Containerisation in the Indian Ocean Shipping: A Comparative Study on Calcutta, Bombay and Singapore Ports, 1965s-2000

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SYNOPSIS

In the postwar world, one of the major changes that took place in the fields of international business and economics was the structural changes in shipping. These include the technical modernisation of infrastructure, the size of the fleets, changes in the composition of traded commodities, and, after all, the institutional mechanisation of ports. The introduction of containers in maritime trade since the 1950s, which is being called "transnational capitalism," represents the most significant technological and organisational rupture in maritime transport. It not only transformed the field of oceanic transportation but also equally reshaped the global economic nexus, trade growth, and prosperity of the nations. While the expansion of containerisation in the West started in the 1950s, developing countries in Asia started to implement it in the 1970s and 1980s.

This research focuses on the expansion, development, and implementation of containerisation, or container technology, in the Indian Ocean arena from a historical perspective, taking its peak period of growth from the 1960s to the 2000s. With a case study of three major international ports, this research contains *four* different yet interlinked aspects: First, it examines how countries and national governments have paid considerable attention to this new technology. Second, my second area of study is the various Non-State Actors (NSAs) that include the Port Trusts, European international shipping companies, exporters, importers, and various Chambers of Commerce throughout Asia that responded to the implementation of container technology and modernisation in shipping. Third, it also considers assessing the role of various international actors and their recommendations, expert advice, and contributions to make the containerisation project successful in Asian ports. These include various transnational banks, study groups, European development institutions, and some global maritime institutions. Fourth, along with the historical account, this research makes an effort to assess how, and to what extent, the use of containers has affected transport costs in maritime trade and business in Asia. By and large, this project seeks to explore the *globalisation* of shipping in the developing world from the below-nation-state level in the days of worldwide adoption of import substitution and Europe's role in postwar Asian maritime transformation.

After 1945, many countries around the Indian Ocean gained independence, and as a result, immigrants in several countries faced serious problems. In many countries, they were forcibly expelled, such as the expulsion of Indians, most notoriously from Uganda in the 1970s. Many of them returned to their home. This is called a 'second migration', and at that time, ports of the Indian Ocean again acted as the point of departure.

Apart from human movement, commercial shipping also increased after decolonisation, or the era of globalisation. The Indian Ocean again became the centre of the global economy. Between 1977 and 1987, ships belonging to the European Union fell from 30% to 17%, Britain from 22% to only 2%, and the USA from 33% to 5%. In 1972, only 20% of port activity took place in Asia. By 2009, Asia accounted for more than 50% of global port activity, thus dramatically changing this picture. However, the effects of 9/11 again caused a fall in maritime trade as it challenged the maritime and port security issues. Modern maritime technology also had an impact on Indian Ocean ports. Before containerisation, the Port of Colombo served as the main hub of the Indian Ocean. In 1992, when Mumbai built JNPT especially for the service of containerisation, it replaced Colombo as the central hub in the ocean. Therefore, the Indian Ocean arena after the Second World War became both the centre of world shipping and international politics through the rapid modernisation of seaports and growth of national shipping companies and shippers' councils, as well as geopolitical tensions among nations.

Business historians' choice to depict the evolution of international trade and business concentrated mainly on the structure of business organisations and how changes in organisational structure resulted in global trade. Although they published several notable works, the literature has two basic shortcomings: First, most business historians have worked a lot on the period between the 19th and early 20th centuries. Their focal point is colonial trading systems. Consequently, the aforementioned works did not effectively elucidate the post-1945 transformations, particularly pertaining to the technological advancements in international business that include the introduction and development of containerisation. Second, they paid little interest in how the structural and organisational changes of the firms and institutions impacted international shipping and never paid interest in Asian shipping at all.

On the other hand, political scientists and scholars tend to focus more on the issue of modernisation and infrastructural changes in shipping after 1945, but their area of discussion revolves around the question of international maritime *governance* and more on the role of

multiple state or non-state actors, local, regional or international organisations facilitating maritime governance. The analysis connects two major areas - globalisation and the growth of the 'conglomeratic nature of maritime governance'. They consider containerisation in maritime shipping as a vital tool of globalisation. However, their research is unable to tell us how such a technological tool of globalisation became a reality in international shipping.

Also, academic research and study on the postwar modernisation of Asian ports is still lacking. It is found that most of the groundbreaking works on Indian economic history or maritime history did not pay adequate attention to Indian Ocean ports or the Indian Ocean trade, especially after 1945. Historians who have written on India's economic history after independence have stressed two issues: the agricultural transformation, that is, the Green Revolution, and, to some extent about the state's industrialisation. Although historian Tirthankar Roy assumes that the globalisation in India had started slowly since the 1970s, he calls it "small opening".

Since the beginning of the twenty-first century, some authors have begun writing the economic and social history of containerisation through academic publishing. Three authors are at the top: Levinson, Gudahy, and Broeze. Levinson's pioneering work on the history of containers, *The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger,* for the first time wrote the complete history of container technology since its inception in US maritime shipping. Levinson's *The Box* tells the story of political economy, economic geography, technology, ports, harbours, and labour relations through the use of large primary data from different archives. However, the author was concerned only with the growth of container shipping in the Western Hemisphere, and as the title of his work indicates, *The Box* paid more attention to the consequences of container technology on the world economy and said almost nothing about the various forces behind containerisation. Levinson's 500-page book barely mentions developing countries (for example, India was mentioned only once in the index). And almost 90% of the sources he used are US-based sources. In the same year that Levinson's work was published, another author, Brian Cudahy, published a book on the history of containers. Like Levinson, Cudahy's work, *Box Boats: How container ships changed the world,* which starts the story just before World War II, describes the container development in the Western world and does not pay attention to the East. It is Lance Hoovestal's work that stands exception among the published literature on containerisation. His work titled *Globalisation Contained* examined the development of containerisation since the Second World

War, but more importantly, this work paid particular attention to the focus on the growth of this new technology in the Far Eastern world and comparatively revealed how this new technology impacted the international relations of two antagonist blocs, the United States and China. However, the narrative that the author adopted revolved chiefly around various ideologies and theories of international relations and therefore, the story of historical development is missing in the pages.

The general proclivity for disseminating the progress of containerisation in developing regions is not only attributed to specialisations such as business history or international shipping but is equally tied to the vast generalisation of maritime history, such as the history of the oceans or the maritime history of the world. Three references are the most suited. Among the latest are Lincoln Paine's *Sea and Civilization: A maritime history of the World*. Paine emphasises the effects on stevedores and waterfronts, the transformation of ports due to containerisation, and the strategic challenges he refers to as "insoluble obstacles" hindering containerisation expansion, with a focus on US ports. However, he acknowledges Singapore's success as one of the busiest container ports, but historical development is almost missing in the discussion, and he laments, "Global figures are not available" (?). Basically, like other works, the discussion of the eastern hemisphere in Paine's book comes only when the author talks about container shipping routes. Quite similarly, Professor David Abulafia, in his monumental study *The Boundless Sea: A Human History of the Oceans*, provides a conventional account of containerisation, citing its roots in US transportation as well as its growth and worker concerns. While he does touch on the various problems and concerns facing post-war Singapore, including shipping, port infrastructure, and trade, the discussion primarily centres on political matters.

Gaps in the literature certainly encourage researchers to dig further. However, this is not the fundamental motivation behind my research. I am interested in conducting a study on Asian containerisation, not just because it has not been extensively studied, but also for several other compelling reasons that include both "academic" and "beyond-academic" spheres.

Academically, my research will contribute to *four histories* of postcolonial developing states: First, rather than nation-state-led histories, it focuses on different bilateral and multilateral trade agreements between port trusts, private shipping companies, maritime institutions, and international development agencies/banks that played a big part in the economic development of Asia/India after 1945. Second, this research will advance knowledge

of the role that FDI exports played in developing nations following the fall of Britain's global empires in Asia and the inclusion of the US and other non-traditional maritime powers, such as Greece and Japan, in the Asian economic landscape. Third, this research will explore how the need for huge capital investment in containerisation paved the way for the gradual participation and inclusion of *privatisation* in the Indian public sphere since the 1970s. Fourth, the history of containerisation in India will help us to know about the future of the *Swadeshi* spirit in the post-independent period, as well as the little-known history behind the rise of major national shipping firms like Great Eastern and Scindia in world trade.

Recent studies indicate a significant *rise* in port activity and shipping in the Indian Ocean region. Two incidents call attention first: the bankruptcy of Hanjin, one of the largest container shipping companies in Korea, in 2016, followed by the blockage of Ever Given (a container ship) in Suez in 2021. The commonalities between the two tragedies lie in their connection with container shipping and their significant linkages to the Asian economy. Both incidents "triggered a worldwide crisis with global consequences". These two incidents substantiate the significance of container shipping and Asia/East in the global economy.

In recent times, developing regions—particularly India—have been actively involved in enhancing their "maritimity" (a concept coined by Bernard Cohen to denote a country's ability to make use of the sea). This is further demonstrated by the Indian government's announcement of the *Maritime Summit* in 2021, which attracted a wide range of stakeholders in the maritime sector, including global and local investors, CEOs of shipping companies, industry experts, policymakers, technology providers, bankers, insurers, and representatives of major ports and shipping lines, with the prime aim of modernising port and shipping sectors. Moreover, the *Maritime India Vision* (MIV 2023) lists more than 150 programmes, some of which entail modernising Indian ports in order to better compete with other maritime powers like China in global shipping. Also, the contribution of India's role in global shipping is explicitly highlighted by the fact that India accounted for 10.4% of global maritime trade, and contributes 9.03% of the total seafarers globally. Within years, Indian ports will likely be included in the top 20 container ports of the world. But if one were asked about the origins of the Asian rise in the global economy and international shipping? This inquiry has induced me to plunge into this matter. I believe it is an opportune time to conduct an extensive historical study on the Asian postcolonial rise in international shipping.

Numerous studies have been linked to container shipping. These include maritime economic and business history, firm studies, globalisation, international business, and strategic management. Therefore, a thorough research study on the development of containerisation/modernisation in shipping based on primary sources could aid in our understanding of a number of phenomena, such as the strategic history of Asian globalisation, Singapore's secrets to success in international trade, or the underlying causes for India's slow growth in global shipping since independence. Studying these subjects will strengthen corporate competitiveness for global corporations and government policymaking as well.

The main objective of this research is basically a new original contribution to the field of maritime history, logistical management, and business history of shipping in the twentieth century. It will place a technological innovation in the world shipping industry in the broad arena of globalisation, liberalisation, and the changing nature of the Asian states over the last seven decades, and tries to establish a relationship between the postcolonial Asian development and international shipping. It further tries to redefine the concept of archives in the light of using a vast amount of untapped non-governmental sources, private records, and corporate files, which could contribute equally/or sometimes more than the conventional method of using governmental archives.

Based on existing literature on post-war shipping, the present study adopts three major pre-imposed hypotheses: First, the post-1945 maritime trade and shipping in the Indian Ocean was altered by technological forces more so than "liberal bilateral orders." Second: Major structural changes-what is often called in academia as structural adjustment, paved greater way to facilitate capital investment in the maritime business in Asia. Third: In contrast to the West, where it was initially spurred by a few private shipping companies, the development of containerization in the Indian Ocean was closely entwined with the composition of commodity exports and, later, the input from the various transnational development institutions in Asia. I have used both primary and secondary sources such as government records, files of the business firms, ports trust and chambers of commerce, shipping companies and took interviews of many ex-officers of the port trust and private bodies to conduct my research.

The First Chapter discusses the structural changes in long-distance shipping networks in the Indian Ocean using a thorough and comparative manner. It examines the factors contributing to the success and failure of marine networks, along with their historical

consequences. A thorough investigation demonstrated that the authoritarian characteristics, anti-maritime stance, and significant dependence on agrarian economies of Asian republics were incongruent with long-distance shipping networks. However, "inclusive" statehood policies, rulers' cosmopolitan orientations to business, Asian maritime merchants' "managerial" and innovative talents, common geographical demands, and the political power of merchant groupings were far stronger than the limits, which made maritime trade thrive. Empire-building, not enough naval power, obsolete maritime technology, and a lack of leaders who were interested in the sea all led to the failure of shipping networks. Lastly, this chapter talks about how marine technology has changed since the 1700s, which has made these "positive variables" less beneficial in the Indian Ocean trade. The discussion has also backed up modern economists' idea of an "institutional mechanism" to explain the expansion of globalisation and ocean transportation.

The Second Chapter has depicted the historical development of containerisation at Calcutta Port. It paid some special attention to depict its long early historical development since the early modern period, and shows that before the coming of the British in Bengal, the shores and waterfront of Bengal were already connected with the expanding worldwide networks of commerce and trade. However, after the arrival of the EIC, its intensity and depth heavily increased, and for the growth of commerce, the British established Calcutta as a modern port. This chapter further argues that the selection of the site of Calcutta Port proves that the present location of Calcutta Port was the best choice among all failed attempts of the British to set up a modern port. Using data, this chapter discusses in detail the maritime trade of the Calcutta Port in the nineteenth century, the war and depression effects, the development of the port facilities after independence, the growth of trade in the sixties and the advent of containers. Using a large section of archival records, both government and private, this chapter argues that Calcutta was much more serious about developing containerisation, and due to being a riverine port, it got some special privileges, which further helped invest its surpluses in container facilities. By the end of the century, container trade successfully occupied one of the largest shares of the sources of its income. It also pays attention to various multiparty agreements and cooperation between the port trust and the international development institutions, which proved instrumental in increasing the port's potential in container shipping.

The Third Chapter of the thesis investigates the historical development of containerisation in the port of Bombay from the 1960s to the coming of the second

millennium. However, a concise early history of the port and the Bombay Island since the coming of Europeans has been given as a briefing to understand the contours of continuity and change in this maritime port. This historical sketch further helps in making a comparison of Bombay with other European port cities in Asia. While digging through many travellers' accounts and contemporary European sources, it is found that the British choice of Bombay for setting up a port was driven mainly to secure their commercial fate in the western Indian Ocean against their counterparts, European nations, but also for its geographical position, suitable for a naval military base. Using the untapped official records and correspondence between the Bombay Port Trust and the national government for the first time, and to a large extent, the corporate sources mainly of private shipping firms and chambers of commerce based in Bombay, this chapter investigated three main questions: first, was there any precondition of containerisation in the port of Bombay? second, how did, and in what extent, the coming of containers affect the overall trajectory of the Bombay waterfront? third, how did it change Bombay's overseas trade pattern, and what was the response of the interest groups—such as exporters, importers, shippers— on the coming of the container age? An in-depth examination of these sources finds that the Bombay Port was well aware of, although not prepared for, containerisation and its move toward containerisation in the initial phase was mainly attributed to the dynamics of import-trade patterns. Only after 1980, containerisation got the prime focus both from the port and the interest groups associated with shipping. Nevertheless, the port faced animus views on the development of port facilities both from various local bodies as well as the national government, which continued till the end of the century. This dichotomy ended up with the operation of Nhava Sheva, signifying the port hierarchy as a result of containerisation development in Asian shores.

The Fourth Chapter has documented the growth, development and expansion of containerisation in Singapore and its impact on the economy and trade of the port. This survey explores a general history of Singapore since the thirteenth century to 1819 when it emerged as a free port, some basic history of Singapore's economy after the Second World War, its rise in the world economy and, in particular, the rise of Singapore as the busiest container port in Southeast Asia. The present analysis has developed a notional history: since the 1960s, after the establishment of Singapore as an independent state, it began to focus more on the development of its exports, and thus, the port received topmost attention as a tool for increasing export potential. But until 1980, the condition of Singapore's port was not satisfactory to the shippers. However, the port authority faced spontaneous upward trends of

container shipping, mainly imports, and thus suggested that the government allow some special privileges to the maritime sectors for the better improvement of the country's ocean shipping. Since 1980, container shipping has received topmost priority from the port and government, and it was at this time that Singapore received loans from international development institutions. Although a similar story with India is that, at its initial stage, even the World Bank was unsure about investing in container facilities in Singapore due to the fact that such a big investment would never bring a positive return. But in reality, Singapore received topmost attention from world shippers and shipping companies due to its geographical location. The government welcomed private investment in the port sector, and its result was very satisfactory, as within a few years, Singapore replaced some other regional ports as a hub of container trade. The direct impact of the growth of container trade was also the changing nature of government policy on trade. Since the 1970s, the government has implemented a programme for industrialisation, a move that was connected with the growing container trade. On the contrary, India did not take such an aligned programme and thus was ahead of Singapore in containerisation development.

The thesis ended up with a Conclusion which basically analyses the development of containerisation in Asian ports from a *comparative* approach. It explores some general features of the Asian containerisation that include the precondition, government strategy, impacts on port policies, and overseas economy, as well as the responses that all of the port users showed during the coming of the iron box on the shores. It also highlights some differences between the Asian and Western containerisation in the era of the 1970s and 1980s, and argues that overall, the coming of the containers had a greater impact on the shipping scenario of Asian waterfronts than any other forces in the twentieth century. At the end, it suggests some limitations of this thesis and provides the possibilities of further research.

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