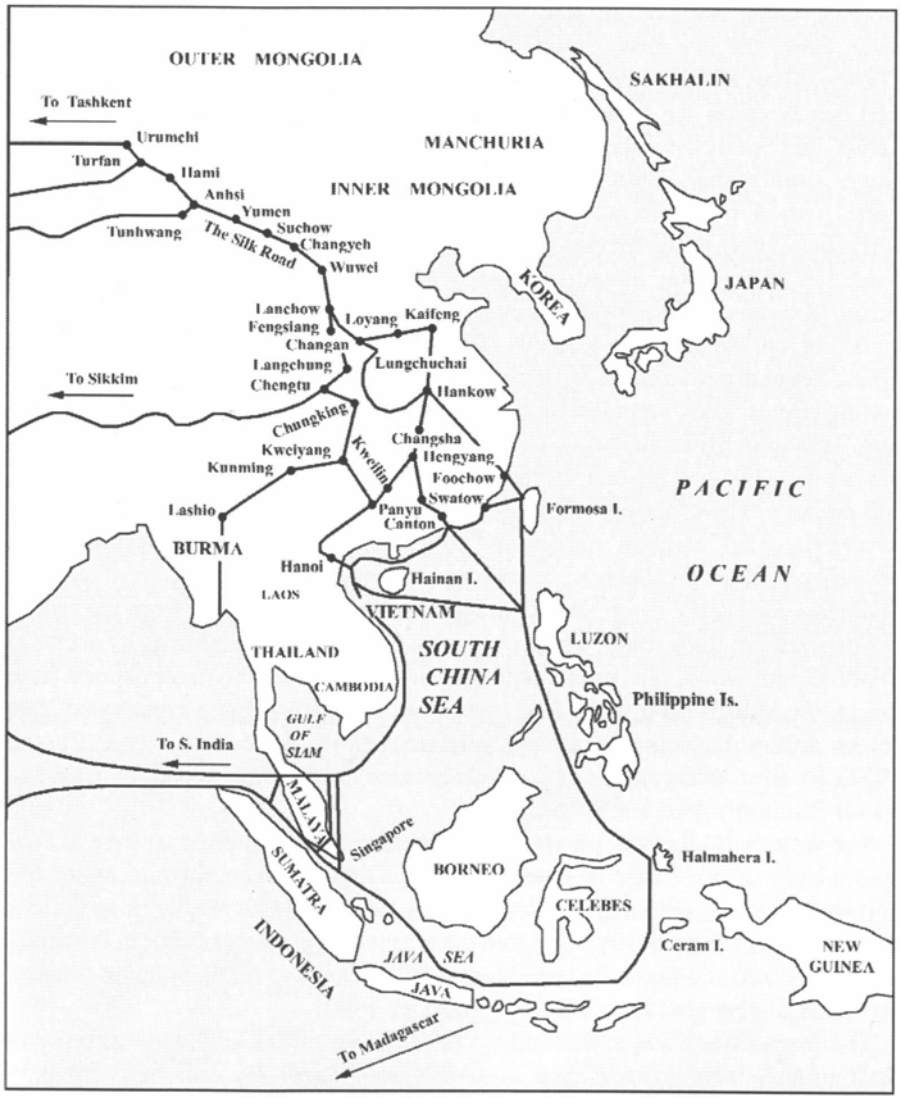

Fig. 2. Trade routes in Asia

What is clear is that by the beginning of the first century AD, trade flourished between the West and the East of the world system (Tibbetts 1956; Colless 1969; Christie 1990; Hall 1985; Glover 1996). Besides luxuries and spices, other products traded were timber, brazilwood, cotton cloth, swords, sandalwood, camphor, rugs, metals, and even African slaves (Wheatley 1959; Leong 1990; Christie 1990; Hall 1985; Coedes 1983).

By the first century AD, Malay/Indonesian sailors were known to have settled along the East African coast (Taylor 1992; Hall 1985, 2011; Blench 2010). Marshall (1980) has even suggested that Indonesian merchants and seafarers were involved in the Indian Ocean trade as far as Madagascar by the late first millennium BC; and Blench (2010) and Dorian *et al.* (2010) have noted of the transfer of agricultural species such as plantains (*Musa paradisiaca*), water yam (*Dioscorea alata*), and Taro (*Colocasia esculenta*) to the East African coast from Southeast Asia prior to first century AD. Southeast Asia was the sea linkage between the West, the Mediterranean basin, and Han China (Glover 1996; Hall 1985, 2011).

Given such scale of trading activities, by the first century AD or even earlier, the Malayan peninsula was undergoing radical socioeconomic changes (Wheatley 1964a; Saidin 2011, 2012; Manguin 2004). They occurred primarily because of Southeast Asian and Indian merchants and traders who were exchanging their merchandises and wares along the coastal areas of Southeast Asia and India, with the Indians seeking gold that in the past they had obtained from the Mediterranean or Central Asia. With the prohibition on the export of gold imposed by Roman Emperor Vespasian (AD 69–79) this spurred the Indian merchants to search for gold bullion in Southeast Asia (Hall 1985). Indian ships weighing about seventy-five tons and that could carry up to two hundred persons were sailing between South Asia/Ceylon and China by the beginning of the first century AD (Wheatley 1964b).

Different type of products characterized the trading exchange. From China, silk, pottery and other manufactured wares were exported for natural resources such as wood products, spices, preciosities from the sea, and mineral resources. The sea trade routing were as follows: Frankincense, myrrh, camphor, spices, gharuwood, and sandal wood were transshipped from Southeast Asian sources for exchange in the ports of southern China for Chinese silks and pottery, which were then shipped westwards to India, Arabia, and the Mediterranean. One such international transit center in Southeast Asia was Funan, which was a center of accumulation from the first to the sixth century AD (Stark 1996; Hall 1985, 1992).[6] The Southeast Asian polities played a significant role in this long distance maritime trade towards China on one hand, and towards India on the other.

By the second century AD, the power of China was recognized by the polities in Southeast Asia that led to tribute missions being sent by these countries to the Chinese court. Such missions were to obtain political and economic concessions from China (Wang 1958; 1989). They came from as far as Sumatra and Java (Wang 1989; Hall 1985; Dunn 1975). The size of tribute varied from the offering of wood products and luxuries such as pearls to gold, silver and copper. For example, a mission from Lin-yi – founded around AD 192 and situated on the Vietnamese coast (what is modern day Danang) – brought ten thousand kati of gold, one hundred thousand kati of silver and three hundred thousand kati of copper (Wang 1958: 52; Yamagata 1998).[7] The number of tribute missions from Southeast Asian countries varied according to the state of political affairs in China with the rise and fall of dynasties. Missions were lowered during years whereby China had political unrests, and hence, its pursuit of trade exchanges and relations were reduced, and they were increased during times of peace and prosperity such as during the era of the Tang Dynasty – a total of 64 missions was recorded (Wang 1958: 122–123). With such political relations, the *Nanhai trade* flourished.

According to Wang (1998: 111), the Nanhai trade was distinguished by three phases of development. The first phase which lasted for five centuries from the first century AD onwards was dominated by a concentration in preciosities consumed by the court and the lords. The second phase had a more religious emphasis whereby 'holy things' were imported into China besides the preciosities and natural resources. This occurred for two centuries with the third phase extending for three centuries through the Tang to the Sung Dynasties. In this third phase, there was a shift to spices and drugs that were introduced earlier but by this period had generated a consumer demand for these items. The increase in market demand of the Nanhai trade products from the fifth century AD onwards revealed the establishment of a wider consumer market that was emerging in the urban centers of China, some of this urbanization was facilitated further by China's global trading relations within the region, and with the West via both the sea and the silk routes. The Nanhai trade had grown to such a scale that by AD 987 (during the Sung Dynasty), the southern maritime trading relations provided a fifth of the total cash revenue of the state (Wheatley 1959: 24; Hall 1985).

The Southeast Asian Polities

Archaeological excavations have indicated of wet rice cultivation in Southeast Asia as early as the third millennium BC, with evidence of burning in the lower Bang Pakong valley in central Thailand as early as the fifth millennium BC (Higham 1996; Higham and Lu 1998; O'Reilly 2006). Subsistence communities have been unearthed at Ban Na Di, Non Nok Tha, Ban Chiang Hian and Khok Phanom Di, where a widespread exchange network existed as early as the Bronze Age with bronze being forged (Higham 1989, 1996; Bayard 1992; Taylor 1992; Hall 1992; Cresmachi and Pigott 1992; O'Reilly 2006). Given such archaeological evidence (see Glover and Bellwood 2004), from the Bronze Age to the Iron Age we find the progressive development of chiefdoms through to kingdoms, and later the formation of empires. Comparatively speaking, the socioeconomic and political development of Southeast Asia (mainland and peninsula) parallels that of other regions of the Eurasian world economy. Therefore, to categorize and view Southeast Asia as a region comprising of just peripheral *entrepôts* (though there were some polities that functioned as trade emporia) as such, especially in the early parts of the current era (up to AD 400) by some scholars is not giving these polities their dues. Southeast Asia (mainland, peninsula, and archipelago) as a region with its separate polities needs to be recognized in terms of the function it played in the global world economy of the first millennium AD, and the established nature of the polities that existed in Southeast Asia (mainland, peninsula, and archipelago) as early as the first century of the current era (see, *e.g.*, Manguin 2004).

Mainland Southeast Asia

Developmentally speaking, with the wide availability of copper, tin and iron ore in the river valleys, we find the widespread development of chiefdoms on the mainland, the peninsula, and the archipelago of Southeast Asia from the Bronze Age onwards. By the first century BC, political economic development on mainland Southeast Asia was spurred further with the Han dynasty's expansionist policies in the south leading to the incorporation of Yunnan and Vietnam into the Han China's imperial schemes. A surge in militarism followed with the rise of powerful local chiefdoms investing their energies in warlike actions. One can clearly see this in the chiefdom of Dian in Yunnan. The graves of the el-

ites and royals of this period contained extraordinary wealth. The lacquered coffins were filled with bronzes and drums of thousands of exotic cowry shells (Higham 2004). Female elite graves that were uncovered contained superb bronze weaving instruments. In the Red River plains of northern Vietnam, the graves excavated included weaponry of bronze spears and axes, imported Chinese coins and woven clothing.

The excavations of Southeast Asian mainland, the peninsula, and archipelago settlements of the early Iron Age have revealed great urban centers. In terms of the scale of these urban complexes, they are of comparable scale as those of the earliest cities found in Egypt and Southern Mesopotamia (Chew 2007; Stark 2006). For example, that at Angkor Borei, Cambodia has indicated of a large urbanized complex (Fu-nan). Archaeological investigations focused on the period between the first to the eighth centuries AD in Cambodia have outlined the formation of complex socioeconomic and cultural systems with indigenous writing system and monumental architecture that also participated in international trade (Stark 2004). Besides Cambodia, other urban complexes have been unearthed in Burma and Vietnam. In Burma, six sites (Maingmaw, Beikthano, Halin, Sriksetra, and Dhanyawadi) ranging in site sizes from 208 to 1477 square hectares, and with occupation periods from AD 1–800 have been excavated (Stark 2006). Vietnam has five sites (Thanh Ho, Chau Sa, Thanh Loi, Tra Kieu, Oc Eo) with occupation periods from AD 1–1000 and having site sizes ranging from 160–850 square hectares (Stark 2006). These kingdoms were walled cities with moats surrounding them. Three hundred and fifty groups of sites have been discovered along the coastal and riverine landscape of the Indochinese coasts dating back to the first half of the first millennium AD (Manguin 2004). Vietnamese archaeologists have named these sites as belonging to the 'Oc Eo Culture' or what Louis Malleret (1959–1963) has determined to be a major polity known as Fu-nan. Size-wise in terms of urban settlement, Fu-nan was about 300–500 hectares and had canals. Other centers such as the port of Oc Éo had walls, moats and reservoirs. As a port city, Roman artifacts have been discovered. Gold and bronze coins and medallions have been unearthed from the ruling periods of Antonius Pius and Marcus Aurelius (Malleret 1962).

In addition to Fu-nan on the Indochinese coast, there was also Lin-yi situated on the Vietnamese coast (Yamagata 1998). These polities participated in the *Nanhai* trade that was discussed previously. Tung-Tien in the third century AD had over twenty thousand families that would give it a population of eighty to a hundred thousand persons. Economically, we can get an impression of their strength and vitality by the amount of tribute some of these states dispatched to China. For example, as we have previously noted, Lin-yi offered to China in 445 AD 10,000 katis of gold, 100,000 katis of silver and 300,000 katis of copper (Wang 1998: 48).

As well, similar urbanization processes can also be detected in Thailand. In central Thailand at the excavation site of Ban Don Te Phet, the graves contained much wealth. Iron spears, harpoons, axes, bronze ornaments, and billhooks were found. Similar level of sociocultural transformation were also uncovered at another location in Thailand, Noen U-Loke, which was first occupied during the late Bronze Age and later abandoned between AD 400–500. Graves unearthed contained extremely rich wealth. The grave of a male excavated showed the interred person wearing 150 bronze bangles, bronze toe and finger rings and three bronze belts. His ear coils were made of silver covered by gold. Pottery and glass beads were also buried with him.

For Burma (Myanmar), the kingdom/state of Tircul had a number of urbanized centers established in the early centuries of the first millennium from the second to the ninth century AD (Luce 1985; O'Reilly 2006; Hudson 2004). The emergence of this kingdom/state can be traced to the first and second century AD (Stargardt 1990). These centers were fortified and furnished with hydraulic works and temples. The sphere of influence of this kingdom stretched from about 1080 kilometers from west to east in central Burma and 1800 kilometers from north to south. Excavations show substantial urban remains and a rich material culture. By the ninth century AD, the extent of the control stretched from the Chenla kingdom (successor of the Funan state) in the east to eastern India in the west and from Nanchao (Yunnan, a kingdom founded in the seventh century) in the north to the ocean in the south. Within this sphere of influence were eight fortified cities (Hla 1979). The dominance of Tircul meant that it had a number of dependencies under its control. A total of 18 dependencies were under its control and approximately 32 tribes recognized it as their overlords. In terms of overall control, the excavated sites exhibited a hierarchy of urbanized settings. Dominance was exercised by nine garrison towns overseeing at least 300 settlements (Wheatley 1983).

The scale of these urban centers can be seen in the city of Beikthano. Beikthano is surrounded by a wall encircling nine square kilometers about 2.5 meters thick punctuated by 12 gates that are six meters across. These gates form the entrances to the city. Within the city are religious structures and bead workshops. A palace or citadel of 480 meters by 410 meters has also been excavated. Other urban centers such as Sri Ksetra and Halin exhibited similar scale of development and material culture with gold and silver coins, jade, ruby, carnelian, and agate beads found among the ruins.

Peninsula Southeast Asia

Peninsula Southeast Asia has also a number of polities by nature of its geographic proximity to the Straits of Malacca that borders the western part of the Peninsula enabling trading ships coming from India to dock, and on the eastern portion of the Peninsula for trading ships arriving from China. From Chinese historical sources sophisticated social systems existed in the Malay Peninsula from the early centuries of the first millennium of the current era. If we also consider other literary historical text accounts such as Ptolemy's *Geography* there were other maritime polities noted along the coastline of Peninsula Malaya. According to these texts and recent archaeological excavations, as early as first century (perhaps even earlier) to the fifth century AD, urban centers enclosed in palisades or walls with rulers living in palaces existed along the coastlines of Peninsula Malaya.

Recent archaeological excavations undertaken from 2009 onwards have revealed urbanized communities on the northwest Malaysian coast of the peninsula at Sungai Batu as early as 50 BC that covered 1000 square kilometers with continuous settlement until sixth century AD (Saidin *et al*. 2011; Chia and Naziatul 2011). An astonishing find of a 1,900 year-old monument built with detailed geometrical precision (possibly for sun worship) was excavated at Sungai Batu (Saidin 2012; Chia and Andaya 2011). Such a monument suggested a highly developed 'civilization' existing at the dawn of the current era that is very much earlier than the well-known powerful kingdom of Sri Vijaya (700 AD) that dominated this region. Besides, this religious structure, buildings composed of warehouses with tile roofs and port jetties have also been found. In addition, the urban community was also undertaking the production of iron and distribution of

iron ingots. Iron slags, iron furnaces and clay tuyeres (air-blast nozzle for iron production) have also been excavated. Besides these excavations, earlier finds in northwest Malaysia have also uncovered building structures of a large kingdom (Jiecha) dating to the third century AD.

In addition to the urban settlements at Sungai Batu, there are other communities on the Peninsula that practiced agriculture and had skilled craftsmen, and also hosted Brahmin and merchant communities. According to the Chinese accounts, they have names such as Takola, P'an P'an, Tun-Sun, Chieh-ch'a, Ch'ih-tu, *etc*. Described as city-states, these complexes each had a large urban settlement. By the fifth century AD, these polities had developed to become full-fledged city-states that were sending and receiving embassies from India and China.

Specifically, urban centers such as Tun-Sun covered an area of about 370 kilometers (Wheatley 1961). It is said that Tun-Sun hosted foreign nationals such as a colony of South Asians. Another kingdom, Panpan, situated on the east coast of the Peninsula near either what is now the Malaysian states of Kelantan and Trengganu, was a city-state that later on sent embassies to China. During the early centuries of the current era, other urban centers that were of some significance in terms of their participation in the trading networks were Langkasuka with its walled city and dense concentrations of canals and moats. These canals connected the city to the sea which is about 10 kilometers away. Bronze coins from China and the Arab World have been found at Langkasuka which is located in the northern part (near Songkhla) of the peninsula what is now southern Thailand (Jacq-Hergoualc'h 2002). Later on in the millennium, Langkasuka sent a total of five trading missions to China. Other urban centers such as Kedah, Ko Kho Khao, Kampung Sungai Mas, and Kuala Selinsing have also been excavated that are located on the west coast of the Malay Peninsula. Others located on the east coast such as Chitu and Pulau Tioman have also been discovered.

Besides the building structures at Bujang Valley (northwest Malaysia) and the other city-states located on the Malayan peninsula, there were also other maritime polities located along southwest Peninsular Thailand and the Malayan/Sumatran coastlines by the first half of the first millennium CE. These polities, for example like those in Thailand were producing beads and glass for regional trade with India (Manguin 2004). This shift of glass and bead production to Southeast Asian coastal polities from India indicates the growing dynamics of regional trade between India and Southeast Asia by this time. Beyond Sumatra, a site complex has also been discovered at Buni in West Java. Still active in the third century AD, it was one of the gateways for the Indian trade. Known as Ko-Ying from Chinese sources, it is said to be densely populated.

The tropical weather and the acidic soil in the Southeast Asian region has been quite debilitative to the preservation of material evidence and records of these ancient socioeconomic and cultural systems that existed more than two thousand years. Nonetheless, what has been archaeologically excavated/discovered so far underlines the complexity and developed nature of these ancient polities. From Chinese and Indian records, we can determine the functions and socioeconomic and political activities undertaken by these kingdoms and city-states in the Eurasian world economy at the beginning of our current era until the wide-scale collapse of the world system and the arrival of another Dark Age (see Chew 2007, 2008) starting from the fourth century AD onwards. For example, the urban settlement at Sungai Batu (northwest Malaysia) showed site

abandonment by the sixth century AD and was not used again for iron smelting until the seventeenth century AD (Chia and Naizatul 2011).

Southeast Asian Connection

Given the trade routes of the first global Eurasian economy two thousand years ago and the geographic location of the Southeast Asian region, Southeast Asia must have played an active part in the global exchange. It has led Whitmore (1977: 141) to 'postulate an active, not a passive, Southeast Asia meeting the expanding international trade route roughly two thousand years ago'. Long before (about 1500 years) the voyages of discovery (commerce) by the Portuguese and the Spanish in the fifteenth century AD seeking a reliable route to the East for its spices, Southeast Asia was already supplying the global economy with these products at the dawn of the first millennium of the AD. Therefore, within the dynamics of the first global economy, Southeast Asian goods (timber, brazilwood, cotton cloth, swords, sandalwood, cinnamon, camphor, rugs, metals, *etc*.) fueled the needs of the different regions of the world economy existing then. The various accounts of Malay sailors reaching East Africa and Ceylon by the first century AD further indicates that a carrying trade existed then between Southeast Asia to as far as East Africa and the Gulf (see, *e.g.,* Taylor 1992; Hall 1985; Beaujard 2007). This exchange system continued on throughout the first millennium of the current era. The European arrival post-1500 just introduced a 'new' participant to the already ongoing global trade of the Southeast Asian region.

The bountiful resources of the Southeast Asian region provided much of the global supply of the spices, aromatics, beads, iron, and woods. Standard historical accounts identified India as the source of spices and aromatics that were shipped to the Mediterranean, Europe and China during Roman and Han periods and beyond. However, it is clear that the attribution of India as the source for spices needs to be amended because of various accounts of Southeast Asian traders injecting local spices, resins, and aromatics as products of India and Persia in the global trade (see, *e.g.,* Whitmore 1977). Besides this, other Southeast Asian products were also shipped such as pearls, kingfisher feathers, *etc*.

The size and scale of the existing polities in Southeast Asia (archipelago, peninsula, and mainland) in the first millennium AD underscores the vitality and scale of the economies of these polities. With the population of urban centers reaching 100,000 and urban areas of 300–800 hectares in size surrounded by moats and ramparts, these polities must have been vibrant centers of production and commerce. For example, Lin-yi with production capacities capable of producing 100,000 katis of silver and 300,000 katis of copper shipped these metals to China as tribute in the mid first millennium AD, and the recent excavations of iron production at Sungai Batu (Malaysia). From this, it is clear that these kingdoms and city-states were not just peripheral *entrepôts* as some, like Abu-Lughod (1989), have characterized them as such.

Another issue that has not been addressed in this exploration is the dynamic relationship between climate, natural hazards and environmental conditions that have shaped the socioeconomic and political forces of this world economy, and especially that of Southeast Asia, and the interaction of these with the pulsations of the world system. Therefore, the socioecological processes at work may change the temporal spatio-social orderings in such a manner that could undermine and erode the particular supposedly permanences. This will be addressed in a subsequent exploration.

Clearly, what has been presented briefly to account for Southeast Asia's role and socioeconomic and political development in the first Eurasian world economy (of the first millennium AD) will prompt us to recalibrate further Southeast Asia's role and historical trajectory in the global world system. With our identification of the first Eurasian world economy that existed in the first millennium AD, and the articulation of our analysis of Southeast Asia within the context of this historical world system will, hopefully, provide us with a different optic for our understanding of the dynamics of a vital region in world history.

With this optic and the revisionist world historical development that I have traced in a limited way, what can this exercise inform us about the nature of globalization and the global economy and crises that comes easily to the lips of everyone in our contemporary period. It is very clear that with this historical materialist investigation, globalization is not a stage that we have reached in our era (see, *e.g.*, Robinson 2004). The world was very globalized even two thousand years ago. Is the system very different then and now? Yes, it is structurally different then and now in light of the advances in science and technology. In my view, the world system has always gone through systemic structural changes when system limits have been reached. The consequence is a new restructured system with perhaps new dynamics. But these structural changes of the system do not occur often. In the history of the world system for the last five thousand years, there have been only three structural systemic changes or Dark Ages (see Chew 2007). In light of the current 'globalizing' trends and tendencies leading perhaps to global collapse that everyone is now starting to realize, and sounding alarms for different ideological reasons, how do we try making sense of these circumstances? If we examine the social evolution of the world system, a similar set of conditions (global migrations, climate changes, sociopolitical disruptions, scarcities of raw materials, *etc*.) that we are experiencing now, were also experienced by the world at the end of the Bronze Age. That world system reconfigured itself through crises and led to different socioeconomic and political organizing principles that gave rise to a new restructured system (see Chew 2008). Will a new restructured system emerge from the current global crisis? The Future Is Still Open!

Acknowledgements

Earlier versions of this paper were presented at the Annual Conference of the Social Science History Association, Boston, November 17–20, 2011, and at The Dimensions of the Indian Ocean World Past 9th – 19th Centuries Conference, Fremantle, Western Australia, 12–14 November 2012. The comments from Philippe Beaujard, Thomas D. Hall, Alvin So, and Bill Thompson on earlier drafts are much appreciated.

NOTES

[1] Some of the sources used in this paper have only indicated dates in the form of BC or AD without any clarifications of whether these dates are carbon dated. I have used BC and AD datings for whole of this paper so that they reflect the original sources from which the citations were taken.

[2] There are exceptions such as Lieberman (2003, 2009). Even Lieberman starts his analysis from AD 800. For the period post 1500 this has not been the case. See, for example, the works of Reid (1988, 1993).

[3] Chapter 8 in *The Theory and Methodology of World Development: The Writings of Andre Gunder Frank*, Sing C. Chew and Pat Lauderdale (eds.) has a summary of the unpublished book manuscript, *ReOrient the 19th Century*.

[4] For a periodisation of long-term economic downturn, see Chew (2007).

[5] For example, the discovery of the Dong Son drums in the eastern part of the Malayan peninsula similar to those of the earlier Dong Son culture located in the Red River Delta of Vietnam is indicative of how much distance these drums have travelled (Jacq-Hergoualc'h 2002; O'Reilly 2006).

[6] Roman coins and products have been discovered among the ruins of Fu-nan (Stark 1996; Wheatley 1964a).

[7] 1 kati is equivalent to 1.1 lbs.

REFERENCES

Abu-Lughod, J. 1989. *Before European Hegemony*. New York: Oxford University Press.

Abu-Lughod, J. 1993. The World System in the 13th Century: Dead-end or Precursor. In Adas, M. (ed.), *Islamic and European Expansion: The Forging of Global Order* (pp 145–167). Philadelphia: Temple University Press.

Algaze, G. 1989. The Uruk Expansion: Cross-Cultural Exchange in Early Mesopotamia. *Current Anthropology* 30(5): 571–608.

Algaze, G. 1993a. *The Uruk World System*. Chicago, IL: University of Chicago Press.

Algaze, G. 1993b. Expansionary Dynamics of Some Early Pristine States. *American Anthropologist* 95(2): 304–333.

Allchin, B. 1982. *The Rise of Civilization in India and Pakistan*. Cambridge: Cambridge University Press.

Amin, S. 1974. *Accumulation on the World Scale*. New York: Monthly Review Press.

Arrighi, G. 1994. *The Long 20th Century*. London: Verso.

Arrighi, G. 2007. *Adam Smith in Beijing*. London: Verso.

Asthana, S. 1993. Harappan Trade in Metals and Minerals. In Possehl, G. (ed.), *Harappan Civilization: A Recent Perspective* (pp. 24–45). New Delhi: Oxford University Press.

Bayard, D. T. 1992. Models, Scenarios, Variables, and Supposition: Approaches to the Rise of Social Complexity in Mainland Southeast Asia 700 BC–AD 500. In Bayard, D. T. (ed.), *Early Metallurgy, Trade, and Urbacn Centres in Thailand and Southeast Asia* (pp. 26–42). Bangkok: White Lotus.

Beaujard, Ph. 2005. The Indian Ocean in Eurasian and African World-Systems before the Sixteenth Century. *Journal of World History* 16(4): 411–465.

Beaujard, Ph. 2007. East Africa, the Comoros Islands, and Madagascar before the 16th Century: On a Neglected Part of the World System. *Azania* Vol. XLII: 15–35.

Beaujard, Ph. 2010. From Three Possible Iron-Age World-Systems to a Single Afro-Eurasian World-System. *Journal of World History* 21(1): 1–43.

Begley, V., and De Puma, R.D. (eds.) 1991. *Rome and India: The Ancient Sea Trade*. Madison, WI: University of Wisconsin Press.

Blench, R. 2010. Evidence for the Austronesian Voyages in the Indian Ocean. In Anderson, A. *et al.* (eds.), *The Global Origins and Development of Seafaring* (pp. 239–249). Cambridge: McDonald Institute for Archaeological Research.

Braudel, F. 1972. *The Mediterranean and the Mediterranean World in the Age of Philip II*. Vol. 1. London: Fontana.

Braudel, F. 1981. *The Structure of Everyday Life*. Vol. 1. New York: Harper and Row.

Braudel, F. 1982. *The Wheels of Commerce*. Vol. 2. New York: Harper and Row.

Braudel, F. 1984. *The Perspective of the World*. Vol. 3. New York: Harper and Row.

Braudel, F. 2001. *Memory and the Mediterranean*. New York: Alfred Knopf.

Cappers, R. T. S. 2006. *Roman Foodprints at Berenike: Archaeobotanical Evidence of Subsistence and Trade in the Eastern Desert of Egypt*. Cotsen Institute of Archaeology Monograph #55. Los Angeles: UCLA.

Casson, L. 1989. *The Periplus Maris Erythraei*. Princeton, NJ: Princeton University Press.

Charlesworth, M. P. 1970. *Trade Routes and Commerce of the Roman Empire*. New York: Cooper Square Publishers.

Chase-Dunn, C., and Hall, T. D. 1997. *Rise and Demise: Comparing World-Systems*. Boulder: Westview Press.

Chew, S. 2000. Ecological Relations and the Decline of Civilizations in the Bronze Age World System: Mesopotamia and Harappa 2500 BC – 1700 BC. In W. Goldfrank, *et al. Ecology and the World System*. Greenwich CT: Greenwood Press.

Chew, S. 2001. *World Ecological Degradation: Accumulation, Urbanization, and Deforestation.* Lanham, MD: AltaMira Press / Rowman and Littlefield Publishers.

Chew, S. 2007. *The Recurring Dark Ages: Ecological Stress, Climate Changes and System Transformation*. Lanham, MD*:* AltaMira Press / Rowman and Littlefield Publishers*.*

Chew, S. 2008. *Ecological Futures: What History Can Teach Us.* Lanham, MD: AltaMira Press / Rowman and Littlefield Publishers.

Chia, S., and Andaya, B. (eds.) 2011. *Bujang Valley and Early Civilizations in Southeast Asia.* Kuala Lumpur: Department of National Heritage.

Chia, S., and Naizatul, A. 2011. Evidence of Iron Production at Sungai Batu, Kedah. In Chia and Andaya (eds.), 2011: 350–364.

Christie, J. W. 1990. Trade and State Formation in the Malay Peninsula and Sumatra 300 BC – AD 700. In Kathirithamby-Wells, J., and Viliers, J. (eds.), *The Southeast Asian Port and Polity* (pp. 39–60). Singapore: Singapore University Press.

Coedes, G. 1983. *The Indianised States of Southeast Asia*. Honolulu, HI: East West Center Press.

Colless, B. E. 1969. Persian Merchants and Missionaries in Medieval Malaya. *Journal of the Malayan Branch of the Royal Asiatic Society* 42(2): 10–47.

Cresmachi, M., and Pigott, V. C. 1992. Paleoenvironment and Late Prehistoric Sites in the Lopburi Region of Central Thailand. In Glover, I. (ed.), *Southeast Asian Archaeology*. Hull: Centre for Southeast Asian Studies.

Dalby, A. 2000. *Dangerous Tastes: The Story of Spices*. London: British Museum Press.

Denemark, R. *et al*. (eds.) 2000. *World System History: The Social Science of Long-Term Change.* London: Routledge.

Deo, S. B. 1991. Roman Trade: Recent Archaeological Discoveries in Western India. In Begley, V., and De Puma, R. (eds.), *Rome and India*. Madison, WI: University of Wisconsin Press.

Di Cosmo, N. 2002. *Ancient China and its Enemies: The Rise of Nomadic Power in East Asian History.* Cambridge: Cambridge University Press.

Dunn, F. L. 1975. *Rainforest Collectors and Traders: A Study of Resource Utilization in Modern and Ancient Malaya*. Monographs of the Malayan Branch of the Royal Asiatic Society 5. Kuala Lumpur: MBRAS.

Edens, C. 1992. The Dynamics of Trade in Ancient Mesopotamian World-System. *American Anthropologist* 94: 118–139.

Ekholm, K., and Friedman, J. 1982. Capital Imperialism and Exploitation in the Ancient World-Systems. *Review* 4(1): 87–109.

Evans, A. 1992. *The Palace of Minos*. London: MacMillan.

Frank, A. G. 1991. Transitional Ideological Modes: Feudalism, Capitalism, and Socialism. *Critique of Anthropology* 11(2): 171–188.

Frank, A. G. 1992. *The Centrality of Central Asia.* Amsterdam: Amsterdam University Press.

Frank, A. G. 1993. Bronze Age World System Cycles *Current Anthropology* 34(4): 383–429.

Frank, A. G. 1998. *ReOrient: Global Economy in the Asian Age.* Berkeley, CA: University of California Press

Frank, A. G. 2010. *Theory and Methodology of World Development*. New York: Palgrave.

Frank, A. G., and Gills, B. K. 1992. World System Cycles, Crises, and Hegemonial Shifts. *Review* 15(4): 621–688.

Frank, A. G., and Gills, B. K. 2000. A Structural Theory of the Five Thousand Year Old World System. In Chew, Sing C., and Knottnerus, D. (eds.), *Structure, Culture, and History* (pp. 151–176). Lanham, MD: Rowman and Littlefield.

Fuller, D. 2006. Silence before Sedentism and the Advent of Cash Crops. In Osada, T. (ed.), *Proceedings of the PreSymposium of RIHN and the 7th ESCA Harvard-Kyoto Roundtable* (pp. 175–213). Kyoto: Research Institute for Humanity and Nature.

Gills, B. K., and Frank, A. G. 1990. The Cumulation of Accumulation: Theses and Research Agenda for Five Thousand Years of World System History. *Dialectical Anthropology* 15: 19–42.

Gills, B. K., and Frank, A. G. 1991. Five Thousand Years of World System History: The Cumulation of Accumulation. In Chase-Dunn, C., and Hall, T. (eds.), *Core-Periphery Relations in the Pre-Capitalist World.* Boulder, CO: Westview Press.

Glover, I. C. 1979. The Late Prehistoric Period in Indonesia. In Smith, R. B., and Watson, W. (eds.), *Early Southeast Asia: Essays in Archaeology, History and Historical Geography* (pp. 167–184). Oxford: Oxford University Press.

Glover, I. C. 1996. Recent Archaeological Evidence for Early Maritime Contacts between India and Southeast Asia. In Ray, H. P., and Salles, J. F. (eds.), *Tradition and Archaeology Early Maritime Contacts in the Indian Ocean* (pp. 129–158). New Delhi: Manohar.

Glover, I., and Bellwood, P. 2004. *Southeast Asia: From Prehistory to History*. London: Routledge.

Habermas, J. 1981. *The Theory of Communicative Action.* Vol. 1. Boston: Beacon Press.

Habermas, J. 1989. *The Theory of Communicative Action.* Vol. 2. Boston: Beacon Press.

Hall, K. 1985. *Maritime Trade and State Development in Early Southeast Asia.* Honolulu, HI: University of Hawaii Press.

Hall, K. 1992. Economic History of Early Southeast Asia. In Tarling, N. (ed.), *Cambridge History of Southeast Asia.* Vol. 1. Cambridge: Cambridge University Press.

Hall, K. 2011. *A History of Early Southeast Asia.* Walnut Creek: Altamira Press.

Higham, Ch. 1989. *The Archaeology of Mainland Southeast Asia*. Cambridge: Cambridge University Press.

Higham, Ch. 1996. *The Bronze Age of Southeast Asia*. Cambridge: Cambridge University Press.

Higham, Ch. 2002. *Early Cultures of Mainland Southeast Asia*. Bangkok: River Books.

Higham, Ch. 2004. Mainland Southeast Asia: From Neolithic to the Iron Age. In Glover, I., and Bellwood, P. (eds.), *Southeast Asia from Prehistory to History* (pp. 41–67). London: Routledge.

Higham, Ch., and Lu, T. 1998. The Origins and Dispersal of Rice Cultivation. *Antiquity* 72: 867–877.

Hudson, R. 2004. *The Origins of Bagan: The Archaeological Landscape of Upper Burma*. Sydney: University of Sydney.

Immerwahr, S. 1960. Mycenaean Trade and Colonization. *Archaeology* 13(1):1–13.

Jacq-Hergoualc'h, M. 2002. *The Malay Peninsula: Crossroads of the Maritime Silk Road (100 BC – AD 1300).* Leiden: Brill.

Kennedy, J. 1898. Early Commerce of Babylon with India. *Journal of Asiatic Society of Bengal:* 241–288.

Kohl, Ph. 1987. The Ancient Economy, Transferable Technologies, and the Bronze Age World System: A View from the Northeastern Frontiers of the Ancient Near East. In Rowlands, M., Larsen, M., and Kristiansen, K. (eds.), *Centre and Periphery in the Ancient World*. Cambridge: Cambridge University Press.

Kristiansen, K. 1998. *Europe before History*. Cambridge: Cambridge University Press.

Kristiansen, K., and Larsson, T. 2005. *The Rise of Bronze Age Society Travels, Transmission, and Transformation.* Cambridge: Cambridge University Press.

Lamberg-Karlovsky, C. C. 1975. Third Millennium Exchange and Production. In Sabloff, J., and Lamberg-Karlovsky, C. C. (eds.), *Ancient Civilization and Trade*. Albuquerque: University of New Mexico Press.

Larsen, M. T. 1987. Commercial Network in the Ancient Near East. In Rowlands, M. *et al.* (eds.), *Centre and Periphery in the Ancient World* (pp. 47–56). Cambridge: Cambridge University Press.

Lattimore, O. 1940. Yunnan: Pivot of Southeast Asia. *Foreign Affairs* 21(3): 476–493.

Leong, S. H. 1990. Collecting Centres, Feeder Points and Entrepots in the Malay Peninsula 1000 BC – AD 1400. In Kathirithamby-Wells, J., and Viliers, J. (eds.), *The Southeast Asian Port and Polity*. Singapore: Singapore University Press.

Lieberman, V. 2003. *Strange Parallels Integration on the Mainland: Southeast Asia in Global Context, c. 800–1830.* Vol. 1. *Integration on the Mainland Southeast Asia in Global Context*. Cambridge: Cambridge University Press.

Lieberman, V. 2009. *Strange Parallels Southeast Asia in Global Context c. 800–1830.* Vol. 2. *Mainland Mirrors: Europe, Japan, China, South Asia and the Islands.* Cambridge: Cambridge University Press.

Malleret, L. 1959–1963. L'Archéologie du Delta du Mekong. *École Française d'Extreme Orient.*

Malleret, L. 1962. L'Archéologie du Delta du Mekong: La Culture du Fou-nan. *École Française d'Extreme Orient* XL III (3).

Manguin, P.-Y. 2004. The Archaeology of Early Maritime Polities of Southeast Asia. In Glover, I., and Bellwood, P. (eds.), *Southeast Asia from Prehistory to History* (pp. 282–313). London: Routledge.

Marshall, W. 1980. Indonesia in Indian Ocean Culture History. *Indonesian Circle* 21: 15–23.

McPherson, K. 1995. *The Indian Ocean: A History of People and the Sea.* New Delhi: Oxford University Press.

Meyer, J. C. 2007. Roman Coins as a Source of Roman Trading Activities in the Indian Ocean. In Seland, E. H. (ed.), *The Indian Ocean in the Ancient Period: Definite Places and Translocal Exchange* (pp. 57–67). Oxford.

Modelski, G., and Thompson, W. 1999. The Evolutionary Pulse of the World System: Hinterland Incursion and Migrations 4000 BC to AD 1500. In Kardulias, N. (ed.), *World System Theory in Practice* (pp. 241–274). Lanham, MD: Rowman and Littlefield.

Moorey, P. R. S. 1994. *Ancient Mesopotamian Materials and Industries*. Oxford: Clarendon Press.

Murillo-Barroso, M. *et al.* 2010. Khao Sam Kaeo: An Archaeometallurgical Crossroads for Trans-Asiatic Technological Traditions. *Journal of Archaeological Science* 37(1): 1761–1772.

O'Reilly, D. J. W. 2006. *Early Civilizations of Southeast Asia*. Walnut Creek: AltaMira Press.

Parker, G. 2002. Ex Oriente Luxuna: Indian Commodities and Roman Experience. *Journal of the Economic and Social History of the Orient* 45(1): 39–95.

Possehl, G. 1982. The Harappan Civilization: A Contemporary Perspective. In Possehl, G. (ed.), *Harappan Civilization.* New Delhi: Oxford University Press.

Possehl, G. 2002. *The Indus Civilization*. Walnut Creek: AltaMira Press.

Raman, K. V. 1991. Further Evidence of Roman Trade from Coastal Sites in Tamil Nadu. In Begley, T., and De Puma, R. D. (eds.), *Rome and India* (pp.125–133). Madison, WI: University of Wisconsin Press.

Ratnagar, S. 1981. *Encounters: The Westerly Trade of the Harappan Civilization*. New Delhi: Oxford University Press.

Ratnagar, S. 1991. *Enquiries into the Political Organization of the Harappan Society*. Pune: Ravish.

Ratnagar, S. 1994. Harappan Trade in its World Context. *Man and Environment* 19 (1–2): 115–127.

Reid, A. 1988. *Southeast Asia in the Age of Commerce 1450–1680.* Vol. 1. *The Lands Below the Winds.* New Haven: Yale University Press.

Reid, A. 1993. *Southeast Asia in the Age of* Commerce *1450–1680.* Vol. 2. *Expansion and Crisis.* New Haven: Yale University Press.

Robinson, W. 2004. *The Theory of Global Capitalism*. Baltimore: Johns Hopkins University Press.

Saidin, M. 2012. *From Stone Age to Early Civilization in Malaysia*. Pulau Pinang: Universiti Sains Malaysia.

Saidin, M. *et al.* 2011. Issues and Problems of Previous Studies in the Bujang Valley and the Discovery of Sungai Batu. In Chia, S., and Andaya, B. (eds.), *Bujang Valley and Early Civilizations in Southeast Asia* (pp. 15–36). Kuala Lumpur: Department of National Heritage.

Sarabia, D. 2004. Dark Age Phases as Periods of Ecological Crisis: An Analysis of the Interplay between Economy, Nature and Culture. Ph.D. Thesis. Oklahoma State University.

Sheratt, A. 1997. *Economy and Society in Prehistoric Europe: Changing Perspectives*. Princeton, NJ: Princeton University Press.

Sidebotham, S. E. 1986. *Roman Economic Policy in the Erythra Thalassa 30 BC to AD 217.* Leiden: Brill.

Stark, M. 1996. Funan as Center or Funan as Periphery? Exploring State Formation in Mainland Southeast Asia. Paper presented at First East Asia Archaeological Network Meetings. Honolulu, Hawaii.

Stark, M. 2004. Pre-Angkorian and Angkorian Cambodia. In Glover, I., and Bellwood, P. (eds.), *Southeast Asia From Prehistory to History* (pp. 89–119). London: Routledge.

Stark, M. 2006. *Archaeology of Asia*. Oxford: Blackwell.

Stark, M., and Allen, J. 1998. The Transition to History in Southeast Asia. Introduction. *International Journal of Historical Archaeology* 2(3): 163–174.

Stark, M. *et al.* 1999. Results of the 1995–1996 Archaeological Field Investigations of Angkor Borei, Cambodia. *Asian Perspectives* 38 (1): 7–36.

Stargardt, J. 1990. *The Ancient Pyu of Burma.* Vol. 1. Cambridge: Cambridge University Press.

Taylor, K. 1992. Madagascar in the Ancient Malayo-Polynesian Myths. In Hall, K. R., and Whitmore, J. (eds.), *Explorations in Early Southeast Asian History* (pp 25–60). Ann Arbor, MI: University of Michigan Center for Southeast Asian Studies.

Thompson, W. R. 2006. Climate, Water, and Crises in the Southwest Asian Bronze Age. *Nature and Culture* Vol. 1(1): 88–132.

Tibbetts, G. R. 1956. Pre-Islamic Arabia and Southeast Asia. *Journal of the Malayan Branch of the Royal Asiatic Society* 29(3): 182–208.

Tomber, R. 2007. Rome and Mesopotamia: Importers into India in the First Millennium AD. *Antiquity* 81: 972–988.

Tomber, R. 2008. *Indo-Roman Trade From Pots to Pepper*. London: Duckworth.

Tosi, M. 1982. Harappan Civilization: Beyond the Indian Sub-Continent. In Possehl, G. (ed.), *Harappan Civilization: A Contemporary Perspective*. New Delhi: Oxford University Press.

Vermeule, E. 1960. The Fall of the Mycenaean Empire. *Archaeology* 13(1): 66–75.

Wallerstein, I. 1974. *The Modern World-System.* Vol. I. *Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century*. New York: Academic Press.

Wallerstein, I. 1980. *The Modern World-System.* Vol. II. *Mercantilism and the Consolidation of the European World-Economy, 1600–1750*. New York: Academic Press.

Wallerstein, I. 1989. *The Modern World-System.* Vol. III. *The Second Great Expansion of the Capitalist World-Economy, 1730–1840s*. San Diego: Academic Press.

Wallerstein, I. 1991. World System *vs.* World-Systems: A Critique. *Critique of Anthropology* 11(2): 189–194.

Wallerstein, I. 1992. The West, Capitalism, and the Modern World-System. *Review* 15(4): 561–619.

Wang, G. W. 1958. The Nanhai Trade: A Study of the Early History of Chinese Trade in Southeast Asia. *Journal of the Malayan Branch of the Royal Asiatic Society* 31(2): 1–135.

Wang, G. W. 1989. *Sung-Yuan-Ming Relations with Southeast Asia: Some Comparisons*. Hong Kong: Hong Kong University Press.

Warmington, E. H. 1928. *The Commerce between the Roman Empire and India*. Cambridge: Cambridge University Press.

Wheatley, P. 1959. Geographical Notes on Some Commodities Involved in the Sung Maritime Trade. *Journal of the Malayan Branch of the Royal Asiatic Society* 32(2): 1–140.

Wheatley, P. 1961. *The Golden Khersonese*. Kuala Lumpur: University of Malaya Press.

Wheatley, P. 1964a. *Desultory Remarks on Ancient History of the Malayan Peninsula*. Berkeley, NJ: Institute of International Studies.

Wheatley, P. 1964b. *Impressions of the Malay Peninsula in Ancient Times.* Singapore: Eastern University Press.

Wheatley, P. 1983. *Nāgara and Commandery: Origins of Southeast Asian Urban Traditions.* Research Paper Nos. 207–208. Chicago, IL: University of Chicago, Department of Geography.

Wilkinson, D. 2000. Civilizations, World Systems and Hegemonies. In Denemark, R. *et al.* (eds.), *World System History* (pp. 54–84). London: Routledge.

Wolters, O. W. 1999 [1967]. *History, Culture, and Region in Southeast Asian Perspectives*. Ithaca, NY: Cornell University Press.

Yamagata, M. 1998. Formation of Lin Yi: Internal and External Factors. *Journal of South-East Asian Archaeology* 18: 51–89.

Young, G. K. 2001. *Rome's Eastern Trade*. New York: Routledge.