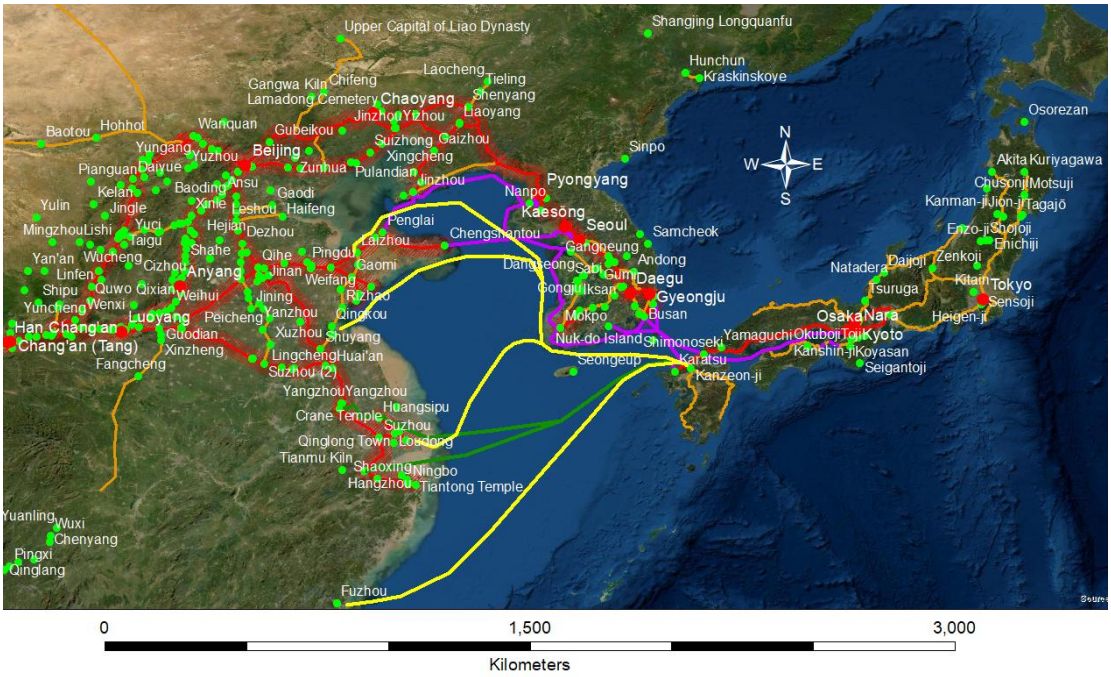
ICOMOS Silk Roads thematic study:
Scoping paper on defining and assessing further routes and corridors

a case study on East Asia



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Abbreviations

DPRK	Democratic People's Republic of Korea
KP	Korean Peninsula
ROK	Democratic Republic of Korea

1 Background: Thematic Study & Scoping Paper

1.1 Introduction

The *ICOMOS Thematic Study of the Silk Roads* (Williams 2014) provided an overview of known sites along its many routes, as a basis for developing a nomination strategy that identified several *corridors* along the Silk Roads that might have the potential to justify Outstanding Universal Value and thus be nominated to the World Heritage List. These *corridors* included significant clusters of surviving sites, which reflected specific responses to trading, political systems, and ecological and geographical contexts. The Thematic Study also identified several geographic areas where further work was needed to augment the study. These included the area east of Chang'an/Luoyang to the Korean Peninsula, and Japan: these areas are the subject of this case study.

The ICOMOS Thematic Study also argued that the Silk Roads were multiple networks of interaction, which cannot be reduced to simple monumental nodal points, and it is important to recognise the complexity of relationships that existed across the study area. Exchange, encompassing long-distance/intra-regional/trans-ecological exchange, was a vital element of the Silk Roads.

A *Scoping Paper* has **defined the criteria to be satisfied to allow for additional areas to be included in the Silk Roads network**. This provided a platform to analyse whether there are additional *corridors* that could be added to the Silk Roads network, as defined in the original Thematic Study and, if so, whether further *corridors* might have the potential to justify Outstanding Universal Value (OUV).

1.2 Geographic scope of the study

The study explored the region between the cities of Chang'an and Luoyang[1] in central China, to Japan. This encompasses central, eastern, and north-eastern China, the Korean Peninsula - today including the Democratic People's Republic of Korea (DPRK), and the Democratic Republic of Korea (ROK) - and Japan.

The study covers the overland routes and maritime crossings that link these routes, connecting the coasts of the Bohai Sea, the Yellow Sea, the East China Sea, and the variously named East Sea/Korean East Sea/Sea of Japan[2] (all arms of the Western Pacific Ocean).

China, in their submission, raised the issue as to whether the East Asia region might not be better incorporated in to the study of the Maritime Silk Routes, and this was echoed in many places by the submissions from Japan and the Republic of Korea, which both recognised the significance of maritime exchange and contact.

At the 5th meeting of the Silk Roads Coordinating Committee in Ashgabat, Turkmenistan in 2018, it was agreed that the Maritime Silk Routes did not fall within the mandate of the present Coordinating Committee, and that it is therefore more appropriate to look at the Maritime Silk Routes using a different nomination approach. For this study, only sea routes that provide essential links between significant land routes are considered.

Questions also arose during the study as to how far to extend the geographic scope, especially:

- North-eastward along the coast of the Far Eastern Federal District of Russia.
- Connections to southern China and Southeast Asia.

[1] Which essentially had provided the eastern starting point for the ICOMOS Thematic study.
[2] For the purposes of this study the neutral term East Sea will be used, but this does not suggest that any of the terms has more legitimacy.

As always, boundaries are problematic when considering such a large and complex network as the Silk Roads. As Fernand Braudel observed, “[t]he question of boundaries is the first to be encountered; from it all others flow” (Braudel 1996, 3). Andrew Abalahin, in exploring the area from the persepective of world history argued that “drawing a boundary at all between a "Southeast Asia" and an "East Asia" creates more problems for historical analysis than it solves and that positing "Sino-Pacifica," a macro-region encompassing Southeast Asia, East Asia, Northeast Asia, and Inner Asia, is useful for reconceptualizing not only national and subcontinental histories but world history as well” (Abalahin 2011, 659).

The issue of connections to the north and the steppe has not been explored. As Tim Winter rightly recognised “a team of Japanese scholars questioned Richthofen’s reading of Eurasian history as a story of east-west flows, thereby stressing the need for understanding the connections between the fertile south and the nomadic north” (Winter 2022, 53), and with time this should be expanded upon. The Japanese submission flagged up the significance of this (Yamauchi 2021), and interactions at the northern end of the KP and in Manchuria would also bear further investigation.

For the purposes of the study, these two areas have not been drawn in, but as the States Parties raised them in their submissions, it is important that this complexity is recognised.

1.3 Chronology

The chronological framework of the UNESCO Silk Roads project was agreed as being between the 2nd century BCE and the 16th century CE. It is recognised that there were significant interactions, over long distances, from prehistory onwards, and that the impacts of overland exchange across the Asian continent continues today. However, this chronology was acknowledged as reflecting the period of maximum impact of the overland Silk Roads on both societies and communities.

1.4 Ancient and modern names

As with many places, there are often multiple spellings of place names, and numerous variations and/or renaming over time. In most cases, the most commonly applied name has been used, often (although not always) modern locations. Known variations of names are recorded as variants in the GIS database, and the name on any map can easily be updated if specific State Parties/communities so wish. Similarly, within the text there are multiple versions of empire and region names, such as Goguryeo, or Goryeo, or Koguryŏ, or Koguryo, or Kyŏngju. The report attempts to be consistent in usage, but quotations often reflect different choices of spellings.

2 Data collection and analysis: the approach to the eastern case study

2.1 Approach: assessing the impact of the Silk Roads

The approach adopted, based on the *Thematic Study* and the *Scoping Paper*, was to:

1) **Map the distribution of sites**, and **possible route segments**, using nodes, site distribution, topographic data, and historical sources to understand their geographic variability over the region.
2) **Assess the range of archaeological site-types**: to what extent do they reflect multiple and complex impacts of the Silk Roads? To what extent do these reflect a significant range of impacts of the Silk Roads, across the three categories of infrastructure, production, and outcomes? [Note: production was always the most difficult and was largely covered by industrial/craft production in urban centres, but it is useful in that it challenges us to think about these issues]. Comparative analysis will help to explore the significance of sites in the context of the Silk Roads.

3) **Assess the chronology of the archaeological sites**: to what extent do these reflect a significant impact of the Silk Roads over at least a significant part of the time span of the Silk Roads project?
4) **Assess the connectivity of regions:** to what extent were the impacts a result of long-distance/inter-regional exchange?
5) **Assess the impact of the Silk Roads on the empire systems/polities of the region**: to what extent was Silk Roads exchange/contact influential in developing/shaping these systems? Assess through the presence of significant historical and cultural sites, the impact of Silk Roads exchange on the economic and cultural development of the region.
6) **Assess the extent to which the region reflects specific responses to the Silk Roads because of distinctive geo-cultural and ecosystems.**

The process for a thematic study is often iterative. In practise, it is often difficult to mobilise expert input, given the pressures on peoples' time, especially when the resources for the exercise are limited. So, it is often necessary to be pragmatic, to gather what data can be readily accessed, and then use that to build a basis for discussion. This Eastern case study adopted this approach and started with a series of data collection exercises.

2.2 State Party focal points

Contact was established, via ICOMOS and UNESCO, with the National Commissions in the three States Parties, who identified a *focal point*. These were:

- **PR China**: Jun SHAO, Deputy Director, Division of World Heritage, National Cultural Heritage Administration
- **Republic of Korea**: Hyung-Bin PARK, Director Research Division of Artistic Heritage, National Research Institute of Cultural Heritage
- **Japan**: Prof Kazuya YAMAUCHI, Teikyo University

The focal points were asked to provide as much data as was feasible in the time, given the restrictions that exist for many countries in terms of access to databases, disclosing precise site locations, the extent to which current site inventories were digitally available, etc.

The three States Parties engaged in the study provided a variety of discussion documents (see below), all of which are provided as appended documents. These have been reformatted for ease of reference, and have had contents pages inserted, but are otherwise unchanged from their original submission. The exception was the report from China, which was only partially translated to English. The rest of the document was translated via translation software at UCL. While this was quickly checked over by a native Chinese speaker, there are undoubtedly errors in the English text

2.2.1 PR China

Several academic seminars/workshops were held, including Prof Wang (from Northwest University), and some 20 scholars including ICOMOS China, National State Cultural Heritage Administration Bureau, Academy of Sciences, etc. As a result, a discussion paper ***The Silk Roads in East Asia (China) and Potential Sites*** (2021) was provided [henceforth referred to as China 2021].

The paper discussed three principal *corridors*: northern, middle, and southern (Figure 1). The paper provided a general discussion of the background and routes. A total of 23 key sites are identified on the southern routes, 16 on the middle routes, and 40 on the northern routes. Some information was provided on each site.

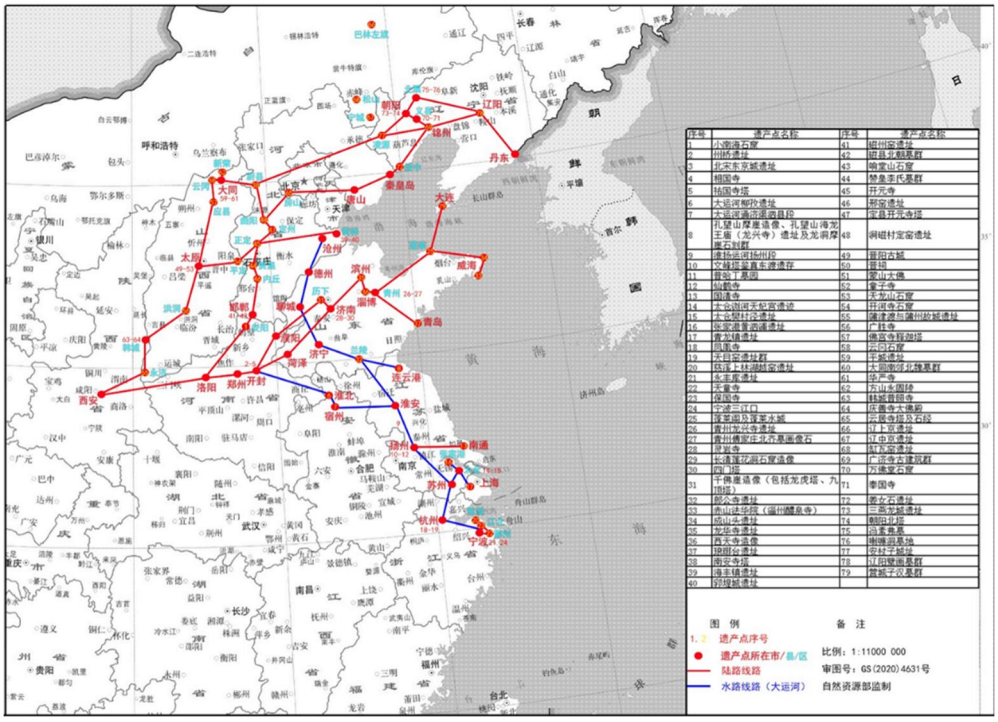

Figure 1. Sites and routes identified in the Chinese report: both the northern and middle routes in red, southern routes in blue.

2.2.2 Japan

Japan engaged several scholars in discussions, who collated information from historical sources, secondary sources, and excavations. A discussion paper, ***The Formation and Development of the East Asian Maritime Trade*** (2021), was provided [henceforth referred to as Yamauchi 2021]. This gave a description of the routes and goods exchanged. The document was prepared by Prof Kazuya YAMAUCHI (Teikyo University), with input from Prof SAOTOME Masahiro (Professor Emeritus, University of Tokyo), Dr FUNO Shuji (Nihon University), Prof HAYASHI Toshio (Professor Emeritus, Soka University), Dr IGAWA Kenji (Waseda University), Dr KOJIMA Yoshitaka (Kanazawa University), Dr NISHIMUTA Yoko (Toyo University), and Dr TANAKA Fumio (Waseda University).

The team also provided a ***Google Earth kml file***, which indicated suggested routes (as lines), sites (as points), and chronologies (in different files). These not only covered Japan, but the wider region. The data was converted into ArcGIS shape files, by Dr Marco Nebbia at UCL, and the site names were translated from the Japanese to English, via translation software (so some mistakes are likely).

The files comprised (Figure 2):

- 2nd_century_BC-1st_century_AD_Hsiung-Nu (routes & sites)
- 3rd_century_Fujian-Surabaya (sites)
- 3rd_century_Gishi_Wajinden (routes & sites)
- 5th-6th_century (routes & sites)
- 6th_century_Turkic Empire (routes & sites)
- 7th-8th_century (routes & sites)
- 8th-9th_century_Qiantangshi_Kentoshi (routes & sites – 6 versions of the routes)
- 9th_century (routes & sites)
- 10th-13th_century (routes & sites)
- 13th_century_Fujian-Surabaya (routes & sites)
- 13th_century_Mongol_Empire
- 14th-first_half_of_16th_century (routes & sites – 2 versions)

- 16th_century_Qing (routes)
- all_5th-13th_century (sites)
- Mid_16th_century_to_the_first_half_of_17th_century (routes & sites – 2 versions)
- Mid_17th_century (routes & sites)
- Mid_17th_century_joseon_mission (routes & sites)
- Ocean_route_in_southeast_asia (routes & sites)
- Route_of_Southeast_Asia_to_Indian_Ocean_in_3-6_Century (routes & sites in 2 parts)
- Route_of_Tokaido_Japan (routes & sites)

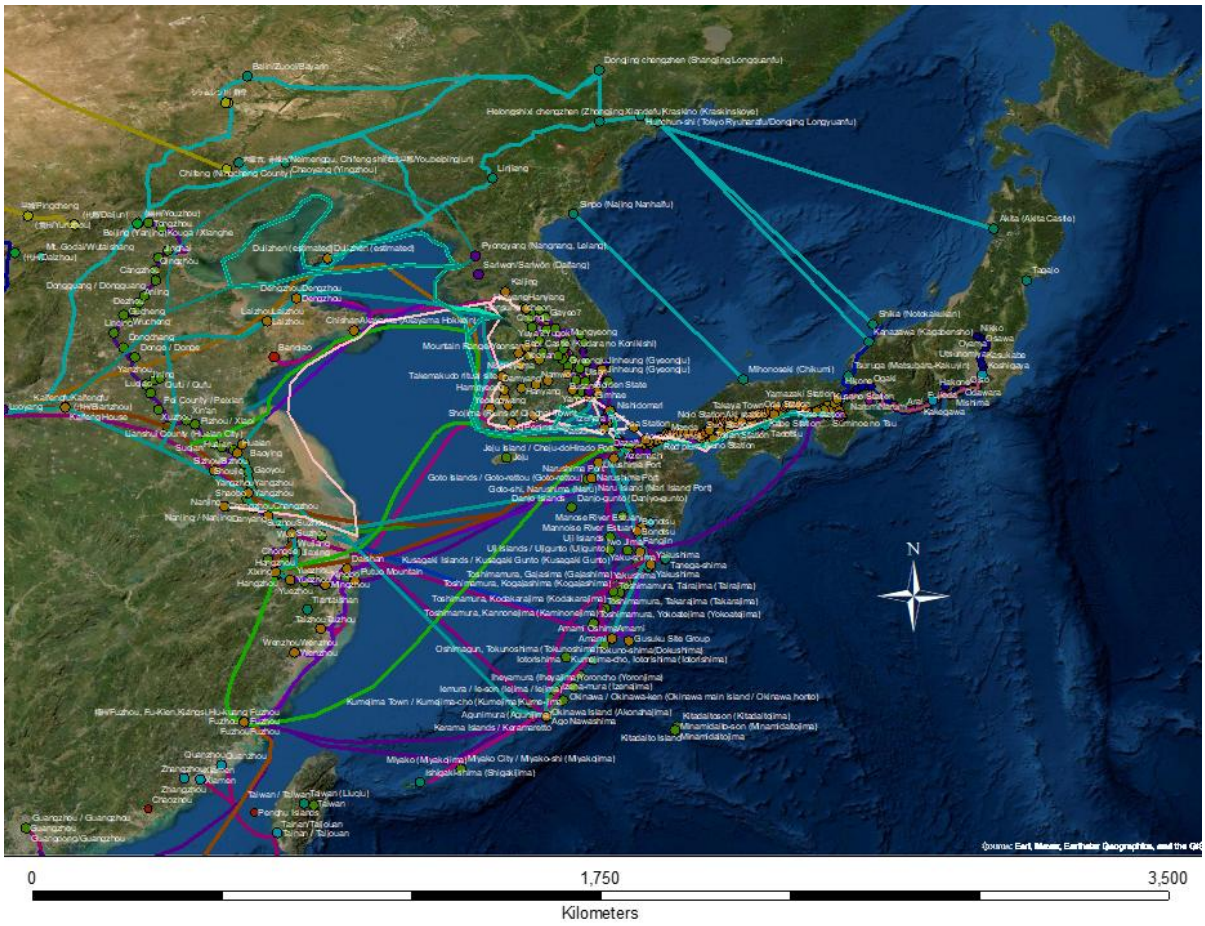

Figure 2. Routes and sites indicated in the Japanese State Party submission (Yamauchi 2021).

2.2.3 Republic of Korea

The Cultural Heritage Administration (CHA) has a cultural heritage GIS system with all archaeological sites and monuments recorded. However, Korean law prohibits maps more detailed than 1:50,000 from being transmitted to foreign countries. This includes site locations. It had been hoped that the Korea Institute of Civilizational Exchange (KICE), at Seoul National University, who are allowed to use the data for research purposes, would be allowed to send maps/site information, but in the end this did not prove possible.

The Republic of Korea focal point, Hyungbin PARK, provided a discussion document ***Silk Roads case study data*** (2022). This provided an overview of evidence, including historical sources, environment and topographic information, and bibliographic sources.

2.3 Commissioned literature reviews

To complement the States Parties work, ICOMOS commissioned two studies.

2.3.1 Acta Via Serica at Keimyung University

The Acta Via Serica (Center for the Silk Road and Central Asia), at Keimyung University of Daegu (www.censcakmu.org), reviewed the Korean material. They produced a ***Case Study on Potential Routes and Sites along the Silk Roads in Eastern Asia*** (AVS 2021), compiled by Prof Tschung-Sun Kim and Dr Farrah Sheikh.

2.3.2 UCL Institute of Archaeology

UCL were commissioned to review available international literature, largely focused on the Korean Peninsula. This work, ***ICOMOS East Asia Silk Routes Report*** (2021), was undertaken by Megan Hinks, and primarily examined evidence from English language publications. As with the original ICOMOS Thematic Study, this was necessarily a rapid review of published material, assembled in a relatively short period of time.

In addition, a variety of data sources used for the original Thematic Study were utilised, including OWTRAD (Williams 2014, 114-6).

2.4 Synthesis and analysis

The data platform for assessing the region consists of information on sites and monuments, historical sources, data on the topography and ecology of the region, and data from relevant secondary sources/commentaries and maps (see *Scoping Paper*). The spatial information was combined in a Geographic Information System (GIS). Together, the available data was used to explore routes, sites, chronologies, and impacts. It attempted to:

1. Map the distribution of sites, taking account of their character, chronology, and quality of survival.
2. Undertake an analysis of how surviving sites reflected the Silk Roads in terms of the three categories established in the Thematic Study: infrastructure, production, and outcomes.
3. Assess the scale and nature of the impacts; the time periods represented; the empire systems; potential routes/*corridors*; the impact of ecosystems; the significance of impact.
4. Assess the potential for *corridors* to be considered as part of the overall Silk Roads network.
5. Identify *corridors* that might be considered to have potential to be nominated to the World Heritage list.

This analysis was undertaken by the UCL team, as an external focal point. In part, this was to avoid pressure on State Parties identifying routes/sites, which have perceived implications in terms of the World Heritage nomination process (see section 6.7).

2.5 Review

First, a draft study was transmitted to the ICOMOS Steering Group. The draft, after editing was sent to the UNESCO World Heritage Centre. The final Study will be submitted for discussion at the forthcoming 7th meeting of the Silk Roads Coordinating Committee.

2.6 Data archiving

The data, as with the original Thematic Study, is being archived with the *ICOMOS International Documentation Centre in Xi'an (IICC-X)*, who act as the secretariat for the Silk Roads nomination project.

2.7 Constraints of an iterative process

The quality of the work is in direct relationship to the time taken to assemble the information. Often the inputs are from staff already engaged in other roles, who cannot simply devote large amounts of time to the work. It is also a factor of funding: resources

made available will enable the use of dedicated researchers and provide time for coordination, checking and synthesis.

1) Rapidly collect as much data and ideas/hypotheses as is readily available in published international literature and digital sources; simultaneously local partners provide as much data as is feasible (given restrictions over access, disclosing precise site locations, whether current site inventories digital, etc.).
2) Undertake synthesis and analysis of this material to suggest significant routes, sites, chronologies, and impacts. Undertaken by an external focal point: to avoid the pressure on States Parties identifying routes/sites, which have perceived implications for them in the World Heritage process.
3) Review of 'draft study' by the local partners. Comments on omissions/clarifications.
4) Dissemination of 'draft study' with focal point identified as the author to avoid pressure on State Party's participants.
5) Opportunity for wider critique of the draft, identifying omissions, providing clarifications, adding depth, etc.

In this case study, a further important constraint was the absence of participation by the Democratic People's Republic of Korea (DPRK).

3 Topography and environment

3.1 The region

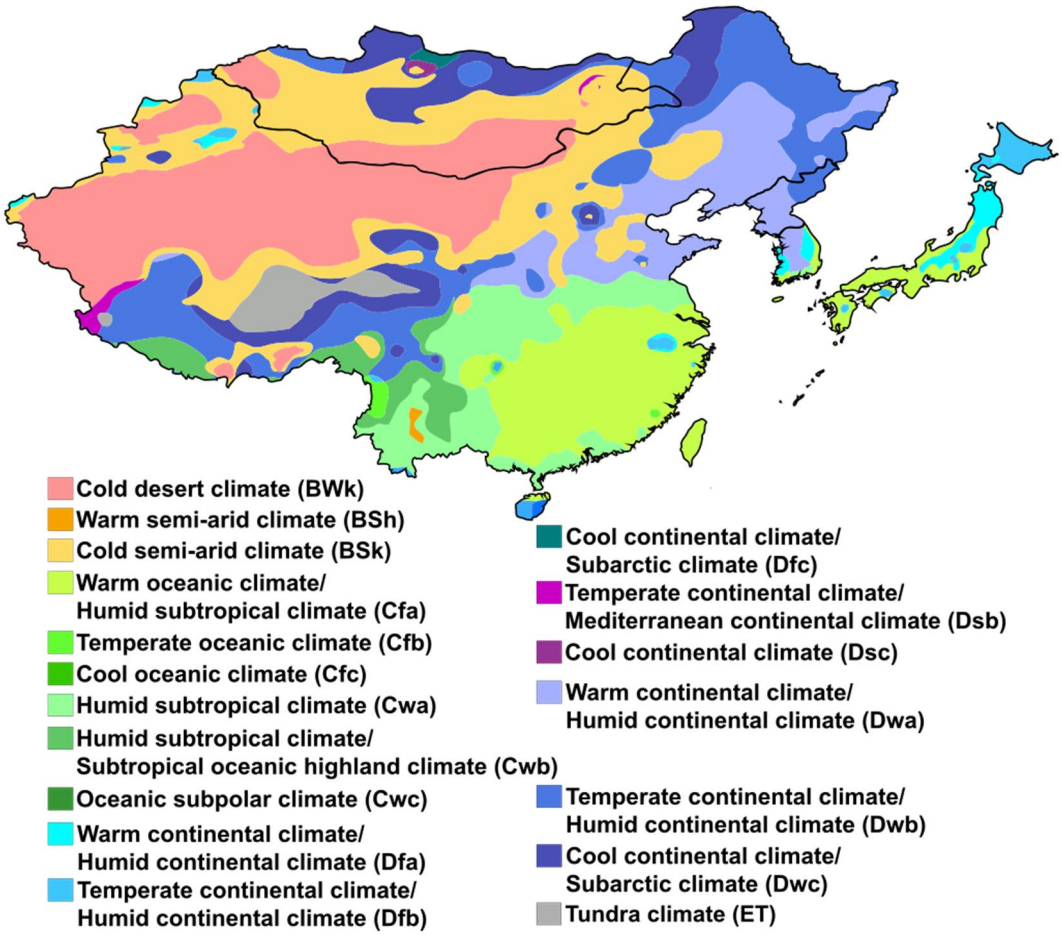

Figure 3. East Asia map of Köppen climate classification. (Peel, M. C., Finlayson, B. L., and McMahon, T. A. (University of Melbourne) (Creative Commons Attribution-Share Alike 4.0 International)

The region encompasses a variety of climates, moving from humid subtropical in the south and central areas, through temperate oceanic climates, to a humid continental climate in the north of the study area (Figure 3). Similarly, it has a varied topography and soils, with extensive plains and river systems, and good water supply and growing seasons over much of the area. There are mountainous regions, especially in north-eastern China, along the Korean Peninsula, and within the Japanese Archipelago (see below).

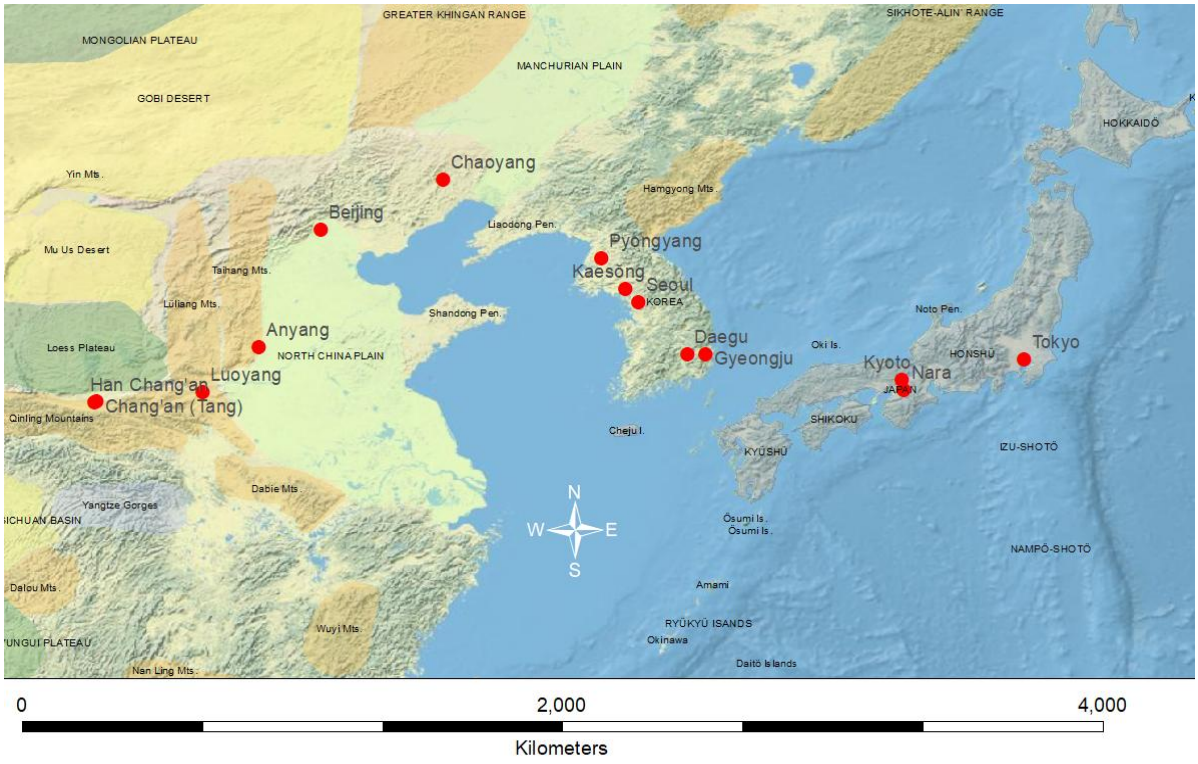

Figure 4. Main geographic areas.

In central China, the Dabie mountain range runs northwest-to-southeast and forms the main watershed between the Huai and Yangtze rivers. This, with the Qinlang mountains to the south, effectively forms a corridor connecting Chang'an, and later Luoyang, with the North Chain Plain (Figure 4). The North China Plain is a large fertile area, fed by several major river systems. The eastern coastline is very long, with numerous peninsulas, such as Shandong, and many harbours.

To the north of the plain lies the Yan range (Yanshan), principally in the modern province of Hebei, which contains many narrow passes, such as the Gubei Pass, the Xifeng Pass, and the Leng Pass. The eastern stretch of the Great Wall runs through this range. The mountains form an important gateway between north and south. Further to the northeast, the Changbai mountain range extends from the provinces of Heilongjiang, Jilin and Liaoning, across the border to North Korea.

The Korean peninsula extends c. 1,100 km, broadly north-south, from continental Asia to the Pacific Ocean. The peninsula has large plains, especially in the south and west, and extensive mountainous regions, especially in the east. As a result, with two exceptions, the principal rivers mainly flow westwards, including the Yalu (Amnok), the Chongchon, the Datong (Taedong), the Han (Hangang), the Geum, and the Yeongsan. These rivers have extensive flood plains and provide an ideal environment for wet-rice cultivation. The two exceptions are the south flowing Nakdong River and Seomjin River.

The main ridge along the Korean Peninsula is the T'aebaek Mountains (T'aebaek-sanmaek), extending over 500 km. The chain stretches along the eastern coast, and continues south as the Kyŏngsang Range. Peaks include Hwangnyong Mountain (1,268 m), Kŭmgang (1,638 m), Sŏrak (1,708 m), Odae (1,563 m), and T'aebaek (1,561 m). The eastern side of the range forms a steep fault line to the coast, but the western side forms a gentle incline. There are many spurs, such as the Sobaek, Charyŏng, and Kwangju mountains, extending southwest. The Republic of Korea's most important rivers, among them the Han, Naktong, and Kŭm, originate in the T'aebaek Mountains.

The south and southwest coasts of the Korean peninsula are *ria* coastlines, which produce calm seas safe for navigation. In contrast, the western coast has extremely high tidal amplitude: at Incheon, around the middle of the western coast, the high tide can reach 9m.

The Japanese Archipelago comprises 6,852 islands, covering 377,975 km^2, with five main islands - Hokkaido, Honshu, Shikoku, Kyūshū, and Okinawa - and numerous smaller islands, including the Izu and Bonin (Ogasawara) Islands (a chain of islands stretching southeast from the Tokyo Bay-Izu Peninsula area of Honshu to the Marianas), and the Ryūkyū Islands (a chain of islands that extends from the southern end of Kyūshū to Taiwan) (Habu 2010, 160). As a result, it has a complex coastline and numerous natural harbours. It is separated from the Korean Peninsula by the 200km wide Tsushima Straits. Seto Inland Sea separates Honshū, Shikoku, and Kyūshū islands, and connects the Pacific Ocean to the East Sea.

The archipelago extends over around 3,000 km, broadly northeast–southwest. It has a rugged and mountainous terrain, with restricted habitable areas.

3.2 Seas

3.2.1 Bohai & Yellow Seas

The Bohai is a marginal sea, approximately 77,000 km^2 in area, off the east coast of China. There are three major bays: Laizhou Bay to the south, Bohai Bay to the west, and Liaodong Bay to the north. Several major rivers drain into the gulf, including the Yellow River, Xiaoqing River, Hai River, Luan River, Dai River, Daling River, Xiaoling River, Liao River and Daliao River. There are several important islands or island groups in the gulf, including the Changshan Archipelago, which marks the eastern edge of the sea, creating the Bohai Straits and marking the connection to the Yellow Sea. The sea today has several major ports (Figure 5).

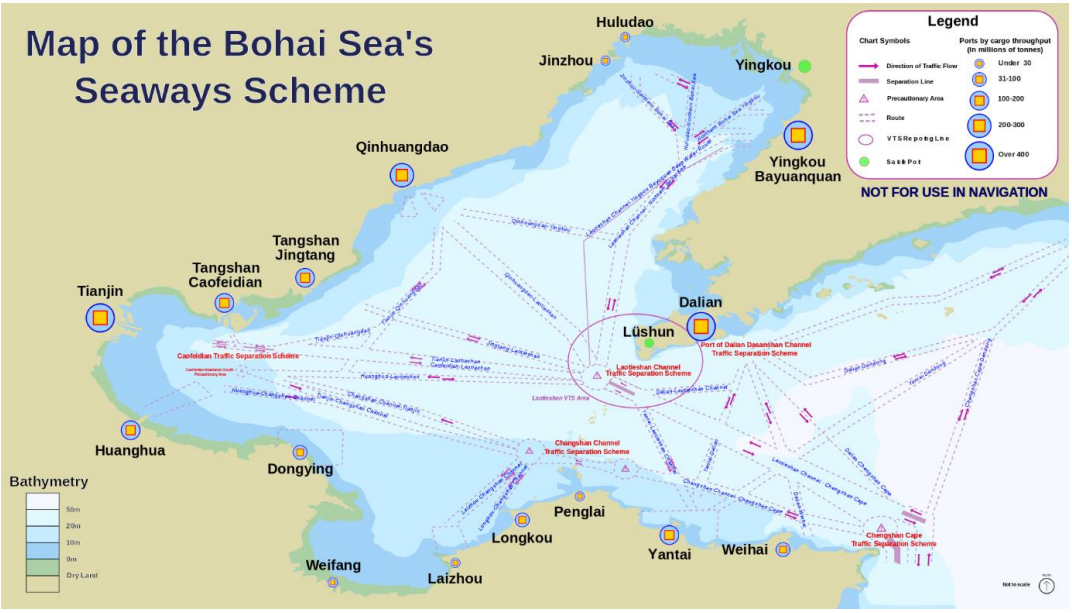

Figure 5. A sketch map of the current (mid-2011) major sea lanes of the Bohai Sea. (Arrorro CC BY-SA 3.0)

The Yellow Sea (Korean Hwanghae) is described as a marginal sea of the Western Pacific Ocean, located between mainland China and the Korean Peninsula, and extending over c. 380,000 km^2. It is demarcated as separating from the East Sea at the southern end of Haenam Peninsula to Jeju Island, and is divided into the East China Sea by a boundary from the west end of Jeju Island to the Yangtze River estuary (International Hydrographic Organization 1953). The north-eastern part of the Yellow Sea is also called Korea Bay, into which flows three important rivers, the Yalu, the Chongchon, and the Taedong.

The Yellow Sea has cold, dry winters, with strong northerly monsoons from late November to March. Summers are wet and warm, with frequent typhoons between June and October. Fog is frequent along the coasts. Along the continental coasts, southward-flowing currents prevail (Figure 6), which strengthen in the winter monsoon period. The tidal range is high, 4 to 8 metres along the shallow west coast of the Korean Peninsula, with a maximum spring tide of almost 8.2 metres. It is less along the coasts of China, 0.9 to 3 metres, except around the Bohai, where it is slightly higher. The speed of the tidal current is generally less than 1.6 km per hour in the middle of the sea, but near the coasts and in the straits and channels, stronger currents of more than 5.6 km per hour have been recorded. The innermost coastal sections of the Bohai freeze in winter, and drift ice and ice fields hinder navigation in parts of the Yellow Sea (Valencia and Uda 2007).

3.2.2 East China Sea

The East China Sea is part of the Western Pacific Ocean, located off the east coast of China and covering an area of c. 1,249,000km^2. To the north is the Yellow Sea, to the northeast it connects with the East Sea through the Korea Strait, to the southwest to the South China Sea via the Taiwan Strait, and to the southeast to the Philippine Sea via straits between the various Ryūkyū Islands (e.g. Tokara Strait and Miyako Strait). The Yangtze is the largest river flowing into the sea. There are numerous island groups and a cluster of submerged reefs in the northern part of the sea.

3.2.3 The East Sea

The East Sea is a marginal sea, almost enclosed by the Japanese Archipelago, Sakhalin, the Korean Peninsula, and the mainland of the Russian Far East. It has a surface area of c. 1,050,000 km^2. Few rivers flow into the East Sea from the Korean Peninsula or mainland Asia, the largest being the Tumen, Rudnaya, Samarga, Partizanskaya and Tumnin; all of which come from mountainous regions. In contrast, numerous large rivers flow from Honshū and Hokkaidō into the sea, including Japan's four largest rivers, the Shinano, Ishikari, Agano and Mogami. During the winter the northern quarter of the sea, particularly along the Siberian coast and the Strait of Tartary, freezes for about 4-5 months. In the north, the currents circulate in a counter-clockwise direction (Figure 6), with complex tides.

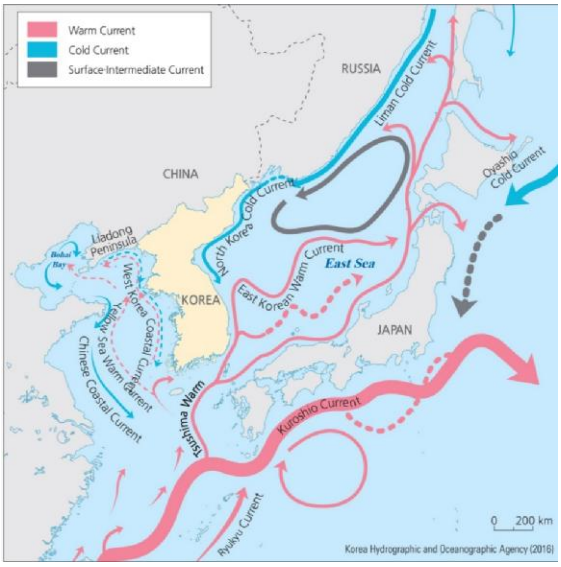

Figure 6. Currents in the eastern seas (Korea Hydrographic and Oceanographic Agency 2016).

4 Early exchange and contacts (pre-2nd century BCE)

While the UNESCO Silk Roads nomination project has defined the starting point for the Silk Roads having significant, culture transforming, interactions as the 2nd century BCE, exchange pre-dating this period provided the context for the development of those wider significant interactions (e.g. Frachetti et al. 2017). For example, Jōmon[3] pottery and obsidian tools from Japan were transported to the southern part of the Korean Peninsula, while comb-pattern pottery from Korea is found in northern Kyūshū: an exchange between coastal areas across the 200-km-wide Tsushima Strait (Saotome 2021, 1). However, there appears to have been no direct exchange with the interior of the Korean Peninsula or China.

Another example is the collection of bronze objects from the steppe and northern China, presumably coming via the eastern Manchurian Basin, which have been found in the Korean Peninsula as early as the transition from the 2nd to 1st millennium BCE (Barnes 2015, 256-7). Mumun burials have produced distinctive Liaoning daggers (from the Upper Xiajiadian culture), and geometric mirrors (op cit., 257), while Liaoning itself appears to have been influenced by the bronze working of the Andron-Karasuk region of Central Asia and south-western Siberia (Aikens, Zhushchikhovskaya, and Rhee 2009, 238).

Between c. 1,000-800 BCE, during the Yayoi period in Japan, rice farming was introduced to Japan from the middle and lower reaches of the Yangtze River in southern China, via the Korean Peninsula (Saotome 2021, 2).

During the Warring States period in China (4th/3rd centuries BCE), the Yan Dynasty ruled the area covering the modern-day provinces of northern Hebei and Liaoning, centred on present-day Beijing. The Yan later expanded eastward into the Laiodong Peninsula. Recently, distinctive Yan Dynasty bronze and iron vessels have been found in both the Korean Peninsula, and the Japanese Archipelago (Saotome 2021, 2), suggesting some trading/exchange across the region.

5 Routes & nodes

5.1 Nodes, routes, and smaller sites

As with the rest of the Silk Roads, the identification of nodal points (major cities and ports) is a useful starting point to understanding broader connections. The identification of these can then be used to explore segments of routes/movements between these nodal points, and their chronologies, drawing in smaller sites to create an increasingly complex picture. This enables a reflection not simply of the most impressive outcomes – great cities and splendid temples – but also a range of smaller settlements – market towns, river crossing points, and way stations – and controlling administrative and military sites, such as forts, all of which were crucial for a successful network of movement and interaction. An example of the latter might be the Dangsung Fortress (Korea) with its crucial role in controlling access to the sea, as exemplified by its rebuilding and extensions (Bae 2016; Bae and Kim 2018).

There is great inter-connectivity across the wider plains of central China, with 'alternative' ways of passing from A to B.

The next section examines the evidence for the main routes within the region.

5.2 The land and the sea

All interactions in this region raise questions about the relationship of land and maritime routes. It is evident that any overall consideration of the nature and scale of interactions between East Asia and the wider world, must encompass both land routes and to some

[3] A broad period from c. 14,000 – 1,000 BCE.

extent the movement of shipping within the Asian seas, that link the main land routes. The ICOMOS thematic study specifically focused on the overland Silk Roads: while it recognised river borne transportation (a major feature in the East Asian region), and routes across larger bodies of water such as the Caspian Sea, it did not set out to encompass the so-called Maritime Silk Routes. Consideration of the Eastern Silk Routes, however, brings this separation into sharp focus. As the Maritime Silk Route is a complex network, extending over a huge area from East Asia to Europe, that has yet to be fully analysed in terms of how they relate to the World Heritage Convention, this study is limited to sea crossings that link substantial land routes. Nevertheless, details of wider maritime connections that have been submitted by States Parties are summarised in this section.

Early contact in East Asia - between mainland China, the Korean Peninsula, and the Japanese Archipelago – would have been largely overland. However, maritime activities began surprisingly early. The routes were clearly complex and seasonal. The seas in East Asia (section 3.2) are dominated by complex currents and weather systems (Yoshio 2010, 66). Navigators had to travel using these currents or winds, but there were great risks; for example, in crossing the Kuroshio current, travellers could be swept far out to the southeast (Yoshio 2010, 70-1).

From the 2nd century BCE and in to the first half of the first millennium CE shipping would have been confined to coastal routes, with ships largely staying in sight of land. Shipping between the southern Korean Peninsula and mainland China, for example, would probably have hugged the coastline around the Yellow Sea. Similarly, ships from Japan crossed to Korea, rather than braving long-distance routes direct to southern China or Southeast Asia. Antony (2017, 13) noted that "China's overseas trade was an extension of the coasting trade. It was normal for ships, which hopped from one port to the next loading and offloading cargo, to call at many ports to obtain sufficient cargo to fill their holds before sailing on to other ports. All ports, whether large or small, served as collection and distribution points that knitted together the larger maritime networks. The coasting trade, in all its variations and intricacies, provided the platform for a well-integrated maritime network that recognized neither national boundaries nor state-imposed maritime restrictions."

As ship technology and navigation advanced (e.g. Quipeng 2003, 497), new routes opened, taking advantage of (and adapting to) the winds, currents, and monsoon weather of the region. By the Tang dynasty, for example, there is evidence for open sea routes between Yeongam (South Jeolla Province, Republic of Korea) and Shanghai region (China). However, there was also continued use of the land routes; for example, between Namyang (Gyeonggi Province, Republic of Korea) and Shandong Peninsula (China) (Woo 2010, 208), and in 607 CE a mission from China to the Korean Peninsula was undertaken overland (Sun 1992, 245), perhaps suggesting that open sea routes were not at that time the primary means of travel.

By the end of the first millennium CE, shipping was probably the dominant mechanism for movement of people and goods over long distances in the region. Although, even in the 15-16th century CE the practice was still for most routes to hug coastlines as much as possible, and wind patterns strongly influenced both routes and landing points (Antony 2017, 13).

Underwater archaeology, intensified in the past two decades, has shed new light on interactions and shipbuilding technology in the region (Kimura 2016a, 2016b). In addition, in later periods, historical records help to provide a more detailed picture of trading contacts (e.g. Hamashita 2011). Sea traffic increasingly drew a diverse mixture of mariners into its trade networks (Lockard 2010, 221). Over time, these routes connected to a wider long-distance "trading network linking China, Japan, the Ryūkyū Islands, Taiwan and Southeast Asia with the Indian Ocean and thence through the Red Sea to the Mediterranean" (Antony 2017, 3). These formed crucial contact zones, so that "sea basins and their littorals provided vital spaces where peoples not only met, mixed, and contended but also transformed one another in the process" (Antony 2017, 11), creating an intra-regional system. The seas in the region became "crisscrossed by a complex network of interconnected trading spheres and sea lanes that … would integrate countries, regions, and trading centres along its shores. For

thousands of years people living in this dynamic transregional zone depended on waterborne trade, smuggling, raiding, and piracy for their existence" (Antony 2017, 12).

5.3 Mainland China

The Chinese submission (China 2021) suggested three broad routes that extended from the Chang'an/Luoyang region to the Korean Peninsula, and Japan. These were (Figure 7):

1) A variety of **northern routes** that passed overland via Chaoyang and Liaoyang, before extending in to the Korean Peninsula.
2) **Central routes** that passed eastward, for the Central Plain capitals, leading to various ports on the east coast, before extending across the seas to Korea and Japan.
3) **Southern routes**, which ran along the Grand Canal (already inscribed on the World Heritage List), and on to ports on the south-east coast, such as Shanghai, Hangzhou, and Ningbo, before extending across the seas to Korea and Japan, and more widely.

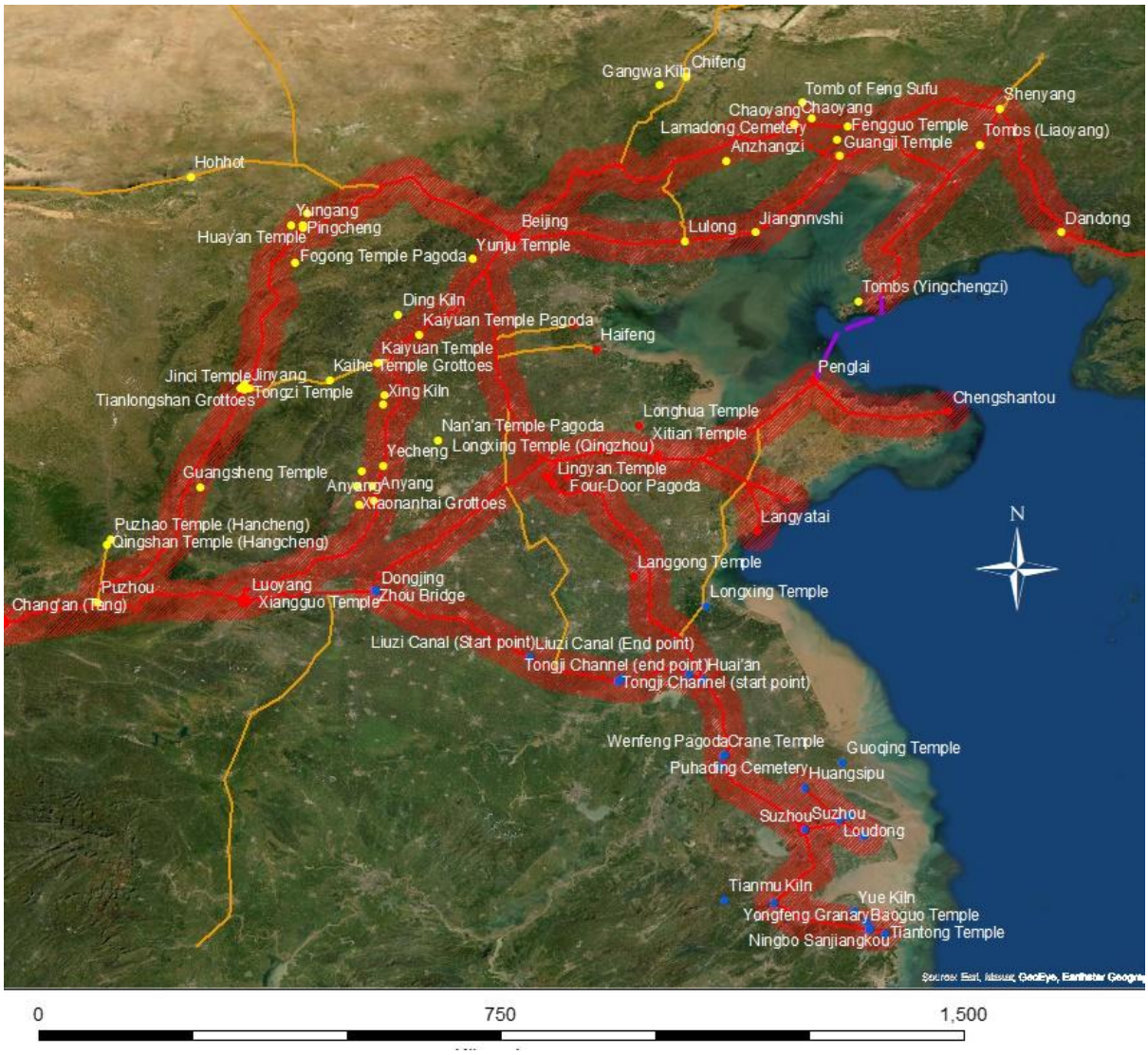

Figure 7. The multiple corridors in China. Sites in yellow= northern routes; red = central routes; blue = southern routes.

5.3.1 The northern routes

There were multiple possible overland routes from the capital cities of Han or Tang Chang'an (modern-day Xi'an), or Luoyang, to the Korean Peninsula. Two main routes have been suggested (Figure 8):

1) From Chang'an, passing through Taiyuan, Pingcheng, Chaoyang, Jinzhou, and Liaoyang, leaving China at Dandong, crossing the Yalu River.
2) From Luoyang, passing through Anyang, Yecheng, Beijing, and then the same route through Chaoyang, Jinzhou, and Liaoyang, leaving China at Dandong, crossing the Yalu River.

There are clearly alternative routes. For example, north of Beijing, in the so-called 'Liaoxi[4] Section', three routes are suggested: Gubeikou - Pinggang - Liucheng; Lulong - Pinggang - Liucheng; Wuzhong - Pinggang - Liucheng. These appeared to be early and lasted until the Liao (916-1125 CE) or Jin periods (1115–1234 CE). A fourth route, from Beijing, eastward via Wuzhong, Lingzhi to the Linyu Pass (near Shanhai Pass nowadays), along the Bohai Coast to Jieshi (today's Suizhong county, Huludao), and then northeast to Liaodong via Xingcheng and Jinzhou was also used. This 'Banghai' route prospered in the later Liao-Jin periods.

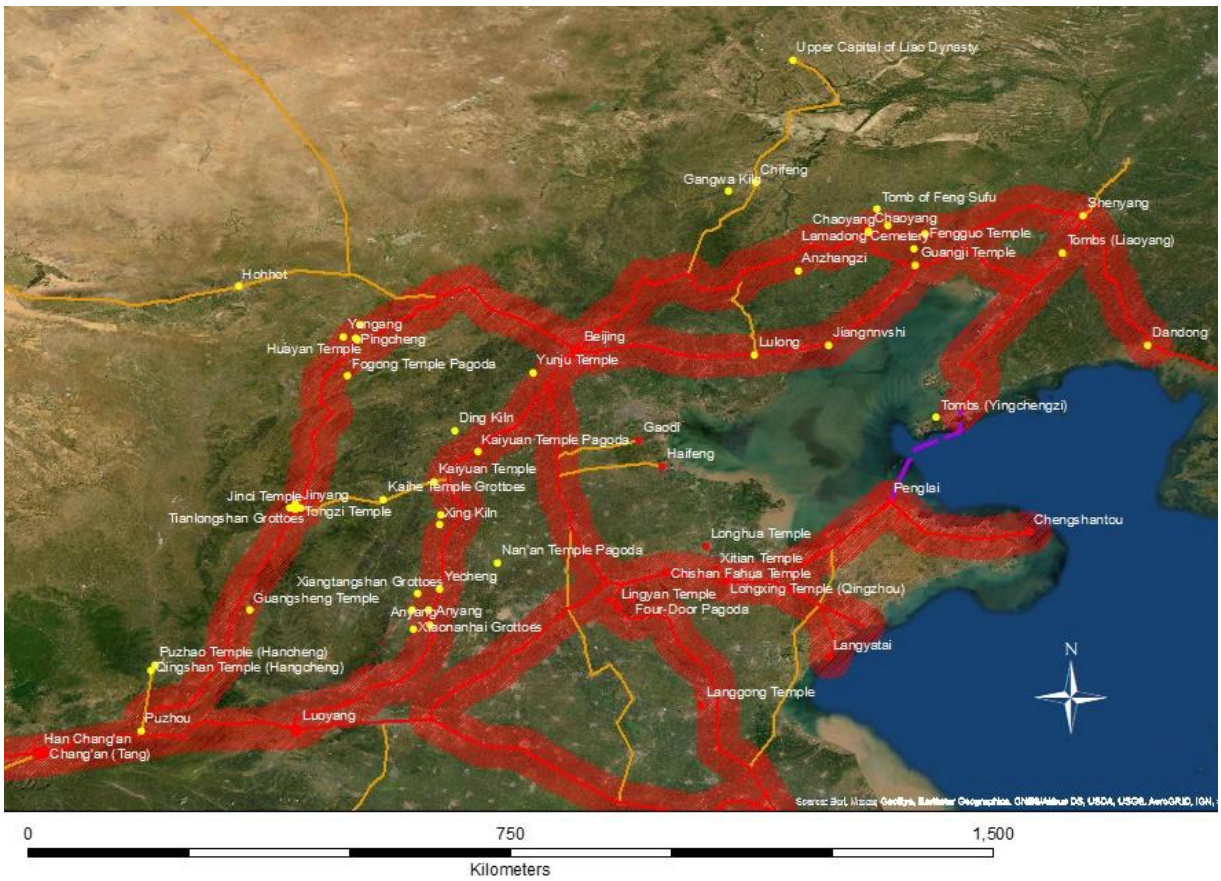

Figure 8. The northern and central routes in China. Sites listed in the China 2021 document.

[4] A now defunct administrative region.

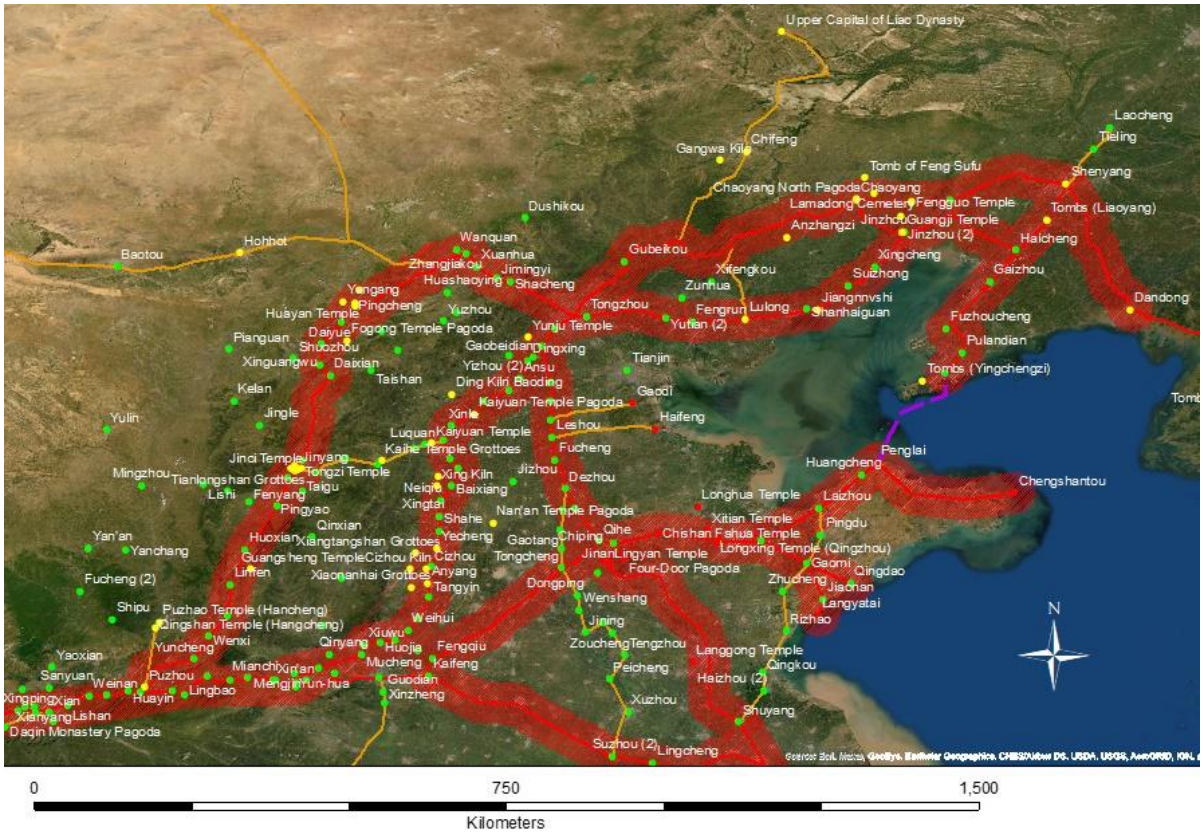

Figure 9. The northern routes in China, with other significant sites shown in green.

A broader range of sites (Figure 9) suggests that there are also other possible routes.

In addition, there was also a maritime connection, from Liaoning's Dalian Peninsula to Penglai in Shangdong (on the central route, see below). It is not clear when this might have started to operate, but it would have been important for early maritime coastal routes around to the Korean Peninsula.

The potential sites identified along these routes (40 sites are noted in China 2021) reflect a mix of attributes:

- A variety of temples/monasteries, reflecting the movement and development of religious beliefs and patronage.
- Important market and staging towns, often controlling specific river crossings. These also reflect a variety of influences and impacts from long distance exchange.
- Kiln sites, associated with the production of export goods.

5.3.2 The central routes

From the Qin (221 BC–206 BCE) to the Tang (618–907 CE), east coast ports were linked to the capital cities in the Central Plain by a route from Penglai - Laizhou - Qingzhou - Zizhou - Qizhou - (Yunzhou-Huazhou) - Kaifeng - Luoyang - Chang'an (Figure 8). The route was one of the relay roads, and a tributary route taken by official envoys to the Sui/Tang Court in China.

The ports along the Shandong and Hebei coasts, along the Yellow Sea and Bohai Sea, were vital to the early maritime exchange with the Korean Peninsula and Japan. From the third century BCE to the late first millennium CE, port cities along the Shandong Peninsula, especially Penglai (Dengzhou), Qingdao, Laizhou, and Weifang (Qingzhou), controlled Chinese access to the Bohai and Yellow seas. Initially the ports enabled coastal trade, but once ship technologies and navigation developed sufficiently, they were best placed to exploit direct journeys across the Yellow Sea to the Korean Peninsula.

The ports had extensive links with Chinese hinterlands, via waterways and land routes. Even after the centre of economic activity shifted to southeast China, these ports continued their economic and military functions until the 19th century, leaving many relics and monuments, demonstrating the influx of people from Japan and Korea.

5.3.3 The southern routes

The southern routes have a strong connection with "water" transportation (Figure 10). The routes connect the capital city Luoyang, via China's Grand Canal, passing through Kaifeng, Suzhou, Tongji, Huai'an, Yangzhou, Suzhou, and then branches to Shanghai, or Hangzhou and Ningbo. At the coast these ports connect the route with the broader East Asian maritime routes to Korea and Japan, but also south to Southeast Asia and more widely.

The Chinese assessment identified 23 potential sites along this route, reflecting a variety of attributes:

- The remains of canal transport facilities: the Grand Canal, a network of waterways across the country built by Emperor Yang of Sui Dynasty (r. 604–617 CE), flourished during the Tang Dynasty (start 618 CE) to Ming Dynasty (end 1644 CE).
- Porcelain kilns, which produced export goods, largely through the Maritime Silk Road.
- Sites that reflect religious and cultural exchanges between Buddhism and Islam.

Among the documents that record Japanese and Korean envoys to China, and Buddhism interactions during the periods after the Tang Dynasty, many mention the journeys to the Chinese capital via the Grand Canal. They also refer to cultural and academic exchanges in the coastal areas.

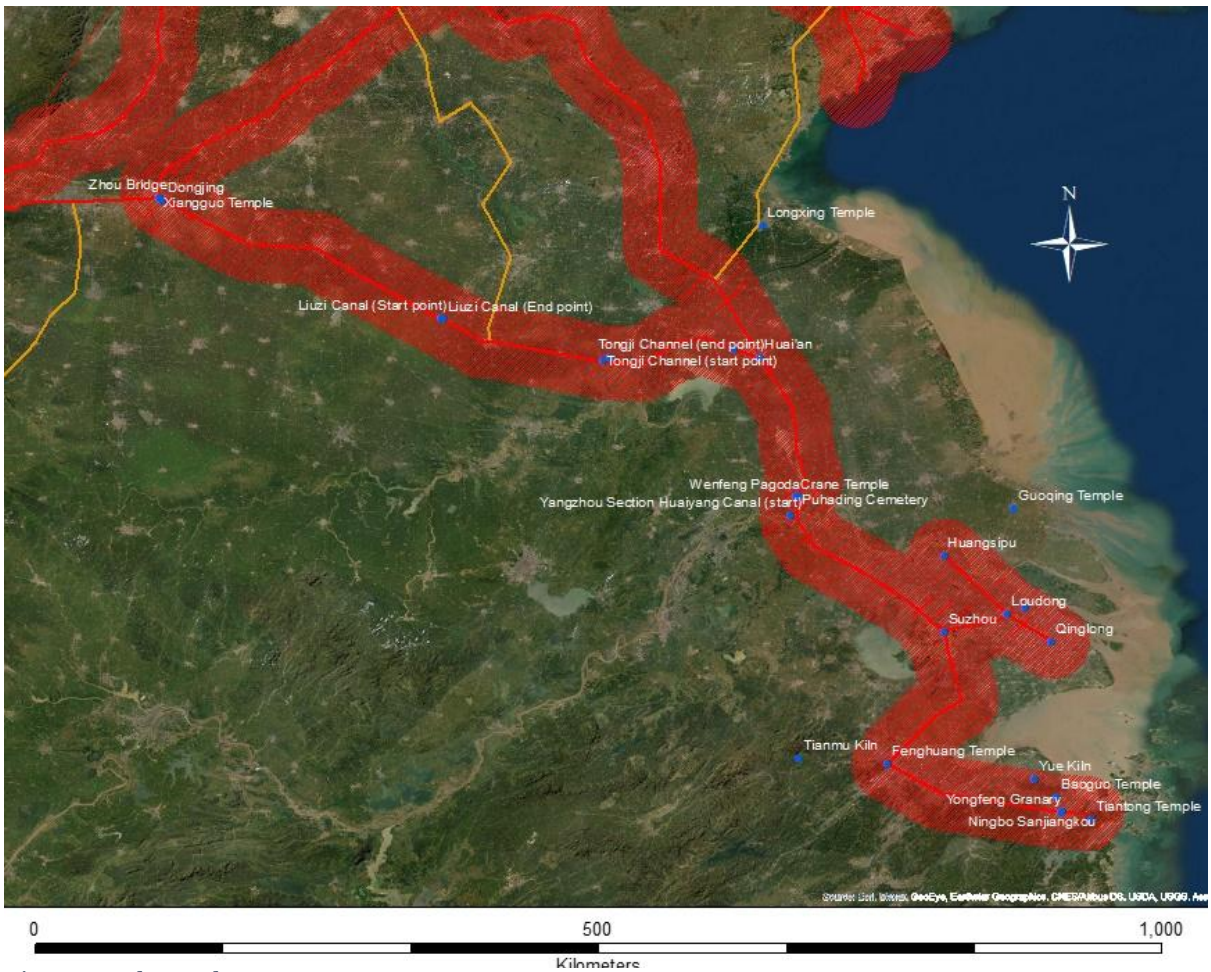

Figure 10. The southern route.

5.4 Korean Peninsula

Note: the identification of sites in modern-day Democratic People's Republic of Korea (DPRK) solely relies on secondary sources. This enables an understanding of the key routes in this area, but while major nodes are identified, we currently lack the identification of smaller sites.

A number of major polities existed within the Korean Peninsula during the period of our study (for an overview, see Barnes 2015). The principal were:

- Wiman Joseon (194-108 BCE)
- Proto-Three Kingdoms period (108-57 BCE)
    - Buyeo, Goguryeo, Okjeo, Dongye, and other minor states
    - The Four Commanderies of Han, in north of the Korean Peninsula, which comprised the Lelang Commandery (108 BCE - 313 CE), Lintun Commandery (107 BCE - 82 CE), Xuantu Commandery (107 BCE - 302 CE), and the Zhenfan Commandery (107 - 82 BCE)
- Three Kingdoms (57 BCE - 668 CE), which included:
    - Goguryeo (37 BCE - 668 CE)
    - Baekje (18 BCE - 660 CE)
    - Silla (57 BCE - 668 CE)
    - Gaya confederacy (42-562 CE)
- Unified Silla (668-935 CE)
- The Balhae (or Bohai, or Parhae) Kingdom (698–926 CE), who controlled an area from the Amur River (Heilong Jiang), to the Strait of Tartary, and the Liaodong Peninsula, in what is now part of the northern Korean Peninsula, northeast China, and the Russian Far East
- Dongdan Kingdom (926-936 CE)
- Goryeo (918-1392 CE)
- Joseon dynasty (1392-1897 CE)

There are obviously complex relationships between these empire systems and those in China and the Japanese Archipelago. Periods of strong diplomatic and social exchange were interspersed with periods of conflict. To take one example, the expansion of the Silla in the 7th century CE led to them establishing a "strategic position in the midst of the Yellow Sea [that] gradually enabled the state to play a substantial role in interregional trade by the middle of the ninth century" (McBride II 2019).

The earliest overland routes in to the peninsula from the continent connected with those discussed under the northern routes above (Section 5.3.1). Within the Korean Peninsula (Figure 11), the routes from Dandong, crossed the Yalu River, and extended southward to Pyongyang. This was a major city, the capital of two ancient Korean kingdoms, including the Goguryeo, and served as the secondary capital for the Goryeo. It was an important commercial and cultural centre, situated on the Taedong River, which provided access to the sea some 50 km to the west. As with many early cities, river ports were often easier to develop and protect. Overland routes also connected it with Nanpo, downriver. In 676 CE, it was captured by the Silla, and became the border between Silla and Balhae (Bohai) to the north, but it continued to function as an important provincial centre.

South of this, the main routes skirted the various mountain chains where possible, heading to Kaesŏng (capital city of the Goryeo between 918-1392 CE), and then to Seoul, another major river port city on the Hangang River.

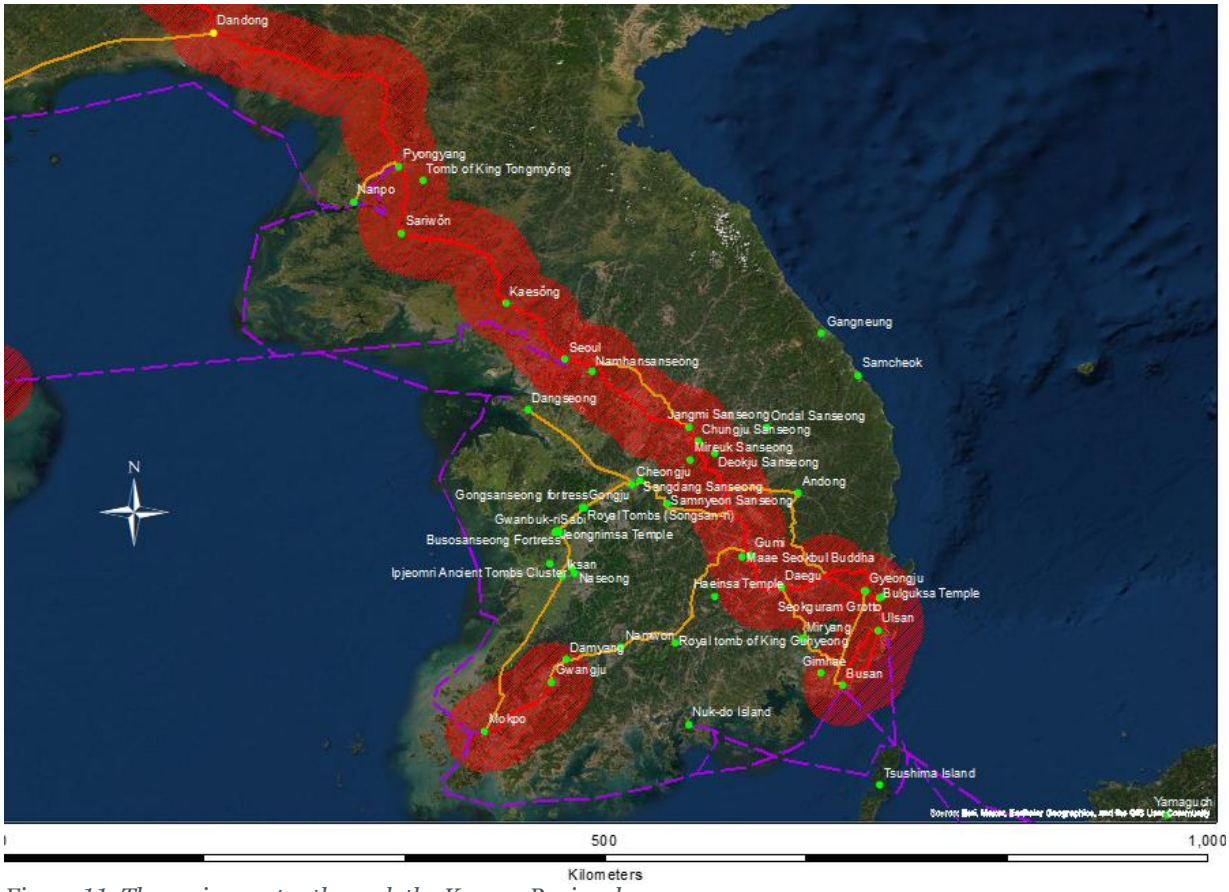

Figure 11. The major routes through the Korean Peninsula.

In a mountainous region, 25 km southeast of Seoul, is the World Heritage Site of Namhansanseong, designed as an emergency capital for the Joseon dynasty (1392-1910 CE). Built and defended by Buddhist monk-soldiers, it could accommodate 4,000 people and fulfilled important administrative and military functions. Its earliest remains date from the 7th century CE, but it was rebuilt several times.

Further south, a variety of routes wind through the central and eastern mountains (Figure 11), many guarded by a variety of mountain fortresses, such as Deokju Sanseong, Chungju Sanseong, Jangmi Sanseong, and Joryeong Gwanmun (all on the current World Heritage tentative list). These defensive facilities linked the routes between the Hangang River and the Nakdong River, important transport routes themselves (see below).

In the south of the peninsula there are multiple routes, connecting with the major historic cities of Daegu, Gimhae, and Gyeongju, and the crucial ports of Ulsan and Busan. In the south and west, the links between the important port city of Mokpo, which rose to prominence in the early era of the three Han confederacies, and continued to be a major point of linkage for the region with the wider east Asian sphere (Figure 12).

Maritime coastal routes around the Korean Peninsula were evidently important from the earliest times of our study period. The routes to and from the Japanese Archipelago are discussed below, but the routes around the coast to mainland China were also very significant (Figure 12). Those in the north, from Pyongyang and Nanpo, those from Seoul and the coastal areas to the west, in part controlled by the fortress at Dangseong, and those hugging the coast from the south, including Mokpo, were all significant. It is important to note that many of these were also based around inland river systems, such as the Taedong and Hangang.

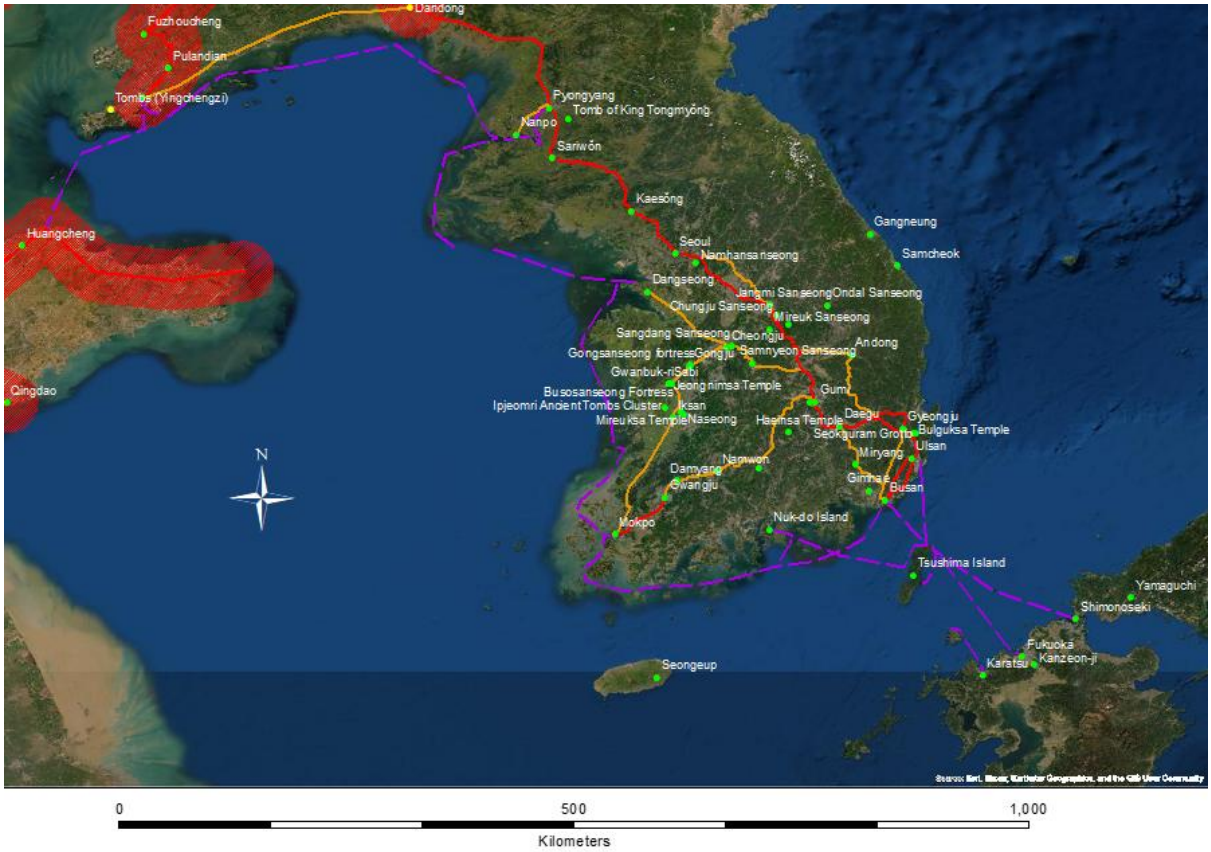

Figure 12. The Korean Peninsula showing early overland and coastal routes.

The sea routes between the Korean Peninsula and China gradually expanded as ship technology and navigation developed. Some of these are discussed below, but the very useful *Chinese Envoy's Record of Koryo*, by Xu Jing in 1123 CE, also emphasises the scale of maritime contact (Yoshio 2010, 67).

5.5 Japanese Archipelago

Obviously, sea routes are crucial to the connectivity within the Japanese Archipelago, and between overland routes in Japan and those of the East Asian mainland. Early sea routes are likely to have been largely coastal (Figure 13). Archaeological and historic data suggest that the main connection between the southern Korean Peninsula and the Japanese Archipelago was to north-western Kyūshū, via the Tsushima straits, and Iki Islands (Habu 2010, 165; Kimura 2016b, 124). On Iki Island, the Haru-no-tsuji site has yielded ceramics from Samhan and Lelang, which connects it with Nuk-do Island, on the southern coast of the Korean Peninsula (Barnes 2015, 327).

From the 1st century BCE northern Kyūshū acted as a gateway to the mainland, with several of the *guo* (political units) maintaining links with the early Han court (Tsonoda and Goodrich 1951, 1). Two of these, Na and Ito, were "important locations acting as focal points for trading networks between the Peninsula and Islands" (Barnes 2015, 326). There were two main port areas on the northern Kyūshū coast: the Matsuura River estuary, with the port of Karatsu (Matsurokoku), and the port of Kōrokan (later subsumed within Fukuoka) in Hakata Bay (Figure 14). The latter was probably the most important port for exchange between the Japanese Archipelago and East Asian mainland until at least the 12th century CE.

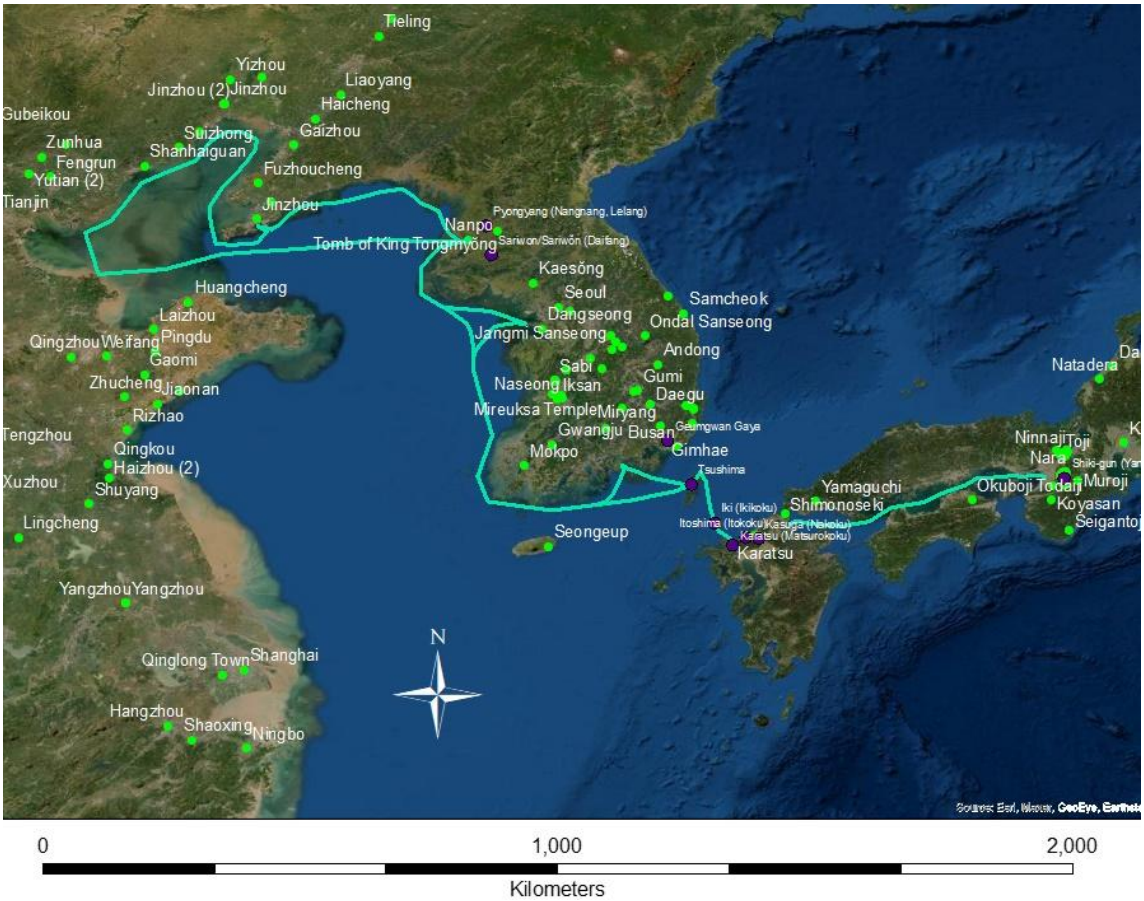

Figure 13. 3rd century CE: suggested sea routes (largely coastal) and through the Inland Sea, based on the Gishi Wajinden (Yamauchi 2021).

Figure 14. The north Kyūshū coast, showing the major ports of Karatsu (Matsurokoku) and Kōrokan. Sites in purple from Gishi_Wajinden_3rd_century_SITES, and those in brown from all_5th-13th_century (Yamauchi 2021).

The network of communication extended from the north Kyūshū coast through many significant sites that were positioned "as nodes in communication networks, specifically at mountain passes and crossroads" (Barnes 2015, 328) (Figure 14). Sugu-Okamoto (Kasuga), a bronze production centre in the Fukuoka Plain, for example, was a "prominent mediator in the emergent network" (Mizoguchi 2013, 169).

Perhaps the most important aspect of the route was its extension eastwards, along the north side of the Inland Sea, to connect, via numerous way stations (駅/*noumaya*), to the Nara Basin, "with an eastern outlet through the mountains to the Pacific coast" (Barnes 2015, 351). By the 7th-8th centuries CE there is detailed evidence for these overland staging posts/small towns, and during the 8th century CE the new provincial capitals were connected to the capital at Nara (Heijo) by a system of trunk roads (*dō*) (Figure 15 & Figure 16). These remained "the main arteries through the Japanese Islands" until the modern era (Barnes 2015, 374). The *dō* comprised seven named routes, part of the Gokishichidō ('five provinces and seven circuits'), established during the Asuka period (538–710 CE). The seven were (Titsign 1834, 57-66):

- Tōkaidō (running east along Japan's Pacific coast)
- Tōsandō (northeast through the Japanese mountains)
- Hokurikudō (northeast along the East Sea coast)
- San'indō (west along the East Sea coast)
- San'yōdō (west along the northern side of the Inland Sea)
- Nankaidō (south to the Kii Peninsula and the islands of Awaji and Shikoku)
- Saikaidō (Kyūshū)

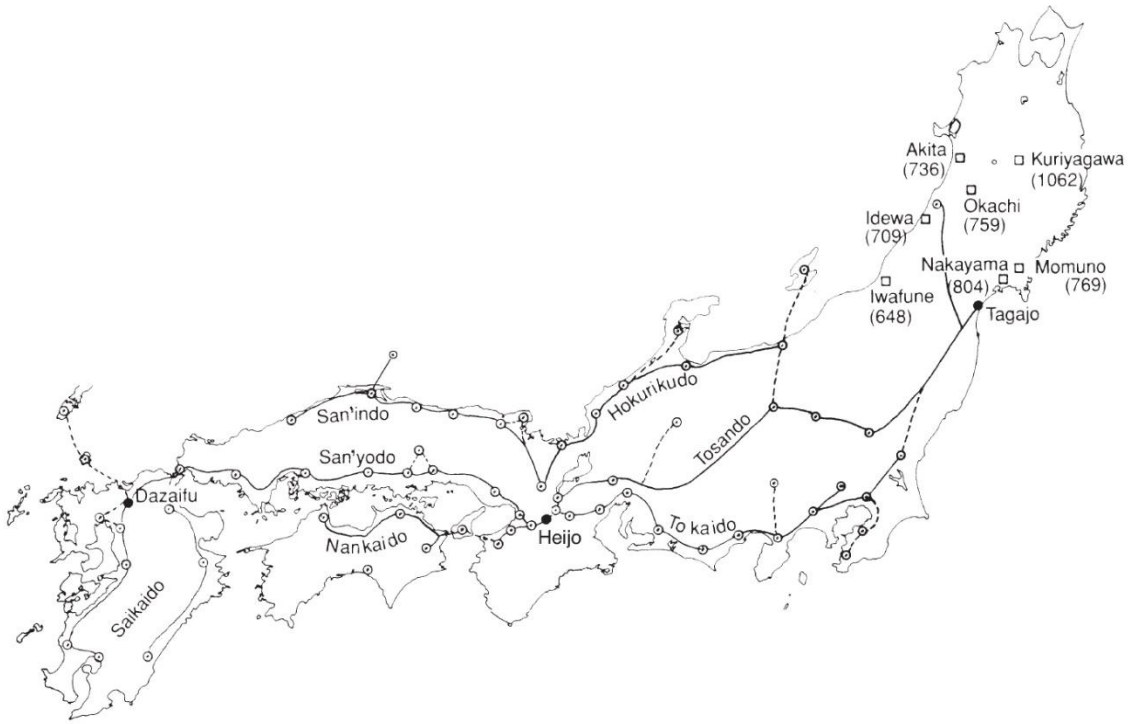

Figure 15. The dō road system passing through provincial capitals in Japan (Barnes 2015, Fig. 15.9, 375).

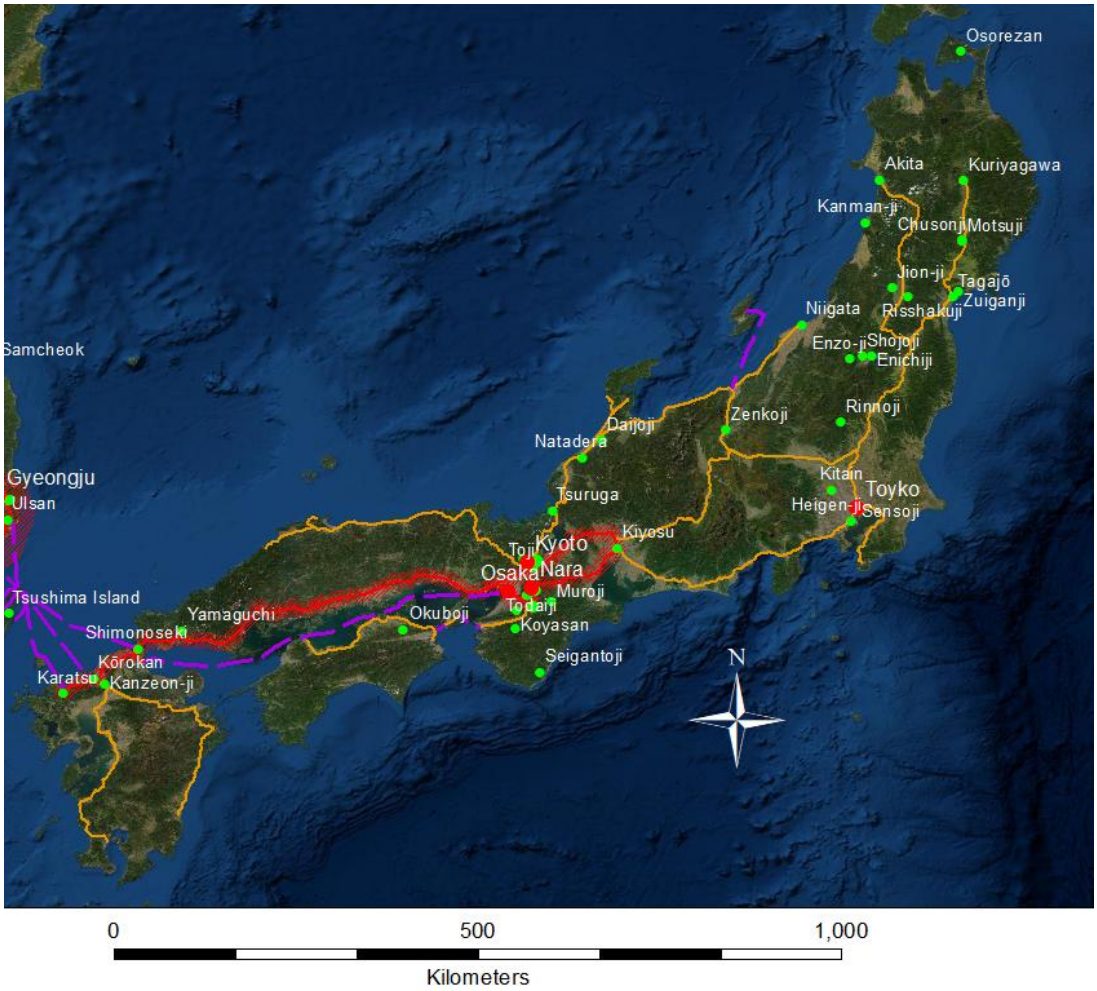

Figure 16. The principal routes and corridors in Japan, based on the dō road system passing through provincial capitals in Japan (after Barnes 2015, Fig. 15.9, 375).

Gina Barnes' excellent map (Figure 15) was amplified by the Japanese submission (Yamauchi 2021) to include the location of the *noumaya* and other significant sites along the vital *corridor* north of the Inland Sea, linking the ports of northern Kyūshū with the capitals of Nara, and then later, Kyoto (Figure 17).

The overland routes within the Japanese Archipelago were obviously heavily influenced by the natural topography, with extensive mountainous areas dictating the routes (Figure 18). For this study, the buffer for the *corridor* north on the Inland Sea was reduced from 30 km to 10 km, as the former was too extensive for this environment.

Figure 17. Corridor of movement from northern Kyūshū ports, along the northern side of the Inland Sea, via numerous way stations/small towns, to the Nara Basin. The suggested 7-8th century CE sites, with routes through the Inland Sea (based on Yamauchi 2021).

Figure 18. The Asahina kiridoshi (Asahina pass) on the Kamakura Kaidō (© Aimaimyi Creative Commons Attribution-Share Alike 3.0).

There were several other important road systems whose infrastructure was in part managed, or supported, by the state over time. During the Edo period (1603 CE onwards) there were five well documented Kaidō (road systems) from Edo:

- Tōkaidō to Kyoto along the coastline
- Nakasendō to Kyoto through the mountains
- Kōshū Kaidō to Kōfu
- Ōshū Kaidō to Shirakawa and northern Japan
- Nikkō Kaidō to Nikkō

However, many of these had earlier antecedents. The Nakasendō system, which comprised 69 way stations connecting Edo with Kyoto, evolved over time: for example, the way point Mitake-juku, one of the way stations on the Nakasendō, developed much earlier as a temple town outside the gates of the Temple of Gankō-ji (founded by the Tendai Buddhist Saichō, in 815 CE), and was part of the much earlier Tōsandō network that connected the provincial capitals of the provinces.

Gradually, as ship technologies and navigation improved, the scale of open ocean crossings increased, and wider connectivity from the Japanese Archipelago developed. Habu (2010, 161) suggests four main routes from the archipelago to the continental mainland, which accords with the Japanese teams' suggestions (Yamauchi 2021) (Figure 19):

- A northern route to the present-day Khabarovsk Krai (Russia) via Sakhalin Island
- A north-eastern route to Kamchatka via the Kuril Islands
- A north-western Kyūshū route to the Korean Peninsula via Tsushima and Iki Islands
- A southern route to Taiwan and south China via the Ryūkyū Islands

The ships for the *Kentoshi*, the Japanese envoys to China (659-838 CE), for example, are described as following three sea routes (Yoshio 2010, 67) (Figure 19):

1) A northern course: Hataka, to Iki, to Tsushima, to the southern coast of the Korean Peninsula, to Bo Hai, to Dengzhou, to Laizhou (China); used mainly during the 7th century CE.
2) The southern islands course: Hakata, to Satsuma, to Oshima, to Okinawa, to Yaeyama Islands, to the narrow seas in the East China Sea, to Chinese continent; used mainly during the 8th century CE.
3) The southern course: Hakata, to Goto Islands, to Yangzhou (China); used mainly from the 8th to 9th centuries CE onwards. However, the chronology of this route is disputed, and it may have been fully operational until after the Ryūkyū Kingdom was established (1429 CE).

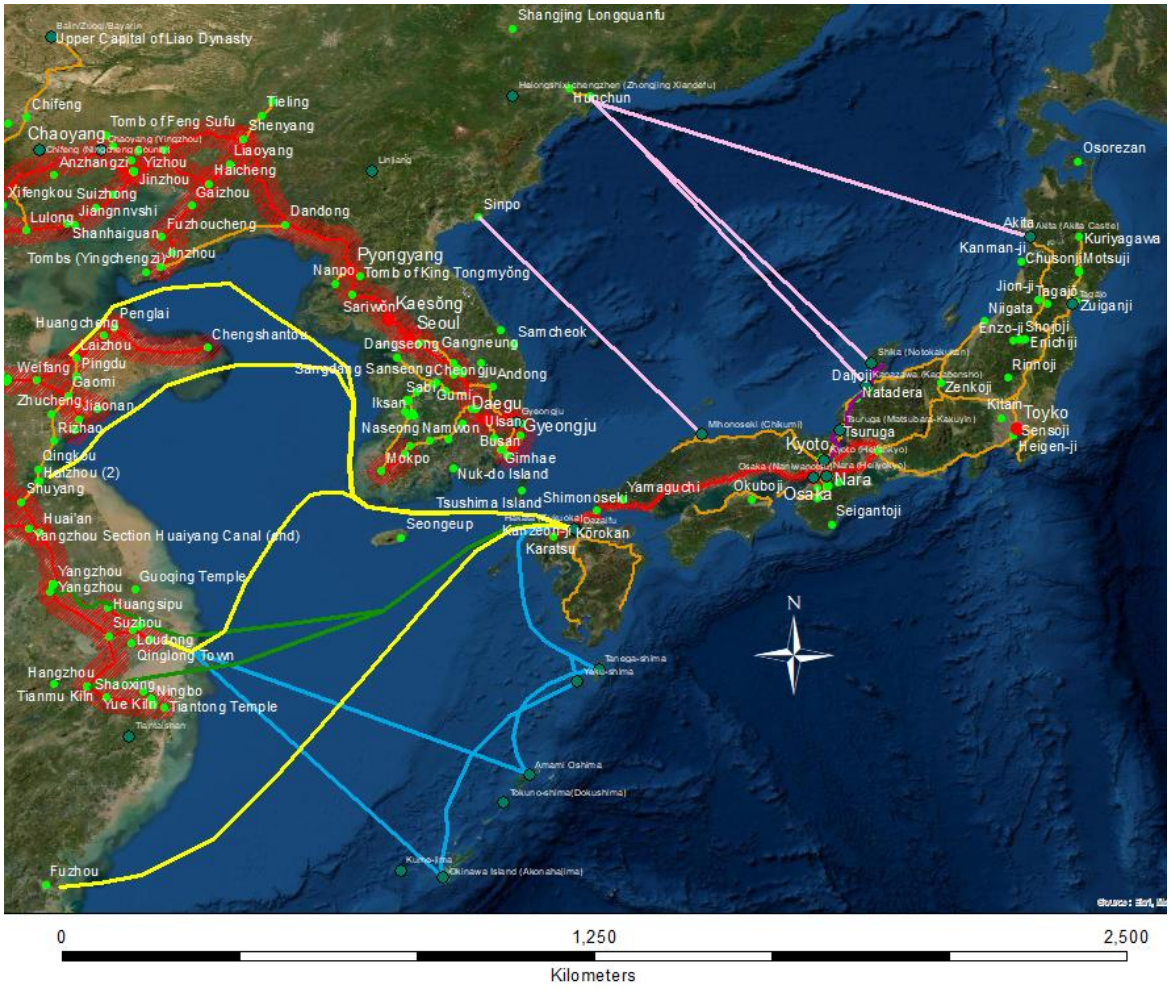

Figure 19. The developing sea routes of the 8th-9th centuries CE (based on Yamauchi 2021). Yellow represent the earlier, largely coastal routes, developing to longer-distance open water routes; Dark green the direct routes between the river ports of central east-coast China and Japan; Blue the Ryūkyū Islands network to both the main Japanese islands and the eastern coast of China; Pink the network of links between the north coast of the Japanese Archipelago and the coast of modern-day North Korea and the Russian Far East.

Two *nitto-guho-so* (priests who travelled to Tang China to study Buddhism), provide additional information:

- En-nin (838 CE) took the southern course: starting at Ojikajima Island (one of the Goto Islands), to Kugang, Rudong, Jiangu (China). The journey took 10 days, and he returned to Japan using the northern course, travelling from China to Hakata in 29 days.
- Enchin (853 CE) also took the northern course back to Japan. Going to China he was meant to take the southern course, from the Goto Islands, but was diverted by northern winds that took the ship to north-western Taiwan, eventually arriving in Fuzhou (China) after a month (Yoshio 2010, 67).

Trade routes between Song dynasty China and the Japanese Archipelago, between the late 10th and 13th centuries, are described as:

- January-March/April and September-November: Ships from Hakata to Mingzhou via the Goto Islands, and to Taizhou and elsewhere in Jiangsu and Zhejiang Provinces, China.
- May-August: ships from Jiangsu and Zhejiang to Japan.

- February-July and September-November (dependent on lack of strong seasonal winds from the northwest): ships sailed to Koryo, NKP, from Hakata and other ports in Japan via Iki and Tsushima.
- Likely July-September (when seasonal winds from the northwest were stronger): ships from Koryo to Japan.

The *Kenminshi missions* from Japan to Ming China (1401-1549 CE) mostly "followed a course starting from Hakata, entering the ocean via the Goto Islands and then heading straight for the Bay of Hangzhou or the mouth of the Yangtze, and sailed on the same route back when returning to Japan … There was another course from Sakai (south of present Osaka) to Ningbo via the southern sea route off Tosa (present Kochi Prefecture, Shikoku), and it is said that these Japanese missions waited for 'strong winds' " (Yoshio 2010, 68). Similar routes to the *Kenminshi* were also probably used by Japanese pirates attacking the Chinese coast (*ibid*).

Shin Sukchi's *Haedong chegukki* [Records of all lands to the east of the sea] (1471 CE) listed various sailing routes, stating that "…traders sailing between Ryūkyū and Korea broke their long and hazardous journey at intermediate ports in Tsushima, Iki, and the western Kyushu islands, in order to repair the damages on their ships, rest their crew, and take provision on board" (Hong-Schunka 2005, 148). The journey from Fujian to Ryūkyū took around three days, depending on weather conditions.

In conclusion, Junko Habu (2010) postulates that ocean-going boats were common as early as the Kofun period (300 - 538 CE), and this led to the Japanese Islands becoming actively integrated into the east Asian economic and political spheres. He argues that this created differential access to "goods, information and political allies from overseas…goods consisted of both practical and prestige items, such as bronze tools and iron, while the information included new technological skills, religions, and political situations" (Habu 2010, 167). He emphasises the selective control over water transport technology in the rise of the Yamato State, highlighting it as a factor in the rapid social, political, and economic change during the Late Yayoi Period: "It is no coincidence that the active integration of the Japanese Islands into the East Asian economic and political spheres occurred together with the evidence of semi-composite boats during the Yayoi and Kofun periods" (Habu 2010, 167).

6 Evidence of impact

6.1 Introduction

There are many detailed accounts of the development and interaction of polities in East Asia and beyond, from the 2nd century BCE to the 16th century CE, the focus of this study. In English, the best overview is Gina Barnes' (2015) masterful review, but there is an extensive range of source material (see the bibliography). This section considers the most important changes, especially when these have direct implications for the scale of exchange and cultural interaction. A key issue is the extent to which the evidence demonstrates an interaction within the East Asian sphere, and the extent to which it demonstrates connectivity and impact with the wider Silk Roads.

As with other parts of the Silk Roads, the balance between trade, elite exchange, and the impacts of travel and contact is central to understanding the nature of impacts within East Asia. These are often intermeshed: Aihwa Ong's work (1999), for example, discussed how travellers can be crucial transnational actors in the making of new economies, and how individual agency is crucial in the large-scale flow of people, images, and cultural forces across borders.

Generally, within the region, the analysis of material culture/commodities requires more archaeological work, including excavations that retrieve well-dated sequences, and not just from elite production and consumption sites, and technological/materials-based research. The collected volume edited by Tagliacozzo & Chang (2011) is an example of a commodity-

based approach, largely for the post-colonial era in Southeast Asia, but might serve as an interesting model for a regional study of the earlier Silk Routes in East Asia. A work of such synthesis could be very rewarding.

6.2 Diplomatic exchange and political initiatives

Interestingly, there is some evidence for contacts along the Silk Roads. At Afrasiab (Samarkand, Uzbekistan) a Sogdian wall painting dating to c. 655 CE shows several 'ambassadors' to the Sogdian court. Two of the men have been identified as being from the Goguryeo (Koguryŏ) Kingdom in Korea, based on their clothes and weapons (Grenet 2007, 13 & 16), suggesting that diplomatic exchange may have been widespread.

There is certainly considerable evidence of diplomatic missions within the region. The Chinese tributary system, for example, was a major factor in facilitating diplomacy and trade. Autonomous tributary polities sent regular envoys to China, often through very controlled routes, with envoys having to travel on specific routes and stay in allocated guesthouses on their way to and from the capital (Kauz 2005, 83). The "tributary system, as primary Chinese historical records clearly show, was not so stringent and comprehensive; for example, during the Song (960–1279) and Yuan (1279–1368) eras, tribute trade and diplomacy were deeply intertwined and extensive overseas commerce legitimized" (Zurndorfer 2016, 63).

By the 15th century CE, if not before, these tributary routes were influential in the spread of diverse commodities in the East China Sea area (Seyock 2005, 101).

Takeshi Hamashita noted that in the 14th-17th centuries CE "under the tribute-envoy system, a tributary state sent periodic tribute missions to the Chinese capital, and each time the ruler of a tributary state changed, the Chinese emperor dispatched an envoy to officially recognize the new ruler. This tributary relationship was at the same time a political, economic, and trade relationship. … This tribute trade was not limited to Chinese merchants from East and Southeast Asia; Indian, Muslim, and European merchants also participated, confirming the link among coastal ports" (Hamashita 2011, 125).

The AVS (2021) report noted that "during Mongol (Yuan) rule, free trade and commercial activities ensured the flow of new items, ideas, and technologies into Korea". Historical evidence in the *Chosŏn wangjo shillokk* (*Veritable records of the Chosŏn Dynasty*) and *Yoktae poan* (*Precious documents of successive generations*) illustrates diplomatic relations but also highlights the scale of exchange of goods. The *shillokk* details c. 80 products sent from Chosŏn Korea to Ryūkyū (Hong-Schunka 2005, 128-35). Cotton, for example, was a major Chosŏn export in the 15th century CE, when both Ryūkyū and Japan were not producing (Hong-Schunka 2005, 136). Ryūkyū acted as an "international entrepôt" (Hong-Schunka 2005, 125), sending 89 products to the Korean Peninsula from elsewhere in Asia, as well as the Middle East and Africa - first through maritime envoys and later via Beijing (Hong-Schunka 2005, 141). Vessels sailing from Ryūkyū to the Korean Peninsula were Japanese owned and operated (Hong-Schunka 2005, 148).

Private commerce, however, was banned by a Chosŏn policy introduced in 1494 CE, to encourage domestic agricultural production. This suggests that the Chosŏn saw trade as primarily "a political and diplomatic act demonstrating goodwill, rather than a commercial transaction motivated by the promise of maximal profits" (Hong-Schunka 2005, 152).

6.3 Postal systems in China and Korea

Kim Tschung-Sun (2016) has suggested that the Mongol Yam postal system was an important tool for connectivity in the Eastern Silk Roads. The Yuan Dynasty (1271–1368 CE), for example, was used to connecting with the vassal state of Gyeongju who controlled the Korean Peninsula at this time (1270–1356 CE). Relay stations, around 30-60 km apart, provided food, shelter, and spare horses for army messengers, able to cover c. 200 km per day (Weatherford 2004). The system was used to speed up the process of information and intelligence.

Kim (2016) argues that the Yeokcham system, which was in operation in the KP during the Unified Silla period, or even earlier, should be viewed as a prototype for the Mongolian Yam. The Silla were operating 22 postal routes and 525 stations under the Yeokcham system with Gaegyeong (Kaesong) as the centre. The *Samguk Sagi* (487) records that the "postal service" ran in every direction, and that office workers were ordered to repair the roads. This allowed for a comprehensive distribution network, feeding smaller businesses, such as accommodation providers and warehouses along the way. It also facilitated safe passage, acting as a transportation network for merchants.

Tribute envoys to Ming China were obliged to use the postal network (*yichuan*) as the Chinese administration took responsibility for the journey to the capital (Kauz 2005, 75, 88). A decree issued in 1368 CE stated that "at all places water and horse stations (*shui mazhan*), furthermore transport stations (*diyunsuo*) and express post houses are to be established. All stations on land are 60 or 80 li [apart], they are responsible for forwarding envoys (*shike*), messengers with military matters, and for transmitting military essentials. They shall use horses, donkeys, boats, carts and servants…" (cited in Kauz 2005, 82).

6.4 Tomb design, and elite grave and ritual goods

Several features indicate the spread of elite burial practices and customs throughout the region, suggesting a degree of interconnectivity in cultural practices. In the Late Han period a new form of corridor-chamber tomb emerged, often accompanied by painted decoration, occasionally on a plaster base. These are very similar to the Goguryeo (Koguryŏ) mural tombs, in the Lelang commandery area near modern Pyongyang, which were constructed with the same corridor-chamber style (Barnes 2015, 355-6). In the Anak tomb #3, the occupant appears to have been a Han émigré, perhaps a Goguryeo king: importantly, this introduction "transforms behaviours and beliefs relating to burial and the afterlife" (Barnes 2015, 355).

The Silla royal tombs also reflect the influence of Han-style tombs, with wooden chambers and an earthen cover, which was combined with the mounded cobbles used in early Goguryeo (Koguryŏ) tombs (Barnes 2015, 340). The Silla royal tomb stone-piled burial structures have been widely accepted as a northern import. The resource-heavy requirements of such tombs signifying the high status of the individuals buried, and their ability to direct the acquisition and use of resources (Barnes 2004, 34). In Late Yayoi period (100 BCE - 250 CE) mounded burials also appear in Japan, showing Han-type tomb adoption and adaptation, perhaps spread from contact with the Silla (Barnes 2015, 343).

In the Late Yayoi period (100 BCE - 250 CE) mounded burials also appear in Japan, showing Han-type tomb adoption and adaptation, perhaps spread from contact with the Silla (Barnes 2015, 343). The influence of the Goguryeo mural tombs can be seen in north Kyūshū, with local adaptation (Barnes 2015, 359). In the late 7th or early 8th century CE the mural tomb Takamatsu-zuka was constructed in Asuka, in the Nara basin, with clear influences from the Tang in the painting of the Directional Deities. It has been suggested that it may have been painted by Tang artists, but certainly it "illustrate[s] the degree to which Yamato looked to Tang for its high culture, which transformed the nature of court society in the last century of the mounded tomb culture" (Barnes 2015, 357).

Perhaps more significantly in terms of the Silk Roads, some of the best evidence of long-distance contacts come from grave goods. These come from tombs that reflect a society that had harnessed the skills of craft specialists for elite goods production, with prestige objects acquired through long-distance trade networks (Barnes 2015, 22). The "elite participated in a distinct material sub-culture not accessible to the general population" (Barnes 2001, 8).

In the **Daereungwon Ancient Tomb Complex**, Gyeongju[5], artifacts from the tombs show connections to the Silk Roads network. A *sword with gold inlay* from King Michu's

[5] Cultural Heritage Administration https://tinyurl.com/2p8wpdvp

(Figure 20) tumulus[6], excavated in 1973. The sword scabbard is short, with a pattern inlay: this type of scabbard was also discovered in tombs in Siberia and Central Asia[7]. A *glass ewer and cups* from the **South Mound of Tomb No.98** (Hwangnamdae-chong)[8], were found in a wooden box. The ewer's shape, with a unique curved delicate neck and horn-styled coaster, resembles those of Persian origin. The cups, with blue and light green colours and decorative tubes around the mouth, are thought to be of the same origin. Additionally, some artifacts, such as a blue glass cup and shell ladle (made of *Turbo marmoratus*) demonstrate exchange with Southeast Asia and Okinawa, again perhaps emphasising the maritime connections.

Figure 20. Left sword with gold inlay from King Michu's tumulus; centre glass ewer from the South Mound of Tomb No.98; right blue glass cup from Cheonmachong Tomb (all images Cultural Heritage Administration of the Republic of Korea).

At Gyeongju the **Royal Tomb of King Wonseongwang**[9] (r.785-798 CE), the 38th King of the Silla Dynasty, has a pair of stone pillars, standing in front of the tomb, depicting Arabian-looking military figures. Similarly, in the **Tomb of King Heungdeok** at Gyeongju[10], two stone figurines, depicting male military officials with full beard and turbans, are thought to have facial characteristics of the Central Asian region.

The **Tomb of King Muryeong** and his queen, who ruled the Baekje from 501 to 523 CE, is based on southern Chinese styles, but also incorporates Baekje elements to create a Korean-style tomb. Korean elements include the arched shape of the chamber and the brick pattern. The king was placed in the east part of the tomb, with the queen in the west, which follows a Chinese practice. The construction of the tomb suggests that the Baekje king was aware of southern Chinese practice at the time, and incorporated elements of this in his tomb, whilst also maintaining a distinctive style. Objects in the tomb included Chinese celadon jars.

The **Bokcheon-Dong Tombs** produced earthenware rhyton cups from the Silla Three Kingdoms period (5th century CE) (Dong-A University Museum), which seem to be clear copies of Parthian vessels, from significantly earlier, in Central and Western Asia.

The **Tomb of King Tongmyŏng (Dongmyeong)** (r. 501 to 523 CE) has impressive murals of hunting scenes, including one depicting a "Parthian Shot" (Figure 21); suggesting knowledge of this Central-Asian archery technique.

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[6] Cultural Heritage Administration https://tinyurl.com/en7etbzy
[7] The National Museum of Korea (2008) *Hwanggeumui Jeguk Pereusia [Persia the Golden Empire]*. Seoul: The National Museum of Korea
[8] Cultural Heritage Administration https://tinyurl.com/26nrcbhv
[9] Cultural Heritage Administration https://tinyurl.com/3bv773wu
[10] Cultural Heritage Administration https://tinyurl.com/yw8ef2hy

Figure 21. Wall-painting of a hunting scene from the Tomb of Muyong Ch'ong (AVS 2021).

The various material excavated from the ancient tombs in Gyeongju, the capital of Silla Kingdom (57 BCE to 935 CE), demonstrates that elite cultural exchange was far reaching. However, whether this was 'direct exchange', perhaps via the MSR, or through contacts with China, where these forms of material culture were also present, is debatable.

In the Japanese Archipelago the earliest imported western Asian material are Sasanian glass vessels, dated to between the 5th to 7th centuries CE, which are known from five sites, mainly in the area of the ancient capital in southern Honshū (Priestman 2016, 10-11). Examples of Sasanian glass vessels include (loc cit):

- The imperial Shōsōin repository of Tōdi-ji temple in Nara dated to between the 5th-6th centuries CE
- Tumulus in the Hibikino-shi area east of Osaka
- Tumulus in the Niizawa Senzuka area of Kashihara City in southern Nara Prefecture
- Kamigamo shrine in Kyōto, founded in 678 CE, one of the earliest Shinto shrines in Japan
- The Munakata shrine on Okinoshima Island, an important spiritual centre of the Munakata clan between the 4th - 10th centuries CE, where rituals for safe navigation were performed (Cultural Properties Department 2016, 71).

At the port of Kōrokan in Hakata Bay, north Kyūshū, there is evidence for huge quantities of East Asian ceramic imports from the 9th century CE onwards. Most were common export wares from China and Korea, including both high-quality pieces and trade-quality export wares, such as "Yue Ware, Changsha, Xing White Ware, other contemporary White Wares from northern and southern China, 'Dusun' bowls and jars from Guangdong Province, some black glazed Silla period stoneware jars from Korea, and small amounts of Sanci Ware decorated with combinations of green, white, yellow, brown and blue" (Priestman 2016, 15). A wide range of goods were imported: for example, iron ingots from southern Korea, particularly from the Kaya region near the mouth of the Naktong River (Batten 2006, 16-17). All of these suggest a scale of trade within the East Asian sphere.

Small quantities of Islamic ceramics have also been discovered in the Japanese Archipelago, the majority from sites around Hakata Bay in northwest Kyūshū (Priestman 2016, 12). Overall, there are c. 80 non-joining sherds from at least 10 different sites in Japan (Priestman 2016, 22). These include Hakata, Tatara Komeda, and Hakozaki shrine within the Hakata Bay; Harunotuji temple complex on Iki Island; inland Dazaifu (Kanonji temple), Kurume and Chikugo Kokofu; and further inland, from the temple complex of Saidai-ji in Nara, a major temple founded in 765 CE (loc cit).

Overall, the long-distance (non-East Asian) glass and ceramic evidence suggest that these were prestige elite commodities, rather than widescale/bulk trade.

6.5 Belief systems

The movement of ideas and beliefs is vital to understanding the impact of the Silk Roads on the region. The impact of Buddhism in East Asia, transmitted to China, the Korean Peninsula and Japan through Silk Roads interactions, cannot be underestimated.

The chronology of the spread of Buddhism into East Asia, however, is still a matter of some debate. It was probably introduced to China by Silk Road traders around the late 1st century CE. It is suggested that it was then introduced into the northern Korean Peninsula, from China, in the second half of the 4th century CE. A mid-4th century tomb in the Goguryeo complex near Pyongyang (Three Kingdoms era), incorporated Buddhist motifs in its ceiling decoration. From the 6th century onwards Buddhism penetrated further into the Korean Peninsula, and it was eventually adopted as Korea's main religion.

In the Korean Peninsula, Buddhism was 'instrumental in both the consolidation of the royal authority and the centralization of government during the Three Kingdoms era' (Woo 2010, 164). James Schopf (2019) describes the significant influence Buddhism had in facilitating Silla's unification of the Korean Peninsula. The Chakravartin Buddhist King model allowed the Silla to build a powerful centralized state, with a sacred royal family, to legitimise its authority over the conquered Baekje and Kokoreyo subjects. King Jinheung (r. 540-576 CE) consolidated this power through the construction of monasteries and support for foreign monks, appointing them to positions of power. Temples, monasteries, nunneries, libraries, and schools were all built, and through them we can see the introduction of Indian, Persian, and Hellenistic artistic influences. For example, the majestic Bulguksa Temple, constructed in the Silla period (751 CE), along with its stupas, was built with influences from both Indian and Chinese designs.

Mahayana Buddhism was introduced to Japan from Korea in the mid-6th century CE (traditionally in either 538 or 552 CE), as part of a diplomatic mission that included gifts such as an image of Shakyamuni Buddha and several volumes of Buddhist text. The circulation of texts was extensive: a "Buddhist monk, Genbō (d. 746), is said to have brought 5,000 manuscripts with him from China to Japan. While that number may be an exaggeration, the surviving book catalogues from the ninth and tenth centuries do give testament to the incredible amount of imported texts available in early medieval Japan" (Hermans 2020, 542). However, immigrants from the Korean Peninsula, as well as merchants and sailors, may have introduced Buddhism independent of the court (Deal and Ruppert 2015, 18). While early Japanese Buddhism was initially strongly influenced by Chinese and Korean Buddhism, it rapidly developed; for example, Asuka Buddhism (*Asuka bukkyō*) developed after 552 CE in the Nara Basin region, through the support of the immigrant Hata clan (experts in Chinese technology), and aristocratic clans, such as the Soga (Deal and Ruppert 2015, 29-32).

It is important to recognise that the interactions within East Asian Buddhism, and indeed wider Asian Buddhism, were multidirectional. The travels of numerous Chinese and Korean scholars to the Sanskritic University of Nalanda in northern India (Hermans 2020, 542) indicate some of this cross-fertilisation. Classifying Buddhism as a world religion was a nineteenth-century Western invention (Deal and Ruppert 2015), which underrepresents the blending of beliefs, and the complexity of scholarship and doctrinal debate. This was not simple passive reception, but rather a process leading to complex fusions (loc cit; Sun 1992, 246).

The adoption of Buddhism was in part closely linked to the politics of the tribute process and the broader political context: transmission from ruler to ruler. However, Deal and Rupert emphasise the often-ignored model of transmission from person-to-person within the general population (loc cit), which is highly relevant in the context of Silk roads interactions. This model includes a consideration of "household Buddhism" in contrast to a strict focus on

"temple Buddhism" (loc cit; Como 2008). In addition, many East Asian monks travelled to Central Asia and India, and within the region: for example, Uisang, a Korean monk, travelled to Tang China in 661 CE and returned in 670 CE, founding a native school of Buddhism (Woo 2010, 210).

The spread and development of Buddhism is perhaps one of the most significant cultural legacies brought about by interactions along the Silk Roads and is strongly evident in the East Asian region. Many of the potential sites identified by the State Parties reflect this. In the Republic of Korea, for example, out of the 230 *National Treasures* nearly half are Buddhist: 37 statues, 25 pagodas, 15 stupas and lanterns, paintings, bells, copies of Sutras, and 14 buildings. Amongst the notable Sutras, as recorded by Yang (2017), this includes the *Tripitaka Koreana*, the whole of the Buddhist Scriptures carved onto 81,350 wooden printing blocks, which has been housed at Haeinsa Temple since 1398.

Note: Obviously, the spread and interaction of other belief systems, such as Islam and Christianity, were also significant aspects of the Silk Road impacts in East Asia, and this needs to be expanded upon.

6.6 Knowledge exchange

6.6.1 Intellectual exchange

A variety of works relating to technologies and science circulated through the region. For example, Dorotheus' *Carmen Astrologicum* (1st century CE) seems to have, at least in part, "reached Chang'an in the ninth century— possibly through an intermediary translation that was transported by Manichean or Nestorian migrants— where they were incorporated into a Chinese horoscopic treatise known as the *Duli yusi jing*. Probably within the same century, Buddhist monks brought a manuscript of the *Yusi Jing* to Japan, where it would continue to be studied until the thirteenth century" (Hermans 2020, 546).

In the late 600s CE literacy significantly increased in Japan, "when orthography employing Chinese characters was first utilized on a broad scale" (Bender 2020, 111).

6.6.2 Land organisation and urban planning

The planning of urban areas demonstrates the scale of contact and influence across the East Asian region. For example, the territorial system in 2nd century CE Goguryeo was based on the Han administration system (nested prefectures (*zhou*) and districts (*xian*)). This system was then used by the Baekje at Hanseong, although it was not implemented at the later Baekje capital at Ungjin, which saw the readoption of the Chinese directional system instead (Barnes 2015, 364).

Similarly, the Yamato state adapted the territorial system from the Korean Peninsula, and modified it into their own *bu* unit system, where the occupants of the unit provide tribute to the Yamato court (Barnes 2015, 364). Yamato also adopted the gridded city pattern from the KP, as well as "positioning based on Chinese geomantic principles", for the development of Fujiwara (completed 694 CE), which was implemented despite the topographic challenges of the Nara Basin (Barnes 2015, 373).

In the 8th century CE, Japan also adopted and adapted the Sui-Tang 'equal field' system as the *jori* grid system for agricultural and capital land division (Barnes 2015, 377).

6.7 Additional evidence in historical accounts

The ***Samguk Sagi***, the official chronicle of the Three Kingdoms era, compiled in 1145 CE, provides a detailed account of commercial items that were sold by Middle Eastern merchants and widely used in Silla society (Lee 1997). This emphasises the wider contacts across the Silk Routes, although especially via maritime connections.

Kitab al-Maslik wa'l-Mamalik *(The book of postal routes and kingdoms)*, written by a Muslim geographer Ibn Khurradādhbih (d. between 885 and 912 CE). It states that the

“place where across the far edge of China has a great deal of mountains and kings, and this place is very Shilla. The country has lots of gold, and if Muslims entered into there once, Shilla's fascination made them settle and do not know after it" (cited in Kanso 1988, 11-2). The Kitab also states that ginseng, gold and silver tools, silk and pottery were popular exports from Silla (loc cit).

Kūshnāma (Persian: کوش نامه), is a Persian epic poem and part of a mythical history of Iran written by Ḥakim Iranshān (or Irānshāh) b. Abu'l-Khayr between the years 1108-1111 CE. Hee Soo Lee (2010) noted that it contained descriptions of the Silla Kingdom, supposedly between the 6th - 8th centuries CE. Lee notes at least 3914 couplets dealing with Silla, covering China-Iran-Silla relations, military activities between Silla and Iran, Iranian migration to Silla, and even a story about a marriage between an Iranian prince and a Silla princess (AVS 2021).

6.8 Other evidence

As Appadurai (1986) argued, the ‘total trajectory’ of commodities - from production, through exchange and distribution, to eventual consumption - involves different stages, and is enmeshed in complex intersections of economic, political, and cultural factors. There are numerous forms of material culture and intangible heritage that point to the connectivity of East Asia with the Silk Roads, and to the impact that such contacts and trade had upon societies in the region. There is more work to be done on these, but some obvious examples are:

- Silkworms, and thus silk production, seem to have reached Japan as early as 199 CE (Sun 1992, 244).
- Herbs and spices from “the Arabian Peninsula and the Western world” and “Persian carpet and the rugs made of wool” were imported to Silla.[11]
- In-Sung Kim Han (2019) argues that the Middle Eastern drink araq arrived in the Korean Peninsula, through China, with the Mongols in the 14th century CE. While the ingredients in araq and soju (the local Korean spirt) are different, the distillation process is almost the same, suggesting that it was the method of distillation what was transmitted.
- The spread of Champa rice, a quick-maturing, drought resistant rice that can allow two harvests of sixty days each per growing season, was important across the region. Probably originating from Eastern India, it spread to the Vietnamese Campa Empire in the late 10th century CE, and was then sent to Song China in the 11th century CE as part of a tribute gift (Barker 2012). Its introduction to Japan in c. 1400 CE, had a significant impact upon agricultural production, and with it the expansion of the population and the consolidation of centralised power.
- Wreck sites are increasingly providing information on the scale of material moving along the maritime routes (e.g. Sun 1992, 231).
- The expansion of markets from the 7th century CE in the Korean Peninsula testifies to the increased importance and volume of long-distance trade. In Gyeongju, for instance, new West and South Markets complimented the existing East Market, significantly expanding capacity (Woo 2010, 207-8).

7 Conclusions

Overall, despite the variability of data across the region, the scale of trade and cultural interaction across the study area is evident. Based on the current evidence several routes can be identified. However, the paucity of data in North Korea means that it has not been possible to identify the smaller sites between major nodes; often an essential component of defining Outstanding Universal Value (OUV).

[11] See https://en.unesco.org/silkroad/countries-alongside-silk-road-routes/republic-korea.

Perhaps the crucial issues are:

1) The extent to which the evidence demonstrates an interaction **within the East Asian sphere** or demonstrates connectivity and impact with the **wider Silk Roads**. As Tim Winter noted (2022, 47) there is "a broader pattern in Asia regarding how the Silk Road comes to be a narrative of intra-Asian connectivity and not just about trade between East and West. This foregrounds themes such as the movement of Buddhism and other Asian religions, as well as histories of regional exchange and exploration." These latter narratives come through very strongly in the evidence, the routes, and the sites identified by the State Parties, etc. For nominations as part of the overall land routes, it is the way these East Asian routes have the capacity to demonstrate their part in the long-distance trade that will be crucial.

2) The scale of **maritime interaction** was clearly crucial for most of the study period. While overland routes were vitally important, in connecting regions and providing access to transhipment centres, the development of riverine and coastal ports was clearly vital to trade and connectivity in the region. Many of the significant cities in the region, such as Hepu, a coastal port in southern China, were connected to a network of rivers that enabled ships to penetrate, into river systems and broader hinterlands (Xiong 2014, 1231-2). Maritime exchange between East Asia and indeed Southeast/South Asia was conducted through a very large number of regional and local ports. The complexity of understanding these networks should not be under-rated. Precisely how certain sea routes provided essential connections to important land routes, and can thus be considered as part of the land-based Silk Roads, has emerged as a key issue.

3) While the evidence highlights the importance of the routes in facilitating the spread of religions, and particularly Buddhism, what will be crucial is how the routes also display substantial physical evidence of the key trade functions of the Silk Roads[12].

The questions at the outset were:

Assess the range of archaeological site-types: there is no doubt that the region reflects a wide range of site types – temples, burial monuments, major cities, ports, market towns, fortresses, etc. They reflect a significant range of impacts of the Silk Roads, across the categories of infrastructure and outcomes. Production, always the most difficult, is partially covered by industrial/craft production in urban centres, but also by rural ceramic production centres, particularly related to maritime trade.

Assess the chronology of the archaeological sites: there were clearly impacts across the region over the full chronological span of the Silk Roads (2nd century BCE to 16th century CE). The surviving monuments and sites tend to focus on the later periods, from the c. 6th century CE onwards, but that is also a factor of survival along much of the Silk Roads. The States Parties involved in the overland Silk Roads agreed a cut-off point of the early 16th century CE (the collapse of the Timurid Empire).

Assess the connectivity of regions: the impacts of inter-regional exchange are very evident in the material collated. Long-distance exchange is perhaps most evident in elite burials, and in the goods traded.

Assess the impact of the Silk Roads on the empire systems/polities of the region: there is no doubt that exchange, and the movement of ideas, technologies, belief systems and people, had a major impact upon East Asia. Interaction clearly shaped elite cultural and material expression, and the tribute system, and wider diplomatic exchange,

[12] It is also worth noting that coastal archaeology across the region is under threat from the climate crisis and sea-level changes (for example, see Li et al. 2022). Given that coastal sites are crucial to the understanding of interaction across the region, this constitutes an important consideration in their nomination and protection.

also stimulated trade. However, exchange and movement also impacted upon the lives of the wider population, through urban planning, administrative structures, access to foodstuffs, and beliefs.

Assess the extent to which the region reflects specific responses to the Silk Roads because of distinctive geo-cultural and ecosystems: the varying ecological zones provided an important catalyst for exchange, with different productive zones.

In terms of key land routes, there are several that span the complexity of the region (Figure 22). At present, the multiple routes through central and north-eastern China link with the route running down the Korean Peninsula, although we currently lack detail of the smaller sites (way stations, forts, market towns, etc.) in the north of the peninsula. Similarly, the route from the Nara Basin to the north coast of Kyūshū links, via the maritime routes, to the Korean Peninsula and the east coast of China. There are also links, via maritime routes, between China, Korea, and Japan.

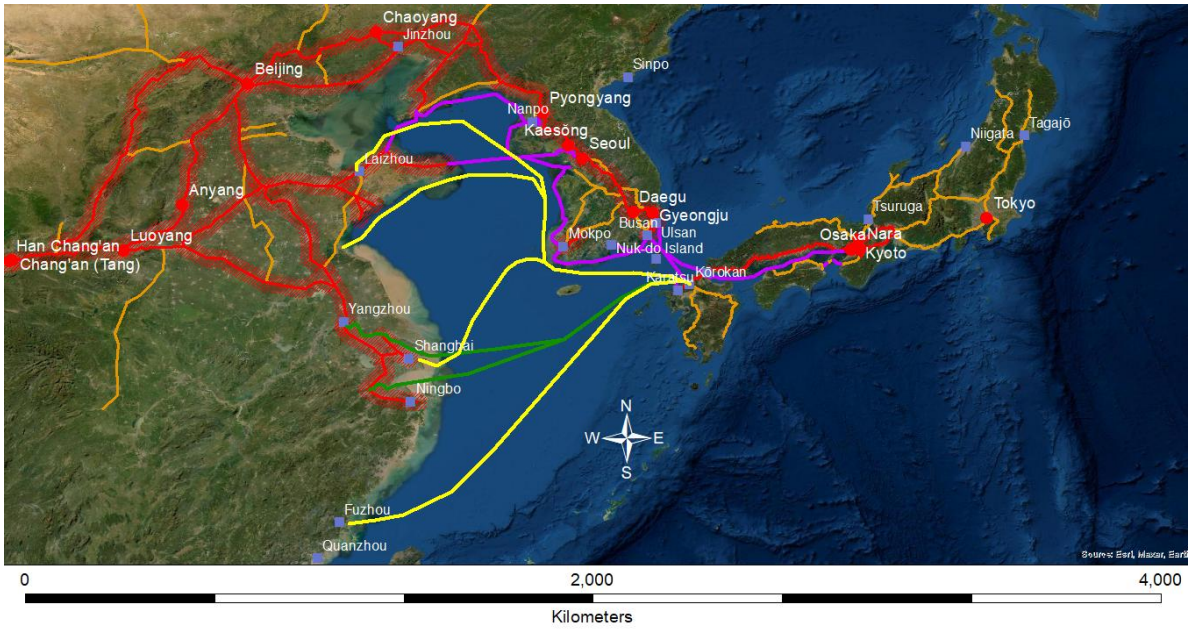

Figure 22. The principal corridors (red) and maritime connections.

In conclusion, the Eastern Silk Routes can be seen as a crucial element of the overall Silk Roads trade network. The notion that the Korean Peninsula and Japan are 'peripheries' of the mainland cultures does not hold good: there was not a one-directional flow of goods and ideas (Aikens, Zhushchikhovskaya, and Rhee 2009, 207). Sanjay Subrahmanyam speaks eloquently of "connected histories," "entangled" or "shared", rather than "comparative histories" (Subrahmanyam 1997). The region clearly reflects the interconnection of land and sea routes, and the significance of the coastal zones. These encompass crucial articulations in systems of production, supply, and redistribution. The inter-relationship between hinterlands, long distance overland routes, and ports (the port-catchment nexus), is a vital part of the complex narrative of the Silk Roads, and encompasses what have been defined as both the overland Silk Roads and Maritime Silk Routes.

The linkage between coastal zones, riverine routes and open sea crossings shaped the nature of exchange and movement, and together the land-based routes and maritime routes played a significant role in the formation of an East Asian cultural sphere. For the purposes of potential nominations of land routes, some essential sea routes might be considered to come within the framework of the overland Silk Roads if they are seen as links between land routes. This is clearly an artificial situation, but necessary until a clearer assessment has been undertaken of how the Maritime Silk Routes might be encompassed by the World Heritage Convention.

8 Next Steps

The mapping of key Silk Road trade routes in the initial Thematic Study proved to be an essential foundation for States Parties to work together to identify c*orridor*s for nominations that exemplified particular characteristics of Silk Roads trade that could be seen to stand apart from other areas, and thus have the capacity to justify Outstanding Universal Value. This current study has demonstrated the way trade routes in East Asia can be seen as a key element of the overall Silk Roads network and similarly offers the basis for further work to be undertaken by States Parties to identify such *corridor*s.

Further active research needs to be undertaken to fill the identified geographical gaps that currently exist, before discrete *corridors* might be defined that display significant clusters of surviving sites, which together reflect specific responses to trading and political systems, social and cultural impact, as well as ecological and geographical contexts, and whose substantial surviving material evidence could be considered to have the potential to demonstrate Outstanding Universal Value and be nominated for inscription as land routes. Such work would need to identify more precisely the immovable physical evidence that survives to reflect the specificities of trade in East Asia, or in part of East Asia, and how this also captures the multiple outcomes and cultural impacts of that trade.

As a first step, this Study will be presented to the forthcoming 7th meeting of the Silk Roads Coordinating Committee for discussion.

9 Implications for future studies

The quality of further work will necessarily be in direct relationship to the time and resources available to assemble, coordinate, check and synthesise data. Researchers are often already engaged in other roles, and cannot suddenly devote large amounts of time to the work. It is also a factor of funding: resources will enable the use of dedicated researchers and provide time for coordination, checking and synthesis. Overall, the process takes time, much goodwill, and engagement.

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Appendices

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Korea

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Samguk Yusa is a collection of historical records and folklore compiled by Ilyeon, a Buddhist monk in 1281. It contains historical accounts of Kings of Goguryeo, Baekje, Silla and Gaya (42-562 CE). It also contains historical accounts of nations *Samguk Sagi* does not cover, such as Gojoseon (For an English translation, see Ilyeon 2006).

Japan

See the report and discussion paper from the Japanese Focal point (Yamauchi 2021).

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